VIA EMAIL

June 15, 2026

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Subject: California-American Water Application for a Lease on Commission Lands; File: A4181

The Monterey Peninsula Water Management District (District) hereby submits these comments regarding the State Lands Commission's (Commission) upcoming hearing regarding the California-American Water Company (Cal-Am) application for a lease on Commission lands (File: A4181; SCH #: 2006101004)

The District's comments primarily address the Commission's May 2026 technical memorandum titled "Evaluation of Prior CEQA Sufficiency and Documentation that No Additional CEQA Review is Needed for the Monterey Peninsula Water Supply Project" (Environmental Memorandum.) Specifically, that (a) there have been significant changes in, and new information regarding, the Monterey Peninsula Water Supply Project (Project) which have not had previous environmental review; (b) the Environmental Memorandum contains errors and omissions; and (c) As a Responsible Agency under CEQA the Commission has an obligation to conduct subsequent or supplemental environmental review before considering the lease application, including all project impacts cumulatively, not merely those limited to the lands subject to Commission jurisdiction.[1]

Changes to the Project

Regarding changes to the Project, "…if the project modification introduces previously unstudied and potentially significant environmental effects that cannot be avoided or mitigated through further revisions to the project plans" then the Responsible Agency must prepare a subsequent EIR.[2] The District contends that the proposed changes to the Project do have potentially significant environmental effects. Specifically, the changes to the project include:

- A phased-approach with a 4.8 million gallon per day (MGD) initial plant, expanding to 6.4 MGD in the future;[3]

[1] California Public Resources Code, Sec. 21166; CEQA Guidelines, Sec. 15162, subdivision (c).
[2] *Friends of College of San Mateo Gardens v. San Mateo County Community College District* (2016) 1 Cal.5th, p. 958.
[3] Cal-Am letter to California Coastal Commission, 10/5/22, p. 1.

- Modifications to Monterey One Water's ocean outfall; and
- Additional brine storage pond at plant site.[4]
- Extending the slant well length from approximately 970 feet to 1,000 feet.[5]

A future action is a reasonably foreseeable consequence "when the project legally compels or practically presumes completion of another action."[6] When a project approval is conditioned upon, "legally compels," or "practically presumes completion of another action," the two actions are considered a "single project."[7] Unquestionably, the overall Project is contingent on the ability of Cal-Am to modify the outfall and to construct the second brine storage pond.

New Information/Changed Circumstances

- The proposed modifications to M1W's outfall are now part of a new project description. The modifications are no longer speculative as stated in the Environmental Memorandum, rather they are known. The potential impacts are significant and unmitigated and were not previously considered in the EIR/EIS.
- The State Water Resources Control Board's (SWRCB) Administrative Hearing Office (AHO) issued a report on June 20, 2025 titled "Final Report of the Board as Referee" (AHO Report) in Monterey Superior Court Case Number 20CV001387. The new groundwater data produced and analyzed in the AHO Report reflect current conditions in the groundwater basin, providing critical information that was not available when the original EIR/EIS was certified.
- The CPUC's 2016 analysis relied on sea-level-rise projections that have since been superseded by more recent State guidance reflecting faster and greater sea-level rise. Ocean Protection Council's 2020 sea level rise projections were not available for the original EIR/EIS. Reasonably foreseeable relocation of the slant wells was indicated to be required by 2045 to 2050 in that report, far earlier than prior analyses.

Insufficiency of the Environmental Memorandum

The District is aware that the Commission was initially expecting an Addendum to the Final Environmental Impact Report and actually received a draft in May 2024. Instead, the Commission has now received an Environmental Memorandum for its review. The Environmental Memorandum states "When acting as a CEQA responsible agency, the Commission may only perform subsequent CEQA analysis under certain conditions specified in State CEQA Guidelines section 15162. This Memorandum document staff's conclusion that none

[4] Letter from Denise Duffy & Associates to Cal-Am, 6/9/25.
[5] Environmental Memorandum, section 1.4, p.10; Cal-Am letter to California Coastal Commission, 10/5/22, Exhibit A, p.1.
[6] *Banning Ranch Conservancy v. City of Newport Beach (2012),*supra*,* 211 Cal.App.4th, p. 1223.
[7] *Id.* at p. 1224.

of these conditions currently exist."[8] The District disagrees and cites below six (6) instances where the Commission's Environmental Memorandum fails to adequately analyze impacts.

1. ***4.8 MGD Plant with Phased Construction:*** A 4.8 MGD plant was specifically not analyzed in the original EIR/EIS and is not sufficiently analyzed in the Environmental Memorandum. In fact, the California Public Utilities Commission (CPUC) concluded "Thus, as a 4.8 mgd desalination plant would not alleviate or substantially reduce significant environmental impacts of the project, and would not meet the basic project objectives, we conclude it is inferior to the 6.4 mgd desalination plant."[9]

   While the Commission correctly identifies certain reduced environmental impacts resulting from fewer well pads and reduced length of access roads, the Commission states "Phase 1 is the activity now subject to the Commission's lease consideration."[10] However, because Phase 2 buildout to 6.4 MGD is reasonably foreseeable, the Commission has incorrectly limited its analysis to only Phase 1. Far from reducing impacts, there is ample evidence to support that phasing construction as Cal-Am proposes will result in increased ESHA impacts. Achieving the full 6.4 MGD capacity would require additional future construction activity, including drilling two additional slant wells and new well pads in ESHA. The CPUC previously concluded that phased construction "*increase[s]* environmental impacts"[11] because it would result in construction impacts occurring twice.

   The record further shows that the dune habitat, though historically disturbed by industrial mining operations, can recover rapidly once disturbances cease. CEMEX ended its mining operations in 2020, and evidence of native species reestablishment emerged just two years later. Because the need for a 6.4 MGD facility is not anticipated for multiple years, the Project site will have substantial time to regenerate – meaning that future construction would disturb habitat that has materially recovered, resulting in greater environmental harm. Rather than confront the substantially more severe ESHA impacts, the Environmental Memorandum provided to the Commission indefinitely postpones any analysis of these impacts. This is the same defect identified in *Laurel Heights.* (47 Cal.3d at pp. 397-399.) There, the Court rejected an agency's attempt to evaluate only the first stage of a project when the record showed that full buildout was contemplated. By analyzing only Phase 1 while deferring evaluation of the foreseeable full buildout, the project proponents engage in impermissible piecemealing. Conditioning Phase 2 environmental review on future proceedings does not excuse the failure to evaluate the ESHA impacts associated with the additional slant wells before approving the Project lease application.

2. ***Outfall Modifications:*** The primary Project components that are located within the Commission's jurisdiction include the modifications to the existing outfall. The Environmental Memorandum states "Potential modifications to M1W's outfall to

[8] Environmental Memorandum, May 2026, Section 1.1, p. 2.
[9] CPUC Decision 18-09-017, 9/13/18, p. 70.
[10] Environmental Memorandum, May 2026, Section 1.1, p.1.
[11] CPUC Decision 18-09-017, 9/13/18, p. 69.

accommodate brine discharges from the MPWSP would be within Commission jurisdiction, but are still being evaluated by M1W and have not been finalized. As a result, evaluation of those modifications and potential impacts are beyond the analysis contained in the certified Final EIR/EIS and would be speculative at the time of this writing."[12] However, the modifications and impacts are far from speculative.

In fact, in support of its Application to the Central Coast Regional Water Quality Control Board for an amendment to the NPDES[13] permit Cal-Am has prepared a full Administrative Draft Addendum to the Final Environment Impact Report – dated May 2026 – including several appendices on topics such as marine resources, diffuser design, and brine mixing zone issues. It is a substantial document. Because the Regional Board is unlikely to hold its hearing any earlier than October 2026, this information should have been considered in the Commission's environmental review first.

The Coastal Commission concluded that "the proposed onshore outfall work would result in adverse impacts to environmentally sensitive habitat areas and special status species during construction."[14] To date, changes to timing of construction, season of entry, overlap with slant well construction, and other issues surrounding outfall construction requiring environmental review have not been addressed by the Commission. The need for a separate Coastal Development Permit for the outfall modifications does not transform those modifications into a separate project for CEQA purposes or relieve the State Lands Commission of its obligation to evaluate their environmental impacts as part of the Project as a whole.

Cal-Am's Project and the outfall modifications do not enjoy independent utility. The Project cannot be implemented independently without the outfall modifications. Because the Project's slant wells cannot operate without the outfall, outfall modifications are subject to Commission review, and since required modifications are no longer speculative, the Commission must evaluate the potential environmental impacts before it considers the lease.

3. ***AHO Report on Groundwater Effects:*** The AHO Report indicates the following: (i) Project pumping will lower groundwater levels in the 180-Foot Aquifer and the Dune Sand Aquifer, both of which are hydraulically connected to the lands regulated by the Commission; (ii) pumping will also redistribute groundwater in the basin; (iii) the AHO Report rejected Cal-Am's "developed water" theory and determined that proposed Project extractions include freshwater by definition, and that harm is likely and may require a physical solution; (iv) the Project will advance seawater intrusion; and (v) the groundwater models appear to indicate the Project would function contrary to the Sustainable Groundwater Management Act (SGMA.) The AHO Report information has never been evaluated in the context of the EIR/EIS and merits evaluation in the

[12] *Id.*, Section 1.5, p. 19.
[13] National Pollution Discharge Elimination System.
[14] Letter from Coastal Commission to M1W, 4/29/26, "Coastal Development Permit Amendment Application No. 3-83-014-A9 (Monterey One Water Outfall Modifications)", Section 7(c), p. 4.

Commission's environmental review, but it was not addressed in the Environmental Memorandum.

1. ***Relocation of Slant Wells for Sea Level Rise:*** As stated earlier, significant new information in the form of the Ocean Protection Council's 2020 sea level rise projections indicate relocation of slant wells to be required by 2045 to 2050, within the proposed Commission lease term. The Coastal Act (Section 30253) and Marina's LCP policies require locating coastal development so that it remains inland of areas vulnerable to erosion for the entire duration of the development's operational life (or at least 50 years). The 2022 Coastal Commission Staff Report discloses that the Project "would have a maximum operating life of about 60 years (until about 2085.)"[15] Without an adequate setback from the shoreline to allow for 50 years of protection, Cal-Am's well field would be inconsistent with these Coastal Act and Marina LCP policies.

   The Commission's Environmental Memorandum does not address this issue and appears to abdicate future evaluation under the Coastal Commission's Special Condition 6.[16] However, the Coastal Commission and Cal-Am truncated the permit term to avoid evaluating whether the Project, as proposed for a 60-year life, complies with Coastal Act setback requirements and to avoid analyzing the reasonably foreseeable ESHA impacts associated with well relocation. CEQA does not permit approval now and analysis later.[17]

   Nor may an agency sidestep supplemental review when significant new information materially affects environmental consequences.[18] The 25-year permit term exists only so Cal-Am may avoid the policies requiring coastal development to remain inland of areas vulnerable to erosion for at least 50 years. The slant wells have an expected useful life of 20-25 years, after which point they will need to be relocated to avoid being inundated by sand erosion and sea level rise. It is no accident that the expected useful life of 20-25 years for the slant wells will end at approximately the same time as the 25-year permit and Commission lease expires. Given that sea-level rise is now foreseeable based on the new information, the environmental impacts must be evaluated.

2. ***New Brine Storage Pond:*** The Environmental Memorandum Table 1 states that under the Phase 1 Project there is "No Change" to the Desalination Plant.[19] That is incorrect. Cal-Am will install an additional brine storage pond adjacent to a similar pond previously approved by the CPUC.[20] Constructing additional brine storage at the desalination plant is being done to maintain minimum brine flow requirements through the outfall during MPWSP operations. However, there has been no analysis of the potential impact to migratory birds due to a doubling of size of the storage ponds, consistent with the

[15] Final Adopted Findings De Novo Appeal Hearing and Consolidated Coastal Development Permit Application 9-20-0603 / Appeal A-3-MRA-19-0034, p. 47.
[16] Environmental Memorandum, May 2026, Section 2.1, p.21.
[17] CCR, tit. 14, § 15126.4, subd. (a)(1)(B); *City of Long Beach v. LAUSD* (2009) 176 Cal.App.4th 889, 915–916.
[18] CCR, tit. 14, § 15162.
[19] Environmental Memorandum, May 2026, Table 1, p.11.
[20] Letter from Denise Duffy & Associates to Cal-Am, 6/9/25, opening paragraph.

Migratory Bird Treaty Act (16 USC Sec 703-711) or the Monterey County General Plan, Conservation and Open Space requirements, as discussed below.

In the original EIR/EIS, for only one Brine Storage Pond the following concern was raised: "The salinity of the brine in the MPWSP brine storage basis is expected to range between 57 and 58 parts per thousand... Waterfowl using the brine storage basin over long periods of time could become sick or die from salt toxicosis." and "Although it is unlikely that many birds would become sick or die at the brine storage basin annually, over the life of the project, some migratory waterfowl could become sick or die from use of the brine storage basin, **a significant impact** (emphasis added.)"[21] The proposed mitigation is installation and monitoring of bird deterrents that would reduce potential impacts on migratory waterfowl by discouraging them from using the basin. This incremental environmental impact of new Project modifications has not been analyzed.

Additionally, the second pond is required in order to "batch" brine to achieve a minimum brine discharge of 5.80 MGD. The proposed batching plan, as well as the design of the diffusers was not analyzed in the EIR/EIS. The Regional Board will review the discharge regime as part of its environmental review, which includes a Marine Resources Assessment (Marine Life Mortality Report), a Diffuser Design Technical Memorandum, and a Near-Field Mixing Zone and Dilution Analysis.

Another unanswered question that has not been reviewed by the Commission or even in the Regional Board's draft Addendum is the potential water quality impacts on the brine before discharge, and potential effects on waste discharge requirements through the outfall. For example, the storage ponds will be uncovered subject to sunshine that can produce algae and salt crystals. Because of the proposed batching plan, brine may sit for long periods of time before discharged to the ocean, potentially causing dissolved oxygen problems or increasing TDS as evaporation occurs.

For the same reasons cited in #2, above, the District believes such analysis should have been performed by the Commission since it is issuing its permit well in advance of the Regional Board.

3. ***Slant Well Length:*** Cal-Am changed its planned slant-well length with no analysis of impacts on groundwater conditions. Because this length is greater than Cal-Am's initial Application to the CPUC, the impacts on groundwater have not been modeled or vetted. For the Commission to approve the lease without analyzing the impacts would be inappropriate.

Duty of Commission to Consider the Whole of the Project's Impacts

The Commission must evaluate the full undertaking—not merely selected components—at the time it acts. Under CEQA, the "project" subject to review is the "whole of an action," which

[21] Original EIR/EIS, p. 4.6-250

includes interdependent components and reasonably foreseeable future phases that form part of the same undertaking.[22] To fail to do so is impermissible piecemeal review.

Piecemealing appears to be the intent of the project proponent. The Environmental Memorandum developed for the Commission, as well as the draft Addendum under development for the Regional Water Quality Control Board have been authored by the same environmental consultant, a long-time collaborator of Cal-Am. The consultant has told the State Lands Commission to only look at Project modifications that directly impact the lands under its jurisdiction, and in the case of the outfall to bypass analysis entirely. It has told the State Regional Water Control Board that there is only need to look into its NPDES outfall permit, ignoring all of the other Project modifications. It has not asked any party to analyze the brine storage ponds beyond earthmoving.

By separating these permit activities in the hope that each board or commission will simply accept a limited "memorandum" on environmental issues is tantamount to piecemealing.

In addition, the consultant is incorrect that the Commission need only consider impacts that occur on lands under its jurisdiction. CEQA requires that an agency identify and attempt to mitigate the extraterritorial environmental effects of any project it intends to carry out or approve.[23] For example, the Commission cannot ignore impacts to groundwater or to migratory birds by arguing that these impacts would occur outside its jurisdiction.

Thank you for the opportunity to comment on the Commission's Environmental Memorandum prior to its hearing on the Cal-Am lease application. The District believes that all of its issues can be addressed by pulling back, delaying the consideration on the lease, and returning with a more thorough and legally compliant environmental review.

Sincerely yours,

David J. Stoldt
General Manager

cc: CSLC.CommissionMeetings@slc.ca.gov
CalAm@slc.ca.gov

[22] CCR, tit. 14, § 15378, subd. (a); *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 396.

[23] *City of Marina v. Board of Trustees of California State University* (2006) 39 Cal.4th 341, 359–360 ("CEQA requires a public agency to mitigate or avoid its projects' significant effects not just on the agency's own property but '*on the environment* ' (Pub. Resources Code, § 21002.1, subd. (b), italics added), with 'environment' defined for these purposes as 'the physical conditions which exist *within the area which will be affected by a proposed project* ' (*id.,* § 21060.5, italics added)"); American Canyon Community United for Responsible Growth v. City of American Canyon (2006) 145 Cal.App.4th 1062, 1082 (error to ignore extraterritorial urban decay effects).

Attachments

CALIFORNIA
AMERICAN WATER

Ian C. Crooks
Vice President, Engineering
655 West Broadway, Suite 1410
San Diego, CA 92101
P: 619-446-4786
E: ian.crooks@amwater.com
www.amwater.com

October 5, 2022

VIA EMAIL

Mr. Tom Luster
California Coastal Commission
Energy and Ocean Resources Unit
445 Market Street, Suite 300
San Francisco, CA 94101

Re: Monterey Peninsula Water Supply Project, CDP Application No. 9-20-0603 & Appeal No. A-3-MRA-19-0034: Potential Slant Well Network Phasing

Dear Tom:

Based on our ongoing outreach to members of the Monterey Peninsula Community, as well as our discussions with Coastal Commission staff, California American Water Company ("CalAm") is proposing to amend its proposal for the Monterey Peninsula Water Supply Project ("MPWSP") to phase the MPWSP's slant well network on the CEMEX site. Specifically, CalAm is proposing to build a slant well network that supplies source water to support an initial desalination plant production capacity of 4.8 million gallons of water per day ("mgd"), with the ability to add slant well infrastructure in the future as needed to support increasing the MPWSP's capacity up to 6.4 mgd. This phased approach, as detailed in **Exhibit A**, would give CalAm sufficient additional water supplies to meet its expected water needs by 2030, while maintaining the flexibility CalAm needs to add additional production wells when additional water supplies are required in the future. As summarized below, a phased approach would provide several benefits that would further applicable Coastal Act and Marina Local Coastal Program ("LCP") policies, as well as reduce the MPWSP's potential environmental impacts on the CEMEX site. We hope that this proposal will assist Commission staff in its ongoing evaluation of the MPWSP.

Environmentally Sensitive Habitat Areas. A 4.8 mgd desalination facility would require only four new slant wells, plus the existing slant well, on the CEMEX site – two fewer wells than the currently proposed 6.4 mgd facility. As a result, CalAm only would need to construct two new well pads, with two slant wells on each pad. This would reduce the MPWSP's potential impacts to ESHA on the CEMEX site from construction of the well pads by approximately 50 percent. Nevertheless, CalAm is committed to mitigating for potential ESHA impacts that would be caused by construction of the entire 6.4 mgd MPWSP upfront, as part of the first phase of the MPWSP, to ensure consistency with Coastal Act Section 30240 and Marina's LCP. In addition, the proposed reduction of slant wells allows CalAm to eliminate the use of the southern loop access road to further reduce impacts to ESHA. CalAm is in the process of preparing an updated site plan reflecting the proposed changes, which we plan to provide to staff in the coming days.

Environmental Justice and Public Access. The reduced MPWSP footprint on the CEMEX site responds to public input requesting a smaller facility, and would benefit Marina residents and promote Marina's LCP policies aimed ensuring that new development considers beach access where compatible. Less permanent above-ground infrastructure would be required and built within Marina. In addition, the construction of fewer wells would reduce construction activities and the duration of construction, which would reduce associated impacts in Marina.

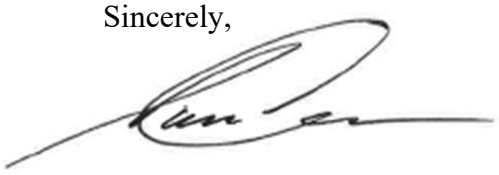
Groundwater. A 4.8 mgd facility will use approximately 25 percent less source water, which reduces the MPWSP's potential impacts to groundwater resources and nearby wetlands and vernal ponds consistent with Coastal Act Section 30231. Further, CalAm proposes to extend the length of the four new slant wells to approximately 1,000 feet long or longer in order to extend the wells further under the seafloor.

Sea Level Rise. A phased approach provides CalAm and Commission staff the opportunity to assess and adapt to changing sea levels and other coastal hazards. While CalAm maintains that the current slant well network location would be resilient to sea level rise and coastal hazards during the well network's economic life, consistent with Coastal Act Section 30253, CalAm and staff would have the benefit of more current science on sea level rise when considering the second MPWSP phase.

Need. CalAm and others recently have submitted testimony to the California Public Utilities Commission ("CPUC") concerning updated supply and demand analyses in CalAm's Monterey service territory, but the CPUC is not expected to consider that testimony until 2023. While CalAm's analysis demonstrates the need for the full 6.4 mgd MPWSP by 2050, CalAm acknowledges there is disagreement among various constituents about when the MPWSP's supplies will be needed. A phased approach helps address such concerns and uncertainty, ensuring that some additional desalinated water supplies will be made available in the near term to provide reliability and help lift the moratorium on new water service connections and enable the development of needed affordable housing and other uses.

We appreciate staff's consideration of the MPWSP and the opportunity to update you with CalAm's proposal for a phased MPWSP. Please do not hesitate to contact us should you have any questions.

Sincerely,



Ian Crooks
California American Water Company

Attachment

cc: Kate Huckelbridge, California Coastal Commission
Kathryn Horning, California-American Water Company
DJ Moore, Latham & Watkins LLP
Winston Stromberg, Latham & Watkins LLP

EXHIBIT A

Proposed Slant Well Network Phasing for the Monterey Peninsula Water Supply Project

Proposal: Construct a slant well network on the CEMEX site that supports an initial production capacity for the MPWSP of 4.8 million gallons per day (mgd), with the ability to construct additional slant well infrastructure in the future to support increasing in production capacity up to 6.4 mgd.

- **Need for Desalination:** Based on CalAm's 2020 Urban Water Management Plan, CalAm would need 4,900 acre-feet a year (afy) in the second-year of a multi-year drought by 2030.
    - In a longer drought, CalAm could need well more than 4,900 afy by 2030.
    - Balancing uncertainty and considering both normal and drought conditions, CalAm needs at least 4,000 afy by 2030, which could be provided by a 4.8 mgd plant.
- **Required Infrastructure:** A 4.8 mgd MPWSP would only require four new slant wells, plus the existing slant well, for five total wells, on the CEMEX site. The new slant wells are planned to be approximately 1,000 feet long or more (the existing test slant well is approximately 700 feet long), and therefore would extend further beneath the seafloor.
    - This is two fewer wells than the full 6.4 mgd MPWSP, which requires seven wells.
    - Instead of constructing four new well pads on the CEMEX site to host six wells for the 6.4 mgd MPWSP, under this proposal CalAm would construct just two new well pads, with two slant wells on each pad. This will reduce ESHA impacts from the well pads by approximately 50%.
    - While the proposed loop access road to the slant wells will be used temporarily during construction, only a portion of the loop road would be needed for ongoing operations and Maintenance. Therefore permanent ESHA impacts would be reduced.
    - Omitting two slant wells also would reduce total MPWSP infrastructure costs.
- **Thresholds for Second Phase:** CalAm would have the ability to seek Coastal Commission approval to add an additional well or wells to the MPWSP if:

    (1) Actual system demand reaches 80% of CalAm's firm supplies for a two-year period; or

    (2) PWM and PWM Expansion fail to deliver the minimum Water Guarantee of 4,600 acre-feet for a two-year period; or

    (3) The CPUC determines that CalAm needs to develop a desalination facility that is larger than 4.8 mgd.

- **Process for Implementing Second Phase:**
    - If one of the Second Phase thresholds is triggered, and it is feasible to add a third well to an existing well pad based on the operation and configuration of the existing wells, staff

could process a second phase to expand the MPWSP up to a 6.4 mgd facility administratively, without requiring a CDP amendment, provided that: (i) the Executive Director confirms that the second phase as proposed is consistent with the terms and conditions of the issued CDP; and (ii) there are no changed circumstances under the California Environmental Quality Act (CEQA).

  - CalAm would be required to apply for a CDP amendment for the second phase if: (i) a new well pad is required; or (ii) the Executive Director determines either that the second phase is not consistent with the terms and conditions of the issued CDP or there are changed circumstances under CEQA.

- **Mitigation:** CalAm proposes to mitigate for potential ESHA impacts caused by the entire 6.4 mgd MPWSP upfront as part of the first phase of 4.8 mgd.

- **Impact of California Public Utilities Commission (CPUC) Decision Reducing MPWSP Scope:** The CPUC is currently evaluating updated information on water supply and demand in CalAm's Monterey service territory as part of proceeding A-21-11-024. If the CPUC determines in that proceeding that CalAm needs to develop a desalination facility that is smaller than 4.8 mgd, CalAm would reduce the number of wells on the CEMEX site as needed to produce an amount of water consistent with the CPUC's determination and would submit those details to the Executive Director for review. If the CPUC determines in that proceeding that CalAm needs to develop a desalination facility that is smaller than 6.4 mgd but larger than 4.8 mgd, CalAm may seek to amend the CDP, if necessary, to authorize a modified second phase.

Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

Memorandum

DATE: June 9, 2025

TO: Tim O'Halloran, Engineering Manager, CalAm

CC: Kathryn Horning, Corporate Counsel, CalAm
Lacy Carothers, Director of Engineering, CalAm
Denise Duffy, Principal, DD&A

FROM: Tyler Potter, J.D., AICP, Project Director, DD&A
Conor O'Toole, Deputy Project Manager, DD&A

Subject: **MPWSP On-Site Brine Storage Expansion – Preliminary Environmental Analysis**

I. Introduction

This memorandum provides a preliminary evaluation of the potential environmental effects associated with increasing the capacity of on-site brine storage for California American Water's ("CalAm") proposed Monterey Peninsula Water Supply Project ("MPWSP"). Specifically, this memorandum evaluates potential environmental impacts associated with installing an additional brine storage pond adjacent to the brine storage pond at the MPWSP desalination plant site previously approved by the California Public Utilities Commission ("CPUC") and County of Monterey ("County") (see **Figures 1 & 2**).

CalAm and Monterey One Water ("M1W") developed this potential brine storage pond expansion to address concerns raised by the Central Coast Regional Water Quality Control Board ("CCRWQCB") regarding potential alternative approaches to modifying M1W's existing ocean outfall in connection with M1W's October 2024 Report of Waste Discharge ("ROWD"). The ROWD requests an amendment to M1W's existing National Pollutant Discharge Elimination System ("NPDES") permit to accommodate brine discharge from the MPWSP and comply with the California Ocean Plan ("Ocean Plan"). In order to ensure Ocean Plan compliance, Trussell Technologies, Inc. ("Trussell") identified that certain flow rates of MPWSP brine may be required over identified periods of time that would necessitate additional brine storage beyond the capacity of the single, three-million-gallon brine storage pond the CPUC and County previously approved.

The CCRWQCB, in its capacity as a Responsible Agency under the California Environmental Quality Act ("CEQA"), ultimately will be responsible for evaluating the proposed brine storage pond expansion and other potential modifications to M1W's outfall and diffuser. This memorandum is organized as follows: 1) Introduction; 2) Procedural Background; 3) Project Description; 4) Environmental Analysis); and 5) Conclusion.

II. Procedural Background

a. California Environmental Quality Act/National Environmental Policy Act

In April 2012, CalAm filed an application for a Certificate of Public Convenience and Necessity[1] with the CPUC for the MPWSP (A.12-04-019). On January 13, 2017, the CPUC, as the CEQA lead agency, and Monterey Bay National Marine Sanctuary ("MBNMS") as the NEPA lead agency, published the MPWSP Draft Environmental Impact Report/Environmental Impact Statement ("EIR/EIS"). On March 20, 2018, the CPUC and MBNMS published the MPWSP Final EIR/EIS. The MPWSP Final EIR/EIS evaluated a 9.6 million gallons per day ("mgd") desalination facility requiring 10 slant wells on six (6) well pads at the former CEMEX sandmining site in Marina, California ("Original Project"), as well as a reduced project alternative.

The reduced project alternative, which the CPUC and County approved, consisted of a 6.4 mgd desalination facility requiring seven (7) intake slant wells (six [6] new wells and conversion of an existing test slant well) on five (5) well pads (four [4] new well pads plus the existing well pad for the test slant well) at the former CEMEX sandmining site ("Approved Project") (MPWSP Final EIR/EIS, 2018).[2] The approved desalination plant included a desalination plant building, a filter building, a reverse osmosis building, an administration building, seven (7) filter vessels, two (2) filtered water tanks, a pump pad, two (2) treated water tanks, a Cal-Flo containment basin, a carbon dioxide ("CO2") tank and solution water pumps, two (2) backwash reclamation basins, a recycle pump station, one (1) three (3)-million-gallon brine equalization/storage basin, and appurtenances (i.e., brine discharge pumps and pump station, aeration system, and connecting pipelines) on approximately 1.5 acres at the desalination plant site.

The MPWSP Final EIR/EIS identified that implementation of the MPWSP would result in potentially significant impacts in the following areas: geology, soils, and seismicity; surface water hydrology and water quality; groundwater resources; terrestrial biological resources; hazards and hazardous materials; land use, land use planning, and recreation; traffic and transportation; air quality; greenhouse gas emissions; public services and utilities; aesthetic resources; cultural and paleontological resources; agricultural resources; energy conservation; and socioeconomics and environmental justice. The MPWSP Final EIR/EIS concluded that all potentially significant impacts could be reduced to a less than significant level with mitigation except in the following areas: terrestrial biological resources, traffic and transportation, air quality, noise and vibration, and growth inducement.

b. California Public Utilities Commission – Certificate of Public Convenience and Necessity

On September 20, 2018, the CPUC issued a decision certifying the MPWSP Final EIR/EIS and approving the reduced project alternative (i.e., Approved Project) (Decision 18-09-017). The CPUC's Decision evaluated the need for additional water supplies, considered the reasonableness of projected water demand for CalAm's Monterey District, evaluated the adequacy of the MPWSP Final EIR/EIS, considered a range of potential project alternatives, and determined that the Approved Project was necessary. The CPUC also issued a Certificate of Public Convenience and Necessity for the MPWSP, adopted settlement agreements, adopted CEQA Findings and a Statement of Overriding Considerations, and approved the reduced project alternative.[3]

---

[1] A Certificate of Public Convenience and Necessity is a discretionary decision-making document for granting or denying applications submitted by public utilities for projects that propose to construct or modify utilities infrastructure.
[2] The MPWSP Final EIR/EIS included an evaluation for a three (3)-million-gallon brine equalization/storage basin at the desalination facility as part of both the Original Project and the Approved Project.
[3] Decision 18-09-017, the MPWSP Final EIR/EIS, and the Mitigation Monitoring and Reporting Program can be accessed at: FinalDecision_18-09-017_wAppendixA.pdf

On August 28, 2019, the California Supreme Court denied two petitions for writ of review challenging the CPUC's Decision and the sufficiency of the MPWSP Final EIR/EIS. The CPUC's Decision and MPWSP Final EIR/EIS are final, valid, and not subject to further challenge.

c. County of Monterey – Combined Development Permit

In September 2016, CalAm filed a Combined Development Permit application (PLN150889) with the County for the portions of the MPWSP in the unincorporated County, consisting of a Use Permit to allow for the construction and operation of a 6.4 mgd desalination plant and an Administrative Permit and Design Approval to allow the construction of the various buildings and facilities associated with the desalination plant, including an approximately three (3) million gallon brine storage basin[4] (See **Figure 3**). On July 19, 2019, the County Board of Supervisors adopted Resolution 19-258 to adopt the MPWSP Final EIR/EIS that was previously certified by the CPUC, the Mitigation Monitoring and Reporting Program from the MPWSP Final EIR/EIS, CEQA Findings, and a Statement of Overriding Considerations, and to approve the desalination plant Combined Development Permit.[5]

d. California Coastal Commission – Coastal Development Permits

In November 2022, the California Coastal Commission ("CCC") considered MPWSP components in the Coastal Zone and approved coastal development permits for a phased version of the Approved Project ("Modified Phased Project"), subject to 20 special conditions to ensure that potential Coastal Act impacts would be minimized to the maximum extent feasible (CDP No. 9-20-0603). The initial phase of the Modified Phased Project would consist of the construction and operation of a 4.8 mgd desalination plant requiring five (5) intake slant wells (four [4] new wells and conversion of the existing test slant well) on three (3) well pads (two [2] new well pads plus the existing well pad for the test slant well) and a shorter access road to the slant well network on the CEMEX site (CCC, 2022 at pg. 42). Further approval from the CCC would be required to expand the Modified Phased Project's components within the Coastal Zone, including the number of slant wells, to increase its capacity to provide source water sufficient for a 6.4 mgd desalination plant under the subsequent phase to achieve full build out of the Approved Project.

e. CCRWQCB – M1W NPDES Permit Amendment

M1W submitted a ROWD to the CCRWQCB on October 1, 2024 to amend M1W's existing NPDES permit to allow brine discharge commingled with existing M1W waste streams through M1W's existing outfall. The CCRWQCB subsequently determined the application was incomplete and requested additional information, among other requests for clarification. Specifically, the CCRWQCB reuqested that M1W evaluate potential alternatives that could eliminate the need to implement a pressure reducing structure at the end of M1W's ocean outfall that was proposed as part of M1W's ROWD. In response to the CCRWQCB's Notice of Incomplete ("NOI"), CalAm and M1W have worked together to develop a series of potential alternatives that would minimize physical changes to M1W's existing outfall, eliminate the need for the pressure reducing structure, and reduce associated environmental effects associated with potential outfall modifications. As part of this alternatives analysis process, M1W and CalAm identified several potential design alternatives to ensure that the combined discharge of MPWSP brine and existing M1W waste streams would comply with applicable Ocean Plan water quality objectives. Specifically, M1W and CalAm identified that modifications to M1W's existing outfall, including the existing diffuser, in combination with increased

[4] The County of Monterey approved an approximately 61,000 square foot (approximately 3-million-gallon) brine storage pond. The approved brine storage pond had a depth of 13.5 feet and a maximum water surface elevation of 10.5 feet.
[5] In September 2023, the Sixth District Court of Appeal upheld the County's approval of the Combined Development Permit in *Marina Coast Water District v. County of Monterey*, Superior Court Case No. 19CV003305, Sixth Dist. Ct. of Appeal Case Nos. H09146 & H049710.

brine storage at the desalination plant site, would ensure future discharges would be compliant with the Ocean Plan.

The CCRWQCB, in its capacity as a Responsible Agency under CEQA, ultimately will be responsible for determining the appropriate level of environmental review for the proposed outfall modifications, including potential modifications at the desalination plant to include increased brine storage. This memorandum includes a preliminary evaluation of potential environmental effects associated with increased brine storage to identify potential environmental consequences associated with changes to the approved MPWSP components at the desalination plant site.

III. Description of Brine Storage Expansion

In connection with identifying alternatives to ensure Ocean Plan compliance under the ongoing NPDES permit amendment process, CalAm is considering minor modifications to the desalination plant to add a second brine storage pond located directly adjacent to the approved brine storage pond (the "Brine Storage Expansion"). With the Brine Storage Expansion, the desalination plant would include two (2) brine storage ponds that provide a total storage volume of six (6) million gallons (three [3] million gallons each). These ponds would be roughly identical in size. Each pond would be approximately 63,000 square feet (roughly 1.5 acres) and have a depth of approximately 13 feet with a low point of about 13.5 feet.[6]

The Brine Storage Expansion would achieve the necessary flow rate to ensure Ocean Plan compliance. Specifically, Trussell, as part of their work on the ROWD and evaluation of alternatives, identified that a minimum brine flow rate of 5.8 mgd is necessary to ensure compliance with a single, conservative minimum probable initial dilution ("Dm") that could apply to any MPWSP brine discharge condition over a 24-hour period. The MPWSP desalination plant is designed to receive 11.6 mgd of ocean water, with a planned production capacity of 4.8 mgd. The reverse osmosis process is expected to recover 42.5% of the influent seawater as product water, and the remaining concentrated residual water will become MPWSP brine at a flow rate of 6.8 mgd under planned capacity. The minimum brine flow rate is only achievable when the desalination plant is operating at a capacity of 4.8 mgd. Because the desalination plant may not continually operate at a capacity of 4.8 mgd, additional brine storage is necessary to ensure enough brine discharge is available to meet the 5.8 mgd volumetric requirement. Therefore, additional storage capacity is needed to temporarily store the brine until the 24-hour volumetric rate of 5.8 million gallons can be accumulated and discharged.

Both brine storage ponds would be double-lined ponds with leak detection systems and would have a common pump station for discharging the brine to the brine mixing structure located on M1W's property. Construction of this alternative would occur over the approximately 24-month timeframe described in the MPWSP Final EIR/EIS. The Brine Storage Expansion would require additional grading to facilitate construction of the second brine storage pond. Specifically, the Brine Storage Expansion would require an additional 27,325 cubic yards ("CY") of cut and 19,782 CY of fill, resulting in 7,542 CY of additional graded material beyond what was analyzed in the MPWSP Final EIR/EIS. This additional graded material would be balanced on site and would not need to be hauled off site.

[6] Final design of the proposed brine pond expansion is pending further engineering evaluation. For the purposes of this preliminary memorandum, the analysis conservatively assumes construction of two brine ponds of equal size to identify potential environmental impacts. The actual extent of impacts will be determined based on the further design.



Project Vicinity Map

Date
4/2/2025

Scale
1 in = 6 mi

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
1

Path: C:\GIS\GIS_Projects\2016-64 MPWSP\NTP2\Desal NTP.aprx



Project Location Map

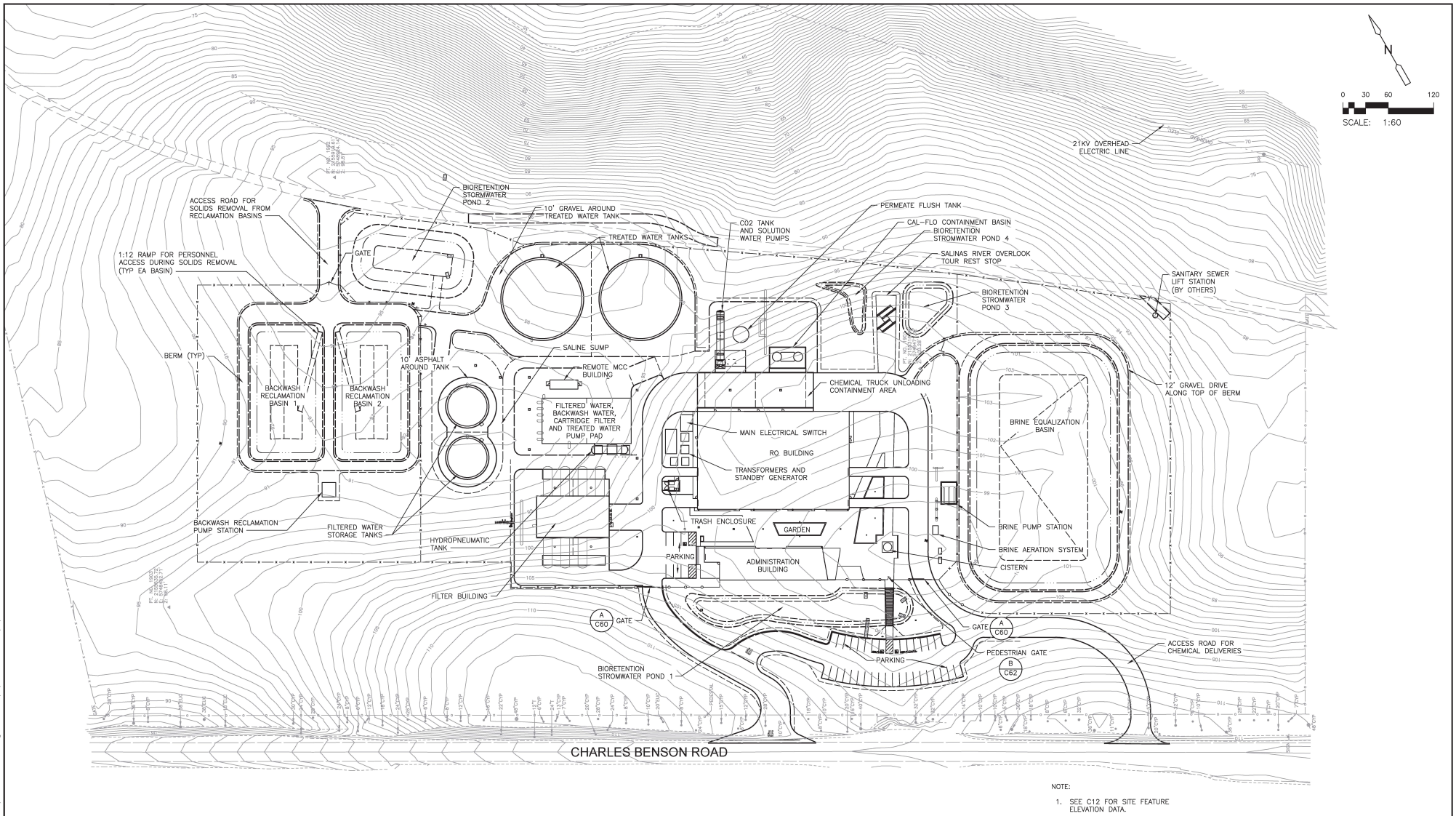
Date
6/3/2025

Scale
1 in = 900 ft

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
2

Path: C:\GIS\GIS_Projects\2016-64 MPWSP\NTP2\Desal NTP.aprx



NOTE:

1. SEE C12 FOR SITE FEATURE ELEVATION DATA.

C:\cdmnet\ymahadevanm\dms86389\1540010191C07.dwg SAVED: 3/6/19 PRINTED: 3/6/19 BY: MAHADEVANM

CALIFORNIA AMERICAN WATER

REVISIONS		REVISIONS	

CDM Smith
2300 Clayton Road, Suite 950
Concord, CA 94520
Tel: (925) 933-2900

LEONEL I. ALMANZAR
REGISTERED PROFESSIONAL ENGINEER
No. 77106
Exp. 12-31-20
CIVIL
STATE OF CALIFORNIA
CA LICENSED PROFESSIONAL ENGINEER NO. 77106

CDM SMITH
2300 CLAYTON ROAD, SUITE 950
CONCORD, CA
CDM Smith

DRAWN BY G. RODRIGUEZ
PROJECT ENG'R D. BROWN

DATE MARCH 2019

PROJECT 154001-0191

MPWSP DESALINATION INFRASTRUCTURE PROJECT
CIVIL
SITE PLAN

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	154001-0191-C7

1540010191C7.DWG

Original Site Plan

Date
6/5/2025

Scale
N/A

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
3

IV. Environmental Analysis

a. Introduction

This section describes the analytical approach used in this memorandum to evaluate the potential environmental effects associated with the Brine Storage Expansion. The MPWSP Final EIR/EIS did not analyze increased brine storage; therefore, this memorandum includes a comparative analysis that evaluates the potential impacts associated with the Brine Storage Expansion relative to the effects identified in the MPWSP Final EIR/EIS. As described below, the extent of potential impacts would be limited. The MPWSP Final EIR/EIS anticipated that approximately 25 acres would be impacted during construction of the desalination plant, which includes the area on the desalination plant site where the proposed additional brine storage pond would be located. Although the Brine Storage Expansion would involve a minor increase in the volume of grading to accommodate the additional brine storage pond, the Brine Storage Expansion would occur entirely within the previously evaluated and approved project footprint and would not introduce new areas of ground disturbance beyond what was identified in the MPWSP Final EIR/EIS.

b. Approach to Analysis

This environmental analysis evaluates whether the Brine Storage Expansion would result in any new or more severe environmental impacts compared to those identified in the MPWSP Final EIR/EIS. The purpose of this analysis is to identify any potential environmental effects resulting from the Brine Storage Expansion. To assist in this evaluation, **Table 1**, included in **Appendix A**, presents a side-by-side comparison of potential environmental impacts associated with the Brine Storage Expansion and the impacts previously identified by the CPUC for the Approved Project. The table is organized by topical resource area and provides a summary of anticipated environmental effects associated with the Brine Storage Expansion.

The following discussion provides a more detailed evaluation of the specific topical resource areas where the Brine Storage Expansion could potentially result in an environmental effect. This includes consideration of both temporary and permanent effects. It is important to note that this analysis is preliminary in nature. The CCRWQCB, acting as a Responsible Agency under CEQA, will ultimately determine the appropriate scope and level of environmental review required for this alternative and any related modifications to M1W's outfall and diffuser.

c. Resource Areas Excluded from Further Analysis

Given the limited nature and scope of the Brine Storage Expansion, certain environmental resource areas were excluded from further analysis. Construction activities associated with the Brine Storage Expansion would occur entirely within the construction footprint of the desalination plant site that was previously evaluated in the MPWSP Final EIR/EIS. While the Brine Storage Expansion would result in minor increases in impervious surfaces, grading volumes, and associated construction activity, all ground-disturbing activities would remain within the same temporary disturbance area described in the Approved Project.

The Brine Storage Expansion would not introduce new vertical elements or expand the extent of disturbance beyond what was previously analyzed. Therefore, the nature, location, and intensity of impacts for several resource areas would remain consistent with those disclosed in the MPWSP Final EIR/EIS. As such, no changes to the Approved Project components are proposed that would materially alter the conclusions of the prior environmental review. Accordingly, the following resource areas are not discussed further in this analysis, as the potential environmental effects would remain the same or would be reduced relative to those previously disclosed in the MPWSP Final EIR/EIS:

- Groundwater Resources
- Marine Biological Resources
- Hazards and Hazardous Materials
- Land Use, Land Use Planning, and Recreation
- Noise and Vibration
- Aesthetic Resources
- Cultural and Paleontological Resources
- Agricultural Resources
- Mineral Resources
- Energy Conservation
- Population and Housing
- Socioeconomic and Environmental Justice

d. Environmental Analysis

i. Geology and Soils

Summary of MPWSP Final EIR/EIS

The MPWSP Final EIR/EIS evaluated potential geology, soils, and seismicity related impacts associated with the Approved Project. **Table 1** summarizes the impacts associated with the Approved Project and identifies the MPWSP Final EIR/EIS significance determination for each impact category. The following analysis specifically evaluates the potential environmental effects associated with the Brine Storage Expansion in comparison to the effects identified in the MPWSP Final EIR/EIS.

The MPWSP Final EIR/EIS determined that most impacts to geology, soils, and seismicity would be less than significant. The MPWSP Final EIR/EIS concluded that potentially significant impacts to soil erosion could occur during slant well construction (Impact 4.2-1) and that the slant wells could have impacts related to coastal erosion (Impact 4.2-10). However, the MPWSP Final EIR/EIS did not identify any potentially significant impacts or mitigation measures related to geology, soils, and seismicity specific to the desalination plant or development on the desalination plant site.

Impact Analysis

Construction of the Brine Storage Expansion would involve installation of a second brine storage pond adjacent to the previously approved brine storage pond. This alternative would require additional grading and earthwork that could result in potential temporary erosion-related effects. However, all activities would occur within the same overall construction footprint as the Approved Project. Therefore, ground-disturbing activities would occur within areas previously anticipated to be disturbed in the MPWSP EIR/EIS. Additionally, because the overall footprint of construction activities at the desalination plant site would exceed one (1) acre, the Brine Storage Expansion would be required to comply with the requirements of the NPDES permit associated with the Approved Project. Specifically, construction-related activities would be subject to the requirements of the State Water Resources Control Board's Construction General Permit for stormwater discharges (Order 2009-0009-DWQ, NPDES No. CAS000002, as amended), as well as applicable Monterey County grading and erosion control ordinances. As a result, temporary construction-related erosion effects associated with the Brine Storage Expansion would not result in any additional environmental effects beyond those identified in the MPWSP Final EIR/EIS.

Operation of the Brine Storage Expansion would result in a new brine storage pond which would increase the permanent impact area of the desalination plant by approximately 63,000 square feet. However, the brine storage pond would remain uncovered and would not substantially increase impervious surfaces such that this alternative would result in additional stormwater runoff at the site. With implementation of standard best management practices ("BMPs") and compliance with the Construction General Permit, the Brine Storage Expansion would not result in any new impacts to soil erosion and stormwater runoff beyond those identified in the MPWSP Final EIR/EIS.

Conclusion

Overall, the Brine Storage Expansion would not result in additional impacts beyond those previously identified in the MPWSP Final EIR/EIS. Impacts would remain consistent with the findings of the MPWSP Final EIR/EIS. Although construction would result in additional earth movement, the Brine Storage Expansion would not result in any new impacts related to geology, soils, and seismicity. No additional mitigation measures are necessary.

ii. Surface Water Hydrology and Water Quality

Summary of MPWSP Final EIR/EIS

The MPWSP Final EIR/EIS evaluated potential surface water hydrology and water quality related impacts associated with the Approved Project. **Table 1** summarizes the impacts associated with the Approved Project and identifies the MPWSP Final EIR/EIS significance determination for each impact category. The following analysis specifically evaluates the potential environmental effects associated with the Brine Storage Expansion in comparison to the effects identified in the MPWSP Final EIR/EIS.

The MPWSP Final EIR/EIS determined that most of the Approved Project's impacts to surface water hydrology and water quality would be less than significant. The MPWSP Final EIR/EIS concluded that potentially significant impacts to surface water hydrology and water quality could occur due to degradation of water quality resulting from construction-related discharges of dewatering effluent from open excavations and water produced during well drilling and development (Impact 4.3-2). However, the MPWSP Final EIR/EIS determined that this impact could be reduced to a less than significant level with the implementation of **Mitigation Measure 4.7-2b** (development and implementation of a groundwater dewatering control and disposal plan).

Impact Analysis

Construction of the Brine Storage Expansion would involve installation of a second brine storage pond adjacent to the previously approved pond that could result in additional dewatering effluent during construction. Specifically, construction-related activities could result in potential water quality impacts due to discharges of dewatering effluent during excavation of the brine storage pond. These effects would be consistent with the temporary, potentially significant construction-related water quality impacts identified in the MPWSP Final EIR/EIS (Impact 4.3-2). As such, implementation of mitigation identified in the MPWSP Final EIR/EIS, including **Mitigation Measure 4.7-2b**, which requires the preparation of a soil and groundwater management plan, would ensure that any potential construction-related water quality impacts would not result in new impacts beyond those identified in the MPWSP Final EIR/EIS. As a result, temporary construction-related effects associated with the Brine Storage Expansion would be consistent with those identified in the MPWSP Final EIR/EIS.

Conclusion

Overall, the Brine Storage Expansion would not result in additional impacts beyond those previously identified in the MPWSP Final EIR/EIS. Impacts would remain consistent with the findings of the MPWSP Final EIR/EIS. Although construction could result in additional dewatering effluent, the implementation of existing mitigation measures identified in the MPWSP EIR/EIS would ensure that the Brine Storage Expansion would not result in any new impacts related to surface water hydrology and water quality. No additional mitigation measures are necessary.

iii. Terrestrial Biological Resources

Summary of MPWSP Final EIR/EIS

The MPWSP Final EIR/EIS evaluated potential impacts to terrestrial biological resources associated with the Approved Project. **Table 1** summarizes the impacts associated with the Approved Project and identifies the MPWSP Final EIR/EIS significance determination for each impact category. The following analysis specifically evaluates the potential environmental effects associated with the Brine Storage Expansion in comparison to the effects identified in the MPWSP Final EIR/EIS.

The MPWSP Final EIR/EIS determined that most impacts on terrestrial biological resources would be potentially significant, and that construction and operation of the desalination plant could degrade or disturb special status species and critical habitat (Impact 4.6-1 through 4.6-9). The MPWSP Final EIR/EIS identified the following mitigation measures to reduce potentially significant impacts: **Mitigation Measure 4.6-1a** through **Mitigation Measure 4.6-1c, Mitigation Measure 4.6-1e, Mitigation Measure 4.6-1i, Mitigation Measure 4.6-1j, Mitigation Measure 4.6-1l, Mitigation Measure 4.6-1n, Mitigation Measure 4.6-1o, Mitigation Measure 4.6-1p, Mitigation Measure 4.6-2b, Mitigation Measure 4.6-4, Mitigation Measure 4.6-6, and Mitigation Measure 4.14-2.** These measures include, but are not limited to, pre-construction surveys, protective measures and monitoring, avoidance and minimization measures for special status species, construction worker environmental awareness training, and installation and monitoring of bird deterrents. Implementation of mitigation would reduce all impacts to less than significant, except for Impact 4.6-C (cumulative terrestrial biological resources impacts). The MPWSP Final EIR/EIS concluded that Impact 4.6-C would remain significant and unavoidable following the implementation of all feasible mitigation.

Impact Analysis

Construction of the Brine Storage Expansion would involve installation of a second brine storage pond adjacent to the previously approved storage pond. Temporary construction-related activities would occur within the same construction footprint evaluated in the MPWSP Final EIR/EIS; therefore, these activities would not substantially increase terrestrial biological effects during construction beyond what was analyzed in the MPWSP Final EIR/EIS. As such, temporary impacts related to habitat disturbance, including the potential for the introduction of invasive species from construction equipment (Impact 4.6-5), would be consistent with those previously disclosed in the MPWSP Final EIR/EIS. However, the addition of a second brine storage pond would increase the overall permanent footprint of development on the desalination plant site by up to approximately 1.5 acres. Depending on the final pond configuration, this could result in a minor increase in permanent impacts to special-status species. As a result, the Brine Storage Expansion may require amendments to existing resource agency authorizations, including those issued by the California Department of Fish and Wildlife ("CDFW") and the U.S. Fish and Wildlife Service ("USFWS"). Additionally, consistent with the Approved Project, the Brine Storage Expansion would be required to comply with the following mitigation measures from the MPWSP Final EIR/EIS: **Mitigation Measure 4.6-1a** through **Mitigation Measure 4.6-1c, Mitigation Measure 4.6-1e, Mitigation Measure 4.6-1i, Mitigation Measure 4.6-1j, Mitigation Measure 4.6-1l, Mitigation Measure 4.6-1n, Mitigation Measure 4.6-1o, Mitigation Measure 4.6-1p, Mitigation Measure 4.6-2b,** and **Mitigation Measure 4.6-4.** The implementation of these measures would be applicable to the Brine Storage Expansion and would ensure that impacts would be consistent with the findings of the MPWSP EIR/EIS.

Operation of the Brine Storage Expansion could result in impacts to migratory bird species due to the placement of an additional brine storage pond (Impact 4.6-6). The MPWSP Final EIR/EIS determined that the approved brine storage pond could result in impacts to waterfowl birds using the brine storage basin

over long periods that could become sick or die from salt toxicosis. The MPWSP Final EIR/EIS concluded that although it is unlikely that many birds would become sick or die over the life of the project, some migratory waterfowl birds could become sick or die. As a result, the MPWSP Final EIR/EIS identified that mitigation would be necessary to minimize potential impacts to a less than significant level. Specifically, the MPWSP Final EIR/EIS concluded that with the implementation of **Mitigation Measure 4.6-6** (installation and monitoring of bird deterrents) would reduce potential impacts to a less than significant level. While the Brine Storage Expansion would increase the amount of brine storage and associated surface water on the desalination plant site, the existing mitigation identified in the MPWSP Final EIR/EIS would remain applicable and would ensure that the Brine Storage Expansion would not result in any new impacts. Therefore, the operation of an additional brine storage pond is unlikely to result in any additional impacts beyond those identified in the MPWSP Final EIR/EIS.

Conclusion

The Brine Storage Expansion would not expand the temporary construction footprint evaluated for the Approved Project - all construction activities associated with the additional brine storage pond would occur within the same general area previously analyzed in the MPWSP Final EIR/EIS. However, the Brine Storage Expansion would result in a minor increase in the Approved Project's permanent footprint by up to an additional 1.5 acres depending on the final design and configuration of the second brine storage pond. The MPWSP Final EIR/EIS included mitigation measures intended to reduce impacts associated with the construction and operation of the desalination plant that would be applicable to the Brine Storage Expansion. Specifically, the following mitigation measures would be implemented for the Brine Storage Expansion, consistent with the Approved Project: **Mitigation Measure 4.6-1a through Mitigation Measure 4.6-1c, Mitigation Measure 4.6-1e, Mitigation Measure 4.6-1i, Mitigation Measure 4.6-1j, Mitigation Measure 4.6-1l, Mitigation Measure 4.6-1n, Mitigation Measure 4.6-1o, Mitigation Measure 4.6-1p, Mitigation Measure 4.6-2b, Mitigation Measure 4.6-4, Mitigation Measure 4.6-6, and Mitigation Measure 4.14-2.** Following the implementation of these measures, the Brine Storage Expansion is not anticipated to result in any additional impacts beyond what was previously identified in the MPWSP Final EIR/EIS. Although cumulative terrestrial biological impacts from the MPWSP would remain significant and unavoidable, the Brine Storage Expansion would not result in any new impacts related to terrestrial biological resources and as such, would not contribute to cumulative impacts that were previously identified in the MPWSP Final EIR/EIS. Therefore, no additional mitigation measures are necessary.

iv. Traffic and Transportation

Summary of MPWSP Final EIR/EIS

The MPWSP Final EIR/EIS evaluated potential traffic and transportation related impacts associated with the Approved Project. **Table 1** summarizes the impacts associated with the Approved Project and identifies the MPWSP Final EIR/EIS significance determination for each impact category. The following analysis specifically evaluates the potential environmental effects associated with the Brine Storage Expansion in comparison to the effects identified in the MPWSP Final EIR/EIS.

The MPWSP Final EIR/EIS determined that most of the Approved Project's impacts to traffic and transportation would be less than significant. The MPWSP Final EIR/EIS concluded that potentially significant impacts related to traffic and transportation could occur as a result of increased road hazards due to larger volume of construction traffic and increased wear-and-tear on designated haul routes used by construction vehicles (Impacts 4.9-3 and Impact 4.9-6). However, the MPWSP Final EIR/EIS determined these impacts could be reduced to a less than significant level with the implementation of **Mitigation Measure 4.9-1** (traffic control and safety assurance plan) and **Mitigation Measure 4.9-6** (roadway

rehabilitation program). Implementation of mitigation would reduce all potential impacts to less than significant, except for Impact 4.9-C (cumulative traffic and transportation impacts). The MPWSP Final EIR/EIS concluded that Impact 4.9-C would remain unchanged following the implementation of all feasible mitigation, including **Mitigation Measure 4.9-C** (constriction traffic coordination plan).

Impact Analysis

Construction of the Brine Storage Expansion could result in additional temporary construction-related traffic. Specifically, this alternative would require additional grading and earth movement during construction, which could result in a greater number of vehicles or construction equipment on site; however, earthwork would be balanced on site, consistent with the approach from the MPWSP Final EIR/EIS. As such, the Brine Storage Expansion would not require additional off-site truck trips to the Monterey Regional Waste Management District ("ReGen Monterey"). In addition, the construction of the Brine Storage Expansion would not result in any additional construction worker traffic trips – no additional construction personnel would be necessary to construct the Brine Storage Expansion. Additionally, implementation of mitigation identified in the MPWSP Final EIR/EIS, including **Mitigation Measure 4.9-1** and **Mitigation Measure 4.9-6**, would ensure that the Brine Storage Expansion would not result in any new construction-related effects. Cumulative impacts would remain unchanged with the implementation of **Mitigation Measure 4.9-C**, consistent with the Approved Project. The Brine Storage Expansion would therefore result in substantially the same impacts as those identified in the MPWSP Final EIR/EIS.

Conclusion

The Brine Storage Expansion would result in additional earth movement due to the construction of an additional brine storage pond at the desalination plant site. However, the Approved Project included mitigation to reduce traffic impacts associated with construction of the desalination plant that would be applicable to the Brine Storage Expansion. Specifically, the Approved Project included **Mitigation Measure 4.9-3** and **Mitigation Measure 4.9-6** to reduce traffic and transportation impacts at the desalination plant. Cumulative impacts from the MPWSP would remain unchanged. The Brine Storage Expansion would not result in any new impacts related to traffic and transportation beyond what was identified in the MPWSP Final EIR/EIS. Therefore, no additional mitigation measures are necessary.

v. Air Quality

Summary of MPWSP Final EIR/EIS

The MPWSP Final EIR/EIS evaluated potential air quality related impacts associated with the Approved Project. **Table 1** summarizes the impacts associated with the Approved Project and identifies the MPWSP Final EIR/EIS significance determination for each impact category. The following analysis specifically evaluates the potential environmental effects associated with the Brine Storage Expansion in comparison to the effects identified in the MPWSP Final EIR/EIS.

The MPWSP Final EIR/EIS determined the Approved Project would have the following significant air quality impacts: (1) emissions of criteria air pollutants during construction could contribute to a violation of an ambient air quality standard (Impact 4.10-1); (2) construction activities could conflict with implementation of the applicable air quality plan (Impact 4-10-2); and (3) cumulative construction-related air quality impacts could occur associated with the potential to contribute to a violation of ambient air quality standards or conflict with an applicable air quality plan (Impact 4.10-C). The MPWSP Final EIR/EIS identified **Mitigation Measure 4.10-1a** through **Mitigation Measure 4.10-1e** to reduce potentially significant construction-related air quality impacts. These measures include certain construction equipment

standards and idling restrictions; development of a Construction Fugitive Dust Control Plan; and off-site mitigation funding. Nevertheless, the MPWSP Final EIR/EIS concluded that even following the implementation of all feasible mitigation, temporary construction-related air quality impacts would remain significant and unavoidable.

Impact Analysis

The construction of an additional brine storage pond could result in a temporary increase in air quality emissions during construction (Impact 4.10-1 and Impact 4.10-2). Consistent with the Approved Project, construction would involve the use of a variety of diesel-fueled equipment, including graders, backhoes, excavators, and loaders, that would emit exhaust containing air pollutants. Additionally, construction vehicles and workers' vehicles would generate exhaust emissions offsite and generate fugitive dust onsite through ground disturbing activities. These activities would generate temporary air quality emissions, including temporarily increased fugitive dust emissions, that would result in potential construction-related air quality impacts, consistent with those previously identified in the MPWSP Final EIR/EIS. Moreover, the incremental increase in anticipated ground disturbance associated with the Brine Storage Expansion would not exceed Monterey Bay Air Resources District ("MBARD") thresholds of 2.2 acres per day and would occur within the existing construction footprint.

Construction of the Brine Storage Expansion would result in additional temporary air quality emissions due to the expanded earthwork on site. The Brine Storage Expansion would require an additional 27,325 CY of cut and 19,782 CY of fill, for a net volume of 7,542 CY of cut to be balanced on site. This additional earth movement would occur during the grading and site preparation phase and would result in a minor increase in temporary construction-related air quality emissions; although grading quantities for the Brine Storage Expansion would not exceed the MBARD threshold of 2.2 acres per day. The Brine Storage Expansion would result in an increase in the criteria pollutants evaluated in the MPWSP Final EIR/EIS, which include reactive organic gases ("ROG"), nitrogen oxide ("NOx"), carbon monoxide ("CO"), respirable particulate matter ("PM10"), and fine particulate matter ("PM2.5"). Construction emissions were quantified using CalEEMod for the Brine Storage Expansion. **Table AQ-1** includes the emissions of criteria air pollutants during construction associated with the Approved Project and Brine Storage Expansion against the established MBARD thresholds.

Table AQ-1
Construction Emissions of Criteria Air Pollutants*

	Emissions (lbs./day)				
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions (Approved Project):	33.94	374.27	217.14	204.93	40.35
Maximum Daily Emissions (Brine Storage Expansion):	1.51	14.10	14.50	7.66	4.01
Total:	33.45	388.37	231.64	212.59	44.36
MBARD Significance Threshold:	137	137	550	82	55

Source: CalEEMod 2025, Denise Duffy & Associates, Inc. 2025 CalEEMod.
See Appendix B for the full CalEEMod Report.
*Consistent with the analysis in the MPWSP Final EIR/EIS, construction emissions show emission sources from Off-road Construction Equipment and On-road Vehicle Exhaust.

Specifically, the Brine Storage Expansion would result in a 4% increase in ROG, a 4% increase in NOx, a 7% increase in CO, a 4% increase in PM10, and a 10% increase in PM2.5 when compared to the Approved Project. These temporary, construction-related increases in criteria pollutants represent a relatively minor increase in air quality emissions when compared to the entirety of the Approved Project analyzed in the MPWSP Final EIR/EIS. Additionally, as discussed in the MPWSP Final EIR/EIS, **Mitigation Measure**

4.10-1a through **Mitigation Measure 4.10-1e** would be implemented to ensure the temporary air quality emissions would be minimized. Consistent with the analysis in the MPWSP Final EIR/EIS, cumulative impacts would remain unchanged with the implementation of **Mitigation Measure 4.10-1a, Mitigation Measure 4.10-1b,** and **Mitigation Measure 4.10-1e**. Therefore, the Brine Storage Expansion would result in substantially the same impacts as those identified in the MPWSP Final EIR/EIS for the Approved Project.

Conclusion

The Brine Storage Expansion would result in additional grading. As a result, the construction activities would result in additional temporary air quality emissions associated with that grading; however, the proposed brine storage alternative would not result in a significant increase in air quality emissions beyond what was previously identified in the MPWSP Final EIR/EIS. Additionally, the Brine Storage Expansion would implement the mitigation measures included in the MPWSP Final EIR/EIS (**Mitigation Measure 4.10-1a** through **Mitigation Measure 4.10-1e**) to reduce construction-related impacts. Cumulative impacts would remain unchanged from those identified in the MPWSP Final EIR/EIS. The Brine Storage Expansion would not result in any additional impacts to air quality beyond those identified in the MPWSP Final EIR/EIS. Therefore, no additional mitigation measures are necessary.

vi. Greenhouse Gas Emissions

Summary of MPWSP Final EIR/EIS

The MPWSP Final EIR/EIS evaluated potential greenhouse gas ("GHG") related impacts associated with the Approved Project. **Table 1** summarizes the impacts associated with the Approved Project and identifies the MPWSP Final EIR/EIS significance determination for each impact category. The following analysis specifically evaluates the potential environmental effects associated with the Brine Storage Expansion in comparison to the effects identified in the MPWSP Final EIR/EIS.

The MPWSP Final EIR/EIS concluded that the Approved Project's GHG-related impacts would be potentially significant. Specifically, the MPWSP Final EIR/EIS identified the following potentially significant GHG impacts: 1) incremental contribution to climate change from GHG emissions (Impact 4.11-1); 2) conflict with Executive Order B-30-15 Emissions Reduction Goal (Impact 4.11-2); 3) conflict with Assembly Bill ("AB") 32 Climate Change Scoping Plan (Impact 4.11-3); and 4) cumulative impacts related to greenhouse gas emissions (4.11-C). The MPWSP Final EIR/EIS concluded that implementation of **Mitigation Measure 4.11-1** and **Mitigation Measure 4.18-1** could reduce the impacts related to GHG emissions to a less than significant level.

Impact Analysis

The construction of the proposed brine storage alternative is not anticipated to result in a noticeable increase in GHG emissions (Impact 4.11-1). Construction of the Brine Storage Expansion would result in a negligible increase in GHG emissions when compared to the entirety of the Approved Project and the desalination plant. Specifically, as shown in **Table GHG-1**, the Brine Storage Expansion would emit an additional 235.44 metric tons of carbon dioxide equivalents ("MT CO2e") during construction. The MPWSP Final EIR/EIS stated that the construction of the desalination plant component of the Approved Project would result in total construction emissions of 7,087.22 MT CO2e and the entirety of the Approved Project would result in 14,291.41 MT CO2e during construction.

Table GHG-1
Construction Emissions of GHGs

Construction Phase	Annual Emissions ($MTCO_2e$/Year)
Site Preparation (2025)	19.30
Grading (2025)	45.14
Grading (2026)	27.03
Building Construction (2026)	138.30
Architectural Coating (2026)	0.77
Paving (2026)	4.90
Total Construction Emissions:	235.44

Source: CalEEMod 2025, Denise Duffy & Associates, Inc. 2025 CalEEMod.
See Appendix B for full CalEEMod Report.

Therefore, the Brine Storage Expansion would result in an approximately 3% increase in GHG emissions from construction at desalination plant site and 1.5% increase in GHG emissions compared to the entirety of the Approved Project during construction. This negligible increase is due to the minor nature of construction-related activities associated with the Brine Storage Expansion, limited equipment use outside of what was included in the Approved Project, and no change in construction duration beyond what was already evaluated in the MPWSP Final EIR/EIS.

Additionally, the Brine Storage Expansion would not substantially increase operational emissions due to the lack of new long-term operational sources of emissions. Operation of the Brine Storage Expansion would not result in significant energy demand. The Brine Storage Expansion is consistent with the state's long-term GHG reduction strategies, including Executive Order B-30-15 and the AB 32 Climate Scoping Plan. Therefore, the Brine Storage Expansion would not result in a significant contribution to overall emissions and would not conflict with Executive Order B-30-15 Emissions Reduction Goal (Impact 4.11-2) or conflict with Assembly Bill ("AB") 32 Climate Change Scoping Plan. Further, because the Brine Storage Expansion would have a negligible increase in GHG emissions compared with the Approved Project, the Brine Storage Expansion would not contribute noticeably to cumulative impacts. Additionally, the Brine Storage Expansion would implement mitigation from the he MPWSP EIR/EIS, including **Mitigation Measure 4.11-1** and **Mitigation Measure 4.18-1**, which require the preparation of a GHG reduction plan and construction equipment efficiency plan to ensure that the proposed brine storage alternative would not result in new impacts beyond what was previously identified in the MPWSP Final EIR/EIS.

Conclusion

The Brine Storage Expansion is anticipated to result in a negligible increase in construction and operational GHG emissions when compared to the Approved Project. Additionally, the Approved Project included **Mitigation Measure 4.11-1** and **Mitigation Measure 4.18-1** to reduce impacts associated with construction and operation of the desalination plant, which would remain applicable to the Brine Storage Expansion. With the implementation of these mitigation measures, construction and operational GHG impacts associated with the Brine Storage Expansion would not result in any new GHG related impacts beyond those identified in the MPWSP Final EIR/EIS. Therefore, no additional mitigation measures are necessary.

vii. Public Services and Utilities

Summary of MPWSP Final EIR/EIS

The MPWSP Final EIR/EIS evaluated potential impacts related to public services and utilities associated with the Approved Project. **Table 1** summarizes the impacts associated with the Approved Project and identifies the MPWSP Final EIR/EIS significance determination for each impact category. The following

analysis specifically evaluates the potential environmental effects associated with the Brine Storage Expansion in comparison to the effects identified in the MPWSP Final EIR/EIS.

The MPWSP Final EIR/EIS determined that most of the Approved Project's impacts on public services and utilities would be less than significant. The MPWSP Final EIR/EIS concluded that potentially significant impacts to public services and utilities could occur as a result of the increased excavated materials that would need to be disposed of offsite (Impact 4.13-2). However, the MPWSP Final EIR/EIS determined this impact could be reduced to a less than significant level with the implementation of **Mitigation Measure 4.13-2** (construction waste reduction and recycling plan).

Impact Analysis

Construction of the Brine Storage Expansion would require additional grading during construction and would result in an additional 7,542 CY of excess material on site. Consistent with the MPWSP Final EIR/EIS, the excess material would be diverted from the landfill and reused on site. Additionally, the Brine Storage Expansion would implement mitigation previously identified in the MPWSP Final EIR/EIS to reduce impacts related to public services and utilities and waste disposal from the construction of the desalination plant. The implementation of mitigation identified in the MPWSP EIR/EIS, including **Mitigation Measure 4.13-2** (construction waste reduction and recycling plan) would ensure that the Brine Storage Expansion does not result in any new impacts to public services and utilities.

Conclusion

The Brine Storage Expansion would result in additional excavated materials as a result of construction activities at the desalination plant site. However, the Brine Storage Expansion would implement previously identified **Mitigation Measure 4.13-2** to reduce impacts resulting from the construction of the desalination plant. Specifically, the Approved Project included **Mitigation Measure 4.13-2** to ensure that waste generated from the construction of the desalination plant would be diverted from landfills to reduce impacts to public services and utilities. Therefore, the Brine Storage Expansion would not result in any new impacts related to public services and utilities beyond those identified in the MPWSP Final EIR/EIS, and no additional mitigation measures would be necessary.

V. Conclusion

The Brine Storage Expansion would not expand the temporary construction footprint evaluated in the MPWSP Final EIR/EIS and would result in environmental effects that are generally consistent with those previously disclosed. While the Brine Storage Expansion could result in a minor increase in the Approved Project's permanent footprint, the overall impact would remain unchanged. Additionally, due to the relatively limited scope of the Brine Storage Expansion, this alternative is not anticipated to generate additional environmental effects beyond those identified in the MPWSP Final EIR/EIS. As a result, the Brine Storage Expansion appears to be a feasible from an environmental perspective. However, it is important to note that this analysis is preliminary in nature and intended to support future project planning and environmental compliance efforts. The CCRWQCB, acting as a Responsible Agency under CEQA, will ultimately determine the scope and level of environmental review required for the Brine Storage Expansion in connection with any subsequent approvals related to modifications to M1W's existing ocean outfall.

Appendix A.

Table 1 - MPWSP Preliminary Impact Comparison Chart

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Section 4.2: Geology, Soils, and Seismicity			
Impact 4.2-1: Substantial soil erosion or loss of topsoil during construction.		**LSM** =	The proposed on-site brine storage expansion ("Brine Storage Expansion") would not change the overall temporary disturbance footprint of the Approved Project. The Brine Storage Expansion would increase the overall volume of grading for excavation of a second brine storage pond at the desalination plant; however, as currently proposed, the additional brine storage pond would be constructed within the existing temporary construction footprint described in the MPWSP Final EIR/EIS for the Approved Project. Additionally, the Brine Storage Expansion would be required to adhere to typical best management practices ("BMPs") required as part of applicable Monterey County grading and erosion control ordinances. As a result, the Brine Storage Expansion would not disturb additional areas beyond those previously identified in the MPWSP Final EIR/EIS. Overall, the Brine Storage Expansion would result in substantially the same impacts as the Approved Project.
Impact 4.2-2: Exposure of people or structures to substantial adverse effects related to fault rupture.		**LS** =	The Brine Storage Expansion is located on the same site as the desalination plant that was previously analyzed as part of the Approved Project. As such, the Brine Storage Expansion would not result in any additional environmental effects beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.2-3: Exposure of people or structures to substantial adverse effects related to seismically induced ground shaking.		**LS** =	
Impact 4.2-4: Exposure of people or structures to substantial adverse effects related to seismically induced ground failure, including liquefaction, lateral spreading, or settlement.		**LS** =	

[1] The CPUC approved project includes a 6.4 mgd desalination facility requiring seven (7) intake slant wells (six [6] new wells and conversion of an existing test slant well) on five (5) well pads (four [4] new well pads plus the existing well pad for the test slant well) at the former CEMEX sandmining site. The desalination facility included the desalination plant building, a filter building, a reverse osmosis building, an administration building, seven (7) filter vessels, two (2) filtered water tanks, a pump pad, two (2) treated water tanks, a Cal-Flo containment basin, a carbon dioxide ("CO2") tank and solution water pumps, two (2) backwash reclamation basins, a recycle pump station, one (1) three (3)-million-gallon brine equalization/storage basin, and appurtenances (i.e., brine discharge pumps and pump station, aeration system, and connecting pipelines) on approximately 1.5 acres at the desalination plant site.

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Impact 4.2-5: Exposure of people or structures to substantial adverse effects related to landslides or other slope failures.	**LS**	**LS =**	
Impact 4.2-6: Exposure of people or structures to substantial adverse effects related to expansive soils.	**LS**	**LS =**	
Impact 4.2-7: Exposure of structures to substantial adverse effects related to corrosive soils.	**LS**	**LS =**	
Impact 4.2-8: Exposure of people or structures to substantial adverse effects related to land subsidence.	**NI**	**NI =**	
Impact 4.2-9: Exposure of people or structures to substantial adverse effects related to alternative wastewater disposal systems.	**LS**	**LS =**	
Impact 4.2-10: Accelerate and/or exacerbate natural rates of coastal erosion, scour, or dune retreat, resulting in damage to adjoining properties or a substantial change in the natural coastal environment.	**LSM**	**LSM =**	The Brine Storage Expansion is not located within the Coastal Zone and is approximately 1.25 miles inland. As a result, there would be no impact on coastal processes. Therefore, the Brine Storage Expansion would not result in any additional impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.2-11: Degrades the physical structure of any geologic resource or alters any oceanographic process, such as sediment transport, that is measurably different from pre-existing conditions.	**NI**	**NI =**	
Impact 4.2-C: Cumulative impacts related to Geology, Soils, and Seismicity.	**LSM**	**LSM** =	See Impacts 4.2-1 – 4.2-11, above. The Brine Storage Expansion would be located in the same footprint that was previously analyzed in the MPWSP Final EIR/EIS. Impacts would remain substantially the same as those identified in the MPWSP Final EIR/EIS. Therefore, the Brine Storage Expansion would not result in an increase in cumulative impacts related to geology, soils, and seismicity beyond those identified in the MPWSP Final EIR/EIS.

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Section 4.3: Surface Water Hydrology and Water Quality			
Impact 4.3-1: Degradation of water quality associated with increased soil erosion and inadvertent releases of hazardous chemicals during general construction activities.	**LS**	**LS** =	The Brine Storage Expansion would result in additional grading that could temporarily increase potential impacts related to erosion (see Impact 4.2-1, above). Further, additional grading could increase the amount of dewatering effluent released during construction activities. However, these impacts would be temporary in nature and would be consistent with impacts identified in the MPWSP Final EIR/EIS in connection with the Approved Project. Moreover, existing mitigation identified in the MPWSP Final EIR/EIS would be applicable to the Brine Storage Expansion and would ensure impacts do not exceed those previously disclosed in the MPWSP Final EIR/EIS. Therefore, the Brine Storage Expansion would not result in additional impacts beyond those identified in the MPWSP Final EIR/EIS for the Approved Project.
Impact 4.3-2: Degradation of water quality from construction-related discharges of dewatering effluent from open excavations and water produced during well drilling and development.	**LSM**	**LSM** =	
Impact 4.3-3: Degradation of water quality from discharges of treated water and disinfectant from existing and newly installed pipelines during construction.	**LS**	**LS** **=**	The Brine Storage Expansion would not result in any changes to the number or location of pipelines or result in any additional brine discharge when compared to the Approved Project. As a result, the Brine Storage Expansion would not change water quality impacts related to pipelines or brine discharge compared to what was identified in the MPWSP Final EIR/EIS.
Impact 4.3-4: Violate water quality standards or waste discharge requirements or degrade water quality from increased salinity as a result of brine discharge from the operation of the MPWSP Desalination Plant.	**LSM**	**LSM** =	
Impact 4.3-5: Violate water quality standards or waste discharge requirements or degrade water quality as a result of brine discharge from the operation of the MPWSP Desalination Plant.	**LSM**	**LSM** =	
Impact 4.3-6: Degradation of water quality due to discharges associated with maintenance of the subsurface slant wells and the ASR -5 and ASR-6 Wells.	**LS**	**LS** =	The Brine Storage Expansion does not include any improvements to the ASR wells or slant wells. As a result, the Brine Storage Expansion would not result in any additional impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.3-7: Alteration of drainage patterns such that there is a resultant increase in	**LS**	**LS** =	The Brine Storage Expansion would not substantially increase erosion, siltation, or the rate or amount of surface runoff compared

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
erosion, siltation, or the rate or amount of surface runoff.			to what was previously analyzed in the MPWSP Final EIR/EIS. In addition, this alternative would not increase flooding on- or offsite or exceed the capacity of a stormwater drainage system. The Brine Storage Expansion would be within the existing construction footprint that was previously analyzed for the Approved Project. The Brine Storage Expansion could result in a minor increase in impervious surfaces that could cause additional runoff; however, these effects would be substantially the same as those identified in connection with the Approved Project. Further, potential impacts would be addressed through compliance with the State Water Resources Control Board Construction General Permit for stormwater discharges (Order 2009-0009-DWQ, NPDES No. CAS000002, as amended), as well as applicable Monterey County grading and erosion control ordinances, consistent with the Approved Project. As a result, the Brine Storage Expansion would not result in additional impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.3-8: Alteration of drainage patterns such that there is an increase in flooding on- or offsite or the capacity of the stormwater drainage system is exceeded.	**LS**	**LS** =	
Impact 4.3-9: Impedance or redirection of flood flows due to the siting of project facilities in a 100-year flood hazard area.	**LS**	**LS** =	The Brine Storage Expansion is not located in an area subject to a 100-year flood or a tsunami hazard zone. As a result, the Brine Storage Expansion would not result in additional impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.3-10: Exposure of people or structures to a significant risk of loss, injury, or death from flooding due to a tsunami.	**LS**	**LS** =	
Impact 4.3-11: Exposure of people or structures to a significant risk of loss, injury, or death from flooding due to sea level rise.	**LS**	**LS** =	

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Impact 4.3-C: Cumulative impacts related to Surface Water Hydrology and Water Quality.	**LSM**	**LSM** =	See Impacts 4.3-1 – 4.3-11, above. Impacts associated with the Brine Storage Expansion would be minor, primarily temporary, and would be consistent with impacts associated with the Approved Project. As a result, the Brine Storage Expansion would not increase cumulative impacts related to surface water hydrology and water quality beyond what was identified in the MPWSP Final EIR/EIS.
Section 4.4: Groundwater Resources			
Impact 4.4-1: Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level during construction.	**NI**	**NI** **=**	The Brine Storage Expansion consists of the construction of an additional brine storage pond at the desalination plant site, which was previously analyzed in the MPWSP Final EIR/EIS. Construction and operational activities associated with the Brine Storage Expansion would be consistent with those assessed in the MPWSP Final EIR/EIS. Therefore, consistent with the analysis in the MPWSP Final EIR/EIS, the Brine Storage Expansion would not result in impacts to groundwater.
Impact 4.4-2: Violate any water quality standards or otherwise degrade groundwater quality during construction.	**LS**	**LS** =	
Impact 4.4-3: Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level during operations so as to expose well screens and pumps.	**LS**	**LS** =	
Impact 4.4-4: Violate any water quality standards or otherwise degrade groundwater quality during operations.	**LSM**	**LSM** =	
Impact 4.4-C: Cumulative impacts related to Groundwater Resources.	**LS**	**LS** =	See Impacts 4.4-1 – 4.4-4, above. Consistent with the analysis in the MPWSP Final EIR/EIS of the Approved Project, the Brine Storage Expansion would not affect groundwater resources.

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Section 4.5: Marine Resources			
Impact 4.5-1: Result in a substantial adverse effect, either directly or through habitat modifications, including direct disturbance, removal, filling, hydrological interruption, or discharge, on any marine species, natural community, or habitat, including candidate, sensitive, or special-status species identified in local or regional plans, policies, regulations or conservation plans (including protected wetlands or waters, critical habitat, essential fish habitat (EFH); or as identified by the CDFW, USFWS, and/or NMFS during construction	**LS**	**LS** =	
Impact 4.5-2: Threaten to eliminate a marine plant or animal wildlife community or cause a fish or marine wildlife population to drop below self-sustaining levels during construction.	**LS**	**LS** =	The Brine Storage Expansion is not located in the Coastal Zone and is approximately 1.25 miles inland, in unincorporated Monterey County. Additionally, as discussed under Section 4.3, above, the Proposed Modification would not increase operational brine discharge associated with the Approved Project. As such, no marine resources would be affected by the Brine Storage Expansion. Therefore, this alternative would not result in any additional impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.5-3: Interfere substantially with the movement of any native marine resident or migratory fish or marine wildlife species or with established native resident or migratory marine wildlife corridors or impede the use of native marine wildlife nursery sites during construction.	**LS**	**LS** =	
Impact 4.5-4: Result in a substantial adverse effect, either directly or through habitat modifications, including direct disturbance, removal, filling, hydrological interruption, or discharge, on any marine species, natural community, or habitat, including candidate, sensitive, or special-status species identified in local or regional plans, policies, regulations or conservation plans (including protected wetlands or waters, critical habitat, essential fish habitat (EFH); or as identified by the	**LS**	**LS** =	

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
CDFW, USFWS, and/or NMFS during operations.			
Impact 4.5-5: Threaten to eliminate a marine plant or animal wildlife community or cause a fish or marine wildlife population to drop below self-sustaining levels during operations.	**LS**	**LS** **=**	
Impact 4.5-6: Interfere substantially with the movement of any native marine resident or migratory fish or marine wildlife species or with established native resident or migratory marine wildlife corridors, or impede the use of native marine wildlife nursery sites during operations.	**LS**	**LS** =	
Impact 4.5-C: Cumulative impacts on Marine Resources.	**LS**	**LS** =	See Impacts 4.5-1 – 4.5-6, above. This alternative would not result in any impacts to marine resources.
Section 4.6: Terrestrial Biological Resources			
Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special status, either directly or through habitat modification, during construction.	**LSM**	**LSM** =	The Brine Storage Expansion could result in a minor increase in potential impacts to terrestrial biological resources due to the construction of a second brine storage pond. However, construction of the brine storage pond would occur within the existing construction footprint for the Approved Project. Therefore, this alternative would not increase areas temporarily impacted during construction. Depending on final configuration of the brine storage ponds, the Brine Storage Expansion could result in a minor increase of up to 1.5 acres in permanent impact area at the desalination site. This would constitute a minor increase in permanent impacts that may require additional coordination with the applicable resource agencies (e.g., California Department of Fish and Wildlife, U.S. Fish and Wildlife, etc.). However, temporary impacts would remain within the overall disturbance footprint that was previously analyzed in the MPWSP Final EIR/EIS and would be consistent with the potential impacts identified for the Approved Project. Moreover, all mitigation measures identified in the MPWSP Final EIR/EIS would be applicable to the Brine Storage Expansion and would ensure impacts would not exceed those previously identified in the MPWSP Final EIR/EIS. Ultimately, more refined
Impact 4.6-2: Result in substantial adverse effects on riparian habitat, critical habitat, or other sensitive natural communities during construction.	**LSM**	**LSM** =	
Impact 4.6-3: Result in substantial adverse effects on federal wetlands, federal other waters, and/or waters of the State during construction.	**LSM**	**LSM** =	

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
			site design is necessary to conclusively determine the extent of potential increases in permanent impacts; however, given the limited size and scope of the Brine Storage Expansion, the increase in permanent impacts would not constitute a new significant biological impact for purposes of this analysis.
Impact 4.6-4: Be inconsistent with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance with local tree ordinances.	**SU**	**SU** **=**	This alternative would not result in any inconsistencies with local policies or ordinances protecting biological resources within unincorporated Monterey County. This alternative could slightly increase permanent impacts associated with the construction of the desalination plant, but it would not result in any potential policy inconsistencies. The MPWSP Final EIR/EIS identified potential policy conflicts due to impacts resulting from potential tree removal at the desalination plant site. No trees would be affected by this alternative. As a result, this alternative would not result in any additional impacts beyond those identified in the MPWSP Final EIR/EIS.
Impact 4.6-5: Introduce or spread an invasive non-native species during construction.	**LSM**	**LSM** =	See notes above regarding Impact 4.6-1 through 4.6-3.
Impact 4.6-6: Result in substantial adverse effects on candidate, sensitive, or special-status species during project operations.	**LSM**	**LSM** =	The operation of an additional brine pond could result in potential impacts to migratory bird species due to the addition of another saline water source that could lead to illnesses and death in certain bird populations. However, as identified in the MPWSP Final EIR/EIS, existing mitigation would ensure that potential impacts due to the exposure of certain bird species to saline water sources would be reduced to a less than significant level. As a result, this alternative would not result in any additional impacts beyond those identified in the MPWSP Final EIR/EIS.
Impact 4.6-7: Result in substantial adverse effects on riparian habitat, critical habitat, or other sensitive natural communities during project operations	**LSM**	**LSM** =	This alternative would not result in adverse effects to sensitive habitats, waters, or result in the spread of non-native species during operation. Additionally, this alternative would not conflict with any adopted plans during operation. The operation of the Brine

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Impact 4.6-8: Result in substantial adverse effects on federal wetlands, federal other waters, and waters of the State during project operations.	**LSM**	**LSM** =	Storage Expansion would consist of routine maintenance in developed portions of the site, consistent with what was discussed in the MPWSP Final EIR/EIS. As a result, this alternative would not result in any additional impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.6-9: Introduce or spread an invasive non-native species during project operations.	**LSM**	**LSM** =	
Impact 4.6-10: Conflict with the provisions of an adopted Habitat Conservation Plans, natural community conservation plans or other approved local, regional, or state habitat conservation plan.	**LSM**	**LSM** =	
Impact 4.6-C: Cumulative impacts related to Terrestrial Biological Resources.	**SU**	**SU** =	See Impacts 4.6-1 – 4.6-10, above. The Brine Storage Expansion would be located in the same temporary construction footprint that was previously analyzed in the MPWSP Final EIR/EIS. Impacts would remain substantially the same as those identified in the MPWSP Final EIR/EIS and mitigation would ensure that the Brine Storage Expansion would not result in an increase in cumulative impacts related to terrestrial biological resources beyond those identified in the MPWSP Final EIR/EIS.
Section 4.7: Hazards and Hazardous Materials			
Impact 4.7-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction.	**LS**	**LS** =	The Brine Storage Expansion would result in additional construction-related grading at the desalination plant site; however, construction activities would be consistent with those analyzed in the MPWSP Final EIR/EIS in connection with the Approved Project. Additionally, previously identified mitigation measures would be applicable to the Brine Storage Expansion and would ensure any impacts do not exceed those previously identified in the MPWSP Final EIR/EIS. As a result, the Brine Storage Expansion would not result in additional impacts beyond those identified in the MPWSP Final EIR/EIS.
Impact 4.7-2: Encountering hazardous materials from other hazardous materials release sites during construction.	**LSM**	**LSM** =	
Impact 4.7-3: Project facilities would be located on a known hazardous materials site.	**LS**	**LS** **=**	
Impact 4.7-4: Handle hazardous materials or emit hazardous emissions within 0.25 mile of schools during construction.	**LS**	**LS** **=**	

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Impact 4.7-5: Increase risk of wildland fires during construction.	**LS**	**LS** **=**	
Impact 4.7-6: Create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials during project operations.	**LS**	**LS** **=**	
Impact 4.7-C: Cumulative impacts related to Hazards and Hazardous Materials.	**LSM**	**LSM** **=**	See Impacts 4.7-1 – 4.7-6 above. The Brine Storage Expansion would not result in any new impacts to hazards and hazardous materials; therefore, this alternative would not increase cumulative impacts beyond those identified in the MPWSP Final EIR/EIS.
Section 4.8: Land Use, Land Use Planning, and Recreation			
Impact 4.8-1: Consistency with applicable plans, policies, and regulations related to land use and recreation that were adopted for the purpose of mitigating an environmental effect.	**LS**	**LS** **=**	The Brine Storage Expansion would not result in any additional land use or recreation related effects. All construction-related activities would occur within the existing construction footprint that was analyzed in the MPWSP Final EIR/EIS for the Approved Project. All mitigation measures identified in the MPWSP Final EIR/EIS would be applicable to the Brine Storage Expansion and would ensure impacts do not exceed those identified in the MPWSP Final EIR/EIS. In addition, the Brine Storage Expansion is located outside of the Coastal Zone, approximately 1.25 miles inland in unincorporated Monterey County; as such, this alternative would not result in any impacts to coastal resources. Therefore, the Brine Storage Expansion would not result in additional environmental effects beyond those identified in the MPWSP Final EIR/EIS.
Impact 4.8-2: Disrupt or preclude public access to or along the coast during construction.	**LSM**	**LSM** **=**	
Impact 4.8-C: Cumulative impacts related to Land Use, Land Use Planning, and Recreation.	**LSM**	**LSM** **=**	See Impacts 4.8-1 – 4.8-2 above. The Brine Storage Expansion would not result in any new impacts to Land Use, Land Use Planning, and Recreation; therefore, this alternative would not increase cumulative impacts beyond those identified in the MPWSP Final EIR/EIS.
Section 4.9: Traffic and Transportation			
Impact 4.9-1: Temporary traffic increases on regional and local roadways due to construction-related vehicle trips.	**LSM**	**LSM** =	The Brine Storage Expansion could result in a minor increase in construction traffic. Specifically, this alternative would require additional grading and earth movement during construction, which

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Impact 4.9-2: Temporary reduction in roadway capacities and increased traffic delays during construction.	**LSM**	**LSM** =	could result in a greater number of vehicles or construction equipment on site. However, consistent with the MPWSP Final EIR/EIS, the entirety of the excess grading material from the Brine Storage Expansion would be balanced onsite. Additionally, the implementation of mitigation measures identified in the MPWSP Final EIR/EIS would be applicable to the Proposed Modification and would ensure that all potential construction-related effects would not exceed impacts identified in the MPWSP Final EIR/EIS. As a result, this alternative would not result in any additional impacts beyond those identified in the MPWSP Final EIR/EIS.
Impact 4.9-3: Increased traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways during construction.	**LSM**	**LSM** =	
Impact 4.9-4: Impaired emergency access during construction.	**LSM**	**LSM** =	
Impact 4.9-5: Temporary disruptions to public transportation, bicycle, and pedestrian facilities during construction.	**LSM**	**LSM** =	
Impact 4.9-6: Increased wear-and-tear on the designated haul routes used by construction vehicles.	**LSM**	**LSM** =	
Impact 4.9-7: Parking interference during construction.	**LSM**	**LSM** =	
Impact 4.9-8: Long-term traffic increases on regional and local roadways during project operations and maintenance.	**LS**	**LS** =	
Impact 4.9-C: Cumulative impacts related to Traffic and Transportation.	**SU**	**SU** =	See Impacts 4.9-1 – 4.9-8 above. The Brine Storage Expansion could result in a minor increase in construction traffic, although the entirety of excess grading material would be balanced on site. Therefore, impacts would remain substantially the same as those identified in the MPWSP Final EIR/EIS and mitigation would ensure the Brine Storage Expansion would not result in an increase in cumulative impacts related to traffic and transportation beyond those identified in the MPWSP Final EIR/EIS.
Section 4.10: Air Quality			
Impact 4.10-1: Generate emissions of criteria air pollutants and contribute to a violation of an ambient air quality standard during construction.	**SU**	**SU** =	Construction of the Brine Storage Expansion could result in air quality emissions during construction. Specifically, grading activities would result in temporarily increased air quality emissions due to the operation of construction equipment for additional

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Impact 4.10-2: Construction activities could conflict with implementation of the applicable air quality plan.	**SU**	**SU** =	earthmoving. The Brine Storage Expansion would increase overall construction-related emissions by an average of 5.8 percent over the applicable criteria pollutants but would not cause an exceedance of any applicable MBARD thresholds of significance beyond what was previously identified in the MPWSP Final EIR/EIS. Additionally, all mitigation measures identified in the MPWSP Final EIR/EIS that are applicable to construction of the desalination plant would also be applicable to the Brine Storage Expansion. Implementation of these mitigation measures would ensure temporary construction impacts are minimized to the extent practicable and would not exceed impacts that were previously identified in the MPWSP Final EIR/EIS. Therefore, the Brine Storage Expansion would not result in impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.10-3: Expose sensitive receptors to substantial pollutant concentrations and/or *Coccidioides immitis* (Valley Fever) spores or create objectionable odors affecting a substantial number of people during construction.	**LS**	**LS** =	The Brine Storage Expansion would not result in any additional impacts to sensitive receptors during construction or operation beyond what was identified in the MPWSP Final EIR/EIS for the Approved Project. Similarly, this alternative would not expose sensitive receptors to substantial pollutant concentrations or create objectionable odors beyond what was identified for the Approved Project. The Brine Storage Expansion would be located within the same footprint as what was previously analyzed for the Approved Project and would involve the same construction and operation materials and methods as what was analyzed in the MPWSP Final EIR/EIS; therefore, impacts would be the same as those identified in the MPWSP Final EIR/EIS.
Impact 4.10-4: Long-term increase of criteria pollutant emissions that could contribute to a violation of an ambient air quality standard during operations.	**LS**	**LS** =	
Impact 4.10-5: Expose sensitive receptors to substantial pollutant concentrations or create objectionable odors affecting a substantial number of people during operations.	**LS**	**LS** =	
Impact 4.10-C: Cumulative impacts related to Air Quality.	**SU**	**SU** =	See Impacts 4.10-1 – 4.10-5 above. The Brine Storage Expansion could result in air quality emissions during construction due to the increase in construction equipment needed for the expanded grading quantities. This increase would not increase the emission of criteria air pollutants above applicable thresholds when compared to the Approved Project. Therefore, impacts would remain substantially the same as those identified in the MPWSP Final EIR/EIS and mitigation would ensure the Brine Storage Expansion would not result in an increase in cumulative impacts

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
			related to air quality beyond those identified in the MPWSP Final EIR/EIS.
Section 4.11: Greenhouse Gas Emissions			
Impact 4.11-1: Incremental contribution to climate change from GHG emissions associated with the proposed project.	**LSM**	**LSM** =	The Brine Storage Expansion could result in potential temporary increases in GHG emissions during construction due to additional construction-related earthmoving activities needed for excavation of the additional storage pond. However, these impacts would be minor, temporary in nature, and would be consistent with construction-related effects that were previously analyzed for the Approved Project. Additionally, the Brine Storage Expansion would implement previously identified mitigation measures to ensure impacts do not exceed those identified in the MPWSP Final EIR/EIS. As a result, the Brine Storage Expansion would not result in additional environmental effects beyond those identified in the MPWSP Final EIR/EIS.
Impact 4.11-2: Conflict with the Executive Order B-30-15 Emissions Reduction Goal.	**LSM**	**LSM** **=**	
Impact 4.11-3: Conflict with AB 32 Climate Change Scoping Plan.	**LSM**	**LSM** =	
Impact 4.11-C: Cumulative impacts related to Greenhouse Gas Emissions.	**LSM**	**LSM** =	See Impacts 4.11-1 – 4.11-3 above. The Brine Storage Expansion would result in additional GHG emissions during construction due to the increase in construction equipment needed for the expanded grading quantities. The Brine Storage Expansion would result in a minor increase in GHG emissions when compared to the Approved Project. Therefore, impacts would remain substantially the same as those identified in the MPWSP Final EIR/EIS and mitigation would ensure the Brine Storage Expansion would not result in an increase in cumulative impacts related to GHG emissions beyond those identified in the MPWSP Final EIR/EIS.
Section 4.12: Noise and Vibration			
Impact 4.12-1: Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction.	**SU**	**SU** **=**	Construction and operation of the Brine Storage Expansion would not result in changes to previously identified impacts related to noise and vibration for the Approved Project. The Brine Storage Expansion would be within the same footprint as what was previously analyzed and would use the same materials and methods for construction and operation as those assessed for the Approved Project. As a result, the Brine Storage Expansion would not result in impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.12-2: Expose people to or generate noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies during construction.	**LSM**	**LSM** =	
Impact 4.12-3: Exposure of people to or generation of excessive groundborne vibration during construction.	**LSM**	**LSM** =	

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Impact 4.12-4: Consistency with the construction time limits established by the local jurisdictions.	**LSM**	**LSM =**	
Impact 4.12-5: Substantial permanent increases in ambient noise levels in the project vicinity above levels existing without the project during operations.	**LSM**	**LSM** =	
Impact 4.12-6: Expose people to or generate operational noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies during operation.	**LS**	**LS =**	
Impact 4.12-C: Cumulative impacts related to Noise and Vibration.	**SU**	**SU =**	See Impacts 4.12-1 – 4.12-6 above. The Brine Storage Expansion would not result in any new impacts related to noise and vibration; therefore, this alternative would not increase cumulative impacts beyond those identified in the MPWSP Final EIR/EIS.
Section 4.13: Public Services and Utilities			
Impact 4.13-1: Disrupt or relocate regional or local utilities during construction.	**LSM**	**LSM** =	Construction of the Brine Storage Expansion would result in an additional 7,542 CY of excess material due to additional grading required for excavation of a second brine storage pond at the desalination site. However, consistent with the Approved Project, all excess material would be contained at the desalination site and would not require disposal off site. Additionally, existing mitigation measures identified in the MPWSP Final EIR/EIS would further ensure that impacts do not exceed those previously identified in connection with the Approved Project. As a result, the Brine Storage Expansion would not result in impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.13-2: Exceed landfill capacity or be out of compliance with federal, state, and local statutes and regulations related to solid waste during construction.	**LSM**	**LSM** =	
Impact 4.13-3 Exceed landfill capacity or be out of compliance with federal, state, and local statutes and regulations related to solid waste during operations.	**LS**	**LS** =	The Brine Storage Expansion would not require offsite disposal of materials (see Impact 4.13-2, above), nor would the Brine Storage Expansion produce additional wastewater or brine discharge beyond what was previously assessed for the Approved Project (also see Impacts 4.3-4 and 4.5-1). Therefore, the Brine Storage Expansion would not result in any impacts beyond those identified in the MPWSP Final EIR/EIS.
Impact 4.13-4: Exceed wastewater treatment requirements of the Central Coast RWQCB or result in a determination by the wastewater treatment provider that it has inadequate	**LSM**	**LSM** =	

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
treatment or outfall capacity to serve the project.			
Impact 4.13-5: Increased corrosion of the MRWPCA outfall as a result of brine discharge associated with project operations.	**LSM**	**LSM =**	
Impact 4.13-C: Cumulative impacts related to Public Services and Utilities.	**LSM**	**LSM =**	See Impacts 4.13-1 – 4.13-5 above. The Brine Storage Expansion would not result in any new impacts related to public services and utilities; therefore, this alternative would not increase cumulative impacts beyond those identified in the MPWSP Final EIR/EIS.
Section 4.14: Aesthetic Resources			
Impact 4.14-1: Construction-related impacts on scenic resources (vistas, roadways, and designated scenic areas) or the visual character of the project area and its surroundings.	**LS**	**LS** =	The Brine Storage Expansion would not result in the construction of any vertical elements that would result in an aesthetic related effect. Therefore, no additional aesthetic-related impacts beyond those identified in the MPWSP Final EIR/EIS would occur as a result of the Brine Storage Expansion.
Impact 4.14-2: Temporary sources of substantial light or glare during construction.	**LSM**	**LSM** =	
Impact 4.14-3: Permanent impacts on scenic resources (vistas, roadways, and designated scenic areas) or the visual character of the project area and its surroundings.	**LSM**	**LSM** =	
Impact 4.14-4: Permanent new sources of light or glare.	**LSM**	**LSM** =	
Impact 4.14-C: Cumulative impacts related to Aesthetic Resources	**LSM**	**LSM** =	
Section 4.15: Cultural and Paleontological Resources			
Impact 4.15-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines or historic properties pursuant to 36 CFR 800.5 during construction.	**NI**	**NI =**	The Brine Storage Expansion would not result in additional cultural and paleontological resource related impacts beyond those previously identified in the MPWSP Final EIR/EIS. All ground disturbing activities would occur within the construction footprint that was previously analyzed for the Approved Project. In addition, construction-related activities associated with the Brine Storage Expansion would be subject to existing mitigation identified in the
Impact 4.15-2: Cause a substantial adverse change during construction in the significance	**LSM**	**LSM =**	

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines or historic properties pursuant to 36 CFR 800.5.			MPWSP Final EIR/EIS, which would further ensure impacts do not exceed those previously disclosed in the MPWSP Final EIR/EIS. As a result, the Brine Storage Expansion would not result in impacts beyond those previously identified in the MPWSP Final EIR/EIS.
Impact 4.15-3: Directly or indirectly destroy a unique paleontological resource or site, or unique geological feature during construction.	**LS**	**LS =**	
Impact 4.15-4: Disturbance any human remains, including those interred outside of formal cemeteries, during construction.	**LSM**	**LSM =**	
Impact 4.15-C: Cumulative impacts related to Cultural and Paleontological Resources.	**LSM**	**LSM =**	
Section 4.16: Agricultural Resources			
Impact 4.16-1: Result in changes in the existing environment that, due to their location or nature, could temporarily disrupt agricultural activities or result in the permanent conversion of farmland to non-agricultural use.	**LSM**	**LSM =**	The Brine Storage Expansion would be located within the same footprint as what was previously analyzed for the Approved Project, which is not located on agricultural land. Therefore, the Brine Storage Expansion would not result in impacts to agricultural resources beyond what was identified in the MPWSP Final EIR/EIS.
Impact 4.16-2: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.	**LS**	**LS =**	
Impact 4.16-3: Conflict with zoning for agricultural uses or with Williamson Act contracts.	**LS**	**LS =**	
Impact 4.16-C: Cumulative impacts related to Agricultural Resources.	**LSM**	**LSM =**	
Section 4.17: Mineral Resources			
Impact 4.17-1: Loss of availability of known mineral resources that are of value to the region or residents of the state or result in the loss of a locally recognized important mineral resource recovery site.	**LS**	**LS =**	The Brine Storage Expansion would be located within the same footprint as what was previously analyzed for the Approved Project and would involve the same construction and operational materials and methods as those analyzed in the MPWSP Final EIR/EIS;

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Impact 4.17-C: Cumulative impacts related to Mineral Resources.	**LS**	**LS =**	therefore, impacts to mineral resources would remain the same as those identified in the MPWSP Final EIR/EIS.
Section 4.18: Energy Conservation			
Impact 4.18-1: Use large amounts of fuel and energy in an unnecessary, wasteful, or inefficient manner during construction.	**LSM**	**LSM** =	The Brine Storage Expansion would not result in additional effects beyond those identified in the MPWSP Final EIR/EIS. Construction activities may result in the use of fuel and energy to facilitate construction of the additional storage pond; however, these activities would not constitute the unnecessary, wasteful, or inefficient use of energy resources and would be consistent with the Approved Project. Therefore, the Brine Storage Expansion would not result in impacts to energy resources beyond what was identified in the MPWSP Final EIR/EIS.
Impact 4.18-2: Use large amounts of fuel and energy in an unnecessary, wasteful, or inefficient manner during operations.	**LS**	**LS** =	
Impact 4.18-3: Constrain local or regional energy supplies, require additional capacity, or affect peak and base periods of electrical demand during operations.	**LS**	**LS** =	
Impact 4.18-C: Cumulative impacts related to Energy Resources.	**LSM**	**LSM** =	
Section 4.19: Population and Housing			
Impact 4.19-1: Induce substantial population growth directly during project construction.	**LS**	**LS** =	This alternative would not result in any impacts related to population and housing. The Brine Storage Expansion would be located within the same footprint as what was previously analyzed for the Approved Project; therefore, impacts would remain the same as those identified in the MPWSP Final EIR/EIS.
Impact 4.19-2: Induce substantial population growth directly during project operations.	**LS**	**LS =**	
Impact 4.19-C: Cumulative impacts related to Population and Housing.	**LS**	**LS =**	
Section 4.20 Socioeconomics and Environmental Justice			
Impact 4.20-1: Reductions in the rate of employment, total income, or business activity in Monterey County.	**LSM**	**LSM =**	The Brine Storage Expansion would not result in any socioeconomic or environmental justice related effects. The Brine Storage Expansion would be located within the same footprint as what was previously analyzed for the Approved Project; therefore, impacts to socioeconomics and environmental justice would be the same as those identified in the MPWSP Final EIR/EIS.
Impact 4.20-2: Disproportionately high and adverse effects on low-income or minority populations.	**LS**	**LS** =	

TABLE 1
MPWSP Preliminary Impact Comparison Chart

Impact	CPUC Approved Project[1] – 6.4 MGD	Proposed Brine Storage Expansion	Notes
Impact 4.20-C: Cumulative impacts related to Socioeconomics and/or Environmental Justice.	**LSM**	**LSM** =	
Growth Inducement			
Impact 6.3-1: Secondary effects of planned growth.	**LS**	**LS** =	The Brine Storage Expansion would not result in any growth inducing related effects. The Brine Storage Expansion would be located within the same footprint as what was previously analyzed for the Approved Project and would not change operational activities from what was analyzed in the MPWSP Final EIR/EIS; therefore, impacts would remain unchanged from those identified in the MPWSP Final EIR/EIS.
Impact 6.3-C: Cumulative impacts related to growth inducement.	**SU**	**SU** **=**	

Attachment B.

MPWSP Brine Storage Expansion

Preliminary CalEEMod Analysis

MPWSP - Desalination Brine Storage Modification Custom Report

Table of Contents

1. Basic Project Information
1.1. Basic Project Information
1.2. Land Use Types
2. Emissions Summary
2.1. Construction Emissions Compared Against Thresholds
2.2. Construction Emissions by Year, Unmitigated
3. Construction Emissions Details
3.1. Site Preparation (2025) - Unmitigated
3.3. Grading (2025) - Unmitigated
3.5. Grading (2026) - Unmitigated
3.7. Building Construction (2026) - Unmitigated
3.9. Paving (2026) - Unmitigated
3.11. Architectural Coating (2026) - Unmitigated
5. Activity Data
5.1. Construction Schedule
5.2. Off-Road Equipment
5.2.1. Unmitigated
5.3. Construction Vehicles
5.3.1. Unmitigated
5.4. Vehicles
5.4.1. Construction Vehicle Control Strategies

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	MPWSP - Desalination Brine Storage Modification
Construction Start Date	10/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	10.8
Location	36.714784895761284, -121.77197614861026
County	Monterey
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3216
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	62.4	1000sqft	1.43	62,400	0.00	0.00	—	—

5.2. Off-Road Equipment

2. Emissions Summary

5.2.1. Unmitigated

2.1. Construction Emissions Compared Against Thresholds

5.3. Construction Vehicles

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	123	8.93	11.2	0.02	46.1	4.87	2,185	0.09	0.05	1.20	2,203
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.90	26.2	27.4	0.04	46.1	10.00	4,638	0.19	0.05	0.03	4,656
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.92	4.39	5.38	0.01	19.1	2.22	1,025	0.04	0.02	0.21	1,033
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.71	0.80	0.98	< 0.005	3.48	0.41	170	0.01	< 0.005	0.03	171

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	123	8.93	11.2	0.02	46.1	4.87	2,185	0.09	0.05	1.20	2,203
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	2.90	26.2	27.4	0.04	39.0	10.00	4,638	0.19	0.04	0.01	4,656
2026	1.47	12.9	14.4	0.02	46.1	5.36	2,522	0.10	0.05	0.03	2,531
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	0.24	2.18	2.29	< 0.005	3.23	0.83	388	0.02	< 0.005	0.02	389

2026	0.82	4.19	5.38	0.01	19.1	2.22	1,025	0.04	0.02	0.21	1,033
Annual	—	—	—	—	—	—	—	—	—	—	—
2025	0.04	0.40	0.42	< 0.005	0.59	0.15	64.2	< 0.005	< 0.005	< 0.005	64.4
2026	0.71	0.80	0.98	< 0.005	3.48	0.41	170	0.01	< 0.005	0.03	171

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

3. Construction Emissions Details

5.4. Vehicles

3.1. Site Preparation (2025) - Unmitigated

5.4.1. Construction Vehicle Control Strategies

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	12.1	12.1	0.02	0.56	0.52	2,065	0.08	0.02	—	2,072
Dust From Material Movement	—	—	—	—	6.26	3.00	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.66	0.67	< 0.005	0.03	0.03	113	< 0.005	< 0.005	—	114
Dust From Material Movement	—	—	—	—	0.34	0.16	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.12	< 0.005	0.01	0.01	18.7	< 0.005	< 0.005	—	18.8

Dust From Material Movement	—	—	—	—	0.06	0.03	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.32	0.00	10.5	1.05	51.1	< 0.005	< 0.005	0.01	51.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.56	0.06	2.81	< 0.005	< 0.005	0.01	2.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.10	0.01	0.47	< 0.005	< 0.005	< 0.005	0.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.51	14.1	14.5	0.02	0.64	0.59	2,455	0.10	0.02	—	2,463

Dust From Material Movement	—	—	—	—	7.08	3.42	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.51	1.56	< 0.005	0.07	0.06	264	0.01	< 0.005	—	265
Dust From Material Movement	—	—	—	—	0.76	0.37	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.28	0.29	< 0.005	0.01	0.01	43.7	< 0.005	< 0.005	—	43.9
Dust From Material Movement	—	—	—	—	0.14	0.07	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.43	0.00	14.0	1.40	68.1	< 0.005	< 0.005	0.01	69.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	1.46	0.15	7.37	< 0.005	< 0.005	0.01	7.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.27	0.03	1.22	< 0.005	< 0.005	< 0.005	1.24

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.2. Off-Road Equipment

5.2.1. Unmitigated

3.5. Grading (2026) - Unmitigated

5.3. Construction Vehicles

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

5.3.1. Unmitigated

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	12.9	14.0	0.02	0.58	0.53	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	7.08	3.42	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.83	0.91	< 0.005	0.04	0.03	159	0.01	< 0.005	—	159
Dust From Material Movement	—	—	—	—	0.46	0.22	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.17	< 0.005	0.01	0.01	26.2	< 0.005	< 0.005	—	26.3
Dust From Material Movement	—	—	—	—	0.08	0.04	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.40	0.00	14.0	1.40	66.9	< 0.005	< 0.005	0.01	67.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.88	0.09	4.34	< 0.005	< 0.005	0.01	4.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.16	0.02	0.72	< 0.005	< 0.005	< 0.005	0.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	8.57	9.96	0.02	0.29	0.27	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	8.57	9.96	0.02	0.29	0.27	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	3.26	3.79	0.01	0.11	0.10	686	0.03	0.01	—	688
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.60	0.69	< 0.005	0.02	0.02	114	< 0.005	< 0.005	—	114
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.08	1.11	0.00	36.7	3.68	186	0.01	0.01	0.73	189
Vendor	0.01	0.28	0.14	< 0.005	9.13	0.92	198	0.01	0.03	0.48	207
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	1.05	0.00	36.7	3.68	175	0.01	0.01	0.02	178
Vendor	0.01	0.30	0.14	< 0.005	9.13	0.92	198	0.01	0.03	0.01	207
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.38	0.00	13.6	1.36	67.0	< 0.005	< 0.005	0.12	68.2
Vendor	< 0.005	0.11	0.05	< 0.005	3.37	0.34	75.4	< 0.005	0.01	0.08	78.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	2.47	0.25	11.1	< 0.005	< 0.005	0.02	11.3
Vendor	< 0.005	0.02	0.01	< 0.005	0.62	0.06	12.5	< 0.005	< 0.005	0.01	13.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	4.41	6.48	0.01	0.18	0.17	991	0.04	0.01	—	995
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.18	< 0.005	0.01	< 0.005	27.2	< 0.005	< 0.005	—	27.3
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	< 0.005	4.50	< 0.005	< 0.005	—	4.51
Paving	0.00	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.53	0.00	17.5	1.76	88.7	0.01	< 0.005	0.35	90.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.47	0.05	2.30	< 0.005	< 0.005	< 0.005	2.34

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.08	0.01	0.38	< 0.005	< 0.005	< 0.005	0.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

3.11. Architectural Coating (2026) - Unmitigated

5.4.1. Construction Vehicle Control Strategies

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	0.02	134	0.01	< 0.005	—	134
Architectural Coatings	123	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	< 0.005	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	3.37	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.61	< 0.005	< 0.005	—	0.61
Architectural Coatings	0.61	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	7.34	0.74	37.2	< 0.005	< 0.005	0.15	37.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.20	0.02	0.96	< 0.005	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.04	< 0.005	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	10/30/2025	11/26/2025	5.00	20.0	—
Grading	Grading	11/7/2025	2/2/2026	5.00	62.0	—
Building Construction	Building Construction	2/3/2026	8/15/2026	5.00	139	—
Paving	Paving	8/16/2026	8/30/2026	5.00	10.0	—
Architectural Coating	Architectural Coating	8/31/2026	9/14/2026	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3. Off-Road Equipment
5.2.1. Unmitigated
5.3. Construction Vehicles
5.3.1. Unmitigated
5.4. Vehicles
5.4.1. Construction Vehicle Control Strategies

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	9.47	LDA,LDT1,LDT2
Site Preparation	Vendor	—	6.03	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	9.47	LDA,LDT1,LDT2
Grading	Vendor	—	6.03	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	26.2	9.47	LDA,LDT1,LDT2
Building Construction	Vendor	10.2	6.03	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	9.47	LDA,LDT1,LDT2
Paving	Vendor	—	6.03	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	5.24	9.47	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	6.03	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.2. Off-Road Equipment

5.2.1. Unmitigated

Non-applicable. No control strategies activated by user.

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

CALIFORNIA COASTAL COMMISSION
ENERGY, OCEAN RESOURCES AND FEDERAL CONSISTENCY
455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105-2421
VOICE (415) 904-5200

April 29, 2026

Monterey One Water
Attn: Paul Sciuto
5 Harris Court, Building D
Monterey, CA 93940
Email to: paul@my1water.org

Re: Coastal Development Permit Amendment Application No. 3-83-014-A9 (Monterey One Water Outfall Modifications)

Dear Mr. Sciuto,

On April 1, 2026, California Coastal Commission (Commission) staff received the subject coastal development permit (CDP) amendment application by Monterey One Water (M1W) for proposed modifications to its existing outfall. This outfall was originally permitted pursuant to CDP No. 3-83-014 in 1980 and is located in Marina, Monterey County. Commission staff has reviewed the amendment application and supporting materials and determined that the application is incomplete pursuant to California Code of Regulations, Title 14, Sections 13053.5 through 13056. We are unable to file and schedule the application for a Commission hearing until we receive the additional information described below. In order to process the permit application in accordance with the provisions of the Coastal Act and its implementing regulations, please provide this information. Information submitted in response to this letter may raise additional issues and/or necessitate further clarification or information requirements.

As an initial matter, we note that the proposed modifications to the existing outfall within the coastal zone are located offshore and onshore and extend within a portion of unincorporated Monterey County, a portion of the City of Marina, and within the Commission's retained permit jurisdiction which includes tidelands, submerged lands, and public trust lands. Monterey County and the City of Marina both have certified Local Coastal Programs. The subject application requests an amendment to a Commission-approved CDP from 1980. Commission staff are continuing to evaluate the jurisdictional aspects of the CDP amendment application and have yet to make a final determination as to them. In the meantime, to avoid potential delay, this letter identifies information needed with respect to the entirety of the proposed outfall modifications within the coastal zone (onshore and offshore).

1. **Filing Fee**. A $45,840 filing fee was submitted with the subject application. However, M1W, a joint powers authority, is a public entity that is exempt from the Commission's application fees pursuant to Government Code section 6103. Therefore, we are returning the submitted filing fee check to you (enclosed).

2. **Noticing Envelopes**. Thank you for the list of names and mailing addresses for each property owner and occupant of property situated within 100 feet of the proposed development (excluding roads), as well as known interested parties and governmental agencies. However, please also provide stamped envelopes addressed to each. The envelopes must be plain (i.e., no return address), regular #10 commercial envelope (9

1/2” x 4 1/8”), and include a first-class postage stamp on each one (metered envelopes are not acceptable).

3. **Central Coast Regional Water Quality Control Board Actions**. At a minimum, the required National Pollution Discharge Elimination System (“NPDES”) Permit and Ocean Plan consistency determination will need to be issued before Commission staff may complete this application.

4. **Other Agency Approvals**. Please provide the following approvals or, if the approvals have not yet been issued, a status update as to the timeline for the approvals:

   a) California State Lands Commission: approved lease for the outfall and proposed outfall modifications.

   b) Monterey Bay National Marine Sanctuary: authorization from the Sanctuary to allow the proposed outfall modifications within submerged lands of the Sanctuary. This is to include any necessary Biological Opinions from the U.S. Fish and Wildlife Service and the National Marine Fisheries Service or confirmation from the Sanctuary that those Opinions are not required.

   c) Other Agency Approvals: verification of all other permits, permissions or approvals applied for or granted by any other public agencies (e.g., U.S. Fish & Wildlife Service, California Department of Fish and Wildlife, U.S. Army Corps of Engineers, U.S. Coast Guard), or evidence that such approvals are not required.

   d) CEQA status: Please identify the CEQA approval or additional CEQA review (along with a discussion of its status and expected timeline) for the proposed modifications in the amendment application.

5. **Evidence of Landowner Authorizations**. Please provide evidence of landowner authorization from the relevant property owners in which temporary work areas and staging are proposed beyond M1W’s 20-ft. wide easement area along the onshore portion of outfall within the coastal zone. See also Item 4(a) above regarding evidence of California State Lands Commission authorization for the offshore portion of proposed work.

6. **Project Details and Plans**.

   a) Installation Methods and Phasing. Please provide a more detailed description of the installation methods for each component of the proposed outfall modifications, as well as how the work components would be phased within the expected 24-month construction period. Please also clarify whether the outfall modifications are proposed to occur concurrent with construction of the approved Monterey Peninsula Water Supply Project (MPWSP) slant wells and associated pipelines on the CEMEX property since there is some construction footprint overlap in sensitive habitat areas between the two projects.

   b) Bypass Pumping and Discharge During Construction. Please clarify the bypass pumping system proposed to be implemented during construction while the outfall is offline, including components, locations, capacity, expected duration, and associated coastal resource impact analysis and minimization measures.

   c) Breakdown of Onshore Work Components and Associated Impacts. For the

proposed onshore work components within the coastal zone, please provide a breakdown of the linear extent or outfall to be lined, quantity of access and grouting pits, and the type and area of biological resource impacts from construction work, access, and staging that are located (1) within the City of Marina, and (2) within the County of Monterey.

d) Offshore Monitoring Buoy Details and Anchor Design. Please provide a description and site plan of the proposed monitoring buoy components, locations, anchor system design, and methods for placement and monitoring. Please also address the technical design rationale and benthic footprint for the proposed buoy anchor system(s).

e) Offshore Outfall Maintenance. Please clarify the estimated quantity of accumulated sediment to be removed from the offshore terminus of the outfall diffuser and proposed methods for removing the sediment onto a barge for offsite transport to an onshore waste facility. Please also clarify whether any ballast rock or gravel that supports the diffuser would need to be modified or supplemented as part of this project, and if so, provide details.

f) GIS Data Layers. Please provide the GIS data layers for the onshore and offshore outfall line and the proposed onshore access/grouting pits, work areas, and temporary construction access and staging areas within the coastal zone that are depicted on submitted figures.

7. Reports and Analyses.

a) Benthic Habitat and Marine Resource Impact Analysis. Please provide a benthic habitat and marine resource impact analysis for construction and operation of all portions of the proposed offshore outfall maintenance work and modifications, including the associated monitoring buoys. This analysis should also address all mitigation measures proposed to avoid and minimize adverse impacts and the disturbance footprint.

b) Onshore Biological Resources and Impact Analysis.

i. Please provide Appendices C-F of the Biological Resources Technical Report by AECOM (November 2025), as well as copies of the referenced botanical surveys that were conducted in 2024 and 2025.

ii. The Biological Resources Technical Report by AECOM (November 2025) documents the presence of California annual and perennial grassland. Stands of native grassland (defined as stands with 10% or more relative cover of native taxa that are evenly distributed in the stand and present at any time during growing season) should be identified.

iii. The Habitat Impact Assessment Memorandum by AECOM (December 15, 2025) indicates that habitat impacts associated with the proposed project would be reduced if the project is constructed concurrent with the related, approved MPWSP. Please provide a figure that identifies the area(s) of habitat impact overlap and associated impact acreages by habitat type.

iv. The Habitat Impact Assessment Memorandum by AECOM (December 15, 2025) quantifies and depicts temporary habitat impacts associated with installation of the proposed onshore outfall liner and states that no permanent impacts have

been identified. However, it is unclear how temporary and permanent impacts are defined in the analysis. Please provide a more detailed description of the proposed methods and extent of proposed ground disturbance and vegetation removal within the various types of work areas along the outfall, and how temporary and permanent impacts are being defined in the analysis[1]. Note that ground disturbance within coastal dune habitat often requires compensatory restoration at a 3:1 ratio as measured by area.

v. The California Coastal Commission considers coastal dune habitat, including degraded dune habitat, to rise to the level of Environmentally Sensitive Habitat Area (ESHA). Please include the acreage of dune habitat to be impacted, excluding area that overlaps with current roads permitted by the original project.

c) Alternatives Analysis. The proposed onshore outfall liner work includes additional access pits, grouting pits, and work areas compared to that analyzed in the MPWSP Final EIR/EIS. We recognize this is likely due to a more refined site design that has been developed since the 2018 EIR/EIS environmental review process. However, the proposed onshore work would result in adverse impacts to environmentally sensitive habitat areas and special status species during construction. Please provide additional information to demonstrate the extent and configuration of the proposed construction work limits and methods are the minimum necessary to feasibly complete the proposed outfall modifications and no feasible alternative construction zone configurations or methods exist that would serve to further minimize the footprint, degree, and duration of habitat impacts.

d) Best Management Practices (BMPs) and Impact Avoidance and Minimization Measures. For each component of work, please describe the BMPs and impact avoidance and minimization measures proposed for water quality, biological resources, and marine resource protection, including avoidance of work during sensitive seasons for wildlife with potential to occur in the project area.

e) Cultural Resources Assessment and Tribal Consultation. Please provide an assessment of the presence and significance of any known cultural, archaeological, and paleontological resources located within the proposed work areas that extend outside of the MPWSP construction footprint previously evaulated in the MPWSP Final EIR/EIS.

Please also describe what (if any) outreach and consultation with California Native American Heritage Commission-identified Native American tribes has occurred to-date regarding the proposed work.

If you have any questions, please contact me at Deanna.Christensen@coastal.ca.gov.

[1] Please note that the California Coastal Commission generally considers impacts to be temporary only where (1) the proposed activities do not include significant ground disturbance such as grading, trenching, or others that would kill vegetation, disrupt native seedbanks, alter topography or soil horizons, etc.; and (2) the native vegetation is recovered to a comparable age class/size structure relative to pre-construction conditions within either a) 12 months of initial disturbance (I.e. short-term temporary), or b) 12 months following the conclusion of disturbance, if the disturbance has extended over no more than a 24-month period (I.e. long-term temporary). Anything failing to meet any of these criteria is, by default, considered to have a permanent adverse effect.

Sincerely,

Deanna Christensen

Deanna Christensen
Senior Environmental Scientist
Energy, Ocean Resources, and Federal Consistency Division

Enclosure: Submitted Filing Fee Check (per Item 1 of this letter)

REMY | MOOSE | MANLEY LLP

Howard "Chip" Wilkins III
cwilkins@rmmenvirolaw.com

June 5, 2026

Via E-mail Only **File: A4181**

CSLC.CommissionMeetings@slc.ca.gov
CalAm@slc.ca.gov
Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: Preliminary Comments of Marina Coast Water District on State Lands Commission's May 2026 *Evaluation of Prior CEQA Sufficiency and Documentation that No Additional CEQA Review is Needed for the Monterey Peninsula Water Supply Project*, prepared for California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

Dear Chair Cohen and Honorable Commissioners:

On behalf of our client, the Marina Coast Water District ("MCWD"), we submit these preliminary comments on the State Lands Commission's ("Commission's") May 2026 memorandum entitled "Evaluation of Prior CEQA Sufficiency and Documentation that No Additional CEQA[1] Review is Needed for the Monterey Peninsula Water Supply Project" ("Environmental Memorandum" or "Memo"), which it prepared as part of its upcoming consideration of California-American Water Company's ("Cal-Am's") proposed Monterey Peninsula Water Supply Project ("MPWSP" or "Project"). MCWD intends to supplement these comments once the Commission releases its corresponding staff report for its upcoming hearing on Cal-Am's lease application on June 23, 2026.

The Environmental Memorandum's conclusion that the Commission need not conduct additional and/or supplemental CEQA review of the MPWSP contradicts substantial evidence of significant new information and changed circumstances that

[1] California Environmental Quality Act ("CEQA") (Pub. Resources Code, § 211000 et seq.) and "CEQA Guidelines" (Cal. Code Regs., § 15000 et seq.).

render the almost decade-old EIR/EIS outdated, inapplicable, and in need of major revisions. In particular, numerous regulatory decisions have transpired that fundamentally change the scope and nature of the Project, including recent decisions that pertain to the California Public Utilities Commission's ("CPUC's") water supply and demand estimates and the State Water Resources Control Board's ("SWRCB's") conclusions about significant and unmitigated impacts to groundwater resources. Moreover, subsequent review is necessary because substantial evidence establishes Cal-Am's proposed modifications to Monterey One Water's ("M1W's") outfall will yield significant and unmitigated impacts that were not considered in the EIR/EIS.

Finally, there are feasible alternatives to the MPWSP that will satisfy the Project's remaining objectives while avoiding its significant and unavoidable environmental impacts. These changed circumstances and significant new information thus compel the Commission, as a responsible agency under CEQA, to conduct supplemental or subsequent environmental review before it can consider Cal-Am's lease application for the slant wells. (See Pub. Resources Code, § 21166; CEQA Guidelines, § 15162, subd. (c).) Until such review is conducted, the Commission's hearing is premature and must be rescheduled.

I. Significant new information requires the Commission to conduct subsequent or supplemental environmental review before it can approve Cal-Am's lease application (Pub. Resources Code, § 21166; CEQA Guidelines, § 15162).

CEQA requires responsible agencies to prepare a subsequent or supplemental EIR if: (a) substantial changes are proposed to the project that will require major revisions to the existing EIR; (b) substantial changes occur with respect to the circumstances under which the project is being undertaken that will require major revisions to the existing EIR; and/or, (c) new information, which was not known and could not have been known at the time the EIR was certified as complete, becomes available. (Pub. Resources Code, § 21166; see CEQA Guidelines, § 15162; see also *Dept. of Water Resources Environmental Impact Cases* (2022) 79 Cal.App.5th 556, 576 ["If another discretionary approval is required, such as when a modified or supplemental project is proposed, the agency must determine whether further environmental review is required due to changes in the project, changes in circumstances, or new information"].) All of which have occurred in this case. The Project is now materially different, the demands that created this Project are different, and new regulations and water supplies are in place.

The purpose behind this requirement "is to explore environmental impacts not considered in the original document" particularly when "changed circumstances are at issue." (*Friends of College of San Mateo Gardens v. San Mateo County Comm. College Dist.* (2016) 1 Cal.5th 937, 949–950 (*San Mateo I*).) So, "when there is a change in plans, circumstances or available information after a project has received initial approval, the [responsible] agency's environmental review obligations turn on the value of the new information to the still pending decisionmaking process. If the original document retains some informational value despite the proposed changes, then the agency proceeds to decide under CEQA's subsequent review provisions whether project changes will require major revisions to the original environmental document because of the involvement of new, previously unconsidered significant environmental effects." (*Id.*, pp. 951–952.) "When there is a proposal to modify a project originally approved through an EIR, no 'major revision' to the initial EIR is required if the initial EIR already adequately addresses any additional environmental effects that may be caused by the proposed modification. Indeed, if the project modification introduces previously unstudied and potentially significant environmental effects that cannot be avoided or mitigated through further revisions to the project plans," then the responsible agency must prepare a subsequent EIR. (*Id.*, p. 958.)

This is the case here. Over eight and a half years have elapsed since the CPUC certified the Project's Final EIR/EIS and issued a Certificate of Public Convenience and Necessity ("CPCN"). Since then, new information of substantial importance that could not have been known at the time has come to light. This new information reveals changed circumstances regarding the Project's nature, scope, and necessity, its substantially more severe significant effects, and feasible, less environmentally damaging alternatives. Contrary to the Memorandum's initial conclusion, this information requires the Commission, as the responsible agency considering the Project's next discretionary approval, to conduct subsequent environmental review. (CEQA Guidelines, § 15162, subd. (c) [if significant new information appears after the initial EIR is certified, "no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified…"]; see Memorandum, p. 2 [finding subsequent review not required].)

As set forth more fully below, substantial evidence of each of these factors compels the Commission to conduct supplemental environmental review before considering Cal-Am's desired slant well lease.

A. <u>Supply and Demand:</u> The circumstances underlying the Project's water supply and demand needs have changed. (CEQA Guidelines, § 15162, subds. (a)(1)–(2).)

1. There is no water shortage in Monterey; Cal-Am has surplus supplies.

Underlying circumstances are substantially changed since the CPUC's EIR was certified. There is no longer a water supply emergency in Cal-Am's Monterey District. Unlike the past three decades, Cal-Am now has an annual surplus of lawful supply for the Monterey District of approximately 2,000 acre-feet per year ("AFY").[2] Updating the CPUC's determination in 2018 that Cal-Am had 9,044 AFY of lawful supplies,[3] the CPUC's 2025 decisions determined there is a supply of 11,204 AFY available to serve a demand of about 9,200 AFY.[4] This 2,000 AFY surplus does not include the 5,200 acre-feet of aquifer storage and recovery ("ASR") supply that is currently stored in the Seaside Basin.[5] Nor does it include the contractually required Pure Water Monterey operating and drought reserves. Cal-Am has complied with its legal limit on Carmel River diversions since December 31, 2021, and, with the Pure Water Monterey Expansion, it also has sufficient supplies to comply with its Seaside Basin adjudication limits, including repayment of prior over-pumping. In June 2025, Cal-Am reported to the Department of Water Resources an expected 42% supply surplus for the year ending June 30, 2026.[6]

The reasons for the current robust supply surplus are twofold.

First, demand for water continues to decline in Cal-Am's Monterey District. Cal-Am's public reporting of demand on its MPWSP website reflects annual demand of 9,149

---

[2] CPUC Decision (D.) 25-08-006, p. 51, as modified by D.25-10-001, p. 4 (11,204 AFY of supply) and D.25-08-006, pp. 17, 33 (9,280 or 9,288 AFY of demand) (available respectively at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M583/K321/583321992.PDF and https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M576/K519/576519917.PDF).

[3] D.18-09-017, p. 167 (referencing Pure Water Monterey as the "Groundwater Replenishment Project"), (available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M229/K424/229424336.PDF).

[4] D.25-08-006, p. 51, as modified by D.25-10-001, p. 4 (11,204 AFY of supply) and D.25-08-006, pp. 17, 33 (9,280 or 9,288 AFY of demand).

[5] Quarterly report by Cal-Am to SWRCB dated April 28, 2026, PDF p. 8 (available at: https://www.amwater.com/caaw/resources/PDF/Customer-Service-Billing/Rates-AL/Monterey/2026/SWRCB_Q2WY_2026.pdf).

[6] Cal-Am Water Shortage Report dated June 25, 2025, "Retail Assessment" tab (available at: https://wuedata.water.ca.gov/wsda_tool.asp?wuedata_plan_id=17600).

acre-feet for calendar year 2022, 9,107 acre-feet in 2023, 8,696 acre-feet in 2024, and 8,794 acre-feet in 2025.[7] Cal-Am reported to the SWRCB that it used 8,978 acre-feet of supplies in water year 2024-2025,[8] with 4,392 acre-feet of stored ASR supplies available at that time.[9] This ongoing decline in demand can be attributed to more efficient customer use, including water-wise fixtures and appliances, as well as higher water prices.

Second, Pure Water Monterey Expansion is now a part of Cal-Am's supply portfolio.[10] This adds another 2,250 AFY to the initial 3,500 AFY of Pure Water Monterey supply.[11] Unlike the past three decades, supply from the new Pure Water Monterey and Expansion, combined with other existing supplies, provides sufficient water to serve Cal-Am's current customers while maintaining a significant water supply surplus.

The Environmental Memorandum's statement that the Pure Water Monterey Expansion was under construction at the time of the CPUC approval of the original project and the CCC's conditional approval of a phased Project (Memo, p. 45) is not accurate. In fact, the CPUC's EIR/EIS for the MPWSP did not analyze a desalination scenario that included Pure Water Monterey Expansion.[12] The CPUC's 2018 decision approving a 6.4 mgd/7,167 AFY Project set cost caps for rate recovery from customers based on the approved 6.4 mgd Project and the assumption that only the base Pure Water Monterey supply of 3,500 AFY would be included.[13] The addition of Pure Water

---

[7] See: https://www.watersupplyproject.org/system-delivery.

[8] This figure does not include Carmel River supplies diverted during winter high-flow conditions under Cal-Am's ASR permits. The supplies utilized for water year 2024-2025 were: Carmel River, 3,347 acre-feet; Malpaso, 91 acre-feet; Table 13, 131 acre-feet; Sand City desal 164 acre-feet; native Seaside groundwater, 1,565 acre-feet; Pure Water Monterey advanced-treated recycled water, 3,680 acre-feet. (See Quarterly Report by Cal-Am to SWRCB dated October 27, 2025, PDF p. 8, available at: https://www.amwater.com/caaw/resources/PDF/Customer-Service-Billing/Rates-AL/Monterey/2025/SWRCB_Q4WY_2024-2025-amended.pdf.)

[9] *Ibid.*

[10] D.22-12-001 (available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M499/K515/499515145.PDF).

[11] D.22-12-001, pp. 2, 5.

[12] See EIR/EIS, Section 5, Alternatives Screening and Analysis, *generally*, and at p. 5.2-6 (Pure Water Monterey would deliver 3,500 AFY).

[13] D.18-09-017, pp. 167 (3,500 AFY from Pure Water Monterey), 184 ($279.1 million cost cap for 6.4 mgd Project).

Monterey Expansion and the existence of a supply surplus constitute substantial changes in circumstances since 2018.

2. Cal-Am purported to change the Project without CPUC approval to do so.

Cal-Am's change in project size is a substantial Project change. The 4.8 mgd project that Cal-Am proposed to the Coastal Commission, which MCWD understands Cal-Am also proposes to this Commission, has never been approved by the CPUC. Thus, Cal-Am has no CPCN for its new proposal, and under the Public Utilities Code, it may not legally commence construction until this defect is cured.[14] Furthermore, the Coastal Commission's conditional approval includes, as part of Special Condition No. 1, the requirement prior to issuance of a Coastal Development Permit that Cal-Am obtain "authorization from the CPUC to proceed" with the project in the changed size.[15] Cal-Am has not sought or obtained such authorization to date.[16]

In order to make substantial changes to the CPUC-approved Project and the existing CPCN, Cal-Am must pursue a Petition for Modification before the CPUC.[17] This change requires both updated CEQA review (whether before this Commission or elsewhere) and the CPUC's review and approval of the change in project size and related revision of project cost caps. The CPUC would need to determine that such changes would be just and reasonable for Cal-Am's ratepayers,[18] as well as required for the

[14] Pub. Util. Code, § 1001 (a water corporation regulated by the CPUC "shall not begin the construction of . . . a line, plant, or system, or of any extension thereof, without having first obtained from the commission a certificate that the present or future public convenience and necessity require or will require its construction").

[15] Coastal Commission Final Adopted Findings, p. 13.

[16] The Coastal Commission's Special Condition No. 1 also requires conclusion of ongoing water rights litigation with a determination that Cal-Am has or can feasibly attain any required water right for its desalination source water and that the Project would not "cause harm to any aquifer that is a source of drinking water to the City of Marina or the Marina Coast Water District." (*Ibid.*) The latter finding appears to be impossible, based upon the determination of the SWRCB's AHO in its Final Report after referral of issues from the trial court that the Project would increase seawater intrusion in the Monterey Subbasin of the Salinas Valley Groundwater Basin. See discussion of significant new information regarding groundwater impacts, *infra*.

[17] D.26-04-046, p. 5 ("D.18-09-017 provides a mechanism for adjustments if needed,"—i.e., a "petition to modify" D.18-09-017), citing D.18-09-017 at ordering paragraph 22 (available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M606/K025/606025359.PDF).

[18] Pub. Util. Code, § 451 (all charges to customers—such as infrastructure costs passed on in rates, as is the case with the MPWSP desalination proposal—must be just and reasonable).

public's convenience and necessity,[19] before Cal-Am could lawfully proceed with construction.

In 2018, certain parties to the CPCN proceeding requested the CPUC to consider a 4.8 mgd alternative, but the CPUC declined to do so.[20] The CPUC's EIR/EIS did *not* analyze a 4.8 mgd alternative.[21] The CPUC expressly rejected a 4.8 mgd alternative, concluding that there would be no reduction in environmental impacts or reduction in costs to ratepayers compared to the 6.4 mgd desalination Project, noting that environmental impacts could be even greater if the project later had to be increased in size.[22]

In denying rehearing of D.18-09-017, the CPUC explained that "the 4.8 mgd plant was not analyzed as a reduced capacity alternative because it would not meet the basic objectives of the project or the purpose and need for the project, and a further reduced capacity alternative would not likely avoid or substantially reduce significant environmental effects of the project."[23] Of course, the primary Project objectives of compliance with legal limits on Carmel River and Seaside groundwater supplies, as well as obtaining a sufficient supply to pay back prior over-pumping from the Seaside Basin[24] have now been achieved *without* the MPWSP. This constitutes another significant change in circumstances. No agency has analyzed whether the remaining Project objectives have also been achieved, and if they have not, whether they would justify the Project's significant unavoidable impacts of any size.

3. Cal-Am would need only 2,528 AFY of additional supply in 2050.

The CPUC's updated supply and demand estimates also present a substantial change in circumstances. In 2018, the CPUC estimated Cal-Am would experience a future supply shortfall of 4,956 AFY.[25] Based on the CPUC's updated 2025 projections,

---

[19] Pub. Util. Code, § 1001.

[20] D.18-09-017, pp. 69-70, 128-129, 178-179.

[21] See generally, Final EIR/EIS, Section 5, Alternatives Screening and Analysis.

[22] D.18-09-017, pp. 69-70; see also pp. 128-129, 178-179.

[23] D.19-01-051, p. 61 (available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M262/K004/262004679.PDF).

[24] See D.18-09-017, p. 14.

[25] D.18-09-017, p. 69.

by 2050, Cal-Am would need only 2,528 AFY of additional supply.[26] In other words, the actual supply shortfall—according to the CPUC's updated projection for 2050—is only 2.3 mgd, which is less than half the volume of the proposed 4.8 mgd reduced-size project.

To meet this much lower projected shortfall, Cal-Am does not need the CPUC-approved 6.4 mgd/7,167 AFY Project, or even the reduced-size 4.8 mgd/5,376 AFY project that the Coastal Commission conditionally approved. However, the CPUC did not predict exactly when it expected customer demand would surpass current supplies. The CPUC simply projected demand of 13,372 AFY by 2050. This significant reduction in projected future supply shortfall ensures that Cal-Am does not urgently need additional water supplies from desalination or any other source for some years to come, likely a decade or more.[27] The reduction in projected future shortfall constitutes a substantial change in circumstances, thus requiring subsequent and/or supplemental environmental review. (Pub. Resources Code, § 21166; CEQA Guidelines, § 15162.)

B. <u>Groundwater Resources:</u> Significant new information regarding the Project's unmitigated adverse groundwater impacts requires the Commission to prepare a subsequent or supplemental EIR. (CEQA Guidelines, § 15162, subd. (a)(3)(B).)

There is new information of substantial importance indicating that the Project will have new or substantially more severe significant groundwater effects than those disclosed and analyzed in the CPUC's EIR/EIS and the Coastal Commission's 2022 Staff Report, including impacts to water quality and supply. The Memorandum does not acknowledge, much less address, the most significant new body of groundwater information developed regarding the Project.

In October 2021, the Monterey County Superior Court, pursuant to Water Code sections 2000–2019, referred eight technical questions to the SWRCB seeking SWRCB's expert opinion on the harm the Project's slant wells would cause to the Salinas Valley

[26] D.25-08-006, p. 51, as modified by D.25-10-001, p. 4 (11,204 AFY of supply) and D.25-08-006, p. 51 (13,732 AFY demand in 2050).

[27] Notably, Monterey Peninsula Water Management District ("MPWMD") has applied to the SWRCB for an order modifying prior SWRCB orders to eliminate the requirement for a moratorium on new water connections, following four consecutive years of full compliance with Carmel River pumping limitations and "no threatened violation . . . in the foreseeable future." (See MPWMD Application, p. 1, available at https://www.mpwmd.net/wp-content/uploads/MPWMD-Application-for-Modification-10-21-25.pdf).

Groundwater Basin ("SVGB"). On June 20, 2025, the Administrative Hearings Office ("AHO") of the SWRCB issued its Final Report of the Board as Referee ("AHO Report") in *City of Marina v. RMC Lonestar, et al.* (Monterey Super. Ct. Case No. 20CV001387).[28] The AHO Report is the product of more than three years of contested evidentiary hearings involving new groundwater level and quality data, expert groundwater modelers, development of new numerical groundwater models, and extensive technical analysis of the Project's effects on groundwater resources.

The new data, modeling, and expert analysis developed for the AHO proceedings were not available when the CPUC certified the EIR/EIS in 2018. The Report shows that the Project will have new or substantially more severe groundwater impacts than previously disclosed in the EIR/EIS, including impacts on water quality and water supply. (See e.g., AHO Report, pp. 83 ["…we conclude that it is likely the proposed draw will result in seawater intrusion in the central and southern sections of the Monterey Subbasin …], 105 ["The current conditions of overdraft in the 180/400 and Monterey Subbasins is general evidence that an additional draw from the subbasins, absent the implementation of some physical solution, would injure existing users or cause unreasonable harm"].) The AHO Report has been publicly available for nearly a year, yet the Environmental Memorandum does not acknowledge—much less address—this significant new body of evidence.[29]

1. The Project will cause groundwater levels to decline and reduce the available supply.

Significant new information indicates that the Project will reduce groundwater supplies available within the Monterey and 180/400-Foot Aquifer Subbasins. The AHO found that Project pumping will lower groundwater levels across broad areas of both Subbasins. Drawdown in the Dune Sand and 180-Foot Aquifers would range from 10 to

[28] Available at: https://www.waterboards.ca.gov/water_issues/programs/administrative_hearings_office/marina.html (hereinafter referred to as "AHO Report"; a courtesy copy is also attached hereto as "**Attachment F**").

[29] Curiously, however, the Commission's "Frequently Asked Questions" webpage about the MPWSP directs readers to the AHO Report in its response to the question "*Will the Commission determine if Cal-Am has a legal right to withdraw water for the proposed desalination project?*" (See: https://www.slc.ca.gov/information/Cal-Am-lease-application-2026/). The Memorandum also references the Final AHO Report in passing but does not discuss it in further detail or consider its evidentiary findings. (See Memo, p. 19.)

20 feet in the immediate vicinity of the proposed slant wells, with measurable effects extending miles beyond the well field. (AHO Report, pp. 73, 88.) These impacts occur in Subbasins that are already experiencing chronic groundwater storage losses, meaning the Project's additional extraction will further reduce an already declining groundwater supply.

The significance of this new information is underscored by existing groundwater conditions. The 180/400-Foot Aquifer Groundwater Sustainability Plan ("GSP") determined that usable groundwater storage in the 180/400-Foot Aquifer Subbasin has historically decreased by approximately 11,700 AFY due to overdraft and increased seawater intrusion. (180/400-Foot Aquifer GSP, p. ES-5.)[30] The Monterey Subbasin is experiencing a loss in storage of between 1,609 and 4,434 AFY due to overdraft and cross-boundary flows. (Monterey Subbasin GSP, p. IX.)[31] The Project will result in widespread drawdown of groundwater levels, which will likely lead to a permanent reduction in groundwater storage of approximately 1,531 AF to 2,046 AF in the Monterey and 180/400 Foot Aquifer Subbasins. (**Attachment A**, p. 8[32].)

Accordingly, significant new information shows that the Project will not only redistribute groundwater within the SVGB, it will also further reduce available groundwater supplies in the Subbasins, exacerbate overdraft conditions, and accelerate the depletion of groundwater in storage in the Subbasins that are already subject to mandatory sustainability requirements under the Sustainable Groundwater Management Act ("SGMA") (Wat. Code, § 10720, et seq.). Neither the magnitude of these storage losses nor their significance in the context of SGMA was disclosed or analyzed in the EIR/EIS.

---

[30] https://sgma.water.ca.gov/portal/service/gspdocument/download/3862?saveas=GSP%202020.pdf (hereinafter, "180/400-Foot Aquifer GSP").

[31] https://svbgsa.org/wp-content/uploads/2022/04/Completed_Monterey-Subbasin-GSP_Chap-ES-10_wo_Appendices.pdf (hereinafter, "Monterey Subbasin GSP").

[32] Expert Report in support of Direct Testimony of Vera H. Nelson, P.E., submitted on behalf MCWD for Phase 3 of the SWRCB AHO Proceedings in *City of Marina v. RMC Lonestar, et al.* (Case No. 20CV001387), admitted into evidence as exhibit MCWD-165 (attached hereto and referred to hereinafter as "**Attachment A**").

2. The Project will extract fresh water and reduce the available groundwater supply.

The Final EIR/EIS concluded the Project's potential impact on groundwater was less than significant based on the assumption that the slant wells would pump primarily otherwise unusable saline and brackish water and therefore posed no threat to the freshwater that existing users depend upon. (Final EIR/EIS, p. 4.4-70.)[33] Significant new information demonstrates that the groundwater Cal-Am seeks to extract includes freshwater, by any definition. (AHO Report, pp. 69–70, 84–87, 108; Appendix C, p. C-8.)

Cal-Am's wells will be located in the Dune Sand Aquifer and the Upper 180-Foot Aquifer. In the Monterey Subbasin, "[g]roundwater in th[e] [Dune Sand] [A]quifer is primarily fresh; minimal seawater intrusion has occurred in this aquifer." (Monterey Subbasin GSP, p. 4-37.) The groundwater in the Dune Sand Aquifer is also hydraulically connected to the underlying aquifers and is an important source of recharge to those deeper aquifers "due to the high permeability of the Dune Sand Aquifer." (*Id*. at p. 4-14.) As for the 180-Foot Aquifer, the groundwater also "remains fresh" in large portions of the Monterey Subbasin, although "seawater intrusion has occurred in the lower 180-Foot Aquifer in the northern portion of the Subbasin." (*Id*. at p. 4-38.)

Moreover, the AHO Report aptly points out, "Cal-Am's proposed draw that presumes a background concentration of 500 mg/L of [total dissolved solids ("TDS")] for non-ocean water, suggests that such water would be available to other users absent the proposed draw." (AHO Report, p. 108.) Indeed, the AHO Report refers to the water the Project will extract as "relatively high-quality groundwater." (*Id*. at p. 108.)

3. The Project will increase seawater intrusion and adversely impact groundwater quality.

Significant new information shows the Project will cause seawater intrusion in the Monterey Subbasin. The EIR/EIS concluded that operation of the Project would not exacerbate seawater intrusion based on the information and modeling available at that time. (Final EIR/EIS, pp. 4.4-91–4.4-92 ["Based on the particle-tracking results, the MPWSP would not exacerbate seawater intrusion, and groundwater extraction from the coast, as part of project operations, would be expected to retard future inland migration of

[33] Available at: https://ia.cpuc.ca.gov/environment/info/esa/mpwsp/feir-eis/4-4_groundwater_feir-eis.pdf (hereinafter, "Final EIR/EIS").

the seawater intrusion front"].) The AHO Report reaches the opposite conclusion based on new data and modeling.

Specifically, the AHO Report concluded that Project pumping will likely advance seawater intrusion in several aquifers, including up to 0.75 miles inland in the Upper 180-Foot Aquifer, up to 0.5 miles in the Dune Sand Aquifer, up to 0.25 miles in the Lower 180-Foot Aquifer, and up to 0.25 miles in the 400-Foot Aquifer. (AHO Report, p. 84, Figure 22.) Seawater intrusion permanently degrades groundwater quality and reduces freshwater availability within the SVGB. Unlike temporary declines in groundwater levels, seawater intrusion can irreversibly impair the freshwater storage capacity of affected aquifers and threaten the long-term reliability of groundwater supplies used by existing users.

Significant new information shows that the Project will likely cause seawater intrusion across multiple aquifer layers, demonstrating that the Project's groundwater impacts are substantially more severe than previously disclosed in the CPUC's or Coastal Commission's environmental review. (CEQA Guidelines, § 15162, subd. (a)(3).)

4. The Project will reduce groundwater storage in overdrafted Subbasins.

Significant new information shows the Project will exacerbate groundwater storage losses in already critically overdrafted Subbasins. Project pumping will reduce groundwater storage in the Dune Sand Aquifer, with model-predicted storage losses ranging from 2,046 to 5,993 acre-feet for the 4.9 mgd project alternative approved by the Coastal Commission. (AHO Report, pp. 90–91, Figure 28.) The significance of this impact is magnified by existing SVGB conditions. Significant new information confirms that both the 180/400-Foot Aquifer Subbasin and the Monterey Subbasin are already experiencing chronic overdraft. (AHO Report, pp. 104–105.) This is prima facie evidence that the Project would cause significant impacts to the SVGB. (*Ibid.*)

The AHO Report, together with the relevant GSPs adopted after certification of the EIR/EIS, establishes that groundwater resources in these Subbasins are more constrained than previously understood and that additional pumping would worsen existing overdraft conditions. The Project's contribution to groundwater storage losses was not previously analyzed in the EIR/EIS.

5. The Project will impede sustainable groundwater management of the SVGB.

New information shows that Project pumping would exceed groundwater sustainability thresholds adopted to prevent significant and unreasonable groundwater impacts. Project-induced groundwater-level declines near the proposed slant wells exceed the quantitative thresholds established in the GSPs for the 180/400-Foot Aquifer and Monterey Subbasins. (AHO Report, p. 107.) Both GSPs identify groundwater level declines, seawater intrusion, and related impacts beyond specified thresholds as "undesirable results"—i.e., conditions SGMA defines as significant and unreasonable and that GSAs are legally required to avoid. (*Ibid.*; 180/400-Foot Aquifer Subbasin GSP, pp. 8-6, 8-31, 8-38; Monterey Subbasin GSP, pp. 8-47–8-54.)

The EIR/EIS did not evaluate the Project in the context of SGMA because the GSPs had not yet been adopted. The approved GSPs contain substantial evidence of existing groundwater overdraft and seawater intrusion that was unavailable at the time the EIR/EIS was certified. This significant new information, along with the AHO Report, demonstrates that the Project would impede sustainable groundwater management by contributing to groundwater-level declines and seawater intrusion that exceed the minimum thresholds adopted in the approved GSPs. As such, these unmitigated and unstudied environmental impacts—all of which will stem from the slant wells subject to the lease that Cal-Am seeks from the Commission—must be considered in a subsequent and/or supplemental EIR.

6. Significant new information demonstrates that the adopted mitigation for groundwater impacts is inadequate.

There is no evidence in the record that the Applicant Proposed Measure 4.4.3 from the CPUC's EIR/EIS or the adaptive management in the Coastal Commission's Special Condition 12 will mitigate or prevent injury to existing groundwater users or the Subbasins. In fact, the evidence in the record supports only the conclusion that mitigation to avoid adverse groundwater impacts is unlikely to be possible here.

Cal-Am's Project pumping would result in a large plume of elevated TDS within the Project's capture zone. Expert evidence from the AHO proceedings shows that ceasing pumping as part of adaptive management or mitigation creates substantial harm, because the seawater drawn into the capture zone by the slant well pumping will then

migrate inland. (**Attachment B**, p. 13[34]). In fact, this evidence shows that the Project **will have to operate in perpetuity**—i.e., beyond the term of the proposed lease that Cal-Am seeks from this Commission—otherwise a plume of elevated TDS will move eastward from the Project area, resulting in increases in TDS within the Upper and Lower 180-Foot Aquifers and the 400-Foot Aquifer. (*Ibid.*, emphasis added; see also **Attachment C**, pp. 57–60[35] [Appendix E shows predicted change in TDS concentrations if the Project were to become active and then shut down].) "If the project shuts down after 25 years of operation, within another 25 years, the impacted portion of the Upper 180-Foot Aquifer in the Monterey Subbasin will expand to the east and north such that an increase in TDS of between 50 and 250 mg/L can be expected at water supply well MCWD-30, which currently extracts water from the Upper 180-Foot Aquifer (See Appendix D to MCWD-165 and Figure 6 to Appendix B of my testimony)." (**Attachment A**, p. 10.)

In summary, the record shows that by the time any monitoring warns of a potential problem, stopping the Project's pumping will only make the problem worse. Mitigation/adaptive management can only provide protection from harm that may arise from the Project when the following conditions are met:

1. The monitoring program is sufficiently designed and implemented, with respect to spatial distribution of monitoring points and temporal distribution of monitoring events, to ensure that effects from the Project are recorded in a timely enough manner to allow for corrective actions to be taken in time to protect the affected parties, resources, and/or sensitive receptors.
2. Actions capable of redressing harm or reversing changes in the monitored conditions are identified.
3. Actions capable of redressing harm or reversing changes in the monitored conditions can be taken in a timely enough manner to protect the affected parties, resources, and/or sensitive receptors.

[34] Rebuttal Testimony of Vera H. Nelson, P.E., on behalf of MCWD for Phase 3 of the SWRCB AHO Hearings in *Marina v. RMC Lonestar, et al.* (Case No. 20CV001387), admitted into evidence as exhibit MCWD-168 (attached hereto and referred to hereinafter as "**Attachment B**").

[35] Rebuttal Testimony of Todd Kincaid, Ph.D., submitted on behalf MCWD for Phase 3 of the SWRCB AHO Proceedings in *City of Marina v. RMC Lonestar, et al.* (Case No. 20CV001387), admitted into evidence as exhibit MCWD-169 (attached hereto and referred to hereinafter as "**Attachment C**").

4. Specific thresholds in the monitored parameters are identified as triggers for corrective actions.
5. Cal-Am agrees to initiate corrective actions immediately following measurement of threshold levels in the monitored parameters, regardless of culpability.

Here, the record contains no evidence that Cal-Am can provide feasible or effective mitigation to avoid harm to water users or the Subbasins due to seawater intrusion outside of the Project's capture zones. First, there is no evidence in the record of a plan that would ensure that effects from the Project are recorded in a timely enough manner to allow for corrective actions to be taken in time to protect the affected water users, resources, and/or sensitive receptors due to seawater intrusion to the Subbasins. Second, and most importantly, the evidence in the record shows that there is likely no feasible action Cal-Am could take to redress the harm caused by the Project's induced seawater intrusion.

C. <u>The M1W Outfall – CDP Application</u>: M1W's application to modify the M1W outfall for the MPWSP constitutes significant new information that reveals previously unstudied environmental impacts. (CEQA Guidelines, § 15162, subd. (a)(3)(A).)

It is undisputed that, before Project operations can begin, M1W's outfall must be modified and retrofitted so that it can accommodate the Project's brine discharge. (See Memorandum, p. 19; see also Final EIR/EIS, pp. 4.13-22–4.13-30, D-52.) The M1W outfall is the only way Cal-Am can discharge brine—so, absent these modifications, the Project cannot operate. (See Final EIR/EIS, pp. 4.13-28–4.13-29, D-52.) As the Memorandum concedes, Cal-Am must seek the Commission's approval to perform these modifications, as many will occur on land within the Commission's jurisdiction. (See Memo, p. 19; see also Final EIR/EIS, p. 3-66 [requiring a "Permit or Approval" from the California State Lands Commission for "New Land Use Lease, for portion of the subsurface slant wells located below mean high tide, and Amended Land Use Lease, for use of the [M1W] outfall and diffuser (Cal. Pub. Res. Code, § 1900)"].)

Even though retrofitting M1W's outfall is a necessary prerequisite to operating the Project's desalination plant, the Memorandum does not analyze it. Instead, the Memorandum incorrectly concludes that these modifications are too "speculative" to analyze and would exceed the scope of the EIR/EIS's analysis. (Memorandum, p. 19; see

id., p. 35 ["In addition, no changes to the M1W Outfall are proposed as part of the Phase 1 Project"].) Significant new information, however, establishes otherwise.

1. The Commission must analyze the recently proposed modifications to the M1W outfall before it considers the slant well lease application.

On March 31, 2026, M1W submitted an application to the Coastal Commission to modify M1W's existing outfall CDP for the MPWSP. (App. No. 3-83-014-A9). (See **Attachment D**.[36]) The application shows that construction associated with the proposed modifications will occur within this Commission's jurisdiction by "extend[ing] onto or adjoin[ing] any beach, tidelands, submerged lands or public trust lands." (*Id.*, PDF p. 16.) In particular, construction activities will affect public access to the beach and associated recreational activities. (See *id.*, PDF pp. 65–66.) Nevertheless, the application conspicuously omits any further reference to the Commission or its need to review the proposal and issue a lease amendment. (See, e.g., *id.*, PDF p. 207 ["Regional and Local Regulatory Approvals and Permits" list anticipated dates for grading permits sought from the County of Monterey and City of Marina, but does not identify approvals needed from the Commission], p. 315 ["Verification of All Other Permits for the Proposed Modification" does not list a lease amendment from the Commission].)

Given this, on April 29, 2026, the Coastal Commission sent M1W and Cal-Am a Notice of Incomplete Application. (See **Attachment E**[37].) Among other outstanding items, the Coastal Commission requested that the parties provide confirmation from the "California State Lands Commission [for an] approved lease for the outfall and proposed outfall modifications" and "evidence of California State Lands Commission authorization for the offshore portion of the proposed work." (*Id.*, p. 2 [§§ 4(a), 5].) Notably, the Memorandum also concedes that Cal-Am and M1W will need to seek these approvals from the Commission before any work on the outfall can commence. (See Memo, p. 19

[36] March 31, 2026, Coastal Development Permit Application Amendment for Modifications to the Monterey One Water Outfall (CDP No. 3-83-014), submitted by Monterey One Water to the California Coastal Commission (attached hereto and referred to hereinafter as "**Attachment D**").

[37] April 29, 2026, California Coastal Commission, Notice of Incomplete Application to Monterey One Water re: *Coastal Development Permit Amendment Application No. 3-83-014-A9 (Monterey One Water Outfall Modifications)* (attached hereto and referred to hereinafter as "**Attachment E**").

["If an amendment to the Lease is required to address potential modifications to the outfall, M1W would apply to the Commission for such an amendment in the future"].)

As M1W has submitted a proposal to modify the outfall at Cal-Am's request solely to address the impacts of Cal-Am's MPWSP, the Commission must analyze the scope and potential impacts associated with the outfall modifications *before* it considers Cal-Am's application for the slant well lease, as they are both part of the MPWSP. Considering the lease application before the proposed outfall modifications would be premature, particularly because the slant wells cannot operate until the outfall is modified. In other words, the Commission cannot analyze these modifications in a separate lease amendment proceeding because any approval issued here would compel the completion of the outfall modifications, in contravention of CEQA's piecemealing provisions. (CEQA Guidelines § 15165; *Nelson v. County of Kern* (2010) 190 Cal.App.4th 252, 272.)

For these reasons, the Commission has been presented with significant new information that establishes the outfall modifications are no longer "speculative"; therefore, it must conduct subsequent/supplemental environmental review to properly consider the *full* scope of the Project, as CEQA demands. (Pub. Resources Code, § 21166; CEQA Guidelines, § 15162; *San Mateo I*, *supra*, 1 Cal.5th at pp. 951–952 ["under CEQA, when there is a change in plans, circumstances, or available information after a project has received initial approval, the agency's environmental review obligations turn on the value of the new information to the still pending decisionmaking process"].)

2. The CDP application to modify the M1W outfall for the MPWSP differs from the Final EIR/EIS and reveals new and substantially more severe environmental impacts.

The Commission's Memorandum states that the 4.8 mgd project's modifications to the M1W Outfall do not differ from the Original Project's modifications that were analyzed in the EIR/EIS. (Memorandum, p. 12.) The M1W Outfall CDP Application reveals the opposite. Though scant, the application indicates that construction work on the outfall will involve several new and/or different elements not analyzed in the EIR/EIS, many of which will likely result in significant unmitigated impacts on State lands. The Coastal Commission concedes this in its Notice, noting that the "proposed onshore outfall liner work includes additional access pits, grouting pits, and work areas compared to that analyzed in the MPWSP Final EIR/EIS[,]…[which] is likely due to a

more refined site design that has been developed since the 2018 EIR/EIS environmental review process. However, the proposed onshore work would result in adverse impacts to environmentally sensitive habitat areas and special status species during construction." (Attachment E, p. 4 [§ 7(c)].)

In addition to the adverse impacts noted by the Coastal Commission, other key examples of these differences that this Commission must first consider in a subsequent or supplemental EIR are summarized below:

- **Construction Timeline and Concurrent Activities:** As the Coastal Commission's Notice observes, it's unclear whether outfall construction activities will occur before or at the same time as the other Phase 1 construction activities. (Attachment E, p. 2 [§ 6(a)].) M1W and Cal-Am's outfall application explains that "[s]ubsurface work associated with the Proposed Modification at some of the access and grouting pit locations at the CEMEX site would overlap with construction activities for the slant well intake network and associated infrastructure component authorized under the CDP for the MPWSP project." (Attachment D, PDF p. 48, fn. 2.) But the Final EIR/EIS does not analyze the impacts associated with constructing the slant well intake network *and* the outfall improvements *simultaneously*. Instead, it assumes that slant well construction will occur *after* the outfall modifications are complete. (See, e.g., Final EIR/EIS, pp. D-52–D53 [before Cal-Am can operate the MPWSP's Desalination Plant, Cal-Am must submit documentation to the CPUC demonstrating that it replaced the outfall's existing WEKO seal clamps and installed a protective liner system on the outfall's land segment in compliance with the mitigation measures' timing requirements].) Thus, absent subsequent or supplemental environmental review, the public cannot meaningfully consider previously unstudied cumulative impacts associated with these overlapping construction activities. (See *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 733 (*Raptor I*) [even if treated separately, cumulative effects of two severed projects must be analyzed]; Pub. Resources Code, § 21083.) It also prevents this Commission from assessing and mitigating potential impacts that will occur within its jurisdiction as part of Cal-Am's underlying slant well lease at issue here. (*Communities for a Better Environment v. City of Richmond*

(2010) 184 Cal.App.4th 74, 82–83 (*CBE*) [failure to adequately apprise all interested parties of the true scope of the project for intelligent weighing of its environmental consequences precludes informed decisionmaking under CEQA].) Because the EIR/EIS did not analyze these cumulative impacts, the Commission must prepare a subsequent or supplemental EIR that considers the combined environmental effects of concurrently constructing the slant well intake network and modifying the outfall. (*Raptor I*, *supra*, 27 Cal.App.4th at p. 733, emphasis added [environmental document must contain an analysis of "the *combined environmental effects* of the proposed development plus [the other project activities]"]; Pub. Resources Code, § 21166 [project changes that will produce new or increased significant environmental effects must be analyzed in a subsequent or supplemental EIR].)

- **Length of Time to Complete Outfall Modifications:** The CDP application states that constructing all requisite onshore and offshore outfall modifications will take approximately 2 years (24 months). (Attachment D, PDF p. 48.) Installing the slip liner will take approximately 9 months, while modifying the outfall's diffuser will take approximately 6 months. Both of these timelines greatly exceed those analyzed in and allowed for under the EIR/EIS. For slip liner installation, the EIR/EIS explained that construction shall occur only during the five-month irrigation season, April through September, and that installation on any given segment shall not exceed 7 to 10 days. (EIR/EIS, p. D-53 [Mitigation Measure 4.13-5b].) For modifications to the outfall's diffuser, the EIR/EIS states that construction shall take approximately 6 to 8 weeks and shall only occur in the late summer/early fall during irrigation season. (*Ibid.*) The M1W Outfall CDP application, however, doubles the estimates for each of these activities, thereby extending the scope and impact of the impacts previously analyzed in the EIR/EIS. Therefore, the Commission's Memorandum lacks substantial evidence to support its conclusions that the EIR/EIS adequately analyzed the extent of these impacts to resources on State lands, and must instead reevaluate them in a subsequent or supplemental EIR.
    - **Construction Staging Square Footage & Easements:** The M1W Outfall CDP Application explains that construction and installation of the onshore

outfall protective slip liner will require excavating 14 access pits along the outfall's alignment, along with 11 grouting pits to grout the liner. (Attachment D, PDF pp. 48–49.) Excavating the access pits would involve 700 square feet of temporary ground disturbance, while excavating the grouting pits would involve 25,000 square feet of temporary disturbance. These numbers greatly differ from those outlined in the EIR/EIS. In particular, the EIR/EIS explains that M1W identified 10 locations within its right-of-way to provide access to the outfall's land segment for installing the liner. (EIR/EIS, p. D-53.) The corresponding mitigation measure authorizing the outfall modifications states that "only these locations shall be used." (*Ibid.*) The measure also states that the excavation pit at each access point shall be located directly above the outfall pipe and shall not exceed 12 feet by 25 feet. (*Ibid.*) The increased construction footprint proposed in the M1W Outfall CDP Application represents a significant increase in potential disturbances to State lands. As such, the Commission must consider this significant new information in a supplemental or subsequent EIR.

D. <u>The OceanWell Alternative:</u> Significant new information establishes feasible alternatives that will satisfy the MPWSP's remaining project objectives with significantly fewer environmental impacts. (CEQA Guidelines, § 15162, subd. (a)(3)(D).)

While the Commission may rely on the CPUC's EIR/EIS, it also must still consider "those aspects of [the] [P]roject that are subject to [its] jurisdiction" and must "issue its own findings regarding the feasibility of … project alternatives that can substantially lessen or avoid significant environmental effects." (*RiverWatch v. Olivenhain Mun. Water Dist.* (2009) 170 Cal.App.4th 1186, 1201.) "[B]efore reaching a decision on the project, the decision-making body of [the Commission, as] the responsible agency[,] must consider the environmental effects of the [P]roject as shown in the EIR ... and feasible mitigation measures or alternatives within the [Commission's] powers. If the [Commission] finds that any alternatives or mitigation measures within its powers are feasible and would substantially lessen or avoid a significant effect of the project, the [Commission] may not approve the [P]roject as proposed, but must adopt the feasible mitigation measures or alternatives." (*Id.*, p. 1202, internal citations omitted; see CEQA Guidelines, § 15096, subd. (g)(2), emphasis added ["When an EIR has been

prepared for a project, the Responsible Agency ***shall not*** approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment"].)

Since the CPUC certified the EIR/EIS over eight years ago, alternatives to the Project have materialized. First, and as explained in section I.A above, expansion of the Pure Water Monterey advanced water recycling project was completed in October 2025.[38] Since coming online, Pure Water Monterey Expansion now supplies the Monterey Peninsula with 60% of its drinking water, thus ending dependence on the Carmel River and Seaside Basin as the region's sole sources of potable water.[39] By adding 2,250 AFY to the initial supply, Pure Water Monterey Expansion, along with other existing supplies, provides enough water to serve Cal-Am's current customers while maintaining a significant water supply surplus.

Second, new desalinization technologies have been developed that would eliminate or substantially reduce the MPWSP's significant and unavoidable impacts. One such feasible alternative has been created by the desalination company OceanWell. The company has developed an innovative new approach to ocean desalination that retains the benefits of onshore desalination without its significant environmental impacts or drawbacks.[40] The company utilizes a subsea reverse osmosis ("SRO") technology that operates at a depth of about 400 meters in the ocean's aphotic zone. At this depth, the ocean's natural hydrostatic pressure provides energy for the reverse osmosis process. The zone's relatively inhospitable conditions also mean there is little organic life that would otherwise be adversely impacted during traditional desalination operations. For similar reasons, the subsea nature of this technology means it will be resilient to extreme weather and rising sea levels. The deep-sea location provides a secure location that eliminates the need for large-scale terrestrial facilities, thereby reducing landside development presence

[38] See https://www.mpwmd.net/water-supply/pure-water-monterey/.

[39] *Ibid.*

[40] See Water Infrastructure Finance Authority of Arizona, *Responses to Request for Information: Long-Term Water Augmentation*, 2023, PDF p. 187 (available at: https://ltwaf.azwifa.gov/images/Docs/2023-ltwaf-rfi-received.pdf) (hereinafter "Arizona Water Infrastructure Report").

by 90%. This, in turn, eliminates the need for unsightly industrial facilities that visually obstruct the coastline and restrict the public's access to the beach.[41]

OceanWell will deploy this technology via "deep sea water farms" featuring LifeSafe™ "purification pods" that filter out salts, bacteria, viruses, pesticides, and PFAS, and are engineered to withstand deep-sea conditions.[42] These screens also protect the relatively scant aphotic marine life from entrapment and eliminate brine discharge. The system then pumps freshwater to shore to maintain a pressure differential on the reverse osmosis membranes and keep the process operating. By relying on natural ocean pressure, this technology eliminates the need for land-based pumps that artificially push feedwater through downstream membranes, thereby reducing energy consumption by up to 40%.[43]

Recent data affirms these projections. Thanks to a partnership with the Las Virgenes Municipal Water District ("LVMWD") and funding from the federal Bureau of Reclamation, a pilot test at the Las Virgenes Reservoir has demonstrated that OceanWell's technology is viable and scalable.[44] The test revealed that the OceanWell system operated with high energy efficiency, utilizing approximately 1 kilowatt hour per cubic meter of water processed/treated.[45] The LifeSafe™ intake system also eliminates aquatic impingement, and microorganisms can be returned to their habitat unharmed. Finally, during the three months the test operated, the pod had 93% uptime and produced over 150,000 gallons of water, with an average TDS of 50 ppm. The Bureau of Reclamation's assessment of the test concluded that a "detailed performance mapping of OceanWell's SRO technology versus other onshore and offshore desalination

---

[41] Arizona Water Infrastructure Report, PDF p. 187.

[42] See https://www.oceanwellwater.com/water-farms; see also https://www.oceanwellwater.com/lifesafe.

[43] See https://www.lvmwd.gov/files/539f4c1ac/Oceanwell-LV+Final+Report+-Brochure.pdf.

[44] See https://www.oceanwellwater.com/pilot-test.

[45] See LVMWD x OceanWell, Final Report: *Submerged Water Filtration Testing at Las Virgenes Reservoir*, May 2026 (available at: https://www.lvmwd.gov/files/b6a210660/OW+Public+Report-v2.pdf); see also Bureau of Reclamation, Desalination and Water Purification Research Program, Report No. R24AC00103-00, *Submerged Water Filtration: A Climate-Resilient, Eco-Friendly, Underwater Filtration Package*, March 2026 (available at: https://www.lvmwd.gov/files/1d2f13549/OceanWell+USBR+Final+Technical+Report.pdf) (hereinafter, "2026 Reclamation Report").

technologies suggests that OceanWell ***has the lowest overall environmental impact in seawater desalination***."[46]

Following the pilot test's success, OceanWell, LVMWD, and a consortium of six other Southern California water agencies have begun rolling out the first coastal pilot test for Water Farm 1 off the coast of Ventura County.[47] The EPA issued an NPDES permit (No. CA0000018) for the coastal pilot test on August 12, 2025, with which the Coastal Commission concurred.[48] Water Farm 1 will scale from producing 10 MGD to 60 MGD by the time it is fully operational in 2030.

OceanWell, in partnership with MCWD, M1W, and the MPWMD, intends to soon develop Water Farm 2 off the Monterey Coast to provide an additional, environmentally benign supply of potable water.[49] OceanWell thus presents an environmentally superior alternative to the MPWSP. As the pilot test results showed, OceanWell will have significantly fewer environmental impacts (if any) to terrestrial, biological, groundwater, energy, and coastal resources. The advent of this technology provides Cal-Am with yet another alternative that would allow it to satisfy its remaining Project objectives and meet water supply demand estimations, without incurring the significant environmental impacts that the MPWSP will inevitably have on precious coastal and tideland resources. Because OceanWell's technology exists and is currently being built to scale, the Commission must conduct supplemental or subsequent environmental review to consider it as a viable alternative that is considerably different from those analyzed in the EIR/EIS, given that it will substantially reduce one or more of the MPWSP's significant and unavoidable impacts on the environment. (CEQA Guidelines, § 15162, subd. (a)(3)(D).)

II. Other Considerations

These preliminary comments are not intended to address all the inadequacies in the Environmental Memorandum. We understand that Commission staff have met with other stakeholders, including the City of Marina, who have provided new information

[46] 2026 Reclamation Report, p. 12 [§ 1.2.2], emphasis added.

[47] See https://www.oceanwellwater.com/news/oceanwell-and-las-virgenes-municipal-water-district-launch-california-water-farm-1-with-capacity-of-60-million-gallons-per-day-as-six-agencies-join-project; see also https://www.oceanwellwater.com/water-farm-one.

[48] See https://www.epa.gov/npdes-permits/CA0000018.

[49] See Arizona Water Infrastructure Report, PDF p. 187.

regarding the proposed phased Project's unevaluated and unmitigated impacts to endangered species and sensitive coastal habitat/EHSA, public access/recreation, groundwater dependent ecosystems, coastal erosion/relocations of slant wells, growth inducement, environmental justice, and public trust issues, among others.

III. Conclusion

MCWD appreciates the Commission's consideration of the above comments. MCWD also intends to supplement these comments once the Commission releases its corresponding staff report for its upcoming hearing on Cal-Am's lease application on June 23, 2026. Thank you again for considering these comments, and please feel free to contact me if you have any questions or would like additional information.

Very truly yours,



Howard "Chip" Wilkins III

Cc: Lucinda Calvo (Lucinda.Calvo@slc.ca.gov)
Remleh Scherzinger (RScherzinger@mcwd.org)

Attachments [*provided via FTP link due to file size exceeding typical email limits*]:

- **Attachment A** – Expert Report in support of Direct Testimony of Vera H. Nelson, P.E., submitted on behalf MCWD for Phase 3 of the SWRCB AHO Proceedings in *City of Marina v. RMC Lonestar, et al.* (Case No. 20CV001387), admitted into evidence as exhibit MCWD-165.
- **Attachment B** – Rebuttal Testimony of Vera H. Nelson, P.E. on behalf of MCWD for Phase 3 of the SWRCB AHO Hearings in *Marina v. RMC Lonestar, et al.* (Case No. 20CV001387), admitted into evidence as exhibit MCWD-168.
- **Attachment C** – Rebuttal Testimony of Todd Kincaid, Ph.D., submitted on behalf MCWD for Phase 3 of the SWRCB AHO Proceedings in *City of Marina v. RMC Lonestar, et al.* (Case No. 20CV001387), admitted into evidence as exhibit MCWD-169.

- **Attachment D –** March 31, 2026, Coastal Development Permit Application Amendment for Modifications to the Monterey One Water Outfall (CDP No. 3-83-014), submitted by Monterey One Water to the California Coastal Commission.
- **Attachment E –** April 29, 2026 Letter and Notice of Incomplete Application from California Coastal Commission to Monterey One Water ("M1W") re: *Coastal Development Permit Amendment Application No. 3-83-014-A9 (Monterey One Water Outfall Modifications)*.
- **Attachment F** – June 25, 2025, Final Report of the Board as Referee in City of Marina v. RMC Lonestar, prepared by the Administrative Hearings Office of the State Water Resources Control Board.

MCWD June 5, 2026 Comment Letter, File A4181

ATTACHMENT A

You can access and download the file here:

https://rmmenvirolaw.sharefile.com/public/share/web-saf675acc430342b19e4f79e856b2817b

MCWD June 5, 2026 Comment Letter, File A4181

ATTACHMENT B

You can access and download the file here:

https://rmmenvirolaw.sharefile.com/public/share/web-saf675acc430342b19e4f79e856b2817b

MCWD June 5, 2026 Comment Letter, File A4181

ATTACHMENT C

You can access and download the file here:

https://rmmenvirolaw.sharefile.com/public/share/web-saf675acc430342b19e4f79e856b2817b

MCWD June 5, 2026 Comment Letter, File A4181

ATTACHMENT D

You can access and download the file here:

https://rmmenvirolaw.sharefile.com/public/share/web-saf675acc430342b19e4f79e856b2817b

MCWD June 5, 2026 Comment Letter, File A4181

ATTACHMENT E

You can access and download the file here:

https://rmmenvirolaw.sharefile.com/public/share/web-saf675acc430342b19e4f79e856b2817b

MCWD June 5, 2026 Comment Letter, File A4181

ATTACHMENT F

You can access and download the file here:

https://rmmenvirolaw.sharefile.com/public/share/web-saf675acc430342b19e4f79e856b2817b

REMY | MOOSE | MANLEY LLP

Howard "Chip" Wilkins III
cwilkins@rmmenvirolaw.com

June 22, 2026

Via E-mail Only **File: A4181**

CSLC.CommissionMeetings@slc.ca.gov
CalAm@slc.ca.gov
Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: Supplemental Comments of Marina Coast Water District on State Lands Commission's June 23, 2026 Hearing Staff Report on Item No. 60 re: California-American Water Company (Applicant), Termination of General Lease – Right-of-Way and Issuance of General Lease – Industrial Use on Sovereign Land Located in the Pacific Ocean, Monterey Bay, near Marina, Monterey County (Lease 9177; A4181; RA# 2022354) (A 30; S 17) (State Clearing House No. 2006101004)

Dear Chair Cohen and Honorable Commissioners:

On behalf of our client, the Marina Coast Water District ("MCWD"), we submit these supplemental comments on the State Lands Commission's ("Commission's") Staff Report regarding California-American Water Company's ("Cal-Am's") general lease application for the Monterey Peninsula Water Supply Project ("MPWSP" or "Project") (Item No. 60), which the Commission will consider at its upcoming hearing on Tuesday, June 23, 2026. These comments supplement our June 5, 2026 letter, which documented fundamental deficiencies in the Commission's May 2026 memorandum entitled "Evaluation of Prior CEQA Sufficiency and Documentation that No Additional CEQA[1] Review is Needed for the Monterey Peninsula Water Supply Project" ("Environmental Memorandum" or "Memo"). As explained herein, the Staff Report, released following

[1] California Environmental Quality Act ("CEQA") (Pub. Resources Code, § 211000 et seq.) and "CEQA Guidelines" (Cal. Code Regs., § 15000 et seq.).

These Materials Have Been Provided to State Lands Commission Staff

close of business on June 19, 2026—less than three business days before the hearing—perpetuates those deficiencies and introduces new legal and factual errors that compound the already substantial reasons the Commission should deny or defer consideration of Cal-Am's lease application.

A. The Commission should deny or defer Cal-Am's lease application unless and until Cal-Am obtains CPUC approval for the actual project it seeks to build.

The Staff Report's proposed Findings and Statement of Overriding Considerations (Exhibit B) make clear that the Commission is being asked to approve only Phase 1 of the Project. (Staff Report, Exhibit B, p. B-2 ["Phase 1 is the activity now subject to the Commission's lease consideration"].) Yet the Staff Report simultaneously misleads the Commission by stating that the California Public Utilities Commission ("CPUC") has approved the Project under consideration. (See Staff Report, p. 26 ["Approvals Obtained"].)

That is incorrect. As explained in our June 5, 2026 letter, Cal-Am does not have CPUC approval to construct or operate the 4.8 million gallons per day ("mgd") Phase 1 project now before the Commission. On the contrary, the CPUC approved a different project in 2018—a 6.4 mgd desalination project—and expressly rejected a 4.8 mgd project and phased construction. This is not an academic discrepancy; it is a threshold legal barrier.

Public Utilities Code, section 1001, does not permit what Cal-Am now seeks the Commission's approval of. No investor-owned public utility in California may build a plant to serve its customers without *first* obtaining a Certificate of Public Convenience and Necessity ("CPCN") from the CPUC. (Pub. Util. Code, § 1001.) Put differently, Cal-Am cannot lawfully implement the project it is proposing to this Commission unless and until the CPUC authorizes that project.

This issue is now squarely before the CPUC. On June 16, 2025, the Monterey Peninsula Water Management District ("MPWMD"), the City of Marina ("Marina"), and MCWD submitted a complaint to the CPUC.[2] The complaint seeks Cal-Am's compliance with the requirements of the Public Utilities Code and prior Project-related CPUC decisions. The primary specific relief the complaint seeks is a CPUC order directing Cal-

[2] A copy of the Complaint is provided as Attachment A to this letter.

Am to file with the CPUC a petition for modification of the CPUC's 2018 authorization of a 6.4 mgd desalination project.[3]

A petition for modification is the means by which Cal-Am can request CPUC approval to change the size of the previously approved desalination project—a significant change to the project. The CPUC has made it very clear that if Cal-Am seeks a non-minor modification to its 6.4 mgd project, as approved and certified by the CPUC in 2018, Cal-Am *must* file a petition for modification with the CPUC to initiate the necessary regulatory review. (CPUC Decision ("D.") 26-04-046, p. 5, ["D.18-09-017 provides a mechanism for adjustments if needed. (See D.18-09-017, Ordering Paragraph 22 [Cal-Am 'shall seek any other [non-minor] project refinements by a petition to modify [D.18-09-017].']).")"].) The order requiring a petition for modification that MPWMD, Marina, and MCWD seek by their complaint will provide a vehicle for the CPUC to analyze and determine whether the currently-proposed 4.8 mgd project is required for the public convenience and necessity, and, if so, *whether the cost to ratepayers* is just and reasonable under Public Utilities Code section 451. This analysis is required by law to be performed by the CPUC, and *only* the CPUC, and Cal-Am may not build its project without the CPUC's authorization and underlying analysis. (Pub. Util. Code, §§ 451, 1001.) In fact, when the CPUC approved a larger desalination project in 2018, it expressly *rejected* a smaller or phased project without even conducting an environmental impact analysis, finding that a smaller size or phased construction would not reduce the project's financial or environmental burdens. (D.18-09-017, pp. 69, 70, 178-179 at Findings of Fact 93-77; D.19-01-051 (denying rehearing of D.18-09-017), pp. 60-61.) No further analysis of the 4.8 mgd phased project has ever been completed—let alone one that demonstrates otherwise.

The Commission should either deny the lease application or delay its consideration until Cal-Am completes a petition for modification proceeding before the CPUC and returns to the Commission with a CPCN for the project Cal-Am seeks to implement.

B. <u>The State Water Board's pending proceeding to consider lifting the moratorium on new service connections on the Monterey Peninsula is significant new information undercutting the need for the Project.</u>

[3] The Complaint also seeks an order barring CalAm from engaging in further activity to implement any desalination project until the petition for modification is resolved by a final Commission decision.

The Staff Report acknowledges that MPWMD has petitioned the State Water Board to modify the Carmel River cease-and-desist orders, including lifting the prohibition on new water service connections. (Staff Report, p. 24.) That proceeding has materially advanced. On June 19, 2026, the State Water Board noticed a hearing on MPWMD's petition based on evidence that Cal-Am has remained within its lawful Carmel River diversion limits for the past three years due to new water supplies and conservation efforts, and that Pure Monterey Expansion provides sufficient additional supply to avoid future violations. (Attachment B [Notice of Hearing to Consider Modification of California American Water Company Cease and Desist Order (State Water Board Orders WR 2016-0016 and WR 2009-0060)].)

As our earlier comment letter indicated, there is no current water shortage in Monterey. Cal-Am has a 2,000 AFY surplus, and the CPUC's 2025 projections show Cal-Am would need only 2,528 AFY of additional supply by 2050—less than half of what the proposed 4.8 mgd Phase 1 project would produce. MPWMD's petition to lift the moratorium—filed based on evidence of Cal-Am's sustained compliance and adequate alternative water supplies—demonstrates that Cal-Am does not urgently need additional water supplies from desalination for some years to come, likely a decade or more. The Commission should defer action on the lease application until the State Water Board resolves MPWMD's petition, allowing that determination to inform the actual timing of any future supply needed (if any).

C. The Staff Report and Environmental Memorandum fail to address significant new information regarding modifications to the M1W outfall, thereby misleading the Commissioners about the true scope of the Project's impacts.

As noted in our prior comment letter, the Environmental Memorandum erroneously states that modifications to the Monterey One Water ("M1W") Outfall do not differ from those analyzed in the EIR/EIS. (Memo, p. 12.) The Staff Report glaringly fails to correct this error and further misleads the Commissioners about the actual scope of the Project. (See Staff Report, pp. 23–24.)

To mitigate the Project's significant impacts to coastal water quality and the corrosive effects of discharging brine through the M1W outfall, the CPUC adopted mitigation requiring Cal-Am, before Project operations may begin, to modify the offshore outfall diffusers and install a protective liner along the landward segment of the outfall. (See Final EIR/EIS, pp. 4.13-28–4.13-29, D-52.) Retrofitting the M1W outfall is therefore not an optional future improvement or an independent undertaking; it is a

CPUC-adopted mitigation necessary to make the approved Project operational and to address its identified environmental effects.

The Staff Report itself confirms as much. It acknowledges that the proposed outfall work—including replacement of internal joint seals, modification of the existing diffuser, replacement of 129 horizontal diffuser ports, and installation of 29 additional ports—would occur within the Commission's jurisdiction. (Staff Report, p. 24.) More importantly, the Staff Report concedes that the "MPWSP would not be able to operate without these modifications." (*Ibid*.) Those admissions are dispositive. The outfall modifications are not a peripheral future undertaking that may be severed from the Project and addressed later. They are an indispensable element of the CPUC-approved mitigation program and a prerequisite to Project operation.

The Coastal Commission previously refused to consider impacts associated with retrofitting the M1W outfall because "neither [Cal-Am nor MW1] has committed to a final design or applied for the needed permits for this work." (Attachment C, p. 75 [November 2022 Coastal Commission Staff Report].) That rationale no longer holds. Cal-Am and M1W have now developed and submitted a proposed retrofit design to the Coastal Commission and Central Coast Water Board—a design that differs materially from the outfall modifications evaluated in the EIR/EIS—for consideration. (See MCWD's June 5, 2026 Comment Letter, pp. 17–20.) The Staff Report nevertheless seeks to defer environmental review of this now-defined, jurisdictionally necessary Project component to a later proceeding. CEQA does not permit that result. CEQA requires review of the "whole of the action," not isolated government approvals or artificially separated project components. (See CEQA Guidelines, §§ 15378, subds. (a), (c) [expressly defining "project" as the "whole of the action" and clarifying that although projects often require multiple discretionary approvals, the term 'project' does not mean each separate government approval], *Nelson v. County of Kern* (2010) 190 Cal.App.4th 252, 272.) In fact, CEQA forbids agencies from considering project components in isolation from the whole project. (See, e.g., *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1222.)

Accordingly, as the "public agency which grants the next discretionary approval for the project, if any," the Commission bears the responsibility to perform the supplemental review required by CEQA. (See CEQA Guidelines, §§ 15162, 15163; *Friends of College of San Mateo Gardens v. San Mateo County Community College Dist.* (2016) 1 Cal.5th 937, 950 [if any of the standards in Guidelines section 15162 are met,

"then a subsequent or supplemental EIR is required"].) The Coastal Commission's insistence that Commission authorization for the outfall modifications be obtained before M1W's Coastal Development Permit application can be deemed complete further confirms that the Commission is the next agency in the approval chain called upon to exercise discretionary authority over the Project. (See April 29, 2026, California Coastal Commission, Notice of Incomplete Application to Monterey One Water re: *Coastal Development Permit Amendment Application No. 3-83-014-A9 (Monterey One Water Outfall Modifications)*, p. 2 [§§ 4(a), 5].) The Commission, therefore, does not enjoy the luxury of ignoring the potentially significant impacts of the outfall work while assuming another agency will sort it out later.

Nor can the Commission sidestep this problem by pointing to the Central Coast Water Board's anticipated EIR addendum for M1W's National Permit Discharge Elimination System permit. (See Staff Report, p. 24.) That addendum will be prepared by a different responsible agency for a different approval decision, and within the confines of the Central Coast Water Board's own permitting jurisdiction over wastewater discharge and water quality impacts. It is no substitute for the Commission's independent obligation, as the next agency asked to approve the Project, to determine whether the modified outfall work within the Commission's jurisdiction triggers supplemental review under CEQA. The "promise" of a future Water Board addendum does not authorize the Commission to approve the lease now on the assumption that another agency will later analyze the environmental consequences of a different project component for different regulatory purposes.

D. <u>The Staff Report fails to adequately address significant new information regarding the Project's substantially more severe groundwater impacts.</u>

The Staff Report also materially understates the significance of the AHO Report and fails to address several critical categories of new groundwater evidence demonstrating that the Project may cause substantially more severe groundwater impacts than previously disclosed or analyzed in the EIR/EIS.

The Staff Report does not even mention the Sustainable Groundwater Management Act ("SGMA") (Wat. Code, § 10720, et seq.)—let alone address evidence that the Project's pumping will cause seawater intrusion and lead to undesirable results substantially impeding sustainable groundwater management of the 180/400-Foot Aquifer and Monterey Subbasins. Importantly, and as explained in our prior comment letter, the record shows that the Project cannot simply be curtailed or shut down if

monitoring reveals groundwater impacts because ceasing pumping would allow the elevated-salinity plume drawn into the capture zone to migrate inland and degrade water quality in the Upper and Lower 180-Foot Aquifers and the 400-Foot Aquifer, including aquifers relied upon by MCWD. (See MCWD's June 5, 2026 Letter, pp. 13–15.)

The Staff Report proposes a special lease provision that would require Cal-Am to submit an application for lease termination if a final judgment or other final disposition in *City of Marina v. RMC Lonestar, et al.*, Monterey County Superior Court No. 20CV001387 establishes that the Project would cause irreparable harm to an aquifer serving as a drinking-water source for Marina or MCWD. (Staff Report, p. 3.) But the AHO Report did not limit its findings to municipal drinking-water sources. It concluded that Cal-Am's proposed draw "may cause unreasonable harm in portions of the 180/400 and Monterey Subbasins" and may injure legal groundwater users not identified in the record. (Staff Report, p. 13, citing AHO Report, p. 112.)

The proposed lease provision improperly narrows the relevant concern from unreasonable harm to the Subbasins and injury to affected groundwater users generally, to irreparable harm to municipal drinking-water aquifers alone. That leaves unaddressed potentially affected nonmunicipal users, including nearby agricultural groundwater users such as the Ag Land Trust's Armstrong Ranch. The Commission cannot rely on an unresolved failure to identify all potentially injured groundwater users as a basis to approve the lease now, while limiting its protective condition to municipal drinking water supplies, even though the record specifically identifies the "other legal users" who may be harmed. (See Staff Report, p. 13.)

The Staff Report acknowledges the legacy of contamination in the Project area—including the nearby Fort Ord Seaside Munition Response Area—but does not analyze the implications of Project-induced groundwater movement on existing contamination, cleanup efforts, or other legal groundwater users. (See Staff Report, pp. 22–23.) The omission is particularly serious because the Staff Report also ignores new technical evidence regarding groundwater-quality changes near the CEMEX property, including potential freshening of Monterey Subbasin groundwater. The Commission cannot assume that these effects can simply be monitored and remedied later. The record before the AHO shows that seawater intrusion will be difficult or impossible to reverse once it occurs, while the proposed lease conditions identify no feasible means to restore groundwater quality, replace lost storage, or undo intrusion beyond the Project's capture zone.

The Staff Report also discusses the Coastal Commission's Special Condition 11, which requires the slant wells to be located at least 1,000 feet seaward of proposed well head locations and to be screened to extract only from the shallow 180-Foot Aquifer without penetrating deeper aquifers. (Staff Report, p. 16.) The Commission's record lacks substantial evidence that compliance with Special Condition 11 is technically feasible. Cal-Am's existing test slant well, which was modified from a 17-degree to a 19-degree angle due to site constraints, provides no assurance that four additional slant wells can achieve the steeper angles (approximately 13 degrees) necessary to comply with Special Condition 11 without impermissibly penetrating into deeper, fresher aquifers. The Commission should require Cal-Am to submit—and independently evaluate—a technical feasibility analysis prior to approving the lease.

Further, the Staff Report selectively cites the Coastal Commission's prior conclusion that neither the 2018 EIR/EIS nor its independent hydrogeologist identified reasonably foreseeable groundwater impacts due to Project pumping. (Staff Report, p. 11.) But the Staff Report omits the critical context for that conclusion—the Coastal Commission's independent hydrogeologist found that substantial uncertainty remained regarding the Project's groundwater effects, and additional modeling was warranted. (See Attachment C, November 2022 Coastal Commission Staff Report, p. 77 ["Commission's independent hydrogeologist recommended additional studies to more fully characterize the Project's likely effects on groundwater"].) That additional modeling and technical analyses have since been completed as part of the AHO proceeding. The new modeling developed and tested using years of additional groundwater-level, water-quality, and hydrogeologic data materially improved the factual basis for evaluating the Project's groundwater impacts and supports the conclusion that Cal-Am's proposed draw may cause unreasonable harm in portions of the 180/400 Foot-Aquifer and Monterey Subbasins. The Commission cannot rely on the Coastal Commission's earlier no-impact conclusion while ignoring both the uncertainty underlying that conclusion and the subsequent modeling developed to resolve it.

E. The Staff Report discloses disproportionate adverse impacts on disadvantaged communities but offers no path to compliance with the Commission's Environmental Justice Policy.

The Staff Report's environmental justice "analysis" effectively concedes that the MPWSP will impose disproportionate burdens on disadvantaged communities, yet it offers no recommendation for how the Commission can approve the Project consistent

with its own Environmental Justice Policy. (See Staff Report, pp. 17–22; see also Attachment D [February 29, 2024, MCWD correspondence to Commission].) The Commission's Environmental Justice Policy does not permit it to merely catalog harms to vulnerable communities and then proceed as if the analysis is complete. Rather, the Commission must weigh those burdens against the Project's claimed benefits and, where feasible, reduce or eliminate them. (Environmental Justice Policy, Goal 5, Strategy 5.3.) Here, where the record shows that the Project's first three primary objectives have already been achieved and it is not needed in the near term, if at all, the most effective and straightforward way to avoid imposing those burdens on disadvantaged communities is to deny Cal-Am's lease application.

The Staff Report discloses several disadvantaged communities that will be disproportionately and adversely affected by the Project—Marina, Seaside and Sand City, and Castroville. (Staff Report, pp. 17–22.) The Staff Report also documents specific harms to these communities: threats to drinking water supplies from groundwater extraction and seawater intrusion; potential rate increases that would burden low-income ratepayers in Seaside and Sand City; interference with public beach access in Marina; and environmental impacts to coastal dune habitat and endangered species. (*Ibid*.) The Staff Report explicitly acknowledges that MCWD and Marina residents have "expressed concerns about the extremely high cost of water" and that "communities within [Cal-Am's] Monterey District service area currently pay among the highest water rates in the country." (Staff Report, p. 21.)

Yet after identifying these disproportionate adverse burdens, the Staff Report proposes nothing—no meaningful mitigation, no enforceable conditions, no monitoring program, no community benefits, and no explanation of how the Commission could approve the Project without violating its own Environmental Justice Policy. In other words, the Staff Report treats environmental justice as a disclosure exercise by cataloging the Project's disproportionate adverse effects but stopping short of the only question that really matters, whether those harms can be justified at all and, if not, how the Commission will reduce or eliminate them. There is no justification for approving environmental and economic burdens on disadvantaged communities for a water supply project that Cal-Am does not presently need and cannot presently build.[4]

[4] The Staff Report also fails to acknowledge that the community of Castroville has an available alternative to Cal-Am's desalinated water for resolving its water quality

What is more, the uncontroverted testimony of water demand management expert Peter Mayer indicates that because the CPUC's projected future demand would require an increase in overall per capita water use, the lion's share of increased consumption by 2050 would necessarily be dedicated to outdoor uses. (See Attachment E, pp. 129:10–130:7.) This is because efficient fixtures mandated by modern building codes, as well as state and national manufacturing requirements, ensure that indoor use is unlikely to increase and will likely continue to decrease. (*Id.* at pp. 128:8–129:17, 130:3–7.) The likelihood of flat or declining per-person indoor demand is bolstered by ongoing conservation habits and high water prices. (*Ibid*.; *id.* at pp. 131:19–25, 149:9–22.) Additionally, to the extent that increased population results from the development of required affordable housing, affordable housing typically uses even less water per capita than market-rate housing. (*Id.* at pp. 149:23–150:3.)

Permitting Cal-Am's project to proceed, with all its adverse environmental and socioeconomic impacts on vulnerable communities, to support more lush landscaping, fountains, and swimming pools in affluent communities would be the height of environmental injustice. The Commission should deny Cal-Am's lease application.

F. <u>The Staff Report ignores feasible alternatives that will satisfy the MPWSP's project objectives with significantly fewer environmental impacts identified in MCWD's prior comments</u>.

The Staff Report does not address the feasible alternatives identified in MCWD's June 5, 2026 comment letter, including OceanWell's subsea reverse osmosis technology. As a responsible agency, the Commission may not approve the Project as proposed if a feasible alternative within its authority would substantially lessen or avoid significant effects. (CEQA Guidelines, §15096, subd. (g)(2); *RiverWatch v. Olivenhain Mun. Water Dist.* (2009) 170 Cal.App.4th 1186, 1201.)

The Staff Report incorrectly assumes the MPWSP, as proposed, remains the only option worth considering. That assumption is untenable. OceanWell's subsea technology operates at a depth of 400 meters, avoids land-based groundwater impacts, eliminates the

---

problems. As explained in our 2024 letter (Attachment D, p. 8), MCWD is prepared to assist Castroville by providing in-lieu pumping of Castroville's supply at MCWD's wells. The required transport pipeline is incorporated into MCWD's five-year plan (*Ibid*.) and could tie into MCWD service extensions to Monterey One Water and ReGen Monterey.

need to modify the M1W outfall, reduces energy use by 40%, has already been successfully piloted, and is currently being developed for deployment off the coast of Ventura County. OceanWell eliminates the groundwater drawdown, seawater intrusion, and impacts to fragile coastal habitat that the MPWSP cannot avoid.

The Commission cannot disregard a feasible alternative that may substantially lessen or avoid significant environmental effects within its jurisdiction. The Commission must conduct supplemental or subsequent environmental review to consider it as a viable alternative that is considerably different from those analyzed in the EIR/EIS, given that it will substantially reduce one or more of the MPWSP's significant and unavoidable impacts on the environment. (CEQA Guidelines, § 15162, subd. (a)(3)(D).)

G. The Commission's eleventh-hour release of its Staff Report undermines meaningful public participation and informed decision-making.

Public participation lies at the heart of CEQA. (*Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1993) 6 Cal.4th 1112, 1123 ["public participation is an '"essential part of the CEQA process'"].) "The requirement of public review has been called 'the strongest assurance of adequacy of [environmental review under CEQA].'" (*Mountain Lion Coalition v. Fish & Game Com.* (1989) 214 Cal.App.3d 1043, 1051.)

By waiting until after the close of business on June 19, 2026 to issue the Staff Report—i.e., only one business day before its June 23, 2026 meeting—the Commission woefully failed to provide the public with a meaningful opportunity to participate, which is one of the hallmarks of informed decision-making. While the Environmental Memorandum was made publicly available in May 2026, neither the Memo nor the subsequently released agenda clearly disclosed what action staff would recommend the Commission take. Instead, the agenda item was ambiguously framed, leaving the public and affected agencies without fair notice of the substance of the proposed action until the Staff Report was released. (See Gov. Code, § 11125, subd. (b) [Bagley-Keene Open Meeting Act requires agenda descriptions sufficient to inform the public of the business to be transacted]; 103 Cal. Op. Atty. Gen. 42 (2020), emphasis added ["specific" means "'characterized by precise formulation or accurate restriction: free from such ambiguity as results from careless lack of precision or from omission of pertinent matter"']; *San Diegans for Open Government v. City of Oceanside* (2016) 4 Cal.App.5th 637, 643 ["agenda drafters must give the public a fair chance to participate in matters of particular or general concern by providing the public with more than mere clues from which they

must then guess or surmise the essential nature of the business to be considered by a local agency"].)

Here, the agenda's description of Item 60 was ambiguous as to whether the Commission itself intended to adopt its own Mitigation Monitoring and Reporting Program and Statement of Overriding Considerations or would merely review and acknowledge CEQA documents previously prepared by the CPUC and the Coastal Commission. The agenda further did not make clear that the Commission is acting as a responsible agency. The problem was compounded by the timing of the Staff Report's release. The Staff Report—the principal document explaining staff's analysis and recommendation—was not released until after the close of business on Friday, June 19, 2026 (a federal holiday), with the hearing set for the following Tuesday, June 23, 2026. As a practical matter, this afforded the public and affected agencies only one business day, at most, to review a 132-page document to ascertain, for the first time, what action staff was actually recommending the Commission take, evaluate staff's analysis, consult with experts or legal counsel as necessary, and prepare comments for the hearing. That is not a meaningful opportunity for participation; it is a compressed process that functionally forecloses informed public review.

The timing of the report's release is particularly problematic because the Staff Report is not a ministerial scheduling document—it was the first document that clearly disclosed the recommended action. The Commission's own meeting procedures contemplate submission of written comments at least three business days before the hearing so that Commissioners have sufficient time to review them. Yet the release of the Staff Report at the eleventh hour—after the window for meaningful written response had effectively closed—turned that process on its head. By withholding the Staff Report, the Commission deprived the public of a fair opportunity to identify errors, raise concerns, and meaningfully participate in the CEQA process before the Commission acted, thereby undermining CEQA's fundamental purpose of informed decision-making through full public disclosure.

F. <u>For the foregoing reasons, the Commission should deny Cal-Am's lease application</u>.

The Commission need not rush to approve a general lease for a project that Cal-Am does not presently need, cannot presently build without CPUC authorization, and cannot operate without resolving pending environmental and regulatory determinations.

The Project presents too many unresolved legal and factual questions to warrant approval at this time.

Very truly yours,



Howard "Chip" Wilkins III

Attachments

- **Attachment A** – Complaint, *Monterey Peninsula Water Management Dist., City of Marina, and Marina Coast Water Dist. V. California-American Water Company (U210W)*, filed on June 16, 2026, before the California Public Utilities Commission
- **Attachment B** – Notice of Hearing to Consider Modification of California American Water Company Cease and Desist Order (State Water Board Orders WR 2016-0016 and WR 2009-0060)
- **Attachment C** – November 17, 2022 California Coastal Commission Staff Report (CDP Application No. 9-20-0603; Appeal No. A-3-MRA-19-0034)
- **Attachment D** – Correspondence from MCWD to State Lands Commission dated February 29, 2024
- **Attachment E –** Peter Mayer Testimony in *City of Marina v. RMC Lonestar, et al.*, Monterey County Superior Court, Case No. 20CV001387

cc: Calvo, Lucinda (Lucinda.Calvo@slc.ca.gov)

Remleh Scherzinger (RScherzinger@mcwd.org)

MCWD June 22, 2026 Comment Letter, File A4181

ATTACHMENT A

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Monterey Peninsula Water Management District, City of Marina and Marina Coast Water District, Complainants v. California-American Water Company (U210W), Defendant.	Complaint 26-06-_____ (Filed _____)

COMPLAINT

DAVID C. LAREDO
FRANCES M. FARINA
De LAY & LAREDO
606 Forest Avenue
Pacific Grove, CA 93950-4221
Telephone: (831) 646-1502
Facsimile: (831) 646-0377
Email: dave@laredolaw.net
fran@laredolaw.net

ATTORNEYS FOR THE MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

RUTH STONER MUZZIN
CATHERINE M. ROE
JORIAN HEAL
EMILY A. HORNE
FRIEDMAN & SPRINGWATER LLP
350 Sansome Street, Suite 800
San Francisco, CA 94104
Telephone: (415) 834-3800
Facsimile: (415) 834-1044
Email: rmuzzin@friedmanspring.com
croe@friedmanspring.com
jheal@friedmanspring.com
ehorne@friedmanspring.com

ATTORNEYS FOR THE MARINA COAST WATER DISTRICT

SARA STECK MYERS
Attorney at Law
122 - 28th Avenue
San Francisco, CA 94121
Telephone: (415) 420-1253
Email: ssmyers@att.net

PAUL P. ("SKIP") SPAULDING, III
SHARTSIS FRIESE LLP
425 Market Street, 11th Floor
San Francisco, CA 94105
Telephone: (415) 421-6500
Email: sspaulding@sflaw.com

ATTORNEYS FOR THE CITY OF MARINA

DATED: JUNE 16, 2026

TABLE OF CONTENTS

Page

COMPLAINT 1
I. SUMMARY 4
II. COMPLIANCE WITH COMPLAINT REQUIREMENTS (PU Code Section 1702; Rules 4.1(a) and 4.2) 7
A. Authority for Complainants to File the Complaint; Legal Name and Contact Information for Complainants and Defendant (PU Code Section 1702; Rules 4.1(a)(1)) and 4.2(a)) ... 7
1. Complainants 8
a) Monterey Peninsula Water Management District 8
b) City of Marina 9
c) Marina Coast Water District 11
2. Defendant 12
B. Rules 4.1(a) and 4.2(a) Complaint Requirements 13
1. Grounds for Complaint (Rules 4.1(a) and 4.2(a)) 13
2. Proposed Category of Proceeding (Rules, Articles 1, 4, and 7) 13
3. Issues to Be Considered and Need for Hearing 13
4. Proposed Schedule and Venue 15
C. The Complaint Cannot Be Resolved "Informally" by Staff, and Consultation with Staff Will Inappropriately Delay Resolution that Requires Immediate Commission Enforcement Action (Rule 4.2(b)) 17
III. GROUNDS FOR COMPLAINT (Rules 4.1(a) and 4.2(a)) 18
A. Applicable Law 18
B. Specific Allegations 25
IV. REQUESTED RELIEF (Rule 4.2(a)) 43
VERIFICATIONS (Rules 1.11 and 4.2)
EXHIBITS

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Monterey Peninsula Water Management District, City of Marina and Marina Coast Water District, Complainants v. California-American Water Company (U210W), Defendant.	Complaint 26-06-_____ (Filed _____)

COMPLAINT

Pursuant to Article XII of the California Constitution, Sections 3, 5, and 6; Sections 451, 701, 702, 761, 1001, 1002, and 1702 of the California Public Utilities Code ("PU Code");[1] and Articles 1, 4, and 7 of the California Public Utilities Commission ("Commission") Rules of Practice and Procedure ("Rules" or "Commission Rules"), the Monterey Peninsula Water Management District ("MPWMD"), the City of Marina ("City" or "Marina"), and the Marina Coast Water District ("MCWD"), collectively, the "Complainants," jointly submit this Complaint seeking a decision by the Commission to do all of the following:

(1) Find that the California-American Water Company ("Cal-Am"), a "public utility" water corporation subject to the Commission's jurisdiction and regulation,[2] is in violation of Decision ("D.") 18-09-017, including Ordering Paragraph ("OP") 22 thereof,[3] because it is implementing a different, reduced-size desalination project and not the 6.4 million gallons per day ("mgd") Monterey Peninsula Water Supply Project ("MPWSP" or "Project") that the Commission authorized and

[1] All statutory references herein are to the California Public Utilities Code unless otherwise indicated.
[2] PU Code Sections 216(a)(1), 701, 702.
[3] D.18-09-017, at pp. 210-211.

granted a Certificate of Public Convenience and Necessity ("CPCN") in D.18-09-017 without first seeking and securing the Commission's authorization and modification of D.18-09-017 to do so;

(2) Direct Cal-Am to file a petition to modify D.18-09-017 and the CPCN granted therein (a) to authorize the project that Cal-Am is implementing, which was rejected by the Commission in D.18-09-017 and D.19-01-051;[4] (b) to revise the forecasted costs and cost caps adopted by D.18-09-017 for a 6.4 mgd Project to support authorization of the project Cal-Am is implementing with cost projections that also account for the increased water supply approved by the Commission in D.22-12-001 (approval of Cal-Am's purchase of an additional supply of water from the Pure Water Monterey ("PWM") Expansion project) and the change in water demand and water supply estimates adopted in D.25-08-006, D.25-10-001 and D.26-04-046, and that are "supported by an appropriate declaration or affidavit"[5]; (c) to undertake appropriate environmental review of the revised phased project proposed by Cal-Am and conditionally approved by the California Coastal Commission with a 4.8 mgd capacity project to operate through January

[4] Throughout this Complaint, reference to the "Project," with a capital "P," is to the 6.4 mgd Project authorized and granted a CPCN in D.18-09-017. Reference to "project" with a small "p" is to a 4.8 mgd project, any expansion from that project size, or any other project that has never been authorized or granted a CPCN by the Commission. Notably, a 4.8 mgd project was not among the alternatives analyzed in detail in the Commission's Final Environmental Impact Report ("FEIR") for the Project, and the Commission expressly rejected such an alternative from consideration on both cost and environmental grounds. (D.18-09-017, at pp. 69-70, 170-171; D.19-01-051, at pp. 60-61.)

[5] As to the required content of a Petition for Modification, Rule 16.4(b) requires: "Any factual allegations must be supported with specific citations to the record in the proceeding or to matters that may be officially noticed. Allegations of new or changed facts must be supported by an appropriate declaration or affidavit."

1, 2050[6] in compliance with PU Code Section 1002(a)(4); (d) to revise the findings of fact, conclusions of law, and ordering paragraphs of D.18-09-017 to demonstrate that "the present or future public convenience and necessity require or will require" construction of a 4.8 mgd project limited in duration through January 1, 2050 pursuant to PU Code Section 1001 inclusive of consideration of all factors required by PU Code Section 1002, subsection (a) to support such a determination; and (e) to justify the filing of the petition more than a year after the issuance of D.18-09-017;[7]

(3) Direct Cal-Am to halt any construction or other activity to implement any desalination project until such a petition for modification is filed, addressed, and resolved by a final Commission decision;

(4) Order the issuance of an Order to Show Cause ("OSC") to Cal-Am as to why Cal-Am should not be sanctioned, fined, or otherwise disciplined for implementing an unauthorized desalination project in violation of D.18-09-017 and D.19-01-051 and for failing to file the petition required by D.18-09-017 to amend the Project's size, as supported by facts and law in compliance with PU Code Sections 1001 and 1002.

The Complainants are all public agencies that are authorized to bring this Complaint against Cal-Am pursuant to Commission Rules[8] and that have long-established and continuous

[6] *Exhibit 1 to Complaint:* Final Adopted Findings of California Coastal Commission, Appeal No. A-3-MRA-19-0034, Application No. 9-20-0603 ("Coastal Commission Findings"), at pp. 2, 9, 16, available at https://documents.coastal.ca.gov/assets/legal/Final-Adopted-Findings-CalAm-.pdf.

[7] Rule 16.4 of the Commission Rules governs Petitions for Modification of Commission decisions. Among other things, Rule 16.4(d) requires a petitioner to "explain why the petition could not have been presented within one year of the effective date of the decision."

[8] Commission Rules, Rule 4.1(a)(1).

rights and obligations to protect their ratepayers, communities, and water supplies impacted by Cal-Am's planned construction and operation of the MPWSP. Those obligations extend to ensuring that the Commission review and decide whether to approve the major Project changes being implemented by Cal-Am to construct an unauthorized, reduced-size project instead of the MPWSP authorized by the Commission. This review must ensure that the change to that reduced-size project is supported by facts and law as to its forecasted costs, environmental impacts, "present or future public convenience and necessity," with consideration of community values, recreational and park areas, and historical and aesthetic values in compliance with PU Code Sections 1001 and 1002. Each Complainant, therefore, has a direct and concrete stake in filing this Complaint to seek an outcome that requires the Commission to properly exercise its regulatory jurisdiction over Cal-Am by compelling Cal-Am to comply with all of the Commission's orders and laws governing its construction of the MPWSP.

I.
SUMMARY[9]

By D.18-09-017, the Commission, pursuant to PU Code Sections 1001 and 1002, granted Cal-Am a CPCN to build a desalination project identified as the Monterey Peninsula Water Supply Project, which was authorized to deliver 6.4 mgd, subject to other operational and environmental parameters. By D.18-09-017, the Commission expressly rejected a 4.8 mgd project on both cost and environmental grounds in favor of the 6.4 mgd plant size and never required it to be considered as a project alternative in the FEIR for the MPWSP.[10] The Commission also rejected phasing from a 4.8 mgd to a 6.4 mgd Project in the future because such an approach would create "a higher likelihood that any expansion that includes permitting,

[9] This Summary is provided for context and is supported by the specific numbered allegations set forth in Section III, below.
[10] D.18-09-017 at pp. 69-70, 128-130, 178-179; rehearing denied D.19-01-051, *see* pp. 60-61.

drilling, and construction of an additional well to increase capacity will increase environmental impacts, face additional scrutiny in the permitting review process, and increase costs to ratepayers."[11]

The Commission has never modified, nor has it been petitioned by Cal-Am to modify, D.18-09-017 to change the Project's size from that authorized by the Commission (6.4. mgd).[12] Instead, the Commission has repeatedly confirmed in subsequent decisions, including its recent D.26-04-046, that only the construction of a 6.4 mgd Project by Cal-Am has been authorized by the Commission.[13] As particularly relevant here, by D.26-04-046, the Commission has further stated:

> "[T]here is no evidence in the record establishing construction of a 4.8 mgd desalination plant in lieu of the *6.4 mgd plant authorized in D.18-09-017*, and in any event, *D.18-09-017 provides a mechanism for adjustments if needed*. (See D.18-09-017, Ordering Paragraph 22 [*Cal-Am "shall seek any other [non-minor] project refinements by a petition to modify [D.18-09-017]*."].)[14]

This statement by the Commission confirms the following: (1) the Commission has solely authorized Cal-Am to construct a 6.4 mgd Project pursuant to its statutory authority, and (2) a change in that Project size requires Cal-Am to file a petition to modify D.18-09-017. No such petition to modify D.18-09-017 has been filed by Cal-Am, despite Cal-Am's many public assertions over at least the past three years that, commencing in "mid-2026," the Project "will be constructed…at 4.8 mgd," not 6.4 mgd, and that Cal-Am is doing so as "approved by the Coastal Commission," not as authorized by this Commission.[15]

The circumstances necessitate urgent action by the Commission where (1) only this

---

[11] D.18-09-017, at p. 69.
[12] *See* D.19-01-051.
[13] *See* D.22-03-038, at pp. 9-12; D.22-12-001, at p. 5; D.25-08-006, at p. 3; D.26-04-046, at pp. 4-5.
[14] D.26-04-046, at p. 5 (emphasis added).
[15] *See*, *e.g.*, Exhibit 2 to Complaint: Cal-Am MPWSP Q4 2025 Project Update, at pp. 2, 5.

Commission has exclusive jurisdiction to authorize the construction of a utility plant pursuant to PU Code Sections 1001, *et seq.*, (2) the Commission has exercised that jurisdiction and has solely authorized Cal-Am to build a 6.4 mgd Project in D.18-09-017, (3) no Coastal Commission action supersedes this Commission's exclusive authority to authorize the Project's construction, including all adopted parameters for doing so, (4) Cal-Am has never filed a petition to modify D.18-09-017 to change the 6.4 mgd Project size authorized by that decision, and (5) Cal-Am has stated that it "will" proceed this year to build a 4.8 mgd project instead in violation of the Commission's jurisdiction and orders.

To address these violations of law by Cal-Am, the Commission must promptly grant the relief requested by this Complaint (1) to preserve and enforce the Commission's regulatory jurisdiction over Cal-Am, (2) to prevent Cal-Am's construction and operation of infrastructure that has not been authorized by the Commission, and (3) to require Cal-Am to meet its burden of filing a petition to modify D.18-09-017 in order to lawfully proceed with a major "refinement" to the certificated Project by reducing its size.[16] Cal-Am's decision to proceed with an unauthorized project deprives the Complainants, each of which is directly and adversely impacted, of notice and opportunity to be heard as to this major refinement in the Project, including whether that change is just, reasonable, prudent, and serves the public convenience and necessity. Cal-Am's failure to appropriately seek Commission authorization to proceed with an unauthorized project also wrongly shifts the burden of ensuring Commission enforcement of its orders governing the jurisdictional utility (Cal-Am) to adversely affected third parties – the Complainant public agencies – that now must use their limited resources to seek corrective Commission action by filing this Complaint.

[16] D.24-04-046, at p. 5.

The Commission must, therefore, promptly (1) find Cal-Am in violation of D.18-09-017, (2) order Cal-Am to file a petition to modify D.18-09-017 to change the desalination project size, supported with cost analysis and cost caps, a proposal for appropriate environmental review of that reduced project size, and consideration of the PU Code Section 1002(a) "factors," (3) direct Cal-Am to halt implementation of any desalination project until such a petition for modification is filed, addressed, and resolved by a final Commission decision, and (4) order Cal-Am to show cause as to why Cal-Am should not be sanctioned, fined, or otherwise disciplined for implementing an unauthorized project in violation of D.18-09-017 and D.19-01-051 beginning in October 2022 when Cal-Am sought a Coastal Development Permit ("CDP") from the Coastal Commission for an unauthorized 4.8 mgd project.

II.
COMPLIANCE WITH COMPLAINT REQUIREMENTS
(PU Code Section 1702; Rules 4.1(a) and 4.2)

Rule 4.1 (a), pursuant to the authority stated in PU Code Section 1702, provides that a "complaint may be filed" with the Commission by "any body politic or municipal corporation" that sets "forth any act or thing done or omitted to be done by any public utility including any rule or charge heretofore established or fixed by or for any public utility, in violation, or claimed to be in violation, of any provision of law or of any order or rule of the Commission." Rule 4.2 sets forth the required "Form and Contents of the Complaint."

Each of the Complainants is a "body politic," and the Complaint sets forth violations of law by Cal-Am with respect to the orders of this Commission governing the Project to the detriment of the public, Cal-Am ratepayers, and the communities located within and represented by the Complainants, as more fully described below. The Complaint also meets all requirements for a Complaint set forth in the Commission Rules.

A. Authority for Complainants to File the Complaint; Legal Name and Contact

Information for Complainants and Defendant (PU Code Section 1702; Rules 4.1(a)(1)) and 4.2(a))

1. Complainants

a) Monterey Peninsula Water Management District

The California State Legislature created the Monterey Peninsula Water Management District ("MPWMD" or "District") in 1977. The District is organized and exists under Chapter 527 of the Statutes of 1977, found at Water Code Appendix, Section 118-1 *et seq*. (District Law). MPWMD's boundary is coterminous with Cal-Am's Monterey service area. Cal-Am's customers directly elect the District's Directors.

The District has the power to store water in surface or underground reservoirs within or outside of the District for the common benefit of the District, to conserve and reclaim water for present and future use within the District, to appropriate and acquire water and water rights and import water into the District, and to conserve and utilize, within or outside of the District, water for any purpose useful to the District.

MPWMD monitors, regulates, and controls water use through issuance and enforcement of Water Distribution Permits to distributors of water, including Cal-Am, and through issuance of Water Permits for new connections and modifications of existing connections to Water Distribution Systems with the District, including Cal-Am ratepayers. MPWMD is the local directly elected representative for Cal-Am water customers. These Cal-Am ratepayers consistently raise concerns at public meetings and in written communications about Cal-Am's expensive water service even without the addition of a desalination plant.

The District and Monterey One Water, both public bodies, with MCWD successfully created the PWM project and the PWM Expansion project creating 5,750 acre-feet per annum of

potable drinking water for Cal-Am's use in serving its customers, as well as additional supplies for MCWD.

MPWMD's principal place of business is 5 Harris Court, Building G, Monterey, CA 93940 with postal address of P.O. Box 85, Monterey, CA 93942-0085. Contact information for Complainant MPWMD and its counsel is as follows:

David J. Stoldt, General Manager
5 Harris Court, Building G
Monterey, CA 93940
Telephone: (831) 658-5651
Email: dstoldt@mpwmd.net

David C. Laredo
Frances M. Farina
De Lay & Laredo
606 Forest Avenue
Pacific Grove, CA 93950
Telephone: (831) 646-1502
Email: dave@laredolaw.net
fran@laredolaw.net

b) City of Marina

The City of Marina is a city of approximately 23,000 residents located along the Pacific Ocean in northern Monterey County, California. The City was incorporated in 1975, has a total area of 9.8 square miles, and has been identified as an environmental justice community of concern.[17]

Cal-Am's Project is a large and complex industrial project that would be constructed (and operated) in, around and through Marina. Since Marina is not located within Cal-Am's service area and would not receive any water produced by the Project, it would bear the major burden of

[17] *Exhibit 3 to Complaint*: MPWSP FEIR, Excerpts of Chapter 4 (Environmental Setting (Affected Environment), Impacts, and Mitigation Measures), at pp. 4.20-2, 5-9 and 16-21; *see also Exhibit 1 to Complaint*, Coastal Commission Findings, at p. 106.

the many adverse Project impacts without receiving any of its benefits. If the Project is constructed and operated, it would threaten the integrity of Marina's groundwater supply, would undermine the Groundwater Sustainability Plans for this groundwater, and would cause devastating impacts to the City's valuable coastal ecosystems and community values.

Cal-Am has represented to the public that, by mid-2026, it will implement a 4.8 mgd version of the Project that was not authorized, but was in fact rejected, by the Commission. This project implementation in violation of governing Commission decisions and statute will directly cause actual injury to Marina because the project's construction and operational impacts of slant wells, pipelines, roads and many other structures within a 39-acre easement area on Marina's dunes and beaches will cause permanent and irreversible impacts to Marina's protected species, environmentally sensitive habitat areas and groundwater resources.[18] These premature and unwanted injuries emanating from Cal-Am's implementation of an unauthorized project must be redressed by the Commission's granting the relief requested by this Complaint.

The City's principal place of business is 211 Hillcrest Avenue, Marina, California. Contact information for Complainant City of Marina and its attorneys is as follows:

Layne P. Long, City Manager
City of Marina
211 Hillcrest Avenue
Marina, CA 93933
Telephone: 831-884-1278
Email: llong@cityofmarina.org

Sara Steck Myers
Attorney at Law
122 – 28th Avenue
San Francisco, CA 94121
Telephone: (415) 420-1253
Email: ssmyers@att.net

Paul P. ("Skip") Spaulding, III

[18] *Exhibit 1 to Complaint*: Coastal Commission Findings, at pp. 4-6.

Shartsis Friese LLP
425 Market Street, 11th Floor
San Francisco, CA 94105
Telephone: 415-421-6500
Email: sspaulding@sflaw.com

c) Marina Coast Water District

MCWD is a special district formed in 1960 under the County Water District Law, Division 12 of the California Water Code, Section 30000, *et seq.*, for the purpose of installing and operating a water supply system, water distribution system, and wastewater collection system for the City of Marina and neighboring communities within the County of Monterey. In 2001, the Fort Ord Reuse Authority quitclaimed the U.S. Army's water and wastewater systems and related easements on the former Fort Ord to MCWD. Today MCWD serves approximately 40,000 customers in the City of Marina, the City of Seaside, the Ord Military Community and neighboring areas, including East Garrison.

MCWD is also the exclusive groundwater sustainability agency ("GSA") within its jurisdictional areas, and it shares GSA responsibilities with the Salinas Valley Basin GSA for other areas of the Salinas Valley Groundwater Basin. MCWD serves several areas that are designated as communities of concern, based on low-income criteria utilized by the Department of Water Resources. These customers are particularly reliant on the affordable groundwater that MCWD provides.

MCWD's service territory is directly adjacent to Cal-Am's Monterey District. MCWD's service territory is also directly adjacent to the property within the City of Marina where Cal-Am's test slant well for the Project is located and where the Project's slant wells are proposed to be installed. MCWD draws its municipal groundwater supply from the Salinas Valley Groundwater Basin. Cal-Am's Project intake wells would be installed in the Salinas Valley Groundwater Basin. Cal-Am's Project intake wells would draw groundwater from one or more

aquifers that MCWD uses to serve its constituents, at a distance of less than five miles from MCWD wells that are screened in these same aquifers.

MCWD's principal place of business is 920 2nd Avenue, Suite B, Marina, California. Contact information for Complainant MCWD and its counsel is as follows:

Remleh Scherzinger, General Manager
Marina Coast Water District
920 2nd Avenue, Suite B
Marina, CA 93933
Telephone: (831) 883-5900
Email: rscherzinger@mcwd.org

Ruth Stoner Muzzin
Friedman & Springwater, LLP
350 Sansome Street, Suite 800
San Francisco, CA 94104
Telephone: (415) 834-3800
Email: rmuzzin@friedmanspring.com

2. Defendant

The named Defendant is California-American Water Company (U210W). As stated in Cal-Am's most recently filed General Rate Case (Application ("A.") 25-07-003)), Cal-Am is a Class A public utility water and wastewater company regulated by the Commission, and its principal place of business is 655 W. Broadway, Suite 1410, San Diego, CA 92101-8494. Cal-Am's current President is Sarah E. Leeper, and communications are directed to the following:

Cathy Hongola-Baptista
California-American Water Company
555 Montgomery Street, Suite 816
San Francisco, CA 94111
Tel: (415) 293-3023
Email: cathy.hongola-baptista@amwater.com

B. Rules 4.1(a) and 4.2(a) Complaint Requirements

1. Grounds for Complaint (Rules 4.1(a) and 4.2(a))

In Section III below, the Complaint sets forth the acts "done or omitted to be done" by Cal-Am that are in violation of "law" and the orders and rules of the Commission (Rule 4.1(a)) and identifies "the specific act[s] complained of" to "completely advise the defendant and the Commission of the facts constituting the grounds of the complaint, the injury complained of, and the exact relief which is desired" (Rule 4.2(a)). Section III is specifically incorporated by reference herein.

2. Proposed Category of Proceeding (Rules, Articles 1, 4, and 7)

The Complaint should be categorized as "Adjudicatory" as it constitutes a complaint against a regulated entity (Defendant Cal-Am) regarding its "violations" of "statutory law or order or rule of the Commission."[19] Pursuant to Rules 4.2(b) and 1.3(a), this Complaint, which does not challenge the reasonableness of Defendant Cal-Am's rates, is the appropriate means and forum for adjudicating Complainants' allegations that Cal-Am has violated an order or rule of the Commission.

3. Issues to Be Considered and Need for Hearing

The issues raised by this Complaint are as follows:

(1) Is Defendant Cal-Am violating D.18-09-017 by implementing a project not authorized by the Commission?

(2) Does implementation of a project not authorized by the Commission violate PU Code Sections 1001 and 1002?

(3) Is Defendant Cal-Am violating D.18-09-017 and/or PU Code Section 1002(a) and/or the Public Resources Code, including but not limited to Section 21166 thereof, by

[19] Commission Rules, Rule 1.3(a).

implementing a project that was not evaluated as an alternative in the Commission's FEIR that was certified by the Commission in D.18-09-017 for the Project?

(4) Should the Commission order Defendant Cal-Am to file a petition to modify D.18-09-017, as required by OP 22 of that decision, for authority to refine the authorized Project size and duration?

(5) Should the Commission direct Cal-Am to include in the petition for modification pursuant to OP 22 (a) justification for filing of the petition more than one year after issuance of D.18-09-017 and D.19-01-051 as required by Commission Rule 16.4(d), (b) affidavits or declarations to support any allegations of new facts as required by Commission Rule 16.4(b), and (c) demonstration of the forecasted costs and cost cap for the project it is implementing, inclusive of consideration of changes in estimates of Monterey District demand and water supply resulting from D.22-12-001, D.25-08-006, D.25-10-001, and D.26-04-046?

(6) To comply with PU Code Sections 451, 1001, and 1002, should the Commission direct Cal-Am to include in its petition for modification, with new facts supported by declaration or affidavit, (a) a demonstration that "the present or future public convenience and necessity require or will require" construction of the project Cal-Am is implementing pursuant to PU Code Section 1001 inclusive of consideration of all factors required by PU Code Section 1002, subsection (a) to support such a determination; (b) a request for the Commission to undertake appropriate environmental review under CEQA for the project Cal-Am is implementing; and (c) a demonstration of the forecasted costs and cost cap for the project it is implementing, inclusive of consideration of changes in estimates of Monterey District demand and water supply resulting from D.22-12-001, D.25-08-006, D.25-10-001 and D.26-04-046?

(7) Should Defendant Cal-Am be barred from engaging in further activity to implement any desalination project until such a petition for modification has been filed, addressed, and resolved by a final Commission decision?

(8) Should the Commission order Defendant Cal-Am to show cause why Cal-Am should not be sanctioned, fined, or otherwise disciplined for violating D.18-09-017 by implementing

an unauthorized project since at least October 5, 2022 and failing to obtain Commission authorization to do so?

As to the need for an evidentiary hearing to resolve these issues, it is clear that a petition to modify D.18-09-017 to change the CPCN granted by that decision will require significant "allegations of new facts" that will certainly be the subject of an evidentiary hearing. However, an evidentiary hearing on Cal-Am's violations of D.18-09-017 alleged by this Complaint can be readily established from publicly available documents, including documents susceptible to official notice by the Commission. This may limit the need for discovery and may eliminate or reduce the need for evidentiary hearings on the Complaint. The applicable law and Commission decisions are also well known to the Commission, which should support an expedited briefing schedule, as proposed below.

4. Proposed Schedule and Venue

Pursuant to Rule 4.2, a complaint must propose a schedule for resolution of the complaint consistent with its categorization. For complaints categorized as "adjudicatory," as the present Complaint should be, the deadline for resolution should be "within 12 months or less."[20] Further, because urgent action is required by the Commission to prevent Cal-Am from proceeding to construct a project for which it has not received the required Commission authorization, Complainants urge adoption of the following proposed expedited schedule to prevent Defendant Cal-Am from developing and operating an illegal project to the detriment of the Cal-Am ratepayers, affected communities, and the Complainants.

PROPOSED SCHEDULE

Action	Date
Complaint Filed	June 16, 2026

[20] Commission Rules, Rule 4.2(a).

Action	Date
Instruction to Answer	Week of June 22, 2026
Answer Filed	Early July 2026
Prehearing Conference (Monterey)	Mid-July, 2026
Discovery (If Necessary)	July 2026
Evidentiary Hearings (If Necessary) (Monterey)	Late July 2026
Complainants' Opening Brief	Mid-August 2026
Defendant's Brief	Late August 2026
Complainants' Reply Brief	Early September 2026
Presiding Officer's Decision (POD)	Early October 2026
Appeal of POD (If Any)	October 2026
Response to Appeal of POD	October 2026
Final Decision	November 2026

As indicated above, Complainants respectfully request that the Prehearing Conference and any evidentiary hearings related to this Complaint be held at a venue in or near the City of Monterey. Monterey is over 100 miles from the Commission's headquarters in San Francisco. Complainants represent not only their own interests, but the interests of their constituents, the ratepayers of Cal-Am's Monterey District (in the case of MPWMD), the citizens of Marina (in the case of the City), and the customers within MCWD's service territory (in the case of MCWD).

This venue request is important where, collectively, over one hundred and thirty thousand people are affected by the issues raised in this Complaint, consisting of Cal-Am's ninety thousand or more water users and MCWD's approximately forty thousand constituents,

including the citizens of Marina. Cal-Am's ratepayers, particularly including those within identified disadvantaged or environmental justice communities of concern, are affected by the unanalyzed cost issues implicated by Cal-Am's proposal to change the Project size. MCWD and Marina's constituents, including those within additional identified disadvantaged or environmental justice communities of concern, are affected by the unanalyzed environmental impacts of the proposed changes to the Project, as well as newly-developed evidence regarding increased impacts to groundwater. The issues raised by Complainants affect their constituents' finances and water supplies. The Commission's proceedings related to this Complaint should be accessible to these affected members of the public in their own community.

C. The Complaint Cannot Be Resolved "Informally" by Staff, and Consultation with Staff Will Inappropriately Delay Resolution that Requires Immediate Commission Enforcement Action (Rule 4.2(b))

Rule 4.2(b) of the Commission's Rules of Practice and Procedure states that a "complaint which does not allege that the matter has first been brought to the staff for informal resolution *may* be referred to staff to attempt to resolve the matter informally." (Emphasis added.) This Complaint has not been brought to the staff for informal resolution because the issues involve undisputed facts regarding well-documented public actions and statements by Defendant Cal-Am regarding plans and actions in violation of statute and Commission orders specific to the Project in D.18-09-017 and successive decisions. These facts raise legal issues that can only be addressed by, and the applicable law applied and enforced by, the Commission itself through a timely, formal decision, including any OSC or other enforcement order issued by the Commission.

The details of this Complaint are fully and clearly explained in Section III, including the Applicable Law and Specific Allegations. The Verifications of Complainants are attached hereto and incorporated by reference herein. As the facts and law set forth in Section III make clear,

there is no purpose served by delaying consideration of this Complaint for referral to staff and doing so will only risk further harm to Cal-Am's ratepayers, the affected communities, and the Complainants by Cal-Am's implementation of a project that has not been authorized and was in fact rejected by this Commission. Resolution of this Complaint should be undertaken now by the Commission without delay.

III.
GROUNDS FOR COMPLAINT (Rules 4.1(a) and 4.2(a))

A. Applicable Law

California Constitution

1. The Commission was created by the California Constitution solely for the purpose of regulating monopoly, investor-owned public utilities, like Cal-Am, as *expressly* dictated by the California Legislature in the PU Code.[21]

2. In turn, the California Constitution prescribes that only the Legislature "has plenary power" to "confer additional authority and jurisdiction upon the [C]ommission" and to "establish the manner and scope of review of commission action in a court of record."[22]

3. The Commission, as an administrative agency, is, therefore, "a creature of statute and only possesses such powers as may be conferred upon it"[23] and, thus, it is from the Legislature '"whence the commission's authority derives.'"[24] The extent of the Commission's authority to regulate California's investor-owned utilities, including Cal-Am, is subject to "control" by the Legislature and is one over which the Legislature has "full" and "broad

[21] Cal. Const., Art. XII, Sections 3 and 5; *see also* PU Code Section 701.
[22] Cal. Const., Art. XII, Section 5.
[23] *People v. Harter Packing Co.* (1958) 160 Cal. App. 2d 464, 467.
[24] *City of Los Angeles v. Public Utilities Commission* (1972) 7 Cal.3d 331, 356 (citing *Pacific Tel. & Tel.* v. *Public Util. Com.* (1965) 62 Cal.2d 634, 655).

power."[25]

Relevant California Codes Governing Commission Regulation of Jurisdictional Utilities

4. By PU Code Section 701, the Commission may supervise and regulate every public utility in the State and may do all things, whether specifically designated in that part or in addition thereto, which are necessary and convenient in the exercise of such power and jurisdiction.

5. By PU Code Sections 1001, *et seq*., the Legislature has exclusively authorized and required the Commission to prohibit water corporations subject to its regulatory jurisdiction, including Cal-Am, from *"begin[ning] the construction of ... a line, plant, or system, or of any extension thereof, without having first obtained from the commission a certificate that the present or future public convenience and necessity require or will require such construction*."[26]

6. Pursuant to PU Code Section 1002, the Legislature has further required the Commission to authorize such construction by granting the utility a CPCN, so long as the Commission also considers the required following factors: community, historical and aesthetic values; recreational and park areas; and influence on the environment. The latter factor – influence on the environment – has consistently been satisfied by the Commission through an Environmental Impact Report subject to the requirements of the CEQA set forth in the California Public Resources Code and its implementing regulations.[27]

---

[25] *See* Cal. Const., Art. XII, Sections 3 and 5; *see also County of Sonoma v. State Energy Resources Conservation etc. Com.* (1985) 40 Cal.3d 361 at 363, 369, 373 (also citing *Pickens v. Johnson* (1954) 42 Cal.2d 399, 404-405).

[26] PU Code Section 1001 (emphasis added).

[27] *See* Public Resources Code, Sections 21000, *et seq*., and CEQA Guidelines, California Code of Regulations ("CCR"), Title 14, Sections 15000, *et seq*., which govern the preparation, review, and certification of the FEIR for the Project by the Commission as "lead agency," as well as the circumstances under which a lead agency or a responsible agency must conduct review under CEQA. *See* Pub. Resources Code Section 21166 and CCR, Title 14, Section 15162.

7. In meeting these requirements, pursuant to PU Code Section 451, the Commission is also charged with the responsibility to ensure that "all charges demanded or received by any public utility…for any product or commodity furnished or any service rendered or to be rendered shall be just and reasonable."[28] For a utility plant, the Commission has made clear that it is required to ensure that the proposed plant or project's costs are just and reasonable and, to do so, "must balance potential benefits against the cost burden" to the utility's ratepayers from the project's construction, including consideration of the "relative benefits and costs of reasonable alternatives," "what is a reasonable cost burden for ratepayers to bear, under what conditions such a cost can be justified, and how the cost increase can be minimized."[29]

8. Pursuant to PU Code Section 761, whenever the Commission finds, after a hearing, "that the rules, practices, equipment, appliances, facilities, or service of any public utility, or the methods of manufacture, distribution, transmission, storage, or supply employed by it, are unjust, unreasonable, unsafe, improper, inadequate, or insufficient, the commission shall determine and, by order or rule, fix the rules, practices, equipment, appliances, facilities, service, or methods to be observed, furnished, constructed, enforced, or employed."

9. The Legislature has conferred the authority to approve or grant permission for a jurisdictional public utility to construct a utility plant and to determine the utility's cost recovery on the Commission and not on any other State agency.[30]

10. Only the Commission, and not any other State agency, has been empowered by the Legislature to regulate a public utility, including Cal-Am, in the manner described in Paragraphs 1 through 9 herein. No statutory provision has been enacted to allow any act or order

[28] PU Code Section 451 further states: "Every unjust or unreasonable charge demanded or received for such product or commodity or service is unlawful."
[29] D.18-09-017, at pp. 123-124.
[30] PU Code Section 1001.

of the California Coastal Commission to supersede this Commission's exclusive authority pursuant to the PU Code to so authorize utility construction or to modify a CPCN or overrule Commission determinations in granting such authority.

Commission Orders Governing the CPCN for the Project

11. In 2018, pursuant to PU Code Sections 1001, *et seq.*, and Section 451, among others, the Commission issued D.18-09-017 in A.12-04-019, the application by Cal-Am for permission to construct the MPWSP.

12. A.12-04-019 involved multiple affected parties and required six years to complete, including hearings, pleadings, and briefs on both CPCN and CEQA issues.

13. Based on its record in A.12-04-019, the Commission granted Cal-Am a CPCN to implement the 6.4 mgd alternative of the Project over other alternatives examined in both the CPCN and CEQA tracks of that proceeding.

14. The Commission estimated a 40-year life of the Project.[31]

15. The approved alternative was solely and exclusively a 6.4 mgd desalination Project to produce a water supply of up to 7,167 acre-feet per year ("afy").[32]

16. The Commission based its authorization of the Project on the record established through both the CEQA and CPCN processes and that authorization was made in consideration of environmental, economic, community value, and ratepayer impacts.

17. Other "alternatives" were considered in this record but were not adopted in favor of the 6.4 mgd Project that the Commission deemed "superior" at that time. Neither a 4.8 mgd project nor a 4.8 mgd project later expanded to 6.4 mgd was among the alternatives evaluated in detail in the FEIR, and the Commission explicitly rejected consideration of both of a 4.8 mgd

[31] *Exhibit 3 to the Complaint:* MPWSP FEIR, at p. 4.11-11.
[32] D.18-09-017, at pp. 70, 178.

project and the expansion from a 4.8 mgd project on multiple grounds, including the following:

a. A 4.8 mgd desalination plant would not alleviate or substantially reduce the greenhouse gas emission impacts of the project;[33]

b. A 4.8 mgd desalination plant would fail to provide sufficient supply to reliably meet, and be able to satisfy, peak month and peak day demands;[34]

c. A reduction in size of the Project from 6.4 mgd to 4.8 mgd would increase the annual Operation and Maintenance cost by $340,000;[35]

d. The potential that additional capacity would need to be added to increase the size in the future creates "a higher likelihood that any expansion that includes permitting, drilling, and construction of an additional well to increase capacity will increase environmental impacts, face additional scrutiny in the permitting review process, and increase costs to ratepayers;"[36]

e. The cost savings for deferring one slant well to initially operate the facility at 4.8 mgd is small in comparison to the risks associated with eliminating the well and the likely environmental impacts associated with constructing it at a later time if needed;[37] and

f. A 4.8 mgd desalination plant "would not alleviate or substantially reduce significant environmental impacts of the project, and would not meet the basic project objectives."[38]

18. In denying rehearing of D.18-09-017 in D.19-01-051, the Commission confirmed that D.18-09-017 was correct in "*rejecting*" a 4.8 mgd project where it would "not meet the basic objectives of the project or the purpose and need for the project, and a further reduced capacity alternative would *not* likely avoid or substantially reduce significant environmental effects of the

[33] *Id.*, at p. 69.
[34] *Ibid*., based on the Commission's supply and demand estimates at that time.
[35] *Id*., Finding of Fact ("FOF") 93, at p. 178.
[36] *Id.*, at pp. 69-70.
[37] *Id.*, FOF 97, at p. 179.
[38] *Id.*, at p. 70.

project."[39]

19. In D.18-09-017, the Commission also only authorized ratemaking and cost recovery for the *6.4 mgd Project* with a 40-year operational life[40] and concluded with the order that Cal-Am is to demonstrate the reasonableness of those costs in the first general rate case after the *specifically authorized* 6.4 mgd Project "becomes operational."[41]

20. By OP 8 of D.18-09-017, Cal-Am was ordered to "implement the environmentally superior alternative (Alternative 5a) of the Monterey Peninsula Water Supply Project identified in the Final Environmental Impact Report"[42] that will produce approximately 6,250 afy of desalinated water in non-drought years (and approximately 7,167 afy in drought years)."[43]

21. By D.18-09-017, as confirmed in denying rehearing in D.19-01-051, the Commission rejected a smaller sized desalination plant of 4.8 mgd that would produce 4,700 afy and any expansion of a 4.8 mgd project to 6.4 mgd as contrary to project objectives and as imposing increased costs and environmental risks.[44]

22. In multiple decisions issued by the Commission over the last *eight years* since 2018, the Commission has repeatedly confirmed that Cal-Am has only been "*authorized*" by the Commission to construct a *6.4 mgd* Project.[45]

23. By D.26-04-046, the Commission has further confirmed that D.18-09-017

---

[39] D.19-01-051, at pp. 60-61 (emphasis added).
[40] *Exhibit 3 to Complaint*: MPWSP FEIR, at p. 4.11-11.
[41] D.18-09-017, OP 34, at pp. 213-214; FOF 96, at p. 178 ("The desalination plant is appropriately sized at 6.4 mgd."); at p. 138; OP 34, at pp. 213-214; Conclusions of Law ("COLs") 64, 67, 73, 75, 76, at pp. 202-204.
[42] *Id.*, at p. 207.
[43] *Id.*, at pp. 2, 70; FOFs 88 (to "produce 7,167 afy assuming operation at full capacity"), 89, at p. 178.
[44] *Id.*, at pp. 69-70; FOFs 93-97, at pp. 178-179; D.19-01-051, at pp. 60-61.
[45] D.26-04-046, at p. 5 (emphasis added); *see also* D.19-01-051, at pp. 60-61; D.22-03-038, at p. 5; D.22-12-001, at pp. 10, 15; D.25-08-006, at p. 3.

"provides a mechanism for adjustments if needed" to the Project, with specific reference to a change in the size of the Project, by "Ordering Paragraph 22 [Cal-Am 'shall seek any other [non-minor] project refinements by a petition to modify [D.18-09-017].'].)"[46]

24. By OP 17 of D.18-09-017, at p. 209, beginning January 1, 2019, Cal-Am was ordered to "submit quarterly status reports on the permitting, financing, design, bidding, and construction of the Monterey Peninsula Water Supply Project to the Executive Director and to the Director of the Public Advocates Office, and publish the reports on a company maintained web site dedicated to the project."

Required Standards of Conduct for Commission-Jurisdictional Utilities

25. Each investor-owned utility subject to this Commission's jurisdiction, including Cal-Am, is subject to both general and program-specific standards of conduct.

26. In terms of general or overarching standards of conduct, PU Code Section 702 requires: "Every public utility shall obey and comply with every order, decision, or rule made or prescribed by the commission in the matters specified in this part, or any other mater in anyway relating to or affecting its business as a public utility, and shall do everything necessary or proper to secure compliance therewith by all of its officers, agents, and employees."

27. By PU Code Section 1702, a "[c]omplaint may be made … by any corporation or person, … or any body politic or municipal corporation, … setting forth any act or thing done or omitted to be done by any public utility, … in violation or claimed to be in violation, of any provision of law or of any order or rule of the commission."

28. The Commission's constitutionally-conferred powers include the power to "examine records" and "punish for contempt."[47]

[46] D.26-04-046, at p. 5.
[47] Cal. Const., Art. XII, Section 6.

B. Specific Allegations

29. The Project is not constructed.

30. The Project is not operational.

31. No petition to modify D.18-09-017 to change the Project size or duration authorized by the Commission in that decision has been filed by Cal-Am.

32. No petition to modify D.18-09-017 to change the Project's forecasted costs and cost caps approved by the Commission in that decision has been filed by Cal-Am.

33. No petition to modify D.18-09-017 to undertake further environmental review and consideration of all factors required by Section 1002(a) for a project size or duration different than the Project authorized by the Commission in that decision has been filed by Cal-Am.

34. Cal-Am only received Coastal Commission conditional approval for its 4.8 mgd revised project through January 1, 2050.[48]

35. The slant wells may need to shut down even sooner due to sea level rise, dune recession and slant well equipment life issues, which in combination with a smaller project size fundamentally changes the cost impacts on Cal-Am's ratepayers.[49]

36. The Coastal Commission found that its Special Condition limiting operation through January 1, 2050 "creates a different concern that Cal-Am's desalination facility may not be able to operate for its overall expected 60-year operating life since Cal-Al does not currently

[48] *Exhibit 1 to Complaint*: Coastal Commission Findings, at pp. 2, 9, 16, 41, 100.

[49] *Id*., at p. 8 ("Projections based on the [Coastal] Commission's current sea level rise guidance documents show the wells could be affected by coastal erosion within the next 40 years or so and that the well heads could be buried due to the inland movement of the adjacent sand dunes by about 2040 to 2050. However, Cal-Am estimates that its wells would operate for only 20 to 25 years before they would need to be relocated due to the decreased water yields they experience as they operate…. Special Condition 6 addresses these concerns by limiting the term of this CDP to no more than 25 years and requiring Cal-Am to submit a complete CDP application before the end of that term to propose relocation, rehabilitation, or removal of the wells.").

have a legal interest in locations further inland where Cal-Am might be able to relocate its wells … A shorter operating life of the desalination facility may also create substantial changes in the Project's financing and water rates, since Cal-Am may seek to recover its costs in a much shorter time than the anticipated 60 years."[50]

37. Based on the Commission's determinations in D.25-08-006, as corrected by D.25-10-001 (rehearing denied, D.26-04-046), the Commission adopted an updated water supply estimate of 11,204 afy for the MPWSP.[51]

38. Cal-Am's current water demand for its Monterey District is approximately 9,000 afy, according to its MPWSP monthly reporting of system delivery.[52]

39. Cal-Am's current water demand for its Monterey District is approximately 9,000 afy, according to its quarterly reporting to the State Water Resource Control Board ("SWRCB").[53]

40. Cal-Am reported a projected 42% annual supply surplus to the Department of Water Resources in June 2025.[54]

41. Pursuant to a reference under Water Code Sections 2000 through 2048, the Executive Director of the SWRCB provided the SWRCB's Administrative Hearings Office's Final Report of the Board as Referee ("Final Report") dated June 25, 2025 to the Monterey

---

[50] *Id.*, at p. 100.
[51] D.25-08-006, COL 11 at p. 50, D.25-10-001, pp. 2-4.
[52] *Exhibit 4 to Complaint:* Monterey Peninsula Water Supply Project, *System Delivery: Monterey Main, Hidden Hills, Ryan Ranch & Bishop*, available at https://www.watersupplyproject.org/system-delivery.
[53] *Exhibit 5 to Complaint:* California American Water, *Consolidated Report for the 4th Quarter of Water Year 2024* (October 30, 2024) *see* PDF page 8, available at https://amwater.com/caaw/resources/pdf/customer-service-billing/rates-al/monterey/2024/swrcb_q4wy_2024.pdf; *Exhibit 6 to Complaint:* California American Water, *Consolidated Report for the 4th Quarter of Water Year 2025* (October 27, 2025) *see* PDF page 8, available at https://www.amwater.com/caaw/resources/PDF/Customer-Service-Billing/Rates-AL/Monterey/2025/SWRCB_Q4WY_2024-2025-amended.pdf.
[54] *Exhibit 7 to Complaint:* Cal-Am Water Shortage Report dated June 25, 2025, "Retail Assessment" tab, available at https://wuedata.water.ca.gov/wsda_tool.asp?wuedata_plan_id=17600.

County Superior Court in its Case No. 20CV001387.[55]

42. The Final Report concluded it is likely that the Project "will result in seawater intrusion in the central and southern sections of the Monterey Subbasin," which is the subbasin of the Salinas Valley Groundwater Basin from which MCWD pumps its municipal groundwater supply.[56]

43. Under Water Code Section 2019, such a report is *prima facie* evidence of the facts found therein, though parties to underlying litigation may offer rebuttal evidence to a court.

44. Increased seawater intrusion is an impermissible undesirable result under the MCWD and Salinas Valley Basin GSAs' Groundwater Sustainability Plan for the Monterey Subbasin.[57]

45. The trial of Case No. 20CV001387 in the Monterey County Superior Court concerning, among other things, the question of whether Cal-Am can obtain any water right applicable to its Project is ongoing, with final oral argument currently scheduled for November 12, 2026.[58]

46. Environmental review of the unauthorized project Cal-Am is implementing is required.

47. In D.22-03-038, the Commission stated an expectation that the Project would be operational by December 31, 2021, to meet Cal-Am's claimed "need for an additional 4,956 afy of water from an alternative water source" by that date in order to comply with State Water

---

[55] *Exhibit 8 to Complaint:* Administrative Hearings Office of the State Water Resources Control Board, *Final Report of the Board as Referee in City of Marina v. RMC Lonestar, Case No. 20CV001384* (June 25, 2025) ("Final Report") at p. 1.
[56] *Id*., at pp. 83, 117.
[57] *Id*., at p. 20.
[58] *Exhibit 9 to Complaint:* May 14, 2026 Minute Order of the Monterey County Superior Court in *City of Marina et al. v. RMC Lonestar et al.*, Case No. 20CV001387, at p. 3.

Resources Control Board Order WR 2016-0016.[59]

48. SWRCB Order WR 2016-0016, required Cal-Am to terminate its unlawful diversions from the Carmel River by December 31, 2021.[60]

49. In May 2021, MPWMD filed a complaint (C.21-05-005) against Cal-Am for failure to enter into an Amended Water Purchase Agreement ("WPA") for the PWM Expansion project to provide 2,250 afy of additional water supply to meet Cal-Am's customer demand. [61]

50. In response, a Presiding Officer's Decision ("POD") was issued dismissing the complaint as premature, while stating that the directive for Cal-Am "to provide alternative water supply sources should not be 'stuck in time,' based on outdated directives in D.18-09-017."[62]

51. The POD ordered Cal-Am to file an application to, among other things, update the demand and supply estimates for the MPWSP, inclusive of "any updated proposals for water supply projects, consistent with the requirements set out in Decision 18-09-017."[63]

52. On November 29, 2021, Cal-Am filed A. 21-11-024 requesting review and approval of an Amended WPA for the PWM Expansion project, and to update demand and supply estimates for the MPWSP.

53. The Commission issued D.22-03-038 dismissing MPWMD's complaint as "moot" following the filing of A.21-11-024, stating that "the 6.4 mgd desalination plant has not been constructed" and had yet to receive permits necessary for its construction.[64]

[59] D.22-03-038, at pp. 3-5.
[60] *Ibid.*; *see* Exhibit 10 to Complaint*:* SWRCB Order WR 2016-0016, at pp. 2, 19.
[61] C.21-05-005 (MPWMD v. Cal-Am), POD (August 12, 2021), at pp. 10-11.
[62] *Id.*, at pp. 21, 23.
[63] *Id.*, OP 2, at p. 24.
[64] D.22-03-038, at pp. 2, 13.

54. The Scoping Memo in A.21-11-024 divided the proceeding into two phases, with the potential for a third phase.[65]

55. The first phase of A.21-11-024 approved an Amended WPA for water supply from the PWM Expansion project.[66]

56. By D.22-12-001 (Rehearing Denied D.23-04-038), in Phase 1 of A.21-11-024, Cal-Am was authorized to enter the Amended WPA where the PWM Expansion project was found to be "reasonable, prudent, and in the public interest" and water supply and demand estimates supported its approval.[67]

57. According to the MPWSP FEIR that was certified by the Commission in D.18-09-017, the first three primary objectives of the Project would be to:

a. Replace Cal-Am's Carmel River diversions in excess of 3,376 afy;

b. Enable Cal-Am to reduce its Seaside Groundwater Basin pumping to 1,474 afy; and

c. Enable Cal-Am to pay back 700 afy to the Seaside Groundwater Basin for 25 years.[68]

58. Cal-Am has been able to cap its Carmel River diversions "at its legal limit of 3,376 afy" to comply with the SWRCB's orders using its current water supplies and without the Project in every year since December 31, 2021.[69]

---

[65] *Exhibit 11 to Complaint:* A.21-11-024, Scoping Memo, at pp. 3, 5-6.
[66] D.22.12-001, OP 1, at p. 87.
[67] *Id.*, COL 2 and 4, at p. 84; OP 1, at p. 87
[68] D.18-09-017, at pp. 14-15 (citing MPWSP FEIR, Vol. I, Section 1.3.1).
[69] *Exhibit 12 to Complaint*: A.21-11-024, Exhibit CAW-17, Phase 2 Direct Testimony of Ian C. Crooks, Corrected, at pp. 28:22 –29:4; *see also Exhibit 5 to Complaint*, at PDF p. 8 and *Exhibit 6 to Complaint*, at PDF p. 8.

59. Cal-Am has been able to cap its Seaside Basin pumping at 1,474 afy since the PWM project began producing supplies.[70]

60. Cal-Am now has sufficient surplus supplies to commence its payback to the Seaside Basin.[71]

61. By OP 17 of D.18-09-017, the Commission ordered Cal-Am to submit quarterly status reports on the permitting, financing, design, bidding and construction of the MPWSP to the Commission's Executive Director and the Director of the Public Advocates Office, and publish the reports on a Cal-Am-maintained web site dedicated to the Project.

62. In reporting on the status of the MPWSP in its Q2 2022 MPWSP quarterly Project Update, Cal-Am stated that the "desalination plant will produce 6,250 acre-feet of treated water per year", which is the water production for a 6.4 mgd plant adopted by the Commission for "non-drought years."[72]

63. As to the "budget," Cal-Am's same MPWSP Q2 2022 Project Update stated that its budget "figures are based on a 6.4 MGD desalination facility."[73]

64. No reference was made in Cal-Am's MPWSP Q2 2022 Project Update to any Project other than 6.4 mgd.

65. In assessing Cal-Am's water supply and approving the PWM Expansion WPA, the Commission in D.22-12-001 again stated that the "6.4 mgd desalination plant" adopted by the Commission in D.18-09-017 had not been constructed.[74]

66. Further, the Commission found that "there will continue to be delay in

---

[70] D.25-08-006, p. 51, as modified by D.25-10-001, p. 4 (11,204 AFY of supply) and D.25-08-006, p. 33 (Cal-Am states 9,280 AFY current demand, accepted by MCWD).
[71] *Ibid*.
[72] Exhibit 13 to Complaint: Cal-Am MPWSP Q2 2022 Project Update, at p. 4.
[73] *Id.*, at p. 5.
[74] D.22.12-001, at pp. 5, 10.

constructing the 6.4 mgd desalination plant" where "CalAm has not obtained" multiple permits, leases, and federal agency authorizations required for the MPWSP to be constructed," the "6.4 mgd desalination plant is also at issue in pending litigation,"[75] and "[t]here is also significant opposition to the desalination plant from community members that cannot be ignored,"[76] in particular noting the strong opposition to construction of the Project from Marina "due to environmental justice concerns and what they see as the relative merits of the PWM Expansion Project compared to the desalination plant."[77]

67. In D.22-12-001, the Commission noted comments from Cal-Am "stating an intent to pursue a smaller 4.8 mgd" project.[78]

68. In 2022, Cal-Am's application for one of the multiple permits required for the construction of the Project – a CDP – was under consideration by the Coastal Commission.

69. In October 2022, Cal-Am modified its application to the Coastal Commission to request approval of a 4.8 mgd project.[79]

70. Cal-Am's corporate parent is American Waterworks Company, Inc.

71. American Waterworks Company, Inc., publicly announced Cal-Am's plans for a 4.8 mgd phased project in a press release dated October 5, 2022.[80]

72. The Docket Card in A.12-04-019 does not include any filing by Cal-Am providing notice of its Coastal Commission application or any change in the Project size and does not include any petition by Cal-Am to modify D.18-09-017 to change that decision's

---

[75] *Id.*, at p. 15.
[76] *Ibid.*
[77] *Id.*, at pp. 15-16.
[78] *Id.*, at pp. 67-68.
[79] *Exhibit 1 to Complaint*: Coastal Commission Findings, at pp. 2, 51.
[80] *Exhibit 14 to Complaint*: American Waterworks Company, Inc. press release dated Oct. 5, 2022, available at https://www.amwater.com/press-room/press-releases/california/california-american-water-announces-phasing-for-monterey-peninsula-water-supply-project.

authorized 6.4 mgd size for the Project.

73. Cal-Am's Q3-Q4 2022 MPWSP Project Update made no reference to a capacity of 6.4 mgd, or 6,250 afy or greater for the Project, instead stating: "The plant has an initial 4.8 million-gallons-per-day capacity" and "is designed to accommodate a phased increase in capacity to provide for future needs for the Peninsula and design" and that "[t]his added flexibility in design was in response to concerns regarding future supply needs."[81]

74. In making the foregoing statements, Cal-Am never explains how the 4.8 mgd project, as opposed to a 6.4 mgd Project, responds to "future supply needs" or what those "needs" are to which only a 4.8 mgd project could respond.

75. No mention is made in any of the Cal-Am's quarterly MPWSP Project Updates published from Q3-Q4 2022 to the present of how Coastal Commission approval could alter the Commission's authorization solely for a 6.4 mgd Project in D.18-09-017.

76. In all of Cal-Am's quarterly MPWSP Project Updates since Q3-Q4 2022, Cal-Am has not mentioned its responsibility to file a petition to modify the Commission's decisions (D.18-09-017 and D.19-01-051) to change the Commission's authorization solely for a 6.4 mgd Project and its rejection of a 4.8 mgd project or a phased project from that smaller size.

77. At a hearing in November 2022, the Coastal Commission voted to conditionally approve Cal-Am's application to proceed with a 4.8 mgd project.[82]

78. The Coastal Commission's summary of its action on page two of the Coastal Commission Findings states:

> Cal-Am is proposing phased construction of the Project. It seeks authorization to construct a smaller initial phase of the Project that would produce 4.8 million

[81] *Exhibit 15 to Complaint*: MPWSP Q3-Q4 2022 Project Update, at p. 2.
[82] *Exhibit 1 to Complaint*: Coastal Commission Findings, at pp. 1, 9, 11.

> gallons per day ("mgd") per year. Construction of the full sale (*sic*) of the Project at 6.4 mgd per year would occur in a second phase *only if* Cal-Am can demonstrate a need for the additional water supply and demonstrate that the first phase has been operating in a manner that is protective of local groundwater supplies and nearby wetlands.

79. Among the Special Conditions imposed by the Coastal Commission, the 4.8 mgd project could be expanded to 6.4 mgd only after at least two years of operation without adverse impacts[83] and a further application demonstrating need for the additional supply.[84]

80. In its written Final Adopted Findings on Cal-Am's application, the Coastal Commission imposed multiple additional Special Conditions that Cal-Am must satisfy before the CDP can be issued.[85]

81. The Coastal Commission's Special Conditions include an express requirement for this Commission's "authorization" to proceed with the 4.8 mgd project.[86]

82. The Coastal Commission's Special Conditions also require entry of a final judgment in Case No. 20CV001387, now pending before the Monterey County Superior Court; however, the CDP "shall not be issued if that judgment or disposition demonstrates that (a) the Applicant does not have, and cannot feasibly obtain, water rights (to the extent applicable) for the Project or (b) Cal-Am's Project would cause harm to any aquifer that is a source of drinking water to the City of Marina or the Marina Coast Water District." [87]

83. During evidentiary hearings in Phase 2 of A.21-11-024 on updated water demand and supply estimates for the MPWSP held in April 2024, testimony by Cal-Am's witness on

---

[83] *Id.*, at p. 14.
[84] *Id.*, at pp. 2, 41, 43.
[85] *Id.*, at pp. 12-40.
[86] *Id.*, at p. 13.
[87] *Ibid*.

water supply admitted into that record as Exhibit CAW-27 stated that a "first phase of the MPWSP" had been "*approved by the California Coastal Commission* in November 2022 [that] would have a capacity of 4.8 million gallons per day (mgd) and would produce approximately 5,372 AFY" and that Cal-Am would construct that 4.8 mgd project for operation by 2030.[88]

84. Cal-Am continued to confirm its decision to construct a 4.8 mgd project in other testimony, public statements, and formally filed pleadings from 2024 to the present.

85. These continuing confirmations of Cal-Am's decision to construct a 4.8 mgd project include the following:

a. During evidentiary hearings in Phase 2 of A.21-11-024, Cal-Am's supply witness was asked whether Cal-Am intends to proceed with a 4.8 mgd project, to which he responded "Yes, the intent is to move forward with the project."[89]

b. During evidentiary hearings in Phase 2 of A.21-11-024, Cal-Am's demand witness was asked whether the 6.4 mgd Project would be in service in or before 2030, to which he responded "No. Our plan is to construct the first phase of the 6.4 MGD project to be in service before 2030."[90]

c. In materials attached to a July 2025 Notice of Ex Parte Communications, Cal-Am stated "In 2022, **Coastal Commission approved** our application including **a phased development** of the desalination plant, with initial construction of a 4.8 MGD plant." (Emphasis in original.)[91]

d. In testimony served on July 1, 2025, in A.25-07-003 (Cal-Am General Rate Case) Cal-Am confirmed that Cal-Am was moving forward to

[88] *Exhibit 16 to Complaint*: Phase 2 Supplemental Rebuttal Testimony of David Pezzini, Attachment 2 (WSA 2023), at p. 17 (emphasis added).
[89] *Exhibit 17 to Complaint*: A21-11-024 Reporter's Transcript, Vol. 3, March 12, 2024, at pp. 329:24-330:17 (Cal-Am (Pezzini)).
[90] *Exhibit 18 to Complaint*: A.21-11-024, Reporter's Transcript, Vol.4, at pp. 487:24 – 488:3 (Cal-Am (O'Halloran)).
[91] *Exhibit 19 to Complaint*: A21-11-024 Cal-Am Notice of Ex Parte Communication (July 23, 2025), Attachment 1, at p. 2 (emphasis original).

construct a 4.8 mgd project based on the Coastal Commission approval of a "phased development."[92]

e. In Cal-Am quarterly progress reports on the status of the MPWSP required by D.18-09-017 and served on the service list for A.12-04-019, Cal-Am confirmed that the project being constructed "will produce 5,376 acre-feet of treated water per year," which is the size of a 4.8 mgd project and *not* a 6.4 mgd Project that was expected to produce 7,167 acre feet per year.[93]

f. According to Cal-Am's quarterly progress report on the status of the MPWSP for the fourth quarter of calendar year 2025, Cal-Am has spent over $200 million of its $279.1 million cost cap applicable to the subsurface intake system, desalination plant and pipeline facilities for the approved 6.4 mgd Project, to implement "a plant that will be constructed preliminary at 4.8 MGD, which can be scaled up to accommodate future demand."[94]

g. Cal-Am has announced the construction of the 4.8 mgd project was to start in 2025.[95]

h. In its February 18, 2026 10-K filing with the United States Securities and Exchange Commission for the fiscal year ended December 31, 2025, Cal-Am's parent company, American Waterworks Company, Inc., stated on page 51 of the filing that construction "is expected to begin in 2026" on Cal-Am's desalination project.[96]

---

[92] *Exhibit 20 to Complaint*: A.25-07-003, Cal-Am General Rate Case, Direct Testimony of Stephen (Wes) Owens for California-American Water Company dated July 1, 2025, at pp. 75-77.
[93] *Exhibit 2 to Complaint*: MPWSP Q4 2025 Project Update, at p. 4; *see also Exhibit 21 to Complaint*, MPWSP Q4 2024 Project Update, at pp. 2, 4.
[94] *Exhibit 2 to Complaint*: MPWSP Q4 2025 Project Update, at p. 5 "Budget and Note."
[95] *Exhibit 22 to Complaint:* Press Release on Commission Decision 25-08-006, dated August 14, 2025, available at https://www.amwater.com/press-room/press-releases/california/california-public-utilities-commission-approves-water-supply-decision-supporting-california-american-waters-monterey-peninsula-desalination-project; *Exhibit 23 to Complaint:* Monterey Herald: "Regulators Side with Cam Am on Monterey Peninsula Water Supply," dated August 14, 2025, available at https://www.montereyherald.com/2025/08/14/regulators-side-with-cal-am-on-monterey-peninsula-water-supply/.
[96] *Exhibit 24 to Complaint:* Form 10-K, ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934, AMERICAN WATER WORKS COMPANY,

i. In its February 18, 2026 10-K filing with the United States Securities and Exchange Commission for the fiscal year ended December 31, 2025, Cal-Am's parent company, American Waterworks Company, Inc., stated on page 52 of the filing that in 2022 Cal-Am had announced "a phasing plan" for the desalination project, initially "constructed to produce up to 4.8 [mgd]".[97]

86. On information and belief, at no point in its amended application to the Coastal Commission nor in any formal hearing before the Coastal Commission did Cal-Am ever state that the Commission in D.18-09-017 had rejected *both* a 4.8 mgd project MPWSP *and the expansion or phasing* of a 4.8 mgd project.

87. In no quarterly MPWSP Project Update filed after Q2 2022 when Cal-Am began to report that the Coastal Commission had "approved" a 4.8 mgd project has Cal-Am ever stated or alerted the Commission to the facts that (1) the Coastal Commission's conditional CDP for a 4.8 mgd project was based on *Cal-Am's request for such a CDP* and (2) that such a request by Cal-Am never alerted the Coastal Commission to the fact that the Commission had rejected both a 4.8 mgd project *and* the expansion or phasing of a 4.8 mgd project to 6.4 mgd in D.18-09-017 and D.19-01-051.[98]

88. No environmental review of a 4.8 mgd project as required by PU Code Section 1002(a)(4) has been conducted by the Commission.

89. Following completion of the Commission's environmental review as lead agency under CEQA and its approval of a 6.4 mgd Project in D.18-09-017, and following the Coastal Commission's conduct of its CEQA-equivalent process as a responsible agency, as part of the

---

INC., Commission File No. 001-34028, at p. 51, available at https://www.sec.gov/Archives/edgar/data/1410636/000141063626000034/awk-20251231.htm.

[97] *Exhibit 24 to Complaint:* Feb. 18, 2026 Form 10-K, at p. 52.

[98] *See* D.18-09-017, at pp. 69-70, 128, FOFs 93-97, at pp. 178-179; D.19-01-051, at pp. 60-61.

SWRCB referral and Monterey County Superior Court Case No. 20CV001387, additional groundwater modeling was performed.

90. The additional groundwater modeling has developed significant new information regarding the Project's potential impacts on local groundwater resources.

91. As stated above, based on this additional groundwater modeling, the Final Report concluded it is likely that the Project "will result in seawater intrusion in the central and southern sections of the Monterey Subbasin."[99]

92. As stated above, the Monterey Subbasin is the subbasin of the Salinas Valley Groundwater Basin from which MCWD pumps its municipal groundwater supply.[100]

93. Multiple discretionary agency approvals for the Project remain outstanding, including the State Lands Commission and the National Oceanic and Atmospheric Administration, as well as the Central Coast Regional Water Quality Board's consideration of necessary modifications to an ocean outfall to accommodate the Project's brine disposal and the Coastal Commission's consideration of the necessary outfall modifications and groundwater impacts.

94. In seeking a lease from the State Lands Commission for its jurisdictional lands where a portion of the desalination intake infrastructure would be constructed, Cal-Am informed State Lands Commission that it had modified the project size to 4.8 mgd.[101]

95. In seeking amendments to an existing State Lands Commission lease for an existing test slant well, Cal-Am informed the State Lands Commission of ongoing proceedings

[99] *Exhibit 8 to Complaint:* Final Report, at pp. 83, 117.
[100] *Id.*, at pp. 3, 6.
[101] *Exhibit 25 to Complaint:* State Lands Commission Environmental Memorandum dated May 2026, at pp. 7-8.

related to the proposed desalination project at the Coastal Commission, in the Superior Court, and before this Commission.[102]

96. The State Lands Commission's February 28, 2023 Staff Report stated an expectation that this Commission "will also consider longer term supply and demand estimates and whether additional water supplies will be needed beyond what the Pure Water Expansion will provide."[103]

97. In Phase 2 of A.21-11-024, the Commission further updated supply and demand estimates for the MPWSP, adopting an updated supply estimate of 11,204 afy and adopting an updated demand estimate forecasted for 2050 of 13,732 afy.[104]

98. In D.25-08-006, the Commission received evidence of Cal-Am's current demand estimates of approximately 9,200 afy.[105]

99. Based on the Commission's supply and demand estimates as updated in D.25-08-006, corrected by D.25-10-001, Cal-Am's current supply surplus for its Monterey District is approximately 2,000 afy, not including supplies stored in the Seaside Basin.

100. On information and belief, as of the filing date of this Complaint, Cal-Am has not commenced construction of the proposed subsurface intake system or the desalination plant in any size.

101. Cal-Am has continued to publicly announce that "all conditions" of the Coastal Commission's CDP for a 4.8 mgd project will be satisfied by "mid-2026" and that activities and "work" continue on "all project components" required to construct the project in that size. [106]

---

[102] *Exhibit 26 to Complaint:* State Lands Commission Staff Report dated Feb. 28, 2023, at pp. 5-6.
[103] *Id.*, at p. 5.
[104] D.25-08-006, OPs 1 and 2 at p. 51, as corrected by D.25-10-001, at pp. 2-4, rehearing denied D.26-04-046.
[105] *See* D.25-08-006, at pp. 17, 33.
[106] *Exhibit 2 to Complaint*: MPWSP Q4 2025 Project Update, at p. 2.

102. Based on Cal-Am's current supply surplus for its Monterey District of approximately 2,000 afy as determined in Phase 2 of A.21-11-024, not including supplies stored in the Seaside Basin, there would be no threat of a water supply shortage for Cal-Am's Monterey District ratepayers if the Commission were to prohibit Cal-Am from further implementing an *uncertificated* project, or any desalination project, during the pendency of a petition for modification of D.18-09-017.

103. The Commission declined to add a third phase to A.21-11-024.[107]

104. The Commission denied Complainants' applications for rehearing of D.25-08-006, including requests therein for a third phase of A.21-11-024 or other vehicle to address the conflict between the Coastal Commission's conditional approval of a 4.8 mgd project and this Commission's 2018 issuance of a CPCN for a 6.4 mgd Project. [108]

105. Where the Complainants were foreclosed by the Commission from presenting evidence of the Coastal Commission's conditional CDP for a 4.8 mgd project contrary to the CPCN for a 6.4 mgd Project issued by the Commission in D.18-09-017,[109] this Complaint to this Commission is Complainants' sole recourse to set forth Cal-Am's violations of D.18-09-017 and D.19-01-051 and seek Commission enforcement of Cal-Am's compliance with D.18-09-017, including the filing of a petition for modification by Cal-Am to seek approval of proposed "non-minor" refinements to the Project, including refinements that have been rejected by the Commission in its "final and non-appealable" orders in D.18-09-017.[110]

106. Cal-Am's implementation since at least October 5, 2022 of an uncertificated 4.8

[107] D.25-08-006, COL 14, at p. 51.
[108] D.26-04-046, OP 1, at p. 14.
[109] D.25-08-006, OPs 3 and 4, at p. 51 (upholding rulings on Cal-Am motion to strike and denying MCWD motion for official notice).
[110] PU Code Sections 702, 1702. D.26-04-046, at p. 5, *see* D.18-09-017, OP 22, at pp. 210-211.

mgd project is a violation of D.18-09-017, wherein the Commission expressly rejected proposals for a smaller or phased project, based upon the Commission's 2018 supply and demand estimates as set forth in Paragraph 17 above.

107. Cal-Am's failure to petition the Commission for modification of D.18-09-017 prior to implementing a 4.8 mgd project is a violation of D.18-09-017, wherein the Commission expressly provided Cal-Am direction to seek non-minor Project "refinements by a petition to modify" D.18-09-017.[111]

108. Cal-Am has been in violation of D.18-09-017 since October of 2022, when it began to implement a differently-sized, 4.8 mgd project that had not been authorized and had been rejected by the Commission, including by seeking a CDP before another State Agency (Coastal Commission) without first seeking authority to modify this Commission's decisions or a Commission-issued CPCN to construct a 4.8 project and by failing to apprise the Coastal Commission in its CDP application that it did not and does not have the authority from this Commission to build a 4.8 mgd project.

109. Cal-Am has failed to meet its duty and obligation to provide safe, reliable, and affordable service to its ratepayers by failing to file a petition to modify D.18-09-017 for authority to alter the Project size, including updated assessments of cost, environmental, and community value impacts.

110. All of these actions by Cal-Am violate D.18-09-017 and PU Code Sections 451, 702, 761, 1001, 1002, and 1702 and further demonstrate that Cal-Am has not met its obligation to provide lawful, safe, reliable, and affordable water service to its customers.

111. Cal-Am should be ordered by the Commission to show cause why it has not

[111] D.18-09-017, OP 22, at pp. 210-211, as confirmed in D.26-04-046, at p. 5.

petitioned for modification of D.18-09-017 to alter the 6.4 mgd Project size authorized by that decision.

112. Attached hereto are the following Exhibits in further support of the foregoing factual allegations:

1 Final Adopted Findings of California Coastal Commission, Appeal No. A-3-MRA-19-0034, Application No. 9-20-0603

2 Cal-Am MPWSP Q4 2025 Project Update (pages 2, 4, 5)

3 MPWSP FEIR, Excerpts of Chapter 4 (Environmental Setting (Affected Environment), Impacts, and Mitigation Measures) (pages 4.11-11 and 4.20-2, 5-9 and 16-21)

4 Monterey Peninsula Water Supply Project, *System Delivery: Monterey Main, Hidden Hills, Ryan Ranch & Bishop*, available at https://www.watersupplyproject.org/system-delivery

5 California American Water, *Consolidated Report for the 4th Quarter of Water Year 2024* (October 30, 2024), available at https://amwater.com/caaw/resources/pdf/customer-service-billing/rates-al/monterey/2024/swrcb_q4wy_2024.pdf (PDF page 8)

6 California American Water, *Consolidated Report for the 4th Quarter of Water Year 2025* (October 27, 2025), available at https://www.amwater.com/caaw/resources/PDF/Customer-Service-Billing/Rates-AL/Monterey/2025/SWRCB_Q4WY_2024-2025-amended.pdf (PDF page 8)

7 Cal-Am Water Shortage Report dated June 25, 2025, "Retail Assessment" tab, available at https://wuedata.water.ca.gov/wsda_tool.asp?wuedata_plan_id=17600

8 Administrative Hearings Office of the State Water Resources Control Board, *Final Report of the Board as Referee in City of Marina v. RMC Lonestar, Case No. 20CV001384* (June 25, 2025) (pages 1, 3, 6, 20, 83, 117)

9 May 14, 2026 Minute Order from *City of Marina et al. v. RMC Lonestar et al.*, Case No. 20CV001387, in Monterey County Superior Court (page 3)

10 SWRCB Order WR 2016-0016 (pages 2, 19)

11 A.21-11-024, Scoping Memo (pages 3, 5, 6)

12 A.21-11-024, Exhibit CAW-17, Phase 2 Direct Testimony of Ian C. Crooks, Corrected (pages 28-29)

13 Cal-Am MPWSP Q2 2022 Project Update (pages 4, 5)

14 American Waterworks Company, Inc. press release dated Oct. 5, 2022, available at https://www.amwater.com/press-room/press-releases/california/california-american-water-announces-phasing-for-monterey-peninsula-water-supply-project

15 MPWSP Q3-Q4 2022 Project Update (page 2)

16 Phase 2 Supplemental Rebuttal Testimony of David Pezzini (pages 13-14), Attachment 2 (WSA 2023) (page 17)

17 A21-11-024 Reporter's Transcript, Vol. 3, March 12, 2024 (pages 329-330)

18 A.21-11-024, Reporter's Transcript, Vol.4, March 13, 2024 (pages 487-488)

19 A21-11-024 Cal-Am Notice of Ex Parte Communication (July 23, 2025), Attachment 1 (page 2)

20 A.25-07-003, Cal-Am General Rate Case, Direct Testimony of Stephen (Wes) Owens for California-American Water Company dated July 1, 2025 (pages 75-77)

21 MPWSP Q4 2024 Project Update (pages 2, 4)

22 Press Release on Commission Decision 25-08-006, dated August 14, 2025, available at https://www.amwater.com/press-room/press-releases/california/california-public-utilities-commission-approves-water-supply-decision-supporting-california-american-waters-monterey-peninsula-desalination-project

23 Monterey Herald: "Regulators Side with Cam Am on Monterey Peninsula Water Supply," dated August 14, 2025, available at https://www.montereyherald.com/2025/08/14/regulators-side-with-cal-am-on-monterey-peninsula-water-supply/

24 Form 10-K, ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934, AMERICAN WATER WORKS COMPANY, INC., Commission File No. 001-

34028, available at https://www.sec.gov/Archives/edgar/data/1410636/000141063626000034/awk-20251231.htm (pages 51, 52)

25 State Lands Commission Environmental Memorandum dated May 2026 (pages 7, 8)

26 State Lands Commission Staff Report of Feb. 28, 2023 (pages 5, 6)

113. As of the date of filing of this Complaint, no MPWSP quarterly Project Update has been released for 2026.

IV.
REQUESTED RELIEF
(Rule 4.2(a))

Wherefore, the Complainants respectfully request that the Commission:

1. Immediately issue a ruling or interim order prohibiting Cal-Am from undertaking any further implementation, including planning or construction, of any desalination project, pending resolution of this Complaint and resolution of any subsequent petition for modification of D.18-09-017.

2. Promptly issue an order:

a. Finding Cal-Am is in violation of D.18-09-017 for implementing a project not authorized by this Commission, and finding that Cal-Am's implementation of an unauthorized project also violates PU Code Sections 451, 702, 761, 1001, 1002, and 1702.

b. Ordering Cal-Am's immediate compliance with D.18-09-017 by requiring Cal-Am to file a petition to modify D.18-09-017 to authorize the project Cal-Am is implementing supported by (i) a thorough justification, as to law and fact, for seeking to change the authorized Project size, inclusive of any planned phasing or expansion; (ii) updated cost information for the project Cal-Am is implementing, including the basis for

revising costs and cost caps adopted by D.18-09-017; (iii) a proposal for environmental review as required under CEQA, to the extent environmental review specific to the project Cal-Am is implementing is not already under way before a different agency, to comply with PU Code Section 1002(a)(4); (iv) a demonstration that "the present or future public convenience and necessity require or will require" construction of the project Cal-Am is implementing pursuant to PU Code Section 1001 inclusive of consideration of all factors required by PU Code Section 1002, subsection (a) to support such a determination; (v) justification for the filing of the petition more than a year after the issuance of D.18-09-017;[112] and (vi) all new facts "supported by an appropriate declaration or affidavit."[113]

c. Requiring Cal-Am to show cause why it should not be sanctioned, fined, or otherwise disciplined for implementing an unauthorized project in violation of D.18-09-017 and

[112] Rule 16.4 of the Commission Rules governs Petitions for Modification of Commission decisions. Among other things, Rule 16.4(d) requires a petitioner to "explain why the petition could not have been presented within one year of the effective date of the decision."

[113] As to the required content of a Petition for Modification, Rule 16.4(b) requires: "Any factual allegations must be supported with specific citations to the record in the proceeding or to matters that may be officially noticed. Allegations of new or changed facts must be supported by an appropriate declaration or affidavit."

D.19-01-051 and failing to file the petition required by D.18-09-017 to amend the Project's size.

3. Grant such other and further relief and remedies as the Commission deems just and equitable.

Respectfully submitted, June 16, 2026

/s/ DAVID C. LAREDO
David C. Laredo
DAVID C. LAREDO
FRANCES M. FARINA
De LAY & LAREDO
606 Forest Avenue
Pacific Grove, CA 93950-4221
Telephone: (831) 646-1502
Facsimile: (831) 646-0377
Email: dave@laredolaw.net
fran@laredolaw.net

ATTORNEYS FOR THE MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

/s/ SARA STECK MYERS
Sara Steck Myers
SARA STECK MYERS
Attorney at Law
122 - 28th Avenue
San Francisco, CA 94121
Telephone: 415-420-1253
Email: ssmyers@att.net

PAUL P. ("SKIP") SPAULDING, III
Shartsis Friese LLP
425 Market Street, 11th Floor
San Francisco, CA 94105
Telephone: 415-421-6500
Email: sspaulding@sflaw.com

ATTORNEYS FOR THE CITY OF MARINA

/s/ RUTH STONER MUZZIN
Ruth Stoner Muzzin
RUTH STONER MUZZIN
CATHERINE M. ROE
JORIAN HEAL
EMILY A. HORNE
FRIEDMAN & SPRINGWATER LLP
350 Sansome Street, Suite 800
San Francisco, CA 94104
Telephone: (415) 834-3800
Facsimile: (415) 834-1044
Email: rmuzzin@friedmanspring.com
croe@friedmanspring.com
jheal@friedmanspring.com
ehorne@friedmanspring.com

ATTORNEYS FOR THE MARINA COAST WATER DISTRICT

VERIFICATIONS

(Rules 1.11 and 4.2)

I am the General Manager for the Monterey Peninsula Water Management District, a Complainant herein, and am authorized to make this verification on its behalf.

The statements in the foregoing document are true of my own knowledge, except as to the matters which are therein stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 15th, 2026 at Monterey, California.

By _____

David J. Stoldt, General Manager
Monterey Peninsula Water Management District

VERIFICATIONS
(Rules 1.11 and 4.2)

I am the City Manager of the City of Marina, a Complainant herein, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to the matters which are therein stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 15, 2026, at Marina, California.

Layne P. Long

VERIFICATIONS
(RULES 1.11 AND 4.2)

I am the General Manager of Marina Coast Water District, a Complainant herein, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to the matters which are therein stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury that the foregoing is true and correct.

Executed on Jan 16, 2026 at Marina, California.

Remleh Scherzinger

EXHIBITS

MCWD June 22, 2026 Comment Letter, File A4181

ATTACHMENT B

State Water Resources Control Board

NOTICE OF HEARING TO CONSIDER MODIFICATION OF CALIFORNIA AMERICAN WATER COMPANY CEASE AND DESIST ORDER (STATE WATER BOARD ORDERS WR 2016-0016 AND WR 2009-0060)

COUNTY: Monterey **STREAM SYSTEM:** Carmel River

NOTICE IS HEREBY GIVEN that the State Water Resources Control Board (State Water Board or Board), Division of Water Rights (Division) assisted by the Administrative Hearings Office (AHO), will conduct a hearing on the written record, with an opportunity for public comment and oral presentation of policy statements, to inform the State Water Board's consideration of the Monterey Peninsula Water Management District's (MPWMD) October 21, 2025 application under Water Code section 1832 to modify Orders WR 2009-0060 and WR 2016-0016 (Application) that the Board issued to the California American Water Company (Cal-Am).

The Division will accept testimony provided under penalty of perjury and other evidence through written submissions, on the hearing questions identified below. Following the deadline to submit written rebuttal evidence, the Division will conduct a hybrid hearing day, held in-person and virtually on Zoom, for the public to provide oral presentation of policy statements and public comments. Senior Hearing Officer Megan Knize from the AHO will preside over the hearing.

Unless a written objection is submitted by **July 1, 2026, at 11:59 p.m.**, the AHO hearing officer hereby waives any requirements for in-person examination and cross-examination of witnesses, and the requirement that witnesses providing written testimony appear at the hearing, pursuant to her authority under California Code of Regulations, title 23, section 648, subdivision (d), in order to promote the efficient conduct of the proceeding.

HEARING PROCESS AND SCHEDULE

July 20, 2026: Written testimony and exhibits addressing the hearing questions are due by e-mail or mail.

August 18, 2026: Written rebuttal to testimony and exhibits are due by e-mail or mail.

September 17, 2026: Opportunity for public comment and presentation of policy statements. This will be conducted as a hybrid hearing with the opportunity to participate in person at the CalEPA Building in Sacramento or online on the Zoom platform.

September 21, 2026: Closing briefs due. Any party may file a closing brief addressing the hearing questions below. The brief should be limited to 10 pages, double-spaced, and written in size 12 font.

Upon receipt of closing briefs, unless the hearing officer issues a different ruling, the hearing will close. State Water Board staff and the hearing officer will prepare a draft order addressing the Application after the close of the hearing. The draft order will be made available for public comment prior to consideration of adoption by the State Water Board at a regular public Board meeting.

Written testimony, exhibits, and closing briefs should be submitted to:
Cal-AmProject@waterboards.ca.gov

OR

State Water Resources Control Board
Division of Water Rights
Attention: Cal-AM Team
P.O. Box 2000
Sacramento, CA 95812-2000

Written testimony and evidence will be posted on the State Water Board's FTP site[1] as soon as practicable after the deadlines for submittal of evidence.

HEARING QUESTIONS

By July 20, 2026, participants must submit written testimony and other evidence they wish to have considered addressing these questions:

1. Should Condition 2 of State Water Board Order WR 2009-0060[2] be modified to lift the moratorium on new service connections?

---

[1] The link for the FTP site, as well as access information, is available at https://www.waterboards.ca.gov/waterrights/water_issues/projects/california_american_water_company/

[2] Condition 2 of Order WR 2009-0060 states, "Cal-Am shall not divert water from the Carmel River for new service connections or for any increased use of water at existing service addresses resulting from a change in zoning or use. Cal-Am may supply water from the river for new service connections or for any increased use at existing service addresses resulting from a change in zoning or use after October 20, 2009, provided that any such service had obtained all necessary written approvals required for project construction and connection to Cal-Am's water system prior to that date." (Order WR 2009-0060, p. 57.)

2. If Condition 2 is modified, is the following trigger appropriate for reimposing restrictions currently in Condition 2 such as the moratorium on new service connections?
   "Upon Cal-Am reporting diversions exceeding 3,376 acre-feet[3] under the water rights described in Order 95-10 in any water year, the moratorium on new water service connections described in Condition 2 shall immediately be reimposed with no further action required by the Board."
   If this trigger is not appropriate, what would be appropriate conditions to reimpose Condition 2?

BACKGROUND

On October 20, 2009, the State Water Board adopted State Water Board Order WR 2009-0060, a cease and desist order for Cal-Am's unlawful diversions from the Carmel River. Order WR 2009-0060, as amended by State Water Board Order WR 2016-0016, requires Cal-Am to take various actions and to terminate all unlawful diversions from the Carmel River by December 31, 2021. Order WR 2009-0060 also includes language that prohibits Cal-Am from creating new water service connections or expanding use at existing service connections (Condition 2).

On October 21, 2025, Monterey Peninsula Water Management District (MPWMD) filed an application with the State Board pursuant to Water Code section 1832 to modify Orders WR 2009-0060 and WR 2016-0016. Specifically, MPWMD requests that the State Board issue an amended order that rescinds Condition 2, updates reporting requirements, and includes a trigger that would allow the Deputy Director for the Division to reinstate Condition 2 if necessary.

A copy of MPWMD's Application is available on the State Water Board's website. In addition, associated letters are also posted on the Board's file transfer protocol (ftp) site:

Website: https://ftp.waterboards.ca.gov/
Username: Cal-AmProject
Password: AccessCal-Am

MPWMD's Application claims:

- There is no current violation or threat of violation of Orders WR 2009-0060 or WR 2016-0016 in the foreseeable future.
- Diversions from the Carmel River have remained within the authorized limit for the past three years due to new water supplies and conservation efforts.
- The Pure Water Monterey Expansion project provides an additional water supply sufficient for Cal-Am to avoid future violations.

[3] Order 2009-0060 provides that 3,376 acre-feet is Cal-Am's maximum diversion limit from the Carmel River pursuant to Cal-Am's pre-1914 rights, riparian rights, and License 11866. (*Id.* at pp. 57, fn. 49 & p. 64, Attachment 1.)

The Application in general does not propose changes to the reporting requirements of Orders WR 2009-0060 and WR 2016-0016. The proposed updates focus on removing requirements that MPWMD claims have been met or are no longer required. Quarterly and annual reports summarizing diversions from the Carmel River, among other data, would still be required under the proposed modifications.

The Application also proposes a mechanism to reimpose Condition 2. Under the proposed methodology, prior year pumping would be evaluated against several water supply metrics. If a defined threshold is reached, the Deputy Director for Water Rights will evaluate submitted reporting data against projected growth in demand estimates from Cal-Am/MPWMD to determine if Condition 2 should be reimposed.

As of the date of this notice, the Division has received 34 letters related to MPWMD's application, including a December 19, 2025 letter from Cal-Am requesting the Board deny the application or hold it in abeyance to provide Cal-Am additional time to "meet with stakeholders and fish agencies to develop appropriate conditions for interim relief from the CDO moratorium" and promising an update by April 1, 2026. The Division has not received further information from Cal-Am. The Division also received from MPWMD four supplements to the application on October 21, 2025, as well as on January 9, April 29, and June 2 of 2026.

PROHIBITION ON EX PARTE COMMUNICATIONS

Any participant submitting evidence by the deadline will be deemed a party to this proceeding. While this proceeding is pending, ex parte communications between any party, party representative or interested person and the hearing officer, any member of the hearing team, or any State Water Board member are prohibited. Ex parte communications include any type of communication regarding this proceeding that occurs between a party or interested person and the hearing officer, a member of the hearing team, or a State Water Board member without notice and an opportunity for all parties to participate. (See Wat. Code, § 1110, subd. (c); Gov. Code, §§ 11430.10–11430.80.) Additional information about ex parte communications is in response number 16 of the AHO's FAQ posted at bit.ly/aho-faq. (See response to FAQ 16.)

If any party wants to communicate with any member of the hearing team, the hearing officer, or any Board member, at any time while this proceeding is pending regarding any potentially controversial procedural or substantive issue, that party shall make such communication in writing (by e-mail or letter) and serve all other parties with copies of the communication and include a proof of service demonstrating such service of the written communication to the hearing officer. A party may provide this proof of service through a formal proof of service or by other verification. For e-mails, the verification shall be a list of the e-mail addresses of the parties or their representatives in an electronic mail "cc" (carbon copy) list. For letters, the verification shall be a list of the names and mailing addresses of the other parties or their representatives in the cc portion of the letter.

If the hearing team receives any substantive or potentially controversial procedural communication regarding this proceeding that is addressed to a Board member, the hearing officer, or any other member of the hearing team, but not copied to the hearing parties, then the hearing team will file a copy of the communication in the "Misc. Correspondence" folder within the State Water Board's FTP folder for this proceeding. Parties should plan to regularly check this folder for such communications. Please do not attempt to communicate by telephone or in person with a Board member or any hearing team member regarding this proceeding, because other parties would not be able to participate in such communications. If oral communications with any members of the hearing team are necessary to discuss any potentially controversial procedural or substantive issue, then the hearing team will set up a conference call in which representatives of all parties may participate. Any party may request such a conference call at any time using the written communications protocols described above.

HEARING DAY FOR PRESENTATION OF PUBLIC COMMENT AND POLICY STATEMENTS

As indicated, the hearing officer will oversee a hybrid-format hearing day to receive public comments and oral presentation of policy statements. Persons who wish to participate in this day of the hearing should join the Service List for this proceeding so they can receive additional instructions about how to participate. Participants will likely be limited to five minutes or less for their presentations. A quorum of the State Water Board members may attend, but will not make any decisions at the hearing day. The Division will provide additional details about hearing logistics closer to the date of the hearing.

Statements presented during the hybrid hearing day will be part of the record of this proceeding but are not made under oath and will not be relied upon by the decisionmakers as evidence when making their determinations.

ADDITIONS AND UPDATES TO SERVICE LIST

The Division has prepared a service list of e-mail addresses using information from the Division's files about the Application and letters it has received so far related to this Application. If anyone wants to be added to the service list or change any of their information, they should submit this information by e-mail to Cal-AmProject@waterboards.ca.gov. The party or interested person does not need to send copies of the e-mail to the service list.

Date of Notice: June 19, 2026

Megan S. Knize
Senior Hearing Officer

Administrative Hearings Office
State Water Resources Control Board

MCWD June 22, 2026 Comment Letter, File A4181

ATTACHMENT C

CALIFORNIA COASTAL COMMISSION
455 MARKET STREET, SUITE 228
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904- 5200
FAX (415) 904-5400
TDD (415) 597-5885
WWW.COASTAL.CA.GOV

Th7a & 8a

Appeal Filed:	May 22, 2019
49th Day:	Waived
Permit Filed:	September 1, 2022
180th Day:	February 28, 2023
Staff:	T. Luster-SF
Staff Report:	November 4, 2022
Hearing Date:	November 17, 2022

STAFF REPORT: RECOMMENDATION ON APPEAL DE NOVO HEARING
and
CONSOLIDATED COASTAL DEVELOPMENT PERMIT

Appeal No:	**A-3-MRA-19-0034**
Local Government:	City of Marina
Decision:	Approval with Conditions
Application No.:	**9-20-0603**
Applicant:	**California American Water Company**
Appellants:	**California American Water Company, Brian LeNeve, Castroville Community Services District, and Commissioners Howell and Uranga**
Project Location:	Wellfield at the site of the CEMEX, Incorporated sand mining facility in the City of Marina, Monterey County, and pipelines and associated infrastructure within the Cities of Marina and Seaside, the County of Monterey, and the Commission's retained jurisdiction.
Project Description:	Construct and operate a slant well field, associated water transmission pipelines and related infrastructure within the coastal zone to support a proposed desalination facility located inland of the coastal zone.
Staff Recommendation:	**Approval with Conditions** of De Novo Permit and **Approval with Conditions,** of Regular Permit.

SUMMARY OF STAFF RECOMMENDATION

The California-American Water Company ("Cal-Am") is proposing to construct and operate desalination components of its overall Monterey Peninsula Water Supply Project ("MPWSP") that would consist of a desalination facility, a well field, water transmission pipelines, pump station, and other related infrastructure (the "Project"). The proposed Project would provide potable water for customers in Cal-Am's service area in the Monterey Peninsula region, which has experienced decades of water shortages resulting from drought, overpumping of groundwater sources, seawater intrusion, proposed supply projects not being completed, and other causes. The Monterey Peninsula region faces unique water supply challenges that are likely to be exacerbated by climate change.

Cal-Am began planning efforts for additional water supply sources more than 20 years ago, with this current MPWSP Project being developed over the past decade. The MPWSP is meant to address longstanding water supply constraints in the region and to provide an alternative water supply for Cal-Am to rely on instead of its overwithdrawal of water from the Carmel River, which the State Water Resources Control Board ordered to be stopped by December 2021.

The overall MPWSP involves several major components – including the Pure Water recycling project, an aquifer storage and recovery ("ASR") project, and a desalination facility. The desalination components of the MPWSP would be located both within and outside the coastal zone. The desalination components within the coastal zone and subject to this Commission review are the proposed desalination facility's source water wells, which would extract water from beneath the Monterey Bay seafloor and sections of various proposed pipelines that would distribute water throughout the Project to Cal-Am's ratepayers in the Monterey Peninsula area distribution system and to the City of Castroville. The proposed Project would be located in several coastal zone jurisdictions and the Commission is conducting a consolidated permit review for those components within the certified Local Coastal Program ("LCP") jurisdictions of the City of Seaside and the County of Monterey, as well as within the Commission's retained jurisdiction in an area of deferred certification within the County, and for components seaward of the mean high tide line. The Commission is also considering multiple appeals of the City of Marina's denial of a CDP application for the well field and portions of two of the pipelines within the City's certified LCP jurisdiction.

Cal-Am is proposing phased construction of the Project. It seeks authorization to construct a smaller initial phase of the Project that would produce 4.8 million gallons per day ("mgd") per year. Construction of the full sale of the Project at 6.4 mgd per year would occur in a second phase only if Cal-Am can demonstrate a need for the additional water supply and demonstrate that the first phase has been operating in a manner that is protective of local groundwater supplies and nearby wetlands. At the Project's maximum build-out, it would include up to six new slant wells to be located within a Cal-Am easement in part of the CEMEX sand mining facility near the Monterey Bay shoreline in the City of Marina. The Project would also include conversion of a test slant

well to a permanent well on the same site, as well as four main pipelines, with part of each in the coastal zone. The desalination facility itself would be constructed inland of the coastal zone and would discharge processed saline brine to an existing outfall operated by the regional wastewater treatment agency, Monterey One Water ("M1W"). This outfall line would need to be modified in order to discharge the brine.

The proposed Project has a controversial history involving multiple agency reviews, spawning at least 10 lawsuits, including several against the California Public Utilities Commission, and raising significant environmental justice concerns. The Commission is not the first agency to review whether the Project should be constructed, nor will it have the final say on the issue, as several other agencies are concurrently and independently reviewing the Project, including the CPUC and the State Water Resources Control Board. Some issues within the Commission's review jurisdiction overlap with issues under consideration by other agencies, but the Commission's determination on those overlapping issues does not legally bind the other agencies (and vice versa).

This is the Project's third scheduled hearing before the Commission. The first was in November 2019, when the Commission took no action but directed Cal-Am and staff to provide additional information and answers to a number of Commissioner questions before bringing the matter back for consideration. Staff scheduled another hearing for September 2020, which did not proceed because Cal-Am withdrew its permit application shortly before the hearing date (and the de novo appeal was continued). Staff's recommendation at that time was that the Commission should deny the proposed Project, as staff had identified a feasible and less environmentally alternative to the Project – i.e., an expansion of the existing Pure Water project (the "Pure Water Expansion").

After September 2020, Cal-Am made several Project modifications to address some of the previously identified concerns. As noted, Cal-Am now proposes a phased construction where the first phase has a smaller Project footprint. This phased approach would reduce ESHA impacts and potential impacts to groundwater in the initial phase (and permanently if the second phase is not constructed). Another significant development since 2020 is that after Commission staff identified the Pure Water Expansion as a feasible alternative in 2020, a CPUC proceeding was initiated, which is ongoing and in which no party disputes approval of the Pure Water Expansion project. In September 2022, the CPUC issued a proposed decision to approve the Pure Water Expansion based on near-term supply and demand estimates. As part of that proceeding, the CPUC will also consider longer term supply and demand estimates and whether additional water supplies will be needed beyond what the Pure Water Expansion will provide. Staff believes that the updated water demand and supply estimates and projections reasonably demonstrate that Cal-Am's Project is likely to be needed at some point during the current 20-year planning period for future demand and supplies.

The proposed Project raises extremely difficult and complex coastal resource issues, particularly regarding the Project's substantial impacts to environmentally sensitive habitat areas ("ESHA"), potential impacts to area wetlands, and potential groundwater impacts to aquifers that are a source of drinking water for the City of Marina and the Marina Coast Water District. The Project also involves the most significant environmental justice concerns the Commission has considered since it adopted an Environmental Justice Policy in 2019.

The record contains competing views regarding groundwater impacts, water demand and supply projections, potential wetland impacts, and the rights to, and availability of, source water for the Project. The communities affected by the Project, along with the elected Board members of the various water districts, are divided about the Project. As discussed in the Findings below, Commission staff believes that uncertainty surrounding these issues can be addressed through a number of prior-to-issuance conditions.

One of the most significant changes from 2020 is the increased pressure from the historic drought for new sources of water in a region already struggling with longstanding, critical water shortages. The three-year period ending in August 2022 was the driest in all of California history, according to data from the National Oceanic and Atmospheric Administration.[1] As described in these recommended Findings, it is reasonable to project that water from Cal-Am's Project will be needed as part of the area's water portfolio within the next 20 years, While the Pure Water Expansion provides a feasible and less environmentally damaging alternative to Cal-Am's Project in the near term. Commission staff concludes that the Project is needed in the longer term. Ultimately, the CPUC will determine the longer-term supply and demand estimates after extensive testimony and evidence on this issue, which bears on whether the CPUC would approve the Project. Furthermore, without CPUC approval, the Project cannot proceed. Thus, the Commission's approval is conditioned on final CPUC approval for construction of the Project based on CPUC's findings of supply and demand. Moreover, if the Project does not begin construction within five years, Cal-Am must seek an extension through Executive Director approval or, if necessary, an amended CDP application through which the Commission may review any changed circumstances affecting the Project.

Coastal Act/Local Coastal Program Environmental Issues & Analysis
Key issues, and staff's analysis in support of its recommendation, are provided in these Findings and are summarized below.

Environmental Justice: As noted above, the Project raises the most significant environmental justice issues the Commission has had to address since the 2019 adoption of the Commission's environmental justice policy. At both its reduced 4.8 mgd scale and its full 6.4 mgd scale, the Project would result in the most costly water of any

[1] See NOAA National Centers for Environmental information, Climate at a Glance: Statewide Time Series, Precipitation, published October 2022 (retrieved Nov. 1, 2022), available at https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/time-series/4/pcp/36/8/1895-2022?base_prd=true&begbas

of the desalination projects the Commission has considered recently and would involve locating some of the Project components in a community that has a long history of having a disproportionate share of industrial facilities and uses. Staff conducted in-depth analyses of these issues and identified several communities of concern that would be affected by Cal-Am's proposed Project – including the cities of Marina, Seaside, Sand City and Castroville. Overall, the analysis shows that Cal-Am's Project creates several serious environmental justice issues.

The Project's well field and some of its pipelines would be sited within the City of Marina, which is not in Cal-Am's service area but would be burdened with many of the adverse coastal resource impacts discussed herein. Marina is already disproportionately affected by other industrial uses, including a regional landfill, regional composting facility, regional sewage plant, a municipal airport, a contaminated site listed on the U.S. EPA's national priorities list, and the former CEMEX sand mining facility, which has ceased its operations. Cal-Am retains an easement over portions of the former CEMEX site, which Cal-Am proposes to use for parts of the Project. As part of settlement agreements between Cemex and the Commission, State Lands Commission, and the City of Marina, areas of the former CEMEX site not used by Cal-Am would be available for habitat restoration and public access to the shoreline. Additionally, the City and the Marina Coast Water District, which provides water to City residents, are deeply concerned that the Project would adversely affect the groundwater aquifers that the District relies on.

Cal-Am modified its Project in several ways to address some of the City and District concerns, including agreeing to a smaller footprint and phasing. The Applicant belatedly increased its public outreach efforts and offered the City a range of proposed benefits from a public access plan to tax benefits, which were largely rejected by a City that continues to oppose the Project. This includes $1 million to use for any of several enhancements or amenities the City may want to develop for its residents. Cal-Am has also modified its proposed wells so they will extend as far as feasible seaward and thereby reduce any potential impacts to the City's and District's groundwater resources. Several recommended Special Conditions also address these concerns – for example, **Special Condition 11** would require Cal-Am to construct its wells to extend as far seaward as feasible to reduce their potential groundwater impacts. **Special Condition 12** would require Cal-Am to develop a comprehensive monitoring and reporting program to detect any potential groundwater impacts its Project would cause and identify measures it would implement before those impacts occur.

Within Cal-Am's service area, there are significant concerns about how the cost of water from the Project will affect low-income ratepayers. According to Cal-Am, water from the Project is expected to increase rates by $47 to $50 per month, which would substantially raise water rates for low-income ratepayers throughout the service area, who worry that the cost of water could eventually push them out of their moderately priced coastal communities. Cal-Am offers several rate assistance programs for low-income ratepayers; however, staff found that several of the programs have eligibility requirements that create a barrier to access, have not reached all low-income

customers, and do not provide enough relief to offset the ongoing rate increases. In response, Cal-Am offered to submit proposals to the CPUC to offset the costs of the Project for low-income rate payers and to expand the eligibility requirements for the discount offered by its Customer Assistance Program In addition, Cal-Am proposed adding $500,000 to a United Way Hardship Fund and a cost cap that would limit any cost increases resulting from the Project to no more than $10 per month for a period of at least five years after commencement of water delivery service. The Commission is requiring a special condition that Cal-Am provide an annual report to the Commission that discusses the implementation of these measures.

Under the Project, Cal-Am will provide discounted water to Castroville, a community of concern on the brink of collapse, according to the manager of the local water district, because its water supply from the underlying Salinas Valley Groundwater Basin has been diminished due to several decades of agricultural over-pumping resulting in increased levels of seawater intrusion. Per Basin requirements, Cal-Am is required to return the same volume of groundwater to the Basin that its Project would remove from beneath the CEMEX site, and Cal-Am would provide that water at a very low rate meant to keep Castroville's water rates affordable. That benefit would come at the expense of Cal-Am's customers, though any impacts are meant to be offset by the measures identified above that would benefit Cal-Am's lower income ratepayers.

This Project affects several environmental justice communities in the region. While the Project provides a benefit to the Monterey Peninsula by providing a secure water source and helps to avoid future overwithdrawal of water from Carmel River, it will disproportionately burden low-income ratepayers in the service area and residents in the City of Marina. Cal-Am proposed a number of measures to help offset costs to low-income ratepayers and provide community benefits for the City of Marina. These proposed measures by Cal-Am and additional conditions imposed by the Commission help to offset adverse impacts and ensure accountability. Even so some environmental justice issues related to the Project remain contentious.

Tribal Consultation
Staff consulted with representatives of Tribes with interests in the Project area, several of which have provided correspondence or have stated their interest or concerns about the Project, as described in Section IV.J below. In partial recognition of some of the concerns expressed, **Special Condition 18** is meant to ensure proper recognition and treatment of any Tribal cultural resources that may be discovered during Project activities.

Terrestrial ESHA
The Project will have adverse effects on ESHA. Its construction and operation would directly or indirectly result in several dozen acres of both temporary and permanent impacts to terrestrial ESHA, most of it consisting of relatively rare coastal dune habitat. Cal-Am has modified its proposal in several ways to avoid or reduce some of the previously expected impacts – most notably through its recent revision that would install

several sections of the Project's pipelines using tunneling techniques rather than trenching, which will reduce surface ESHA impacts by up to several acres, and also through its recently proposed Project phasing, which would reduce the initial ESHA impacts at the Project's well field by about one-half acre. Many of the expected impacts are addressed through several Special Conditions that would require verification of expected Project impacts before and during construction, submittal of revised mitigation plans that fully address these impacts and provide ongoing monitoring and remediation, and other protective measures. However, even with these Special Conditions, the Project would not be fully consistent with several Coastal Act and LCP policies that do not allow the type of disturbance and loss of ESHA that would result from Cal-Am's Project. As described in Section IV.E of the Findings, staff recommends that the Commission find the proposed Project does not conform to those policies but that it apply the "override" provisions of Coastal Act Section 30260 to address these nonconformities.

Groundwater Resources

Much of the controversy surrounding Cal-Am's Project relates to whether its source water intake wells near the coast would adversely affect groundwater within the aquifers that provide the City of Marina's water supply and whether it would increase the rate of seawater intrusion in the area. Despite a lengthy process before and during the Project's CEQA review that included installing and operating a test well, collecting several years' worth of data, and developing various groundwater models, the City of Marina and others have maintained that there will be adverse effects. As part of the Commission's earlier review, staff hired an independent hydrogeologist to review some of this data and modeling and to recommend additional data collection and modeling to help reduce the levels of uncertainty about these and other potential effects. This independent review concluded that the Project would have limited to negligible effects on the rate of seawater intrusion in the area and that the groundwater "capture area" of the Project's wells would likely not extend to near the City's wells; however, it also identified two new likely effects – groundwater drawdown in areas that could potentially adversely affect nearby wetlands, and a likelihood that Cal-Am would need to return more water to the groundwater basin than had been previously considered. These are further described in the Findings and addressed through several recommended Special Conditions, including **Special Conditions 11** and **12** requiring the Project's wells to withdraw water from as far seaward as is feasible and requiring a comprehensive monitoring plan to detect potential effects on groundwater. Cal-Am's Project will also rely on the final determination of a lawsuit filed by the City of Marina regarding the amount of groundwater that can be extracted from the Project's well field site. **Special Condition 1** requires Cal-Am, prior to issuance of the CDP, to submit final resolution of that lawsuit to the Executive Director and to submit a complete application to amend its Project if warranted.

Coastal Hazards

Cal-Am's proposed well field would be located several hundred feet inland of the shoreline, but in an area where relatively high rates of coastal erosion could endanger the wells. Projections based on the Commission's current sea level rise guidance

documents show the wells could be affected by coastal erosion within the next 40 years or so and that the well heads could be buried due to the inland movement of the adjacent sand dunes by about 2040 to 2050. However, Cal-Am estimates that its wells would operate for only 20 to 25 years before they would need to be relocated due to the decreased water yields they experience as they operate. While this necessary relocation would allow the wells to avoid the expected coastal erosion and dune recession during their initial 20 to 25 years of operation, it is unclear where they could be relocated to avoid these hazards during their next cycle of operations. Cal-Am does not have legal interest in possible sites further inland, and while the wells could be moved to nearby locations parallel to the existing line of wells, that would put them at risk of coastal erosion and dune recession during the next 20-to 25-year operating cycle. **Special Condition 6** addresses these concerns by limiting the term of this CDP to no more than 25 years and requiring Cal-Am to submit a complete CDP application before the end of that term to propose relocation, rehabilitation, or removal of the wells.

Wetlands

After the Commission's November 2019 hearing, concerns emerged that Cal-Am's pumping of groundwater could result in drawdowns beneath several dozen acres of nearby wetlands and vernal ponds. While Cal-Am's CEQA review acknowledged some amount of drawdown would occur beneath these areas, it also asserted that the drawdown would not adversely affect the wetlands because they were not hydraulically connected to groundwater. However, the City of Marina and others maintain that some of these areas are dependent on the underlying groundwater. Moreover, the Commission's July 2020 independent hydrogeologic review shows groundwater elevations decreasing by as much as about four feet beneath some of these wetlands and vernal ponds. If they are connected to groundwater, this amount of drawdown could cause adverse effects to up to several dozen acres of these important habitat areas.

Cal-Am submitted its own analyses contending that its drawdowns would not affect these areas, but also recommended that additional field data and analysis be conducted to confirm this contention. **Special Condition 13** would require Cal-Am to conduct extensive monitoring and reporting that is sufficient to detect potential effects its Project may cause in those areas before they occur. With that requirement, staff believe the Project may be found consistent with relevant Coastal Act wetland and ESHA policies and LCP ESHA policies.

Coastal-Dependent Override Provision

As discussed above, staff is recommending that the proposed Project be found inconsistent with Coastal Act and LCP provisions regarding the protection of ESHA. Generally, if a project is inconsistent with LCP or Coastal Act policies, and the inconsistencies cannot be addressed by requiring mitigation or alternatives, the Commission must deny a project. However, because Cal-Am's proposed Project is a coastal-dependent industrial facility, the Commission may consider approving it despite its nonconformity with provisions of the Coastal Act and LCP.

Coastal Act Section 30260, which is incorporated into the City of Marina's LCP, provides that the Commission may approve a CDP for a coastal-dependent industrial facility that is otherwise inconsistent with other Coastal Act Chapter 3 policies if it meets a three-part test: 1) alternative locations are infeasible or more environmentally damaging; 2) denial of the permit would adversely affect the public welfare; and, 3) the project's adverse environmental effects are mitigated to the maximum extent feasible. Application of the Section 30260 override provision is discretionary: if a project meets these three criteria, the Commission *may* approve the project, but is not required to do so. Conversely, if a project fails to meet one or more of the criteria, the Commission may not approve it.

Staff recommends that the Commission finds that there is no current alternative that can provide a reliable supply of water in the longer-term. Although the Pure Water Expansion is expected to meet demand in the near term, based on updated supply and demand estimates, the Pure Water Expansion project alone is likely inadequate to meet demand over the next twenty years. For that reason, denial of the Project would adversely affect the public welfare. Staff's recommended Findings recognize the need for long-term planning to address the region's critical water supply constraints and has conditioned this approval in ways that allow the Commission to evaluate any changed circumstances in the future (including any feasible alternatives that may emerge in the future) if the Project's construction timeline becomes too remote. Finally, through the imposition of a number of conditions, staff believes the Project's impacts have been mitigated to the maximum extent feasible.

Staff Recommendation
For the reasons described above, and as described in detail in the proposed Findings, staff recommends that the Commission **approve** the proposed Project with conditions. The proposed motions and resolutions are on page 11.

TABLE OF CONTENTS

I. MOTIONS & RESOLUTIONS **11**
A. Determination For Appeal A-3-MRA-19-0034 11
B. Determination For CDP 9-20-0603 11
II. STANDARD CONDITIONS **12**
III. SPECIAL CONDITIONS **13**
IV. FINDINGS & DECLARATIONS **38**
A. Project Description, Location, and Objectives 38
B. Project Background 45
C. Jurisdiction and Consolidated Permit Review 49
D. Findings on CDP Determination and De Novo Hearing 54
E. Environmentally Sensitive Habitat Areas – Terrestrial 55
F. Protection of Groundwater Resources 77
G. Environmentally Sensitive Habitat Areas - Wetlands and Vernal Ponds ... 85
H. Coastal Hazards 91
I. Environmental Justice 99
J. Tribal Consultation 116
K. Protection of Marine Life and Coastal Waters 119
L. Energy Consumption & Climate Change 125
M. Public Access and Recreation 129
N. Visual Resources 133
O. Assessment of Alternatives 135
P. Coastal-Dependent Industrial Facility Override 149
III. CALIFORNIA ENVIRONMENTAL QUALITY ACT **155**
APPENDIX A – SUBSTANTIVE FILE DOCUMENTS **156**

EXHIBITS

Exhibit 1 – Project Location
Exhibit 2 – Project Layout
Exhibit 3 – Proposed Project Well Field
Exhibit 4 -- September 20, 2022 letter from Cal-Am
Exhibit 5 – Map of Water District Jurisdictions
Exhibit 6 – Final EIR/EIS Summary of Terrestrial Biological Resources Mitigation Measures
Exhibit 7 – Map of Area Wetlands
Exhibit 8 – Coastal Hazards Technical Memorandum
Exhibit 9 – Map of Housing Burdened Communities
Exhibit 10 – Cal-Am letters regarding community benefits
Exhibit 11 – CPUC Public Advocates Office Water Demand/Supply Recommendations

APPENDICES

Appendix A – Substantive File Documents
Appendix B – Ex Parte Forms
Appendix C – Correspondence Received

I. MOTIONS & RESOLUTIONS

A. DETERMINATION FOR APPEAL A-3-MRA-19-0034

Motion

I move that the Commission approve Coastal Development Permit Application No. A-3-MRA-19-0034 pursuant to the staff recommendation.

Staff recommends a YES vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution

The Commission hereby approves Coastal Development Permit Application No. A-3-MRA-19-0034 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and, as applicable, will not prejudice the ability of the local government having jurisdiction over the relevant area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that will substantially lessen any significant adverse impacts of the development on the environment.

B. DETERMINATION FOR CDP 9-20-0603

Motion

I move that the Commission approve Coastal Development Permit No. 9-20-0603 pursuant to the staff recommendation.

Staff Recommendation of Approval:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Approve the Permit:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California

Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire five years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for an extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Other Permits and Approvals.** PRIOR TO ISSUANCE OF THIS PERMIT, the Applicant shall submit documentation from the following entities of final approvals, permits, and determinations required for the proposed Project or documentation from those entities that no further permits or approvals are required:

   Local –
   - **Monterey One Water ("M1W"):** authorization for connection to, and use of, the M1W ocean outfall.
   - **Monterey County:** encroachment permit(s) for construction of Project pipelines within the coastal zone and within County jurisdiction.
   - **Cities of Marina, Seaside, and Sand City:** encroachment permit(s) for construction and operation of Project pipelines within the coastal zone and within the jurisdiction of these entities.
   - **Transportation Agency of Monterey County ("TAMC"):** approvals necessary for construction and operation of Project pipelines within TAMC rights-of-way.

   State –
   - **State Lands Commission:** lease(s) of state tidelands for continued use of the Project's existing test well and of new proposed wells beneath state tidelands.
   - **Central Coast Regional Water Quality Control Board:** a National Pollution Discharge Elimination System ("NPDES") Permit allowing the discharge of effluent through the M1W outfall and approval to modify that outfall to allow the discharge.
   - **California Public Utilities Commission ("CPUC"):** final CPUC approval for construction of the Project, including but not limited to a final and binding CPUC determination in the pending proceeding (A.21-024) of water supply and demand estimates for the Monterey Peninsula Water Supply Project (MPWSP) that there is projected demand for additional water supply beyond the Pure Water Market Project Expansion (i.e., the project that would increase the capacity of the previously CPUC-approved Pure Water Market project from 3,500 AFY to 5,750 AFY) by or before 2050.

   Federal –
   - **Monterey Bay National Marine Sanctuary:** authorization from the Sanctuary to allow discharges into Sanctuary waters and drilling and disturbance of submerged lands within the Sanctuary. This is to include any necessary Biological Opinions from the U.S. Fish and Wildlfe Service and the National Marine Fisheries Service or confirmation from the Sanctuary that those Opinions are not required.

   Other –
   - **Other landowners:** authorization from any other landowners within the coastal zone on whose property the Applicant would conduct Project-related construction activities.

- **Legal:** a final judgment or other final disposition of the entirety of the pending action entitled *City of Marina v. RMC Lonestar, et al.*, Monterey County Superior Court No. 20CV001387 (in which the trial court has referred various issues to the Administrative Hearings Office of the State Water Resources Control Board for determination), Cal-Am shall provide proof of such judgment or disposition to the Executive Director. This permit shall not be issued if that judgment or disposition demonstrates that (1) the Applicant does not have, and cannot feasibly obtain, water rights (to the extent applicable) for the Project or (2) Cal-Am's project would cause harm to any aquifer that is a source of drinking water to the City of Marina or the Marina Coast Water District.

If any of these approvals or determinations result in changes to the proposed Project that are not evaluated in this CDP, the Applicant submit a complete application to amend this permit unless the Executive Director determines that an amendment is not necessary.

2. **Project Phasing.** This permit authorizes construction and operation of Phase I of the Project. To obtain authorization for construction and operation of Phase II, the Applicant shall submit an application for an amendment to this permit that includes all of the following:
   a. Authorization from the CPUC for the 6.4 mgd facility and any other required approvals.
   b. A detailed description of the proposed development associated with Phase II.
   c. An assessment of coastal resource effects from Phase II, including whether there are any changed circumstances from what was analyzed as part of this CDP review.
   d. Confirmation that the Applicant has submitted all required monitoring reports for the Phase I Project.

   The Applicant shall not begin operation of Phase II until the following criteria have been met:
   - Phase I has been in full operation for a minimum of two years; and
   - All required monitoring reports have been submitted, including the Groundwater Monitoring Report, Wetland Monitoring Report, etc., for a minimum two-year period, to demonstrate that the Project's Phase I has not caused any significant adverse effect on local groundwater supplies for the City of Marina and Marina Coast Water District, wetlands or other coastal resources.

3. **Construction Best Management Practices.** PRIOR TO STARTING CONSTRUCTION ACTIVITIES, the Applicant shall provide, for Executive Director review and approval, Construction Plans that address construction methods and Best Management Practices ("BMPs") of all project components and that include the following:

a) Construction areas: site plans showing the location of all construction areas, staging areas, fueling areas, and construction access corridors. The areas within which construction activities and/or staging are to take place are to be minimized to the extent feasible to reduce potential impacts to coastal resources.
b) Construction BMPs: the Plans shall identify the type and location of all erosion control and water quality BMPs that will be implemented during construction to protect coastal water quality. Silt fences, straw wattles, filtration equipment, and other similar materials are to be installed and maintained around the perimeter of all construction areas to prevent construction-related runoff and sediment from discharging directly into storm drains or coastal waters. The Plans shall identify all measures that will be used to keep the construction areas physically separate from public recreational use areas, such as using signage, temporary fencing, or other measures to delineate construction areas. The Plans are to also describe all measures that will be implemented to reduce the effects of construction noise and lighting of areas outside the delineated construction areas.
c) Equipment BMPs. Equipment fueling, washing, and maintenance shall take place at a designated hard-surfaced area where any leaks or spills can be contained and collected. All equipment shall be inspected at least daily to identify any leaks or potential leaks promptly. Any fueling and maintenance of mobile equipment conducted on site shall take place at designated areas located at least 50 feet from coastal waters, drainage courses, and storm drain inlets, if feasible (unless those inlets are blocked to protect against fuel spills). Fueling and maintenance areas shall be designed to fully contain any spills of fuel, oil, or other contaminants. Equipment that cannot be feasibly relocated to a designated fueling and maintenance area may be fueled and maintained in other areas of the site, provided that procedures are implemented to fully contain any potential spills.
d) Good Housekeeping BMPs. The Plans shall describe good construction housekeeping controls and procedures that will be implemented, including cleaning up all leaks, drips, and other spills immediately, keeping materials covered and out of the rain, covering exposed piles of soil and wastes, disposing of all wastes properly, placing trash receptacles on site and covering open trash receptacles during wet weather, and removing all construction debris from the site at least daily.
e) Construction timing: The Plans are to provide a construction schedule identifying the expected duration of construction and the hours and days construction is expected to occur.
f) Construction Coordinators. The Plans shall identify one or more designated construction coordinators at each construction site as the point of contact during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies). The Plan shall provide coordinators contact information, including, at minimum, an email address and a telephone number that will be made available 24 hours a day for the duration of construction and that shall be conspicuously posted at the job site where such contact information is readily visible from areas accessible to the public. The Plan shall require that the coordinators record all complaints received regarding construction activities,

including the nature of the complaints, contact information where available (e.g., name, phone number, and email address) and shall require the coordinator to investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry. All complaints and all actions taken in response shall be summarized and provided to the Executive Director upon request.

Copies of the approved Plans and of the signed CDP shall be maintained at the appropriate construction site(s) and be available to project personnel and the interested public upon request. All project personnel shall be briefed on the content and meaning of the CDP and the approved Plans prior to their start on project activities.

The Applicant shall implement development in accordance with this condition and the approved Construction Plans. Minor adjustments to the above requirements, as well as to the Executive Director approved Plan, which do not require a CDP amendment or a new CDP (as determined by the Executive Director), may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.

4. **Spill Prevention and Response Plan.** PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, the Applicant shall submit, for Executive Director review and approval, Project-specific Spill Prevention and Response Plans that address potential spills or releases of hazardous materials during both project construction and project operations. The Plans shall identify worst-case spill scenarios and demonstrate that adequate spill response equipment will be available. The Plans also shall include preventative measures that will be implemented to avoid spills and measures that will implemented should spills occur. The Plans shall specify responsibilities of contractors and project personnel. The Plans shall identify the location of all on- and off-site spill response equipment (including sorbent materials, booms, etc.) that will be available in the event of a spill, and the protocols and expected response times for deployment. The Plans are to clearly identify responsibilities of project personnel and contractors in the event of a spill and shall include necessary contact information for responsible personnel and involved emergency response agencies (e.g., Fire Department, U.S. Coast Guard, etc.).

5. **Closures for Species Protection.** Any construction activities at the Project well field or near the beach for outfall modifications shall occur outside of Western snowy plover breeding and nesting season (March 1 through September 30 of any year), unless authorized by the U.S. Fish and Wildlife Service (“USFWS”). Any construction activities within 30 feet of habitat known to be used by Smith’s blue butterfly shall occur outside of the annual butterfly flight season (June 1 to September 15 of any year) unless authorized by the USFWS. All Project maintenance and repair activities shall occur outside these closure periods to the extent feasible.

If the USFWS authorizations require any changes to the project as approved herein, the Applicant shall submit a complete application to amend this permit and receive approval from the Commission for those changes, unless the Executive Director determines no amendment is necessary.

6. **Permit Term.** This coastal development permit authorizes the approved project slant wells and associated components to be installed and remain on the Applicant's property within the CEMEX site for a period of 25 years, or until January 1, 2050, whichever occurs first. After such time, the authorization for the continuation and/or retention of these project elements shall cease, unless an extension of the permit term is approved, as set forth below.

   No later than two years prior to the end of this permit term, the Permittee shall apply for a new coastal development permit or amendment to this permit to remove, relocate, or rehabilitate these project elements or to modify this term of authorization. This application shall include, at a minimum, the most recent sea level rise projections for the project location, the most recent coastal erosion rates for the location, and the then-current location of site features, including the mean high tide line, foredunes, existing habitat types, and presence of any known or potential sensitive species using the site's habitat types. The application shall also identify and address changed circumstances and/or unanticipated impacts that have occurred or are reasonably expected to occur during the next 25-year period regarding environmental impacts and coastal hazards, including but not limited to ongoing sea level rise projections and changed projections of known and potential coastal hazards. It shall also describe any changes to coastal resources including those resulting from public access or modifications to site habitat types. Provided the Permittee submits a complete application by this date, the termination date for this permit shall be automatically extended until the time the Commission acts on the new or amended coastal development permit application.

   Failure to obtain a new or amended coastal development permit authorizing removal of and/or an additional term to retain the project elements shall cause this development to be in violation of the terms and conditions of this coastal development permit.

7. **Pre-Construction Biological Surveys and Monitoring During Construction.** The Permittee shall enlist one or more qualified biologists acceptable to the Executive Director, to conduct sensitive species pre-construction surveys and to monitor the project site during all construction activities per the following:
   a. **Pre-Construction Biological Surveys.** PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES IN SPECIFIED WORK AREAS, Protocol-level surveys shall be conducted for any species that have been previously documented in the work area, its buffers, or within 0.5-mile, and could be reasonably expected on the basis of other known factors (e.g.,

habitat suitability). Surveys shall be conducted to at least 100 feet beyond the specified work areas. In the event that the biologist(s) reports finding any sensitive wildlife (within three days or less of intended construction for a specified work area) or plant species (within the preceding bloom season) during the pre-construction surveys, the Permittee shall delay work, implement any pre-approved mitigation measures, and promptly notify the Executive Director as well as CDFW and/or USFWS, as applicable. Project activities may commence upon written approval from the Executive Director, following any necessary consultation with CDFW and/or USFWS. Surveys and mitigating measures shall additionally:

i. For western snowy plover, nesting surveys shall be informed by the cumulative and trending record of habitat use from recent years and extend out to 500 feet from the work area.

ii. For legless lizards, use a triple-pass method where hand rakes are passed through the upper three inches of soil below the current vegetation layer in areas of appropriate habitat, and each sequential pass should demonstrably locate progressively fewer animals. The first pass shall occur in the early morning, when the species is most readily captured, and an overnight period of no soil disturbance shall be allowed before the second pass. If no animals are found during the second pass, they may be assumed absent and no third pass shall be required. If animals are found during the first or second passes, a third pass shall be required.

iii. For all nesting birds, other than western snowy plover and burrowing owls, surveys shall be completed no more than 72 hours prior to the commencement of construction activities and provide for a minimum of 300-ft buffers for non-raptor species and 500-ft buffers for raptor species, unless determined less may be acceptable during consultation with CDFW and/or USFWS, as appropriate. At a minimum, buffers shall not be reduced below 50 feet or 250 feet for non-raptors and raptors, respectively, and noise shall not exceed 65 dBA at any sensitive receptor site. Noise barriers and visual screens may be considered, in consultation with the Executive Director.

iv. For American badgers, surveys shall include areas along the pipeline alignments in vegetation communities where burrows have been previously recorded, including the various scrubs.

v. For Monterey dusky-footed woodrats, surveys shall extend out to 100 feet from the specified work area.

vi. Include the Executive Director in all relevant natural resource consultations and provide all survey results and supporting documentation, including submissions to other agencies.

b. **Biological Monitoring During Construction.** PRIOR TO COMMENCEMENT OF CONSTRUCTION EACH DAY, the biologist(s) shall inspect the active project areas to ensure that the day's activities will not result in impacts to sensitive species or encroach on established buffers. The biologist(s) shall document the results of each daily pre-

construction survey; the Permittee shall retain and make these available upon request. Construction activities may not commence until any sensitive wildlife species have the left the project area and its vicinity and/or any sensitive plant species have been sufficiently protected or salvaged in accordance with the approved final Habitat Mitigation and Monitoring Plan, pursuant to **Special Condition 10**. In the event that the biologist(s) determines that any sensitive species exhibit reproductive or nesting behavior, the Permittee shall cease work and promptly notify the Executive Director as well as CDFW and/or USFWS, as applicable; construction activities may only resume upon written approval of the Executive Director. If impacts or injury occur to sensitive species, the Permittee shall notify the Executive Director as well as CDFW and/or USFWS and will be advised of the appropriate action or mitigation to be taken.

The biologist(s) shall possess the authority to halt work to prevent any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise and until they are satisfied that the issue has been resolved. The biologist(s) shall immediately notify the Executive Director if development activities outside of this permit occur and document any incidents requiring the stoppage of work.

8. **Construction Impact Validation and Compensatory Mitigation Ratios for Habitat.** NO LESS THAN 90 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ANY SPECIFIED WORK AREA, the Permittee shall submit baseline surveys documenting, at a minimum: the physical extent and acreage of all habitats within proposed impact areas; each vegetation community's native species diversity, native species cover, invasive species cover, and the relative cover of dominant native vegetation species; and the vegetation community's age classes and/or size structure distributions. Surveys shall be conducted during the late spring/early summer season when most plant species are blooming and readily identifiable, unless otherwise proposed with clear justification, for review and approval by the Executive Director. Existing records and documentation shall be considered in conjunction with the new data to establish as comprehensive a baseline as possible. Any sensitive species detections not previously documented in submitted materials shall be clearly reported, including with annotations identifying occurrences as new, and shall be additionally submitted to CDFW and/or USFWS, as appropriate, and to the California Natural Diversity Database (CNDDB). Photos shall be taken from designated points across the survey area, at spacings and perspectives sufficient to represent existing conditions and support impact evaluations. In addition, post-construction surveys, final impact assessments, and compensatory mitigation requirements shall follow as:
    a. **Post-Construction Surveys.** For each habitat, post-construction surveys shall document, at a minimum: the physical extent and acreage of all impacted habitats, and the activities that occurred within the area, including any vegetation clearance, mortality, or other significant reduction

in vegetation cover due to project activities (e.g., pruning), or ground disturbance. Post-construction surveys shall be completed within 90 days of completion of construction activities in a specified work area and for impacts anticipated to be potentially characterized as temporary, additionally document, at a minimum: the dates of initial and final project-related disturbance to the habitat; each vegetation community's native species diversity, native species cover, invasive species cover, and the relative cover of dominant native vegetation species; the vegetation community's age classes and/or size structure distributions; and, photos from the designated points used for pre-construction surveys, to support impact evaluations.

i. **Impact Validation Report.** A final report comparing the extent and nature of impacts as estimated by the Permittee in the submitted materials with those actually observed following construction shall be submitted within 30 days of post-construction survey completion, for Executive Director review and approval. The observed impacts, once approved, shall form the basis of the compensatory mitigation obligation. If the observed impacts are significantly greater than what has been assessed as part of the Commission's authorization, a permit amendment will be required to address the discrepancy, unless determined unnecessary by the Executive Director. Any such differences between estimated and observed impacts shall require revision or supplement to the HMMP pursuant to **Special Condition 10**.

b. **Temporary Impacts.** Short-term temporary impacts are those that are fully restored within 12 months of initial construction activity disturbance, and long-term temporary impacts are those that may occur for up to a 24-month period from the initial disturbance but require no more than 12 months following the conclusion of construction activity to fully recover. Any impacts that do not meet these timing parameters, significantly disturb the ground (e.g., trenching), or fail to recover vegetation communities to equal or better condition in terms of native diversity, native species cover, the relative cover of dominant native vegetation species, and vegetation community age classes and/or size structure distributions shall be considered permanent and mitigated for pursuant to sub-section C of this condition. Any impacts determined to qualify as temporary shall be mitigated for at a minimum of 1:1 (short-term) or 1.5:1 (long-term) ratio, and comply with the following terms:

i. **On-Site Mitigation.** No less than 1:1 of the mitigation shall occur in-kind and on-site, where temporary impacts are observed.

ii. **Off-Site Mitigation.** For long-term temporary impacts, the balance (0.5:1) shall occur as in-kind mitigation unless no feasible option is available and a clear nexus is identified, subject to Executive Director review and approval. The balance of mitigation acreage shall occur within the geography specified for all compensatory

mitigation in **Special Condition 10** **[HMMP]** and where it can be protected in perpetuity.

iii. **Invasive Species Treatments.** All California Invasive Plant Council (Cal-IPC) -listed species will be removed from temporarily impacted ESHA such that species ranked "high" shall not exceed a total of 1% cover and all ranked invasives shall not exceed a total of 5% cover. If this cannot be achieved by hand, for any herbicide proposed for potential use, the following information shall be provided prior to its use, for review and approval by the Executive Director: rationale for why herbicide(s) would constitute the least environmentally damaging alternative and detail on the specific product(s) that would be used, including certification by the California Department of Pesticide Regulation and allowance for the intended application.

iv. **Revegetation Requirements.** Any revegetation intended to address temporary impacts shall include, at a minimum, replanting with locally and genetically appropriate native species. Documentation of all plant material sources shall be provided.

v. **Restoration Report.** Within 30 days of completion of any active restoration work, the Permittee shall submit a post-restoration report documenting the areas where revegetation and invasive species treatments have occurred.

vi. **Final Short-term Temporary Impact Survey.** Within twelve months of the initial disturbance, the Permittee shall conduct a survey that describes whether areas (physical extents and acreages) identified as short-term temporarily-impacted have returned to their pre-impact condition (or better) by comparison with the baseline condition for each vegetation community, including native species diversity, native species cover, the relative cover of dominant native vegetation species, and the vegetation community's age classes and/or size structure distributions. Invasive species cover shall also be described. The survey shall be detailed in a report, to be submitted by the Permittee within 30 days of final survey completion, for Executive Director review and approval. If the survey demonstrates impacts persist or any revegetation effort has been unsuccessful, in part or in whole, any remaining impacts are, by definition, permanent, and shall be mitigated accordingly and shall require revision or supplement to the HMMP pursuant to **Special Condition 10**. Digital copies of the survey data and associated metadata shall be provided with the reports.

vii. **Final Long-term Temporary Impact Survey.** Within twelve months of the conclusion of disturbance, the Permittee shall conduct a survey that describes whether areas (physical extents and acreages) identified as long-term temporarily-impacted have been returned to their pre-impact condition (or better) by

comparison with the baseline condition for each vegetation community, including native species diversity, native species cover, the relative cover of dominant native vegetation species, and the vegetation community's age classes and/or size structure distributions. Invasive species cover shall also be described. The survey shall be detailed in a report, to be submitted by the Permittee within 30 days of final survey completion, for Executive Director review and approval. If the survey demonstrates impacts persist or any revegetation effort has been unsuccessful, in part or in whole, any remaining impacts are, by definition, permanent, and shall be mitigated accordingly and shall require revision or supplement to the HMMP, pursuant to **Special Condition 10**. Digital copies of the survey data and associated metadata shall be provided with the reports.

c. **Permanent Impacts**. All impacts failing to qualify as temporary for any of the above cited reasons shall be recognized as permanent and mitigated for, consistent with the following:
    i. A minimum ratio of 3:1 for ESHA impacts, where this base ratio assumes compensation as habitat creation or substantial restoration. Alternatively, enhancement or preservation strategies may be proposed at no less than double or triple the base ratio, respectively. No net loss of dune habitat(s) shall be assured by provision of a minimum 1:1 as habitat creation for the total acreage where permanent development will be located (e.g., the slant well pads and access road infrastructure); any remaining balance may be addressed through the various mitigation strategies, with adjustments to the discounted ratio, as described above (e.g., 2:1 may be satisfied via creation or substantial restoration, or as 4:1 via enhancement, or as 6:1 via preservation).
    ii. All habitat mitigation for permanent impacts, and the 0.5:1 fraction for it, shall occur within areas that are or will be protected, as consistent with **Special Condition 9**.
    iii. Mitigation requirements for particular species impacts, as may be required by other agencies, may be folded into those for ESHA but may not conflict with or otherwise replace the requirements of this permit, and alternatively, may necessitate additional acreage or other requirements.

9. **Dune Habitat and Open Space Protection.** PRIOR TO THE START OF CONSTRUCTION, the Permittee shall submit to the Executive Director for review and approval evidence of existing deed restriction(s) or documentation irrevocably dedicating habitat and open space conservation easement(s) in perpetuity, consistent with the following terms:
    d. **Objective.** Existing restriction(s) and/or conservation easement(s) shall provide for the protection, creation and/or improvement of dune habitat in the subject area(s). At a minimum, the 1:1 dune habitat creation

requirement in **Special Condition 8** **[Construction Impact Validation and Compensatory Mitigation Ratios for Habitat]** shall be satisfied by the establishment of new protections over previously unprotected lands and activities necessary to restore natural dune processes at the site(s). Outside the TAMC corridor, any additional areas supporting compensatory mitigation shall be afforded the comparable protections, whether existing or established by necessity of this permit.

e. **Allowable Uses and Development.** No development, as defined in Section 30106 of the Coastal Act, shall occur within the easement area(s) except for those consistent with ESHA (*e.g., restoration activities, nature study, and low impact recreation)*.

f. **Recordation.** Conservation easement(s) shall be recorded free of prior liens and any other encumbrances that the Executive Director determines may affect the interest being conveyed and shall include formal legal descriptions of the entirety of the parcel, a metes and bounds legal description and graphic depiction, prepared by a licensed surveyor based on an on-site inspection, drawn to scale and approved by the Executive Director, of the dedicated easement area(s). Such easement(s) shall run with the land, binding successors and assigns of the Permittee and the landowner and indicate that the restrictions on the use of the land shall be in effect upon recording and remain as covenants, conditions, and restrictions running with the land in perpetuity.

g. **Dedication.** The Permittee may dedicate dune habitat and open space conservation easement(s) to another public entity, including State Parks or another land management entity, upon approval of the Executive Director.

h. **Deadline.** The Executive Director may extend the deadline if they determine that the Permittee has been diligently pursuing the conservation easement, and that the Permittee has demonstrated good cause for any identified delays.

10. **Habitat Mitigation and Monitoring Plan.** PRIOR TO PERMIT ISSUANCE, the Permittee shall submit two copies of a final Habitat Mitigation and Monitoring Plan (HMMP) prepared by a qualified restoration ecologist to the Executive Director for review and written approval. Impact acreages, which shall be the basis of compensatory mitigation requirements, are estimated in the materials submitted on October 24, 2022 and shall be finalized per **Special Condition 8**.

    i. **Compensatory Mitigation Options.** Compensatory mitigation requirements for habitat impacts may be satisfied by any of the following three alternatives, or combination thereof, with the exception of the dune creation requirement to achieve no net loss of dune acreage, which must be fulfilled on lands not yet protected and contribute significantly to the restoration of coastal dune processes:

        i. **Protection and Improvement of Unprotected Lands.** Lands that presently support or would appropriately support dune habitat(s) following habitat improvement activities may be acquired or otherwise moved into protection from future development threats

(e.g., conservation easement), for the purposes of habitat conservation. Such lands may be of singular or multiple nature, include sites of variable habitat condition, and involve acquisition, restoration or enhancement activities as part or all of the compensation due for habitat impacts and losses associated with the permitted project. Newly protected but unimproved lands will qualify as preservation whereas protected and improved lands may qualify for credit as restoration or enhancement, if approved by the Executive Director.

ii. **Improvement of Protected Lands.** Lands that presently support or would support dune habitat(s) following habitat improvement activities, and which occur on lands already protected for the purposes of habitat conservation, may be restored or enhanced with agreement and coordination with the landowner and Executive Director. In such case, the landowner may specify the acreage available and terms of agreement between the Permittee and landowner. Land already obligated to other regulatory requirements, including but not limited to prior Commission decisions, legal obligation, and Habitat Conservation Plans, shall not be considered available as compensation for this project unless the work would demonstrably exceed those obligations and provide mitigation determined by the Executive Director to be not otherwise available. The landowner shall be included in all discussions concerning site restoration priorities, goals and objectives, methods, maintenance, etc. The Executive Director shall review and approve any tentative agreement between the Permittee and landowner prior to execution, to ensure that all terms are consistent with the requirements of this and other Special Conditions.

iii. **In-Lieu Fees.** A fee of $250,000 per acre of required restoration shall be assessed and paid into an interest-bearing account to be established and managed by a government or non-governmental organization as approved by the Executive Director, for the sole purpose of financing dune habitat protection, restoration, and related activities in the region not otherwise already provided for. If a suitable account to accept and administer in-lieu fee funds for dune habitat in the region does not already exist, the Permittee shall be responsible for facilitating the development and initiation of such an account, including through the provision of funds to establish the account. Any additional costs associated with administering the prescribed fees for habitat benefit shall be the responsibility of the Permittee. For each year between the time of Commission approval and the payment of any in-lieu fees, the cost per acre shall be adjusted by any increase in the consumer price index applicable to the Monterey region. All of the habitat-directed funds and any accrued interest shall be used as consistent with the above stated purposes, in consultation with the Executive Director.

NO LESS THAN 90 DAYS PRIOR TO PERMIT ISSUANCE, if insufficient acreage has been secured by the Permittee for either protection or improvement, the balance shall be assessed as a non-refundable in-lieu fee per the terms above. Evidence of all fees having been received into an approved account shall be provided PRIOR TO PERMIT ISSUANCE.

Any and all lands that would be protected and/or improved shall occur within the coastal zone, in dune habitats situated between the southern boundary of the Salinas River and northern boundary of the City of Monterey, and west of Highway 1. Any in-lieu fees that would be paid as compensation shall be applied to the protection and improvement of dune habitats in this same geography. Any and all lands that would support compensatory mitigation requirements, including those that would be protected or improved using in-lieu fees, shall be subject to the requirements of **Special Condition 9** with the sole exception being for temporary impacts that would be restored on-site and in-kind within the TAMC corridor.

j. **Plan Components.** The final HMMP shall include, at a minimum, each of the following components and may necessarily be structured to address multiple mitigation sites:
   i. **Introduction.** Description of the HMMP purpose including an overview of the proposed project associated with the HMMP; a summary of impacts for which the HMMP is intended to mitigate; identification of the general mitigation strategies to be used; the proposed on-site and off-site mitigation locations; and the mitigation areas intended to compensate for each affected resource.
   ii. **Mitigation Goals and Objectives.** Statement of mitigation goals, including the desired habitat type(s), major vegetation components, and sensitive species and wildlife support functions; description of the desired habitat with rationale, to be based on a high functioning reference site where feasible and alternatively, derived from literature describing either the site's historic conditions or "typical" regional habitat conditions; specific, actionable objectives to support stated goals; and a detailed timeline laying out all major activities including any outstanding preliminary work such as surveys, site preparation, mitigation implementation including revegetation activities, interim and final monitoring periods, etc.
   iii. **Description of Existing Habitat(s).** Separate sections describing each of the impacted native habitat types including coastal dune, coastal scrub, and mixed chaparral habitat; final figures, maps, and related information depicting existing ecological resources; and specification of impacts for which the HMMP is intended to mitigate.
   iv. **Design Plans and Construction Methods.** Specification of final mitigation site design and construction methods consistent with identified goals and objectives, including but not limited to:

1. **Mitigation Design**. Detailed plans showing final topography, vegetation, and any other significant features characteristic of the intended habitat; and how these connect to the surrounding environment.
2. **Site Preparation.** Methods and plans for salvage of any plant and/or seed material (including collection from impact areas, storage, relocation, and/or reestablishment); salvage of any topsoils to be stock-piled and reused in the mitigation area; any demolition, debris removal, grading, decompaction, soil amendment, or other substrate-affecting activities; erosion control measures; and treatment of invasive species.
3. **Best Management Practices.** Detailed list of all BMPs that will be implemented as part of project implementation, including triggers for further or remedial action.
4. **Revegetation Plans.** Details on plant palettes; stocks and seed mixes; material sourcing including verification of local and genetically appropriate nature; any proposed irrigation including rationale, method, and schedule; and provisions for removal of any temporary infrastructure following plant establishment.

v. **As-Built Report.** Provision that eight (8) weeks following completion of mitigation site construction and revegetation activities, an as-built report summarizing mitigation activities to-date, a description of consistency with approved plans, documentation of acreage treated, maps and descriptions any temporary infrastructure installed, photos taken from fixed points, and a description of consistency with all terms and conditions, to be submitted to the Executive Director.

vi. **Invasive Species Control.** Provision for continued control of all California Invasive Plant Council-listed species and description of monitoring and control methods. If any herbicide is proposed for potential use, rationale for why it would constitute the least environmentally damaging alternative and detail on the specific product(s) that would be used, including its certification by the California Department of Pesticide Regulation and allowance for the intended application.

vii. **Monitoring Plan.** Detailed plan for quantitatively monitoring the condition and progress of the mitigation site during both the initial mitigation phase as well as over the long-term at reduced frequency and intensity; performance relative to set criteria, as informed by robust sampling and statistics; triggers for adaptive management action; and reporting. Specifically:

1. **Monitoring Frequency.** During the initial phase of no less than five (5) years or three (3) years following cessation of all remedial measures except weeding, whichever is longer,

quantitative monitoring at least once per year during the period of rapid plant growth and flowering, generally in spring or early summer, unless a clear rationale for otherwise is fully presented. Following the determination that success criteria have been met, long-term monitoring to inform maintenance and adaptive management shall occur at a frequency of no less than five (5) years.

2. **Success Criteria.** Final success criteria supported by interim criteria, the latter of which are intended to serve as benchmarks and guide adaptive management, whereas the former will enable measure of mitigation success. Criteria shall have a clear empirical basis (i.e., reference sites and/or published technical literature appropriate for the local area) and generally include representativeness of target vegetation communities (e.g., species composition, cover, structure, diversity, and presence of major structure-producing and habitat-defining species); physical parameters such as topography, bare substrate, and hydrology; and target wildlife support functions or usage. Criteria may be fixed values where there is a strong empirical basis, but, where feasible, should be relative to high-functioning reference sites in order to account for environmental variability. Reference sites should be located within the geography identified in subsection (a) of this condition and be similar to the mitigation site with regard to soil type, aspect, slope, and other relevant abiotic characteristics, and shall be identified, sampled, and quantitatively described as a component of the monitoring plan. Invasive species ranked by the Cal-IPC as “high” shall not exceed a total of 1% cover, and all ranked invasives shall not exceed a total of 5% cover.
3. **Performance Assessment.** Methods for judging mitigation success shall include supporting rationale for their selection and be specified in terms of the type(s) of comparison, including whether relative to fixed criteria or reference sites; identification of any reference sites that will be used; test(s) of similarity; specification of the maximum allowable difference or effect size between the mitigation value and the reference value for each success criterion; and where statistical tests will be employed, statistical power analyses to document that the planned sample sizes will provide adequate power to detect maximum allowable differences. For such a test, alpha must equal beta; these values are typically 0.10 or 0.20, depending on the expected natural variability of the variables of interest.

4. **Sampling Design.** The field sampling program shall be designed in conjunction with the success criteria and selected methods of assessment. The sampling design and methods shall provide sufficient detail to enable an independent scientist to duplicate them, including a description of the randomized placement of sampling units, sampling unit size, planned number of samples, etc.

viii. **Reporting.** Monitoring of and reporting on the mitigation site shall occur annually for no less than five (5) years, and for at least three (3) years following the conclusion of all remediation and maintenance activities other than weeding, whichever is later. All reports shall be prepared by a qualified restoration ecologist and be submitted to the Executive Director for review and approval, no later than December 31st of each year. Raw data and associated metadata shall be delivered with all reports (in digital format).

1. **Annual Monitoring.** Beginning the year after the mitigation project has been installed, annual monitoring reports shall be due each year, including photos taken from fixed points; assessment relative to interim success criteria; a work plan for the subsequent year; and specific recommendations to adaptively manage the effort and facilitate mitigation success. Once a monitoring report is approved by the Executive Director, recommendations identified in the report shall become prescriptive unless otherwise advised in writing.
2. **Final Annual Monitoring Report.** A final monitoring report shall be submitted at the conclusion of all mitigation efforts, no sooner than five (5) years following mitigation implementation and summarize all prior reports; provide a detailed timeline of the overall progress and success; and include sufficient detail to evaluate comprehensive mitigation compliance with the specified goals, objectives, and success criteria set forth in the approved HMMP.
3. **Long-Term Monitoring Reports**. Associated with the long-term monitoring, reports shall be provided to summarize results, document any management actions that have been taken on the mitigation site, and any recommendations for management action going forward.

ix. **Long-Term Maintenance and Adaptive Management.** If a long-term monitoring report indicates that there has been substantial decline in the condition of the mitigation site, adaptive management shall be implemented to resolve this issue(s) to the extent feasible.

x. **Provision for Possible Further Action.**

1. Impact Validation. If final post-construction impact validation surveys or temporary impact performance assessments pursuant to **Special Condition** **8** indicate that

additional compensatory mitigation is necessary, in part or in whole, the Permittee shall submit within 90 days a revised or supplemental HMMP to compensate for those increases relative to the original estimates. The revised or supplemental HMMP(s) shall be prepared by a qualified restoration ecologist approved by the Executive Director and shall specify plans to compensate for the additional acreage consistent with all requirements of this Special Condition, to be reviewed and approved by the Executive Director. The revised HMMP may be processed administratively by the Executive Director, unless the Executive Director determines that an amendment to the original CDP is necessary.

2. **Non-performance.** If the final annual monitoring report indicates that the mitigation effort has been unsuccessful, in part or in whole, based on the approved success criteria, the Permittee shall submit within 90 days a revised or supplemental HMMP to compensate for those portions of the original program which did not meet the approved success criteria. The revised or supplemental HMMP(s) shall be prepared by a qualified restoration ecologist approved by the Executive Director and shall specify measures to remediate those portions of the original approved HMMP that have failed or have not been implemented in conformance with the original approved HMMP. These measures, and any subsequent measures necessary to carry out the approved revised or supplemental HMMP, shall be carried out in coordination with the direction of the Executive Director until the approved revised or supplemental HMMP is established to the Executive Director's satisfaction. The revised HMMP may be processed administratively by the Executive Director, unless the Executive Director determines that an amendment to the original CDP is necessary.

xi. **Partnering Agencies and/or Subcontractors.** The Permittee remains responsible for meeting all CDP terms and conditions, including funding of the full cost and implementing all measures to minimize and fully mitigate project impacts to coastal dune, coastal scrub, and mixed chaparral habitat. If the Permittee elects to enter into a binding agreement with a third-party agency or land management entity to carry out all or a portion of these HMMP requirements, the Permittee shall submit draft agreement provisions to the Executive Director for review and approval prior to finalizing any such agreements.

xii. **Consistency.** The Permittee or the approved third-party entity shall undertake development in accordance with the approved HMMP. The Executive Director may approve minor adjustments to these terms if the Executive Director determines that the adjustments (1)

are de minimis in nature and scope, (2) are reasonable and necessary, (3) do not adversely impact coastal resources, and (4) do not legally require an amendment.

11. **Groundwater Protection.** The Applicant shall install the Project's slant wells to extend at least 1,000 feet seaward of the proposed well head locations and shall screen the wells so they extract from the 180-Foot Aquifer as far seaward as is feasible and without penetrating the 400-Foot Aquifer. Any proposed changes to this approved installation must be reported to the Executive Director for a determination as to whether those changes would require an amendment to this permit.

12. **Monitoring and Remedial Measures to Protect Groundwater.** PRIOR TO ISSUANCE OF THIS PERMIT, the Applicant shall provide, for Executive Director review and approval, a Groundwater Monitoring Plan intended to ensure the Project's source water pumping does not adversely affect the aquifers that are a source of drinking water to the City of Marina and the Marina Coast Water District. The Plan shall include the following:
    a) A detailed description, including maps and diagrams of area aquifers, including those the Applicant would rely upon for the Project's source water and those relied upon by the City and Water District for drinking water. The description shall identify all known existing monitoring or production wells screened within each aquifer. It shall also identify any known existing groundwater monitoring (water level and water quality) that is currently occurring and the availability of the data.
    b) A narrative characterization of all known sources affecting these aquifers (e.g., existing withdrawals for municipal or agricultural purposes, precipitation rates, seasonal variations, inputs or outputs from surface water features, etc.) and the extent of any known existing contamination sources (e.g., locations and rate of seawater intrusion, contaminant plumes, etc.). It shall also describe the known or expected degree that these sources affect the aquifers.
    c) A comprehensive groundwater monitoring program designed to assess how the Project's proposed source water pumping could affect the quality and availability of freshwater within the aquifers relied upon by the City and Water District as sources of drinking water. This program shall include the following components:

        i. Statement of monitoring goals to ensure that the monitoring will adequately identify the percentage of seawater extracted by the Project, will detect any change in the rate of seawater intrusion that the Project might induce, and will provide sufficient time to modify Project operations if monitoring identifies potential harm to the aquifers from those operations.
        ii. A description of monitoring and other measures that will be implemented to establish baseline conditions. This shall include identification of proposed well locations and methods to be used to collect data, existing data to be used, measures to ensure the baseline conditions are sufficient to identify changes that occur from seasonal and water year type

variations. Baseline data shall be collected for at least one year before Project pumping begins.

iii. A description of monitoring methods and frequency to be implemented during Project operations, including the locations and depths of existing or proposed monitoring wells, methods of data collection and review (including frequency of data review), data management and storage, and intended purpose of the data being collected, and shall describe the analyses to be conducted to determine whether adverse effects are likely to occur. All monitoring data collected by the Applicant pursuant to this permit shall be publicly available and posted on the Applicant's website in a clear and conspicuous manner. Monitoring frequency should be adequate to characterize relevant scales of variability and should be conducted continuously for at least the first two years. If continuous monitoring is not feasible, the Plan shall include a justification explaining why.

iv. Proposed thresholds or criteria for total dissolved solids and any other relevant water quality constituents as well as groundwater levels that will be used to indicate or predict potential harm to local groundwater supplies consistent with monitoring goals described in (a). The criteria or thresholds will be established through an appropriate statistical analysis prepared by the Applicant, and the analysis shall identify the methods to evaluate any statistically significant deviations from the baseline data. The Plan shall include a justification for each proposed threshold.

v. A description of model validation to be conducted. This shall include methods to incorporate the above-referenced baseline data and subsequent operational data into the Project's modeling to assess the ability of the model to accurately predict groundwater conditions and identify what, if any, changes can be made to improve its reliability. Model validation shall also incorporate available and relevant Aerial Electromagnetic survey data and modeling into the proposed model validation, as appropriate.

vi. A description of data analyses to be performed to assess impacts to local aquifers including a comparison of monitoring results to baseline conditions and the thresholds described above. If this involves updated groundwater modeling, provide a description of the proposed models, proposed statistical analyses to be conducted, and how monitoring data will be used. As part of the statistical evaluation, the monitoring data collected will be used to evaluate statistically significant deviations from monitoring criteria or thresholds compared to background levels.

vii. Proposed remedial measures and operational controls that could be implemented should any of the above thresholds be reached. Remedial measures for thresholds indicating a lower level of concern may include further in-depth studies to investigate why a particular threshold has been reached. The proposed remedial measures shall include procedures for immediate notification to the Executive Director if Applicant discovers any exceedance of a threshold or criteria established pursuant to this Special Condition. Other remedial measures may include, but are not limited to, reduced or no pumping from one or more wells, repair and maintenance of

existing intake or groundwater supply wells, relocation or redrilling of intake wells, groundwater recharge or similar projects implemented in partnership with affected water supply providers, or other measures to address groundwater quality or supply concerns. All remedial measures shall include timelines for implementation and reporting requirements to the Executive Director.

d) Annual reporting: The Plan shall include a provision for annual reporting of groundwater monitoring results. The annual report shall be submitted to the Executive Director as well as posted on a publicly accessible website and shall include annual results as well as results from previous years. The report shall also discuss comparison of annual data and/or multi-year data (if appropriate) to the thresholds identified in subsection (d), a discussion of planned remedial measures and the success of any previously implemented remedial measures, and an overall assessment of achievement of the monitoring goals set out in subsection (a).

The Applicant shall provide the funding necessary to allow the Executive Director to hire one or more independent third-party reviewers to evaluate the proposed Plan and to recommend any changes to the Plan necessary to ensure it is adequately protective of the aquifers used by the City and Water District. If, after any Executive Director approval of the Plan, new information becomes available to the Applicant demonstrating that less stringent criteria (e.g., Total Dissolved Solids, salinity concentrations, etc.) are adequately protective of sources of drinking water in the relevant aquifers, the Applicant may seek an amendment to this permit unless the Executive Director determines that an amendment is not needed.

13. **Wetlands and Vernal Pond Adaptive Management Program.** PRIOR TO PERMIT ISSUANCE, the Applicant shall submit a Wetlands and Vernal Pond Adaptive Management Program, for review and approval by the Executive Director. The Applicant shall provide the funding necessary to allow the Executive Director to hire one or more independent third-party reviewers to evaluate the proposed Plan and to recommend any changes to the Plan necessary to ensure it is adequately protective of area wetlands and vernal ponds.

The Plan shall provide for the following:

k. Data collection and monitoring during Project operations of wetlands and vernal ponds within, at a minimum, the Project's drawdown zone plus a buffer area extending a distance of at least 50% beyond the edge of the drawdown zone. The Program shall identify the wetland areas to be monitored within this zone. If there is evidence that wetland areas outside this specified monitoring area could be affected by pumping, these wetland areas should also be included in Program. The data collection shall occur annually for no less than two (2) years immediately prior to operations and the first five (5) years following commencement of operations. For vernal ponds and all other wetland types within the monitoring area, appropriate reference sites shall be required to the extent

feasible, and monitoring parameters shall include, at a minimum: evaluation of wetland extent consistent with the Commission's regulations; depth of surface water; depth of saturation; depth to groundwater; characterization of other potential hydrologic inputs; hydroperiods (including duration and timing); water temperature and salinity; characterization of vegetation communities and their relative extents and conditions (e.g., stressed, healthy); root zone depth; and surveys for rare or otherwise sensitive plant and wildlife species. Remote-sensing along with on-the-ground monitoring efforts shall be used. Wetland delineations shall be completed annually. The annual results of Stage 1 shall be submitted to the Executive Director for review and approval by December 31 of each year. Subject to the Executive Director's review and approval, if at the end of the data collection period the results clearly demonstrate that there is no connection between the Project's pumping and the wetlands and/or vernal ponds within the Project's drawdown Project zone and buffer area, the Permittee's requirements under the Wetland and Vernal Pond Adaptive Management Program will be satisfied.

If at any time during the five (5) years of supplemental data collection, the results of Stage 1 suggest that there is a connection between the Project's pumping and the wetlands and/or vernal ponds within the Project's drawdown and buffer zones, the Permittee shall develop a Wetland Resiliency, Enhancement, Restoration, and Monitoring Plan (Plan) to address any, and all, prior and future impacts. The Permittee shall apply for and obtain the Commission's approval of the Plan in the form of an amendment to this permit.

14. **No Future Shoreline Protective Device.**
    a) By acceptance of this permit, the Applicant agrees, on behalf of itself and all other successors and assigns, that no shoreline protective device(s) shall be constructed to protect the wellheads and related development approved pursuant to Coastal Development Permit No. 9-20-0603 in the event that the development is threatened with damage or destruction from flooding, waves, erosion, storm conditions, sea level rise, or other natural hazards in the future. By acceptance of this permit, the Applicant acknowledges that the project is new construction for which there is no right to construct shoreline protective devices, and hereby waives, on behalf of itself and all successors and assigns, any rights to construct such devices that may exist under applicable law.
    b) By acceptance of this permit, the Applicant further agrees, on behalf of itself and all successors and assigns, that the landowner(s) shall remove the development authorized by this permit if: (a) any government agency has ordered that the structures are not to be occupied due to coastal hazards, or if any public agency requires the structures to be removed; (b) essential services to the site can no longer feasibly be maintained (e.g., utilities, roads); (c) the development is no longer located on private property due to the migration of the public trust boundary; (d) removal is required pursuant to LCP policies for

sea level rise adaptation planning; or (e) the development would require a shoreline protective device to prevent a-d above.

c) In the event that portions of the development fall to the beach before they are removed, the landowner(s) shall remove all recoverable debris associated with the development from the beach and/or ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit. Prior to removal, the Applicant shall submit two copies of a Removal Plan to the Executive Director for review and written approval. The Removal Plan shall clearly describe the manner in which such development is to be removed and the affected area restored so as to best protect coastal resources, including the beach and Pacific Ocean.

15. **Assumption of Risk, Waiver of Liability, and Indemnity.** By acceptance of this permit, the Applicant acknowledges and agrees (i) that the site may be subject to hazards from tsunami, storm waves, surges, and erosion; (ii) to assume the risks to the Applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

16. **Reporting of Environmental Justice Benefits.** The Applicant shall submit an annual report to the Executive Director that describes and provides the status of all Project-related measures meant to reduce Project costs to low-income ratepayers. These shall include, but are not limited to:

- All measures taken to enroll additional ratepayers into the Applicant's Customer Assistance and Low-Income Ratepayer Assistance programs, including the number and percentage of customers enrolled.
- All measures implemented to provide low- or no-cost purchase and installation of low-flow water fixtures (e.g., sink and bath faucets, showerheads, toilets, etc.), including the number of each type of fixture installed.
- The status of all requested or required CPUC proceedings meant to reduce costs to low-income ratepayers.
- All measures implemented to ensure that once deliveries of desalinated water from the Project start, ratepayers enrolled in these programs are subject to a rate increase of no more than $10.00 per month for any costs associated with the delivery of desalinated water from the Project for a period of at least five years after start of those water deliveries.
- A description of outreach activities to low-income ratepayers to inform them of the cost-saving measures.

17. **Community Engagement and Public Access Plans and Implementation**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Applicant shall submit, for review and approval by the Executive Director, a Community Engagement Plan that ensures residents and representatives of the City of Marina will be equitably engaged in development of a revised Public Access and Amenities Plan.

    The Community Engagement Plan is to describe how the Applicant will provide opportunities for Marina community members to identify public access priorities and projects for the benefit of Marina residents. It shall:

    a. Describe a community engagement strategy using community-centered and culturally relevant engagement and outreach methods (e.g., communication with multiple forms of media and in relevant languages, various methods to participate, such as in person meetings, online options, mail-in surveys, etc.) Materials developed to implement the Plan shall be provided in plain language to prevent cultural or educational barriers from preventing or reducing public participation.
    b. Includes a schedule and agendas for at least five community workshops within the City to allow community input on preferred public access opportunities and improvements. Workshops shall be noticed at least one month in advance and shall include benefits to ensure maximum participation, such as free parking, childcare options, refreshments, translation services, and others.

    Upon Executive Director approval of the Plan, the Applicant shall implement it as approved to prepare a Public Access and Amenities Plan based on preferences expressed in the Community Engagement Plan. This Access Plan shall include:

    - A description of all access amenities to be provided.
    - Identification of all reviews, permits, and approvals that may be needed to implement these amenities.
    - A proposed schedule to complete implementation, which shall ensure amenities are provided within five years of issuance of this permit.

18. **Cultural Resource Monitoring During Construction.** Prior to construction, the Applicant (or its designee) shall retain a Cultural Resource Specialist ("CRS") that meets the minimum qualifications of the U.S. Secretary of Interior Guidelines (NPS 1983). Prior to construction, the Applicant (or its designee) shall additionally retain a minimum of one Native Monitor, including at least one monitor from each Tribal entity with documented ancestral ties to the area and that expresses an interest in monitoring, appointed consistent with the standards of the Native American Heritage Commission and the Native American most likely decendent (MLD) when State Law mandates identification of an MLD.

    The Applicant shall ensure that all Project personnel are trained by the CRS and Native Monitor on the appropriate identification of potential Tribal cultural resources that may be encountered and on the necessary measures to be implemented should they be encountered. Prior to their presence at any Project construction area, all Project personnel shall complete cultural sensitivity training by Tribal experts to

understand and acknowledge the cultural and ancestral Tribal resources in the region and to ensure that the Native Monitor and Cultural Resource Specialist are treated respectfully during construction of the project**.**

The CRS and Native Monitor(s) shall be present during all ground disturbing activities, including excavations for pipeline trenches, well head installations and other actions that penetrate below native ground surface. The CRS, Native Monitor(s), and the Project Construction Manager shall have the authority to halt construction if previously unknown cultural resource sites or materials are encountered. In the event of unexpected cultural resource discovery, the Native Monitor(s) and CRS shall have the authority to redirect ground disturbance under consultation with the Construction Manager.

19. **Energy Minimization and Greenhouse Gas Reduction.** PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, the Applicant shall submit, for Executive Director review and approval, an Energy Minimization and Greenhouse Gas Reduction Plan that provides the following:

    a) Identifies the expected annual amount of indirect greenhouse gas ("GHG") emissions resulting from the desalination facility's electricity use during its initial year of operations, with provisions to update these expected emissions during each subsequent year of operations. These amounts shall be based each year on the electricity supplier's most recent emission factor for delivered electricity as reported to the California Air Resources Board ("CARB") and/or Climate Action Registry ("CAR") that identifies the tonnes of GHG emissions per megawatt of electricity generated.
    b) For all remaining indirect GHG emissions resulting from facility operations, the Plan shall provide for the Applicant to submit an annual report for each year of facility operations that will identify all measures the Applicant will implement to ensure that the facility operates as "net carbon neutral" on an annual basis. These measures may include carbon offsets or Renewable Energy Credits purchased through CARB or CAR or approved by a California Air Pollution Control District, with reductions achieved using these measures documented by these entities as being "real, permanent, quantifiable, verifiable, and enforceable," pursuant to CARB regulations. Each annual report shall be submitted for Executive Director review and approval within 90 days of the electricity supplier's annual documentation to CARB or CAR of its most recent emission factor for delivered electricity. The Applicant may purchase more than one year's worth of offsets or credits, if deemed prudent, to use in subsequent years, but at no time shall the facility be operating with its annual amount of indirect GHG emissions greater than its purchased offsets or credits for a given year.
    c) The Plan may also identify any on-site and project-related measures the Applicant implements to avoid or reduce the facility's indirect GHG emissions – for example, installation of a roof-mounted solar photovoltaic system, use of a

fuel cell system, etc. - and describe the amount of emissions avoided through these measures.

20. Visual Resources. PRIOR TO CONSTRUCTION, the Applicant shall submit, for Executive Director review and approval, a Visual Elements Plan that illustrates all above-grade elements of Project components within the coastal zone. The Plan shall include drawings and illustrations of those components with proposed surface colors and treatments that ensure the Project features are compatible with, and blend in to, the surrounding habitats and other nearby coastal resources. The Applicant shall construct these Project components as approved by the Executive Director.

IV. FINDINGS & DECLARATIONS

A. PROJECT DESCRIPTION, LOCATION, AND OBJECTIVES

California American Water Company ("Cal-Am") proposes to construct and operate desalination components of its overall Monterey Peninsula Water Supply Project ("MPWSP") that would consist of a desalination facility, a well field, water transmission pipelines, pump station, and other related infrastructure (the "Project"), and which would be consolidated with other water infrastructure serving the area, including a water recycling project (the "Pure Water" project and its expansion – the "Pure Water Expansion") and an Aquifer Storage and Recovery ("ASR") project. The proposed Project would provide up to 6,250 acre-feet per year, or about 6.4 million gallons per day ("mgd")[2] of potable water to its customers in the Monterey Peninsula area (see **Exhibit 1**). As described below, Cal-Am seeks authorization to construct a smaller initial phase of the Project that would produce about 5,372 acre-feet per year (which would be about 4.8 mgd). It proposes that construction of the full-scale Project during a second phase occur only if it can demonstrate a need for the additional water supply at a later date.

The desalination facility itself would be located outside the coastal zone at a site about two miles inland within the jurisdiction of Monterey County. As described below in Section IV.C – Jurisdiction and Consolidated Permit Review, these Findings include Commission consideration of several actions, including a consolidated CDP application for portions of the Project within the City of Seaside, the County of Monterey, and the Commission's retained jurisdiction within a portion of the County that does not have a certified Local Coastal Program ("LCP"), along with de novo review of an appeal of the City of Marina's decision to deny a CDP for portions of the Project within its certified LCP jurisdiction.

Project description

As described by Cal-Am and in the proposed Project's Final Environmental Impact Report/Environmental Impact Statement ("FEIR/FEIS/FEIS") prepared by the California Public Utilities Commission ("CPUC") and Monterey Bay National Marine Sanctuary ("MBNMS"), the primary components of the proposed Project within the coastal zone include a well field that would be located at the site of the CEMEX sand mining facility on the shore of Monterey Bay within the City of Marina's LCP jurisdiction, several water transmission pipelines that would be located within the LCP jurisdictions of the Cities of Marina and Seaside and the County of Monterey, and an existing outfall that Cal-Am would modify, which is located within the City of Marina's LCP jurisdiction and the Commission's retained jurisdiction (see **Exhibit 2**). All of these main components would be located in whole or in part within environmentally sensitive habitat areas ("ESHA") or would result in effects on other coastal resources, as described in the Findings below.

[2] Water planning documents generally refer to water use as measured in acre-feet per year or in gallons per day. A million gallons per day equals about 1,100 acre-feet per year. In the Monterey area, which has one of the lowest rates of residential water use in the state, water use averages about 0.2 acre-feet per year, or under 200 gallons per day, for a single-family home.

Well field: For the full-scale 6.4 mgd Project, the well field would consist of about seven slant wells that would extract up to about 16 mgd of a mix of seawater from beneath the bay floor, intruded seawater from beneath the shoreline, and non-potable brackish water that includes a blend of seawater and freshwater from the underlying aquifer system. The proposed well field is within an approximately 30-acre easement Cal-Am purchased within the CEMEX sand mining facility, which is located in an extensive area of coastal dunes along the shoreline of Monterey Bay in the northern portion of the City of Marina (see **Exhibit 3**). Parts of the site were previously used for sand mining since 1906. Although the site has long been disturbed by mining activities, it continues to provide significant areas of sensitive habitat.

The full-scale Project would include five fenced well pads, with each well pad containing from one to three wells. Each well pad would include a concrete pad, an enclosure for electrical equipment, mechanical piping, and a rip-rap basin for disposing of pumped water during maintenance activities. Each would be within a graded area of between about 5,200 and 6,000 square feet. The well field would also include two surge tanks. The overall developed area for these components would total up to just under an acre within the CEMEX site. The well field would also include about 2,000 linear feet of graded access road providing access to each well pad from the existing CEMEX access road.

In October 2022, Cal-Am modified its Project to propose a "phased" approach that would initially provide about 4.8 mgd of water in the first phase and then, if certain conditions are met and approval is granted, could be expanded in the second phase to provide the previously proposed full amount of 6.4 mgd.[3] This proposed first phase would require construction of just two well pads, would allow for a shorter access road, and would reduce the initially required pumping volumes by about a third. As part of this "phased" proposal, Cal-Am also modified the design of these first two well pads to initially accommodate two slant wells and could accommodate a third well during the Project's second phase (i.e., without constructing an additional well pad) if hydrogeologic monitoring during the first phase indicated one or both well pads could accommodate the additional well. This would allow the reduced Project footprint and reduced impacts to continue into the second phase and would allow more flexibility in how the Project might be expanded in the second phase to address identified water demands at that time. If the third well could not be accommodated at either well pad, Cal-Am would construct up to the five well pads as described in the full Project proposal.

[3] See October 5, 2022 letter from Cal-Am. The proposed 4.8 and 6.4 mgd volumes are based on the modular nature of the desalination facility's "treatment trains," each of which is designed to produce about 1.6 mgd of potable water. Under this phased approach, Cal-Am would initially operate using three trains and then add a fourth under the second phase.

As part of this "phased" proposal, Cal-Am proposes to construct and operate a Project second phase if it can demonstrate a need for the full scale of the Project in the future. Further, although Cal-Am is currently seeking authorization for just this first phase of construction and operation, it requested that the Commission evaluate the full-scale proposed Project for consistency with the Coastal Act and relevant LCPs – i.e., that the evaluation address the full scope of ESHA impacts that could occur, the full suite of potential groundwater impacts, and other relevant issues. The Commission agrees that it is appropriate to evaluate those issues associated with the full scale of the Project in this review.

There is a great deal of uncertainty about if and when the Project's Phase II would be needed and what, if any, changed conditions may occur that would affect the analysis under the Coastal Act and the LCPs by the time of any Phase II of this Project. Part of this uncertainty may be addressed by the CPUC when it completes its proceeding to determine Cal-Am's reasonably expected water demand and supply projections during the current water planning period (i.e., until about 2050) (see CPUC Proceeding A-21-11-024, which is expected to be completed sometime in 2023). **Special Condition 1** requires Cal-Am to submit that final determination and to modify its Project accordingly to conform to that determination. However, the uncertainty about when Phase II might occur also limits the Commission's ability in this current review to adequately evaluate Project impacts that might occur at an unknown future date and to assess what feasible and less environmentally damaging alternatives might be available. Therefore, **Special Condition 2** acknowledges this remaining uncertainty by requiring Cal-Am to submit a complete application to amend this permit if it seeks to expand authorization of the Project to Phase II.

Desalination facility: Cal-Am would transport water from the well field through a proposed Source Water Pipeline to its desalination facility, which would be located outside the coastal zone and adjacent to a regional wastewater treatment facility operated by Monterey One Water ("M1W," formerly the Monterey Regional Water Pollution Control Agency). Cal-Am would treat the source water from the well field to create two main streams of potable water – the majority would be sent several miles south in new and existing pipelines to Cal-Am's customers in the Monterey Peninsula area, and up to several hundred acre-feet per year could be sent several miles north to the community of Castroville.[4] At the full scale of the Project, the facility would also create an approximately 10 mgd brine discharge that would be routed to an existing ocean outfall currently used by the wastewater treatment facility. With the recently proposed phased Project approach, Cal-Am would still construct the facility and pipeline system to accommodate the potential full-scale facility but would operate them at about two-thirds capacity until the second phase might be needed.

[4] Part of the potable water would also be sent north through a new pipeline to the City of Castroville pursuant to a Settlement Agreement that ensures any "non-seawater" – i.e., the proportion of water the slant wells remove from the aquifer that is not fully seawater – is returned to the groundwater basin. This project component is described in more detail below.

Water delivery pipelines: As shown in **Exhibit 2**, the proposed Project includes four new pipelines within the coastal zone:

- The Source Water Pipeline would deliver water from the well field to the desalination facility. It would start at the CEMEX site within the City of Marina's LCP jurisdiction, and then enter the County's LCP jurisdiction as it continues east along Lapis Road and Del Monte Boulevard, then Charles Benson Road. A total of 5,365 linear feet of this 42-inch pipeline would be within the County's coastal zone.
- The Desalination Water Pipeline would be constructed along part of the same route as the Source Water Pipeline. Starting at the desalination facility outside of the coastal zone, it would run west along Charles Benson Road and then follow the same alignment as the Source Water Pipeline along Del Monte Boulevard and Lapis Road and continue further south to the City of Marina. About 7,207 linear feet of this pipeline would be within the coastal zone.
- The Transmission Main Pipeline would connect to the Desalination Water Pipeline to transport water further south to an existing pipeline in the City of Seaside that Cal-Am would rely on to transport the water to its customers in the Monterey Peninsula area.[5] Several thousand feet of this Transmission Main Pipeline would be within the coastal zone.
- The Castroville Pipeline would connect to the Desalination Water Pipeline at Lapis Road and run to the north until it leaves the coastal zone. A portion of the pipeline would be attached to the Monte Road Bridge to cross the Salinas River. This location is just outside the coastal zone, though construction would occur within the coastal zone.[6]

As noted above, Cal-Am would install pipelines that could accommodate its full proposed 6.4 mgd capacity for any future second phase but would initially operate the pipelines at about two-thirds of that capacity in the first phase.

Many of the proposed pipeline routes would be through environmentally sensitive habitat areas ("ESHA"). In October 2022, in response to Commission staff concerns about the scope of the Project's impacts on ESHA and the potential to reduce those impacts, Cal-Am modified its proposed pipeline routes to avoid some areas of ESHA and modified its installation methods to identify several areas where it would reduce impacts by using various tunneling techniques instead of trenching to reduce surface impacts to ESHA.

[5] A dispute exists over whether Cal-Am currently has approval to use this existing pipeline. The pipeline's majority owner, the Marina Coast Water District, has determined that the pipeline does not have sufficient capacity for Cal-Am's proposed use, though Cal-Am disagrees with that determination and asserts that it has the authority to use the pipeline. This issue is described further in the Assessment of Alternatives in Section IV.O below.

[6] The coastal zone boundary runs along the centerline of the bridge, and the pipeline would be installed inland of the boundary.

Outfall modifications: Cal-Am would direct its brine discharge from the desalination facility through an outfall owned by M1W, a public agency in Monterey County. The outfall is currently used to discharge treated wastewater from Monterey One's regional wastewater treatment facility in northern Monterey County to about 11,000 feet offshore in Monterey Bay. The outfall terminates at a diffuser that is about 1,000 feet long and that has over 100 ports through which the discharge reaches ocean waters. Cal-Am is expected to be required to modify the diffuser system so that its discharge conforms to Ocean Plan requirements.[7] Those modifications are expected to include Cal-Am replacing the existing end gate of the outfall, installing monitoring buoys anchored to the seafloor to obtain baseline and operational data related to water quality and biological resources in the area of the discharge. Cal-Am must also install, prior to starting desalination facility operations, about 20 corrosion-resistant clamps within the nearshore portion of the outfall to replace existing clamps that would not provide sufficient protection to the outfall from the desalination brine. This installation would involve work on the beach and placement of fill in coastal waters.

Additionally, Cal-Am must install an approximately two-mile long liner within the existing wastewater outfall to protect the outfall from the corrosive effects of the desalination brine. Although Cal-Am does not seek authorization for the liner in this present Commission action, it is appropriate for the Commission to review those proposed outfall modifications necessitated by the desalination operations for issues under the Coastal Act and relevant LCPs. On that issue, the CPUC included the outfall modification component as a required mitigation measure in its FEIR/FEIS/FEIS and analyzed the foreseeable impacts of an earlier version of the liner installation work, which would have involved several excavations along the pipeline route within sensitive habitat areas.

Cal-Am did not include the outfall modification work in its CDP application, as it was relying on an agreement it was developing with M1W to identify which entity would fund the work, apply for needed permits, and install the liner. Cal-Am informed Commission staff that Cal-Am and M1W had reached agreement on a 95% design for the proposed liner and for the associated brine mixing structure that would be built at the facility; however, that agreement has since expired. That design is substantially similar to the version evaluated in the FEIR/FEIS/FEIS and would have similar impacts. However, the agreement between Cal-Am and M1W has expired and M1W is now considering whether to implement this design or an alternative approach that would combine the liner installation work for the desalination facility with an outfall relocation/rehabilitation project that M1W had planned previously to undertake as a separate and independent project. If the outfall liner work and relocation project proceeds as a combined project, it could involve more extensive repair or replacement of most of the outfall located on the upland portions of the coastal zone as a result of the outfall relocation component. This combined project has not yet been designed or gone through environmental review or

[7] The Regional Water Quality Control Board is reviewing Cal-Am's proposed project to determine whether it would be consistent with Ocean Plan requirements applicable to seawater desalination facilities. See Section IV.J of these Findings.

permitting and will require M1W and Cal-Am to develop an agreement on how to implement the project.[8] That combined outfall liner work and relocation project will likely require an amendment to the CDP that M1W received from the Commission for initial construction and operation of the outfall.

Special Condition 1 addresses this issue by requiring Cal-Am, prior to issuance of this coastal development permit, to provide documentation that the outfall liner needed for its proposed desalination facility has received all necessary approvals for use of the M1W outfall. If, however, Cal-Am and M1W do not agree on pursuing the outfall liner work and relocation project as a combined project, the two projects would proceed separately and likely require separate CDPs. In any event, because Cal-Am's proposed desalination facility necessitates the outfall liner work (but not M1W's independently planned outfall relocation), Commission staff has reviewed the impacts from the outfall liner.[9]

Ratepayer Assistance. As part of this Project, Cal-Am is proposing low-income ratepayer assistance. For the first five years after commencement of the Project's water service deliveries, Cal-Am will cap any rate increases resulting from the Project to $10 per month for customers who qualify for Cal-Am's existing Customer Assistance Program. During this period, Cal-Am also proposes to pursue CPUC approval of one or more rate relief programs to offset the costs of the Project on low-income ratepayers enrolled in the Customer Assistance Program and to expand eligibility requirements for the discount offered by its Customer Assistance Program. This could include, for example, include approval to expand the discount offered by its existing Customer Assistance Program from 30-50%, to expand eligibility requirements to include region-specific income guidelines, or to expand a multi-family rate assistance pilot program in Monterey. Additionally, and separate from its proposals to the CPUC, Cal-Am will offer free installation of low-flow water fixtures for low-income customers in single-family or multi-family residences to help contribute to conservation efforts. Finally, Cal-Am proposes to contribute $500,000 to a United Way Hardship Fund. Cal-Am's proposal is included as **Exhibit 4**.

Project timing

Initial construction for the Project's first phase would occur over an approximately two-year period. Cal-Am anticipates that its desalination facility would have a maximum operating life of about 60 years (until about 2085), though its slant wells would have maximum operational lives of 20 to 25 years, at which point Cal-Am anticipates

[8] This may also require approval or involvement by the Marina Coast Water District, which has an existing agreement with Monterey One Water giving it the priority right to discharge brine through the outfall. See February 12, 2010 Outfall Agreement between Monterey Regional Water Pollution Control Agency (now Monterey One Water) and Marina Coast Water District.

[9] If the outfall liner work proceeds as a combination project with Monterey One Water's planned outfall relocation project, Cal-Am's desalination project will not materially affect the relocation component of a combined project. Thus, Commission staff is not reviewing the outfall relocation for purposes of this present CDP application and appeal.

rehabilitating or relocating the wells to continue supplying source water for its facility. Coastal resource issues related to the slant wells' expected operating life are described below in Section IV.H of these Findings.

Project objectives
The Project's primary purpose is to provide Cal-Am a source of water to serve its customers' current and future demands while reducing Cal-Am's reliance on water from the Carmel River.

As stated in the FEIR/FEIS, the primary objectives for the MPWSP are:

1) Develop water supplies for Cal-Am's Monterey District service area to replace existing Carmel River diversions in excess of Cal-Am's legal entitlement of 3,376 acre-feet per year, in accordance with SWRCB Orders 95-10 and 2016-0016;
2) Develop water supplies to enable Cal-Am to reduce pumping from the Seaside Groundwater Basin from approximately 4,000 to 1,474 acre-feet per year, consistent with adjudication of the groundwater basin, natural yield, and improvement of groundwater quality;
3) Provide water supplies to allow Cal-Am to meet its obligation to pay back the Seaside Groundwater Basin by approximately 700 acre-feet per year over 25 years as established by the Seaside Groundwater Basin Watermaster;
4) Develop a reliable water supply for the Cal-Am Monterey District service area, accounting for the peak month demand of existing customers;
5) Develop a reliable water supply that meets fire flow requirements for public safety;
6) Provide sufficient water supplies to serve existing vacant legal lots of record;
7) Accommodate tourism demand under recovered economic conditions;
8) Minimize energy requirements and greenhouse gas emissions per unit of water delivered; and
9) Minimize Project costs and associated water rate increases.

The FEIR/FEIS also included the following secondary objectives for the MPWSP:

1) Locate key Project facilities in areas that are protected against predicted future sea-level rise in a manner that maximizes efficiency for construction and operation and minimizes environmental impacts;
2) Provide sufficient conveyance capacity to accommodate supplemental water supplies that may be developed at some point in the future to meet build out demand in accordance with adopted General Plans; and
3) Improve the ability to convey water to the Monterey Peninsula cities by improving the existing interconnections at satellite water systems and by providing additional pressure to move water over the Segunda Grade.

B. PROJECT BACKGROUND

This section discusses two main components of the area's history and background relevant to the proposed Project – a recent history of water issues in the Monterey area and background on the site of Cal-Am's proposed well field at the CEMEX sand mining facility. It refers to several entities involved in the area's relatively complex water management and delivery systems, including the following, whose jurisdictions are illustrated in **Exhibit 5**:

- **California-American Water Company ("Cal-Am"):** Cal-Am is a private, investor-owned company that supplies water for areas on and near the Monterey Peninsula. Its service area includes the Cities of Monterey, Seaside, Sand City, Carmel-by-the-Sea, and Del Rey Oaks, and nearby portions of Monterey County. Cal-Am's rates are regulated by the California Public Utilities Commission ("CPUC"). There is a pending CPUC proceeding that will determine if there is a need for Cal-Am's desalination facility based on longer term water supply and demand estimates.
- **Monterey Peninsula Water Management District ("MPWMD"):** MPWMD is a public agency whose main functions are to augment the regional water supply through integrated management of surface and ground water, conservation, and water reuse and reclamation. MPWMD's service area overlaps Cal-Am's to a large degree and includes areas within the Cities of Carmel-by-the-Sea, Del Ray Oaks, Monterey, Pacific Grove, Seaside, and Sand City, along with other nearby areas. For purposes of these Findings, one of MPWMD's important functions is to assist Cal-Am in developing a legal water supply.[10]
- **Monterey One Water ("M1W"):** M1W is a regional, public agency primarily involved with collection, conveyance, and treatment of wastewater within its service area, which includes much of the region between Moss Landing to the north, Pacific Grove to the west, and Salinas to the east. For purposes of these Findings, one of M1W's important roles is its management of the Pure Water project, which provides the foundation for the Pure Water Expansion that the Commission has identified as a feasible alternative to Cal-Am's proposed Project.
- **Marina Coast Water District ("MCWD"):** MCWD provides potable water to about 35,000 people in and near the City of Marina. Over the next several decades, it is projected to serve about twice that number of people, due to the expected development of the nearby former Fort Ord Army Base. MCWD obtains its water from wells within the Salinas Valley Groundwater Basin, the same aquifer system that Cal-Am would use as the source for its proposed well field.

Other involved entities include the Castroville Community Services District ("CCSD"), which provides water, sewer, and other services to the community of Castroville in northern Monterey County. The CCSD relies primarily on wells withdrawing water from

[10] See MPWMD's website at https://www.mpwmd.net (accessed August 6, 2020).

the Salinas Valley Groundwater Basin. The CCSD is outside of Cal-Am's service area but would be involved in Cal-Am's proposed Project because it would receive potable water from Cal-Am based on a CPUC-approved Return Water Agreement among Cal-Am and other entities within the Salinas Valley Groundwater Basin. This is more fully described below.

Recent History of Water Issues in Monterey Area

The Monterey area has had long-standing difficulties and constraints with its water supply. The area has no imported water sources local supplies have sometimes been insufficient to provide the expected amount of water. Over the past several decades, a number of water supply projects have been proposed, but for various reasons not all have been completed.

Cal-Am has provided water to the Monterey Peninsula area since 1966. Its primary source of water has been a series of wells along the Carmel River that draw water from the aquifer underlying the river. Cal-Am also shares a network of wells in the Seaside Groundwater Basin with other water users.

In 1995, the State Water Resources Control Board ("State Water Board" or "SWRCB") issued a cease-and-desist order (Order 95-10)[11] that substantially reduced the amount of water Cal-Am was able to legally withdraw from the Carmel River. Cal-Am had previously been pumping an annual average of about 10,370 acre-feet per year from the river, but the State Water Board determined that Cal-Am had a legal right to withdraw no more than 3,376 acre-feet annually. The State Water Board's Order required Cal-Am to take any of several steps to address this issue – obtain the necessary appropriative rights, obtain water from other sources that would allow it to reduce its use of Carmel River water, and/or obtain water from other entities that have the rights to use Carmel River water. The Order also directed Cal-Am to reduce its Carmel River Basin water use in part by maximizing its use of water from the Seaside Groundwater Basin.

Around the same time, the Monterey Peninsula Water Management District (MPWMD) proposed constructing a new dam on the Carmel River; however, local voters rejected the dam's financing plan and the dam was not built. Shortly thereafter, two species in the Carmel River watershed were listed as "threatened" under the federal Endangered Species Act – the red-legged frog in 1996 and the steelhead trout in 1997, which severely limited any future consideration of dams on the river.

[11] See State Water Resources Control Board, Order No. WR 95-10, Order on Four Complaints Filed Against the California-American Water Company, Carmel River, Monterey County, July 6, 1995.

In 1998, state legislation directed the CPUC to develop a water supply plan for the Monterey Peninsula that did not include a dam.[12] In 2009, the State Water Board issued a second cease and desist order with a deadline of December 31, 2016 for compliance, which the SWRCB subsequently extended to December 31, 2021, for the exceedances of diversions from the Carmel River. In 2013, Cal-Am and other stakeholders proposed the initial version of the currently proposed Project. In April 2013, Cal-Am filed an application with the CPUC for the MPWSP, which included the Project's slant wells that would be located at the CEMEX site, a desalination facility to be located about two miles inland adjacent to a regional wastewater treatment facility, pipelines, and the other related facilities needed to produce and deliver water to Cal-Am's service area on the Monterey Peninsula. The CPUC, in conjunction with the Monterey Bay National Marine Sanctuary, prepared a joint Environmental Impact Review/Environmental Impact Statement ("FEIR/FEIS/FEIS") to meet requirements of the California Environmental Quality Act and National Environmental Policy Act. In September 2018, the CPUC certified the FEIR/FEIS/FEIS and issued its Certificate of Public Convenience and Necessity for the proposed Project.[13]

The decision required Cal-Am to construct a smaller desalination facility than it had initially proposed – a 6.4 mgd facility instead of an originally proposed 9.6 mgd facility – and to purchase water from the Pure Water project, a water recycling and aquifer recovery and storage project that was being developed by two public water agencies, the Monterey Peninsula Regional Water District and M1W. The Pure Water project is now operating and is providing about 3,500 acre-feet per year to be used by Cal-Am or stored in the Seaside Basin aquifer for future use. It is more thoroughly described below in Section IV.O – Assessment of Alternatives. The Pure Water project also serves as the base project for the Pure Water Expansion project, which the CPUC is currently considering as an additional water source for Cal-Am to use and is also described in Section IV.O below.

After the 2018 CPUC decision certifying the FEIR/FEIS and issuing a certificate of public convenience and necessity for the proposed desalination Project, Cal-Am then submitted two CDP applications: one to the City of Marina for Project components proposed within the City's coastal zone, and another, consolidated CDP application for components of the proposed Project within the Commission's retained jurisdiction and those within the coastal zone of the County of Monterey and the City of Seaside. In March 2019, the City denied Cal-Am's request for a permit and Cal-Am and others appealed that decision to the Commission. In November 2019, the Commission found substantial issue existed with respect to the appeal but continued both the de novo appeal and the consolidated permit review until a subsequent hearing scheduled for

[12] AB 1182 required the CPUC to consult with Cal-Am and a number of affected parties to prepare a contingency water supply plan that did not rely on a new dam.

[13] CPUC No. A-12-04-019, Decision Approving a Modified Monterey Peninsula Water Supply Project, Adopting Settlement Agreements, Issuing Certificate of Public Convenience and Necessity and Certifying Combined Environmental Report, Decision, September 13, 2018, as modified and affirmed in D. 19-01-051 (February 5, 2019).

September 17, 2020. The staff report for that hearing had recommended the Commission deny Cal-Am's permit, in part due to staff concluding that there was a feasible and less environmentally damaging alternative that would provide sufficient water for Cal-Am's customers. This was based in part on Commission staff having updated water use data and demand projections that was not available as part of the CPUC's review and 2018 decision approving the 6.4 mgd desalination Project. Shortly before that September 2020 Commission hearing, Cal-Am withdrew its CDP application, but resubmitted it in November 2020 and modified it in October 2022 to include the proposed phased construction approach. That is the application the Commission is considering for the present action.

Background and history of the CEMEX sand mining facility: As noted above, the location of Cal-Am's proposed well field has been used for sand mining for over a century, most recently by its current owner, CEMEX. The site includes sedimentation ponds, sand mining equipment and related infrastructure, accessways, and stockpile areas, some of which have remained in relatively the same location for several decades and some of which have moved within the site due to changing production levels, shifts in the surrounding dunes, changes in sand delivery to the site from the Bay, and other factors. In the mid-1980s, the Monterey Peninsula Water Pollution Control Agency (now M1W) constructed the outfall Cal-Am proposes to now use along the southern portion of the CEMEX site.

In addition, violations of the Coastal Act and/or City of Marina LCP exist on the subject property including, but not limited to, unpermitted development with adverse effects on ESHA and coastal waters. These violations took place both prior to and during Cal-Am's interest and involvement in the property. With this application, Cal-Am is not proposing to resolve these violations. These prior violations at the site are the subject of Settlement Agreements reached in 2017 between CEMEX and the Coastal Commission, State Lands Commission and the City of Marina. The Settlement Agreement between CEMEX and the Coastal Commission required, among other things, that CEMEX stop sand mining by December 31, 2020, to conduct certain reclamation activities, to transfer the property to a non-profit or government entity with a deed restriction that ensures protection of the site for public access, open space, and habitat, and to provide such protections until the transfer has been effectuated. The anticipated restoration activities have not yet been completed but are underway in some areas, and the property transfer has not yet occurred, though the future uses anticipated at the site are restoration, low-impact passive recreation, public access, and public education, consistent with the terms of the Settlement Agreement.

The Settlement Agreement also recognized then-existing legal rights at the site, which included a recorded easement and option for Cal-Am to use and eventually purchase or acquire an easement over the approximately 30-acre area on which it planned to build the well field, along with a 30-foot-wide easement within and along the CEMEX access road for the Source Water Pipeline. In 2018, Cal-Am exercised this option to obtain a permanent 30-acre easement and the access easement as the proposed location the well field.

More recently, other alleged violations have been discovered on the CEMEX site, in a portion distinct from the Cal-Am easement, and those are the subject of an active enforcement investigation.

C. JURISDICTION AND CONSOLIDATED PERMIT REVIEW

Project components would be located in several local jurisdictions both within and outside of the coastal zone, as well as within the Commission's retained permit jurisdiction. As noted above, the desalination facility and segments of the water transmission pipelines would be located outside the coastal zone within the County of Monterey's jurisdiction. The pipelines would be located within the certified LCP jurisdictions of Monterey County and the Cities of Seaside and Marina, and within an area of deferred certification where the Commission has permit jurisdiction. The Project's proposed well field would be located largely within the City of Marina's LCP jurisdiction, while those subsurface portions of the wells that extend seaward beyond the mean high tide line, along with modifications to the existing outfall, would be within the Commission's retained permit jurisdiction. All Project components within the coastal zone and outside the City of Marina are being evaluated herein pursuant to consolidated permit review, as provided by Coastal Act Section 30601.3. The standard of review for these components is Chapter 3 of the Coastal Act.

The other Project components that are within the City of Marina's LCP jurisdiction are evaluated herein pursuant to appeals of the City's decision denying Cal-Am's CDP application to construct and operate slant wells, a water transmission pipeline, and associated infrastructure that would be located within the City's LCP jurisdiction.[14] On November 14, 2019, the Commission found that substantial issue existed with respect to these appeals. The standard of review for these Project components is the City's certified LCP, which consists of its Local Coastal Land Use Plan (LCLUP) and its Local Coastal Program Implementation Plan (LCPIP). The relevant policies and measures of these documents are codified in Chapter 17.41 of the City's Municipal Code under "Coastal Zoning" and are implemented through requirements and development standards identified in the Ordinance. In addition, the Commission analyzes whether Project components located between the first public road and the sea are consistent with the public access and recreation policies of the Coastal Act.

Scope of review: Cal-Am and some other commenters have questioned the Coastal Commission's jurisdiction to analyze, as part of its Coastal Act review, water rights, water supply and demand, the public need for the Project, and some related issues. Cal-Am asserted that "only the CPUC has the authority to make binding determinations as to the levels of supply and demand within Cal-Am's service area." It also asserted that "the issue of water rights is not for the Commission to decide," and that the

[14] On March 7, 2019, the City's Planning Department denied Cal-Am's CDP application. Cal-Am appealed the decision to the City Council, but then withdrew that appeal and instead appealed directly to the Commission. On May 13, 2019, the City issued its Final Local Action Notice, which started a 10-working day appeal period, during which the Commission received five valid appeals. Pursuant to Coastal Acct Section 30621, the Commission must hear an appeal within 49 days of the date an appeal is filed, unless the Applicant waives that 49-day period, which Cal-Am did on May 30, 2019.

Commission should defer to the State Water Board on questions related to water rights and water quality. As explained below, the Commission, CPUC, and State Water Board all have separate, but sometimes overlapping roles, with regard to Cal-Am's proposed Project.

The Commission has the authority and duty to analyze whether aspects of the Project within the coastal zone are consistent with the Coastal Act and/or the City of Marina's LCP. As a responsible agency under CEQA, the Commission must also consider the FEIR/FEIS certified by the CPUC, analyze the environmental effects of the portions of the Project within the coastal zone, and consider whether there are feasible mitigation measures or alternatives available that would lessen or avoid any such significant impacts.[15] As part of its Coastal Act review in this case, the Commission must consider whether the Project will have groundwater effects, whether there are feasible alternatives to the Project, whether denial of the Project would adversely affect the public welfare, and whether the Project would cause an unequal distribution of environmental burdens. (See Coastal Act §§ 30231, 30233, 30260, 30604(h).) To make these findings—and particularly the public welfare and feasibility findings—the Commission needs to consider whether the Project's full water supply is needed and whether an alternative water supply project is feasible and would provide sufficient water. It also must consider whether there are uncertainties regarding Cal-Am's water rights or other authorizations that the Commission should address.

In analyzing these issues, the Commission should consider, and may rely on, information and conclusions reached by the CPUC and on advice provided by the State Water Board. The CPUC has exclusive jurisdiction to set rates for regulated water utilities. The CPUC has expertise in water supply and demand issues as well as the fairness of water customers' rates, but the Commission retains authority to review the Project for need and to evaluate environmental justice issues.

The Commission's review of Cal-Am's current proposal is being done concurrently with a CPUC proceeding that addresses, among other issues, water supply and demand estimates for Cal-Am's service area through 2050 (see CPUC Proceeding No. 21-11-024). An overview of the pending CPUC proceeding is summarized below:

- After Cal-Am withdrew its Project application to the Commission in 2020, MPWMD filed a complaint with the CPUC against Cal-Am and requested that the CPUC order Cal-Am to enter into an amended water purchase agreement for the Pure Water Expansion project. Ultimately, the CPUC dismissed that complaint as premature but ordered Cal-Am to file an application to the CPUC to update Cal-Am's overall Monterey Peninsula Water Supply Project plan.

[15] The Commission need not create a separate document to carry out its CEQA obligations; rather, the Commission uses its certified regulatory program in lieu of needing to adopt a separate environmental impact report or other CEQA document. (See Pub. Res. Code § 21080.5; 14 Cal Code Regs. § 15251(c).) Thus, the analysis in these Findings satisfies any CEQA obligations the Commission has.

- Cal-Am subsequently filed an application in 2021 with the CPUC to request CPUC approval of (1) an amended water purchase agreement for the Pure Water Expansion Project, (2) updated supply and demand estimates for the Monterey Peninsula Water Supply Project plan, and (3) cost recovery. The CPUC phased the proceeding as follows: (1) Phase 1 addresses whether CPUC approval of the Amended Water Purchase Agreement for the Pure Water Expansion project is reasonable, prudent, and in the public interest based on near-term supply and demand estimates (among other factors); and (2) Phase 2 addresses longer-term supply and demand estimates to evaluate any need for additional water supply beyond the Pure Water Expansion project. The CPUC also indicated that a third phase may be warranted. but the CPUC has not yet specified the issues for that third phase. It seems likely, however, that if there is a third phase, the CPUC would consider, among other things, the timing and size of the proposed desalination Project.

- In Phase 1 of the CPUC proceeding, no parties disputed approval of the Amended Water Purchase Agreement for the Pure Water Expansion project. On September 30, 2022, the administrative law judge issued a proposed decision in Phase 1 to authorize Cal-Am to enter into the Amended Water Purchase Agreement for the Pure Water Expansion project.

- The parties to the CPUC proceeding are currently litigating Phase 2 issues – namely, long-term supply and demand estimates for the region. The parties have presented a range of projections for the CPUC to consider, and the CPUC is likely to issue a decision on Phase 2 issues by the first half of 2023 at the earliest. Several parties to the CPUC, including Cal-Am, have provided their projections to the Commission to consider as part of this Commission proceeding.

Although the Commission considers the need for Cal-Am's proposed Project in the context of the "public welfare" element of Section 30260 of the Coastal Act, which is a necessary component of its review, it recognizes that the CPUC will reach a decision on longer-term supply and demand estimates after extensive testimony, evidence, and briefing on this issue. The Commission also recognizes that, unlike with Cal-Am's 2020 CDP application, the CPUC and the Commission are reviewing the same sets of supply and demand figures to evaluate the need for the Project. Moreover, Cal-Am's Project cannot proceed without CPUC approval. The Commission is therefore requiring through **Special Condition 1** that its approval of this consolidated coastal development permit and its de novo approval of the coastal development is subject to a final adjudication of the issues in the current CPUC proceeding. **Special Condition 2** additionally requires Cal-Am to submit an application to amend this permit if it proposes to construct and operate Phase II of the Project. It also requires Cal-Am, as part of that application, to include the CPUC's approval of Phase II. This is further detailed in Section IV.O below.

Regarding the State Water Board, the Coastal Act prescribes some limits on the Commission's jurisdiction vis-à-vis the State Water Board, stating that the Commission may not act in a manner that conflicts with any determination by the State or a Regional Water Board "in matters relating to water quality or the administration of water rights." (Coastal Act § 30412(b).) Similar to the above, the Regional Water Board and State Water Board are in the midst of reviewing Cal-Am's Project's conformity to water quality standards and an analysis of issues related to water rights, respectively. Regarding water quality considerations, the Regional Board is expected to review an application from M1W to accommodate Cal-Am's effluent flows into the M1W outfall. Some of the modeling work has been done to determine how the Cal-Am brine effluent can be discharged in a manner consistent with the state's Water Code and Ocean Plan. Currently available results show that the discharge can meet those requirements if Cal-Am or M1W make the structural changes to the outfall described in the Project description above and in Section IV.K – Protection of Marine Life and Water Quality. The Commission is evaluating the effects of those structural changes on coastal resources; however, because the Regional Board cannot approve Cal-Am's discharge unless it is consistent with relevant Water Code and Ocean Plan requirements, the Commission is deferring to the Regional Board on matters related to the water quality components of the discharge, such as effluent limits and the extent of dilution zones, over which the Regional Board has controlling authority. The Commission's action here therefore complies with the above provision of Section 30412(b), as it does not impose a conflicting water quality limit on Cal-Am's Project.

In addition, the State Water Board's Administrative Hearings Office ("AHO") has a pending proceeding regarding Cal-Am's Project to decide various issues relating to water rights – namely, whether Cal-Am's withdrawals of a mix of groundwater and seawater from beneath the CEMEX site and beneath state tidelands would be subject to several of the state's water rights provisions.[16] The AHO is conducting this proceeding after the trial court in a pending lawsuit referred various issues to the AHO to resolve pursuant to Cal. Water Code § 2000.[17] That lawsuit, which was filed by the City of Marina and others, challenges Cal-Am's ability to withdraw more than 500 acre-feet per year of groundwater from the proposed well field location. After the AHO's referee issues a proposed report and provides it to the SWRCB for consideration, the SWRCB will issue its final report and the SWRCB will send the report to the trial court to guide an

[16] SWRCB November 17, 2021 Assignment of Court Reference in *City of Marina, et al. v. RMC Lonestar, et al.*, Monterey County Superior Court No. 20CV001387.

[17] *City of Marina v. RMC Lonestar, et al.*, Monterey County Superior Court No. 20CV001387 (Complaint filed May 11, 2020). On October 7, 2021, the trial court referred various issues to the SWRCB to determine. In the prior CPUC proceeding where the CPUC certified the FEIR/FEIS and issued a certificate of public convenience and necessity for the desalination facility, the SWRCB issued an advisory opinion determining that it was reasonably foreseeable that Cal-Am had a path forward to obtain the necessary water rights. FEIR/FEIS, Appendix B2 (SWRCB letter to CPUC dated July 13, 2013). In the current litigation and AHO proceeding, the City of Marina asserts that new evidence, which was not available at the time that SWRCB issued its advisory opinion in 2013, supports the City's claims.

adjudication of the case. The SWRCB's order is not binding on the trial court.[18] The Board's and court's adjudication of these matters could affect whether Cal-Am can conduct its pumping operations at this location, and if so, how much water it can extract, among other related issues.

As with the above examples, the AHO is in the midst of its proceeding, with a decision expected sometime in 2023, and parties to that proceeding have submitted documents from that proceeding for the Commission to consider as part of its evaluation of Cal-Am's CDP application and appeal. And – as with the above example, the Commission is acknowledging that the State Water Board (along with the courts) has primary responsibility to resolve water rights issues. Therefore, the Commission is imposing **Special Condition 1**, which requires Cal-Am to submit a final determination on these matters to demonstrate that it has, or can feasibly obtain, water rights for the Project. Therefore, the Commission's decision does not conflict with the above-referenced provision of Coastal Act Section 30412(b).

Other Agency Approvals & Consultations
The Project would be additionally subject to discretionary permits and approvals, including the following:

- **Monterey One Water:** Cal-Am will need to obtain authorization from M1W for connection to, and use of, the agency's ocean outfall.
- **Monterey County:** Cal-Am obtained an encroachment permit from the County for construction of its pipelines within County jurisdiction. It also received a use permit from the County that allowed Cal-Am to start construction of the desalination facility; however, that permit has been stayed by the County Superior Court.
- **State Lands Commission:** Cal-Am will need to obtain two state tidelands leases from the State Lands Commission – a new or extended lease for its existing test slant well at the CEMEX site that Cal-Am proposes to make a permanent well, and a new lease for the other proposed slant wells. The current lease for the test well expires in December 2022 and Cal-Am has not yet submitted a lease application for the other wells.
- **Central Coast Regional Water Quality Control Board ("Regional Water Board"):** Cal-Am will need to obtain a National Pollution Discharge Elimination System ("NPDES") Permit allowing it to discharge brine through the MRWPCA outfall and to modify that outfall to allow the discharge. Cal-Am will also need to obtain approval from the Regional Water Board to ensure Cal-Am's use of groundwater from the Salinas Groundwater Basin is consistent with the Regional Water Board's adopted Basin Plan.
- **California Public Utilities Commission:** As discussed above, the CPUC is conducting a proceeding that will affect whether the CPUC will approve the Cal-Am's Project, including its size and timing.

[18] See Water Code § 2019.

- **California Department of Transportation ("CalTrans"):** Cal-Am has obtained encroachment permits from CalTrans for the segments of its pipelines that would be constructed within CalTrans rights-of-way.
- **Transportation Agency of Monterey County ("TAMC"):** TAMC has approved an Easement Purchase Agreement with Cal-Am for portions of the pipelines within TAMC rights-of-way.
- **Monterey Bay National Marine Sanctuary:** The Sanctuary issued a Record of Decision for its Final Environmental Impact Statement, though Cal-Am will also be subject to authorization from the Sanctuary to allow discharges into Sanctuary waters and drilling and disturbance of submerged lands within the Sanctuary.[19] The Sanctuary's consideration will likely involve review by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to ensure protection of species that may be affected by the Project.
- **Other landowners:** Cal-Am is negotiating with several private landowners along sections of its proposed pipeline routes, several of whom have stated that they would not consider providing approval until after the Coastal Commission's decision on the proposed Project.

Special Condition 1 requires Cal-Am, prior to permit issuance, to provide documentation from these agencies showing that it has received all necessary permits and approvals for its Project. Because of the number of approvals still required and the uncertainty about the timing and extent of some of these reviews, the general two-year permit expiration period in **Standard Condition 2** is modified to allow five years until permit expiration.

D. Findings on CDP Determination and De Novo Hearing

For portions of the proposed Project within the City of Marina's LCP jurisdiction that raised substantial issue, the Commission now reviews that portion of the Project de novo (as continued hearing from the originally scheduled September 17, 2020 hearing). Cal-Am has also applied for a consolidated CDP for portions of its proposed Project within the Commission's retained jurisdiction and within the certified LCP jurisdictions of the City of Seaside and the County of Monterey. The findings below address all portions of the Project within these jurisdictions, using the Coastal Act as the standard of review for those Project components within the Commission's consolidated permit jurisdiction and using the City of Marina's certified LCP and Coastal Act public access and recreation policies as the standard of review for Project components within the City's LCP jurisdiction.

[19] The Sanctuary also served as lead agency under the National Environmental Policy Act ("NEPA") for the project's Environmental Impact Statement.

E. Environmentally Sensitive Habitat Areas – Terrestrial

Coastal Act Section 30240 states:

> (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
> (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Coastal Act Section 30107.5 states:

> Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Relevant City of Marina LCP Provisions

LCLUP Policy 19:

> Promote reclamation and protection of native dune habitat and vegetation.

LCLUP Policy 25:

> Protect the habitat of recognized rare and endangered species found in the Coastal dune area.

LCLUP Policy 26:

> Regulate development in areas adjacent to recognized rare and endangered species or their habitats so that they will not threaten continuation of the species or its habitat.

LCLUP Policy 41:

> Give priority to coastal-dependent development on or near the shoreline and to ensure environmental effects are mitigated to the greatest extent possible.

LCLUP Exhibit A states:

> **Primary habitat.** This term includes all of the environmentally sensitive habitat areas in Marina. These are as follows:
>
> 1. Habitat for all identified plant and animal species which are rare, endangered, threatened, or are necessary for the survival of an endangered species. These species will be collectively referred to as "rare and endangered." …

3. All native dune vegetation, where such vegetation is extensive enough to perform the special role of stabilizing Marina's natural sand dune formations.
4. Areas otherwise defined as secondary habitat that have an especially valuable role in an ecosystem for sensitive plant or animal life, as determined by one or more qualified biologists approved by the City. [Resolution No. 2001-118 (October 16, 2001); approved by CCC November 14, 2001]

Secondary habitat. This term refers to areas adjacent to primary habitat areas within which development must be sited and designed to prevent impacts which would significantly degrade the primary habitat. The secondary habitat area will be presumed to include the following, subject to more precise determination upon individual site investigation:

1. The potential/known localities of rare and endangered plant species as shown on LUP p. 71 ("Disturbed Vegetation" map).
2. The potential wildlife habitats as shown on LUP p. 75 ("Potential Wildlife" map).
3. Any area within 100 feet of the landward boundary of a wetland primary habitat area.

Rare and endangered species. This term will apply to those plant and animal species which are rare, endangered, threatened or are necessary for the survival of such species. The Environmental Analysis Report prepared for the Marina Local Coastal Program identified such species in the dune habitat areas. While future scientific studies may result in addition or deletion of species, the list presently includes:

1. Smith's Blue Butterfly **(**Shijimiaeoides enoptes smithi**)**[20]
2. Globose Dune Beetle **(**Coelus globosus**)**
3. Black Legless Lizard **(**Anniella pulchra nigra**)**
4. Salinas Kangaroo Rat **(**Dipodomys heermanni goldmani**)**
5. Seaside Painted Cup **(**Castilleja latifolia ssp. latifolia**)**
6. Monterey Spine Flower **(**Chorizanthe pungens var. pungens**)**
7. Eastwood's Ericameria **(**Ericameria fasciculate**)** [sic][21]
8. Coast Wallflower **(**Erysimum ammophilum**)**
9. Menzies' Wallflower **(**Erysimum menziesii**)**
10. Coastal Dunes Milk Vetch **(**Astragalus tener var. titi**)**
11. Dune Gilia **(**Gilia tenuiflora var. arenaria**)**
12. Wild Buckwheat **(**Eriogonum latifolium**)***
13. Wild Buckwheat **(**Eriogonum parvifolium**)***
14. Bush Lupine **(**Lupinus ssp.**)+**

* only within the range of Smith's Blue Butterfly.
\+ only within the range of the Black Legless Lizard.

[20] This name has been updated since publication of the LCP – it is now *Euphilotes enoptes smithi*.

[21] The correct spelling is *Ericameria fasciculata*.

LCLUP Habitat Protection Policies include:

> Before any use or change in use, areas identified as potential habitat for rare and endangered plant or animal species shall be investigated by one or more qualified biologist(s) to determine the physical extent of the primary habitat areas for the specific rare and endangered plants and animals on that site.
>
> Primary habitat areas shall be protected and preserved against any significant disruption of habitat values and only uses dependent on those resources shall be allowed within those areas. All development must be sited and designed so as not to interfere with the natural functions of such habitat areas. Management and enhancement opportunities should be incorporated into use or development proposals; potential impacts shall be fully mitigated, including the assurance of long-term mitigation and maintenance of habitat through the use of appropriate acreage replacement/restoration ratios for any unavoidable direct impacts to habitat areas.
>
> Potential secondary or support habitat areas to the primary habitats identified on the site should also be defined. Secondary habitat investigation should include identification of the role and importance of the secondary area to the primary habitat area and should stress the impact of use or development in the secondary area on the primary habitat. All development in this area must be designed to prevent significant adverse impacts on the primary habitat areas. In concert with State law, City ordinances shall require environmental review and appropriate mitigation of identified impacts for all development in the Coastal Zone, including the assurance of long-term mitigation and maintenance of habitat through the use of appropriate acreage replacement/restoration ratios for any unavoidable direct impacts to habitat areas.
>
> Available evidence indicates that dune vegetation is more resilient than previously thought, and areas damaged by illegal use or negligence shall be considered restorable and eligible for restoration.
>
> Where habitats of rare and endangered species are located on any parcel, owners and/or operators shall, at such time that development is proposed, develop and execute a Management Plan which will protect identified rare and endangered plant and animal communities. Each plan shall be drawn up by a qualified biologist(s) in co-operation with the property owner/developer.

LCLIP Regulations for Coastal Conservation and Development District Policy (b)(2)

> Regulations for coastal conservation and development uses shall be specified in the Coastal Development Permit. The permit-issuing body may approve Permit applications if the following factors, where relevant, are found to apply: …
> b. Development is limited to already-disturbed areas.
> c. Rare and endangered plant and animal habitats are adequately protected
> d. Grading and roadway construction are the minimum necessary for the development. …

g. All significant adverse environmental effects are either avoided or adequately mitigated.

ESHA within the City of Marina
Cal-Am's proposed well field and a portion of its Source Water Pipeline would be located on a 30-acre easement and an access easement within the CEMEX site in the City of Marina (see **Exhibit 3**). The Commission's 2014 Findings regarding Cal-Am's test well project at this same location determined that this area consisted of Environmentally Sensitive Habitat Area ("ESHA"). Similarly, a July 2017 site visit by the Commission's ecologist concluded with a recommendation that the full site be considered ESHA and more recent surveys conducted pursuant to the CPUC's CEQA review confirmed the continuing presence of several special-status species within the proposed well field.

ESHA determination under the LCP: The City's LCP establishes two types of habitats – "primary" and "secondary" – and describes the different levels of required habitat protection and allowable uses in each. The LCP states that primary habitat "includes all of the environmentally sensitive habitat areas in Marina" and defines it as being the "potential locale for rare and endangered plan [sic] and animal species and identified, at the time of development, by a qualified biologist as supporting rare and endangered plant and animal species." The LCP further states that "primary habitat areas shall be protected and preserved against any significant disruption of habitat values and only uses dependent on those resources shall be allowed within those areas." The LCP's "primary habitat" definition and its related provisions are similar to the Coastal Act's definition of ESHA, which is "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."[22] The LCP's use limitations in those primary habitat areas are also similar to the Coastal Act's, in that both allow only those uses that are dependent on the habitat resources. Because the LCP's policies derive from the authority of the Coastal Act, we read its policies regarding primary habitat to be consistent with those of the Coastal Act.[23]

The LCP's other category – secondary habitat – is defined as those areas "adjacent to primary habitat on which the primary habitat area is dependent or from which the primary area can be influenced by drainage, erosion, human, equestrian or vehicle use or other factors." The LCP requires that direct and potential impacts to both primary and secondary habitat be fully mitigated. While the LCP includes maps of areas presumed to be primary or secondary habitat, it notes that the actual determination of

[22] See Coastal Act Section 30107.5.

[23] The LCP derives its statutory authority from the Coastal Act, and all of its provisions, including the policies above, must be read consistent with and understood to conform to the Coastal Act as a matter of law (McAllister v. California Coastal Commission (2009) 169 Cal.App.4th 912, 931).

habitat type and category for a particular location must be based on a site-specific biological study.[24]

For several reasons, the area of coastal dune habitat where the proposed well field would be located is considered an area of primary habitat, and therefore ESHA. First, and as detailed below, although it would be in a previously disturbed area of the CEMEX site that consists largely of compacted and sparsely vegetated sand dunes, it nonetheless provides habitat for at least three threatened or endangered species, as described below. Additionally, a number of other special-status species are known to exist or have the potential to exist within the footprint or in adjacent areas of the dunes, and multiple sensitive native vegetation communities occur. The presence of these special-status species reinforces that the Project footprint includes primary habitat qualifying as ESHA. However, it would also arguably qualify on the basis of sensitive vegetation communities being present and the overall habitat type, dunes, as being rare.

This type of dune habitat is easily disturbed by human activity. Nonetheless, even though this area is disturbed, degraded dune habitat generally has the ability to restore itself or be restored given the dynamic natural environmental processes shaping the landscape and the persistence of well-adapted native seed banks. The proposed well field area consists of the same substrate as the rest of the dune habitat and is contiguous to less disturbed or undisturbed areas. Barring ongoing disturbance or development, the well field site would soon be colonized by dune biota, either from the adjacent areas or from buried seed stock. In fact, this has been observed in other areas of the parcel as CEMEX scaled-back its operations in preparation for closure – native dune species have appeared where they have been neither planted nor seeded during reclamation activities, instead appearing following the removal of invasive species and cessation of ongoing development activities. The presence of the above-noted threatened or endangered species in the Project area provides further evidence that this degraded and historically manipulated area still provides valuable coastal dune habitat, may recover in terms of quality and extent, and could likely support other rare or threatened species if not further disturbed.

[24] The LCLUP policies regarding Rare and Endangered Species – Habitat Protection includes the following statement: “In Marina’s Coastal Zone, the foredune, dune and grassy inland areas all contain potential habitat for rare and endangered plants and animals. The precise range for each plant and animal is not known because intensive site-specific study throughout the area was not financially possible. However, the potential for various rare and endangered habitats has been identified and mapped (see Environmental Capability section) to provide a guide to the locations where more intensive study is required. Because site-specific study is needed in many areas before any development can take place the following policies apply to all of the areas indicated on the map or meeting the definitions of Exhibit “A” as being potential habitats for rare and endangered plants and animals.”

Further, the City's LCP acknowledges that disturbed dune habitat is resilient and relatively easy to restore.[25] The LCP also requires that the reclamation and protection of native dune habitat be promoted, and that habitat for rare and endangered species, such as this dune habitat, be protected (see LUP Policies 19 and 25). The Commission, too, has previously found that even degraded dunes can provide habitat for rare and threatened dune species and that degraded dune areas can constitute ESHA.[26] Thus, interpreting the LCP's definition of primary habitat consistent with the Coastal Act, the Commission finds that the coastal dune area in which the well head portions of the Project would be located constitutes ESHA and meets the description of primary habitat under the LCP.

As noted above, the LCP limits uses within primary habitat to those dependent on the resources,[27] and any development within those areas is limited to that which is sited and designed to not interfere with the natural functions of the habitat. The LCP also requires that all adverse effects in primary habitat be fully mitigated. Although the Project is proposed to be located in portions of the CEMEX site that have been subject to disturbance, the entire area in which the well field would be located is primary habitat and ESHA under the LCP. The Project is not a resource-dependent use, so it cannot be approved consistent with the LCP's habitat protection policies. Importantly, the FEIR/FEIS identified the Project's inconsistency with these LCP provisions as a significant and unavoidable impact.[28]

Site background and habitat characteristics: The CEMEX site largely consists of central foredune habitat, which is one of the most important, vulnerable, and geographically constrained environmentally sensitive habitat types in California. In the 2010 update to the status of the state's natural communities, CDFW assigned central foredune habitat the highest rarity ranking as "critically imperiled", this qualifying it as ESHA.[29] Dunes form only under certain conditions where adequate sand supply and appropriate wind energy and direction allow. They are a dynamic habitat subject to extremes of physical disturbance, drying, and salt spray. The winds and shifting sands in dune habitat can cause the habitat characteristics and the species at any given location to change on a relatively short or shifting timescale, so a particular area of dune habitat may have relatively higher or lower resource values over time. The changing

[25] See the fourth paragraph of the LCLUP Habitat Protection Policies.

[26] See, for example, Commission actions in the Asilomar Dunes system (including Youssef (CDP 3-11-068) and Goins (CDP 3-11-020)), MBARI (CDP A-3-MCO-17-0068), Oceano Dunes (CDP 4-82-300 Review in 2021), City of Grover Beach LCP Amendment 1-12, Part 1 (Grover Beach Lodge), Koligian (Commission denial of CDP application A-3-PSB-10-062), and California Department of Parks and Recreation (CDP 3-11-003).

[27] LCLUP Habitat Protection Policy Paragraph 2.

[28] See FEIR/FEIS, Section 4.6 – Terrestrial Biological Resources.

[29] CDFW ranks this habitat type as G1 S1.2, which makes it "critically imperiled" both globally and within the state.

and often harsh conditions found in coastal dune habitat support plant and animal species that have evolved strategies adapted to these conditions – for example, many dune plants have seeds that can remain dormant for extended periods of time until conditions allow for them to germinate. Many of the plant and animal species adapted to these geographically constrained and relatively harsh conditions have become uncommon and are considered rare, endangered, or have a similar special status. It follows that assemblages of such unique species make for unique communities, and the dune-associated vegetation communities, as described in the Manual of California Vegetation, are also generally considered rare by CDFW.[30] At the same time, the ability of these various resources to withstand such challenging conditions or to remain dormant for long periods allows dune habitat, even severely disturbed dune habitat, to either be restored or to restore itself relatively easily. The habitat values in dune areas are therefore best understood in terms of the overall complex of dunes of which they are a part, and the Commission has typically found coastal dune habitat to be ESHA even when it is disturbed, due to its rarity, its important ecosystem functions, and its support of sensitive species and communities.[31]

Despite more than 100 years of active sand mining, the coastal dune habitat at the CEMEX site provides habitat for over two dozen sensitive species, including several listed as endangered or threatened. The habitat within and adjacent to Cal-Am's proposed well field and pipeline route also includes large areas of central dune scrub, which also qualifies as ESHA in part due to its CDFW ranking,[32] and which includes a number of sensitive plants and animals that have evolved and adapted to the desiccating, salt-laden winds and nutrient poor soils of this area. Several sensitive vegetation communities are also part of the central dune scrub, including silver dune lupin-mock heather scrub (Lupinus chamissonis-Ericameria ericoides shrubland alliance), which is ranked G3 S3 and considered ”vulnerable”. Between 2012 and 2016, consultants for Cal-Am and the CPUC conducted several biological surveys of the site.[33] These biological investigations, along with a 2017 site visit by the Commission’s ecologist, identified several special-status plant and animal species present within or

[30] For example, the dune mat vegetation (Abronia latifolia-Ambrosia chamissonis herbaceous alliance) present is ranked G3 S3, indicating that it is considered “vulnerable” both globally and within California, and qualifies as a sensitive natural community.

[31] This has been the Commission’s approach to dune protection at other locations, for example, in the Asilomar Dunes area in Pacific Grove and the in the Del Monte Forest as well as sites like the Oceano Dunes State Vehicular Recreation Area.

[32] CDFW considered central dune scrub habitat as ”imperiled” with rankings of G2 S2.2 in its 2010 update to the status of the state’s natural communities.

[33] See survey dates and findings in Section 4.6 – Terrestrial Biological Resources of the project’s Draft FEIR/FEIS.

adjacent to the Project area.[34] More recently, surveys conducted in 2019 identified the continued presence of most of these species and added more records of their occurrences as well as a few additional sensitive species.

Species present on the site that are listed as threatened or endangered include:

- **Monterey spineflower** (*Chorizanthe pungens* var. *pungens*), an annual herb listed as federally-threatened under the Endangered Species Act (ESA). It also has a California Rare Plant Rank of 1B.2. It has been observed extensively throughout the CEMEX site, including the proposed well field area.
- **Smith's blue butterfly** (*Euphilotes enoptes smithi*), a federally-endangered species, also ranked by CDFW as S1, is obligate to two host plant species throughout its life cycle – coast buckwheat (*Eriogonum latifolium*) and seacliff buckwheat (*E. parvifolium*) – that grow in these coastal dunes. While the butterfly's flight season is only from mid-June to early September each year, larvae consume the plants' flowers and seeds and pupate directly on or beneath the plants, where they overwinter until the following flight season. The surveys identified both the butterfly and both species of buckwheat within the CEMEX site, including along the access road where Cal-Am's Source Water Pipeline would be built.
- **Western snowy plover** (*Charadrius nivosus nivosus*), is listed as threatened under the federal ESA and is considered a California Species of Special Concern by the CDFW, which ranks it as S2.[35] The shoreline along the CEMEX site is within designated critical habitat for the species and much of the site provides nesting, roosting, or foraging habitat. Nests are most common in the sparsely vegetated beach and shore-most foredunes but have also been found further inland where the well field would be located and where they may become more common as shores continue to erode and succumb to sea level rise.

The site also serves as habitat for many other special-status species, including several plants on California's Rare Plant Inventory. The sand-loving wallflower (*Erysimum ammophilum*) is eligible for state listing and is considered rare, with a moderate to high degree and immediacy of extirpation (California Rare Plant Rating [CRPR] of 1B.2). It has been observed within the proposed well field area. The site also includes ocean bluff milkvetch (*Astragalus nuttallii* var. *nuttallii*; CRPR 4.2) and branching beach aster (*Corethrogyne leucophylla*; CRPR 3.2), which are included on the California Rare Plant

[34] Along with direct observation during site visits, the presence of sensitive species was supported by historical documentation describing the presence of various sensitive species and communities at the site.

[35] CDFW's Species of Special Concern List includes a "NatureServe" ranking system used by a network of agencies around the world. It assigns each listed species a level of risk based on both its Global abundance, where applicable, and its risk at the state level. Rankings include such categories as "critically imperiled," "vulnerable," "apparently secure," and others. The S2 category for Western snowy plovers indicates the species is "at high risk of extirpation in the state due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors,"

Inventory as species of concern. Other special-status species are known to occupy nearby areas or have the potential to occur at the Project site, though they were not identified within the Project footprint during these surveys. Plant species include the federally-endangered Robust spineflower (*Chorizanthe robusta* var. *robusta*; CRPR 1B.1), the state- and federally-endangered Menzies' wallflower (*Erysimum menziesii*; CRPR 1B.1), the federally-endangered and state-threatened Sand gilia (*Gilia tenuiflora* ssp*. arenaria*; CRPR 1B.2), and the state-endangered Seaside bird's-beak (*Cordylanthus rigidus* var. *littoralis*; CRPR 1B.1). Two reptiles – the California legless lizard (*Anniella pulchra*; S2) and the coast horned lizard (*Phrynosoma coronatum* - S3), which are considered Species of Special Concern, were also documented during the 2019 surveys. Most recently, Cal-Am reported occurrences of Peninsula coast range shoulderband snail (*Helminthoglypta nickliniana awania* – S1), globose dune beetle (*Coelus globosus* – G1G2/S1S2), and American badger [burrows] (*Taxidea taxus* – S3; CDFW SSC).[36] Several sensitive bird species have also been documented using the area, including Bryant's savannah sparrow *(Passerculus sanwichensis alaudinus* - CA Species of Special Concern) and California horned lark *(Eermophila alpestris actia* - CDFW Watch List).

Native plants found within the dune scrub areas include California sagebrush (*Artemisia californica*), coast buckwheat (*Eriogonum latifolium*), deerweed (*Acmispon glaber*), California lilac (*Ceanothus* spp.), mock heather (*Ericameria ericoides*), silver dune lupine (*Lupinus chamissonis*), and sandmat manzanita (*Arctostaphylos pumila*; CRPR 1B.2). The site also includes many native foredune species, such as beach evening primrose (*Camissonia cheiranthifolia*), yellow sand verbena (*Abronia latifolia*) and beach bur (*Ambrosia chamissonis*). The access road to the CEMEX site has adjacent stands of Coyote Brush Scrub (*Baccharis pilularis* Shrubland Alliance), which is not considered a rare plant community at the alliance level but several vegetation associations within it can meet that designation.[37] Ongoing sand mining and processing operations appear to have contributed to invasive vegetative species dominating several areas within the CEMEX site, particularly iceplant (*Carpobrotus* spp.). In some areas, a thick cover of iceplant has helped prevent establishment or re-establishment of native species; however, as disturbance is removed and reclamation and restoration activities proceed in certain areas of the CEMEX site under the terms of the CEMEX settlement agreement, the cover of invasives is declining, and the cover of natives due to restoration and native seedbank release is reportedly increasing.

[36] As stated in Cal-Am's proposed Habitat Mitigation and Monitoring Plan, June 2020.

[37] Vegetation communities are generally classified by the repeating patterns observed across a landscape, those patterns being described by the composition of plant species and reflecting the effects of local environmental conditions. The category of alliance is presently the most typical level of such classification used but at a more refined level are associations – one alliance can have many associations, each of these reflecting nuances that may be specific to a geography or narrower set of environmental conditions. CDFW describes and evaluates both alliances and their associations and determines which should rank as sensitive in the state; lists are updated biannually with new vegetation communities at both alliance and association levels and refinements to existing community ranks.

Location and impacts of Project components within ESHA: Cal-Am's well field would be located on an area of this coastal dune habitat immediately landward of the foredunes that separate the well sites from the shoreline. This habitat had been disturbed during earlier sand mining activities at CEMEX when used for stockpile storage. The mining activities are now confined to a much smaller area and are scheduled to end this year, pursuant to provisions of 2017 Settlement Agreements between CEMEX and the Coastal Commission, State Lands Commission, and the City of Marina (Order CCC-17-CD-02").

The Settlement Agreement between the Coastal Commission and Cemex ("Settlement Agreement") required CEMEX to stop sand mining by December 31, 2020, to conduct certain reclamation activities, and transfer the property to a non-profit or government entity with a deed restriction that ensures protection of the site for public access, open space, and habitat. The anticipated restoration activities have not yet been completed but are underway in some areas, and the property transfer has not yet occurred, though the future uses anticipated at the site are restoration, low-impact passive recreation, public access, and public education.

The Settlement Agreement also recognized existing legal rights at the site, which included a recorded easement and option for Cal-Am to use and eventually purchase or acquire an easement over the approximately 30-acre area on which it planned to build the well field, along with a 30-foot-wide easement within and along the CEMEX access road for the Source Water Pipeline. In 2018, Cal-Am exercised this option to obtain a permanent 30-acre easement and the access easement.

Within this 30-acre easement, the Project would disturb about nine acres during construction of up to five separate well pads, an access road, and part of the Source Water Pipeline, which would continue inland along the easement. The proposed phased Project would reduce this somewhat, due to a reduction in the number of initially planned well pads and a shorter access road. Cal-Am also recently determined it could reduce impacts along the pipeline route within CEMEX by routing the pipeline within the road rather than adjacent to it within ESHA. Cal-Am expects that several of these disturbed acres – those that would be used for staging and materials storage – would be restored within five years after construction is complete. The Commission generally considers impacts to be temporary only where 1) the proposed activities do not include significant ground disturbance such as grading, trenching, or others that would kill vegetation, disrupt native seedbanks, alter topography or soil horizons, etc.; 2) the native vegetation is recovered to a comparable age class/size structure relative to pre-construction conditions within either a) 12 months of initial disturbance (I.e. short-term temporary), or b) 12 months following the conclusion of disturbance, if the disturbance has extended over no more than a 24-month period (I.e. long-term temporary). Anything failing to meet any of these criteria is, by default, considered to have a permanent adverse effect on the ecosystem. Due to the type of proposed activities and the expected five-year recovery period, Cal-Am's impacts here would not be considered temporary. Additionally, the expected need to conduct maintenance at the well sites every few years would result in ongoing impacts to about six of these acres, which could lead to ongoing disturbance during the expected recovery periods. Further, there would

likely be more future losses due to the need to relocate the wells after their expected 20- to 25-year operating lives or due to sea level rise and coastal erosion.

Based on the presence of sensitive habitat areas (and coastal waters) within or adjacent to most of the Project's footprint, **Special Condition 3** requires Cal-Am to implement extensive and protective construction "best management practices" to avoid and minimize actual and potential impacts, and **Special Condition 4** requires Cal-Am to develop and implement a Spill Prevention and Response Plan to prevent spills to the extent possible and to respond appropriately if they do occur.

Various Project construction impacts are further detailed below:

- **Well and access road construction:** This work would involve use of heavy equipment, including drill rigs and motor vehicles, that would cause crushing of native vegetation, soil compaction, disturbance of seed banks within the work site noise effects, and potential for fuel spills. Each well site would be developed within a graded area of a few thousand square feet and would include concrete pads, electrical equipment, and other similar Project components. Cal-Am would grade, but not pave, a road to allow access to the well sites. As noted above, the Commission typically considers significant ground disturbance such as grading and compaction to have lasting effects on the ecosystem and thus, characterizes these impacts as permanent even if a foreign surface would not be evident. In this case, though the road would not be paved, it would be used regularly and thus, be subject to not only the initial ground disturbing activities but also ongoing operational impacts that would adversely affect any dune species that might begin to reestablish, precluding any (natural or facilitated) restoration to healthy habitat.

  Additionally, because the drilling work for each well needs to be done continuously, Cal-Am would need to time its well field construction activities to avoid disturbing nearby Western snowy plovers during their breeding and nesting season (which runs from March 1 to September 30 of any year). **Special Condition 5** requires Cal-Am to conduct its well field construction outside this period, unless otherwise authorized by the USFWS, with such authorizations potentially requiring an amendment to this permit..[38] Smith's blue butterflies similarly stand to be subjected to disturbance and impacts across all stages of their life history (larvae, pupae and adult) given their obligation to their sessile host plants, and **Special Condition 5** similarly requires Cal-Am to conduct all construction activities that would occur within 30 feet of its habitat outside its flight period between June 1 and September 15 of any year.

[38] The FEIR/FEIS provides that well construction should be conducted during non-breeding season unless otherwise allowed by the U.S. Fish and Wildlife Service. It presumes, though, that construction will occur during that season and includes a number of mitigation measures such as conducting nesting surveys, providing visual barriers between construction and any nests, etc.

Spoils from well drilling: Cal-Am expects to remove about 1,000 cubic yards of spoils during well drilling and its CDP application had initially proposed spreading the spoils evenly in an approximately two-inch thick layer throughout eight nearby acres of ESHA. However, Commission staff identified this activity as an avoidable impact and recommended that Cal-Am consider transporting the spoils offsite to an appropriate disposal location. Cal-Am's June 30, 2020 letter to Commission staff modified these spoils spreading approach and confirmed that Cal-Am would dispose of these spoils at the nearby Monterey Peninsula Landfill. This would represent a de minimus reduction in the Landfill's capacity, as Cal-Am has calculated the 1,000 cubic yards as being less than two one-thousandth of one percent of the Landfill's remaining capacity. This modification would require additional truck trips, though Cal-Am estimates no more than one trip every two to three days during the expected seven-month well construction period, for a total of between 70 and 105 total trips. With the proposed phasing of the Project, the initial impacts resulting from the volume of spoils and number of truck trips would be reduced by up to about 60-70%.

- **Maintaining or relocating well sites:** Cal-Am anticipates having to conduct maintenance at the well sites about every five years and that the area of disturbance – for access, staging, presence of construction equipment, etc. – would total about six acres for each event. This is the same area that would be significantly disturbed and characterized as a permanent impact during the initial construction phase. And even if the latter were not the case, although each maintenance event could be considered relatively short-term, the overall effect would be ongoing, re-disturbance of the area that would prevent adequate restoration and natural community successional processes from occurring between events, which would represent a greater than temporary adverse effect to these areas of habitat. The phased Project would result in reduced initial impacts due to the maintenance occurring at just two well pads rather that six for the undetermined period where Cal-Am would rely on just Phase 1 of its Project.

  At some point in the future, Cal-Am may need to relocate or rehabilitate its wells due to the effects of climate change or once the wells reach the end of their service life. This could result in additional adverse impacts to ESHA. As the nearby shoreline erodes inland, the beach and foredunes at the CEMEX site would also move inland and would be expected to maintain approximately the same profile as they now have. In response to a study done early during the CPUC's CEQA review that showed coastal erosion likely affecting the proposed well sites during their operating life, Cal-Am located them several hundred feet further inland than initially proposed. However, because that study was based on earlier versions of state guidance and science on sea level rise, Commission staff requested that Cal-Am provide an updated study using currently applicable guidance and projections. This more recent study, which Cal-Am provided in October 2019, showed that the well sites would likely be protected from the direct effects of coastal erosion over their proposed 25-year operating life, though it also showed that those well sites could be buried by the inland recession of the foredunes occurring in response to erosion and sea level rise. In recognition of these hazards, and as described in Section IV.H –

Coastal Hazards, **Special Condition 6** limits the permit term to no more than 25 years and requires Cal-Am to seek authorization from the Commission to relocate, rehabilitate, or extend the permit term. Because Cal-Am's site is surrounded by ESHA, it is likely that moving the wells will result in additional impacts to ESHA. These impacts would be assessed and addressed if and when Cal-Am seeks authorization from the Commission to move the wells.

- **ESHA Impacts from Pipeline Construction:** As noted above, Cal-Am would construct a Source Water Pipeline from the well field to the desalination facility and a Desalination Water Pipeline from the desalination facility to its Transmission Main Pipeline to the south. Most of the pipelines would be installed using conventional open trench methods, which due to equipment access, sidecasting or stockpiling of soil, and other factors, would result in a larger area being affected than just the width of the pipeline trenches. These pipelines include components within and outside of the City of Marina and are described in more detail below:
- **Source Water Pipeline:** About 5,365 linear feet of this pipeline would be within the County's coastal zone, including sections along the easternmost portion of the CEMEX access road, and along Lapis Road, Del Monte Boulevard, and part of Charles Benson Road. Pipeline construction along the CEMEX access road and Lapis Road would be within areas of disturbed coastal dune habitat and has the potential to disturb several special-status species, including Monterey spineflower, branching beach aster, ocean bluff milkvetch, and coast buckwheat. The FEIR/FEIS identifies ESHA impacts of up to 11.8 acres during construction, though some of these overlap with areas within the City of Marina's LCP jurisdiction.

- **Desalination Water Pipeline:** About 7,207 linear feet of this pipeline would be within the County's coastal zone, including sections along Charles Benson Road, Del Monte Boulevard, and Lapis Road, where it would enter the City of Marina. The route traverses areas of disturbed coastal dunes, including areas of central dune scrub and coyote brush scrub as well as ruderal habitat and developed areas. The FEIR/FEIS notes that pipeline construction could adversely affect at least three special-status species observed along the route – Monterey spineflower, Kellog's horkelia,[39] and coast buckwheat. The FEIR/FEIS identifies construction impacts of up to 16.9 acres of ESHA, though similar to the Source Water Pipeline above, some of this would occur within the City of Marina's LCP jurisdiction. The FEIR/FEIS also states that the Source Water and the Desalinated Water pipelines could potentially impact about 0.2 acres of this Smith's blue butterfly habitat, which it notes would be a significant adverse effect.

[39] Kellog's horkelia (*Horkelia cuneata* var. *sericea*) has a California Native Plant Society Rare Plant Ranking of 1B.1, meaning that it is rare throughout its range and seriously threatened.

- **Transmission Main Pipeline:** Several thousand linear feet of this pipeline would be located within the coastal zone, including about 320 linear feet within the City of Seaside and 1,290 linear feet bordering the Fort Ord Dunes State Park in the Commission's retained jurisdiction. It would traverse areas of coastal dune that include stands of central dune scrub, coyote brush scrub, coast live oak woodland, and northern coastal scrub, including some areas previously identified by the Commission as ESHA. Within the City of Seaside, the habitat along the route includes relatively small and discontinuous areas of coyote brush scrub, silver dune lupine-mock heather scrub, and Monterey pine woodland, along with areas of landscape plantings and ruderal vegetation. Construction could adversely affect a number of special-status species observed along the route, including sandmat manzanita, the federally threatened Monterey spineflower, Menzies' wallflower, Kellogg's horkelia, Monterey Coast paintbrush, branching beach aster, south coast branching phacelia, Michael's rein orchid, and Monterey ceanothus.[40] The FEIR/FEIS identifies pipeline construction as resulting in up to about 5.4 acres of ESHA impacts (including some within the City of Marina).[41]

- **Castroville Pipeline:** A short segment of this pipeline would be located within the County's coastal zone. Most of the area traversed by the pipeline consists of agricultural land, non-native grassland, developed areas, and ruderal habitat, though it also includes areas of central dune habitat and coyote brush scrub. The FEIR/FEIS notes that construction could adversely affect Monterey spineflower and branch beach aster and could result in construction impacts to about 0.4 acres of ESHA.

As part of pipeline installation, Cal-Am would establish several construction staging areas identified in the FEIR/FEIS as covering a total of 6.6 acres, though Cal-Am's recent Project modifications have reduced that area to some degree. Most of these areas are paved and along active rights-of-ways but are adjacent to areas that have the potential to provide habitat for special-status species, though they have not yet been described as ESHA.

The actual area of direct and indirect impact would likely be less than described above. This impact estimate is reduced from the 2020 estimate. In October 2022, in response to questions by Commission staff, Cal-Am determined that it could reduce surface impacts to ESHA by up to about 8.6 acres by installing pipelines in some areas using tunneling techniques instead of trenching. Cal-Am estimates impacts that would qualify as long-term temporary (i.e., not be subject to ground disturbance, significant vegetation

[40] Monterey Coast paintbrush (Castilleja latifolia ssp. latifolia) has a California Rare Plant Ranking (CRPR) of 4.3; south coast branching phacelia (Phacelia ramosissima var. austrolitoralis) ranks 3.2; Michael's rein orchid (Piperia michaelii) ranks 4.2; and Monterey ceanothus (Ceanothus rigidus) ranks 4.2. These species are currently either on the California Native Plant Society's Review or Watch Lists.

[41] The FEIR/FEIS also describes an optional alignment for this Transmission Main Pipeline that would affect up to 5.7 acres of ESHA.

loss, and to be able to be restored within 12 months following construction) to be approximately 14.7 acres and those that would qualify as permanent (or require more than 12 months to recover to a pre-construction condition) to be 7.5 acres. The actual extent and nature of ESHA impacts would be determined through additional field surveys comparing conditions shortly before and following Project implementation.

Avoidance, Minimization and Mitigation of Impacts
The FEIR/FEIS includes a number of mitigation measures meant to avoid or reduce some of these known or potential impacts to ESHA (see **Exhibit 6**). They include several commonly required measures, such as requiring the presence of one or more qualified biologists to oversee implementation of protective measures, conducting environmental awareness training and education to construction personnel, conducting pre-construction surveys and ongoing monitoring, and numerous best management practices. They also include Mitigation Measure 4.6-1n that requires Cal-Am to submit, prior to construction, a comprehensive Habitat Mitigation and Monitoring Plan ("HMMP") that describes Cal-Am's proposed mitigation, including providing mitigation success criteria, implementation plans, maintenance, monitoring, and reporting plans, and contingency measures needed to address restoration and compensatory mitigation on all sensitive habitats and species affected by the Project. It also anticipates that Cal-Am would coordinate with several resource agencies (including staff of the Commission, California Department of Fish and Wildlife, Regional Water Quality Control Board, U.S. Army Corps of Engineers, and U.S. Fish and Wildlife Service) to determine the full suite of mitigation measures that would ultimately be needed.

The mitigation measures included in the FEIR/FEIS are critical in reducing the impacts associated with the Project. Thus, the Commission imposes **Special Condition 7**, which codifies the mitigation measures from the FEIR/FEIS and refines several details to ensure consistency with the Commission's practice. Pre-construction biological surveys, including buffer areas surrounding the Project work site, would help to ensure that any sensitive wildlife or plant species detected, is avoided where feasible, and salvaged or safely relocated where possible. The approved biologist(s) would also have the ability to delay construction in order to avoid immediate impacts and consult with the appropriate agencies (i.e., CDFW and/or USFWS) including the Executive Director. During construction, the biologist(s) would be responsible for inspecting work areas ahead of construction each day, documenting their observations, ensuring that any necessary buffers are observed and clearly delineated, salvaging and/or relocating sensitive species in accordance with pre-approved measures, stopping work if there is imminent threat to a sensitive species or other need to consult with any agencies (e.g., USFWS or CDFW), and notifying the Executive Director of any consultation, impacts or injury to sensitive species, or development activities observed outside the scope of the permit. Refinements to the mitigation measures include broader consideration of western snowy plover nesting habitat use from prior years and wider buffers reflecting

the species' highly sensitive nature,[42] guidance on the legless lizard survey methods that should be used, further specifications for nesting birds, including survey windows nearer the commencement of construction, standard and minimum buffers, and limits on noise at nest sites,[43] requirements to survey for American badgers in habitats beyond those originally specified in the FEIR/FEIS,[44] larger buffers for Monterey dusky-footed woodrat middens, which are considered ESHA,[45] and inclusion of the Executive Director in all natural resource agency consultations as well as provision of all survey results and supporting documentation.

To address the additional need for habitat mitigation, Cal-Am submitted a Habitat Mitigation and Monitoring Plan ("HMMP") in June 2020 that relied heavily on anticipated opportunities to restore portions of the CEMEX site and provided three options by which to implement such restoration, including direct restoration, funded restoration, and the contribution of funds towards CEMEX parcel acquisition following the terms of the CEMEX settlement agreement. However, several concerns have arisen that will require Cal-Am to also consider mitigation options outside the CEMEX site. These concerns include the net loss of dune habitat that would occur, the concentration of mitigation effort in one area while Project impacts would be distributed throughout a much broader region, and ongoing negotiations concerning the CEMEX Settlement Agreement. More specifically, the full scope of final implementation of the Cemex Settlement Agreement and resolution of the underlying violation is undetermined at this point in time. Thus, it is unclear what, if any, mitigation opportunities will remain at the CEMEX site once the Agreement is fully implemented. To address these concerns, Cal-Am has worked in recent months to identify potential alternative mitigation options and while none have yet formally come together, several appear to be feasible or are even making significant progress towards partially resolving anticipated mitigation requirements. The options span dune ecosystems within the coastal zone, between the northern border of the

[42] For highly sensitive bird species, such as western snowy plovers, a 500-foot buffer (rather than the proposed 300-foot buffer) is recommended during their nesting period.

[43] Consistent with prior Commission approvals, noise levels would be maintained below 65 dBA or less at nest sites, which is approximately equivalent to that of a busy restaurant. Above these levels, noise can interfere with conspecific communications such as that between parent and chick or alert calls signaling the presence of other imminent threats; elevate stress hormone levels that compromise overall animal physiology; scare or startle animals, leading to nest evacuation or even abandonment, rending unfledged young vulnerable to predation or harsh environmental conditions (e.g., extreme cold or heat); and so forth.

[44] In the FEIR/FEIS, American badger habitat was identified as agricultural and grazing lands, and non-native grasslands; however, Cal-Am's 2019 surveys from across the Project site have since identified badger burrows within the pipeline corridor at multiple points, including within various types of dune scrub habitats.

[45] Dusky-footed woodrat middens are generally recognized as ESHA under the 'especially valuable habitat' portion of the definition because these are typically large, complex structures that support multiple generations of the species, persisting in some cases for as much as decades. The proposed mitigation measures in the FEIR/FEIS would limit buffers to 50 feet; however, the Commission generally applies the 100-foot buffer used for most ESHA.

CEMEX site and the southern border of Sand City and include potential private land acquisitions as well as restoration on publicly owned lands. Importantly, after investigating and reviewing alternative mitigation options, Commission staff is confident that that there is sufficient acreage available in the appropriate geography and within appropriate ecosystems to accommodate anticipated mitigation requirements for this Project with or without use of the CEMEX site.

In order to validate estimates of habitat impacted by the Project, **Special Condition 8** requires Cal-Am to conduct pre-construction surveys to document the condition of ESHA during the preceding late spring to early summer period (when most species are in bloom and most readily identifiable) including the physical extent and acreage of all habitats within proposed impact areas as well as metrics such as native species diversity, native species cover, invasive species cover, and vegetation community age class and/or size structure distributions, and photos, to compare against conditions following conclusion of construction. Existing records and documentation would be considered in conjunction with the new data, enabling a more comprehensive analysis for less apparent seedbanks and rare species occurrences. The timing of the pre-construction surveys would also allow for the detection of any recovery or other differences due to the termination of CEMEX operations and progress in reclamation activities, as the ecosystem may present differently. The post-construction surveys would reevaluate all of the same variables and additionally document dates of initial disturbance and disturbance cessation, and areas of significant ground disturbance (e.g., trenching), vegetation mortality and cover losses due to pruning, trampling, heavy equipment use, etc. to aid in the determination of impact nature, whether qualifying as temporary or permanent. For areas anticipated to be classified as temporarily impacted, another survey would be required prior to the conclusion of the allowed recovery period (e.g., within 12 months of initial disturbance for short-term and within 12 months of disturbance conclusion for long-term) to verify that the habitat has in fact recovered and if and where it has not, impacts would be reclassified as permanent. Invasive species would also be treated in all temporarily impacted ESHA in order to facilitate recovery.

Special Condition 8 also establishes base mitigation ratios for the various impact characterizations, providing for 1:1 where impacts would be considered of short-term temporary nature, a minimum 1.5:1 where they would be considered long-term temporary to account for the additional temporal loss of ecological functions, and a minimum 3:1 where impacts would be considered permanent. These minimum base ratios assume that compensation would take the form of habitat creation or substantial restoration but allow for the alternative strategies of enhancement and preservation to be used at double or triple the base ratios, respectively (e.g., for an acre of permanent impacts, three acres could be substantially restored, six acres could be enhanced, or nine acres could be preserved). Thus, there is a framework that recognizes the range of mitigation options that may be ultimately secured while ensuring that there would be meaningful compensation for the Project's impacts; similar strategies have been used in

other recent Commission decisions.[46] Additionally, in this case, because there would be a net loss of 1.9 acres of dune habitat to the permanent Project features such as the well pads and service roads, Cal-Am would be required to ensure a minimum 1:1 of the permanent impact mitigation requirement for that portion take the form of habitat creation. This could be achieved through the removal of existing unprotected dune habitat from future development opportunities and the restoration of essential dune processes (e.g., beach-dune connectivity). All mitigation for permanent impacts, and the added 0.5:1 fraction for long-term temporary impacts would be required to occur within areas that are or would be protected in perpetuity, and as consistent with **Special Condition 9**. For temporary impact mitigation, habitat would be addressed in-place and in-kind. Although some of these areas within the TAMC right-of-way corridor could remain susceptible to future development efforts, mitigation located in these areas could be assessed as part of future CDPs in those areas.

Although Cal-Am has previously submitted a HMMP, it was developed with a specific focus on the CEMEX parcel. Since this determination and in response to staff requests for alternative mitigation site options and more extensive mapping, Cal-Am has submitted assorted materials intended to update the existing HMMP. However, because the nature of modifications that would be necessary is extensive, both due to the changes in mitigation site availability and inadequate details such as success criteria, and that the inherent complexity of both past and expected plans is substantial, **Special Condition 10** would require Cal-Am to submit a new HMMP prior to permit issuance. It is expected that Cal-Am may be able to reuse still-relevant portions from the prior plan, but must also include more detailed information on mitigation goals, restoration objectives, and site specific conditions; reference conditions with supporting rationale; plan sets; invasive species control; success criteria and performance assessment methods; sampling designs and monitoring schedules; as-built, interim, and final reporting; provisions for possible further action, should any part of the mitigation effort fail to succeed; and, maintenance of responsibility even when working through partnerships. In addition, the HMMP would require provisions for the long-term monitoring of the mitigation site(s) and complete restoration of the developed footprint supporting infrastructure when the wells and any associated development comes to the end of its operational life.

With alternative mitigation options still being pursued but not finalized, **Special Condition 10** importantly provides for three options by which compensatory mitigation for habitat impacts could be implemented. In all cases, the options would be limited to Project-associated habitats (i.e., primarily foredunes and dune scrubs, but also maritime chaparral, etc.) in the coastal zone between the southern boundary of the Salinas River and the northern boundary of the City of Monterey, and west of Highway 1. This spatial focus ensures that comparable ecosystems under the Commission's jurisdiction would benefit directly from mitigation efforts. **Special Condition 10** also ensures that any and

[46]For example, CA Department of Transportation (CDP 2-20-0282) at Gleason Beach, Sonoma County, and Federal Highway Administration (CD-0001-21) at Santa Cruz County.

all lands used for mitigation, apart from where temporary impacts would be mitigated in-place and in-kind within the TAMC corridor, would be protected in perpetuity.

The first mitigation option under **Special Condition 10** would allow for Cal-Am to protect and potentially improve currently unprotected lands, effectively removing them from future development threats and providing for more habitat than might otherwise exist. This approach would be required, at a minimum and as part of a significant contribution to restoring coastal dune processes, as creation of dune habitat to ensure no net loss due to the Project's permanent footprint, presently estimated as 1.9 acres. For example, the protection of remaining gaps among otherwise conserved areas might enable broader restoration efforts, or the removal of legacy materials such as roadbeds or revetments could restore beach-dune connectivity where those processes have been lost. Beyond the minimum requirement to compensate for no net loss of dune habitat, additional acreage could be moved into protection and would be eligible for preservation credit if unimproved; if improvements would be proposed in addition to new protections, the mitigation may alternatively qualify the lands for enhancement or restoration credit, based on standards typically applied for these thresholds.[47]

Special Condition 10 also allows for a second mitigation option where lands already protected from development could be improved, either through enhancement or substantial restoration efforts, and whether implemented by Cal-Am, the landowner, or an agreed-upon third party. This option would necessarily occur in coordination with the landowner, allow for landowner specification of available acreage and terms of agreement with Cal-Am, and ensure landowner involvement in all discussions concerning site restoration priorities, goals and objectives, methods, maintenance, etc. Land already obligated to existing regulatory or legal requirements would generally be considered unavailable as compensation for Cal-Am's Project and the Executive Director would review and approve any tentative agreement between Cal-Am and a landowner prior to its execution, to ensure that all terms would be consistent with the requirements of this and other special conditions. If Cal-Am decides to pursue mitigation at the CEMEX site under this option, it would also need to demonstrate that proposed restoration work goes above and beyond what is expected from the Settlement Agreement.

A third mitigation option under **Special Condition 10** would assess an in-lieu fee of $250,000 per acre of required restoration with an annual adjustment per consumer price index beginning one year after Commission approval and continuing until all fees are paid.[48] The in-lieu fee amount of $250,000 per acre of required restoration is based

[47] For example, see the Ecology staff technical memo provided as Exhibit 24 in the staff report for California Department of Transportation (CDP 2-20-0282) at Gleason Beach, Sonoma County.

[48] The in-lieu fee amount of $250,000 per acre of required restoration is based upon … a range of examples from other permits, practitioners, and published literature. For example, elsewhere in Monterey County, in the Asilomar Dunes of Pacific Grove, an in-lieu fee program has been used for dune habitat and most recently, in 2018 (Smith CDP 3-18-0286), applied a fee of $2 per square foot. This is

upon a range of examples from other permits, practices, and published literature. For example, elsewhere in Monterey County, in the Asilomar Dunes of Pacific Grove, an in-lieu fee program has been used for dune habitat and most recently, in 2018 (Smith CDP 3-18-0286), applied a fee of $2 per square foot. This is approximately equal to $87,000 per acre, and if that amount is then adjusted for consumer price index would be approximately $102,000 per acre today. Another example from a small project in San Mateo County (Caltrans 2-22-0192-W) included a proposal with budget that, if simply scaled-up, would create and restore dunes at a cost of approximately $740,000 per acre. Published literature for large complex projects involving dunes in California suggests a starting point of $1,000,000 per acre.[49] Conversations with experienced dune restoration practitioners in southern California have indicated that a relatively simple project can readily cost somewhere between $100,000-$250,000 per acre and that up to $1,000,000 per acre is reasonable for complex or significantly degraded sites requiring significant engineering effort for components such as grading topography or removing contaminated materials. Because the existing restoration opportunities in the region are as variable as these examples, a fee assessment of $250,000 per acre is considered reasonable and could likely afford significant improvements to local dune ecosystems.

Fees would be deposited into an interest-bearing account established and managed by a government or non-governmental organization as approved by the Executive Director, with the sole purpose of financing dune habitat protection, restoration, and related activities in the southern Monterey Bay region. Should such an account not already exist, Cal-Am would be responsible for facilitating its development and initiation and covering the costs associated with administering the fees. The in-lieu fee option may be elected by Cal-Am for any fraction of mitigation acreage due except the required habitat creation to assure no net loss. The in-lieu fee option should be viewed as the last resort mitigation option and should be selected by Cal-Am only if neither of the other two options is feasible. If, at no less than 90 days prior to anticipated permit issuance, Cal-Am has failed to secure sufficient acreage to mitigate for Project impacts to habitat, the prescribed fee will be assessed for any outstanding acreage and evidence of all fees having been paid into an approved account would be required prior to permit issuance.

---

approximately equal to $87,000 per acre, and if that amount is then adjusted for CPI, would be approximately $102,000 per acre today. Another example from a small project in San Mateo County (Caltrans 2-22-0192-W) included a proposal with budget that, if simply scaled-up, would create and restore dunes at a cost of approximately $740,000 per acre. Published literature for large complex projects involving dunes in California suggests a starting point of $1,000,000 per acre (King et al 2018 in *Shore & Beach*). Conversations with experienced dune restoration practitioners in southern California have indicated that a relatively simple project can readily cost somewhere between $100,000-$250,000 per acre and that up to $1,000,000 per acre is reasonable for complex or significantly degraded sites requiring significant engineering effort for components such as grading topography or removing contaminated materials. Because the existing restoration opportunities in the region are as variable as these examples, a fee assessment of $250,000 per acre is considered reasonable and could likely afford significant improvements to local dune ecosystems.

[49] PG King. C Nelsen, JE Dugan, DM Hubbard, KL Martin, RT Battalio. 2018. Valuing beach ecosystems in an age of retreat. Shore and Beach 86(4): 45-59.

The mitigation measures and Special Conditions described above will ensure that impacts to ESHA are avoided, minimized, and mitigated to the maximum extent feasible. Nonetheless, the Project remains inconsistent with Coastal Act and LCP provisions requiring that development in ESHA be dependent on the habitat resources within the ESHA, as neither the well field nor pipeline components are dependent on those resources. Therefore, the Project may only be approved if it meets the requirements of Coastal Act Section 30260, as discussed below in Section P (Coastal-Dependent Industrial Facility Override).

Additional Project impacts

Another aspect of the Project is the required modification of the existing outfall the Project would use to discharge its effluent into Monterey Bay. These modifications would include replacement of some clamps on the existing outfall line, which is necessary to protect from corrosion. The clamp replacement is included as a mitigation measure required by the FEIR/FEIS and must occur before Cal-Am begins its facility operations. This work is proposed to occur during the treatment facility's low flow period in the summer, when most of its discharge is treated and used for agricultural irrigation. However, this would coincide with the Western snowy plover breeding and nesting season and would occur within the plover's critical habitat area on the beach. As described in the FEIR/FEIS, the installation work would likely require heavy equipment on the beach and foredune area, excavation of some amount of beach and dune habitat, installation of temporary fencing to protect the work area, and other activities that would result in temporary noise, disturbance, and occupancy of this critical habitat area for a six- to eight-week period during a critical time period for the species. The activities could disturb approximately a half-acre between the dunes and the beach. Such activities in dune habitat would be considered permanent due to their ground-disturbing nature and would not conform to Coastal Act Section 30240 (if the work is done in the Commission's retained jurisdiction) or LCP provisions that mirror that Section (for any work in the City's permitting jurisdiction) because it would be non-resource-dependent activity occurring in ESHA. For portions that would occur on the beach, Coastal Act Section 30230 would instead apply, requiring the protection of biological productivity and species of special biological significance, such as the plover.

A Project component that is not part of Cal-Am's current CDP application is the liner that must be installed within the existing ocean outfall pipeline to prevent the desalination facility discharge from corroding the outfall line (see description in Section II.I). The liner is included as one of the mitigation measures required by the FEIR/FEIS and must be installed before Cal-Am begins its facility operations.[50] Pursuant to an agreement between Cal-Am and M1W, the operator of the wastewater treatment plant, the liner is to be installed by M1W; however, neither entity has committed to a final design or applied for the needed permits for this work. As described above, this proposed work is not authorized under this permit although the impacts are considered to provide a

[50] The FEIR/FEIS imposed Mitigation Measure 4.13-5b requiring Cal-Am to install the liner to protect the outfall from corrosion. It required Cal-Am to include the proposed liner in its CDP application, described some of the potential impacts that might occur during installation, and noted that the work would be subject to other mitigation measures meant to reduce impacts to terrestrial biological resources.

comprehensive review of the Project. This outfall work will require a subsequent amendment of a CDP the Commission issued to M1W.

The preliminary analysis provided in the FEIR/FEIS anticipates that part of the liner installation would be done from the beach (and at or near the boundary between the City of Marina's LCP jurisdiction and the Commission's retained jurisdiction). Draft information provided by Cal-Am shows that work could require digging access pits at two sites along the outfall route within the City of Marina that consist of ESHA. As with the clamp replacement, work is proposed to occur during the treatment facility's low flow period in the summer, when most of its discharge is treated and used for agricultural irrigation. The excavation pit at each access point would be located directly above the outfall pipe and would not exceed a size of 12 feet by 25 feet. Soils would be stockpiled within the existing outfall right-of-way, and topsoil would be stored in a separate pile for use in restoration following installation. Because the work would again need to occur during low-flow times for the wastewater plant, this too would need to happen in late summer, during Western snowy plover breeding and nesting, and potentially within the plover's critical habitat area on the beach. The installation work would likely require heavy equipment on the beach and foredune area, excavation of some amount of beach and dune habitat, installation of temporary fencing to protect the work area, and other activities that would result in noise, disturbance, and occupancy of this critical habitat area during a critical time period for the species. Similar to ESHA impacts described above, these activities would not conform to Coastal Act Section 30240 or LCP provisions that mirror that Section for the dune portion because they would be non-resource-dependent activity that would occur in ESHA. And again, for portions that would occur on the beach, Coastal Act Section 30230 would apply.

Conclusion for Appeal
Based on the discussion above, the Commission finds that the Project, as proposed, does not conform to provisions of Habitat Protection policies in the City's LCLUP, including LCLUP Policies 25, 26, and 41 and those requiring that only uses dependent on habitat resources be allowed within primary habitat areas.

Conclusion for Consolidated CDP
Based on the discussion above, the Commission finds that the Project, as proposed, does not conform to the Coastal Act's ESHA policies.

However, because the Project is considered a coastal-dependent industrial facility, the Commission has the discretion to apply the three tests of Coastal Act Section 30260 and approve the Project notwithstanding its inconsistencies with Coastal Act and LCP provisions (see Section IV.P).

F. PROTECTION OF GROUNDWATER RESOURCES

Coastal Act Section 30231 states, in relevant part:

> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, **preventing depletion of ground water supplies** … [emphasis added]

Background and Analysis

The groundwater aquifer system in this region is complex and includes several "stacked" aquifers – e.g., the Dune Sands Aquifer, the 180-Foot Aquifer, and the 400-Foot Aquifer – that are partially connected and are experiencing various degrees of seawater intrusion. Studies done as part of the CEQA review for the Project as well as subsequent modeling studies undertaken by Cal-Am concluded that the proposed Project's well field would have relatively limited effects on nearby groundwater resources. However, other entities point to other studies to identify greater potential for adverse impacts to nearby groundwater resources. In particular, they maintain that other modeling shows an increased likelihood that Cal-Am would extract a higher than anticipated percentage of "non-seawater" (i.e., water that includes some proportion of fresh or brackish water from the inland aquifer systems) and would therefore be required to return more water to the basin than previously anticipated in the Project's Return Water Agreement.[51] This outcome could substantially increase the costs to Cal-Am's ratepayers (as described in Section IV.I – Environmental Justice and Section IV.O – Assessment of Alternatives. In addition, some commenters have expressed concern that the Project would adversely affect the water supply wells of the Marina Coast Water District, which are located about two miles from the Project's proposed well field. Neither the CPUC in certifying the FEIR/FEIS nor the Commission's independent hydrogeologist (as part of Commission's review in 2020) found evidence concluding that such impacts would occur; however, the Commission's independent hydrologist recommended additional studies to more fully characterize the Project's likely effects on groundwater. Additionally, a pending lawsuit filed in 2020 by the City of Marina) is challenging Cal-Am's ability to withdraw more than 500 acre-feet per year of

[51] As noted in the Project Description, a Return Water Agreement between Cal-Am and the Monterey County Water Resources Agency, which was approved by the CPUC , provides that Cal-Am would have to monitor the water extracted from its wells, determine the proportion that is not fully seawater (by calculating the salinity of its extracted water as compared to that of seawater), and then return that volume to the Basin at substantially reduced prices, in the form of potable water to be supplied to the Castroville Community Services District. See CPUC Final Decision 18-09-17, Appendix H – Return Water Settlement. The Return Water Agreement is not related to CEQA environmental impacts, however. As noted by the CPUC, the FEIR/FEIS concluded that "with or without any return water component, the project's groundwater resources impact would be less than significant." *In the Matter of the Application of California American Water Company for Approval of the Monterey Peninsula Water Supply Project, etc.*, CPUC No. A-12-04-019, at p. 115 (Order Denying Rehearing of Decision, dated Feb. 5, 2019) (citing FEIR/FEIS at pp. 4.4-66, 4.4- 67, 4.4-71 and 4.4-72).

groundwater from the proposed well field location.[52] In that lawsuit, the trial court referred a series of issues to the State Water Board's Administrative Hearing Office for determination pursuant to Cal. Water Code § 2000.[53] After the Administrative Hearing Office's referee issues a proposed report and provides it to the State Water Board for consideration, the State Water Board will issue its final report and the SWRCB will send the report to the trial court to guide an adjudication of the case.[54] There is a trial date of October 23, 2023 in the litigation, so a trial court decision is not expected until late 2023 at the earliest.

Although the Project's potential impacts to area groundwater have been extensively analyzed in connection with the CEQA review relating to the Project, operation of the slant test well at the former CEMEX site, by the Commission's independent hydrology expert, and other analyses; however, some degree of uncertainty remains. Therefore, staff believes it is appropriate to require several Special Conditions to require additional protections. As described below, the Special Conditions are necessary to ensure that Cal-Am can withdraw its proposed volumes of groundwater from this site, that it can operate its wells in a manner that avoids harm to aquifers that are a source of drinking water for the City of Marina and MCWD, and that it provides adequate monitoring and reporting to identify potential impacts to other nearby groundwater users before they occur.

The CPUC's CEQA review of the proposed Project included extensive groundwater modeling and monitoring data from a number of monitoring wells, including monitoring wells that Cal-Am installed as part of a test slant well. In 2014, the Commission approved Cal-Am's CDP for installation of a test slant well at the former CEMEX site and included a special condition requiring Cal-Am to install monitoring devices in at least four wells nearby on the CEMEX site and at least one offsite well. This monitoring was meant to provide baseline water data and Total Dissolved Solids levels in those wells before the start of pumping from the test well and to help identify potential impacts through monitoring during test well operations.[55]

---

[52] *City of Marina, et al. v. RMC Lonestar, et al.*, Monterey County Superior Court No. 20CV001387 (complaint filed May 11, 2020).

[53] Under this provision, a court may refer to the SCRWB any or all issues in a lawsuit involving water rights to obtain SCRWB's determination; however, SCRWB's determination is not binding on the court.

[54] The SWRCB's determination is not binding on the trial court. Under Water Code section 2019, "[t]he report filed by the board is prima facie evidence of the physical facts therein found; but the court shall hear such evidence as may be offered by any party to rebut the report or the prima facie evidence."

[55] In litigation challenging the Commission's approval, the Court found that the Commission had not abused its discretion in relying on monitoring wells to evaluate the test well's potential impacts to groundwater supplies and water quality. *Marina Coast Water District v. Coastal Commission*, No. H042742, 2016 WL 6267909 (Cal. Ct. App. Oct. 26, 2016).

The CPUC's CEQA review included establishment of a Hydrologic Working Group ("HWG") to help develop these monitoring and modeling methods and to assess the resulting studies.[56] Those studies and pump tests at the test well identified a relatively limited "zone of influence" around Cal-Am's proposed well field, and the CEQA review concluded that Cal- Am's proposed extraction of groundwater from the 180-Foot Aquifer in this area would have less than significant effects with regards to groundwater depletion or recharge. These findings and conclusions were incorporated into the CPUC's FEIR/FEIS, which was published in 2018. The CPUC subsequently certified the FEIR/FEIS and authorized a Certificate of Public Convenience and Necessity for the MPWSP in 2018.[57]

In the CEQA review and the CPUC proceeding to certify the FEIR/FEIS, other interested parties presented additional studies and analyses which raised competing views about the type and extent of the likely effects that Cal-Am's intake wells would have on area groundwater supplies. Key areas of concern or disagreement included whether the data used in Cal-Am's modeling and monitoring studies were adequate to characterize conditions of the affected aquifers and the likely or potential effects of Cal-Am's water extractions from those aquifers, whether Cal-Am's proposed extractions would induce seawater intrusion or would remove greater volumes of "non-seawater" than predicted, or whether the Project's pumping would adversely affect any water in those aquifers that may be suitable to treat as fresh water or drinking water. In particular, the City of Marina and the Marina Coast Water District concluded that Cal-Am's proposed use of groundwater from this area would have substantially greater adverse effects than had been identified during the CEQA review and the CPUC proceeding to certify the FEIR/FEIS, including adverse effects on the groundwater the City and Water District rely upon for drinking water supplies.

Data adequacy: Some of the main reasons for disagreement among the studies were their use of different baseline standards, data collection methods, and modeling approaches. For example, Cal-Am's studies were focused in part on determining how much "non-seawater" Cal-Am's wells would extract – that is, what proportion of the water withdrawn through Cal-Am's wells would not be fully seawater but would include brackish or fresh water that could be useful or treatable groundwater within the Salinas Valley Groundwater Basin. As noted above, the Basin has a prohibition of exporting such water outside the Basin boundaries, and pursuant to the CPUC-approved Return Water Agreement, Cal-Am would return any such portion that is not considered seawater. Some of the criteria Cal-Am used were different than those used in other studies – for example, the concentrations of Total Dissolved Solids ("TDS") used to

[56] See documentation provided on Cal-Am's MPWSP website at https://www.watersupplyproject.org/test-well (accessed September 1, 2022). The HWG is comprised of two hydrogeologists working on behalf of Cal-Am and one each working for the Salinas Valley Water Coalition and the Monterey County Farm Bureau.

[57] CPUC No. A-12-04-019, Decision dated September 13, 2018, as modified and affirmed Feb. 5, 2019).

identify fresh water, brackish water, and seawater.[58] Some studies were based on entirely different data collection methods than those used by Cal-Am – for example, the City used an Airborne Electromagnetic ("AEM") survey to augment its hydrogeological data and modeling.[59] In addition, the City argued that a study published in 2018 ("AEM Study"), which used the AEM modeling, indicated that Cal-Am's wells would extract substantially greater volumes of "non-seawater" than had been projected.[60] A preliminary version of the AEM Study was submitted by MCWD following the close of the public comment period on the Draft EIR, and the final AEM Study was submitted after publication of the FEIR/FEIS. The FEIR/FEIS addressed the AEM Study in detail and concluded that its results were consistent with hydrogeologic data reviewed in the CEQA process: "The results showed a distribution of groundwater chemistry that is consistent with the findings of the HWG hydrogeologic investigation and generally consistent with the salinity mapping for the 180-Foot and 400-Foot Aquifers published by the MCWRA. The Stanford study also provides data to help interpolate between control points provided by the MPWSP monitoring network and confirms the work completed for the hydrogeologic investigation regarding the distribution of water quality in the MPWSP study area."[61] In the prior CPUC proceeding to certify the FEIR/FEIS, the City of Marina and MCWD filed a motion for a rehearing, arguing that that the FEIR/FEIS erred because it did not alter its characterization of the environmental baseline in light of the data in the AEM Study. In 2019, the CPUC denied the rehearing request.[62] Since then, the City of Marina has argued in the pending lawsuit against Cal-Am (for which there is a State Water Board reference proceeding underway) that a more recent 2020 AEM study published by the same authors as the 2018 study

[58] Cal-Am's modeling efforts characterized "fresh" water as having TDS concentrations lower than 500 milligrams per liter ("mg/l"), which is based on California's recommended drinking water objective of no greater than 500 mg/L (per California Code of Regulations, title 22, division 4, chapter 15, article 16, section 64449, Table 64449-B (Consumer Acceptance Contaminant Level Ranges). Others were based on "fresh" water having TDS concentrations of less than 3,000 mg/l, which is based on the State Water Board's Resolution 88-63 – Sources of Drinking Water that identifies groundwater at those concentrations as suitable for drinking water, if treated.

[59] AEM is a relatively new technique for determining various characteristics of groundwater and aquifers. Its approach is one of geophysics rather than hydrogeology, and therefore involves an entirely different approach than that used in previous Cal-Am monitoring and modeling work. As a result, it is difficult to compare the two.

[60] Knight, R. et al., *Interpretation of Hydrostratigraphy and Water Quality from AEM Data Collected in the Northern Salinas Valley, CA*, Geo Frameworks, Marina Coast Water District (March 2018).

[61] FEIR/FEIS, p. 4.4-36.

[62] CPUC No. A-12-04-019, at p. 115 (Order Denying Rehearing of Decision, dated Feb. 5, 2019). After the CPUC denied the re-hearing request, the City of Marina and MCWD filed a direct petition for a writ of review to the California Supreme Court, which did not grant review.

demonstrates that the desalination facility would adversely affect the aquifers that are a source of drinking water for the City of Marina and MCWD.[63]

Additionally, two recently published peer-reviewed papers contend that some of the modeling Cal-Am conducted provided results that could almost only have occurred due to errors or mis-application of the collected data.[64] Arguments regarding data corruption were previously presented several times to the CPUC, which rejected those arguments.[65] A party to the prior CPUC proceeding to certify the FEIR/FEIS (Water Plus) has renewed those arguments in an August 2022 petition to the CPUC to modify the CPUC's decision, and that petition is currently pending.

Some of these issues and areas of disagreement cannot be fully resolved without additional data collection and monitoring, and some will not be determined unless and until Cal-Am actually conducts pumping. Cal-Am does not need a permit or water right for its withdrawal of seawater. However, Cal-Am would need to obtain appropriative rights for its extraction of the "non-seawater" portion of the water it extracts. To obtain those rights, it would have to establish that its use of that water was not harming other existing lawful water users in the Basin.[66]

To reduce some of the existing uncertainties to determine whether the proposed Project would conform to the groundwater protection provision of Coastal Act Section 30231, Commission staff, as part of its prior review of the Project, contracted with an independent licensed hydrogeologist to review some of these studies and conclusions, to conduct additional analyses, and to reach independent conclusions about these issues. The initial review, prepared in November 2019,[67] concluded that there were several substantial remaining uncertainties about how Cal-Am's extraction of groundwater may affect the groundwater basin and the amount of potentially usable

[63] Knight R., et al., Gottschalk et al., Using an Airborne Electromagnetic Method to Map Saltwater Intrusion in the Northern Salinas Valley, CA, 85 GEOPHYSICS B119-131 (July 2020).

[64] See Weitzman, R.A., Tuning a Model in Climatology and Calibrating One in Hydrgeology: An Informative Comparison, in American Journal of Theoretical and Applied Statistics, May 12, 2022, and Weitzman, R.A., From Divining Rods to Statistics: A Forensic Analysis of the Misuse of Statistics in the Estimation of Environmental Impact, in Chance, pages 18-20, November 17, 2021.

[65] See. e.g, CPUC No. D.18-09-017, Application of California-American Water Company for Approval of the Monterey Peninsula Water Supply Project and Authorization to Recover All Present and Future Costs in Rates, dated September 13, 2018 ("D.18-09-017"), Appendix J, CPUC Memorandum Re: Responses to Comments Received After Publication of MPWSP Final EIR/EIS, p. 2 ("Water Plus has provided no direct evidence to support the data tampering accusation. Rather, the evidence in the record (including but not limited to Final EIR/EIS Master Response 12: The North Marina Groundwater Model (v. 2016), and FEIR/FEIS Section 8.6.20) indicates that the data tampering accusations are false…").

[66] See FEIR/FEIS, Chapter 2 – Water Demand, Supplies, and Water Rights; see also SWRCB Letter to CPUC, dated July 13, 2013.

[67] See Weiss Associates, Independent Hydrogeological Review of Recent Data and Studies Related to California American Water's Proposed Monterey Regional Water Supply Project, November 1, 2019.

groundwater within the area. That review concluded that the prior HWG modeling did not adequately characterize some aspects of the underlying aquifers and some of Cal-Am's potential effects on those aquifers. It also concluded that although Cal-Am's proposed groundwater extraction would likely have limited to negligible effects on the rate of seawater intrusion in the area, it appeared that Cal-Am's wells could extract greater volumes of non-seawater than had been previously identified, which would increase the amount of water Cal-Am would need to return to the Basin pursuant to the Return Water Agreement. It also recommended that additional data collection and modeling were needed to further reduce the degree of uncertainty about expected impacts, although it also suggested that some of that uncertainty and potential impacts could be reduced by ensuring that the screened sections of Cal-Am's wells extended further seaward so they could extract a greater percentage of seawater from beneath Monterey Bay.

After the Commission's November 2019 hearing, Cal-Am agreed to fund some of these additional recommended analyses to allow for further reduction in uncertainties about the proposed Project's effects on groundwater and to better determine the amount of "non-seawater" likely to be extracted by Cal-Am's wells. Results of this review included the following conclusions:[68]

- The additional modeling suggests the amount of recharge into the aquifers – from precipitation, irrigation water percolating downward, etc. – would affect the percentage of seawater extracted by the wells. The previous modeling did not include this recharge component and showed that the wells would initially pump about 85-90% seawater and that the percentage would increase to about 96-99% after the first three years of operation. This updated modeling shows that the amount of seawater withdrawn would not reach that expected steady state of 96-99%, but rather would vary based on whether it was a wet or dry season, how much irrigation occurred, and other factors. As described below, this aquifer characteristic is likely to result in Cal-Am needing to return more water to the Salinas Valley Groundwater Basin during wet years, pursuant to the Return Water Agreement.
- This most recent modeling also concluded that the amount of seawater extracted would vary due to the direction and slope of the groundwater gradient; that is, an aquifer gradient from the shoreline to inland areas, which is currently the most common condition, would result in extraction of a higher percentage of seawater, while a flat gradient or shoreward gradient would result in extraction of a higher percentage of non-seawater. This latter condition could be developed through the upcoming implementation of the Salinas Valley Groundwater Management Plan; however, even with a flat or shoreward gradient, the modeling showed that it could take several decades to increase the percentage of non-seawater, due to the large volumes of seawater that have already intruded to inland areas of the aquifer system.

[68] See Independent Evaluation, Modification, and Use of the North Marina Groundwater Model to Estimate Potential Aquifer Impacts, July 2020, which was provided as Exhibit 12 of Commission staff's September 2020 staff report on Cal-Am's proposed project.

- The modeling determined that the "capture area" from which Cal-Am's wells could capture non-seawater from the upper Dune Sand Aquifer could cover up to about 2.5 square miles.
- The recent modeling also identified areas of expected groundwater drawdown beneath several nearby wetland and vernal pond areas. This is described further in Section IV.G of these Findings.

This second review also recommended that additional modeling be done to further evaluate and describe potential groundwater impacts. For example, some of these conclusions are derived from use of a "steady state" model rather than a "transient" model that incorporates more dynamic modeling aspects, such as relatively short-term aquifer changes that result from seasonal changes in rainfall or irrigation and can better account for the amount of groundwater storage in the aquifers. The review also includes several specific recommendations on various components of that transient model to help adequately capture some of the expected reduction in uncertainty.

In July 2020, the above-referenced Hydrogeologic Working Group (HWG) submitted a critique of this most recent review.[69] Although this critique identified several concerns related to this recent modeling, it concurred that the Commission's independent reviewer reached a reasonable conclusion that the amount of seawater in the water withdrawn from Cal-Am's well field would range from about 88 to 99% and would vary in response to precipitation, agricultural pumping rates further inland, and other considerations. In July 2022, Cal-Am provided an updated analysis by the HWG that described results of the HWG's implementation of the scope of work that Weiss had previously proposed in the June 2020 review. This more detailed evaluation included additional modeling with several changed parameters as suggested by Weiss and determined that the range of non-seawater extracted under some conditions could be substantially greater – up to about 20%. As noted above, the modeling done during Cal-Am's CEQA review concluded that Cal-Am's water withdrawal would reach a steady state of 96-99%. Pursuant to the above-referenced Return Water Agreement, this would result in Cal-Am needing to return no more than about 700 acre-feet of water per year to the Salinas Valley Groundwater Basin. The updated modeling, however, shows that during years with higher precipitation rates, lower inland pumping rates, or other reasonably foreseeable conditions, Cal-Am could be required to return substantially more water to the Basin.

From a perspective of protecting groundwater resources, the CPUC's requirement that Cal-Am return any non-seawater to the Basin as specified in the Return Water Agreement is meant to ensure that the Project does not conflict with the Basin's prohibition against groundwater being exported from the Basin. In addition, if any party was harmed by Cal-Am's pumping of larger than expected quantities of non-seawater, they could challenge Cal-Am's ability to obtain appropriative rights to that groundwater. This increased return water requirement could also affect Project feasibility and cost, as described in Section IV.I – Environmental Justice and Section IV.O – Assessment of

[69] Hydrogeologic Working Group Comments on Weiss Report, July 10, 2020.

Alternatives. Essentially, because any higher return water volumes could result in additional costs to Cal-Am that it might seek to cover through additional cost recovery requests to the CPUC, the increased need to return water could substantially increase the costs to members of disadvantaged communities and to all Cal-Am ratepayers.

To address concerns related to Coastal Act Section 30231's provision for protection of groundwater supplies, Cal-Am revised its Project to include several new components. It now plans to extend its slant wells to be at least 1,000 feet long so as to maximize the amount of seawater they extract. It also plans to build the Project in phases, so that an initially smaller Project will both require less pumping and allow opportunities to monitor for potential adverse effects before the full Projects implemented. Cal-Am also proposes some additional monitoring measures and has committed to hold public hearings to present its monitoring results.

Even with these recent commitments, there will still be uncertainty about the effects of Cal-Am's groundwater pumping from this location. To provide additional protection and avoid or minimize potential impacts, the Commission is imposing several Special Conditions. **Special Condition 1** requires, prior to permit issuance, that Cal-Am submit the final decision in the above-referenced litigation, which is expected to adjudicate Cal-Am's right to extract groundwater and identify the amount of groundwater Cal-Am would be able to extract from its Project site (among other issues). **Special Condition 11** requires Cal-Am to install its wells to reach at least 1,000 feet seaward, if feasible, and if during installation it is found to be infeasible, to submit a revised plan for Executive Director approval, or an amended CDP (if the Executive Director determines it is necessary), showing the revised installation and that identifies any expected changes in the proportion of seawater to be extracted. To provide further protection for other groundwater users in the Basin, **Special Condition 12** requires Cal-Am to submit a monitoring and reporting plan, which is to be reviewed by an independent third-party to be funded by Cal-Am, that identifies monitoring measures that Cal-Am will implement to provide an "early warning" of any potential impacts to other users resulting from Cal-Am's water extractions. This is intended to identify any potential effects Cal-Am's pumping may have on nearby freshwater sources, on any increasing seawater intrusion that may affect other uses, and to avoid other similar concerns.

Conclusion

Even though there is uncertainty about the potential impacts Cal-Am's water extraction would have on other users in the Basin, the analyses and Special Conditions described above allow the Commission to determine the Project will be protective of groundwater resources and therefore consistent with the relevant provision of Coastal Act Section 30231.

G. Environmentally Sensitive Habitat Areas - Wetlands and Vernal Ponds

Section 30231 Biological productivity; water quality

> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

LCLUP Exhibit A states:

> **Primary habitat.** This term includes all of the environmentally sensitive habitat areas in Marina. These are as follows:
> 1. Habitat for all identified plant and animal species which are rare, endangered, threatened, or are necessary for the survival of an endangered species. These species will be collectively referred to as "rare and endangered."
> 2. Vernal ponds and their associated wetland vegetation. The Statewide Interpretive Guideline for Wetlands and Other Wet Environmentally Sensitive Habitat Areas (California Coastal Commission, February 14, 1981) contains technical criteria for establishing the inland boundary of wetland vegetation...
>
> **Secondary habitat.** This term refers to areas adjacent to primary habitat areas within which development must be sited and designed to prevent impacts which would significantly degrade the primary habitat. The secondary habitat area will be presumed to include the following, subject to more precise determination upon individual site investigation:
> 1. The potential/known localities of rare and endangered plant species as shown on LUP p. 71 ("Disturbed Vegetation" map).
> 2. The potential wildlife habitats as shown on LUP p. 75 ("Potential Wildlife" map).
> 3. Any area within 100 feet of the landward boundary of a wetland primary habitat area.
>
> **Rare and endangered species.** This term will apply to those plant and animal species which are rare, endangered, threatened or are necessary for the survival of such species. The Environmental Analysis Report prepared for the Marina Local Coastal Program identified such species in the dune habitat areas. While future scientific studies may result in addition or deletion of species, the list presently includes:
>
> 1. Smith's Blue Butterfly **(**Shijimiaeoides enoptes smithi**)**[70]

[70] This name has been updated since publication of the LCP – it is now Euphilotes enoptes smithi.

2. Globose Dune Beetle **(**Coelus globosus**)**
3. Black Legless Lizard **(**Anniella pulchra nigra**)**
4. Salinas Kangaroo Rat **(**Dipodomys heermanni goldmani**)**
5. Seaside Painted Cup **(**Castilleja latifolia ssp. Latifolia**)**
6. Monterey Spine Flower **(**Chorizanthe pungens var. pungens**)**
7. Eastwood's Ericameria **(**Ericameria fasciculate**)** [sic][71]
8. Coast Wallflower **(**Erysimum ammophilum**)**
9. Menzies' Wallflower **(**Erysimum menziesii**)**
10. Coastal Dunes Milk Vetch **(**Astragalus tener var. titi**)**
11. Dune Gilia **(**Gilia tenuiflora var. arenaria**)**
12. Wild Buckwheat **(**Eriogonum latifolium**)***
13. Wild Buckwheat **(**Eriogonum parvifolium**)***
14. Bush Lupine **(**Lupinus ssp.**)+**

* only within the range of Smith's Blue Butterfly.
\+ only within the range of the Black Legless Lizard.

LCLUP Habitat Protection Policies include:

> Before any use or change in use, areas identified as potential habitat for rare and endangered plant or animal species shall be investigated by a qualified biologist to determine the physical extent of the primary habitat areas for the specific rare and endangered plants and animals on that site.
>
> Primary habitat areas shall be protected and preserved against any significant disruption of habitat values and only uses dependent on those resources shall be allowed within those areas. All development must be sited and designed so as not to interfere with the natural functions of such habitat areas. Management and enhancement opportunities should be incorporated into use or development proposals; potential impacts shall be fully mitigated, including the assurance of long-term mitigation and maintenance of habitat through the use of appropriate acreage replacement/restoration ratios for any unavoidable direct impacts to habitat areas.

LCP Policy 24 states:

> To protect and encourage the restoration of the vernal ponds to their original state and allow only those uses adjacent which will reinforce and conserve the unique habitat qualities of these ponds.

Cal-Am's Project has the potential to indirectly affect wetlands and vernal ponds in the surrounding area. Vernal ponds are generally considered wetlands for purposes of the Coastal Act; however, the City's LCP further specifies that vernal ponds and their associated wetland vegetation are a type of primary habitat and are thereby considered ESHA. Vernal ponds are relatively rare and often biologically important seasonal wetlands used during avian migration and amphibian breeding seasons. Further, since

[71] The correct spelling is Ericameria fasciculata.

the Project does not include direct impacts through fill or dredging of wetland areas that would be addressed under Section 30233 of the Coastal Act, indirect impacts to wetlands are assessed here under Section 30231 and the relevant LCP policies listed above.

The LCP and other City and County planning documents identify several areas within the expected groundwater drawdown zone of Cal-Am's well field as vernal ponds and wetlands, and data from the National Wetlands Inventory suggests the presence of several more (see **Exhibit 7**). Among the closest, approximately 1,000 feet from the nearest the well field, are several dozen acres on either side of Highway One south of Lapis Road, known as the Armstrong Ranch Ponds. They are within the County's coastal zone and are designated "Habitat Reserve and Other Open Space." This complex of vernal ponds is generally dry at the surface for part of the year and floods in the spring during periods of precipitation, though they are occupied year-round by marsh vegetation species. They also represent an important habitat feature for a number of avian species including sensitive California coast horned lark and loggerhead shrikes as well as other, particularly during migration season, and provide potential breeding habitat for any of several amphibian species as well as fairy shrimp. Other smaller biologically important vernal ponds are in the drawdown zone and within the City of Marina, though somewhat further from the well field. The FEIR/FEIS identified several vernal ponds and wetlands at and near the CEMEX site and near the various Project pipeline routes.

Potential Impacts

As described in the FEIR/FEIS, construction activities have the potential to result in runoff, dust, noise and disturbance to surrounding wetland areas, so it requires several mitigation measures meant to reduce these impacts to less than significant levels. Another potential indirect impact from the Project on surrounding wetlands could be from drawdown of groundwater levels resulting from Cal-Am's pumping from its well field. The FEIR/FEIS determined that although wetland areas were located within the drawdown zone of the pumps, these wetland areas were likely "hydrologically disconnected" from the underlying groundwater and would therefore not be affected by the pumping.

After the conclusion of the CEQA review, and after the Commission's November 2019 hearing, Commission staff received an April 2020 analysis provided by the City of Marina that described many of these wetland areas as "groundwater-dependent ecosystems" ("GDEs") and identified potential adverse effects due to the groundwater drawdown.[72] GDEs include various types of wetland areas with hydrology supported entirely or in part by underlying groundwater. They include permanent, seasonal, and temporary wetlands (including vernal ponds) that change in extent and depth in response to changes in underlying groundwater elevations.

[72] Formation Environmental, April 13, 2020. The analysis considers both freshwater and saltwater marsh as well as willow riparian forest habitats associated with the City's wetlands as groundwater-dependent and therefore vulnerable to draw-down from vegetation roots zones, reduces surface hydroperiods, etc.

The City's GDE review identified several previously unknown potential adverse effects on several nearby vernal ponds and other wetlands. It included data and analyses indicating that several of these areas do not appear to be the "perched" wetlands presumed during CEQA review but appear to be connected to the underlying groundwater within the shallow Dune Sands Aquifer that underlies this area. The GDE review described data collected from Cal-Am's monitoring wells closest to some of these areas during Cal-Am's approximately two-year pump test, which included about two dozen events where groundwater drawdown and recovery was correlated with the start and stop of pumping activities. At the Armstrong Ranch vernal pond complex, the City's review identified a relatively immediate groundwater drawdown/response of about one foot. The review also notes that the groundwater underlying these areas has variable salinity levels (from slightly brackish to nearly the same as seawater), suggesting it has sources other than the primarily fresh water that would be expected from precipitation. Additionally, it observes that the overlying habitat includes vegetation species adapted to this range of salinity variation.

Later, in June 2020, Commission staff received a report from the Commission's independent hydrogeologist that described additional groundwater modeling conducted in addition to that done previously as part of CEQA review and by Cal-Am (this report is more thoroughly described in Section IV.F of these Findings).[73] Part of the additional modeling was meant to identify expected groundwater drawdown levels beneath nearby vernal ponds and wetlands that could result from Cal-Am's longer-term pumping operations. This report identified such modeled drawdowns of between about two to four feet beneath the closest of these features – at the Armstrong Ranch Ponds – and attenuating at more distant features – for example, to just under one foot drawdown at the Lake Drive Pond within the City, which is about 1.6 miles from the Project well field. These drawdown levels appear to be fairly consistent with those the City identified in its above-referenced GDE review; for example, Cal-Am's test well pumping at about three mgd showed a one-foot drawdown at the Armstrong Ranch vernal pond complex, whereas modeling based on Cal-Am's initially proposed project that would have withdrawn about 16 mgd shows about a four-foot drawdown.

The City then provided a July 2020 report updating the 1994 CVCMP with a current assessment of hydrologic conditions and biological resources at six of the seven vernal ponds within or adjacent to its jurisdiction.[74] While the report did identify some limited changes to the ponds including new pockets of wetland vegetation supported by freshwater runoff and expanded willows, it also concluded that all six areas revisited have remained approximately as described in the original 1994 CVCMP. Importantly, it also determined that they should all be considered GDEs on the basis of a suite of ecological indicators accounting for source water quality, growth patterns, and

[73] Weiss Associates, July 10, 2020.

[74] See WRA Environmental Consultants, Biological Resource and Groundwater Dependency Analysis of Marina Vernal Ponds, prepared for City of Marina, July 30, 2020.

vegetation condition in summer months, and that as GDEs, these sensitive habitats would be vulnerable to any significant changes in groundwater levels.

Effects of drawdowns
These recent analyses, although not comprehensive, suggest that changes in groundwater levels associated with drawdown from the proposed pumping could adversely affect the functions and values at up to several dozen acres of these vernal ponds and wetlands, primarily at the Armstrong Ranch Ponds, and possibly at other nearby wetlands. It is difficult to precisely determine the specific nature and magnitude of expected effects, as they would vary by vegetation and wildlife species, by temporal changes in precipitation and natural variation in groundwater levels, by the location in the landscape of the wetland features, and various other factors. Under the phased Project, potential effects are likely to be less, since Phase I would extract less water, but the differences have not yet been adequately quantified. The groundwater drawdowns could result in the following types of adverse effects:

- Reduction of surface water extent and depth
- Temporal losses of vernal pond functions and values, including shifts in the timing of surface flooding as well as reduced durations of flooding.
- Reduction of wetted area around the root zones of marsh or aquatic vegetation.
- Reduction in species diversity.
- Reduction in habitat resilience.

To address these concerns, Cal-Am has recently proposed developing an adaptive management program with two stages. In the first, Cal-Am would collect supplemental data and monitor vernal ponds and wetlands within the Project's drawdown zone during the first five years of operations. If the results of that effort showed that there was no connection between well operation and conditions at the wetlands and vernal ponds, no further action would be taken. However, if a connection was determined to exist, Cal-Am would move into a second phase, where it would develop a second plan that would evaluate and mitigate impacts, and potentially bring that plan back to the Commission for consideration. Given the many environmental factors that might reasonably affect vernal ponds and wetlands, including fluctuations in annual precipitation associated with drought or El Nino years, and the complex interactions among changing groundwater elevations and the presence and distribution of different species with variable responses to those changes, it would be difficult to monitor Project effects without adequate reference sites or baseline data for many of these areas. In addition, disagreement concerning the zone of potential drawdown influence exists. It would likewise be difficult to ensure adequate mitigation for any adverse effects, in part due to the potential extent of the effects – which could cover up to several dozen acres of wetlands and vernal ponds – and also due to the difficulty in identifying sites where creating or restoring wetland or vernal ponds could be successful and would not result in the conversion of other sensitive habitats.

To ensure the Project avoids causing impacts to these areas, **Special Condition 13** requires Cal-Am to develop a robust adaptive management program to detect any potential impacts the Project may have on the Project's expected drawdown area plus a buffer area extending a minimum of 50% of the distance from the pumping area to the edge of the drawdown zone to account for uncertainty in the zone of potential influence. The program would require a minimum of two years of monitoring immediately prior to Project operations, to provide some level of baseline to compare against, as well as identification and monitoring of reference sites appropriate for the different wetland types within the monitoring area. Monitoring parameters would address wetland geometry (I.e., horizontal extent as well as depths of surface water, saturation), characterization of hydrologic sources (i.e., groundwater and surface inputs), variability in water quality and hydroperiods, vegetation communities, and sensitive plant and animal species habitat and use. Remote-sensing methods would be used along with on-the-ground sampling efforts, and reports would be provided annually. Cal-Am would be required to provide for a third-party review, which would be selected by the Executive Director in consultation with the City of Marina, to aid in interpreting complex monitoring results. Should the results of this Stage 1 effort suggest that there is a connection between the Project's pumping and vernal ponds or other wetlands, Cal-Am would be required to return to the Commission for a permit amendment with a plan to continue monitoring and provide compensatory mitigation for any observed or future impacts.

Conclusion

With this protective **Special Condition 13**, the Project can be found consistent with the provisions of Coastal Act Section 30231 and the above-referenced provisions of the LCP requiring that "[p]rimary habitat areas [will] be protected and preserved against any significant disruption of habitat values," and that it will ensure the maintenance of the biological productivity and the quality of coastal wetlands.

H. COASTAL HAZARDS

Coastal Act Section 30253 states, in relevant part:

> New development shall do all of the following:
> (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
> (b)Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs…

The LCLUP states:

> Before development is permitted in the Coastal Zone, a geotechnical report appropriate to the specific proposal shall be prepared for that development in the dunes or in the vicinity of any vernal pond. The report shall include at least geologic and seismic stability, liquefaction potential, identification of an appropriate hazard setback to protect the economic life of structures, and specific recommendations on drainage, irrigation and mitigation of identified problems. Report contents shall comply with guidelines of the California Division of Mines and Geology.
> …
> No new development shall be permitted which will require the construction of shoreline protection structures unless such development is in accordance with the provisions of the "Small Boat Harbor" section of this Land Use Plan, or when such structures are necessary to serve coastal dependent uses (as defined in the Coastal Act) or to protect publicly owned beaches from erosion.

The LCLUP states:

> Tsunami Hazard: Tsunamis are seismic sea waves, often erroneously called "tidal waves." Because of the height and depth of the Coastal dunes in Marina, inland areas are not within the tsunami hazard zone. The areas most subject to tsunami in Marina are the sandy beaches and dunes. With an adequate tsunami warning system, there is no significant tsunami threat to beach users. Since there is little development within the tsunami run-up zone, there is little present threat. Future development should not occur in the tsunami run-up zone (on the sandy beaches and foredune area).

The LCP's North of Reservation Road Planning Area requires proposed development consider:

> Public safety and vulnerability to wave erosion.
>
> Tsunami and other coastal hazards.

The LCLIP states:

> **Standards for Coastal Protection Structures:** Except for a few facilities associated with sand mining, there currently is little capital investment to be threatened by erosion along Marina's shoreline. The face of the dunes is subject to wave erosion, so future development shall be placed beyond the area vulnerable both to wave erosion and tsunami hazard. This setback shall be great enough to protect the economic life of the proposed development (at least 50 years) and be east of the tsunami hazard zone. The exact extent of this setback shall be determined by a qualified geologist, selected from an approved list compiled and maintained by the City. Because of variation from site to site, the setback line shall be determined at the time development of a site or parcel is proposed.
>
> Protective structures are not recommended in Marina; however, if they should ever be necessary, standards shall be established to ensure that the type of protection, location, design and other factors are considered. In determining if it is suitable to issue a coastal permit for a shoreline structure, the following shall be addressed: (1) alternatives to a protective structure shall be determined and evaluated by appropriate specialists first; and (2) an EIR/EIS shall be required on the proposed structure. The EIR/EIS shall address specific issues of Local Coastal Land Use Plan concern, construction and maintenance. The environmental evaluation and mitigations shall be prepared by qualified specialists and shall address at a minimum the following specific issues and design considerations.

Coastal erosion and sea level rise

Background: The well field would be just inland of the actively eroding shoreline of Monterey Bay, with the existing test well located about 600 feet inland and the other proposed wells to be located about 800 feet inland. The Bay shoreline near Cal-Am's proposed well field has exhibited the highest annual erosion rates in the state, due in part to relatively high levels of wave energy and the easily erodible sand that makes up most of the Bay shoreline. The area has experienced, and will likely continue to experience, storm-driven erosion that results in losses of as much as 100 feet of beach during a single event. Erosion along this stretch of shoreline also results in the recession inland of the dune system located adjacent to the beach. As the beach erodes, the dune profile moves inland, though not necessarily at the same rate as the shoreline or with the same dune profile.

Along with the natural shoreline processes that drive coastal erosion in this area, a substantial additional contributor has been the sand mining that occurred at the CEMEX facility over many decades. CEMEX's removal of more than 100,000 cubic yards of sand annually from the nearshore area served to reduce the sand supply along the shoreline, thereby exacerbating the ongoing natural erosive processes. As detailed below, although the sand mining operations have ended, the shoreline is expected to continue having a relatively high erosion rate.

In recognition of the area's high erosion potential, the LCP requires that development be located inland of areas near the shoreline that are vulnerable to erosion. The FEIR/FEIS included an assessment of the effects of sea level rise and coastal erosion on the proposed well field and the most seaward sections of the Source Water Pipeline. Coastal erosion studies during early stages of the Project's environmental review showed that the then-proposed well field could be affected by coastal erosion expected during the Project's operating life. Cal-Am then relocated the proposed well heads about 400 feet further inland to their currently proposed location. For these new locations, the FEIR/FEIS modeled "stand-alone" expected erosion rates as well as those same rates when accompanied by 100-year storm events. It found that expected erosion by 2060 would remove about 300 feet of the beach and dune profile and that adding a 100-year storm event would remove an additional 130 feet for a total of 430 feet. This analysis showed that most of the well field would escape erosion until 2060, although the existing test well that Cal-Am proposes to convert to a permanent well would likely be affected sooner, as it is about 200 feet closer to the current shoreline than the other wells.

To address the anticipated erosion hazard, the FEIR/FEIS included a mitigation measure requiring Cal-Am to monitor the rate of coastal retreat and to determine, based on the identified and expected annual erosion rate, when there are no more than five years before the wells would become exposed due to erosion.[75] At that point, Cal-Am would be required to start the planning and permitting needed to abandon the wells in accordance with state well destruction requirements, and upon receipt of the necessary approvals, Cal-Am would remove the wells. As noted above, Cal-Am expects its wells to have useful lives of only about 20 to 25 years before they need to be relocated, so it does not expect that they would be affected by erosion.[76]

However, this CEQA analysis was done in 2016 and was based on sea level rise guidance and scenarios that have been superseded by more recent state and Commission guidance that anticipates more rapid, and greater, sea level rise.[77] For example, the projections used in the FEIR/FEIS anticipated sea level rise of 15 inches by 2040 and 28 inches by 2060, whereas the currently applicable projections for the Monterey Bay area anticipate a range of sea level rise in 2040 of between about 15 and 20 inches and a 2060 range of 31 and 46 inches (increases of up to 33% and 64%, respectively). The assessments were also done before completion of the CEMEX Settlement, which requires CEMEX to permanently stop its sand mining operations by the end of 2020, so they do not reflect what the expected erosion rates will be after CEMEX ceases removing large amounts of sand from this stretch of shoreline.

[75] See FEIR/FEIS Mitigation Measure 4.2-10.

[76] The limited operating life is due to wells such as these experiencing reduced yields due to a slow build-up of fine sediments in or near the screened intake portion of the well casing.

[77] See the Ocean Protection Council's State of California Sea-Level Rise Guidance 2018 Update and the Coastal Commission's 2018 Sea Level Rise Policy Guidance and November 7, 2018 Science Update.

Prior to the Commission's November 2019 hearing on the proposed Project, Commission staff requested that Cal-Am provide an updated assessment of expected sea level rise and coastal erosion based on current state guidance and projections and on-site conditions expected without sand mining. In response, Cal-Am provided an October 2, 2019 technical memorandum – "Updated Coastal Erosion Hazard Analysis for CalAm Monterey Peninsula Water Supply Project," prepared by AECOM. This technical memorandum assesses expected sea level rise and coastal erosion effects on Cal-Am's proposed well field and Source Water Pipeline using low, medium-high, and extreme risk aversion scenarios for the years 2040, 2060, and 2120. It includes the high GHG emission scenario for each to provide a more conservative assessment of expected effects. It also considers the effects of both a 100-year and 500-year storm event on site erosion to provide additional conservatism (i.e., projections that provide a greater margin of safety). To reflect the expected site conditions resulting from the closure of the CEMEX sand mining operations, it assumed a 60% reduction in the historical retreat rate along the stretch of shoreline.[78] For each of the several scenarios, the memorandum separately describes the expected effects on the test slant well, which Cal-Am proposes to convert to a long-term well for the Project and is located about 600 feet from the current shoreline, and on the rest of the well heads that would be constructed about 800 feet from the current shoreline.

The Commission's coastal engineer reviewed the FEIR/FEIS and Cal-Am assessments and prepared a technical memorandum describing that review and its conclusions (see **Exhibit 8**). The review concluded that under the above scenarios, both the test well site and the other well sites would likely be safe from erosion through 2040, that the test well site could be at risk by 2060, and that both the test well site and other well sites would likely be at risk by 2120.

Since then, however, California has developed a new principle calling for permitting agencies to consider, for planning purposes, an increase in sea level of 3.5 feet by 2050.[79] Compared to the Commission's above-referenced current sea level rise guidance, this would result in expected sea level rise projections occurring several years sooner than previously anticipated. For example, instead of reaching the above-referenced 31- to 46-inch range of increase by 2060, it would be expected by about 2045 to 2050. Commission staff requested Cal-Am provide additional analysis showing the expected site conditions under this most recent state guidance. Essentially, using these projections, the well field could be at risk by 2045 to 2050 instead of 2060.

[78] This assumed 60% reduction is derived from studies and a sand budget analysis presented in two documents prepared, in part, to identify the effects of those mining operations on erosion along the Monterey Bay shoreline. See Environmental Science Associates and Phillip Williams and Associates, Evaluation of Erosion Mitigation Alternatives for Southern Monterey Bay, prepared for the Monterey Bay Sanctuary Foundation and the Southern Monterey Bay Coastal Erosion Working Group, May 30, 2012, and Young, Robert, An evaluation of the ongoing impacts of sand mining at the CEMEX Lapis Sand Plant in Marina, California on the Southern Monterey Bay Shoreline, 2017.

[79] See Ocean Protection Council, Strategic Plan to Protect California's Coast and Ocean 2020 – 2025, February 2020.

With the test well site at risk from these expected long-term erosion scenarios, the Project could include development in an area subject to wave erosion during the next 50 years. This presents some tension with LUP and IP policies that generally require setbacks adequate to protect new development for "the economic life of the proposed Project (at least 50 years)." The LUP has an exception to this policy allowing construction of shoreline protection structures when necessary to serve a coastal-dependent industry, which might apply to the test well portion of this project. However, Cal-Am is not proposing any such structures, and the LCP's standards for approving such structures require several analyses not included as part of the proposed project, including an assessment of alternatives to any such protective structure and review of any proposed protective structure through an Environmental Impact Report. Without an adequate setback to allow for 50 years of protection, and without these analyses being completed, the Project's well field component could be inconsistent with LCP policies related to coastal erosion unless there is a requirement to remove the test well when it becomes threatened.

Cal-Am expects that its wells would operate for no more than 20 to 25 years and then need to be rehabilitated or relocated, which would presumably result in them avoiding coastal hazards related to erosion during the term of this permit. This would allow for conformity with the LCP's coastal hazards provision related to the expected economic life of the development. **Special Condition 6** is based on Cal-Am's characterization that the wells have an approximately 20- to 25-year economic life and limits the term of this permit for 25 years after installation or until January 1, 2050. This latter date is in recognition of the increased uncertainty about our current projections of sea level rise and climate change after 2050. **Special Condition 6** also requires Cal-Am to apply for a new or amended CDP to remove or relocate the wells at least two years before the end of this permit term. While this Special Condition removes the project's inconsistency with the LCP provision that specifies a 50-year economic life, it creates a different concern that Cal-Am's desalination facility may not be able to operate for its overall expected 60-year operating life since Cal-Am does not currently have a legal interest in locations further inland where Cal-Am might be able to relocate its wells. Additionally, much of that inland area is expected to be restored as a result of the above-referenced Settlement Agreement. A shorter operating life of the desalination facility may also create substantial changes in the Project's financing and water rates, since Cal-Am may seek to recover its costs in a much shorter time than the anticipated 60 years. These issues are described in more detail below and in Section IV.I – Assessment of Alternatives and in Section IV.O – Environmental Justice.

The Commission also considered whether the wells would be affected by expected dune recession at the well field location.[80] As noted above, the site's foredunes will recede inland as a consequence of shoreline erosion and at some point will occupy the same area as the well sites. The initial review, conducted in October 2019, concluded that the risk of this occurring would be low before 2040, but would increase thereafter.

[80] Neither the FEIR/FEIS nor the AECOM technical memorandum assessed risk from this hazard.

Additionally, dune height is likely to increase along with the increases in sea level – for example, as sea level elevates by its expected 15 to 20 inches by 2040, the dune face could experience a similar height increase and an inland migration of the profile. The issue of well site burial was examined not as a risk in itself, but since it could lead to the need for greater maintenance of the well heads and thus greater site disturbance. It is difficult to estimate exactly when these backshore adjustments would occur as there would very likely be a lag time between changes in sea level and changes to the beach and then changes to the back shore. With these uncertainties it is difficult to estimate when the dune profile might shift inland; however, the well sites have been located inland of and at a lower elevation than the dune crests, and inland migration of the profile could eventually cover the well sites. The review concluded that risk is low that any of the well sites could be buried by 2040 but that the risk would increase over time. Because of differences in the elevations of the well heads and variations in the dune profile – i.e., the dunes seaward of some well sites are higher or contain greater volumes of sand than those seaward of other well sites – the timing and amount of burial would likely vary among the well sites. The review concludes that the test well head would experience the greatest risk from dune erosion; however, since the more inland well field is 12 to 15 feet lower than the frontal dune, the well field might be more at risk from the inland shift of the dune profile.

Overall, no appreciable erosion risks are anticipated to occur at the test well or the well field areas by 2040. There are small risks to the test well site from storm-related erosion between 2040 and 2060. There are also small risks to the test well site and the well field site from possible sand burial that would be minimal through 2040. There is a small chance that the well field site might experience several feet of sand burial between 2040 and 2060. Beyond 2060, it becomes more likely that significant burial could occur. Again, however, this October 2019 review was completed before the state's adoption of the recent planning principle of expecting 3.5 feet of sea level rise by 2050, so any expected risks may happen several years sooner.

In June 2020, Cal-Am provided an updated analysis of expected dune recession that details the various mechanisms involved in this type of sand movement. It concluded that the primary mechanism – dune blowouts, which involves the wind being funneled through gaps in the dune and causing higher rates of erosion in and near those gaps – could result in two of the seven proposed well head sites being affected by sand burial within about 20 to 25 years. It also found, though, that this effect could be reduced or delayed through measures such as removal of invasive vegetation and re-establishment of native dune vegetation to stabilize the dunes, or by installing sand fences or elevating the well head sites, either of which would likely require additional CDP review and approval. Cal-Am also proposed a special condition that would include the "soft" measures above – removal of invasive species and re-establishment of native vegetation – along with annual monitoring of the dunes and well heads to identify the rate of dune recession. Once the identified rate of recession showed that the well heads could be buried within five years, Cal-Am would return to the Commission with any proposed development, such as sand fencing, elevating or relocating the wells, etc., for additional review and permitting.

Similar to the above coastal erosion scenarios, the risk to the wells from this erosive process of dune recession could create some tension regarding conformity to the LCP provision that requires identification of an adequate hazard setback to protect at least a 50-year economic life of the structures and specific recommendations to mitigate any identified problems. However, as noted above, Cal-Am has estimated that the wells would operate for about 25 years but would then need to be relocated further inland. Importantly, and as noted above, Cal-Am does not have legal interest in property further inland, so it has no locations available yet to site the wells after this expected initial 25 years of operations. The above-referenced **Special Condition 6** addresses concerns about the hazards beyond this period. This expected operating life of 20-25 years allows for conformity to the above-referenced LCP requirement that development include setbacks adequate to protect it during its expected operating life, but as noted above, this limited operating life raises concerns about whether Cal-Am would be able to operate its desalination facility for only 20-25 years instead of its proposed 60-year operating life (this is discussed further in Section IV.O – Assessment of Alternatives). Importantly, without **Special Condition 6**, the currently proposed locations would be inconsistent with the previously referenced FEIR/FEIS Project objective to "locate key project facilities in areas that are protected against predicted future sea-level rise in a manner that maximizes efficiency for construction and operation and minimizes environmental impacts," which is also described in Section IV.H below.

It is not clear that Cal-Am would be able to obtain the additional legal interest needed to move its wells further inland. However, the areas of CEMEX inland of Cal-Am's current proposed well sites are largely slated for reclamation and restoration as dune habitat. With this 25-year operating period and no alternative locations known to be available, future well sites and operations beyond that period would be considered speculative.

Regarding tsunami hazards, the LCP recognizes the area's high erosion potential and requires that development be located inland of areas near the shoreline that are vulnerable to tsunami runup. Cal-Am has proposed locating the well heads inland of the tsunami runup zone identified in the LCP and at an elevation of approximately 30 feet (NAVD88), which would be above the most recently identified maximum tsunami runup estimate of 18 feet, both now and under projections of several feet of sea level rise.[81]

Finally, with the uncertainties involved with predicting the likelihood and extent of future hazards at this location, additional Special Conditions are necessary to ensure the proposed development does not adversely affect coastal resources. **Special Condition 14** requires that the wells and associated components be removed if damaged and prohibits the use of shoreline protection devices in the event the well field is subject to threatening erosion or other hazards during the term of this permit, and **Special Condition 15** ensures that Cal-Am acknowledges the risks involved in siting its development at this location.,

[81] See Wood, et. al, Community Exposure to Tsunami Hazards in California: U.S. Geological Survey Scientific Investigations Report 2012–5222, 2013.

Conclusion
With the above Special Conditions, the Commission finds that the Project would conform to relevant Coastal Act and LCP provisions regarding coastal hazards and the avoidance of risk from those hazards.

I. ENVIRONMENTAL JUSTICE

Coastal Act Section 30604(h) states:

> When acting on a coastal development permit, the issuing agency, or the Commission on appeal, may consider environmental justice, or the equitable distribution of environmental benefits throughout the state.

Section 30604(h) provides for the Commission to evaluate environmental justice considerations when making permit decisions. As defined in Section 30107.3 (a) of the Coastal Act, "environmental justice" means "the fair treatment and meaningful involvement of people of all races, cultures, incomes and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."[82] Section 30107.3(b)(4) states that environmental justice includes, "[at] a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions."[83]

In March 2019, the Commission adopted an environmental justice policy ("EJ Policy") to guide and inform its implementation of Section 30604(h) in a manner that is fully consistent with the standards in, and furthers the goals of, Chapter 3 of the Coastal Act and certified local coastal programs. The EJ Policy further articulates environmental justice as the following:

> The term 'environmental justice' is currently understood to include both substantive and procedural rights, meaning that in addition to the equitable distribution of environmental benefits, underserved communities also deserve equitable access to the process where significant environmental and land use decisions are made.

Ensuring access to the Commission's proceedings means making sure that those who are affected by proposed development have a meaningful and equitable opportunity to voice concerns in an open and transparent public process. Substantively, the EJ Policy describes how the Commission will work to ensure equitable access to the coast, support measures that protect existing affordable housing, and ensure that environmental justice communities are not disproportionately affected by climate change, water contamination, overuse, or diminished environmental services.

---

[82] Coastal Act Section 30013, which provides that the Commission is to advance the principles of environmental justice and equality, references California Government Code section 65040.12(e), which defines "environmental justice" as "the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."

[83] Added by AB 1628 (Rivas), Chapter 360, Statutes of 2019.

The then-proposed Project was scheduled to come before the Commission in September 2020, but the Applicant withdrew the CDP application before the hearing, saying in public statements that they wanted additional time to address the environmental justice concerns from the City of Marina and water cost concerns from their customers before coming back to the Commission for review. Two years later, opponents of the Project continue to express procedural and substantive concerns about its impacts on communities of color and low-income communities located near the Project site in the City of Marina, as well as on Cal-Am service area ratepayers. Project proponents have pointed out the benefits to environmental justice communities outside of the service area, including the nearby community of Castroville. This section addresses these concerns in this section.

Identifying Communities of Concern

The Commission's EJ Policy was created to provide a framework to consider fair outcomes and requires staff to reach out to and include the voices of environmental justice community members[84] who have been historically marginalized in the governmental review process and whose households have been disproportionately burdened by environmental hazards often stemming from industrial development. The goal is to make sure these voices are thoughtfully considered by the Commission during the decision-making process.

To identify these communities, staff evaluated various quantitative and qualitative sources of information for the City of Marina, which is where the Project is located, and the nearby community of Castroville, which is an unincorporated area of Monterey County that would receive desalinated water as part of a CPUC-approved water rights settlement agreement (the Return Water Agreement). As such, the Castroville community will also be affected by the Project outcomes. As shown in **Exhibit 5**, Cal-Am's service area includes parts of unincorporated Monterey County, census designated places, such as Del Monte, and jurisdictions of Seaside, Sand City, Carmel-by-the-Sea, Del Rey Oaks, Pacific Grove, and Monterey. Quantitative indicators in the selected geographies were used to identify low-income communities either through the low-income definition from AB 1550 or at two times the federal poverty level.[85] This

[84] In this staff report, the terms "underserved communities" and "environmental justice communities" are used interchangeably with the term "communities of concern." All these terms refer to low-income communities, communities of color, and other populations with higher exposure and/or sensitivity to adverse project impacts due to historical marginalization, discriminatory land use practices, and/or less capacity to mitigate adverse impacts.

[85] AB 1550 identifies "Low-income communities" as census tracts with median household incomes at or below 80 percent of the statewide median income or with median household incomes at or below the threshold designated as low-income by HCD's State Income Limits adopted pursuant to Section 50093 of the Health and Safety Code. This measure provides a more specific measure of identifying low-income communities in California due to higher costs and wages in the state, which is not reflected by the Federal Poverty Level

includes limited English proficiency households[86], housing-burdened[87] households, population of color,[88] and communities with high exposure to pollutants, adverse environmental impacts or sensitivities to pollution according to CalEnviroScreen 4.0. The demographic and socioeconomic indicators establish a high number of communities of concern in four areas, all affected by the Project: Marina, Seaside, Sand City, and Castroville.

More than half the population in Castroville, Marina, and Seaside identifies as a person of color, and in Castroville approximately a quarter of households have limited English proficiency (see Table 1 below). Although all of the jurisdictions in Cal-Am's service area have individuals who are experiencing poverty[89] (Table 2), Castroville, Marina, Seaside, and Sand City have a much higher proportion of their population living under the poverty threshold (see Table 2). Additionally, the region has several housing-burdened communities, where low-income households are paying more than 50% of their household income towards housing and utilities (see Figure 1). Increasing utility rates for housing-burdened ratepayers would exacerbate these existing cost burdens.

[86] Households where no one over age 14 speaks English very well. Based on "linguistic isolation" indicator from CalEnviroScreen 4.0.

[87] The housing burden indicator from CalEnviroScreen 4.0 is the percent of households in a census tract that are both low income (making less than 80% of their county's median family income) and severely burdened by housing costs (paying greater than 50% of their income for housing costs).

[88] Population of color refers to anyone that identifies as Hispanic (of any race) and anyone who identifies as non-Hispanic but as a race other than white on the Census, such as Black or African American, Asian, or American Indian.

[89] In this staff report, the term "poverty" is defined as households or individuals with income below a threshold of twice the federal poverty level because California's cost of living is higher than many other parts of the country. This is the indicator for poverty in CalEnviroScreen 4.0.

Table 1: Demographic Characteristics

Geography	Total population	Population of color		Total Households	Limited English Proficiency Households	
		Population	%		Households	%
Cal-Am Service Area[90]						
Carmel-by-the-Sea	3,220	358	11%	1,909	0	0%
Del Monte Forest	4,204	884	21%	1,710	35	2%
Del Rey Oaks	1,592	451	28%	633	8	1%
Monterey (city)	30,218	9,866	33%	12,373	338	3%
Pacific Grove	15,090	3,922	26%	6,977	123	2%
Sand City	325	151	46%	162	10	6%
Seaside	32,366	21,136	65%	10,709	778	7%
Other Geographies						
Marina	22,359	13,918	62%	7,777	712	9%
Castroville CDP	7,515	6,170	82%	1,426	373	26%
Monterey County	439,035	280,156	64%	126,003	14579	11%
State of California	39,538,223	23,242,101	59%	13,103,114	1,134,348	9%

Source: U.S. Decennial Census 2020; U.S. Census Bureau 2016-2020 American Community Survey Data, 5-year estimate.

[90] Staff approximated Cal-Am's service area by including these cities and census designated places. The table does not depict some of the unincorporated areas of Monterey County part of the service area.

Table 2: Income Characteristics

Geography	Total population [91]	Poverty (individuals with income below 200% the federal poverty level)		Median household income
		Individuals	Percent	
Cal-Am Service Area[92]				
Carmel-by-the-Sea	3,220	367	10%	$101,696
Del Monte Forest CDP	4,204	231	6%	$143,750
Del Rey Oaks	1,592	190	13%	$101,458
Monterey (City)	30,218	4,771	18%	$80,908
Pacific Grove	15,090	1,924	13%	$89,088
Sand City	325	317	33%	$57,000
Seaside	32,366	10,250	31%	$68,399
Other Geographies				
Marina	22,359	6,622	31%	$73,115
Castroville CDP	7,515	3,067	48%	$66,839
Monterey County	439,035	136,649	33%	$76,943
State of California	39,538,223	11,344,790	29%	$78,672

Source: U.S. Census Bureau 2016-2020 American Community Survey Data, 5-year estimate.

In addition to gathering and evaluating quantitative information from online sources, Commission staff met with community members and leaders from or who work in Castroville, Marina, and the Monterey Peninsula communities of concern affected by the Project. In September 2019, staff traveled to the area to learn about the lived experiences of residents, and to corroborate quantitative information. Staff met with residents from Marina and Seaside, including subsistence fishers, single parents living in Section 8 (federally subsidized) housing, retirees on fixed incomes, recent immigrants caring for extended families, and head-of-household wage earners working multiple jobs to support their families. In early 2020, because COVID-19 travel restrictions made travel infeasible, staff conducted outreach by email and phone with Castroville residents including Community Services District staff, social justice advocates, a county representative, water experts, and other stakeholders. Staff continued and expanded outreach efforts in 2022 over the phone and via video conferencing when Cal-Am

[91] The total population in Table 2 does not include individuals for whom poverty status cannot be determined, which includes people living in institutional group quarters (i.e., prisons, nursing homes), college dormitories, military barracks, and living situations without conventional housing (and who are not in shelters). See U.S. Census Bureau for more information: https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html

[92] Staff approximated Cal-Am's service area by including these cities and census designated places. The table does not depict some of the unincorporated areas of Monterey County part of the service area

resubmitted its Project proposal. Staff spoke with community members from Marina, Castroville, and the Monterey Peninsula.

The City of Marina is located eight miles north of Monterey, includes a modest downtown dotted with Asian and Mexican markets and family-owned restaurants. In limited English proficient households within this area, the top three non-English languages spoken include Spanish, Vietnamese, and Korean.[93] The city has a disproportionate amount of nearby industrial development that serves many areas in the region beyond Marina, including a regional landfill, regional composting facility, and regional sewage plant. Nearby Fort Ord is a contaminated site listed on the U.S. EPA's national priorities list.[94] Marina is also home to the former CEMEX sand mining facility, the last coastal sand mining operation in the country, which recently ceased sand mining operations pursuant to Coastal Commission Consent Order CCC-17-CD-02. While Marina has high concentration of industrial development compared to other coastal communities in the Monterey area, it is committed to public engagement, and many residents care deeply about the future of their town.

The Project would directly impact coastal resources and residents in Marina since the proposed slant well field is located within City limits at a site that could otherwise be fully set aside for public access, passive recreation, and coastal resource protection. Residents and City officials also have expressed concern that the Project may have an adverse effect on Marina's groundwater resources, by potentially lowering ground water tables, increasing saltwater intrusion into groundwater aquifers that are sources of drinking water, and impacting the City's wetland and vernal pond areas (addressed in Section IV.G). Further, many expressed deep frustration that although the Project would be located in their community, they receive all of the burdens and none of the benefits that other areas of the Monterey Peninsula and nearby communities would receive.

The City of Seaside is on the southern end of the Monterey Bay, similar in many ways to neighboring Marina, with a modest downtown and housing stock primarily consisting of relatively small, older homes, despite its proximity to the ocean. Just under two thirds of its residents are people of color, nearly a third of individuals experience poverty, and most census tracts in the jurisdiction are low-income communities per AB 1550. Seaside is home to the largest population of African American residents in the Project area or the region. Many Black soldiers came to Seaside for training at Fort Ord, and over time Seaside became a center for African American settlement.[95] Over the years, other people of color and Latino populations have settled in Seaside as well, fostering a

[93] American Community Survey 2015-2019.

[94] The U.S. EPA describes the National Priorities List (NPL) as sites of national priority among the known or threatened releases of hazardous substances and contaminants throughout the United States and its territories. The NPL guides the EPA in determining which sites warrant further investigations and potential remediation.

[95] https://www.blackpast.org/african-american-history/race-and-color-california-coastal-community-seaside-story/

majority people of color coastal community. Accommodation, food services, and retail are the largest employment sector,[96], which was part of why Seaside was hit hard economically by the military base closures in the 1990s. Seaside residents broadly indicate that they would be impacted by the Project's increased water rates. In addition to Seaside, many households in the Monterey Peninsula already experience housing burden, and the unhoused population has increased in the area. There is an increased need for more affordable housing in the region, but because of water restrictions, this kind of development has generally been significantly constrained.

Castroville is an agricultural area, known in part for artichoke production. Much of its economic activities center around agricultural support services, and many of its residents work directly or indirectly in agricultural production. Farms, farm stands, and restaurants specializing in locally produced food demonstrate the direct connection between growers and consumers. Castroville's population is majority people of color and nearly half the households live in poverty. Although Castroville is less than 3 miles from the coast, the community surrounded by three local highways in the region, agriculture, and private land and does not have any direct coastal access. While the community is small, it has high density of multifamily homes with a number of instances of many people living in close quarters.

The groundwater aquifer system beneath Castroville is the town's main source of drinking water and has been overdrafted by decades of intensive agricultural use. Since 2020, the water needs in this community have become increasingly desperate and the survival of the community is dependent on finding new sources of water, according to the general manager of the Castroville Community Services District (CCSD). Community leaders expressed the need for safe, reliable and affordable source of drinking water for the community amid current concerns from saltwater intrusion as two source wells have already been shut off. The CCSD was able to secure a long-term source of new water through a Return Water Agreement developed during the CPUC's review of Cal-Am's Project in a prior proceeding. Through this agreement, Cal-Am would return a portion of the water it extracts and exports from the Salinas Valley Groundwater Basin back into the Basin via pipeline in the form of reduced-cost potable water for the CCSD.[97] As a result, Castroville would benefit from the Project because the agreement will help to maintain existing water rates of approximately $42.50 per month and provide a secure source of water. Under the Return Water Agreement, additional deliveries toward the return water obligation may go to the Castroville Seawater Intrusion Project which provides recycled water and surface water in lieu of groundwater pumping for agricultural use in the Castroville area. [98]

[96] Data source from: https://datausa.io/profile/geo/seaside-ca#economy
[97] See CPUC Final Decision 18-09-17, Appendix H.

[98] CPUC No. A-12-04-019, Decision Adopting Settlement Agreements (Sept. 20, 2018), as modified and affirmed February 5, 2019.

The Project will directly affect each of the communities of concern identified in this section in different ways. As mentioned above, the town of Castroville will benefit from a new, secure source of water. The Project is sited within the City of Marina, although it will not receive any water and many of Marina's residents have raised concerns about potential impacts to groundwater, public access, and limiting opportunity for the community's future growth. In the service area, low-income ratepayers throughout the area, including Seaside, will be adversely impacted by water rates. And while there are additional communities of concern that may be affected by this Project indirectly, such as individuals who work in the agricultural industry throughout the Salinas Valley, this staff report is solely focused on those directly affected by the Project. Potential impacts to communities of concern identified above and the Commission's ability to mitigate those impacts warrant additional consideration pursuant to Section 30604(h) of the Coastal Act.

Environmental Justice Coastal Act Analysis

Procedural Concerns

The City of Marina and its residents expressed several procedural concerns regarding the Project. Marina residents said they felt largely excluded from the process prior to the 2020 hearing because they are not Cal-Am ratepayers. This was of particular concern since Marina would experience environmental burdens from the Project being sited in their community while receiving none of the Project benefits, Following Cal-Am's withdrawal in September 2020, executives held several meetings with Marina city officials in 2020 and 2021 but were unable to agree on any community benefits or to gain support for the Project. In mid-July 2022, shortly before Cal-Am submitted information to Commission staff to complete the CDP application, it met with staff to discuss renewed outreach to the environmental justice communities in the area. Cal-Am submitted a detailed outreach and engagement plan with regular updates, names of groups they would contact, and other outreach items. Beginning in August 2022, three months before the Commission's scheduled hearing, Cal-Am proposed and began conducting a total of 12 community meetings in Marina, Seaside, Sand City, Castroville and Salinas. According to Cal-Am, these meetings were advertised on social media, radio and their website. Following these meetings, Cal-Am answered community questions in writing, and then distributed a handout in English, Spanish, Vietnamese and Korean to event participants and posted it on their website.

Despite Cal-Am's efforts, many Marina and Seaside residents expressed frustration about Cal-Am's recent engagement efforts, with some describing them as last-minute and performative. Opponents of the Project, who attended the community sessions, said the events were largely a venue to promote the Project and not a genuine exchange with the community. Some meetings were advertised only days in advance, making it challenging for community members to make arrangements to attend, were at times difficult to find and, in at least one case, the wrong time was posted, as certain community members reported. Cal-Am and the City of Marina continue to remain very far apart.

In response to these concerns and to a request from the City of Marina for greater avenues for public engagement, the Commission agreed to several additional approaches to encourage the widest possible involvement from underserved members of the public in consideration of the current Project. The Commission created an FAQ on the Project in English and Spanish, sent an infographic about the Coastal Commission and how to participate in public meetings that the community could share, and regularly spoke with Marina officials to answer questions and provide guidance on how they could enable community members to testify from Marina City Hall. Cal-Am agreed to provide Spanish interpretation and translation services for the hearing, which will be available to anyone attending in person or over Zoom.

Substantive concerns
Quantitative and qualitative information, along with the lived experience of the community members, is key to understanding existing environmental justice burdens on a community and the potential for new development to inadvertently exacerbate those impacts. As part of the Commission's ongoing commitment to foster meaningful involvement consistent with 30107.3(a) and to increase outreach consistent with its Environmental Justice Policy, staff have engaged with community members and leaders in Marina, Castroville, Seaside and the service area since 2019. In interviews and during a tour of the Project location, residents from these communities shared various environmental concerns and community burdens, providing additional relevant information to consider.

The main substantive issues identified relate to three main areas: 1) increased costs for water, 2) benefits to Castroville's water supply through the Return Water Agreement, 3) environmental burdens that will contribute to cumulative impacts to the City of Marina, including groundwater impacts.

1) Water costs: One of the primary concerns staff heard is the disproportionate burden that low-income ratepayers in Cal-Am's service would experience due to increasing water rates from the construction and operation of the Project. Affordable water is critical for people on limited incomes and is a critical component in the state's Human Right to Water strategy that identifies access to safe, clean, and affordable drinking water as a public health imperative.[99] According to Cal-Am, the average single family customer in the Monterey service area will have a monthly rate increase of approximately $47 to $50 due to Project construction and operation costs once the Project is put into service.[100] This cost increase will occur in addition to any other general rate case increases or surcharges that Cal-Am already has applied for or received approval from the CPUC.

[99] See State Water Resources Control Board. Options for Implementation of a Low-Income Water Rate Assistance Program at https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/docs/2019/draft_report_ab401.pdf

[100] Correspondence from Cal-Am to Tom Luster, dated October 27, 2022.

As a result of this Project, rates will increase for all customers in the service area, and higher bills resulting from the proposed desalination facility would disproportionately impact low-income ratepayers, including Seaside and Sand City which have the largest proportion of low-income households among the jurisdictions serviced by Cal-Am. Cal-Am has existing bill assistance programs, including a federal low-income household water assistance program (LIWAHP), a payment arrangement program to set up a payment plan if bills cannot be paid on time, hardship program with the United Way of Monterey County, and its Customer Assistance Program (CAP), which provides a monthly discount of 30% on the fixed service charge for eligible households.[101] Cal-Am reported that as of September 2022, they have enrolled approximately 3,700 customer accounts in their CAP program[102] Enrolled low-income customers in the CAP program have an average monthly bill of $65.74 in 2022 with the discount included. Additionally, they also applied for an increase in the discount its CAP offers for eligible customers, from 30% to 35%, which is still pending approval from the CPUC. While Cal-Am increased enrollment from 5% to 10% among single-family residential customers in the CAP, enrollment is still low. Income-burdened individuals that may qualify face several barriers to enroll and/or meet eligibility requirements.

The eligibility requirements themselves create barriers to access. The CAP program requires customers to be in an individually metered or flat-rate residential customer with the bill in the customer's name. However, many otherwise eligible ratepayers live in multi-family structures, where the water bill is in the name of a landlord or management company and not individually metered. Some landlords of single-family residences that rent to low-income tenants prefer to keep the water and sewer bill in their own name. In both cases, increases in utilities are passed through from the landlord to the tenants, without any options for the tenants to request assistance. While individuals may qualify as low-income based on the standards set by other state-administered assistance programs, they do not necessarily meet the eligibility criteria for Cal-Am's LIWAHP or CAP programs. For example, using an average household of three, state income limits set by Housing and Community Development (HCD) in 2022[103] identifies low-income households with a median household income of below $81,900 and very low-income households with a median income below $51,200 in Monterey County. The LIHWAP threshold for a household of three, however, is a monthly max income of $4,143 or $49,719 per year, which means there are households experiencing housing or rent burden that may not benefit from the program. Similarly, Cal-Am's CAP program income guidelines identifies that a household of three must have a total combined income of $46,060 to meet eligibility requirements.

[101] https://www.amwater.com/caaw/Customer-Service-Billing/customer-assistance-programs

[102] Correspondence from Cal-Am to Tom Luster, dated October 27, 2022.

[103] California Housing and Community Development State Income Limits for 2022 - https://www.hcd.ca.gov/docs/grants-and-funding/inc2k22.pdf

Staff heard from various ratepayers in the area to understand concerns with the Project. Some Seaside residents worry that the economic hardship caused by rate increases will eventually push them out of one of the few remaining affordable coastal communities. Customers voiced the great lengths they have taken to reduce water costs over the years, including using their dishwashers only to air dry dishes, flushing toilets only once a day, taking showers at municipal facilities instead of at home, not washing clothes often, removing gardens, or using graywater for irrigation -- but their bills have continued to increase. Some ratepayers expressed frustration with existing income assistance programs, including difficulty in applying for relief and finding application instructions as well as describing noticing barely any difference in their bills when discounts were applied through the CAP. Additionally, many residents shared with staff concerns regarding the impact of ongoing inflation and housing shortages as compounding pressures affecting the cost of living in the area.

For low-income households experiencing the burden of high housing costs, rampant inflation and economic insecurity, increased water rates could make it infeasible to continue living on the Monterey Peninsula. If an unintended, but foreseeable consequence of the Project is to displace existing residents from their homes in formerly affordable coastal communities, this raises a serious coastal access issue. Although coastal access is typically viewed through the lens of providing and protecting recreational infrastructure and other amenities for the public to visit and enjoy, viewing it through an environmental justice lens illustrates that an affordable cost of living is a fundamental part of coastal access for nearby residents. In this case, Seaside residents' coastal access hinges on their ability to economically survive in their communities. The Commission would not achieve maximum consistency with the Coastal Act's Chapter 3 public access policies if it only implemented these policies to protect the amenities that enhance visitor access to the coast without also considering how permitting decisions might negatively affect community-wide affordability for those living within the coastal zone. Historically, communities of color have been excluded from or driven out of coastal areas by intimidation, exclusionary lending practices, racist covenants, eminent domain, gentrification and other instruments. Because of this troubling history, it is incumbent on the Commission to scrutinize the Project with a focused perspective grounded in this wider context.

Cal-Am and some Project proponents have said this Project will create a new reliable water supply that will help lift the current building moratorium and enable developers to build much needed affordable housing. There has been an ongoing debate about whether the Pure Water Expansion recycled water project will be able to accommodate affordable and market rate housing needs, while also addressing other environmental concerns, including an affordable and reliable water supply and reducing reliance on the Carmel River.

In response to concerns expressed by its income-burdened ratepayers, Cal-Am said that the company "commits to the goal of completely offsetting cost impacts from the desalination facility to low-income customers." In a September 20, 2022 letter to Commission staff (see **Exhibit 4**), Cal-Am modified its proposed Project to include a number of benefits, including:

- Cal-Am will increase its contribution of up to $500,000 to the United Way Monterey's Hardship Benefit Program, which helps customers with impending water-shut offs, and that it would increase outreach to inform customers about the federal LIWAHP.
- Cal-Am will also seek approval from the CPUC for one or more of seven different proposals to achieve this goal of offsetting cost impacts to low-income customers. These proposals range from expanding participation to and increasing the Customer Assistance Program or CAP discount from 30% to 50%, to expanding existing programs to multi-family residences to eliminating bill impacts related to the cost of the proposed desalination facility.[104]

After staff raised concerns that the CPUC process could take years and may not result in an approval for their low-income rate relief plan, Cal-Am proposed to include in its Project two additional benefits (see October 27, 2022 letter and October 31, 2022 email from Cal-Am):

- First, Cal-Am would offer to all ratepayers enrolled in its Customer Assistance Program free installation of low-flow fixtures (sink and bathtub faucets, showerheads, and toilets) that met state efficiency standards.
- Second, Cal-Am would take steps to ensure that any ratepayers enrolled in that Program, once deliveries of desalinated water from the Project begin, would have a rate increase of no more than $10 per month for water provided by the Project for at least five years after those deliveries begin

Cal Am also recommended the Commission include a special condition requiring annual reporting on both these benefits, which is included as **Special Condition 16**.

While these proposals indicate that the applicant will take some measures to address cost burdens, the $10 cost cap for five years will not address the long-term impacts this Project will have on low-income ratepayers and there is no certainty the additional proposals will be approved by the CPUC during this time. Additionally, Cal-Am noted that as of July 2022, the United Way Hardship Benefit Program has already assisted 231 ratepayers with a total benefit payout of $136,209 (average $590 per customer) since it started in 2018. However, without updated cost and rate increase estimates, it is not clear if the additional $500,000 over the course of the Project will be enough to assist ratepayers who may experience financial hardship.

2) **Return Water Agreement to Castroville Community Services District (CCSD)**
The Project is intended in part to provide up to about 690 acre-feet of potable water at a discounted price to Castroville, which would constitute a benefit to a community of

[104] Correspondence from Cal-Am to Tom Luster, dated October 19, 2022.

concern. The cost of providing the water would be recovered through ratepayer fees in Cal-Am's service area. In order to address a prohibition against exporting groundwater from the Salinas Valley Groundwater Basin, Cal-Am agreed to provide potable water to Castroville at about $580 per acre-foot. The agreement also contemplates that return water in excess of that provided to Castroville would be directed to the Castroville Seawater Intrusion Program ("CSIP") at a cost of about $110 per acre-foot to help reduce seawater intrusion in the Basin. Without this Return Water Agreement, the Project could not be considered consistent with Basin management requirements, since it would export groundwater to communities throughout the Monterey Peninsula that are outside the Basin boundaries. The prices per acre-foot for Castroville and CSIP would be far less – i.e., no more than several hundred per acre-foot – compared to the $6,100 per acre-foot that Cal-Am's ratepayers are currently expected to pay for water from the Project.[105] This would keep Castroville's water rates at $42.50 per month, while providing a new source of water for affordable housing projects, agriculture, and other types of new development. Depending on the amount of water Cal-Am returns to the Basin, the agreement could partially replenish Castroville's over drafted groundwater basin that has been depleted in part by decades of agricultural pumping. It would also support a community that is in dire need of a reliable water supply.

However, as noted above, the City of Marina claims that recent groundwater modeling shows that the amount of water Cal-Am may need to return to the Basin could be substantially higher than anticipated in the Return Water Agreement. Instead of a relatively steady rate of up to about 700 acre-feet per year, Cal-Am may need to return up to two or three times that amount during years with higher recharge to the Basin.[106] This could represent about a third of its desalination facility's overall production volume and would likely result in substantially higher costs for Cal-Am or its customers to subsidize. If Cal-Am was to obtain CPUC approval of additional rate recovery for these increased expenses, it would represent an even greater burden on all of Cal-Am's ratepayers and especially members of communities of concern.

In its decision approving the Return Water Agreement, the CPUC acknowledged that higher return water percentages could affect rates. To address this risk, it required Cal-Am's shareholders, not ratepayers, to pay excess costs if return water obligations exceeded certain percentages.[107] However, in that same decision, the CPUC acknowledged that return water amounts could vary and that the CPUC could revisit the

[105] As stated in CPUC Proposed Decision in Proceeding No. A-21-11-024 (modified October 31, 2022).

[106] As noted in Section IV.F above, the Hydrogeologic Working Group, which conducted the previous modeling, concurs that this range of potential return water requirements is reasonable.

[107] As the CPUC noted in that decision, "[i]t is reasonable to require Cal-Am shareholders, not ratepayers, to incur any and all costs for any unreasonable portion of the return water obligation that is greater than an average of approximately six percent (6%) between years 0-7; four percent (4%) between years 8-15; or 1.5% annually from year 16 forward. The Commission may also look at the reasonableness of the return water amount and costs to ratepayers at other times as necessary to ensure the return water obligation being met is reasonable and consistent with the estimates provided in the proceeding to support approval of the MPWSP." CPUC No. A-12-04-019 (Sept. 20, 2018).

issue, and Cal-Am's rates, in the future as necessary. This issue is addressed in part through **Special Condition 12**, which require Cal-Am to conduct comprehensive monitoring that will detect the amounts of groundwater subject to the Return Water Agreement provisions and to modify its operations if necessary to reduce any of several groundwater-related impacts.

In summary, Castroville residents would get a discounted rate on the desalinated water, providing an important benefit for the community experiencing a water crisis. The discount, however, could result in higher rates for Cal-Am ratepayers, including low-income ratepayers throughout the service area.

3) **Cumulative Environmental Impacts**
The Project will result in environmental impacts in the City of Marina's coastal zone that will increase the overall cumulative environmental burdens in the area. The City of Marina and many of its residents believe the Project will create environmental burdens for their community but provide no benefits. The Project's slant wells will be placed within the shuttered CEMEX sand mining property in Marina's coastal zone and would affect several acres of beach and dune habitat that currently supports a variety of rare or sensitive plant and animal species. Marina is already located near several industrial uses both within and outside of the coastal zone. According to CalEnviroScreen data, Marina ranks highly compared to other tracts in the state for groundwater threats, impaired water, solid waste, pesticides, and cleanup site (see Table 3 below and **Exhibit 9**). Within the coastal zone, industrial uses include the former CEMEX sand mining site. Some community members are concerned that access to the site would be partially lost due to limitations Cal-Am may impose around its well field (Section IV.M of these Findings provides a review of the Project's effects on public access). Although Marina has about four miles of shoreline, it currently has just two points of public access along that stretch of coast. While the Project's adverse effects on public access are likely to be relatively limited, they would affect Marina residents' ability to fully access this section of the coast. As part of its proposed benefits package, Cal-Am offered to provide access around its Project, but Marina officials said it preferred a cohesive network of trails, which they believed would be more achievable through restoration and access requirements under the 2017 Settlement Agreements to which CEMEX, the Coastal Commission, the City of Marina and the State Lands Commission are collectively signatories.

Table 3: SB 535 Disadvantaged Community Census Tract 6053014102 (Marina)
Selected CalEnviroScreen Indicators

Demographic Indicators	Percentile Relative to State
Linguistic Isolation	62[108]
Poverty	72
Unemployment	46
Housing Burden	68
Environmental Indicators	Percentile Relative to State
Pollution Burden	78
Pesticides	78
Drinking Water	61
Cleanups	81
Groundwater Threats	87
Impaired Water	95
Solid Waste	78

Outside of the coastal zone, existing industrial facilities near Marina include a regional wastewater treatment plant, the Marina Municipal Airport, and Monterey Regional Waste Management District facility, which includes a landfill, materials recovery facility, food and yard waste composting facilities, a landfill gas-to-energy conversion facility, and a hazardous waste collection site (see Figure 1). Marina is also near the former Fort Ord military base, which is on the Superfund National Priorities List. While Cal-Am's slant wells will not result in the level of pollution as existing facilities, this Project would be one more industrial development in a community already dealing with the cumulative impacts of a disproportionate number of industrial facilities.

The City of Marina and its residents also are concerned about the potential impacts of the proposed slant wells on their own aquifer and groundwater supply, as described in Section IV.F. The City has opposed the Project, due in part, to its view that impacts would be extensive enough to impact its current and future groundwater supply of drinking water and because officials believe it could require the construction of new water supply facilities. In certifying the FEIR/FEIS in 2018, the CPUC rejected that argument.[109] In 2020, the City filed a lawsuit against Cal-Am asserting these claims and that lawsuit is pending. In that case, the trial court referred a series of technical issues

[108] The data for all indicators are from CalEnviroScreen 4.0 except linguistic isolation, which is from CalEnviroScreen 3.0 because it was unavailable for this tract in CalEnviroScreen 4.0.

[109] CPUC No. A-12-04-019, Decision Approving a Modified Monterey Peninsula Water Supply Project, Adopting Settlement Agreements, Issuing Certificate of Public Convenience and Necessity and Certifying Combined Environmental Report, Decision, September 13, 2018, as modified and affirmed in D. 19-01-051 (February 5, 2019).

to the State Water Resources Control Board's Administrative Hearing Office, and that proceeding is also pending.

Based on what Cal-Am heard during community meetings held between August 2022 and October 2022, it modified its Project description to include a wide range of benefits to help off-set burdens to Marina. As described in letters from Cal-Am (see **Exhibit 10**), these include increased groundwater monitoring, property tax revenues, a public access plan, and habitat mitigation on the Cemex site, as well as an offer of $1 million in funding for improved public access, public facilities and recreational opportunities and restoration for the City, though it did not specify how this amount to help off-set impacts from the construction of the $419 million Project in Marina was determined.

City officials had issues with many of these proposals. They indicated that increased monitoring would not be necessary if not for the Project, and the economic benefits were vague and not guaranteed. In addition, Marina officials said the proposed public accessway could undermine the City's desire for a cohesive network of trails on the entire site. As noted above, there are Settlement Agreements in place which require that the Cemex property be sold to a public access agency (subject to the pre-existing easement on the site that Cemex previously recorded in favor of Cal-Am), which will eventually address the roughly 400-acre site. Finally, Cal-Am had also originally proposed a habitat mitigation and monitoring plan that proposed to restore 105 acres of habitat at the CEMEX site. Marina officials, however, pointed out that the Cemex property is already covered by a conservation easement and much of it was already being restored. As described previously, the full scope of final implementation of the Cemex Settlement Agreement and resolution of the underlying violation is undetermined at this point in time. Under **Special Condition 10**, if Cal-Am proposes any restoration work on the CEMEX site as mitigation for habitat impacts, it would have to demonstrate that this work is above and beyond any restoration and benefits that result from the CEMEX settlement.

Cal-Am also stated that they would be willing to revisit earlier benefits they offered following their 2020 withdrawal, which included annual payments based upon an agreed formula such as revenue generated by the Project, long-term funding for Western Snowy Plover protection, enhanced fire flows, potential optioning or selling Marina one or more source water wells and providing potable water on an emergency basis. For its part, Cal-Am officials said they tried to engage with Marina city officials more recently to get their input on all these potential benefits, but officials continue to oppose the Project and declined any discussions.

Nonetheless, to ensure that the benefits Cal-Am recently offered to Marina as part of its Project are implemented consistent with relevant Coastal Act and LCP provisions, **Special Condition 17** requires Cal-Am to submit, for Executive Director review and approval, a Public Access and Amenities Plan that will result in benefits to the City's residents. It requires first that Cal-Am provide a Community Engagement Plan describing measures Cal-Am will take to engage with representatives and residents of the City to develop the Public Access and Amenities Plan. The Community

Engagement Plan is to increase accountability and ensure include outreach to various populations within Marina, provide a schedule for community meetings, and identify measures that will allow interested residents to participate. This Plan is to lead to development of the Public Access and Amenities Plan, which will identify the selected amenities to be implemented using Cal-Am's offer of $1 million and is to include an implementation plan to ensure the amenities are put in place for benefits of the City's residents. While this Special Condition is not expected to eliminate the burdens identified by the City and its residents, it will provide assurance that Cal-Am will provide benefits to the community based on the preferences of the residents with potential to be affected by the Project.

Conclusion

The Project has become extraordinarily controversial, involving some of the most significant environmental justice concerns the Commission has considered since it adopted an Environmental Justice Policy in 2019. There is a long history of government institutions not giving low-income communities and communities of color adequate consideration in the decision-making process, even when it comes to the welfare of their own communities. Here, a historic drought has swept across California, increasing pressure for new sources of water in a region already struggling with longstanding, critical water shortages. This has resulted in a project with range of benefits and burdens to nearby environmental justice communities that need affordable water but are also often the site of unwanted industrial development. Cal-Am said it has tried to resolve these concerns through increasing outreach to get greater input from nearby communities of concern. Cal-Am updated the Project description to include measures designed to alleviate impacts to low-income ratepayers, and they put together a package of benefits for Marina, which were largely rejected by the City. Further, Cal-Am's proposed changes and **Special Conditions 16** and **17** provide additional measures to offset adverse impacts and ensure accountability. Even so, these efforts have not resolved all the environmental justice issues related to this Project, which remain contentious.

J. TRIBAL CONSULTATION

The Commission in 2018 adopted a Tribal Consultation policy meant to help establish meaningful and respectful consultation with California's Tribal governments and representatives. The policy includes several guiding principles regarding communication with the Tribes, acknowledgment of Tribal interests and resources, and how to assess the effects Commission actions may affect Tribal interests.

During the Project's CEQA review, the CPUC requested information from the Native American Heritage Commission ("NAHC") regarding potential tribal cultural resources that the Project might affect. The NAHC did not identify any such resources, though provided a list of Native American contacts that might have additional information about such resources. The Project area is within the traditional lands of the Ohlone/Costanoan-Esselen Nation.

Commission staff initiated formal tribal consultation consistent with the Commission's Tribal Consultation Policy. Coastal Commission staff reached out to nine tribal representatives by email and telephone for the purpose of consultation and coordination. Staff received responses from two tribes and held consultation meetings via Zoom with representatives of the Indian Canyon Band of Costanoan Ohlone People and the Ohlone Costanoan Esselen Nation.

On October 3, 2022, staff met with cultural representative Kanyon Sayers-Roods from the Indian Canyon Band of Costanoan Ohlone People, whose ancestral lands are adjacent to the Project site. Indian Canyon is 15 miles south of Hollister, in the Gavilan mountain range. The tribe is the only federally recognized tribe between Sonoma and Santa Barbara, and the area has been sacred land for Ohlone/Costanoan people since time immemorial, according to the tribe's website. During the 1700 and 1800s, Indian Canyon served as a safe haven for the local indigenous peoples who traversed the territory to escape the Spanish Missions and remains a place where Indigenous peoples in need of land can go for ceremony.

During staff discussion, Sayers-Roods said she had not taken a position on the Project and had not heard from Cal-Am. She was broadly concerned about with desalination in general, particularly with regards to the impact on the ocean. Sayers-Roods said she wanted to learn more about potential brine discharge from the proposed Cal-Am facility and its potential impact to local marine ecology and culturally sensitive marine plants. She also requested that Cal-Am provide a list of community benefits, a land acknowledgement, access to traditional sacred lands, and ensure the protection of cultural resources for the tribes of the region. **Special Condition 18** requires Cal-Am to have approved monitors on site for any ground-disturbing activities that may affect Tribal cultural resources.

On October 7, 2022, staff met with Chairwoman Louise Miranda Ramirez of the Ohlone Costanoan Esselen Nation or OCEN, on whose ancestral land the Project is proposed for. Currently, the Nation represents over 600 enrolled tribal members of Esselen,

Carmeleno, Monterey Band, Rumsen, Chalon, Soledad Mission, San Carlos Mission (Carmel) and/or Costanoan Mission Indian descent from at least 19 villages from a contiguous region surrounding Monterey Bay, according to the Nation's website. Chairwoman Miranda Ramirez felt it was important to share that their tribe has proof of their genealogy and that each OCEN member must certify their genealogy to core families from Mission documents. In 1852, ancestors of the Nation were identified as the San Carlos Band at Carmel Mission and in 1906 the Chairwoman's great grandfather and family were identified as landless Indians from the Monterey Band of Monterey at the Sur Rancheria by Special Indian Agent C.E. Kelsey.

Chairwoman Miranda Ramirez said she is opposed to the Project and has deep concerns about Cal-Am due to an earlier experience with the company in 2020, when an archaeologist and two OCEN tribal monitors, Alexandria Casares and Michael Sandoval, were on-site during one of Cal-Am's construction projects in Pacific Grove. The Chairwoman said a Cal-Am supervisor announced to workers that they could not resume their work until "the Indian returns from the bathroom." The monitors immediately contacted the Chairwoman, who reached out to the City of Pacific Grove and requested an emergency meeting with Cal-Am about the remarks and offered free cultural sensitivity training. She stated that she did not hear back from Cal-Am until October 2022, when she received two phone calls and two emails from company representatives including the president and vice president of the company. In an October 25, 2022 email, a Cal-Am employee referenced the earlier incident, let the Chairwoman know that the Project would be coming before the Coastal Commission and asked if she would be open to discussing cultural training for all Cal-Am Project managers and contractors working on the project. The Chairwoman was offended. "They don't respect Native people, they didn't care about the process when we offered them a process," she said. "Now that they have a project, they want me (OCEN) on their side."

Chairwoman Miranda Ramirez indicated the tribe's complete opposition to desalination and the Project. She said the CEMEX sand mining operation already degraded their ancestral land and they believe desalination is deeply destructive for the ocean and surrounding environments. The tribe's main concern is in relation to the brine and wastewater outfall into the ocean, in part because their tribal community members continue to practice traditional seaweed harvesting methods and fishing in this region. The Project area is also cited near an area that is sacred to the Nation because their ancestral remains are there. Historically, the Nation has lost access to coastal areas, which prevents them from practicing their cultural traditions, she said. While she does not want to see the Project approved, if it is allowed to move forward their Nation is interested in recovering any cultural resources and artifacts discovered, as well as gaining access to relevant archaeological reports and having Tribal monitors on site. **Special Condition 18** is meant to address this concern.

For its part, Cal-Am said they reached out to 27 tribal representatives and members to participate in an in-person meeting in Sand City on July 21, 2022, of which four attended. The company said participants expressed concern about the health of the

Carmel River. In October, Cal-Am received letters of support from Pajaro Valley Ohlone Indian Council Chair Patrick Orosco and Chumash Tribal member Mary Anne Carbone. The identical letters say the signatories are tribal leaders “representing Monterey County’s Native American Tribes.” The Native American Heritage Commission does not include the Pajaro Valley Ohlone Indian Council Chair Orosco in its 2022 list of tribes and staff was unable to verity if he had permission to represent multiple tribes in the Monterey area. Carbone later clarified that she was representing Monterey’s Chumash community members, not the tribe. Commission staff acknowledges and honors that the Chumash community in the area represents a broad and diverse array of tribal affiliations. Staff was unable to verify whether Carbone had permission to speak for other Chumash community members and defers to the individual tribal leaders to speak on behalf of their members.

K. Protection of Marine Life and Coastal Waters

Coastal Act Section 30230 states:

> Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Coastal Act Section 30231 states:

> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Coastal Act Section 30233 states, in relevant part:

> (a)The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
> (1) New or expanded port, energy, and coastal-dependent industrial facilities…

LCLUP Policy 16:

> To insure the protection of marine resources for long-term commercial, recreational, scientific and educational purposes.

LCLUP Policy 17:

> To insure protection and restoration of the ocean's water quality and biological productivity.

Intake effects
Cal-Am has specifically selected subsurface slant wells to obtain source water for its proposed desalination facility. The state's Ocean Plan includes provisions applicable to seawater desalination facilities that require, where feasible, that those facilities use wells or other types of subsurface intakes instead of open water intakes to avoid the adverse entrainment and impingement effects on marine life caused by open water intakes.[110] Staff of the Central Coast Regional Water Quality Control Board has determined that Cal-Am's proposed slant well system meets the Ocean Plan requirement that the proposed Project's intakes constitute the "best intake technology feasible to minimize the intake and mortality of all forms of marine life."[111]

Cal-Am's proposed slant wells would extend under coastal dunes and the beach to reach offshore about 200 feet beneath the Monterey Bay seafloor. From that location, they would extract primarily seawater from the underlying substrates. Cal-Am's hydrogeological modeling of the site and its proposed well operations show that the pumping would induce seawater to be drawn into the wells through the overlying sand and sediments. Due to the depth of the wells, the relatively large area from which they would induce this drawdown, and the maximum pumping rate of each well of about 2,500 gallons per minute, the seawater would be drawn through the seafloor at an essentially undetectable rate, so any effects that might occur to marine life in the overlying ocean water column or benthic habitat would be imperceptible.[112]

Discharge effects
Cal-Am would direct the brine and other effluent from its desalination facility through an existing outfall owned by M1W. The outfall is currently used to discharge treated wastewater from Monterey One's regional wastewater treatment facility in northern Monterey County to about 11,000 feet offshore in Monterey Bay. The outfall terminates at a diffuser that is about 1,000 feet long and that has over 100 ports through which the discharge reaches ocean waters.

---

[110] Entrainment occurs when small organisms, such as plankton, fish eggs, larvae, etc., are pulled into an open-water intake. It results in essentially 100% mortality due to the organisms being subjected to filters and high pressures within the facility's pre-treatment or treatment systems. Impingement occurs when larger fish or other organisms are caught on an intake's screening system and are either killed or injured.

[111] See January 15, 2019 letter from John Robertson, Executive Officer of the Central Coast Regional Water Quality Control Board to Coastal Commission's Tom Luster regarding Cal-Am's conformity to Ocean Plan provisions Chapter III.M.2.b and III.M.2.d(1) and Water Code section 13142.5(b) regarding intakes.

[112] See State Water Resources Control Board, Water Quality Control Plan – Ocean Waters of California, revised 2019. Available at: https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oceanplan2019.pdf (accessed August 10, 2020).

Cal-Am would first route its effluent from its facility to an approximately three-million-gallon mixing tank to be built at the wastewater treatment facility where it would blend with treated wastewater before being discharged through the outfall. The rate of treated wastewater discharge through the outfall varies significantly over the course of a year – from close to zero gallons per day during the summer months when much of it is recycled to provide irrigation water for area agricultural operations during the growing season to up to about 17 mgd in the winter. With the desalination facility's expected production capacity of 6.4 mgd of potable water, it is expected to contribute about 10 mgd of brine to these discharge flows. During the facility's first production phase of 4.8 mgd, the effluent volumes would be about one-third less. Depending on the time of year, those volumes would represent anywhere from about one-third to 100% of the volume of combined desalination and wastewater effluent conveyed through the outfall.

The treatment facility's discharge is currently regulated through a National Pollutant Discharge Elimination System ("NPDES") permit that would need to be amended to allow Cal-Am to use the outfall for its discharge.[113] Regional Water Board staff is currently reviewing Cal-Am's proposed discharge to determine what requirements are needed to ensure that the characteristics of the combined discharges under the various flow regimes would meet water quality objectives and be protective of water quality and marine life. Regional Water Board staff is also reviewing what measures are needed for the discharge to be consistent with the state's Ocean Plan Amendment applicable to discharges from seawater desalination facilities.

In its CEQA review, the CPUC evaluated potential operational impacts on marine biological resources from discharge of brine generated at the proposed desalination facility. The FEIR/FEIS identified the potential impacts from elevated salinity or other constituents in the brine or from shear stress on plankton from discharged brine. It found that increased salinity would meet Ocean Plan water quality objectives at the edge of the brine mixing zone and would not affect marine habitat by reducing dissolved oxygen content (hypoxia). The FEIR/FEIS found that for certain other constituents in the brine for which there was not adequate data, it was appropriate to require monitoring as a conservative measure to be more protective. The FEIR/FEIS also concluded that any impacts due to shear stress caused by the brine discharge would be less than significant and noted that the Regional Board would be conducting a review to determine the Project's conformity to the state Ocean Plan provisions applicable to seawater desalination facilities. The FEIR/FEIS concluded that Project operation would not have substantial adverse effect on any marine biological resources including special-status species, would not cause a fish or marine wildlife population to drop below self-sustaining levels and would not interfere with the movement of any native marine resident or migratory fish or marine wildlife species.

[113] Order No. R3-2018-0017, approved on December 6, 2018 by the Central Coast Regional Water Quality Control Board, acknowledges that Monterey One Water anticipates discharging Cal-Am's brine waste through its outfall, but states that Monterey One Water will need to submit a new application for the Board's consideration and approval prior to any such discharge.

One potential requirement still being evaluated is whether Cal-Am or M1W would need to modify the outfall's existing diffuser to ensure that the expected salinity concentrations from both the stand-alone brine discharge and the combined brine and treatment plant discharges conform to the Ocean Plan standard that requires seawater desalination facility discharges into ocean waters not exceed two parts per thousand over natural background salinity levels as measured no further than 100 meters from the discharge points.[114] Modeling conducted to date shows that this distance would likely be much smaller for the Project, with the 100% brine discharge expected to meet this salinity standard just a few dozen feet from the discharge points, well within the allowable distance. However, Cal-Am or M1W may need to modify the diffusers so that the effluent is discharged at a higher angle to ensure that it does not contact the seafloor at times when it is more highly saline than ocean water so as to avoid impacts to benthic marine life in the area.

The discharge would also be limited in its allowable concentrations of other constituents, such as metals, dissolved oxygen, and various contaminants. The FEIR/FEIS identified potential exceedances of several contaminants under certain operational scenarios and uncertainty about whether some constituents would meet the necessary Ocean Plan objectives.[115] In the CPUC's prior proceeding certifying the FEIR/FEIS and issuing a certificate of public convenience and necessity for the Project, the CPUC approved a settlement agreement (the "Brine Discharge Settlement") between Cal-Am and various other parties addressing future discharges into the marine environment from the desalination operations. That settlement agreement creates standards and conditions for the collection of water quality data to ensure compliance with defined water quality standards. It also requires mitigation and corrective action if the Project is not in compliance with salinity standards. The Brine Discharge Agreement was also addressed in the CPUC's CEQA review, and the CPUC found the settlement agreement to be consistent with the CEQA findings. The Regional Board review is expected to address these water quality-related aspects of the Project and to incorporate these monitoring data into its evaluation to ensure that the discharge is consistent with these requirements. To achieve consistency with the Ocean Plan, Cal-Am may need to modify its Project to include outfall modifications, operational changes, or other measures to ensure compliance. Potential operational changes include modifying the treatment methods, treating the discharges before they are routed to the outfall, or augmenting the flows to increase dilution prior to discharge (although the Ocean Plan Amendment generally prohibits flow augmentation for seawater desalination discharges). Potential design changes include retrofitting the existing diffuser system to allow additional dilution of the discharge, which would involve adding one or more additional structures to the existing outfall. The FEIR/FEIS described these changes to the diffuser as the most effective and reasonable strategy for ensuring

[114] Natural background salinity in ocean water generally ranges from about 30 to 35 parts per thousand.

[115] The FEIR/FEIS noted that under certain operating scenarios, the project could result in exceedances of water quality standards for ammonia and cyanide, along with possible exceedances for up to 10 other constituents of the brine discharge.

compliance. Some of these potential changes are internal to the treatment process, but others, such as potential outfall modification, could result in additional development. **Special Condition 1** requires Cal-Am to submit the Regional Board's final determination prior to issuance of this CDP. If the Regional Board requires Cal-Am to make any significant structural or operational changes, or identifies impacts requiring mitigation not evaluated under this review, **Special Condition 1** also requires Cal-Am to obtain authorization through a CDP amendment prior to issuance of the CDP.[116]

While it is unclear which of these structural changes might occur for purposes of NPDES and Ocean Plan compliance, M1W has already determined that the outfall must be modified in several specific ways to accommodate the relatively corrosive effluent from Cal-Am's facility. Along with requiring that a liner be installed along the upland portions of the outfall, M1W expects that new corrosion-resistant clamps will need to be installed. Although these clamps would be inside the outfall, installation would involve activities on the beach and possibly within coastal waters, with work expected to involve heavy equipment in those areas, including a generator, a 20-foot container box for equipment storage, a staging and work area, temporary fencing, and possibly excavation around the outfall's existing junction box on the beach. The work would also require installation of a bypass line that would reroute outfall flows around the junction box for the expected six- to eight- week work window. Should the work be implemented as described, **Special Condition 3** requires a number of Best Management Practices to avoid and minimize potential impacts to marine life and water quality – for example limitations on fueling equipment near coastal waters, minimizing the construction area needed to the extent feasible, and others. **Special Condition 4** provides that Cal-Am will develop a Spill Prevention and Response Plan to avoid and minimize the potential for spills or releases of hazardous materials and to ensure there is an adequate response if these events occur. Because this area is within known critical habitat used for breeding, nesting, and foraging by Western Snowy Plover, **Special Condition 5** prohibits construction activities during breeding and nesting season unless otherwise allowed by the U.S. Fish and Wildlife Service ("USFWS"), in which case, Cal-Am would need to seek an amendment of this coastal development permit if the USFWS approval results in changes to the Project not evaluated in this permit.

Other expected inwater work is installation of several monitoring buoys offshore near the outfall diffusers that the Regional Board is likely to require to ensure the Project's discharge is conforming to Ocean Plan requirements. The monitoring to be conducted would establish baseline conditions prior to the start of the discharge and then provide data regarding conditions during Project operations. Cal-Am's currently proposed plan includes installing four buoys to be located at different distances from the outfall to measure salinity and other water quality parameters. The buoys would include a seafloor anchor, a package of sensors, floats, and other equipment, all of which would

[116] Additionally, the project's FEIR/FEIS includes Mitigation Measure 4.3-5, which is meant to ensure that the discharge meets the relevant standards. This mitigation measure prevents Cal-Am from discharging brine into coastal waters until it can demonstrate that it has implemented any measures needed to ensure compliance.

extend about ten feet above the seafloor. Cal-Am would also install a telemetry buoy consisting of a seafloor mooring, ballast chain, a cable riser, and necessary instrumentation, which would extend through the water column to the water surface. The buoy would transmit data from the other buoys to allow near real-time monitoring.

Any of these Project aspects – a potential diffuser retrofit, the expected buoy installation, or the clamp replacement – would involve placing fill in coastal waters in the form of new or modified structures. Pursuant to Coastal Act Section 30233, any such fill is allowed only if it meets a three-part test: 1) that there is no feasible less environmentally damaging alternative, 2) that feasible mitigation measures have been provided to minimize adverse environmental effects, and 3) that it be for certain specified purposes, including a new or expanded port, energy, or coastal-dependent industrial facility. The two tests related to alternatives and mitigation are similar to tests found in Coastal Act Section 30260, which is applied in Section IV.P of these Findings. Those Findings include the analysis and conclusions needed to determine conformity to these Section 30233 tests. For the reasons described in those Findings, the Project conforms to relevant provisions of Section 30233.

Conclusion

Based on the analyses and Special Conditions described above, and because the Project would be required to meet water quality objectives and be protective of water quality and marine life, per state Ocean Plan standards, the Project can be found consistent with Sections 30230 and 30231.[117] Based on the analyses provided above, the Commission finds that the Project conforms to relevant provisions of Section 30233.

[117] The Commission would also defer to the Regional Water Board with regard to effluent limitations (see Coastal Act Section 30412), though if the Board required changes to the outfall, it might trigger the need for a CDP amendment or new CDP to address those changes.

L. ENERGY CONSUMPTION & CLIMATE CHANGE

LCP Policy 39 states that the City's intent is:

> To encourage development which keeps energy consumption to the lowest level possible.

Coastal Act Section 30253 states, in relevant part:

> New development shall do all of the following:
> …
> c) Be consistent with the requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.
>
> d) Minimize energy consumption and vehicle miles traveled.

Constructing and operating major water, energy, telecommunication, and transportation projects can use a significant amount of energy, thereby significantly increasing emissions of greenhouse gases ("GHGs").[118] These emissions exacerbate climate change caused by global warming, which, in turn can cause significant adverse impacts to coastal resources of California. The Coastal Act has a number of provisions that provide authority to take steps to reduce causes and effects of climate change and to adapt to the effects of global warming. These include the Coastal Act's public access and recreation policies (Sections 30220 and 30211), marine resource and water quality policies (Sections 30230 and 30231), the environmentally sensitive habitat area protection policy (Section 30240), and the coastal hazards policy (Section 30253(1) and (2)). Further, Section 30253 requires, in part, that development be consistent with the state's air pollution control requirements and that it minimize energy consumption.

The state has long recognized the threats of climate change and the importance of taking steps to reduce those threats. In 2006, for example, the California Legislature adopted the state's 2006 Global Warming Solutions Act and found:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems. (California Health & Safety Code, Division 25.5, Part 1).

[118] Greenhouse gases are any gas, both natural and anthropogenic, that absorbs infrared radiation in the atmosphere and include water vapor, carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). These greenhouse gases lead to the trapping and buildup of heat in the atmosphere near the earth's surface. Carbon dioxide is the major anthropogenic greenhouse gas. All greenhouse gases are quantified collectively by the carbon dioxide equivalent ("CO_2e"), or the amount of CO2 that would have the same global warming potential, when measured over a specific time period.

Climate change covers a broad range of impacts that can occur due to GHG emissions, such as increased sea level rise, changes in the frequency, intensity or occurrence of heavy precipitation and droughts, changes in the frequency and intensity of extreme temperature events, and changes in ocean water chemistry. California's and the Coastal Commission's current guidance documents – *Rising Seas in California: An Update on Sea-Level Rise Science*, the *State of California Sea-Level Rise Guidance: 2018 Update*, and the Commission's *Sea Level Rise Policy Guidance* – build on several previous assessments and projections[119] that describe and recognize that within the coming century potentially severe impacts will likely occur in the areas of sea level, water resources, agriculture, forests and landscapes, and public health. Many of these effects will impact the coastal zone and resources specifically protected by the Coastal Act, including impacts to air quality, species distribution and diversity, agriculture, expansion of invasive species, increase in plant pathogens, alteration of sensitive habitat, wildfires, rising sea level, coastal flooding, and coastal erosion. In addition, absorption of carbon dioxide by the ocean leads to a decrease in ocean pH with concomitant consumption of dissolved carbonate ions, which adversely impacts calcite-secreting marine organisms (including many species of phytoplankton, zooplankton, clams, snails, sea stars, sea urchins, crabs, shrimp, and others). The most direct impacts of global warming focused on the coastal zone are sea level rise and its associated impacts, ocean warming, and ocean acidification.

Expected Direct and Indirect CO_2e Emissions

Cal-Am's Project would result in direct GHG emissions during Project construction, primarily due to use of motorized equipment, and would result in ongoing indirect GHG emissions during facility operations due to its use of purchased electricity. The FEIR/FEIS calculated expected construction-related emissions based on the presumed equipment use over a 24-month construction period. It determined that total direct construction emissions would be about 13,680 tonnes CO_2e, which when annualized over the then-expected 40-year Project life, would equal about 342 tonnes CO_2e per year.[120] If the Project was to operate for just the 25-year expected operating life of the slant wells, its annualized emissions would be about 547 tonnes Co_2e per year. This does not include emissions that would result from the required installation of the outfall liner described above, which would make these total and annualized emissions somewhat higher.

[119] See, for example, California's 2006 Climate Change Impacts Assessment, 2009 Climate Adaptation Strategy and 2013 Indicators of Climate Change in California reports, and reports by the Intergovernmental Panel on Climate Change (IPCC Reports in 1990, 1995, 2001, 2007 and 2013) and various climate research centers (such as the Pew Center on Global Climate Change and the Heinz Center), and the Commission's own 2015 Sea-Level Rise Policy Guidance.

[120] Note: Standard guidance for air districts includes annualizing construction emissions over the expected operating life of the project.

Regarding Project operations, the full-scale Project would be expected to use approximately 63,000 megawatt-hours of electricity per year, which would be an increase of almost 52,000 megawatt-hours per year over Cal-Am's existing baseline electrical use for its water portfolio (based on the 2015 baseline used in the FEIR/FEIS). The Phase I Project would use a smaller, but unquantified amount. The total indirect annual emissions resulting from that electrical use would depend on what sources of energy (fossil fuels, wind, sun, etc.) are used to generate the electricity supplied to the Project. These indirect emissions would be expected to decrease over time as PG&E and the energy producers it purchases electricity from are able to institute emission reduction measures required pursuant to AB 32 and other state laws, such as increasing the use of lower emitting energy sources, such as solar or wind instead of natural gas. Additionally, and as stated in the FEIR/FEIS, there would also be some emissions – in the range of about 490 tonnes per year – resulting from the release of carbon dioxide caused by pulling seawater and groundwater from depth, where atmospheric pressure is much higher that at the ground surface. There would also be other emissions resulting from vehicle use needed for Project operations and maintenance, use and testing of an emergency generator, etc. The FEIR/FEIS amortized these emissions over an expected 40-year operating life for the facility to determine that these operationally related emissions would total just over 5,188 tonnes per year, which would be well above the 2,000-tonne per year significance threshold identified in the FEIR/FEIS.[121]

Cal-Am's desalination facility, which would use the great majority of the overall Project's energy, would be located outside of the coastal zone. Coastal Act Section 30604(d) states that "[n]o development or any portion thereof which is outside the coastal zone shall be subject to the coastal development permit requirements of this division." Accordingly, this analysis only considers whether the portions of the Project inside the coastal zone comply with the relevant LCP and Coastal Act policies, though the Findings discuss overall Project energy use for context. The portions of the Project within the coastal zone would use energy for construction of those components and would use electricity for running the slant well pumps.

To address the Project's emissions, the FEIR/FEIS includes a mitigation measure meant to ensure that Cal-Am's proposed GHG Emissions Reductions Plan results in net zero operational emissions. This measure requires Cal-Am to identify state-of-the art energy recovery and conservation technologies that it can include as part of its Project, and requires Cal-Am to use renewable energy to the extent possible and to procure and retire Renewable Energy Credits, Carbon Offsets, and other similar instruments that are meant to offset emissions and that are acceptable to any of several state-approved carbon registries.[122] The measure also includes reporting requirements to ensure that

[121] The FEIR/FEIS used a threshold of 2,000 tonnes of CO_2e per year to determine if the proposed project's emissions would represent a significant adverse environmental effect.

[122] Per the FEIR/FEIS, these include the Climate Action Reserve, the American Carbon Registry, the Verified Carbon Standard, or the Clean Development Mechanism; or (ii) any other entity approved by the

Cal-am achieves net zero emissions for each year's operations. In addition, the FEIR/FEIS and Project design include other measures to address energy usage. For example, piping system materials and sizing would be designed to limit pressure losses and reduce pumping and energy requirements, and electrical and treatment equipment would include variable frequency drives to reduce the operating speed of pumps to match the pump discharge pressure requirements and reduce energy usage. To further ensure that the Project meets the "net zero" standard, **Special Condition 19** requires Cal-Am to submit an Energy Minimization and Greenhouse Gas Reduction Plan that specifies measures it will implement to avoid and reduce operational emissions, and to offset any remaining emissions. With the designs and mitigation measures incorporated in the FEIR/FEIS/EIS and the Project and with **Special Condition 19** included, the Project would minimize energy consumption, consistent with the LCP and Coastal Act requirements.

California Air Resources Board to act as an "offset project registry" under the state's Cap-and-Trade Program.

M. Public Access and Recreation

LCLUP Policy 1 is:

> To insure access to and along the beach, consistent with the recreational needs and environmental sensitivity of Marina's Coastal area.

LCLUP Policy 2 is:

> To provide beach access and recreational opportunities consistent with public safety and with the protection of the rights of the general public and of private property owners.

LCLUP Policy 3 is:

> To provide beach access in conjunction with the new development where it is compatible with public safety, military security and natural resources protection; and does not duplicate similar access nearby.

The LCLUP's "North of Reservation Road Planning Area" requires that proposed development consider:

> Retention of uninterrupted lateral access along the sandy beach frontage.
>
> Protect and continue to provide public access from the nearest public roadway to the ocean.
>
> Structures necessary for the functioning of any Coastal Conservation and Development use (e.g., dredgelines, sewer outfall lines) may cross the sandy beach designated Park and Open Space provided lateral beach access is not significantly blocked.

Coastal Act Section 30210 states:

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Coastal Act Section 30211 states:

> Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Coastal Act Section 30212(a) states:

> Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) Adequate access exists nearby, or, (3) Agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Coastal Act Section 30214 states, in relevant part:

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:
(1) Topographic and geologic site characteristics.
(2) The capacity of the site to sustain use and at what level of intensity.
(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

Coastal Act Section 30221 states:

> Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Because most Project components in the coastal zone, including the well field and portions of the Source Water Pipeline, would be located between the first public road and the sea, the Coastal Act's public access and recreation provisions apply to all such development in both the consolidated permit action as well as the de novo permit action in the City's LCP jurisdiction. LCP and Coastal Act policies require generally that development located adjacent to the shoreline in areas with public use not interfere with that use and that they provide access to the shoreline.

Effects during construction
The CEMEX site has been an active industrial facility for over a century that has not provided vertical access to the shoreline. Coastal access at the site is primarily available as lateral access along the beach from access points to the north and south. During construction, work to develop the well field and the Project's Source Water Pipeline would occur several hundred feet from the shoreline and would not be expected to affect access to or along the beach and would have little, if any, effect on public access or recreational use. Cal-Am's installation offshore of the modified diffuser

components needed to allow its use of the existing wastewater outfall would involve boats and divers working in coastal waters and would result in temporary and minor effects to use of those coastal waters for fishing or other uses. These construction-related activities would be expected to be consistent with, and not conflict with, the above policies, as they would not require activities or structures on the beach that would inhibit public access or impede beach users.

One component of the Project's construction – replacement of some clamps on the nearshore area of the outfall line – would occur on the beach at the CEMEX site and would likely result in temporary adverse effects on public access during construction. Installation would involve heavy equipment operating on the beach, placement of barriers and protective work zones around the installation, and other measures that could prevent lateral access along the shoreline during extreme high tide events for a period of six to eight weeks during the summer. The aforementioned installation of an outfall liner, if done as described in the FEIR/FEIS, could also involve these types of activities and effects on the beach.

Effects during Project operations
Pursuant to the above-referenced Settlement Agreement, the CEMEX site will soon be transferred to another owner and made available for public access, habitat restoration, and passive recreational uses. It is unclear when this would occur in relation to when Cal-Am's initial well field construction would be completed, when the Project's proposed Phase II might occur, or when it would occur in relation to ongoing Project operations.

During Project operations, Cal-Am's Project could result in adverse effects to public access and recreation, depending on the eventual restoration and access plan that emerges from implementation of the CEMEX Settlement Agreement. The site is currently privately owned and operated for purposes of sand mining, and there is not public access at the site of the proposed wellheads. Project operations therefore would not cause public access or recreation impacts compared to currently existing conditions. However, the CEMEX Settlement Agreement anticipates that most of the CEMEX site will be used for habitat restoration, public access, and passive recreation opportunities. Because this is a known change in environmental conditions that would occur before or during Project construction and operation, it is also appropriate to consider how the Project would affect public access under those future conditions. Cal-Am has a 30-acre permanent easement within the CEMEX site and its well field would include fencing to protect about a quarter-acre of the several well heads and associated equipment. Cal-Am's ongoing maintenance of the well field would result in access and use of heavy equipment and vehicles over an area of up to about six acres over the Project's lifetime, though not all of that acreage would be used at once.

It is unclear at this time how these aspects of the Project would affect or prevent public access over this part of the CEMEX site in the future. Until the Commission approves a restoration and access plan pursuant to the Agreement, it is difficult to know exactly how much of an effect Cal-Am's Project would have on future public access and recreation within the CEMEX site or along the shoreline. However, the Project would, at

a minimum, fence off a quarter-acre around the wellheads and some other equipment, occupy another quarter-acre for a period of nine to 18 weeks each year for maintenance, and result in use of vehicles and other equipment over an approximately six-acre area over time. This would prevent at least some portion of the overall area used by Cal-Am from being restored and used for public access or recreation. This area is a relatively small portion of the overall CEMEX site, and there is significant beach and coastal area available nearby for coastal access and recreation. However, allowing an industrial use to occupy and use up to six acres of prime coastal land that could otherwise be used for coastal access and recreation does not maximize public access, as required by the Coastal Act. As noted elsewhere in these Findings, any adverse effects on access and recreation would likely be experienced disproportionally by members of the nearby communities described in Section IV.I – Environmental Justice.

In a letter it submitted to the Coastal Commission on June 30, 2020, Cal-Am asserts that the Commission should not consider Cal-Am's use of this area to be a public access impact because the Commission's Settlement Agreement anticipated that Cal-Am might use this area for its Project. It is true that the Settlement Agreement acknowledges that Cal-Am has rights to its easement area and permits uses consistent with Cal-Am's anticipated operations in that area. However, the Settlement Agreement merely stated that it did not interfere with any existing property rights that Cal-Am had on the CEMEX property; it did not guarantee Commission approval of a later CDP for the Project or state or imply that it would not analyze or require mitigation for public access or other impacts of any future Cal-Am project on the CEMEX property. Thus, there would not be public access impacts from Project operations compared with existing conditions, nor compared to one set of possible future conditions as allowed for in the Settlement Agreement, but there would be a reduction in access and recreational opportunities compared to what would occur without the Project.

However, to address concerns raised by City of Marina residents regarding their lack of access opportunities in the area, Cal-Am has offered to provide $1 million to fund public access amenities, as described in Section IV.I above and as addressed by **Special Condition 17**. The amenities provided are expected to enhance public access in the area.

Conclusion

The development, as proposed, would result in temporary adverse impacts to public access and recreation during construction. It could also result in relatively modest, but by no means insignificant, long-term loss of public access and recreation opportunities that might otherwise be available through amenities provided through the above-referenced Settlement Agreement, though the amenities provided through Cal-Am's offer to the City as acknowledged by **Special Condition 17**, the Project is likely to reduce nearby access limitations in a manner consistent with public access and recreation provisions of the Coastal Act and LCP.

N. VISUAL RESOURCES

The LCP's Preservation and Enhancement of Coastal Views policy states:

> Views of the dunes from Highway 1 and the beach shall be protected by keeping development off of the primary ridgeline. Development below the ridgelines shall be limited in height and mass to blend into the face of the dunes: generally structures should be hidden from public view where physical and habitat constraints allow. Where this is not possible, structures shall be clustered and sited to be as inconspicuous as possible.
>
> In areas where mining activity or blowouts have removed sand dune landforms, new development shall not extend above the height of the nearest adjacent sand dunes and shall be clustered so as to preserve access views across its site from Highway One.

The LCP's North of Reservation Road Planning Area requires proposed development consider:

> Visibility of new uses from Highway 1 and from the water's edge.

Coastal Act Section 30251 states, in relevant part:

> The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas…

Project components within the coastal zone would consist primarily of pipelines and subgrade components that would have little, if any, visual impact once construction and installation is complete. Within the City of Marina, the Project's well field would include above-grade well heads and electrical boxes surrounded by fences, with all completed Project components would be less than ten feet in height. The City's LCP generally requires that permitted development protect views to and along the coast and specifically requires that views of the dune area from Highway 1 and the beach be protected by keeping development below the dune ridgelines, limiting its height, and clustering structures to the extent allowed by physical and habitat constraints.

Some Project construction – primarily some of the outfall modifications – would occur on or near the Monterey Bay shoreline and would be visible from other nearby publicly accessible shoreline areas, including the highly scenic Marina Dune Complex. These areas are valued in part for their views of the Bay, for wildlife watching, and for recreational activities. If Project construction occurs after the above-referenced transfer of CEMEX lands, it may be visible when the CEMEX property becomes available for public access and recreational opportunities.

During construction, the main Project activities that would affect visual resources would be staging and operating the drilling equipment needed to install the wells, which is expected to take up to about 15 months. Many of these activities would involve the use of large construction equipment and would be visually similar to those that have occurred as part of the sand mining activities at the site. Some of the Project construction activities – including ingress and egress to the site and the use of drill rigs – could be viewed by passing motorists on Highway 1 or by beach users, though most would have distant views that would be partially blocked by intervening dune formations and vegetation. The most visible construction activities near the well field would likely be the lighting associated with the Project, and construction of the outfall modifications, which could be visible from nearby beach areas. Most of the water delivery pipeline construction would be within or adjacent to existing rights of ways, roads, and highways and could be highly visible, though would be similar to other construction activities in these settings that involve use of heavy equipment.

During operations, the visual impacts of the well heads, surge tanks, and fences at the site would be relatively minimal, though their effects would depend in part on the eventual surrounding uses at the site. Cal-Am's preliminary site illustrations show that most of these components would be completed in muted tones intended to blend into the surrounding areas of dune habitat. In the current setting, as well as during the anticipated use of the surrounding area for dune restoration and public access, these components would be visible, but relatively innocuous and small in scale compared to the nearby dunes and vegetation features. Visual impacts would be more substantial during Cal-Am's ongoing maintenance at the well field, which would involve vehicles, heavy equipment, and maintenance activities at a time when similar industrial uses on the rest of the CEMEX site have ended.

To ensure the Project's visual impacts are minimized, **Special Condition 20** requires that Cal-Am submit drawings or other simulations of the Project's proposed above-grade features within the coastal zone showing that the selected colors are muted and would blend into the surrounding areas. **Special Condition 3** requires that Project lighting during Project construction, operation, and maintenance be directed inward and downward towards any work areas or Project components and that it be the minimum needed to ensure the health and safety of Project personnel and the public.

Conclusion

The proposed development would not be on prominent ridgelines and permanent structures would mainly be hidden from public view. Ongoing maintenance activity at the well head sites might be visible from nearby public locations but would be limited in extent so that it would not conflict with the LCP's requirement that development below the ridgelines be limited in height and mass to blend into the face of the dunes. Construction activities would have several temporary adverse visual impacts, but none that conflict with the LCP's or Coastal Act's visual resource policies. The Commission therefore finds that the Project is consistent with those relevant policies.

O. ASSESSMENT OF ALTERNATIVES

Cal-Am's Project is subject to two Coastal Act provisions requiring an assessment of alternatives. Coastal Act Section 30233 states, in relevant part:

> (a)The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
> (1) New or expanded port, energy, and coastal-dependent industrial facilities…

Coastal Act Section 30260 states:

> Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Furthermore, and as noted previously, the City of Marina LCP includes provisions that incorporate Coastal Act Section 30260.

The alternatives assessment herein applies to the Project components both in the Commission's consolidated permit jurisdiction (i.e., components in its original jurisdiction and in areas within the County's and Seaside's jurisdiction that the Commission is reviewing pursuant to the consolidated permit) and in the City's LCP jurisdiction (i.e., components that are now before the Commission on appeal).

The Project is subject to Coastal Act and LCP provisions that explicitly require the Commission to determine whether there are feasible and less environmentally damaging alternatives to the Project.[123] In 2020, Commission staff conducted an alternatives analysis using the then-most recently available water demand and supply projections for the area and determined that the proposed Pure Water Expansion project would be a feasible and less environmentally damaging alternative to Cal-Am's then-proposed project and would provide sufficient water without the need for Cal-Am's desalination facility.

[123] The LCLUP states, for example, that uses allowed in Coastal Conservation and Development-designated sites, which includes the Cal-Am location, are to be consistent with requirements of Coastal Act 30260.

Since then, Cal-Am has pursued the Pure Water Expansion project as part of its expected water supply portfolio – for example, Cal-Am's most recent Urban Water Management Plan includes the expected water supply the Expansion would provide, and Cal-Am initiated a proceeding with the CPUC to request approval of an Amended Water Purchase Agreement through which Cal-Am would purchase water from the Expansion project as part of its water supply portfolio. On September 30, 2022, the Administrative Law Judge in that CPUC proceeding issued a proposed decision for Phase 1 of that proceeding that recommends approval of the agreement for the Expansion project based on near-term supply and demand estimates. The parties in that proceeding have submitted comments on the proposed decision, but no parties dispute approval of the Amended Water Purchase Agreement for the Expansion project. The CPUC is currently conducting a second phase of this proceeding to determine reasonably expected levels of water supply and demand in Cal-Am's service area based on longer term estimates (through 2050). The parties in that CPUC proceeding have presented a wide range of water demand and supply projections and widely varying assumptions about future water needs and uses, though all assume that water will be available from the Pure Water Expansion.

As detailed below, the Pure Water Expansion project has fewer environmental impacts than Cal-Am's Project and would likely be available much sooner. The Pure Water Expansion project is a preferred alternative to meet water supply needs in the near term, but it is not likely adequate to meet water supply needs in the longer term (i.e., within the next approximately 20 years).

Cal-Am's Project would have greater adverse environmental impacts but may be needed for longer-term water supply needs. Commission staff concludes that an additional source of water beyond the Pure Water Expansion is likely to be needed to meet demand over a longer-term period – i.e., with demand occurring at some point within the next 20 years. The approximate timing of when an additional source of water supply beyond the Pure Water Expansion project will be decided by the CPUC. As noted in **Special Condition 1**, the Commission's approval of Cal-Am's Project is contingent upon, among other things, this CPUC determination.

Background

As part of its consideration of Cal-Am's project, the CPUC acted as the lead agency in drafting and certifying an Environmental Impact Report (EIR) under CEQA for Cal-Am's MPWSP. As the CPUC explained in the FEIR/FEIS:

> The primary purpose of the MPWSP is to replace existing water supplies that have been constrained by legal decisions affecting the Carmel River and Seaside Groundwater Basin water resources. SWRCB Order 95-10 requires CalAm to reduce surface water diversions from the Carmel River in excess of its legal entitlement of 3,376 acre-feet per year (afy), and SWRCB Order 2016-0016 ("Cease and Desist Order") requires CalAm to develop replacement supplies for the Monterey District service area by December 2021. In 2006, the Monterey County Superior Court

> adjudicated the Seaside Groundwater Basin, effectively reducing CalAm's yield from the Seaside Groundwater Basin from approximately 4,000 afy to 1,474 afy.[124]

The CPUC's review was based on Cal-Am's initially proposed 9.6 mgd desalination facility. In its CEQA review, the CPUC analyzed a variety of alternatives to the Project to determine whether they would meet the basic project objectives. One alternative that the CPUC analyzed in detail was the Pure Water project (the base project for the subsequent Pure Water Expansion project), which had been proposed as part of a water recycling and aquifer storage and recovery project for the area. It was to be operated by M1W and funded by M1W, Cal-Am, and the Monterey Peninsula Water Management District ("MPWMD"). It was designed to recycle and treat water from several sources, including treated wastewater, stormwater, agricultural runoff, and food processing water using several separate treatment methods – ozone, membrane filtration, reverse osmosis (similar to that done in desalination facilities) and disinfection with ultraviolet and hydrogen peroxide. The Pure Water project was to apply these treatments after most of its source water had already undergone primary and secondary treatment at the M1W wastewater treatment facility. After treatment, the treated water was to be injected into the Seaside Groundwater Basin for use by Cal-Am and for longer-term storage in the event of drought. The project was designed to produce about 3,700 acre-feet per year.

The CPUC's Final EIR ("FEIR/FEIS") determined that a smaller Cal-Am desalination facility of 6.4 mgd, in conjunction with the 3,500 acre-feet per year expected from the Pure Water project, was the preferred alternative for Cal-Am's project. In 2018, the CPUC certified the FEIR/FEIS and issued a Certificate of Public Convenience and Necessity for the 6.4 mgd desalination facility and Pure Water project.[125] After the CPUC's approval of a Water Purchase Agreement allowing Cal-Am to purchase water from the Pure Water project, the project was completed in March 2020 and is now producing about 3,500 acre-feet per year of water for use by Cal-Am's customers.

In the proceeding to certify the FEIR, the CPUC also considered a potential 2,250 acre-foot per year expansion of the Pure Water project as a possible supplemental water supply for Cal-Am. However, the CPUC found the Pure Water Expansion project to be "speculative" at that time as it had not yet undergone CEQA review and the initial Pure Water project had not yet started operations.[126] Subsequently, however, as part of Commission staff's 2020 review of Cal-Am's proposed project, staff conducted an

---

[124] See https://www.cpuc.ca.gov/Environment/info/esa/mpwsp/PD.html

[125] CPUC No. A-12-04-019, Decision Approving a Modified Monterey Peninsula Water Supply Project, Adopting Settlement Agreements, Issuing Certificate of Public Convenience and Necessity and Certifying Combined Environmental Report, Decision, September 13, 2018, as modified and affirmed in D. 19-01-051 (February 5, 2019).

[126] CPUC Proceeding No. A-12-04-019 (Order Modifying Decision dated Feb. 5, 2019).

assessment of the Pure Water Expansion project using data and analyses that had not been available to the CPUC and concluded that, under the Coastal Act, the Expansion project would provide a feasible and less environmentally damaging alternative to Cal-Am's Project (see additional detail below). In April 2021, M1W certified a Supplemental Environmental Impact report for the Pure Water Expansion. In recognition of these events, Cal-Am's most recent Urban Water Management Plan, released in 2021, identifies water from the Pure Water Expansion as part of its expected water supply portfolio for the next 25 years.

In the currently ongoing CPUC proceeding, Cal-Am is now seeking CPUC approval of an amended water purchase agreement for the Pure Water Expansion project.[127] That proceeding is also considering updated supply and demand estimates to determine the need for the desalination facility in addition to the Pure Water Expansion. That CPUC proceeding has a phased approach where the CPUC will decide approval of the Pure Water Expansion project in first phase and determine longer-term supply demand estimates in a second phase. In the first phase, the CPUC issued a proposed decision on September 30, 2022 approving the Pure Water Expansion based on near-term supply and demand estimates. In that first phase of the proceeding, Cal-Am presented its supply and demand estimates through 2024, and the proposed CPUC decision found Cal-Am's estimates to support approval of the Amended Water Purchase Agreement for the Pure Water Expansion project.[128] All parties to the proceeding concur with the recommended approval of the Amended Water Purchase Agreement, though each has requested some relatively minor changes to the currently proposed text of the agreement.

The parties in the CPUC proceeding are currently litigating Phase 2 and presenting longer term supply and demand estimates through 2050. A decision by the CPUC on Phase 2 expected by 2023 at the earliest.

Alternatives analysis

In this current review, the Coastal Commission, as part of its duties to analyze the Project's conformity with the Coastal Act and LCP, has an independent obligation to consider feasible alternatives to the Project based on current information. Most of the issue areas Commission staff considered in its 2020 assessment are still relevant to this current alternatives analysis and are described below. However, they are now evaluated using additional data and analyses that have been developed since that 2020 assessment and rely, in part, on the CPUC proceeding that is currently underway.

The Findings below discuss Cal-Am's Project and the Pure Water Expansion alternative and evaluate their feasibility, ability to meet project objectives, and ability to protect the public welfare. Fundamentally, Cal-Am's Project and the Pure Water Expansion are water supply projects that, when combined with the other water sources in Cal-Am's water supply portfolio, would allow Cal-Am to reduce its withdrawals from the Carmel

[127] CPUC Proceeding No. A-21-11-024.

[128] CPUC Proceeding No. A-21-11-024 (Proposed Decision dated Sept. 30, 2022 and revised October 31, 2022).

River to no more than its maximum legal limit while providing enough water for Cal-Am's existing and future water demands. As described below, the Pure Water Expansion is a less environmentally damaging alternative to Cal-Am's Project, and one that, if included as part of Cal-Am's water supply portfolio, would protect the public welfare by providing adequate regional water supplies. The Pure Water Expansion project can also be implemented in the near term. The Pure Water Expansion project (in combination with other existing water supply) is likely not adequate, however, to meet long-term demand based on current data. Based on current water demand projections, including data being presented in the CPUC proceeding, it seems likely that an additional source(s) of water beyond the Pure Water Expansion project will be needed at some point within the next 20 years. Therefore, this analysis concludes that it is appropriate to consider Cal-Am's Project as a feasible component of that the water supply portfolio for the service area.

This evaluation uses the same approach as Commission staff's 2020 analysis, but incorporates new data and assessments that have occurred since then:

1) **Feasibility:** The two projects are briefly evaluated for conformity to the criteria of the Coastal Act Section 30108 definition of feasibility – i.e., "'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."

   - **"Capable of being accomplished in a successful manner":** Both Cal-Am's desalination facility and the Pure Water Expansion would use proven technology to produce and deliver drinking water. Just as Cal-Am is proposing to use treatment processes common to other seawater desalination facilities in operation around the world, the Pure Water Expansion would use the same treatment processes now being used by the baseline Pure Water project and by other water recycling projects in California and elsewhere. The Pure Water Expansion is essentially a larger version of the same Pure Water project that Cal-Am is relying on for a part of its expected water supply. Given that the Pure Water Expansion would use the same processes as the baseline Pure Water project and would be located at the Pure Water facility, which was designed to include this expansion, the Expansion is capable of being successfully accomplished from a technological standpoint.

   - **"Within a reasonable period of time":** Cal-Am's facility is expected to take about two years to construct and about six months to commission and begin operations. The Pure Water Expansion has a projected construction and start-up schedule of about 24 to 27 months total. For either project, the actual timeline to produce drinking water is likely to take somewhat longer, as complex water treatment facilities such as these often require several months of adjustment to achieve their expected production level or needed level of treatment. An additional consideration is that both projects have additional approvals necessary before they can begin operation, as well as other potential obstacles that could adversely affect their feasibility and schedule. The main issues that could affect the timing of each project are briefly discussed below, and these and other

issues are also further addressed at the end of the Alternatives section in the subsection regarding Areas of Uncertainty.

The primary remaining elements needed for the Pure Water Expansion is final approval by the CPUC of an Amended Water Purchase Agreement and acceptance of that Agreement by Cal-Am, M1W, and MPWMD. On September 30, 2022, the CPUC issued a proposed decision in the current proceeding to approve the Amended Water Purchase Agreement for the Pure Water Expansion. The Pure Water Expansion would not proceed until such an Agreement in place, because that Agreement would be needed to secure funding for that project. The Expansion will require additional review and permits for its expected discharge, though that discharge will be similar to the discharge of the already permitted baseline Pure Water project, so much of the necessary analysis has already been completed.

The Amended Water Purchase Agreement would allow Cal-Am to purchase 2,250 afy of water from the Pure Water Expansion project in addition to the 3,500 afy it is currently approved to purchase from the baseline Pure Water project for a total of 5,750 afy. Certain parties have questioned whether the two Pure Water projects will actually yield a supply of 5,750 afy. Although actual water yields from the two Pure Water projects are not yet available because the Pure Water Expansion is not yet in production, M1W has identified sufficient source waters to accommodate both projects.

Regarding Cal-Am's Project, it faces a variety of hurdles that could prevent or delay its construction and operation. As noted above, Cal-Am needs the CPUC to complete its current proceeding to determine reasonable updated water demand and supply projections. Also, in order for Cal-Am to use the proposed outfall for its Project, Cal-Am or M1W must obtain one or more permits to install an outfall liner in M1W's outfall line. The installation would require M1W to apply for an amendment to its CDP for the outfall, which the Commission originally approved in 1996. While Cal-Am and M1W had agreed on a 95% design for the needed liner, M1W has more recently considered including the liner not as a "stand-alone" modification to accommodate Cal-Am's discharge, but as part of a more comprehensive and long-planned relocation and rehabilitation project that would upgrade a substantial portion of the overall outfall. M1W has not yet conducted CEQA review for either option for installing the liner, so it could be up to several years before a final approach is decided upon and the necessary environmental review and permitting is implemented and completed.

There is also ongoing litigation related to several aspects of Cal-Am's Project. This includes litigation filed by the City of Marina and later joined by Marina Coast Water District contending that Cal-Am is not able to use more than 500

acre-feet per year of groundwater from the CEMEX site.[129] In this lawsuit, the trial court issued an order referring certain technical issues to the State Water Board's Administrative Hearings Office ("AHO") for the AHO's determination. The AHO is in the midst of that referral proceeding. Once the AHO issues its proposed report, the SWRCB is expected to review it and issue an order, which is then returned to the trial court. The SWRCB's order is not binding on the trial court, however. The SWRCB's final order is expected sometime in 2023; a trial date in the litigation is set for October 2023. If Cal-Am does not prevail in a final judgment in the case, its desalination facility will not proceed.

Additionally, and as noted above, Cal-Am needs two additional approvals from the State Lands Commission regarding leases of state tidelands – one for the continued operation of Cal-Am's test well as part of the Project[130] and another for the other proposed Project wells. It also needs an approval from the Regional Water Quality Control Board, and approvals from the U.S. Army Corps of Engineers and the Monterey Bay National Marine Sanctuary for various aspects of in-water work, which will be subject to review by the U.S. Fish and Wildlife Service and National Marine Fisheries Service. Pursuant to **Special Condition 1**, Cal-Am will need several of these approvals prior to issuance of this coastal development permit.

The Pure Water Expansion is therefore likely to be available to provide water much sooner than Cal-Am's Project and would likely be in a better position to address near-term supply and demand needs. Therefore, the Pure Water Expansion is a critical component of the water portfolio for the region.

"… and taking into account the following factors":

- **"Economic":** The expected costs of Cal-Am's Project are much higher than those of the Pure Water Expansion. In its 2018 proceeding, the CPUC set a cost cap of $279 million for capital costs for the MPWSP, which included Cal-Am's 6.4 mgd desalination facility and the baseline Pure Water project.[131] At the time, Cal-Am estimated its operation and maintenance costs for the desalination plant to be approximately $19.3 million per year, for a total of approximately $579 million (in 2017 dollars) in operation and maintenance costs over 30 years.[132] Current estimates are that Cal-Am's water would cost more than $6,100 per acre-foot, while the current Pure Water project provides water at cost of $2,808 per acre-

[129] See Monterey County Superior Court Case No. 20CV001387, filed by the City of Marina against RMC Lonestar and RMC Pacific Materials, LLC (together known as "CEMEX") and Cal-Am.

[130] Cal-Am has a lease for the test well that expires in December 2022.

[131] CPUC Proceeding No. A-12-04-019.

[132] CPUC Proceeding No. A-12-04-019 (Cal-Am Opening Brief filed Dec. 15, 2017).

foot.[133] Recent figures for the Pure Water Expansion are estimated to include about $60 million in initial capital costs and about $190 million in operational and maintenance costs over a 30-year operating life. Although the desalination facility would produce more water than the Pure Water Expansion, its cost per unit of water would be about twice as much. Cal-Am has not provided an assessment of how its recently proposed Project phasing might affect the expected costs. Although the first phase would involve reduced initial capital costs for construction and some reduction in operations and maintenance costs, the overall cost per unit of water could be higher than expected, especially when it is not certain if and when additional water from the second phase might be made available to spread costs over a larger volume of water to be produced. As noted above, Cal-Am will also likely need to either account for recouping its Project costs over a shorter Project operating life - i.e., the 25 years it expects its wells to operate - or account for the additional costs to relocate or rehabilitate those wells if they are to continue operating beyond that period.

- **"Environmental":** As noted in the Findings above, Cal-Am's Project would result in significant adverse effects on coastal resources, particularly to environmentally sensitive habitat areas, whereas the Pure Water Expansion would be built entirely outside the coastal zone, would be constructed largely on an existing industrial site, and would have relatively few environmental impacts compared to Cal-Am's Project. The Pure Water Expansion would also be greenhouse gas neutral, as it would use renewable electricity generated from landfill gasses. Although the Cal-Am Project would rely on grid-supplied electricity, which generally has a current emissions rate of up to several hundred pounds of greenhouses gasses per megawatt-hour, it is subject to a CPUC-imposed mitigation measure (MM 4.11-1) requiring the Project to have net zero greenhouse gas emissions from electricity used during operations. The Special Conditions imposed through this permit would allow Cal-Am's Project to avoid or minimize most of the environmental impacts, though the Project would still not fully comply with several Coastal Act provisions and would require the Commission to apply the "override" provisions of Coastal Act Section 30260 in order to approve a coastal development permit for the Project.

- **"Social":** As described more below and in the Findings on Section 30260's public welfare test, either project would provide sufficient water for the Cal-Am's service area, at least in the near term, though Cal-Am's would have far greater environmental justice-related effects on low-income ratepayers and other communities of interest that would require several Special Conditions to address (see Section IV.I – Environmental Justice).

- "**Technological":** As noted above, both projects would generally use proven technology for treating and distributing water. The Cal-Am Project would use a

[133] As stated in the CPUC Proposed Decision on Proceeding A-21-11-024 (modified October 31, 2022).

slant well system to provide its source water, and although there are no other operating desalination facilities known to use this system, there are at least two projects here in California where slant wells were successfully tested as a method to supply source water to desalination facilities.[134] Both projects would use a variety of water treatment methods commonly used in water supply facilities. Cal-Am, the Pure Water project and the Pure Water Expansion all rely in part on an Aquifer Storage and Recovery ("ASR") system that is being used in numerous locations as a proven method to store and provide water supplies.

1) **Water supply and demand – would the Pure Water Expansion provide sufficient amounts of water to allow Cal-Am's water portfolio to meet expected demands?** The 2020 Commission staff assessment of alternatives included an extensive evaluation and comparison of the expected water demand and supplies that would be available to Cal-Am with either the Project or the Pure Water Expansion. Key issues included: 1) whether either project would provide an adequate and reliable water supply to meet current and future demands; 2) whether either would be consistent with state requirements regarding the design and capacity of water supply facilities; and 3) whether they would allow Cal-Am to meet conditions of the State Water Board's cease and desist order for reducing withdrawals from the Carmel River.

   At that time, Commission staff concluded that, although there was inherent uncertainty in projecting supply and demand, the most recent data and analyses available showed that the Pure Water Expansion would be expected to meet demand for at least 20 years. While Cal-Am's desalination facility would provide more water than would the Pure Water Expansion, either project, when combined with Cal-Am's other available water sources, would provide more than adequate water supplies for current and expected future demands and would allow the water system to conform to the state's design and capacity requirements. Adding either project to Cal-Am's water portfolio would also allow Cal-Am to reduce its withdrawals from the Carmel River in accordance with requirements of the State Water Board's cease-and-desist order. Importantly, although the CPUC's 2018 decision described the Pure Water Expansion as speculative, it recognized that, if built, it would satisfy project objectives and provide sufficient water if the desalination facility was delayed for five to fifteen years.[135] Using data and analyses that had not been available to the CPUC in the prior proceeding, the Commission staff assessment identified substantially lower baseline water demands and concluded that the Pure Water

[134] Along with Cal-Am's test slant well, the South Coast Water District in Orange County conducted successful slant well tests and will use them for its full-scale desalination facility in Dana Point.

[135] The CPUC decision states: "…the PWM Expansion would satisfy the basic and key purposes of the Project (i.e., sufficient and reliable water supply) only in conjunction with construction of a desalination plant of some size within five to fifteen years." . CPUC No. A-12-04-019, Decision Approving a Modified Monterey Peninsula Water Supply Project, Adopting Settlement Agreements, Issuing Certificate of Public Convenience and Necessity and Certifying Combined Environmental Report, Decision, September 13, 2018, as modified and affirmed in D. 19-01-051 (February 5, 2019).

Expansion could be expected to provide the necessary amount of water for at least 20 to 25 years without the desalination facility in place.

Since Commission staff's review in 2020, the CPUC has initiated a new proceeding to identify a reasonable projection of longer-term water demand and supply for the region. Parties to that proceeding have submitted widely varying projections through 2050 based on significantly different assumptions about expected growth rates, the number of new residents to expect, the potential for drought to affect existing supplies, and others. Certain parties argue that there is no need for Cal-Am's Project by 2050 while Cal-Am argues that the Project is needed as soon as 2025. Other estimates project a demand for additional water supply beyond the Pure Water Expansion sometime between 2025 and 2050. For example, the California Public Advocates Office ("Cal Advocates"), which is the independent entity within the CPUC that represents and advocates on behalf of the interests of customers,[136] determined that there would be a demand for the additional supply by 2040.[137] Figure 1 below is a chart from Cal Advocates comparing the supply and demand estimates presented by California Public Advocates and Cal-Am in the current CPUC proceeding:

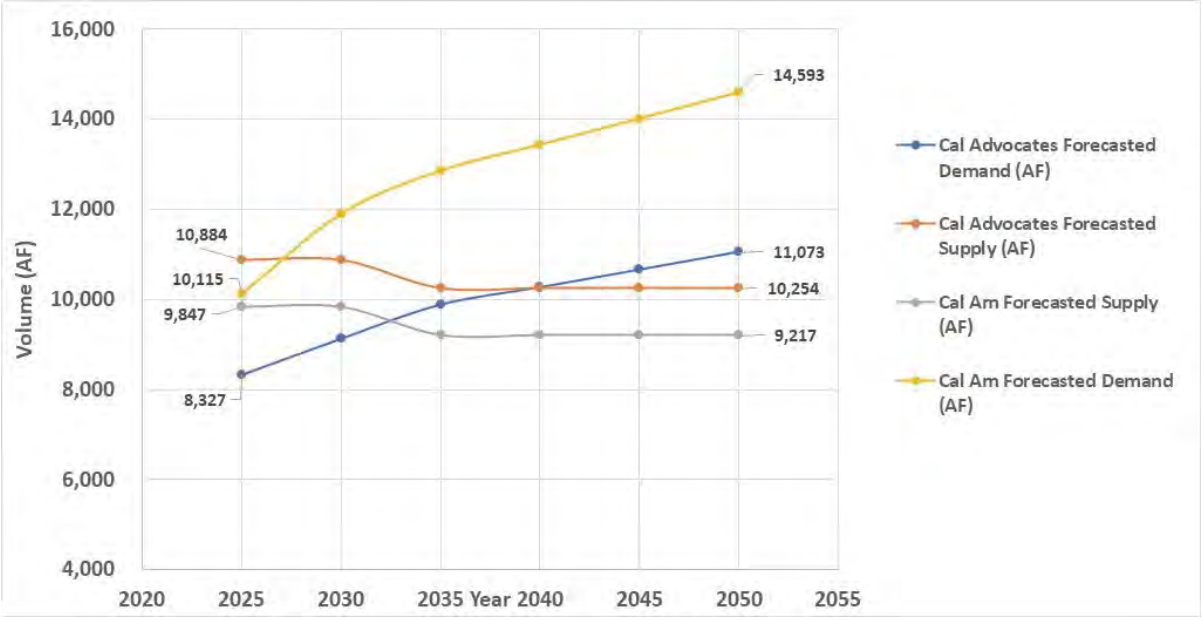


Figure 1.[138]

[136] Cal. Public Utilities Code § 309.5.

[137] Report and Recommendations of Office of Public Advocates in Phase 2, CPUC No. A-21-11-024, dated Aug. 19, 2022.

[138] Report and Recommendations of Office of Public Advocates in Phase 2, p. 2, CPUC No. A-21-11-024, dated Aug. 19, 2022.

Determining the amount of water needed for current and future demands generally involves three main steps: 1) identify existing water use and available supplies; 2) identify the expected rates of growth; and 3) identify any additional sources of water needed to serve that growth. Commission staff has reviewed longer-term estimates presented in the Phase 2 CPUC proceeding and believes that there is a basis for demand of additional sources of water supply beyond the Pure Water Expansion at some time by 2050. The Cal Advocates analysis, in particular, which is prepared by an independent entity representing the interests of water customers, provides a detailed and comprehensive analysis that demonstrates a demand for such additional water sources by 2040 (see **Exhibit 11**). The two tables below from Cal Advocates compare the demand and supply estimates of Cal Advocates and those proposed by Cal-Am.

Table 4 below compares the expected demands projected by Cal Advocates and Cal-Am. It shows Cal Advocates' projected demands are substantially lower than those presented by Cal-Am – by about 2,000 to 3,000 acre-feet per year lower at various points in the planning horizon. The Commission notes that the Cal Advocates' demand estimates beginning in 2040 – from 10,283 to 11,073 afy – are close to those that Commission staff cited in its 2020 assessment – an expected demand of from 10,884 afy to 11,240 afy.

Table 4.[139]

Forecasted Demand (AF)	Cal Am						Cal Advocates					
Demand Category	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Residential demand	5,031	5,644	5,754	5,864	5,974	6,084	5,297	5,403	5,511	5,621	5,734	5,848
Non-Residential demand	4,834	5,019	5,204	5,389	5,574	5,759	3,030	3,091	3,152	3,215	3,280	3,345
Total Residential and Non-Residential demand	9,865	10,663	10,958	11,253	11,548	11,843	8,327	8,494	8,663	8,837	9,013	9,194
Pebble Beach Entitlements	-	65	130	195	260	325	-	65	130	195	260	325
Tourism	250	500	500	500	500	500	-	-	-	-	-	-
Legal Lots of Record												
Single Family Residential	-	59	103	147	190	234	-	-	-	-	-	-
Multi Family Residential	-	35	60	86	111	137	-	-	-	-	-	-
Commercial	-	158	274	389	505	621	-	158	274	389	505	621
Residential Remodels	-	27	47	66	86	106	-	27	47	66	86	106
Commercial Remodels	-	21	36	51	67	82	-	21	36	51	67	82
Legal Lots of Record Total		300	520	739	959	1,180	-	206	357	506	658	809
RHNA Demands	-	370	745	745	745	745	-	370	745	745	745	745
Total	**10,115**	**11,898**	**12,853**	**13,432**	**14,012**	**14,593**	**8,327**	**9,135**	**9,895**	**10,283**	**10,676**	**11,073**

Table 5 below compares the Cal Advocates supply estimates with those of Cal-Am, with both including the Pure Water Expansion as one of the supply sources. It shows that, although they rely on the same identified sources, Cal Advocates expects that there will be about 1,000 acre-feet per year more supply than Cal-Am identifies.

[139] Id. at p. 10 (footnotes omitted). The estimates reflect certain assumptions discussed in in the Public Advocates' report.

Table 5.[140]

Available Supply (AF)	Cal Am						Cal Advocates					
Source	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Carmel River	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376
Seaside Basin	1,474	1,474	774	774	774	774	1,474	1,474	774	774	774	774
Aquifer Storage and Recovery	470	470	470	470	470	470	1,210	1,210	1,210	1,210	1,210	1,210
Table 13	-	-	-	-	-	-	189	189	189	189	189	189
Sand City Desalination	94	94	94	94	94	94	94	94	94	94	94	94
WPA	5,527	5,527	5,527	5,527	5,527	5,527	5,750	5,750	5,750	5,750	5,750	5,750
Total before 10% Buffer	10,941	10,941	10,241	10,241	10,241	10,241	12,093	12,093	11,393	11,393	11,393	11,393
10% Supply Buffer	1,094	1,094	1,024	1,024	1,024	1,024	1,209	1,209	1,139	1,139	1,139	1,139
Total after 10% Buffer	**9,847**	**9,847**	**9,217**	**9,217**	**9,217**	**9,217**	**10,884**	**10,884**	**10,254**	**10,254**	**10,254**	**10,254**

Note: The "Table 13" category refers to an additional water right Cal-Am has to divert Carmel River water under certain conditions.

In terms of supply, Commission staff's 2020 assessment cited a higher figure of 11,700 afy than the Cal Advocates current estimate of 10,254 afy for 2040 and later, as shown in Table 6 below:[141]

Table 6

Supply Source	With Cal-Am desalination (in afy)	With Pure Water Monterey Expansion (in afy)
Cal-Am Desalination	6,252	0
Pure Water Monterey	3,500	3,500
Pure Water Monterey Expansion	0	2,250
Carmel River	3,376	3,376
Seaside Basin	774	774
Aquifer Storage and Recovery	1,300	1,300
Sand City Desalination	94	94
Total Available Supply	**15,296**	**11,294**
Other Available Supply	406	406
Total Available Supply w/Other	**15,702**	**11,700**

Some of the difference is due to Cal Advocates identifying slightly less supply being actually available from some sources, though Cal Advocates also included a 10% "supply buffer." This supply buffer addresses the potential for some under-supply by a factor of 10% (and, therefore, builds in a buffer in the supply estimate). As shown in Table 5, the 10% supply buffer in 2040 and later is 1,139 afy. As noted in the FEIR/FEIS, "[f]orecasting future demand and supply is not an exact science," and "estimating future water demand necessarily entails the use of assumptions about

[140] Id. at p. 6 (footnotes omitted). The estimates reflect certain assumptions discussed in Cal Advocates' report.

[141] From August 25, 2020 Coastal Commission Staff Report, page 121.

demand factors that cannot be predicted with absolute certainty." The Commission finds that use of a 10% buffer is reasonable, particularly because the Pure Water Expansion does not yet have actual production data to rely on, and Cal Advocates' estimate assumes that the Pure Water Expansion will supply its full production of 2,250 afy. Moreover, drought conditions have become increasingly more severe, which is another significant factor in the analysis. The three-year period ending August 2022 was recorded as the driest three-year period in California since records began in 1895.[142]

Even with the thoroughness of the California Public Advocates' analysis, any need for additional water supply beyond the Pure Water Expansion may occur earlier or later than 2040. Moreover, the CPUC will be adjudicating if and when a desalination facility is needed for the region. The CPUC is expected to reach a decision on longer term supply and demand estimates in 2023, which will help determine how much water is needed, and when, and which projects Cal-Am would be expected to rely on to provide sufficient water for its ratepayers.

2) How does the Pure Water Expansion conform to the FEIR/FEIS Project Objectives and Criteria used for Cal-Am's project?

In order to qualify as a feasible alternative to a proposed project, an alternative generally must feasibly accomplish most of the basic objectives of the project. The FEIR/FEIS describes a number of objectives of the MPWSP, for which the FEIR/FEIS identified the 6.4 mgd desalination facility in combination with the base Pure Water project as the preferred alternative. Key objectives included water reliability, such as (1) developing water supplies to replace Carmel River diversions in excess of Cal-Am's legal entitlement and (2) developing a reliable water supply for the Cal-Am Monterey District service area. As discussed above, the Pure Water Expansion project is an important, but not sufficient, alternative to meet these objectives over the next 20 years approximately, based on the new data presented in the current CPUC proceeding.

"No Action" Alternative

The purpose of describing the "no action" alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving it. Here, if the Commission denies Cal-Am's Project, Cal-Am would still have available the water supply provided by the Pure Water Expansion along with other components of Cal-Am's water portfolio. As noted above, the CPUC is in the midst of a proceeding to determine Cal-Am's reasonably expected water demand and supply projections over the next 20-25 years, which will help determine how long Cal-Am's water portfolio will be sufficient without the desalination facility in place. to the Commission concludes that additional water supply will likely be needed (beyond the Pure Water Expansion) at

[142] See NOAA National Centers for Environmental information, Climate at a Glance: Statewide Time Series, Precipitation, published October 2022 (retrieved Nov. 1, 2022), available at https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/time-series/4/pcp/36/8/1895-2022?base_prd=true&begbaseyear=1895&endbaseyear=2022.

some point before 2050. As such, the "no action" alternative would not achieve project objectives and is not feasible.

The Commission recognizes the need for long-range planning to address water supply constraints, particularly in this region which has experienced longstanding water shortages. At the same time, in light of the override provisions of Section 30233 and 30260, the Commission also recognizes that other water solutions with fewer environmental impacts than the proposed desalination facility may potentially emerge as feasible alternatives, particularly as the timeframe for construction of the desalination facility becomes longer. **Standard Condition 2** requires Cal-Am to meet all prior-to-issuance conditions of this permit and begin development activities pursuant to this permit within five years. If Cal-Am seeks an extension of the permit term, the Executive Director may either (1) approve an extension of the permit term or (2) require Cal-Am to seek an amended CDP in the event that there changed circumstances affecting this Project that warrant an updated review. Finally, the Commission acknowledges, as the CPUC did in the FEIR/FEIS, that "estimating future water demand necessarily entails the use of assumptions about demand factors that cannot be predicted with absolute certainty." To help ameliorate that uncertainty, Cal-Am's proposed phased approach would create reliability and promote longer term planning by authorizing a smaller 4.8 mgd facility and by permitting full scale construction only if warranted based on conditions demonstrated in the future.

Conclusion

Based on the above, the Commission finds that the Pure Water Expansion project is a feasible and less environmentally damaging alternative to meet supply and demand needs in the near term as compared to Cal-Am's Project but that additional water supply beyond the Pure Water Expansion is likely necessary at some point within the next twenty years. Thus, the addition of the Pure Water Expansion project alone is not sufficient to address longer term supply and demand. Likewise, the "no action" alternative is not feasible for longer term water supply planning. The CPUC-certified FEIR/FEIS identified the proposed desalination facility as a component of the preferred alternative. Therefore, as conditioned, the Commission finds that Cal-Am's Project is presently a feasible alternative to address water supply needs for the region over the longer term.

P. COASTAL-DEPENDENT INDUSTRIAL FACILITY OVERRIDE

Section 30260 of the Coastal Act states:

> Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Section 30101 of the Coastal Act states:

> "Coastal-dependent development or use" means any development or use which requires a site on, or adjacent to, the sea to be able to function at all.

Section 30101.3 of the Coastal Act states:

> "Coastal-related development" means any use that is dependent on a coastal-dependent development or use.

The City of Marina LCP includes the following provisions:

LCLUP Policy 41:

> To give priority to Coastal-dependent development on or near the shoreline and ensure that environmental effects are mitigated to the greatest extent feasible.

LCLUP Geotechnical Policies, Policy 1 (first bullet)

> Structural development shall not be allowed on the ocean-side of the dunes, in the area subject to wave erosion in the next 50 years, or in the tsunami run-up zone. The only exception to this would be essential support facilities to a coastally-dependent industry, and in these areas the city will not undertake liability for property damage due to hazards.

Project components within the City of Marina are on property designated by the LCP as "Coastal Conservation and Development," a designation that prioritizes coastal-dependent industrial uses.

LCLUP Coastal Conservation and Development Uses, Policy 2 (second bullet) states:

> Coastal Conservation and Development uses shall be allowed on the west side of Dunes Drive. These activities shall include, but not be limited to, marine agriculture (Mariculture); off-shore and surf-zone sand mining, and other commercial activities dependent for economic survival on proximity to the ocean,

> salt water or other elements available in this particular environment. Development in this area will be allowed in already disturbed areas.

The LCLUP, at page 41, describes uses allowed in areas designated Coastal Conservation and Development:

> …such uses as are dependent upon salt water, the unique coastal-marine environment found in Marina, and/or on resources present only in this portion of Marina's Coastal Zone. Development shall be sited in already disturbed areas. Access roadways shall be kept to the minimum necessary to serve the proposed development and buildings shall be designed and sited to preserve sensitive habitats and views of the coastal dunes.

The IP, in its regulations for Coastal Conservation and Development Districts, includes similar standards for allowed uses in this district. They include:

> Coastal research and educational uses; developed public access and other coastally dependent recreation uses; coastal dependent industrial uses including but not limited to marine agriculture (mariculture), dredge pond, surf zone and offshore sand extraction.

The LCLUP's policies relating to the North of Reservation Road Planning Area identify appropriate uses within the high Flandrian dune area, in which this Project is proposed, to include "activities specifically dependent upon proximity to the ocean" (see LCLUP, page 37). It further states that the uses allowed in Coastal Conservation and Development districts are those consistent with numerous Coastal Act policies, including Coastal Act Section 30260 (see LCLUP, pages 38 and 44).

Analysis

As evaluated in Section IV.E, the Commission finds that the Project is fundamentally inconsistent with (i.e., is inconsistent and could not be brought into consistency through mitigation measures) Coastal Act and/or LCP policies regarding environmentally sensitive habitat areas. Nonetheless, Coastal Act Section 30260 allows the Commission to approve a coastal-dependent industrial facility that is otherwise inconsistent with one or more policies of the Coastal Act's Chapter 3. The City of Marina's LCP, under its Coastal Conservation and Development land use designation, similarly allows coastal-dependent uses that are dependent on proximity to the ocean if the uses are consistent with Coastal Act Section 30260, subject to certain limitations.

The Commission finds that the Project is a "coastal-dependent industrial facility" and can therefore be reviewed pursuant to Coastal Act Section 30260. The LCP does not define the term "coastal-dependent," but Coastal Act Section 30101 states that a coastal-dependent development or use "means any development or use which requires a site on, or adjacent to, the sea to be able to function at all." Cal-Am's proposed Project is coastal-dependent because: 1) its well field will be located adjacent to the shoreline so it can extract primarily seawater from beneath the Monterey Bay seafloor; 2) the shoreward section of its Source Water Pipeline is needed to transport that water from this shoreline area to the inland desalination facility; and 3) the Project's proposed

use of an existing ocean outfall is needed to convey the facility's effluent into coastal waters.

Some commenters have asserted that the Project is not coastal-dependent because the extraction wells would be extracting brackish groundwater, and that brackish groundwater could be extracted further inland instead. However, as detailed previously in these Findings, the Project is expected to predominantly extract seawater over its operating life. To achieve this, Cal-Am is proposing to maximize the length that the Project's slant wells project into the ocean at about 1,000 feet; therefore, they could not extract predominantly seawater if they were located farther inland. In addition, if the wells were located inland and were pulling a higher percentage of non-seawater, this could cause greater adverse impacts to other groundwater users, could affect Cal-Am's ability to obtain sufficient appropriative water rights, and would significantly alter its return water obligations. This would be a less feasible (if feasible at all) alternative to the Project's proposed site for the wells.

Additionally, the proposed Project is an industrial facility. Several Project components fall within at least one category of the North American Industry Classification System ("NAICS") – i.e., NAICS #237110: Water and Sewer Line and Related Structures Construction.[143] Some of the Project components would be built within currently active industrial sites and would use similar equipment and methods as the other uses on those sites. The proposed Project would be implemented by Cal-Am, an entity that, along with being a CPUC-regulated utility, is considered part of the water and wastewater industry. Further, the Commission has previously recognized that public utilities conduct industrial activities – for example, in its 2013 certification of Santa Barbara County Local Coastal Program Amendment No. LCP-4-STB-13-0215-2 allowing natural gas exploration and production by public utilities. The City's LCP also includes several provisions that similarly address "coastal-dependent" uses. The proposed Project is therefore a coastal-dependent industrial facility.[144]

Application of Coastal Act Section 30260

Coastal Act Section 30260 provides for special consideration of coastal-dependent industrial facilities that would otherwise be unapprovable due to inconsistencies with the Act's Chapter 3 coastal resource protection policies. Section 30260 allows the Commission to approve such projects, notwithstanding the project's inconsistencies with those other policies, if they meet a three-part test: 1) if alternative locations are infeasible or more environmentally damaging; 2) denial would adversely affect the

[143] NAICS was formerly the Standard Industrial Classification, or SIC system. Both systems have been used by U.S. EPA, the State and Regional Water Boards, and others to categorize various industrial activities.

[144] The Commission's findings here are also supported by an unpublished Court of appeal opinion upholding the Commission's 2014 approval of Cal-Am's test well and finding that the test well was a "coastal-dependent industrial facility" and that the City's LCLUP incorporates Section 30260. See *Marina Coast Water Dist. v. California Coastal Comm'n*, 2016 WL 6267909, (Oct. 26, 2016).

public welfare; and 3) if adverse effects are mitigated to the maximum extent feasible. The LCP similarly allows approval of coastal-dependent industrial uses in dune habitat if they are the types of uses allowed pursuant to Coastal Act Section 30260, if the development is sited in the most disturbed areas, and if the adverse impacts of the development are mitigated.[145] Thus, the Commission interprets these LCP provisions consistent with Section 30260 to determine if the Project is approvable, despite its inconsistency with the habitat protection policies of the LCP.[146] For this first test of Section 30260, the Commission is also incorporating the alternatives analysis required pursuant to Coastal Act Section 30233 – that there be no feasible, less environmentally damaging alternative to the proposed project.

Application of the Section 30260 override provision is discretionary: it *allows* the Commission to approve a project that meets the three statutory criteria, but it does not *require* the Commission to do so. Similarly, the Commission need not find that a coastal-dependent industrial project fails to meet the three criteria in order to deny it, although such findings could support a denial. The three tests of Section 30260 are applied below.

Test 1 – Alternative Locations are Infeasible or More Environmentally Damaging and Development is Limited to Already-Disturbed Areas: The first test of Coastal Act Section 30260 allows the Commission to approve a project that is otherwise inconsistent with Coastal Act policies, or in this case, if it is additionally inconsistent with LCP policies, if it finds that "alternative locations are infeasible or more environmentally damaging." As noted above, the Commission is also considering this question in the context of Coastal Act Section 30233's provision allowing fill in coastal waters only "where there is no feasible less environmentally damaging alternative."

The alternatives analysis in Section IV.O of these Findings describes a feasible and less environmentally damaging alternative to the Project that will provide the needed water supply in the near term. However, as described in the Commission's alternative analysis, the Pure Water Expansion Project is likely not adequate to meet supply needs in the longer term. Although there is uncertainty about when water from Cal-Am's Project would be needed and how much would be needed, it is reasonable to expect a need beyond what the Pure Water Expansion would provide at some point within the next twenty years approximately. The uncertainties about when and how much water is needed are addressed through **Special Condition 1**, which acknowledges that the

[145] For example, LCLUP Uses allowed in the CD District, Policy 2, p. 41, LCLUP Habitat Protection Policy 1, LCLIP Regulations for CD Districts section b(2)(b).

[146] *McAllister v. California Coastal Commission*, (2009) 169 Cal.App.4th 912, 931. Marina Coast Water District submitted comments asserting that the Commission may only consider whether the Project is consistent with the City's LCP in the appeal and may not use the Section 30260 override. The Court of appeal has previously rejected a substantially similar argument made by Marina Coast Water District in litigation that it brought challenging the Commission's approval of Cal-Am's test well. See Marina Coast Water Dist. v. Cal. Coastal Commission (2016) 2016 WL 6267909 (upholding the Commission's use of the 30260 override, as it is incorporated in the City's LCP, to approve the test well).

CPUC, which is conducting a proceeding addressing the need for the Project and longer term supply and demand estimates (through 2050), will be making the necessary determination in the near future. Thus, the Commission finds that the proposed Cal-Am Project meets the first test of Section 30260.

Test 2 – To not permit the development would adversely affect public welfare: Section 30260's second test provides that coastal-dependent industrial development may be permitted if to do otherwise (i.e., to deny the proposal) would adversely affect the public welfare. The Findings herein evaluate several benefits and concerns regarding the proposed Project's effects as related to the public welfare.

The Commission acknowledges the need for Cal-Am to obtain a new water supply and the importance of long-term planning in light of the decades-long water supply crisis affecting the Monterey Peninsula region. As noted above, Cal-Am and other entities in the area have been seeking a water supply since about 1995 to replace that obtained from the Carmel River in response to the requirements of a cease-and-desist order from the State Water Board to reduce its water withdrawals from the Carmel River by December 2021 so as to eliminate Cal-Am's water extractions above its legal rights to that water and to benefit the Carmel River watershed, particularly the federally-listed Central Coast steelhead. Without a reliable water supply, part of the Region has been under a moratorium on new water connections since 2010, making it difficult to plan adequately for housing and other community needs. The Pure Water and Pure Water Expansion projects will help to address water supply demand in the short term, but additional supplies will be needed to address the long-term demand.

Cal-Am's proposed Project also includes several components meant in part to address public welfare concerns. First, Cal-Am selected a site where it could obtain its source water using subsurface intakes, which is the state's preferred method for seawater desalination facilities, due to their limited or non-existent adverse effects on marine life. It also selected a site that, at the time, was already being used by a coastal-dependent industrial facility – the CEMEX sand mining operation – rather than a completely undeveloped coastal location where it may have caused additional adverse effects. Although CEMEX has recently ceased operations and the site will be largely set aside for habitat restoration, public access, and coastal educational opportunities (subject to Cal-Am's existing easement rights on a portion of that property), the Project, as conditioned, will be constructed and operated in a manner that minimizes impacts to surrounding coastal resources and uses. Additionally, Cal-Am proposed to implement the Project in two phases, in part, to address concerns raised by the public about potential impacts to groundwater and wetland resources. Monitoring during the first phase will demonstrate whether the Project is resulting in adverse effects to local groundwater supplies and nearby wetlands and will inform the decision about whether and how to proceed with the full-scale facility. This approach is more protective of coastal resources and the public welfare than the originally proposed full scale facility. Finally, Cal-Am has proposed a series of measures designed to benefit the underserved communities that would be disproportionately burdened by the Project, including programs designed to minimize additional costs to low-income ratepayers and a

package of benefits for the residents of Marina. These benefits include increased groundwater monitoring, property tax revenues, funding for improved public access, public facilities and recreational opportunities and restoration for the City. These benefits were largely rejected by the City and thus, environmental justice issues remain unresolved.

The Commission concludes that the desalination Project is necessary to meet longer term supply and demand needs, both to secure a reliable source of water and to help the region undertake long-term planning that is dependent on water supply needs. Thus, a denial of the Project would adversely affect the public welfare. Further, Cal-Am has incorporated several project elements designed to minimize impacts to the public. The Commission also recognizes that despite the benefits of the Project to the region, certain communities face disproportionate burdens from the Project. Cal-Am's proposed measures to offset costs to low-income ratepayers and community benefits for the City of Marina provide some measures to address impacts, but environmental justice issues related to the Project are not fully resolved.

Test 3 – Adverse environmental effects are mitigated to the maximum extent feasible: The third test of Section 30260 and of the LCLUP's Habitat Protection Policy 1 require that the Project's adverse environmental effects be fully mitigated. As noted in the Findings above, the Commission is imposing an array of Special Conditions requiring that Cal-Am implement substantial mitigation measures to address a range of expected or potential impacts to coastal resources to the extent feasible – from extensive requirements for habitat restoration to address the Project's impacts to sensitive resources to comprehensive design changes and monitoring to ensure groundwater sources are protected. With the above-referenced Special Conditions, the Commission therefore finds that Cal-Am's Project meets the third test of Section 30260.

Conclusion
The Commission finds that the Project meets the three tests of section 30260 and the parallel LCP policies.

III. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act ("CEQA"). Section 21080.5(d)(2)(A) of CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment. The Project as conditioned herein incorporates measures necessary to avoid any significant environmental effects under the Coastal Act, and there are no less environmentally damaging feasible alternatives or mitigation measures. Therefore, the proposed Project is consistent with CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

Coastal Development Permit Application No. 9-20-0603 and all related submittals.

California American Water, Coastal Development Permit Application for Monterey Peninsula Water Supply Project, July 31, 2019, with attachments and responses to Commission staff requests for additional information.

California American Water, Monterey Peninsula Water Supply Project Hydrogeologic Working Group – Hydrogeologic Investigation Technical Report, November 6, 2017.

California American Water, Monterey Peninsula Water Supply Project Hydrogeologic Investigation Technical Memorandum, Summary of Results – Exploratory Boreholes, July 8, 2014.

California American Water, Reply Comments Regarding Hydrogeologic Study and Technical Report, CPUC Application 12-04-019, January 4, 2018.

California Public Utilities Commission No. A-12-04-019, Decision Approving a Modified Monterey Peninsula Water Supply Project, Adopting Settlement Agreements, Issuing Certificate of Public Convenience and Necessity and Certifying Combined Environmental Report, Decision, September 13, 2018, as modified and affirmed (February 5, 2019).

California Public Utilities Commission No. A-21-11-024, Application of Cal-Am To Obtain Approval of Amended and Restated Water Purchase Agreement for Pure Water Monterey Groundwater Replenishment Project, Update Supply and Demand Estimates for MPWSP, and Cost Recovery, filed November 29, 2021.

California Public Utilities Commission, Monterey Bay National Marine Sanctuary, Final Environmental Impact Report / Final Environmental Impact Statement, March 2018.

City of Marina, file for California American Water coastal development permit application 2018- 01.

County of Monterey, Integrated Coastal Groundwater Monitoring Program and Plan, May 2019.

Knight, R. et. al, Preliminary Findings of AEM Study, June 16, 2017.

Knight, R., et al., *Interpretation of Hydrostratigraphy and Water Quality from AEM Data Collected in the Northern Salinas Valley, CA*, Geo Frameworks (March 2018).

Knight R., et al., Gottschalk et al., Using an Airborne Electromagnetic Method to Map Saltwater Intrusion in the Northern Salinas Valley, CA, 85 GEOPHYSICS B119-131 (July 2020).

Marina Coast Water District and City of Marina, technical appendices/attachments to submittals to CPUC pursuant to California American Water application A-12-04-019 to California Public Utilities Commission, April 19, 2018.

M1W, Final Supplemental Environmental Impact Report for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, April 2020.

MCWD June 22, 2026 Comment Letter, File A4181

ATTACHMENT D

FRIEDMAN & SPRINGWATER LLP

350 Sansome Street
Suite 800
San Francisco
California 94104

T 415.834.3800
F 415.834.1044

www.friedmanspring.com

*Jane Springwater, Retired

Ruth Stoner Muzzin
rmuzzin@friedmanspring.com
DD 415.834.3805

February 29, 2024

BY E-MAIL ONLY (*Yessica.Ramirez@slc.ca.gov*)

Ms. Yessica Ramirez
Environmental Justice and Tribal Liaison
Executive Office, California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento CA 95825

Re: **File Ref. A4181**- Application for General Lease, Industrial Use, for Installation of Slant Wells, City of Marina, Monterey County

Dear Ms. Ramirez:

This firm represents the Marina Coast Water District ("MCWD" or "Marina Coast"). Marina Coast appreciates the Commission's solicitation of comments from the community concerning a desalination project, the Monterey Peninsula Water Supply Project ("MPWSP"), that is proposed by the California-American Water Company ("CalAm"), and the Commission's particular interest at this time in the community's views regarding the proposed MPWSP in relation to the Commission's adopted Environmental Justice ("EJ") Policy. Marina Coast is pleased to provide its views in relation to the Commission's EJ Policy, and it looks forward to providing additional comments in the future as to other aspects of the Commission's consideration of CalAm's application.

Marina Coast also looks forward to meeting with you and Commission staff in person when you are visiting the community in the near future. Please continue to be in touch with Paula Riso at Marina Coast to coordinate meeting times.

The MPWSP will result in disproportionate burdens to vulnerable communities. Under its EJ Policy, the Commission must weigh those burdens against the claimed merits of the project. (EJ Policy, Goal 5, Strategy 5.3.) Where feasible, reduction or elimination of those burdens is required. (*Id.*) Here, because the MPWSP will not be needed for decades – if at all – the Commission can best fulfill its EJ Policy goals by denying CalAm's lease application.

Marina Coast and its constituents

MCWD is a county water district, formed in 1960, that is governed by an elected, five-member Board of Directors. MCWD provides water, wastewater and recycled water services to approximately 41,000 residents of the City of Marina, and portions of the City of Seaside, Del Rey Oaks and Monterey, two Universities, the Department of Defense, Bureau of Land Management and the State of California. MCWD pumped approximately 3,363 acre-feet of groundwater to serve its customers in 2023. MCWD's service territory is directly adjacent to CalAm's Monterey District. Under the Sustainable Groundwater Management Act ("SGMA"), MCWD is also the exclusive groundwater sustainability agency ("GSA") within its jurisdictional boundaries, and it shares GSA responsibilities with the Salinas Valley Basin GSA within the Monterey Subbasin and 180/400 Foot Aquifer Subbasin of the Salinas Valley Groundwater Basin ("SVGB") where the proposed project will reside.

The City of Marina is a racially diverse (64% non-white) community of over 22,000 people, including many retired military veterans and their families and ranks 13th in the state for overall diversity. Marina's average income is 8% lower compared to Monterey County as a whole. In comparison to more affluent areas served by CalAm, median income in 2020 for Marina was 70% of median income in Monterey and only 54% of median income in Carmel.

Marina and its surrounding areas are disproportionately burdened by industrial infrastructure, including the County dump and recycling facility with a composting operation, the regional wastewater treatment facility which serves from Salinas to the Peninsula, the Fort Ord superfund site (EPA CA7210020676), and the Old Fort Ord Airport. In a 2017 settlement with CEMEX and the California Coastal Commission ("CCC"), the City of Marina achieved a path toward eliminating a sand mining operation that has adversely impacted the shore, the beaches, the area's unique sand dunes and the community's access to and enjoyment of its coastal resources for over a century.

Now, CalAm proposes to locate another industrial facility - the intake wells for its desalination project – on the CEMEX property, severely increasing the burden to EJ communities that MCWD serves. To add insult to injury, the project would withdraw over 17,000[1] acre-feet of groundwater without any groundwater right. In addition to impacts to the community's access to and enjoyment of its coastal resources, the proposal presents a significant threat to MCWD's groundwater supply. MCWD and the City of Marina are

[1] Recovery of desalinated brackish groundwater estimated at approximately 40% of source water.

presently engaged in litigation with CalAm and CEMEX in Superior Court over the lack of groundwater rights and the anticipated groundwater impacts of the MPWSP, and certain groundwater issues have been referred to the Administrative Hearings Office of the State Water Resources Control Board ("SWRCB") for the SWRCB's consideration and recommendation to the Court. Trial is presently scheduled for July of 2024.

Notably, the California Public Utilities Commission ("CPUC") specifically acknowledged when it approved CalAm's MPWSP in 2018 that subsequent litigation regarding water rights issues could render the MPWSP infeasible. (CPUC Decision ("D.") 19-01-051, pp. 117-119, modifying D.18-09-017 ; id. at p. 118 ["If the proposed project is approved and any dispute arises as to whether or not [CalAm] possesses legal water rights, such dispute likely would be resolved through court action. Naturally, however, if [CalAm] does not have the right to the supply water for the proposed project, the proposed project could not proceed and would thus prove infeasible."], quoting CPUC's EIR.)[2] Contrary to CalAm's claim in its application, its project will undoubtedly result in impacts to groundwater. Ongoing groundwater modeling and investigation in the pending litigation indicate that the proposed MPWSP desalination intake wells in the SVGB would likely result in four of the six "undesirable" outcomes that are to be avoided under SGMA. Specifically, based on the most recent evidence developed before the SWRCB, the MPWSP intake wells would likely lower groundwater levels, reduce available groundwater storage, increase seawater intrusion and degrade groundwater quality, all in clear violation of the goal of sustainable groundwater management.

While such impacts should be avoided in any case, it is particularly inappropriate and unjust to impose these severe risks on the water supply of the EJ communities that are served by MCWD, who will receive no water from the MPWSP, simply in order to provide ***surplus*** desalinated water to more affluent communities on the Monterey Peninsula. In the event that MCWD's groundwater resources become impaired due to operation of the MPWSP, the EJ communities MCWD serves would be additionally unfairly impacted by substantially increased costs because MCWD would need to resort to developing more costly supply sources of its own, potentially including desalination. For this reason, MCWD urges the Commission to deny the lease application, or at the very least suspend the application pending resolution of Superior Court and CPUC proceedings.

[2] The CPUC at the time had not yet adopted its Environmental and Social Justice ("ESJ") Policy. In Phase 2 of Application ("A.") 21-11-024, the current proceeding to updated supply and demand estimates for the MPWSP, MCWD has requested the CPUC to consider its ESJ Policy.

Disproportionate burdens to vulnerable communities

As the California Coastal Commission recognized, this project presents "significant environmental justice concerns." (CCC Findings, pp. 3, 4-6, 104-120.) In fact, the Coastal Commission found the MPWSP "raises the most significant environmental justice issues" the CCC has confronted since it adopted its own EJ policy in 2019. (*Ibid.*) While the CCC conditionally approved the project, it imposed numerous prior-to-issuance conditions that CalAm must fulfill before it may obtain a Coastal Development Permit ("CDP") for the MPWSP. (CCC Findings, Section III., pp. 12-40.) Many of these conditions were directed toward addressing EJ concerns, including risks to MCWD's groundwater resources in the SVGB. (*Id.*, pp. 4-7.)

Importantly, Cal-Am's application fails to acknowledge the CCC's Special Condition 1, which states this permit ***shall not be issued*** if a final judgment or disposition in *City of Marina v. RMC Lonestar, et al.,* Monterey County Superior Court Case No. 20CV001387 "demonstrates that (a) the Applicant does not have, and cannot feasibly obtain, water rights (to the extent applicable) for the Project or (b) Cal-Am's Project would cause harm to any aquifer that is a source of drinking water to the City of Marina or the Marina Coast Water District." (CCC Findings, pp. 12-13.) In Case No. 20CV001387 the trial court has referred certain issues to the Administrative Hearings Office of the SWRCB. The condition allows Cal-Am to seek an amendment to the conditional CDP to remove this condition if the SWRCB's final adopted order in the SWRCB referral proceeding demonstrates "that (a) Cal-Am has, or can feasibly obtain, water rights (to the extent applicable) for the Project and (b) Cal-Am's Project would not cause harm to any aquifer that is a source of drinking water to the City of Marina or the Marina Coast Water District.". (*Ibid*.) Both the court case and the SWRCB proceedings are ongoing.

CalAm's application to the Commission also grossly mischaracterizes the CCC's Special Condition 12, which is intended to address environmental justice issues related to the project's potential impairment of the SVGB groundwater resource that MCWD relies upon to serve its customers, including EJ communities in Marina and Seaside. Special Condition 12 has many parts, which include the requirement that CalAm develop a groundwater monitoring plan in consultation with Marina Coast based on new groundwater modeling, to ensure CalAm adequately protects the aquifers used by the City and Marina Coast. (CCC Findings, pp. 29-31.) Special Condition 12 further requires Cal-Am to apply for and obtain the CCC's approval of the monitoring plan in the form of an amendment to the conditional CDP issued by the Commission. CalAm has not, to date, contacted Marina Coast to initiate the consultation process for Special Condition 12, much less applied to the CCC for an amendment to the conditional CDP for approval of the monitoring plan.

If the project is to eventually proceed, this monitoring plan will be critical to ensuring that impacts to MCWD's groundwater resources are identified and mitigated swiftly and fully. MCWD's provision of safe, reliable and affordable water to its constituents, including EJ communities in Marina and Seaside, would be at grave risk if the project were to move forward, and implementation of Special Condition 12 is essential for Marina Coast. Although CalAm does not include Special Condition 12 in its EJ discussion, the condition is critical to addressing EJ concerns regarding groundwater resources for the EJ communities that MCWD serves. And, as noted above, Cal-Am has not even started the consultation process for Special Condition 12, much less submitted the required amendment to the conditional CDP.

The CCC also considered whether other projects could meet the MPWSP's objectives, and it concluded that, while expansion of the Pure Water Monterey ("PWM") advanced-treated recycled water project would be sufficient both in the near term and coming decades, additional supply could be needed before or after 2040. (CCC Findings, p. 155.) But the CCC's special conditions include the requirement that CalAm obtain the concurrence of the CPUC in the CCC's determination that CalAm could proceed with a proposal to re-size the desalination project at 4.8 mgd, or million gallons per day (approximately 5,376 acre-feet per year). (CCC Findings, pp. 12, 13.)[3] Therefore, CalAm cannot proceed with any project until it has the CPUC's permission to carry out its newly-proposed 4.8 mgd version, "with a determination that there is projected demand for additional water supply beyond the Pure Water Project Expansion" by or before 2050. (CCC Findings, p. 13.)

MPWSP not needed to serve CalAm's customers

In 2020, MCWD retained water demand expert Peter Mayer, of WaterDM, to analyze whether expansion of the PWM project would provide CalAm with a sufficient future water supply source, without the need for desalination. In a series of updated reports over the last several years, Mr. Mayer has concluded that PWM Expansion, particularly when combined with prudent management of ASR and available storage capacity in the Seaside Basin, provides a sufficient supply through at least 2050, with a ten percent buffer, and considering anticipated population growth.

[3] CalAm's existing approval from the CPUC is for a 6.4 mgd project (roughly 7,168 acre-feet per year), and in issuing its approval in 2018, the CPUC expressly disapproved a smaller-sized or phased project. (D.18-09-017, pp. 69-70.)

Mr. Mayer also concluded that it would be unfair and unnecessary to burden local EJ communities with the adverse environmental and financial impacts of CalAm's proposed project:

> WaterDM's analysis shows that Marina, an ESJ community, is the proposed recipient of an unwanted and unnecessary infrastructure project. Cal-Am has other good water supply options available that are less expensive and less burdensome to rate payers. With the addition of 2,250 AF from the Pure Water Monterey Expansion and continuing its water conservation efforts, Cal-Am will have sufficient supplies that the moratorium on new connections can be lifted, while still complying with the State Water Board's limits on Cal-Am's annual Carmel River diversions.

(WaterDM Sixth Supplemental Report, Jan. 22, 2024, p. 42.) Mr. Mayer's conclusions are consistent with recent analyses by the General Manager of the Monterey Peninsula Water Management District ("MPWMD") and Dr. Lon House for the City of Marina. Please let us know if you would like to have copies of Mr. Mayer's reports.

Cal-Am's customers, supply and demand

CalAm is an investor-owned utility regulated by the CPUC. Its Monterey District encompasses Carmel, Pebble Beach, Monterey, Pacific Grove, Sand City, Del Rey Oaks and portions of the City of Seaside. The CCC identified EJ communities that are served by CalAm in the cities of Monterey and Seaside. (CCC Findings, pp. 109-110, 112-113.) An unjust impact of the MPWSP generally, and to these EJ communities in particular, is the high cost of the proposed desalinated water supply. In 2018, it was estimated that the cost per acre-foot of desalinated water would be over $6,000, as compared to pumped water costs in the hundreds of dollars per acre-foot and recycled water costs ranging around $2,000 per acre-foot. (*See* D.18-09-017, p. 123, fn. 332 [combined desalination and recycled water price estimate].) MCWD is not aware of an updated cost analysis for the MPWSP. Overestimating demand, which can lead to overbuilding projects, places significant cost risks on CalAm's ratepayers.

Annual water demand for CalAm's Monterey District is presently 9,288 acre-feet. CalAm supplies its customers through sources including the Carmel River system, native groundwater from the adjudicated Seaside Basin, advanced-treated recycled water from the PWM project, and various aquifer storage and recovery ("ASR") supplies that are banked in the Seaside Basin for future withdrawal when needed. In 2018, the CPUC determined that CalAm's sources of supply totaled 9,044 acre-feet annually. (D.18-09-017, pp. 33 and fn 91,

167 at Finding of Fact 13.) However, the CPUC did not include 700 acre-feet of CalAm's 1,474 acre-foot per year native Seaside Basin supply in this annual figure, due to CalAm's obligation to pay back approximately 17,500 acre-feet that it previously over-pumped, during a future 25-year period when its supplies are otherwise sufficient. (*Ibid*.)

Expansion of CalAm's PWM supply was approved by the CPUC last year. The CPUC is in the process of updating supply and demand estimates for the MPWSP in Phase 2 of proceeding A.21-11-024, with hearings to be held in March and a final decision expected later this year. Meanwhile, PWM Expansion facilities are under development, and the project is scheduled to add 2,250 acre-feet annually to CalAm's supply beginning in 2025. This will permit CalAm to 1) lift its moratorium on new connections,[4] facilitating much-needed affordable housing, and 2) commence its 25-year payback to the Seaside Basin.

Adding a costly, surplus water supply from the MPWSP to CalAm's Monterey District supply portfolio will adversely impact CalAm's own customers through significantly higher rates. This economic burden would be particularly unfair to the EJ communities in Seaside and Monterey that are served by CalAm. It would also be unjust to CalAm ratepayers generally, because they would be saddled with unnecessarily increased rates to pay for surplus supply. Shifting the risk of overbuilding infrastructure to its customers, however, is a win-win for CalAm, because of its ability to collect a fixed percentage of the

[4] Attachment A to CalAm's application describes the project as "necessary to lift the SWRCB's CDO and its moratorium on new or expanded service connections." (Att. A, p. 16 "Public Benefit".) This sentence could lead the reader to leap to several incorrect assumptions that should be addressed. First, the 2009 SWRCB Cease and Desist Order ("CDO") will not be "lifted," rather CalAm must permanently comply with Carmel River pumping limits that the SWRCB set in 1995 and reinforced in 2009 and 2016. Since December 31, 2021 CalAm has been in full compliance with those limits. They will not be "lifted," and CalAm has publicly stated that it will continue to comply with its legal limitations on Carmel River withdrawals. Second, because CalAm and its customers have already replaced over 10,000 acre-feet per year of illegal withdrawals (in 1995) with a 7,000+ acre-foot reduction in demand (similar to conservation successes across California, including at Marina Coast) and the addition of 3,500 acre-feet per year of initial PWM and other smaller new supplies, CalAm does not require the desalination project to continue complying with the SWRCB's orders. Third, the moratorium is a creature of CalAm's making, which it requested from the CPUC in 2010 and was granted in 2011. (D.11-03-048.) It was a condition of the SWRCB *in the event* that CalAm wanted to seek relief from its Carmel River limits. (*Id.*, pp. 10-12; *see also* SWRCB Order WR 2009-0060.) Fourth, cessation of the moratorium can be achieved as soon as CalAm certifies to the CPUC, and the SWRCB's Deputy Director for Water Rights concurs, that the illegal withdrawals have been replaced permanently. (*Id.*, pp. 51-52.) If CalAm believes it cannot make that representation today, it surely can do so when it begins receiving PWM Expansion supply in 2025.

value of the asset as an annual income component of water rates, or "return on equity."[5]

Because the CPUC is currently updating its supply and demand estimates for the MPWSP, it would be premature to approve CalAm's lease application. In addition, the Superior Court is considering the legal feasibility of CalAm's slant well proposal. Therefore, the Commission should deny the application or suspend it pending the outcome of the CPUC's decision and the Superior Court litigation.

Castroville Community Services District

In its EJ discussion, CalAm emphasizes the benefit that it expects the MPWSP to provide to the EJ community of Castroville, by supplying an increment of desalinated water to Castroville Community Services District in lieu of groundwater that is showing impacts from seawater intrusion. But this benefit is also a mechanism for CalAm to satisfy the Monterey County Water Resources Agency ("MCWRA") that CalAm's project will not result in the net export of groundwater from the SVGB. (D.18-09-017, p. 103 and Appendix H.) In exchange for solving CalAm's groundwater export problem, at least in theory and assuming that CalAm's water quality projections are accurate, Castroville will receive desalinated water at a far lower price than CalAm's customers will pay. Moreover, if CalAm's water quality projections overestimate the salinity of the brackish groundwater it would pump as sourcewater, CalAm would be required to provide the Castroville Seawater Intrusion Project or C-SIP of MCWRA with additional desalinated water returned to the SVGB at an even lower price, for agricultural use. (D.18-09-017, p. 103 and Appendix H.) In that case, far less supply could be available from the project for CalAm's own customers.

Any benefit to Castroville and the Castroville Community Services District would also come at the expense of much larger EJ communities in MCWD's and CalAm's service territories, as discussed above. What CalAm does not mention is the fact that MCWD's Board of Directors has approved a different, more just solution for Castroville's water supply issues. MCWD is prepared to assist Castroville through in-lieu pumping of Castroville Community Services District's SVGB supply at MCWD's wells, with installation of a transport pipeline to deliver the water. Capital costs for this project are included in MCWD's most recent five-year plan (CIP #GW-2310). It is important to bear in mind that Castroville will not be adversely impacted if the MPWSP is not carried out.

[5] For example, if the MPWSP cost $300 million to put into service and a 7.5% net return on equity were assumed, CalAm could add 7.5% of $300 million, or $22.5 million to its annual revenue requirement.

Pure Water Monterey project and Expansion

Through an agreement with Monterey One Water ("M1W"), MCWD has been partnering with M1W since 2016 in the development of the PWM advanced-treated recycled water project. MCWD is also a member entity in M1W, a joint-powers authority in Monterey County. MCWD's 2016 agreement with M1W for delivery of advanced-treated recycled water, as amended in 2017, calls for an amount of recycled water produced from wastewater flows to M1W to be provided to MCWD. MCWD began taking delivery of its first increment of recycled water in 2022, which is presently served to its golf course customers in the City of Seaside, enabling conservation of groundwater supplies.

CalAm is presently receiving 3,500 acre-feet per year of water supply from the PWM project. In 2025, that amount will increase to 5,750 acre-feet per year. Combined with CalAm's other supplies, it will then have access to approximately 12,000 acre-feet of annual supply to serve its Monterey District customers. CalAm also has the ability to purchase additional increments of available PWM supply under its existing contracts with M1W and MPWMD, and it has reported such additional purchases in recent years.

Although recycled water is a more expensive supply source than native groundwater or river water, it is available at a fraction of the cost of desalination. Recycled water is also a resilient supply in times of drought, because it relies on re-use of the community's base-line indoor consumption and agricultural or industrial water that has already been produced.

Conclusion

Marina Coast appreciates the opportunity to provide comments relevant to the EJ aspects of CalAm's lease application. Marina Coast believes the Commission may deny the lease application without adverse impact to CalAm's water supply or customers, or the Castroville community as described above. At the very least, Marina Coast requests the Commission suspend CalAm's application pending resolution of the Superior Court water rights case and CPUC proceedings to update supply and demand estimates for the MPWSP. Please let us know if you have any questions, or if you would like to have copies of any of the materials referenced in this letter.

Sincerely,

/s/ Ruth Stoner Muzzin
Ruth Stoner Muzzin

cc: MCWD Board of Directors
Remleh Scherzinger, General Manager, MCWD
Roger Masuda, Esq.
Howard Wilkins, III, Esq.
City of Marina counsel and City Manager, Layne Long
Monterey Peninsula Water Mgmt District counsel and General Manager, David Stoldt
LandWatch Monterey County counsel and Executive Director, Michael DeLapa
Public Water Now Executive Director, Melodie Chrislock
Citizens for Just Water Chair, Liesbeth Visscher

MCWD June 22, 2026 Comment Letter, File A4181

ATTACHMENT E

SUPERIOR COURT OF THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF MONTEREY

HONORABLE THOMAS W. WILLS, JUDGE

CITY OF MARINA, Plaintiffs, vs. RMC LONESTAR, et al., Defendants.	No. 20CV001387
MARINA COAST WATER DISTRICT, Cross-Complainant, vs. CALIFORNIA-AMERICAN WATER COMPANY, et al., Cross-Defendants.	

TRANSCRIPT OF PROCEEDINGS

Courthouse, Monterey, California

Department 15

November 12, 2025

(Court Trial - Day 1)

LISA A. MEESKE, CSR No. 10617, RPR, CRG
Official Pro-Tem Reporter

JOB NO.: 108767

Well, all right. Is this person -- what capacity is this individual? An expert?

MR. BROCHARD: Yes, Your Honor. He's being offered as an expert.

THE COURT: All right. You can come forward and be sworn.

PETER MAYER,

called as a witness on behalf of the Plaintiff, being sworn by the clerk to tell the truth, the whole truth, and nothing but the truth, answered and testified under oath as follows:

THE WITNESS: I do.

THE CLERK: Please state and spell your first and last name.

THE WITNESS: My name is Peter Mayer, P-E-T-E-R M-A-Y-E-R.

THE CLERK: Thank you very much.

If you'll please take the stand.

THE COURT: Proceed.

DIRECT EXAMINATION

BY MR. BROCHARD:

Q. Good afternoon, Mr. Mayer.

Can you please state and spell your name for the record.

A. My name is Peter Mayer, P-E-T-E-R

M-A-Y-E-R.

MR. BROCHARD: Mr. Mayer's CV is at Exhibit 442. I think it will go quicker if I can show that, Your Honor.

BY MR. BROCHARD:

Q. Mr. Mayer, can you please describe your education.

A. Certainly.

I have a bachelor's degree from Overland College in 1986, and I got a Master's Degree in Civil Engineering from the University of Colorado in 1985.

Q. Are you licensed in any states?

A. I am a licensed professional engineer in the State of Colorado.

Q. Do you have any professional affiliations?

A. I have numerous professional affiliations.

I am an active member of the American Water Works Association, the American Water Resources Association, the Alliance for Water Efficiency, the American Society of Civil Engineers, the California Water Efficiency Partnership, the Colorado River Water Users Association, Colorado Water Congress, Colorado Water Wise.

Q. Thank you, Mr. Mayer.

A. Those are the ones listed there, at least.

Q. Currently, what is your job?

A. I am the principal of Water DM, Water

Demand Management.

Q. And what do you do?

A. I'm a consultant. I provide services to water utilities and entities -- state entities, national entities -- regarding water supply and water demand.

Q. What is your understanding of the subject matter to which you're being asked to opine on today?

A. I have been asked -- accepting the decision from the CPUC, I have been asked to look at what current population and current demand is and what future population and future demand has been deemed to be in the CPUC decision and then to offer an opinion about what will constitute that increase in future demand.

Q. How long have you been a registered professional engineer?

A. I've been a registered professional engineer for 22 years.

Q. And what did you do before that?

A. I was an engineer before that. It took me a few years to achieve professional certification. I worked for over 30 years.

Q. In your 30-year career, can you name some of the projects that you worked on that may relate to this case.

A. Well, certainly.

Currently, I am the principal investigator for the California Department of Water Resources Statewide Indoor Residential Water Use Study that is pursuant to the 11 -- the Senate Bill 1157 legislation titled "Making Conservation a California Way of Life."

THE COURT: Okay. Try to slow down a little bit. The court reporter's struggling and so am I. Thank you.

THE WITNESS: Shall I restate what I just said?

THE COURT REPORTER: No.

THE COURT: Okay. Thank you.

THE WITNESS: So that is a project that is looking at indoor water use across the state of California at every water utility and determining the ability of water utilities to comply with the 42 gallons per capita per day target that has been set.

BY MR. BROCHARD:

Q. Have you ever testified in court as an expert witness?

A. Yes, I have.

Did you want me to mention any other projects that I've worked on, or is that the only one you're interested in?

Q. Are there any other projects that you think that are relevant?

A. Well, I think there's quite a few that are relevant.

I am currently also the principal investigator for the National Residential End Uses water study --

(Court reporter clarification.)

THE WITNESS: End -- End Uses; where water is used, essentially.

And that is a study that is funded by the Water Research Foundation and has 52 participating water utilities from across the country participating, including a number from California.

I am the author of the previous two editions of this study, the 2016 Residential End Uses of Water, Version II, and then the 1999 Residential End Uses of Water, Version I.

I am also the coauthor of the Water Research Foundation's commercial and institutional end uses of water study published in 2000.

And those are just a small number of projects that I've worked on.

BY MR. BROCHARD:

Q. Have you ever testified in court as an expert witness?

A. I have testified once before.

Q. When was that?

A. I testified in 2016, as an expert on behalf of the State of Georgia as their expert in municipal and industrial water use at the US Supreme Court in the case of Florida vs. Georgia 142 origination.

Q. Have you appeared as an expert or provided testimony as an expert in any other proceedings?

A. I've provided testimony, yes.

As part of the CPUC proceeding that just concluded, I provided expert testimony. I provided expert testimony for the US EPA as part of a wastewater decision in northern Ohio. And then, even before that, I provided expert testimony in a water law case in Colorado.

Q. Okay. Now, the subject matter that we're talking about today, the per capita usage and where it will come from, have you done this type of analysis for other clients?

A. Yes. This is very much the type of work that I do.

I help water utilities understand where they use water, how much water they are likely to use in the future, where that water demand is going to come from.

Q. Okay. Have you reviewed the most recent decision by the California Public Utilities Commission regarding Cal-Am's water needs?

A. Yes, I have.

THE COURT: Is that when you provided your copies, Mr. Brochard?

MR. BROCHARD: We exchanged copies of exhibits simultaneously.

THE COURT: Are these numbers to which Mr. Mayer testified during his deposition?

MR. BROCHARD: Yes, the numbers are consistent with his deposition testimony. And that's --

THE COURT: Not consistent. I want to know if their identical.

MR. BROCHARD: Yes.

THE COURT: There's a difference?

MR. BROCHARD: I believe they are identical.

THE COURT: All right. I will -- since the defense has not seen this before, I'm going to allow the testimony, subject to a motion to strike if, in fact, upon review, it appears to them that they are not identical to the numbers to which Mr. Mayer testified in his deposition.

Go ahead.

BY MR. BROCHARD:

Q. So there's three pages to this exhibit. Let's focus on Page 1.

Mr. Mayer, can you explain to us what we're looking at.

A. Yes.

This is a chart that -- which has two parts, two Y-axis.

On the blue bars, we see the 2022 water demand for Cal-Am at 9,280 acre-feet. And then the next second blue bar is the 2050 water demand, the deemed water demand, from the CPUC decision of 13,732 acre-feet.

Then I have included a line which shows the population, the 2022 population, 92,647, and then the future population of 102,877 people. And I have noted that this is an 11-percent increase in population over this time period.

Q. Can we go to the next page, please.

Can you explain what we're looking at here.

A. Yes.

So the blue bars are identical to the previous chart. They simply show the current water demand and the projected future water demand. And here, that I have calculated the gallons per capita per day using the population values shown in the previous chart.

So you can see that, in 2022, there was 89.4 gallons per person per day, and that, in 2050, this is projected to increase to 119.2 gallons per person per day, a 33-percent increase.

Q. Do you have an opinion as to where this

increase is most likely to come from?

A. Yes, I do.

Q. What is that?

A. Well, to understand my opinion, it's important to understand the history trajectory of water use, really, in California and across the United States.

And over the course of my career, I studied residential and urban water use. And one of the clear patterns that has emerged is an increase in -- particularly, in indoor water use efficiency over the last 30 years.

Indoor water use has declined steadily in California and, really, across the United States. And this is because of an intentional effort to reduce indoor water use through plumbing codes and -- and measures that assure that fixtures, like toilets and showers and faucets, can only use a certain amount of water.

So, currently, the 1992 Energy Policy Act -- National Energy Policy Act restricts toilets to 1.6 gallons per flush. You cannot purchase a toilet anywhere in the United States legally that uses more than 1.6 gallons per flush.

California has gone even farther than this, and they have passed rules that limit toilets to 1.28 gallons per flush. And similarly, similar rules and regs and

codes have been put in place that impact showers, that impact faucets, that impact clothes washers and dishwashers, as well as a variety of different commercial and nonresidential fixtures.

And these policies, programs, and measures have had a measurable impact on indoor water use. Indoor water use has become substantially more efficient across the country, across California, and in fact, in the Cal-Am service area as well.

So it is my opinion that this change in indoor water use to become more efficient would be very, very difficult to reverse. It would require that everyone start using water -- using more water for toilets, for all of these different fixtures, and -- when you simply can't even purchase one that uses more water.

So I think it is extremely unlikely that indoor water use will become less efficient in the future.

Therefore, I -- it is my opinion that the majority, the lion's share, of this increase in per capita water use that is being shown in this chart would come from outdoor water use, from irrigation, from using water on gardens and lawns, swimming pools.

And I agree with Cal-Am's experts who, in their testimony, also noted, when asked about where the additional water use would come from, they said that

people would like to enjoy their gardens more. And that -- in my view, that is the only possible source of this additional water demand. It would have to come from the form of outdoor water use from both the residential and the nonresidential sector, because indoor water use has become so much more efficient and is unlikely to reverse.

MR. BETZ: Objection; move to strike; nonresponsive. The PUC decision speaks for itself. And lacks foundation.

THE COURT: I think the issues that you're raising go more to its weight than its admissibility, and the Court will take that into account in evaluating this testimony.

I think there's a sufficient foundation for it to come into evidence, and I rather suspect we may hear some evidence from Cal-Am to the contrary.

So I'll allow the testimony to remain, but, of course, that is subject to evaluating its weight by the Court, which I will do.

Okay. Proceed.

MR. BROCHARD: Thank you, Your Honor.

BY MR. BROCHARD:

Q. Mr. Mayer, are you aware of any current restrictions on outdoor water use in Cal-Am's Monterey

District?

A. So, in Cal-Am's Monterey District, currently there are day-of-the-week watering restrictions, so you're only allowed to use water outdoors on certain days of the week. But, on those days of the week, there's no volumetric limit to the water, so you can use as much water as you want on the days which you are assigned.

Q. Is the restriction on day-of-the-week water usage, outdoor water usage, is that unique to Cal-Am's Monterey district?

A. No. That is a common form of restriction that many water utilities put into place to shift irrigation demands across different days. It's one of the ways that water utilities manage their peak demands to assure that not everybody is watering at the same time on the same day.

In the western United States, peak water demand is driven largely by simultaneous irrigation.

THE COURT: Is water demand influenced by the rates that are charged based upon the volume of water used by the individuals?

THE WITNESS: Rates have an impact too.

THE COURT: Do those have a tendency to discourage outdoor water use?

THE WITNESS: Exactly right.

And many rate structures are, specifically, designed so that you pay a higher rate for outdoor water use.

THE COURT: Thank you.

Go ahead.

BY MR. BROCHARD:

Q. Mr. Mayer, if new homes are built or people want to remodel their existing homes to add a bathroom, would that affect per capita usage?

A. Adding a bathroom by itself does not effect per capita usage. You would need to add a person to increase the water use. Simply just adding a bathroom with the same number of people using the water would not increase per capita use, and in fact, it might decrease it, because you would be, by law, installing a more efficient fixture more likely than the one that you had there before.

Q. If the increased demand is largely a result of outdoor water use like you've said, what effects or implications would that have on Cal-Am's system?

A. Well, I'm not sure exactly what the implication would be, but an obvious one would be an increase in peak demand. You would expect that, if people are using considerably more water outdoors than in, you would see an increase in peak day, in peak hour, in peak

The 89.4 of current use includes all of the water use, tourism water use, nonresidential water use, and residential water use, indoor and outdoor.

Q. The population goes up. The per capita water use stays the same. The amount of water people are using stays the same. Then the per capita number would stay the same; correct?

A. Yes.

Q. So the per capita number only goes up if they change their water usage habits; correct?

A. Correct.

Q. Is it possible to change your indoor water use habits with the current regulations on efficiency?

A. Very difficult.

Indoor water use is really driven largely by technology. There's -- and so, to increase your indoor water use, substantially, would require a concerted effort, as opposed to -- it's just if -- if you just go along and do the things as you've been doing them as they are today, you're not going to increase your indoor water use. You're going to use less, because fixtures and appliances are gradually getting more and more efficient.

Q. Does affordable housing use more water on a per capita basis than regular housing?

A. No.

In fact, there's data that shows that affordable housing uses less water per capita, because there is less outdoor water use, typically, at affordable housing.

Q. Thank you, Mr. Mayer.

MR. BETZ: I have no more questions, Your Honor.

THE COURT: All right. Any recross?

MR. BETZ: Nothing further.

THE COURT: All right. Thank you.

You're excused, Mr. Mayer. You may step down. Thank you.

Do we have another witness?

MR. SPAULDING: Yes, Your Honor.

THE COURT: Okay. Next witness?

MR. SPAULDING: The City of Marina calls Bruce Carlos Delgado to the stand.

THE COURT: All right.

Just a reminder, everybody, try to speak a little more slowly. I realize the questioning and answers may be quite animated and, at times, emotional. But it's extremely important so that we have a clear record with the court reporter and that I understand what it is that's being said. Okay.

So thank you.

THE CLERK: Raise your right hand.

////

C E R T I F I C A T E

STATE OF CALIFORNIA
COUNTY OF MONTEREY

I, LISA A. MEESKE, a Certified Shorthand Reporter in and for the State of California, do hereby certify that I am the reporter who reported the above proceedings in the matter entitled City of Marina vs. RMC Lonestar, et al., Case No. 20CV001387, dated November 12, 2025, that I reported the above proceedings fully and correctly, and that the foregoing pages, numbered 1 - 211, inclusive, are a complete and correct transcription of my stenotype notes taken at said time and place.

I further certify that I have complied with CCP 237(a)(2) in that all personal juror identifying information has been redacted, if applicable.

IN WITNESS WHEREOF, I have hereunto set my hand this 30th day of January, 2026.

Lisa A. Meeske
Lisa A. Meeske
CSR NO. 10617, RPR, CRG

15 May 2026

TO: State Lands Commission, attn. Atty. Lucinda Calvo and SLC Commission Members

FROM: The Ag Land Trust (Marc Del Piero, CEO for ALT - https://www.aglandtrust.org/)

RE**: SUMMARY OPPOSITION MEMO OBJECTING TO THE REQUESTED LEASE OF STATE LANDS AND GROUNDWATER RESOURCES BY THE CALIFORNIA AMERICAN WATER COMPANY**

To the CA. State Lands Commission:

On behalf of the Ag Land Trust, please accept this letter of opposition to the requested lease of public trust resources by the California American Water Company at the CEMEX site near the City of Marina in the County of Monterey.

The Ag Land Trust (ALT) is an IRS Sec. 501c3 non-profit farmland conservation organization headquartered in Monterey County **(https://www.aglandtrust.org/).** Organized in 1984, ALT holds fee ownership and agricultural conservation easements on over 51,000 acres of prime farmland in Monterey, San Luis Obispo, San Benito, and San Mateo Counties. ALT has been and remains the most successful and prolific farmland conservation organization in Central California. ALT has received more grants from the State of California (CA. Department of Conservation SALC Program) than any other recipient. ALT also has on-going, sole source federal contracts with the United States government to receive grants for agricultural lands purchases in southern Monterey County (U.S. Department of Defense/War REPI Program) to purchase lands proximate to military bases so as to limit foreign ownership of California farmlands.

In 1996, the State Legislature passed **CA. Water Code Sec. 1010** that guarantees the protection of the senior water rights of any water rights holder that choses to use reclaimed water to conserve existing potable supplies. Further, in **CA. Water Code Sec. 1010, the Legislature** expressly prohibits any third party from attempting to "take" or appropriate "conserved waters" that land owners have protected through conservation efforts.

In 1997-98, ALT received grants from the U.S. Department of Agriculture, the California Coastal Conservancy, and the CA. Department of Conservation to purchase the fee ownership of our West Armstrong Ranch. Our West Armstrong Ranch **(https://www.aglandtrust.org/projects/west-armstrong-ranch/)** is 192 acres of prime coastal farmland that is of the highest agricultural productive value in the state. The grants from both federal and state agencies to purchase the West Armstrong Ranch and to preserve it for farming and open space in perpetuity reflect its remarkable value to the nation as a rare agricultural treasure.

In 1998, ALT executed long-term contracts with the County of Monterey to purchase reclaimed wastewater for agricultural irrigation purposes and to conserve its senior overlying percolated groundwater rights beneath our West Armstrong Ranch. Pursuant to this ongoing effort to conserve (and protect) our groundwater and the provisions of CA. Water Code Sec. 1010, ALT has reported our annual use of reclaimed water for irrigation to the SWRCB. (See attached memo to SWRCB – Connor Bouvee and attached Sec. 1010 reporting documents).

The West Armstrong Ranch immediately abuts the CEMEX Property where the California American Water Company (CalAm) proposes to drill groundwater wells. The argument that has been advanced by CalAm since the beginning of its long and legally tortuous program to advance a desalination project is as follows:

In 1994, CalAm was found guilty by the State Water Resources Control Board (SWRCB) of illegally appropriating thousands of acre/feet annually of river underflow from the Carmel River. (I was the Vice-Chair/Attorney member of the SWRCB at that time). CalAm's illegal appropriation, from which it has made millions of dollars in corporate profits by wrongfully exploiting river water (at no expense to CalAm) and to which it had no water rights or legal entitlement, was ordered by the SWRCB to end. CalAm was ordered to construct a new potable water supply to replace its illegal services to the Monterey Peninsula.

Over the course of the last three decades, CalAm has failed to complete any project to comply with the SWRCB orders. Multiple lawsuits by private parties and municipal governments have been filed against CalAm and in 2010 the SWRCB was compelled to again take punitive action against CalAm for its ongoing failure to comply with the SWRCB orders. In the meantime, a major, publicly owned wastewater reclamation project (built by MontereyOne Water) has now been completed that will serve all of the potable needs of the Monterey Peninsula for the next 30-40 years.

CalAm has continued proposing "solutions" that invariably are predicated upon exploiting the senior water rights of innocent third parties, in effect proposing to trade the illegal appropriation of river water from the Carmel River for an even greater illegal appropriation somewhere else. Their current project is the wells that they propose to drill on the CEMEX property adjacent to our (ALT's) West Armstrong Ranch. CalAm's paid consultants produced the Environmental Impact Report that was originally rejected by the City of Marina City Council as failing to properly identify and mitigate the the significant adverse impacts that CalAm's project would cause to the overdrafted Salinas Valley Groundwater Basin. The California Coastal Commission subsequently certified the EIR (over the objections of the City and the Ag Land Trust) WITHOUT REQUIRING FOLLOW-UP HYDROLOGY STUDIES TO CONFIRM/VERIFY CALAM'S ENGINEERS REPORTS. The SWRCB

has now determined that the EIR and the CalAm produced reports were and are defective because they did not identify and provide mitigation for CalAm's proposed illegal "taking" of potable water from beneath the ALT West Armstrong Ranch. (See attached SWRCB published Referee Report to the Superior Court dated June 25, 2025 Pages 119-120 (Question 8)).

In 2014, the State Legislature passed and Governor Brown signed the Sustainable Groundwater Management Act (SGMA) that included a designation of the Salinas Valley Groundwater Basin as a groundwater basin in "severe overdraft". CalAm is a "junior appropriator" pursuant to 100 years of case law and the CA. Water Code. CalAm has no overlying groundwater rights in the Salinas Valley (see attached memo to SWRCB-Connor Bouvee) due to the determination by the Legislature that the basin is in severe overdraft, and cannot secure any such rights until the severe overdraft is cured (See City of Barstow v. Mojave Water Agency, 23 Cal.4th 1224, 99 Cal.Rptr.2d 294, 5 P.3d 853 (Cal. 2000)).

CalAm's request of the State Lands Commission to allow it to drill wells on public trust lands, that will intentionally extract nearly 1800 acre feet of our potable groundwater from beneath the ALT's West Armstrong Ranch, would result in an illegal appropriation (taking) of our conserved groundwater (in violation of the legislative protections guaranteed for ALT's conserved water rights as provided for in CA. Water Code Sec. 1010). **There are NO EXCEPTIONS allowing third party "takings" of conserved groundwater under Sec. 1010.** (See attached CalAm's own MAPS (annotated by ALT) showing CalAm's acknowledged cones of depression for its wells that extend over, into, and beneath the statutorily protected aquifers of the ALT West Armstrong Ranch

CalAm's requested lease from the SLC ignores the factual evidence now produced by the SWRCB and accepted into the record of the Superior Court that CalAm's project will violate SGMA prohibitions against exacerbating the severe overdraft in the Salinas Valley.

CalAm's failure to intentionally disclose that it intends to illegally "take" privately conserved groundwater (as now disclosed in the SWRCB's Referee's Report) justifies: 1. the SLC either denial of CalAm's application, or 2. that SLC order the preparation of a supplemental EIR to fully evaluate these now disclosed significant adverse environmental impacts and to fully identify the mitigation measures that CalAm must satisfy in order to proceed with its project. The original EIR is now old and proven (by the findings of the SWRCB Referee) to be defective. CEQA provides the mechanism of a Supplemental EIR to cure such procedural problems.

The SLC, as the state agency responsible for the protection and preservation of the state's Public Trust resources, may not take an affirmative action to approve the requested lease

given that the “takings” and these violations of SGMA and statutory and case law have been disclosed and will flow directly from the drilling of wells on Public Trust lands under the SLC control (See attached memos re: Public Trust issues). The “CalAm prepared” hydrology reports used in the original EIR have been shown by the SWRCB as lacking in the disclosure of the complete truth about CalAm’s project consequences.

ALT stands ready to further discuss these issues with the SLC, and to work cooperatively with the SLC to further the completion of the now mandatory environmental review in order to avoid any future legal disputes.

Respectfully,

Marc Del Piero, CEO for the Ag Land Trust

(CA. Bar #91644)

.

TO: **Connor Bovee, SWRCB** (Please forward to Div. of Water Rights and Water Quality)

FROM: Marc Del Piero (CA. Bar #91644)

RE: Legal limitations on the CALIFORNIA AMERICAN (CalAm) WATER COMPANY'S APPLICATION FOR A DE-SALINATION PLANT NEAR MARINA, CA. (MONTEREY COUNTY)

Mr. Bovee:

Thank you for taking the time to discuss with me the potential Public Trust issues and major groundwater rights/water quality issues that appear to have been completely ignored as part of the scrutiny of the above-referenced application by CalAm for a permit to develop and operate a "so-called" seawater de-salination plant near Marina, California. By way of background, I served on the Monterey County Board of Supervisors and the Monterey County Water Resources Agency (MCWRA) Board of Directors from 1981-1992. I then served as the attorney member of the State Water Resources Control Board from 1992-1999. I taught California Water Law at Santa Clara University from 1992-2011.

I am writing this memo to you (and the appropriate parties at SWRCB) for the purposes and hope of bringing to your attention to factual information and issues of water law, the Public Trust Doctrine, and water quality statutes and policies that have been either intentionally ignored or avoided during the public hearings by the California Coastal Commission. I have shared this information, however, with staff representatives of the State Lands Commission who have expressed serious concerns that these issues were not scrutinized as part of the EIR process for the consideration of the pending CalAm permit.

I strongly recommend that the SWRCB fully re-evaluate any pending favorable decisions regarding CalAm's requested project only AFTER the water rights issues and the water quality issues outlined herein are considered and either mitigated or fully addressed.

First, let me begin with the enumeration of applicable uncontested facts about the groundwater "theater" into which CallAm is attempting to inject its corporate interests:

1. **FACT:** The Salinas Valley is the location of a major percolated (fresh) groundwater basin. This 70 mile long freshwater groundwater basin and its ongoing beneficial uses are and have been historically identified and mapped for decades (since the 1940's) in the SWRCB adopted Basin Plan/Inland Surface Waters Plan for Region 3, and by the CA. Department of Water Resources, USEPA, and the U.S. Army Corps of Engineers.
2. **FACT:** The freshwater aquifers of the Salinas Valley Groundwater Basin do not end at the high tide mark of the Monterey Bay National Marine Sanctuary. The hydrologic modelling conducted by Stanford University on behalf of the Marina Coast Water

District has confirmed this fact. This information is in the evidentiary record. The freshwater aquifers extend as part of the submerged lands out into the Monterey Bay and surface as freshwater seeps on the floor of the marine sanctuary. These freshwater aquifers and the submerged tidelands of which they are a part are Public Trust resources of the state.

3. **FACT:** Water in the basin is stored in two surface water reservoirs (Lake San Antonio and Lake Nacimiento) that are owned by the County of Monterey. The County has only surface water rights on the Salinas River. It releases water from the reservoirs into the river for the recharge of the percolated groundwater basin. Once the County releases the stored water into the Salinas River, it flows down the course of the river and migrates into and percolates into the aquifers. **Importantly, once the water percolates into the aquifers, it migrates beyond the "bed and banks" of the river and the County "loses its management and control of that water". The County (and the MCWRA) are both "junior appropriators" and hold NO percolated groundwater rights in the overdrafted Salinas Valley percolated groundwater basin.** The Salinas River has very little subsurface flows over most of the Upper Valley and NO subsurface flows north of Spreckels, CA.
4. **FACT:** The basin is NOT an adjudicated groundwater basin, and as such, is governed by existing case law governing groundwater rights and the applicable provisions of the California Water Code, the CA. Public Resources Code, and the Sustainable Groundwater Management Act (SGMA) of 2014. This includes the provisions of CA. Water Code Section 1010 which mandate the state's affirmative protection of the senior overlying groundwater rights of landowners who voluntarily use alternative or supplemental water resources for irrigation purposes instead of pumping groundwater.
5. **FACT:** The state legislature through SGMA identified the Salinas basin as a "priority" for the development of a groundwater management plan due to significant overdrafts of the groundwater basin. The overdraft of the basin (by both sprawling/expanding municipal users and agriculture) has led to periodic seawater intrusion into aquifers. Historically, the intrusion "waxed and waned" seasonally, but as the City of Salinas has expanded over the past 20 years, the intrusion has grown worse.
6. **FACT:** Importantly, SGMA (pursuant to the published express legislative intent of the state legislature at the time of its adoption) did not enact or grant any authority to any party or agency (including the local groundwater management agency) to "take" water rights so as to diminish the existing, senior overlying groundwater rights of property holders in affected basins.
7. **FACT:** There have been no significant new water resources developed in the Salinas Valley in the past 60 years except for the Castroville Irrigation Project (CSIP) which produces recycled/reclaimed wastewater used for ag irrigation. CSIP was fully funded

and paid for exclusively by the farmland owners from north of the City of Salinas to the coast near Marina to "supplement" their groundwater irrigation supplies. That project was developed over two decades and came on-line in 1997, at which time it began delivering irrigation water to over 15,000 acres of protected prime coastal farmlands. Notably, the farmers incorporated into the purchase contracts for that reclaimed water a recognition that their senior groundwater rights were not subject to surrender or abandonment and that their senior rights were protected for such claims by the provisions of CA. Water Code Section 1010 which was adopted in 1995 and became effective in 1996.(This is important because it is this protected groundwater that would be wrongfully exploited by CalAm and its de-sal wells).

8. **FACT:** Except for CSIP recycled/reclaimed wastewater for agriculture now sourced from MontereyOne Water, the non-adjudicated Salinas Valley groundwater basin is the source of literally 100% of the fresh water that is consumed by agriculture landowners (exercising their existing, senior (overlying) groundwater rights), and by urban users (public agencies like Monterey County and regulated utilities like CalAm) which are by definition **"junior appropriators " whose consumptive use of groundwater is limited by available groundwater "surpluses" to which those users have previously secured appropriative rights (see discussion below). "Junior appropriators" cannot acquire MORE percolated groundwater rights in a severely overdrafted basin that has NOT been adjudicated because "junior appropriators" are only entitled to appropriate groundwater "surplus to the needs of senior rights holders". In the overdrafted Salinas Valley basin, by definition, there IS NO GROUNDWATER SURPLUS TO THE NEEDS OF senior overlying rights holders (Landowners).** The exception to this would be if a junior appropriator purchased land that holds overlying rights, in which case the junior appropriator would be limited to the overlying land's correlative share of basin's available groundwater, the use of which would be limited to the limits of the purchased property. CalAm has no groundwater rights in the Salinas Valley groundwater basin and cannot acquire any without damaging the rights of other senior rights holders.
9. **FACT:** As part of its application, CalAm proposes to drill so-called onshore "slant" groundwater wells on the CEMEX property to produce "feed water" for their proposed desalination plant. CEMEX, pursuant to a settlement with the state, is limited to pumping not more than 500 acre feet of groundwater per year. **CalAm's application anticipates CalAm pumping up to 30,000 acre feet per year from the proposed slant wells. As a proposed junior appropriator, CalAm holds NO groundwater rights in the Salinas Valley and cannot acquire any groundwater rights because of the basin wide overdraft and because the location of their proposed wells will violate the CA. Water Code Sec 1010 protected senior groundwater rights of overlying landowners.**

10. **FACT:** CalAm attorneys have repeatedly (and FALSELY) represented that the proposed groundwater wells will be pumping seawater, clearly because they have recognized the insurmountable legal prohibition that they face if they truthfully acknowledged that their intent of the proposed wells is to actually pump groundwater from the overdrafted Salinas Valley groundwater basin. This assertion has been refuted by the hydrogeologic modelling and well tests that have been produced over the past ten years and which can be found in the evidentiary record. Notably, CalAm's own hydrology studies (well tests beginning in 2017 and on-going)) have identified these facts, contrary to their attorneys public statements. **The studies show that the massive "cones of depression" that will be caused by the daily pumping of the proposed "slant" groundwater wells will be aggressively drawing fresh water from beneath prime coastal farmlands owned by real property owners with senior (and conserved) overlying groundwater rights.** The result of CalAm's project will be the permanent contaminating and polluting (with artificially induced seawater intrusion) the conserved aquifers beneath those privately owned lands in violation of Water Code Sec. 1010 and the 1968 SWRCB Anti-Degradation Policy, AND the permanent pollution and contamination and waste of the Public Trust freshwater aquifers that extend into the submerged "state lands" beneath Monterey Bay.
11. **FACT:** Under California case law which controls the ownership and use of potable (fresh) groundwater rights in our state, each property owner with land that overlies a percolated fresh groundwater aquifer (including the State of California as the "public trust owner" of submerged lands that are overlying the Salinas Valley potable groundwater aquifer that extends into the Monterey Bay National Marine Sanctuary) is entitled ONLY to its correlative share of the safe yield of the fresh groundwater that may be used without causing additional over-draft, adverse effects, waste and/or damage to the potable water resource or to the water rights of the other overlying senior rights holders and land owners. (Katz v. Walkinshaw (141 Cal. 116); Pasadena v. Alhambra (33 Calif.2nd 908), and reaffirmed in the Barstow v. Mojave Water Agency case in 2000). No state agency has any right to authorize or allow the intentional contamination and waste of a potable aquifer which is also a Public Trust resource (see below), and such an act would be "ultra vires" and illegal.
12. **FACT:** The freshwater aquifers of the Salinas Valley Groundwater basin have clearly been identified in hydrology studies and well tests conducted by both CalAm and the Marina Coast Water District (groundwater hydrology studies conducted for MCWD after 2017 by Stanford University). The results of these conclusive tests have all been entered into the evidentiary records before the Coastal Commission and the State Lands Commission.

13. **FACT:** The proposed slant wells will not be pumping "seawater". They are intended both to violate the laws prohibiting the waste of public trust water resources and the SWRCB Non-Degradation Policy AND to significantly (and permanently) induce saltwater pollution and contamination into an over-drafted on-shore freshwater aquifer thereby causing depletion, contamination, waste, and "wrongful takings" of the private potable water rights of other overlying landowners and farmers.
14. **FACT:** As discussed earlier, CalAm, by their own admission, has NO groundwater rights in the Salinas Valley aquifer because they are not overlying landowners. Additionally, neither the County of Monterey (nor the Monterey County Water Resources Agency) have any groundwater rights and cannot acquire any because they are all "junior appropriators", and the non-adjudicated percolated groundwater basin is in overdraft.
15. **FACT:** Since none of these junior appropriators can legally acquire additional groundwater rights, the concept of a "physical solution" is impossible absent significant compensation to the over 15,000 acres of overlying land owners who have (for more than 25 years) paid to purchase supplemental (CSIP) irrigation water from Monterey One's reclaimed wastewater plant so as to conserve their existing groundwater resources and senior groundwater rights pursuant to CA. Water Code Sec. 1010. (**See attached examples of notice letters pursuant to Sec. 1010** sent over multiple years to the SWRCB Division of Water Rights to ensure the protection of the overlying landowners' senior water rights against exactly the type of wrongful "taking" proposed by CalAm). **MOREOVER, the County of Monterey publicly acknowledged its lack of any groundwater rights in the basin many years ago (see Attachment).**
16. In order for any "physical solution" to remedy CalAm's proposed contamination of the aquifers, the overlying landowners with senior groundwater rights and ownership of the aquifers in the basin must be made whole. CalAm has proposed NO such remedy as part of their desalination project because it would be forced to compensate the landowners (senior water rights holders) of several thousand acres of prime coastal farmlands that are protected pursuant to the state-certified North (Monterey) County Local Coastal Plan. Rather, CalAm apparently hopes to ignore the senior water rights holders and "take" groundwater rights without compensation. If the SWRCB wishes to try to facilitate a "physical solution", CalAm must be compelled to guarantee delivery of adequate and full supplies of potable irrigation water from its proposed desalination plant to ALL of the overlying land owners with senior groundwater rights whose rights will be compromised by CalAm's excessive pumping and inducement of seawater into the conserved aquifer.
17. Moreover, CalAm's proposed offering of "discounted desalinated water" to the County of Monterey (which has no groundwater rights that would be impaired) and the Castroville Community Services District (which, as a junior appropriator, is entitled to

NO MORE water from the overdrafted basin until the senior rights holders entitlements are satisfied) is the equivalent of a thief trying "to pay off the cops" with property (stolen conserved groundwater) stolen from innocent overlying landowners and Public Trust resources that CalAm intends to permanently pollute/deplete with seawater.

18. Such a "taking" by CalAm's proposed willful act of "depletion" will constitute a direct and adverse impact and impairment of the public's health and safety by permanently diminishing the quality of the potable groundwater aquifer and a Public Trust resource. It will also adversely affect protected coastal priority agricultural enterprises due to the induced seawater contamination/pollution into the aquifers that have been conserved for future irrigation purposes by landowners pursuant to CA. Water Code 1010.
19. **FACT:** In an over-drafted potable groundwater basin, no property owner or user of water is entitled to pump or take any such actions as to waste, contaminate, impair, or diminish the quantity and quality of the freshwater resource. The over-drafted Salinas Valley freshwater groundwater aquifer that extends under the Monterey Bay National Marine Sanctuary is identified as a potable water resource by the State and is governed by the SWRCB Groundwater Non-Degradation Policy, which finds its source in the California Constitution:

CALIFORNIA CONSTITUTION

ARTICLE 10 - WATER

SEC. 2. It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.

In other words, the state has determined that the subject Salinas Valley potable groundwater aquifer (including that portion extending into the submerged lands that is a Public Trust resource) is a protected natural resource. The state reaffirmed this in SGMA, subject to the express legislative intent of that legislation.

The state may use the fresh groundwater ONLY to the extent that it has a correlative right that accrues to its Public Trust lands as against all other overlying landowners that are exercising their senior rights and using the fresh groundwater for beneficial uses, as mandated and protected in the California Constitution. Additionally, the state may not allow a private party to willfully deplete a Public Trust resource by allowing the intentional inducement of seawater into a potable groundwater aquifer. Further, the 1968 SWRCB Non-Degradation Policy absolutely prohibits the intentional contamination and/or "waste" of a potable groundwater aquifer by any party. Again, the fact that the Salinas Valley aquifer is a potable supply is definitively established in the Central Coast Regional Water Quality Control Board "Basin Plan" for Central California. Additionally, the mandatory requirements of the California Coastal Act also control the conduct, powers, and permitting authority of state agencies (including the SWRCB) when addressing these Public Trust resources and the required special consideration and protection thereof.

The California Coastal Act - Section 30231 (California Public Resources Code Section 30231) requires that:

Sec. 30231 - The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

CalAm's proposed slant wells are proposed to be located onshore and are designed to take wrongful advantage of the protected Salinas Valley aquifers (by the design of the wells' cones of depression). It appears that the CalAm proposal will directly and knowingly violate

the mandatory statutory requirements, duties, and obligations imposed by Section 30231 of the Coastal Zone Act. Moreover, the proposed slant wells are, according to CalAm's application, intended to take advantage of a "coastal water". But, taking advantage of a coastal water by depletion caused knowingly by a party that has NO groundwater rights is a violation of the law.

As the staff of the SWRCB is well aware, In National Audubon Society v. Superior Court of Alpine County (1981), the California Supreme Court confirmed as part of its "Public Trust Doctrine" that the **State retains continuing supervisory control over the navigable waters of California and the lands beneath them**. This prevents any party from acquiring a vested right to appropriate water in a manner harmful to the uses protected by the Public Trust. (California Water Plan Update 2009, Vol. 4, Page 2 (1)). The SWRCB, given its statutory responsibility over water quality and the protection of Public Trust water resources clearly has the responsibility and must exercise the state's "continuing supervisory control over the navigable waters of California (Monterey Bay) and the lands beneath them" (including the submerged tide lands and Public Trust resources of the extended Salinas Valley aquifers).

The proposed slant wells as designed will intentionally deplete, contaminate, pollute, and waste a protected potable water supply and a Public Trust resource. It appears that the project will violate statutory and regulatory mandates of the California Coastal Act, the California Water Code, the California Public Resources Code, the California Constitution, and over 100 years of case law governing groundwater rights and the Public Trust Doctrine. It also appears that it will result in the wrongful taking of senior percolated groundwater rights from farmers who are beneficially using recycled/reclaimed water for protected, coastal priority agricultural production and for human consumption. Besides that, CalAm, by their own admission, has no appropriative groundwater rights.

Mr. Bovee, I apologize if this letter is overly long. But it appears that **CalAm, as part of its proposed "solution" to its decades' long illegal appropriations of water from the Carmel River (I was Vice Chair of the SWRCB when we issued the unanimously**

adopted original order finding CalAm guilty of violating the Water Code), is now proposing to exchange their illegal appropriation of CV water for another illegal (and much BIGGER) wrongful taking of groundwater to which it has NO legal entitlements. Moreover, CalAm cannot acquire any legal rights to pump groundwater from the basin. And now, it also looks like it is trying to get the SWRCB to be complicit in its proposed illegal appropriation of groundwater from the Salinas Valley by arguing that their proposed slant wells will only pump "seawater".

If the current project as proposed continues to be pursued, the only solution is to extend the extent of the slant wells' depth and length much farther into the submerged aquifers beneath the Monterey Bay National Marine Sanctuary so as to cause the wells' cones of depression to be far enough out into the bay so as to not draw in the freshwater from the on-shore groundwater aquifers that are protected pursuant to CA. Water Code Sec. 1010. That is the only way to guarantee that CalAm's public representations (that they will only be pumping "seawater" and not injuring innocent third party groundwater rights holders) can be assured. Originally, the wells were proposed to extend much farther into the bay, but they were changed and shortened due to the expense of construction, and it was this change that has resulted in the pending disputes that will result in litigation over any entitlements that CalAm may secure that violates the groundwater rights of farmland owners with senior rights.

A "physical solution" was addressed previously. The problem (for CalAm) with that solution is probably that CalAm will not be able to make the massive anticipated profits from rate increases off of the hapless ratepayers of the Monterey Peninsula. In order for the over-lying landowners in the Salinas Valley (who hold the senior groundwater rights) to be "held harmless" by CalAm, CalAm's profits will likely be "eaten up" subsidizing the costs of desalinating seawater for the irrigation of 15,000+ acres of prime coastal farmlands.

Most Respectfully,

Marc Del Piero

Marc Del Piero

FAX TRANSMISSION

MONTEREY COUNTY WATER RESOURCES AGENCY
P. O. BOX 930
SALINAS, CA 93902
831.755.4860
FAX: 831.424.7935

FOR IMMEDIATE DELIVERY DATE: 3/25/10

To: Molly Erickson From: David Kimbrough

C/O:

FAX: 373-0242 ( )

Re: PRAR - 3/3/10

* See Paragraph 15 - Attachment

MONTEREY COUNTY

WATER RESOURCES AGENCY

PO BOX 930
SALINAS , CA 93902
(831)755-4860
FAX (831) 424-7935

CURTIS V. WEEKS
GENERAL MANAGER

STREET ADDRESS
893 BLANCO CIRCLE
SALINAS, CA 93901-4455

March 24, 2010

Molly Erickson, Esq.
LAW OFFICES OF MICHAEL W. STAMP
479 Pacific Street, Suite 1
Monterey, CA 93940

Re: Your Letter of March 22, 2010

Dear Ms. Erickson:

You were wrong in considering MCWRA's response to your March 3, 2010 Public Records Request as "disingenuous." Consider the following:

At the Board hearing of February 26, 2010, Mr. Weeks addressed the development of basin water; that is water that the proposed Regional Desalination Project will produce. The project will rely upon the removal of sea water, which will most likely contain some percentage of ground water. Whatever percent is ground water will be returned to the basin as part of the project processing. As a result, no ground water will be exported. Mr. Weeks' comment to "pump groundwater," refers to this process. The process is allowable under the Agency Act. See the Agency Act (previously provided) and the EIR for the SVWP, which I believe your office has, but if you desire a copy, they are available at our offices for $5.00 a disc. In addition, a copy of the FEIR for the Coastal Water Project and Alternatives is also available for $5.00 a copy. Further, MCWRA intends to acquire an easement, including rights to ground water, from the necessary property owner(s) to install the desalination wells. These rights have not been perfected to date, hence no records can be produced.

As to MCWD, it was previously annexed into Zones 2 & 2A and as such has a right to ground water. These documents are hereby attached PDF files.

As for the reference to "every drop of water that we pump that is Salinas ground water will stay in the Salinas Ground Water Basin," this was a reference to the balancing of ground water in the basin. The development of the Salinas River Diversion Project is relevant, as it will further

relieve pressure on the ground water wells. As such, it is a component of the overall plan to protect and enhance the ground water supply, keep it in the basin, and prevent salt water intrusion. In your letter of March 22nd, you did not consider this project as relevant. Nevertheless these records are available for your review

Looking forward, one additional document is the staff report yet to be finalized for the Board's consideration in open session of the Regional Project. When available, this will be provided.

Very truly yours,

David Kimbrough
Chief of Admin Services/Finance Manager

Encls.

cc: Curtis V. Weeks

*See Paragraph 15 – Notice Letters Pursuant to Cal. Water Code Sec. 1010

AG LAND TRUST
Preserving Farm Land Since 1984

www.AgLandTrust.org
Location: 1263 Padre Drive | Salinas, CA
Mail Address: P.O. Box 1731 | Salinas, CA 93902
Tel.: 831.422.5868

DRAFT NOTICE OF USE OF RECLAIMED WASTEWATER
FOR CONSERVATION OF POTABLE GROUNDWATER RESOURCES

DATE: **June 17, 2021**

TO: **California State Water Resources Control Board (SWRCB), CA State Water Resources Control Board, Division of Water Rights**

FROM: **Ag Land Trust – formerly known as Monterey County Agricultural and Historic Land Conservancy (MCAHLC)**

RE: **Notice of Conserved Groundwater and Groundwater Rights pursuant to California Water Code SEC. 1010**

Dear Chairman Esquivel and SWRCB Board Members,

This letter is being forwarded to you for the purposes of providing **notice** to the SWRCB, pursuant to the provisions of **California Water Code Section 1010 et seq.**, of our use of reclaimed water on our "Armstrong Ranch" which is located in Monterey County. The Assessor's Parcel Numbers for this parcel are 203-011-010, -011, -013, -014.

Our use of reclaimed water (pursuant to **California Water Code Section 1010**) for irrigation purposes of our documented prime coastal zone farmland (Armstrong Ranch) is and has been expressly to preserve and protect our existing groundwater resources and expressly to preserve and protect our existing overlying groundwater rights in the Salinas Valley Percolated Groundwater Basin. This prime and massively productive coastal farmland, and its necessary supplies of irrigation waters, have been recognized in both federal and CA. statutes and administrative regulations as "protected" natural resources within the Coastal Zone and have been acquired with both state and federal grant funds expressly to guarantee the preservation of the resource's productivity.

A summary of our actions to preserve and protect our groundwater and groundwater rights follows. Although notices provided pursuant to **California Water Code Section 1010** are generally indicating supplemental reclaimed water use in lieu of surface water appropriations and appropriative rights, Ag Land Trust is submitting this notice in reliance upon the express statutory language of Sec. 1010 that refers to "the use of water under ANY existing right".

Ag Land Trust is a 501(c)(3) NON-PROFIT CORPORATION organized pursuant to IRS regulations in 1984 for the purposes of owning, protecting, and permanently preserving prime and productive agricultural lands in Monterey County and within the California Coastal Zone. It is now the largest and most successful farmland preservation trust in the State of California, and it owns, either "in fee" or through permanent conservation easements, well over 46,000 acres of prime farmlands and productive coastal agricultural lands throughout Monterey County and the Central Coast of the state. Further, and of more particular importance, Ag Land Trust has been the farmland conservancy that the California Department of Conservation, the California Resources Agency, the United States Department of Agriculture, the National Guard Bureau, the United States Department of Defense, and the California Coastal Commission has sought out to receive grants and to accept the dedications of prime and productive coastal farmlands in the Central Coast area to insure the permanent preservation of those recognized, protected, and irreplaceable state and federal agricultural resources.

Ag Land Trust owns, in fee, the prime and productive coastal farmland (the Armstrong Ranch), and all of the overlying percolated groundwater rights thereunder, that is located immediately adjacent to the CEMEX property, a closed sand mining facility. Our irrigated Armstrong Ranch has been in cultivation since the 1970's producing a minimum of at least two crops of vegetables per year. Our property is in the unincorporated area of Monterey County. Our ranch lies within, and is subject to, the policies and regulations of the state (CA. Coastal Commission) certified North Monterey County Local Coastal Plan, California Natural Resources Code provisions, and federal laws which mandate the protection of our farmlands and the overlying groundwater rights and supplies thereto due to its rare and important productivity values as a prime national and state coastal agricultural resource.

Our ranch was acquired between 1995-1998 with grant funds from the State of California (Natural Resources Agency), the Packard Foundation and the United States (USDA) expressly to permanently preserve its protected (pursuant to federal and state regulations and statutes) and irreplaceable prime and productive coastal farmland (including its groundwater resources) from development or exploitation. We have over 160 acres under cultivation at the Armstrong Ranch, and regularly use reclaimed wastewater as herein described (and our groundwater wells as necessary) for irrigation water.

In 1996, the Monterey County Water Resources Agency (MCWRA) and the Monterey Regional Water Pollution Control Agency (MRWPCA, now known as Monterey OneWater) entered into contracts to build a major regional wastewater reclamation project expressly to provide supplemental irrigation water supplies to the Castroville/Marina coastal area of Monterey County so as to protect existing potable percolated groundwater supplies from advancing seawater intrusion caused by excessive pumping in the basin. The area to be benefitted by this supplemental supply of reclaimed wastewater was, and is approximately 12,000 acres of prime, actively cultivated coastal farmlands. The entirety of the 12,000 acres in the "benefitted area" all hold unimpaired, percolated overlying groundwater rights in the non-adjudicated Salinas Valley Groundwater Basin. The reclaimed wastewater project was funded by USEPA, in part, to address the protection of potable groundwater supplies and the protection and enhancement of productivity of protected coastal farmlands in the basin. This federal funding from USEPA was provided to advance the adopted U.S. Congressional directives to insure the permanent preservation of the productivity of prime coastal farmlands for the protection of the national food supply.

The reclaimed wastewater project is now known as MCWRA Zone 2B, or the "purple valve project", started delivering reclaimed water in 1998. That was the year that Ag Land Trust began to use the reclaimed wastewater so as to conserve our potable groundwater resources. A large portion of the reclamation and piping project was built with assessment district funds voluntarily paid for by the landowners that hold senior, overlying groundwater rights within the 12,000 acre area of benefit.

At the time of the initiation of the wastewater reclamation project construction, the overlying landowners within the assessment area had voluntarily subscribed to 97% of the reclaimed water that was to be produced, expressly to protect their existing wells and senior potable groundwater supplies from seawater intrusion. All of the "subscription contracts" to receive reclaimed wastewater between the MCWRA and the overlying land owners (of which Ag Land Trust is one) expressly acknowledged that the use of the reclaimed wastewater was not intended to, and would not result in, any forfeiture or abandonment of the overlying groundwater rights of the land owners who were going to voluntarily buy the supplemental reclaimed wastewater from the MCWRA/MRWPCA as part of the comprehensive plan to conserve their existing, senior, potable groundwater supplies and groundwater rights in the overdrafted Salinas Valley Groundwater Basin.

With the execution of these "subscription contracts", both the California Department of Water Resources AND CALEPA (of which the SWRCB was a subsidiary agency) were fully advised of the terms of those contracts so that future challenges to the retained groundwater rights by the overlying landowners would be avoided. These express agreements make any arguments about unfounded assertions of the potential for that acquisition of "salvaged water rights" (by "third party, junior, non-overlying potential appropriators") MOOT. Moreover, it is imperative to note that the "subscription contracts" did not require ANY abandonment or cessation of the use of groundwater wells by the overlying landowners. In fact, at the beginning of the reclamation project, reclaimed water was not available during the winter months and irrigated winter vegetable crops (cauliflower, celery, and broccoli) were irrigated with groundwater from the landowners' existing wells. Ag Land Trust owns two groundwater wells on our Armstrong Ranch that may be used pursuant to these comprehensive supplemental water supply contracts and groundwater conservation programs.

Ag Land Trust used 347.203-acre feet of reclaimed wastewater for agricultural irrigation purposes in 2020, in lieu of exercising our senior overlying groundwater rights and pumping groundwater from our existing groundwater wells. This reclaimed wastewater use can be confirmed by the attached property tax bill showing our annual paid assessments for the reclaimed water project and piping AND the attached bill showing the reclaimed water purchased for the purposes of irrigating multiple crops on our prime coastal farmlands. As indicated, we have been actively pursuing this water conservation effort and strategy on our ranch annually since 1998.

Please record this Notice of our annual efforts to conserve our existing groundwater rights and resources with the SWRCB Division of Water Rights and the SWRCB Office of the Chief Counsel.

Most Respectfully,

Richard Nutter

Richard Nutter, Board Chairperson
Ag Land Trust



U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee $3.75

Extra Services & Fees (check box, add fee as appropriate)
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage $0.58

Total Postage and Fees $4.33

Postmark Here

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 1810 0001 2838 9796

NOTICE OF USE OF RECLAIMED WASTEWATER
FOR CONSERVATION OF POTABLE GROUNDWATER RESOURCES

DATE: June 17, 2022

TO: **California State Water Resources Control Board (SWRCB), CA State Water Resources Control Board, Division of Water Rights**

FROM: **Ag Land Trust – formerly known as Monterey County Agricultural and Historic Land Conservancy (MCAHLC)**

RE: **Notice of Conserved Groundwater and Groundwater Rights pursuant to California Water Code SEC. 1010**

Dear Chairman Esquivel and SWRCB Board Members,

This letter is being forwarded to you for the purposes of providing **notice** to the SWRCB, pursuant to the provisions of **California Water Code Section 1010 et seq.,** of our use of reclaimed water on our "Armstrong Ranch" which is located in Monterey County. The Assessor's Parcel Numbers for this parcel are 203-011-010, -011, -013, -014.

Our use of reclaimed water (pursuant to **California Water Code Section 1010**) for irrigation purposes of our documented prime coastal zone farmland (Armstrong Ranch) is and has been expressly to preserve and protect our existing groundwater resources and expressly to preserve and protect our existing overlying groundwater rights in the Salinas Valley Percolated Groundwater Basin. This prime and massively productive coastal farmland, and its necessary supplies of irrigation waters, have been recognized in both federal and CA. statutes and administrative regulations as "protected" natural resources within the Coastal Zone and have been acquired with both state and federal grant funds expressly to guarantee the preservation of the resource's productivity.

A summary of our actions to preserve and protect our groundwater and groundwater rights follows. Although notices provided pursuant to **California Water Code Section 1010** are generally indicating supplemental reclaimed water use in lieu of surface water appropriations and appropriative rights, Ag Land Trust is submitting this notice in reliance upon the express statutory language of Sec. 1010 that refers to "the use of water under ANY existing right".

Ag Land Trust is a 501(c)(3) NON-PROFIT CORPORATION organized pursuant to IRS regulations in 1984 for the purposes of owning, protecting, and permanently preserving prime and productive agricultural lands in Monterey County and within the California Coastal Zone. It is now the largest and most successful prime farmland preservation trust in the State of California, and it owns, either "in fee" or through permanent conservation easements, well over 46,000 acres of prime farmlands and productive coastal agricultural lands throughout Monterey County and the Central Coast of the state. Further, and of more particular importance, Ag Land Trust has been the farmland conservancy that the California Department of Conservation, the California Resources Agency, the United States Department of Agriculture, the National Guard Bureau, the United States Department of Defense, and the California Coastal Commission has sought out to receive grants and to accept the dedications of prime and productive coastal farmlands in the Central Coast area to insure the permanent preservation of those recognized, protected, and irreplaceable state and federal agricultural resources.

Ag Land Trust owns, in fee, the prime and productive coastal farmland (the Armstrong Ranch), and all of the overlying percolated groundwater rights thereunder, that is located immediately adjacent to the CEMEX property, a closed sand mining facility. Our irrigated Armstrong Ranch has been in cultivation since the 1970's producing a minimum of at least two crops of vegetables per year. Our property is in the unincorporated area of Monterey County. Our ranch lies within, and is subject to, the policies and regulations of the state (CA. Coastal Commission) certified North Monterey County Local Coastal Plan, California Natural Resources Code provisions, and federal laws which mandate the protection of our farmlands and the overlying groundwater rights and supplies thereto due to its rare and important productivity values as a prime national and state coastal agricultural resource.

Our ranch was acquired between 1995-1998 with grant funds from the State of California (Natural Resources Agency), the Packard Foundation and the United States (USDA) expressly to permanently preserve its protected (pursuant to federal and state regulations and statutes) and irreplaceable prime and productive coastal farmland (including its groundwater resources) from development or exploitation. We have over 160 acres under cultivation at the Armstrong Ranch, and regularly use reclaimed wastewater as herein described (and our groundwater wells, as necessary) for irrigation water.

In 1996, the Monterey County Water Resources Agency (MCWRA) and the Monterey Regional Water Pollution Control Agency (MRWPCA, now known as Monterey OneWater) entered into contracts to build a major regional wastewater reclamation project expressly to provide supplemental irrigation water supplies to the Castroville/Marina coastal area of Monterey County so as to protect existing potable percolated groundwater supplies from advancing seawater intrusion caused by excessive pumping in the basin. The area to be benefitted by this supplemental supply of reclaimed wastewater was, and is, approximately 12,000 acres of prime, actively cultivated coastal farmlands. The entirety of all 12,000 acres in the "benefitted area" holds unimpaired, percolated overlying groundwater rights in the non-adjudicated Salinas Valley Groundwater Basin. The reclaimed wastewater project was funded by USEPA, in part, to address the protection of potable groundwater supplies and the protection and enhancement of productivity of protected coastal farmlands in the basin. This federal funding from USEPA was provided to advance the adopted U.S. Congressional directives to insure the permanent preservation of the productivity of prime coastal farmlands for the protection of the national food supply.

The reclaimed wastewater project is now known as MCWRA Zone 2B, or the "purple valve project", started delivering reclaimed water in 1998. That was the year that Ag Land Trust began to use the reclaimed wastewater so as to conserve our potable groundwater resources. A large portion of the reclamation and piping project was built with Monterey County assessment district funds (assessed and voluntarily) paid for by the landowners that hold senior, overlying groundwater rights within the 12,000 acre area of benefit.

At the time of the initiation of the wastewater reclamation project construction, the overlying landowners within the assessment area had voluntarily subscribed to 97% of the reclaimed water that was to be produced, expressly to protect their existing wells and senior potable groundwater supplies from seawater intrusion. All of the "subscription contracts" to receive reclaimed wastewater between the MCWRA and the overlying land owners (of which Ag Land Trust is one) expressly acknowledged that the use of the reclaimed wastewater was not intended to, and would not result in, any forfeiture or abandonment of the overlying groundwater rights of the land owners who were going to voluntarily buy the supplemental reclaimed wastewater from the MCWRA/MRWPCA as part of the comprehensive plan to conserve their existing, senior, potable groundwater supplies and groundwater rights in the overdrafted Salinas Valley Groundwater Basin.

With the execution of these "subscription contracts", both the California Department of Water Resources AND CALEPA (of which the SWRCB was a subsidiary agency) were fully advised of the terms of those contracts so that future challenges to the retained groundwater rights by the overlying landowners would be avoided. These express agreements make any arguments about unfounded assertions of the potential for that acquisition of "salvaged water rights" (by "third party, junior, non-overlying potential appropriators") MOOT. Moreover, it is imperative to note that the "subscription contracts" did not require ANY abandonment or cessation of the use of groundwater wells by the overlying landowners. In fact, at the beginning of the reclamation project, reclaimed water was not available during the winter months and irrigated winter vegetable crops (cauliflower, celery, and broccoli) were irrigated with groundwater from the landowners' existing wells. Ag Land Trust owns two groundwater wells on our Armstrong Ranch that may be used pursuant to these comprehensive supplemental water supply contracts and groundwater conservation programs. Recently, shortages in the "purple valve" system have increased the need to preserve our groundwater and groundwater rights.

Ag Land Trust used 262.08 acre feet of reclaimed wastewater for agricultural irrigation purposes between June 1, 2021 and May 31, 2022, in lieu of exercising our senior overlying groundwater rights and pumping groundwater from our existing groundwater wells. This reclaimed wastewater use can be confirmed by the attached property tax bill showing our annual paid assessments for the reclaimed water project and piping AND the attached bill showing the reclaimed water purchased for the purposes of irrigating multiple crops on our prime coastal farmlands. As indicated, we have been actively pursuing this water conservation effort and strategy on our ranch annually since 1998.

Please record this Notice of our annual efforts to conserve our existing groundwater rights and resources with the SWRCB Division of Water Rights and the SWRCB Office of the Chief Counsel.

Most Respectfully,

Aaron Johnson

Aaron Johnson, Board Chairperson

AG LAND TRUST
Preserving Farm Land Since 1984

www.AgLandTrust.org
Location: 1263 Padre Drive | Salinas, CA
Mail Address: P.O. Box 1731 | Salinas, CA 93902
Tel.: 831.422.5868

DRAFT NOTICE OF USE OF RECLAIMED WASTEWATER 2022-23
FOR CONSERVATION OF POTABLE GROUNDWATER RESOURCES

DATE: October 1, 2023

TO: **California State Water Resources Control Board (SWRCB), CA State Water Resources Control Board, Division of Water Rights**

FROM: **Ag Land Trust – formerly known as Monterey County Agricultural and Historic Land Conservancy (MCAHLC)**

RE: **Notice of Conserved Groundwater and Groundwater Rights pursuant to California Water Code SEC. 1010**

Dear Chairman Esquivel and SWRCB Board Members,

This letter is being forwarded to you for the purposes of providing **notice** to the SWRCB, pursuant to the provisions of **California Water Code Section 1010 et seq.,** of our use of reclaimed water on our "Armstrong Ranch" which is located in Monterey County. The Assessor's Parcel Numbers for this parcel are 203-011-010, -011, -013, -014.

Our use of reclaimed water (pursuant to **California Water Code Section 1010**) for irrigation purposes of our documented prime coastal zone farmland (Armstrong Ranch) is and has been expressly to preserve and protect our existing groundwater resources and expressly to preserve and protect our existing overlying groundwater rights in the Salinas Valley Percolated Groundwater Basin. This prime and massively productive coastal farmland, and its necessary supplies of irrigation waters, have been recognized in both federal and CA. statutes and administrative regulations as "protected" natural resources within the Coastal Zone and have been acquired with both state and federal grant funds expressly to guarantee the preservation of the resource's productivity.

A summary of our actions to preserve and protect our groundwater and groundwater rights follows. Although notices provided pursuant to **California Water Code Section 1010** are generally indicating supplemental reclaimed water use in lieu of surface water appropriations and appropriative rights, Ag Land Trust is submitting this notice in reliance upon the express statutory language of Sec. 1010 that refers to "the use of water under ANY existing right".

Ag Land Trust is a 501(c)(3) NON-PROFIT CORPORATION organized pursuant to IRS regulations in 1984 for the purposes of owning, protecting, and permanently preserving prime and productive agricultural lands in Monterey County and within the California Coastal Zone. It is now the largest and most successful farmland preservation trust in the State of California, and it owns, either "in fee" or through permanent conservation easements, well over 48,000 acres of prime farmlands and productive coastal agricultural lands throughout Monterey County and the Central Coast of the state. Further, and of more particular importance, Ag Land Trust has been the farmland conservancy that the California Department of Conservation, the California Resources Agency, the United States Department of Agriculture, the National Guard Bureau, the United States Department of Defense, and the California Coastal Commission has sought out to receive grants and to accept the dedications of prime and productive coastal farmlands in the Central Coast area to insure the permanent preservation of those recognized, protected, and irreplaceable state and federal agricultural resources.

Ag Land Trust owns, in fee, the prime and productive coastal farmland (the Armstrong Ranch), and all of the overlying percolated groundwater rights thereunder, that is located immediately adjacent to the CEMEX property, a closed sand mining facility. Our irrigated Armstrong Ranch has been in cultivation since the 1970's producing a minimum of at least two crops of vegetables per year. Our property is in the unincorporated area of Monterey County. Our ranch lies within, and is subject to, the policies and regulations of the state (CA. Coastal Commission) certified North Monterey County Local Coastal Plan, California Natural Resources Code provisions, and federal laws which mandate the protection of our farmlands and the overlying groundwater rights and supplies thereto due to its rare and important productivity values as a prime national and state coastal agricultural resource.

Our ranch was acquired between 1995-1998 with grant funds from the State of California (Natural Resources Agency), the Packard Foundation and the United States (USDA) expressly to permanently preserve its protected (pursuant to federal and state regulations and statutes) and irreplaceable prime and productive coastal farmland (including its groundwater resources) from development or exploitation. We have over 160 acres under cultivation at the Armstrong Ranch, and regularly use reclaimed wastewater as herein described (and our groundwater wells as necessary) for irrigation water.

In 1996, the Monterey County Water Resources Agency (MCWRA) and the Monterey Regional Water Pollution Control Agency (MRWPCA, now known as Monterey OneWater) entered into contracts to build a major regional wastewater reclamation project expressly to provide supplemental irrigation water supplies to the Castroville/Marina coastal area of Monterey County so as to protect existing potable percolated groundwater supplies from advancing seawater intrusion caused by excessive pumping in the basin. The area to be benefitted by this supplemental supply of reclaimed wastewater was, and is approximately 12,000 acres of prime, actively cultivated coastal farmlands. The entirety of the 12,000 acres in the "benefitted area" all hold unimpaired, percolated overlying groundwater rights in the non-adjudicated Salinas Valley Groundwater Basin. The reclaimed wastewater project was funded by USEPA, in part, to address the protection of potable groundwater supplies and the protection and enhancement of productivity of protected coastal farmlands in the basin. This federal funding from USEPA was provided to advance the adopted U.S. Congressional directives to insure the permanent preservation of the productivity of prime coastal farmlands for the protection of the national food supply.

The reclaimed wastewater project is now known as MCWRA Zone 2B, or the "purple valve project", started delivering reclaimed water in 1998. That was the year that Ag Land Trust began to use the reclaimed wastewater so as to conserve our potable groundwater resources. A large portion of the reclamation and piping project was built with assessment district funds voluntarily paid for by the landowners that hold senior, overlying groundwater rights within the 12,000 acre area of benefit.

At the time of the initiation of the wastewater reclamation project construction, the overlying landowners within the assessment area had voluntarily subscribed to 97% of the reclaimed water that was to be produced, expressly to protect their existing wells and senior potable groundwater supplies from seawater intrusion. All of the "subscription contracts" to receive reclaimed wastewater between the MCWRA and the overlying land owners (of which Ag Land Trust is one) expressly acknowledged that the use of the reclaimed wastewater was not intended to, and would not result in, any forfeiture or abandonment of the overlying groundwater rights of the land owners who were going to voluntarily buy the supplemental reclaimed wastewater from the MCWRA/MRWPCA as part of the comprehensive plan to conserve their existing, senior, potable groundwater supplies and groundwater rights in the overdrafted Salinas Valley Groundwater Basin.

With the execution of these "subscription contracts", both the California Department of Water Resources AND CALEPA (of which the SWRCB was a subsidiary agency) were fully advised of the terms of those contracts so that future challenges to the retained groundwater rights by the overlying landowners would be avoided. These express agreements make any arguments about unfounded assertions of the potential for that acquisition of "salvaged water rights" (by "third party, junior, non-overlying potential appropriators") MOOT. Moreover, it is imperative to note that the "subscription contracts" did not require ANY abandonment or cessation of the use of groundwater wells by the overlying landowners. In fact, at the beginning of the reclamation project, reclaimed water was not available during the winter months and irrigated winter vegetable crops (cauliflower, celery, and broccoli) were irrigated with groundwater from the landowners' existing wells. Ag Land Trust owns two groundwater wells on our Armstrong Ranch that may be used pursuant to these comprehensive supplemental water supply contracts and groundwater conservation programs.

Ag Land Trust used 375-acre feet of reclaimed wastewater for agricultural irrigation purposes in 2022-23, in lieu of exercising our senior overlying groundwater rights and pumping groundwater from our existing groundwater wells. This reclaimed wastewater use can be confirmed by the attached property tax bill showing our annual paid assessments for the reclaimed water project and piping. As indicated, we have been actively pursuing this water conservation effort and strategy on our ranch annually since 1998.

Please record this Notice of our annual efforts to conserve our existing groundwater rights and resources with the SWRCB Division of Water Rights and the SWRCB Office of the Chief Counsel.

Most Respectfully,

Heather Golden, Board Chairperson
Ag Land Trust

TBUN2WEB 1.2.005

MONTEREY COUNTY 2022 - 2023 PROPERTY TAX BILL

10/24/2023 2:47:52PM

MARY A. ZEEB Treasurer-Tax Collector

P.O. Box 891, Salinas, CA 93902-0891, (831) 755-5057, www.co.monterey.ca.us/taxcollector

SECURED TAX ROLL FOR FISCAL YEAR JULY 1, 2022 - JUNE 30, 2023

PROPERTY INFORMATION				IMPORTANT MESSAGES
ASMT NUMBER:	203-011-010-000	TAX RATE AREA:	099147	Original bill date 09/20/2022
ORIG ASMT:	203-011-010-000	ACRES:	17.00	This property is part of an agricultural preserve
FEE NUMBER:	203-011-010-000			
LOCATION:				
OWNER JAN. 1st:	MONTEREY COUNTY AGRICULTURAL &			
MONTEREY COUNTY AGRICULTURAL &				

2022-2023

COUNTY VALUES, EXEMPTIONS, AND TAXES

PHONE #	DESCRIPTION	PRIOR	CURRENT	BILLED
VALUATIONS (831) 755-5035	LAND	0	159437	159437
TAX RATES (831) 755-5040		0	0	0
EXEMPTIONS (831) 755-5035		0	0	0
PAYMENTS (831) 755-5057		0	0	0
PERS PROP (831) 755-5035		0	0	0
ADDR CHGS (831) 755-5035		0	0	0
GENERAL INQ (831) 755-5057		0	0	0
		0	0	0
	NET TAXABLE VALUE			159437
	VALUES X TAX RATE PER $100 1.000000			$1,594.36

DUPLICATE COPY

VOTER APPROVED TAXES / TAXING AGENCY DIRECT CHARGES & SPECIAL ASSESSMENTS / FEES

PHONE #	CODE	DESCRIPTION	ASSESSED VALUE	X	TAX RATE /100	=	TAX AMOUNT
(831) 755-6700	12000	Hartnell 02CD 14Ref A 15Ref AB 16Ref AB	159437		0.044324		$70.65
(831) 633-3343	12200	No Mty Co USD 12Ref 13AB 16Ref	159437		0.048619		$77.50

PHONE #	DESCRIPTION	DIR CHRG	PHONE #	DESCRIPTION	DIR CHRG	PHONE #	DESCRIPTION	DIR CHRG
(831) 755-4860	MCWRA Zone 2Y	$64.60	(831) 755-4860	MCWRA Zone 2Z	$196.68	(831) 755-4860	MCWRA Zone 2B	$1,944.86
(831) 755-4860	MCWRA Zone 2C Ops	$408.68	(831) 755-4860	MCWRA Zone 2C Sp	$48.62	(831) 755-4860	MCWRA Zone 2C Dv	$105.06
(831) 755-4860	MCWRA Zone 2C Admin	$28.22	(831) 633-2578	NorthCountyFire-EMS	$2.50	(800) 273-5167	North County FPD & E	$70.14

AGENCY TAXES	$148.16
DIRECT CHARGES	$2,975.18
PENALTY & COST $0.00	
FEES	$0.00
AGENCY TAXES + DIRECT CHARGES + FEES + PENALTY + COST + DELINQUENT PENALTIES	$3,123.34

1st INSTALLMENT $2,358.85	2nd INSTALLMENT $2,358.85	TOTAL TAXES
PAID ON 12/10/2022	PAID ON 04/06/2023	$4,717.70

MONTEREY COUNTY SECURED PROPERTY TAXES - 2ND INSTALLMENT PAYMENT STUB

ASMT NUMBER: 203-011-010-000 TAX YEAR: 2022
ORIG ASMT: 203-011-010-000
FEE NUMBER: 203-011-010-000
LOCATION:
CURRENT OWNER: MONTEREY COUNTY AGRICULTURAL &

MAKE CHECK PAYABLE TO:
County of Monterey Treasurer-Tax Collector
P.O. Box 891
Salinas, CA 93902-0891

2022-2023 **2ND**

PAID ON 04/06/2023 $2,358.85

PAID

2030110100000202220000023588512000002614733202 22

CUT HERE

MONTEREY COUNTY SECURED PROPERTY TAXES - 1ST INSTALLMENT PAYMENT STUB

ASMT NUMBER: 203-011-010-000 TAX YEAR: 2022
ORIG ASMT: 203-011-010-000
FEE NUMBER: 203-011-010-000
LOCATION:
CURRENT OWNER: MONTEREY COUNTY AGRICULTURAL &

MAKE CHECK PAYABLE TO:
County of Monterey Treasurer-Tax Collector
P.O. Box 891
Salinas, CA 93902-0891

2022-2023 **1ST**

PAID ON 12/10/2022 $2,358.85

PAID

2030110100000202220000023588511000002594737202 22

Direct Charges

Phone	Description	Dir Chrg
8002735167	NoSalinasValleyMosquitoAbatementDist	1.2400
8314717526	SVBGSA Groundwater Sustainability Fee	98.5800
8317555013	CSA74 EMSAmbCountyWide	6.0000

TBUN2WEB
1.2.005

MONTEREY COUNTY 2022 - 2023 PROPERTY TAX BILL

10/24/2023
2:33:36PM

MARY A. ZEEB Treasurer-Tax Collector

P.O. Box 891, Salinas, CA 93902-0891, (831) 755-5057, www.co.monterey.ca.us/taxcollector

SECURED TAX ROLL FOR FISCAL YEAR JULY 1, 2022 - JUNE 30, 2023

PROPERTY INFORMATION				IMPORTANT MESSAGES
ASMT NUMBER:	203-011-011-000	TAX RATE AREA:	099147	Original bill date 09/20/2022
ORIG ASMT:	203-011-011-000	ACRES:	76.00	This property is part of an agricultural preserve
FEE NUMBER:	203-011-011-000			
LOCATION:				
OWNER JAN. 1st:	MONTEREY COUNTY AGRICULTURAL &			
MONTEREY COUNTY AGRICULTURAL &				

2022-2023

COUNTY VALUES, EXEMPTIONS, AND TAXES

PHONE #	DESCRIPTION	PRIOR	CURRENT	BILLED
VALUATIONS (831) 755-5035	LAND	0	1166214	1166214
TAX RATES (831) 755-5040		0	0	0
EXEMPTIONS (831) 755-5035		0	0	0
PAYMENTS (831) 755-5057		0	0	0
PERS PROP (831) 755-5035		0	0	0
ADDR CHGS (831) 755-5035		0	0	0
GENERAL INQ (831) 755-5057		0	0	0
		0	0	0
	NET TAXABLE VALUE			1166214
	VALUES X TAX RATE PER $100 1.000000			$11,662.14

DUPLICATE COPY

VOTER APPROVED TAXES / TAXING AGENCY DIRECT CHARGES & SPECIAL ASSESSMENTS / FEES

PHONE #	CODE	DESCRIPTION	ASSESSED VALUE	X	TAX RATE / 100	=	TAX AMOUNT
(831) 755-6700	12000	Hartnell 02CD 14Ref A 15Ref AB 16Ref AB	1166214		0.044324		$516.90
(831) 633-3343	12200	No Mty Co USD 12Ref 13AB 16Ref	1166214		0.048619		$567.00

PHONE #	DESCRIPTION	DIR CHRG	PHONE #	DESCRIPTION	DIR CHRG	PHONE #	DESCRIPTION	DIR CHRG
(831) 755-4860	MCWRA Zone 2Y	$276.00	(831) 755-4860	MCWRA Zone 2Z	$840.46	(831) 755-4860	MCWRA Zone 2B	$12,493.34
(831) 755-4860	MCWRA Zone 2C Ops	$1,745.62	(831) 755-4860	MCWRA Zone 2C S	$207.64	(831) 755-4860	MCWRA Zone 2C Dv	$448.76
(831) 755-4860	MCWRA Zone 2C Admin	$120.50	(831) 633-2578	NorthCountyFire-EMS	$2.50	(800) 273-5167	North County FPD & E	$313.60

AGENCY TAXES	$1,083.90
DIRECT CHARGES	$16,794.72
FEES	$0.00
PENALTY & COST	$0.00
AGENCY TAXES + DIRECT CHARGES + FEES + PENALTY + COST + DELINQUENT PENALTIES	$17,878.62

1st INSTALLMENT $14,770.38	2nd INSTALLMENT $14,770.38	TOTAL TAXES
PAID ON 12/10/2022	PAID ON 04/06/2023	$29,540.76

MONTEREY COUNTY SECURED PROPERTY TAXES - 2ND INSTALLMENT PAYMENT STUB

ASMT NUMBER: 203-011-011-000 TAX YEAR: 2022
ORIG ASMT: 203-011-011-000
FEE NUMBER: 203-011-011-000
LOCATION:
CURRENT OWNER: MONTEREY COUNTY AGRICULTURAL &

MAKE CHECK PAYABLE TO:
County of Monterey Treasurer-Tax Collector
P.O. Box 891
Salinas, CA 93902-0891

2022-2023 2ND

PAID ON 04/06/2023 $14,770.38

PAID

2030110110009202220000147703852000016267415202 22

CUT HERE

MONTEREY COUNTY SECURED PROPERTY TAXES - 1ST INSTALLMENT PAYMENT STUB

ASMT NUMBER: 203-011-011-000 TAX YEAR: 2022
ORIG ASMT: 203-011-011-000
FEE NUMBER: 203-011-011-000
LOCATION:
CURRENT OWNER: MONTEREY COUNTY AGRICULTURAL &

MAKE CHECK PAYABLE TO:
County of Monterey Treasurer-Tax Collector
P.O. Box 891
Salinas, CA 93902-0891

2022-2023 1ST

PAID ON 12/10/2022 $14,770.38

PAID

2030110110009202220000147703851000016247410202 22

Direct Charges

Phone	Description	Dir Chrg
8002735167	NoSalinasValleyMosquitoAbatementDist	5.5400
8314717526	SVBGSA Groundwater Sustainability Fee	334.7600
8317555013	CSA74 EMSAmbCountyWide	6.0000

SECURED TAX ROLL FOR FISCAL YEAR JULY 1, 2022 - JUNE 30, 2023

PROPERTY INFORMATION				IMPORTANT MESSAGES
ASMT NUMBER:	203-011-013-000	TAX RATE AREA:	099008	Original bill date 09/20/2022
ORIG ASMT:	203-011-013-000	ACRES:	16.00	This property is part of an agricultural preserve
FEE NUMBER:	203-011-013-000			
LOCATION:				

OWNER JAN. 1st: MONTEREY COUNTY AGRICULTURAL &
MONTEREY COUNTY AGRICULTURAL &

2022-2023

COUNTY VALUES, EXEMPTIONS, AND TAXES

PHONE #	DESCRIPTION	PRIOR	CURRENT	BILLED
VALUATIONS (831) 755-5035	LAND	0	250155	250155
TAX RATES (831) 755-5040		0	0	0
EXEMPTIONS (831) 755-5035		0	0	0
PAYMENTS (831) 755-5057		0	0	0
PERS PROP (831) 755-5035		0	0	0
ADDR CHGS (831) 755-5035		0	0	0
GENERAL INQ (831) 755-5057		0	0	0
		0	0	0
	NET TAXABLE VALUE			250155
	VALUES X TAX RATE PER $100 1.000000			$2,501.54

DUPLICATE COPY

VOTER APPROVED TAXES / TAXING AGENCY DIRECT CHARGES & SPECIAL ASSESSMENTS / FEES

PHONE #	CODE	DESCRIPTION	ASSESSED VALUE	X	TAX RATE / 100	=	TAX AMOUNT
(831) 755-6700	12000	Hartnell 02CD 14Ref A 15Ref AB 16Ref AB	250155		0.044324		$110.86
(831) 633-3343	12200	No Mty Co USD 12Ref 13AB 16Ref	250155		0.048619		$121.62

PHONE #	DESCRIPTION	DIR CHRG	PHONE #	DESCRIPTION	DIR CHRG	PHONE #	DESCRIPTION	DIR CHRG
(831) 755-4860	MCWRA Zone 2Y	$51.32	(831) 755-4860	MCWRA Zone 2Z	$156.38	(831) 755-4860	MCWRA Zone 2B	$4,357.84
(831) 755-4860	MCWRA Zone 2C Ops	$324.48	(831) 755-4860	MCWRA Zone 2C S[	$38.56	(831) 755-4860	MCWRA Zone 2C Dv	$83.40
(831) 755-4860	MCWRA Zone 2C Admin	$22.38	(831) 633-2578	NorthCountyFire-EMS	$2.50	(800) 273-5167	North County FPD & E	$66.02

		AGENCY TAXES	$232.48
		DIRECT CHARGES	$5,210.66
PENALTY & COST	$0.00	FEES	$0.00
AGENCY TAXES + DIRECT CHARGES + FEES + PENALTY + COST + DELINQUENT PENALTIES			$5,443.14

1st INSTALLMENT $3,972.34	2nd INSTALLMENT $3,972.34	TOTAL TAXES
PAID ON 12/10/2022	PAID ON 04/06/2023	$7,944.68

MONTEREY COUNTY SECURED PROPERTY TAXES - 2ND INSTALLMENT PAYMENT STUB

ASMT NUMBER: 203-011-013-000 TAX YEAR: 2022
ORIG ASMT: 203-011-013-000
FEE NUMBER: 203-011-013-000
LOCATION:
CURRENT OWNER: MONTEREY COUNTY AGRICULTURAL &

MAKE CHECK PAYABLE TO:
County of Monterey Treasurer-Tax Collector
P.O. Box 891
Salinas, CA 93902-0891

2022-2023 2ND
PAID ON 04/06/2023 $3,972.34
PAID

2030110130007202220000039723462000004389573202 22

CUT HERE

MONTEREY COUNTY SECURED PROPERTY TAXES - 1ST INSTALLMENT PAYMENT STUB

ASMT NUMBER: 203-011-013-000 TAX YEAR: 2022
ORIG ASMT: 203-011-013-000
FEE NUMBER: 203-011-013-000
LOCATION:
CURRENT OWNER: MONTEREY COUNTY AGRICULTURAL &

MAKE CHECK PAYABLE TO:
County of Monterey Treasurer-Tax Collector
P.O. Box 891
Salinas, CA 93902-0891

2022-2023 1ST
PAID ON 12/10/2022 $3,972.34
PAID

2030110130007202220000039723461000004369575202 22

Direct Charges

Phone	Description	Dir Chrg
8002735167	NoSalinasValleyMosquitoAbatementDist	1.1600
8314717526	SVBGSA Groundwater Sustainability Fee	100.6200
8317555013	CSA74 EMSAmbCountyWide	6.0000

TBUN2WEB 1.2.005

MONTEREY COUNTY 2022 - 2023 PROPERTY TAX BILL

10/24/2023 2:36:17PM

MARY A. ZEEB Treasurer-Tax Collector

P.O. Box 891, Salinas, CA 93902-0891, (831) 755-5057, www.co.monterey.ca.us/taxcollector

SECURED TAX ROLL FOR FISCAL YEAR JULY 1, 2022 - JUNE 30, 2023

PROPERTY INFORMATION				IMPORTANT MESSAGES
ASMT NUMBER:	203-011-014-000	TAX RATE AREA:	099008	Original bill date 09/20/2022
ORIG ASMT:	203-011-014-000	ACRES:	83.00	This property is part of an agricultural preserve
FEE NUMBER:	203-011-014-000			
LOCATION:				

OWNER JAN. 1st: MONTEREY COUNTY AGRICULTURAL &
MONTEREY COUNTY AGRICULTURAL &

2022-2023

DUPLICATE COPY

COUNTY VALUES, EXEMPTIONS, AND TAXES

PHONE #	DESCRIPTION	PRIOR	CURRENT	BILLED
VALUATIONS (831) 755-5035	LAND	0	1818106	1818106
TAX RATES (831) 755-5040		0	0	0
EXEMPTIONS (831) 755-5035		0	0	0
PAYMENTS (831) 755-5057		0	0	0
PERS PROP (831) 755-5035		0	0	0
ADDR CHGS (831) 755-5035		0	0	0
GENERAL INQ (831) 755-5057		0	0	0
		0	0	0
	NET TAXABLE VALUE			1818106
	VALUES X TAX RATE PER $100 1.000000			$18,181.06

VOTER APPROVED TAXES / TAXING AGENCY DIRECT CHARGES & SPECIAL ASSESSMENTS / FEES

PHONE #	CODE	DESCRIPTION	ASSESSED VALUE	X	TAX RATE / 100	=	TAX AMOUNT
(831) 755-6700	12000	Hartnell 02CD 14Ref A 15Ref AB 16Ref AB	1818106		0.044324		$805.84
(831) 633-3343	12200	No Mty Co USD 12Ref 13AB 16Ref	1818106		0.048619		$883.94

PHONE #	DESCRIPTION	DIR CHRG	PHONE #	DESCRIPTION	DIR CHRG	PHONE #	DESCRIPTION	DIR CHRG
(831) 755-4860	MCWRA Zone 2Y	$315.40	(831) 755-4860	MCWRA Zone 2Z	$960.30	(831) 755-4860	MCWRA Zone 2B	$24,393.36
(831) 755-4860	MCWRA Zone 2C Ops	$1,995.32	(831) 755-4860	MCWRA Zone 2C Sy	$237.38	(831) 755-4860	MCWRA Zone 2C Dv	$512.94
(831) 755-4860	MCWRA Zone 2C Admin	$137.78	(831) 633-2578	NorthCountyFire-EMS	$2.50	(800) 273-5167	North County FPD & E	$342.48

		AGENCY TAXES	$1,689.78
		DIRECT CHARGES	$29,332.28
PENALTY & COST	$0.00	FEES	$0.00
AGENCY TAXES + DIRECT CHARGES + FEES + PENALTY + COST + DELINQUENT PENALTIES			$31,022.06

1st INSTALLMENT $24,601.56	2nd INSTALLMENT $24,601.56	TOTAL TAXES
PAID ON 12/10/2022	PAID ON 04/06/2023	$49,203.12

MONTEREY COUNTY SECURED PROPERTY TAXES - 2ND INSTALLMENT PAYMENT STUB

ASMT NUMBER: 203-011-014-000
ORIG ASMT: 203-011-014-000
FEE NUMBER: 203-011-014-000
LOCATION:
CURRENT OWNER: MONTEREY COUNTY AGRICULTURAL &

TAX YEAR: 2022

MAKE CHECK PAYABLE TO:
County of Monterey Treasurer-Tax Collector
P.O. Box 891
Salinas, CA 93902-0891

2022-2023 **2ND**

PAID ON 04/06/2023 $24,601.56

PAID

2030110140006202220000246015662000027081719202 22

CUT HERE

MONTEREY COUNTY SECURED PROPERTY TAXES - 1ST INSTALLMENT PAYMENT STUB

ASMT NUMBER: 203-011-014-000
ORIG ASMT: 203-011-014-000
FEE NUMBER: 203-011-014-000
LOCATION:
CURRENT OWNER: MONTEREY COUNTY AGRICULTURAL &

TAX YEAR: 2022

MAKE CHECK PAYABLE TO:
County of Monterey Treasurer-Tax Collector
P.O. Box 891
Salinas, CA 93902-0891

2022-2023 **1ST**

PAID ON 12/10/2022 $24,601.56

PAID

2030110140006202220000246015661000027061713202 22

Direct Charges

Phone	Description	Dir Chrg
8002735167	NoSalinasValleyMosquitoAbatementDist	6.0400
8314717526	SVBGSA Groundwater Sustainability Fee	422.7800
8317555013	CSA74 EMSAmbCountyWide	6.0000

AG LAND TRUST
Preserving Farm Land Since 1984
www.AgLandTrust.org
Location: 1263 Padre Drive | Salinas, CA
Mail Address: P.O. Box 1731 | Salinas, CA 93902
Tel.: 831.422.5868

[redacted] NOTICE OF USE OF RECLAIMED WASTEWATER
FOR CONSERVATION OF POTABLE GROUNDWATER RESOURCES

DATE: June 7, 2024

TO: California State Water Resources Control Board (SWRCB), CA State Water Resources Control Board, Division of Water Rights

FROM: Ag Land Trust – formerly known as Monterey County Agricultural and Historic Land Conservancy (MCAHLC)

RE: Notice of Conserved Groundwater and Groundwater Rights pursuant to California Water Code SEC. 1010 for Year July 1, 2023 – June 30, 2024

Dear Chairman Esquivel and SWRCB Board Members,

This letter is being forwarded to you for the purposes of providing notice to the SWRCB, pursuant to the provisions of California Water Code Section 1010 et seq., of our use of reclaimed water on our "Armstrong Ranch" which is located in Monterey County. The Assessor's Parcel Numbers for this parcel are 203-011-010, -011, -013, -014.

Our use of reclaimed water (pursuant to **California Water Code Section 1010**) for irrigation purposes of our documented prime coastal zone farmland (Armstrong Ranch) is and has been expressly to preserve and protect our existing groundwater resources and expressly to preserve and protect our existing overlying groundwater rights in the Salinas Valley Percolated Groundwater Basin. This prime and massively productive coastal farmland, and its necessary supplies of irrigation waters, have been recognized in both federal and CA. statutes and administrative regulations as "protected" natural resources within the Coastal Zone and have been acquired with both state and federal grant funds expressly to guarantee the preservation of the resource's productivity.

A summary of our actions to preserve and protect our groundwater and groundwater rights follows. Although notices provided pursuant to **California Water Code Section 1010** are generally indicating supplemental reclaimed water use in lieu of surface water appropriations and appropriative rights, Ag Land Trust is submitting this notice in reliance upon the express statutory language of Sec. 1010 that refers to "the use of water under ANY existing right".

Ag Land Trust is a 501(c)(3) NON-PROFIT CORPORATION organized pursuant to IRS regulations in 1984 for the purposes of owning, protecting, and permanently preserving prime and productive agricultural lands in Monterey County and within the California Coastal Zone. It is now the largest and most successful farmland preservation trust in the State of California, and it owns, either "in fee" or through permanent conservation easements, well over 46,000 acres of prime farmlands and productive coastal agricultural lands throughout Monterey County and the Central Coast of the state. Further, and of more particular importance, Ag Land Trust has been the farmland conservancy that the California Department of Conservation, the California Resources Agency, the United States Department of Agriculture, the National Guard Bureau, the United States Department of Defense, and the California Coastal Commission has sought out to receive grants and to accept the dedications of prime and productive coastal farmlands in the Central Coast area to insure the permanent preservation of those recognized, protected, and irreplaceable state and federal agricultural resources.

Ag Land Trust owns, in fee, the prime and productive coastal farmland (the Armstrong Ranch), and all of the overlying percolated groundwater rights thereunder, that is located immediately adjacent to the CEMEX property, a closed sand mining facility. Our irrigated Armstrong Ranch has been in cultivation since the 1970's producing a minimum of at least two crops of vegetables per year. Our property is in the unincorporated area of Monterey County. Our ranch lies within, and is subject to, the policies and regulations of the state (CA. Coastal Commission) certified North Monterey County Local Coastal Plan, California Natural Resources Code provisions, and federal laws which mandate the protection of our farmlands and the overlying groundwater rights and supplies thereto due to its rare and important productivity values as a prime national and state coastal agricultural resource.

Our ranch was acquired between 1995-1998 with grant funds from the State of California (Natural Resources Agency), the Packard Foundation and the United States (USDA) expressly to permanently preserve its protected (pursuant to federal and state regulations and statutes) and irreplaceable prime and productive coastal farmland (including its groundwater resources) from development or exploitation. We have over 160 acres under cultivation at the Armstrong Ranch, and regularly use reclaimed wastewater as herein described (and our groundwater wells as necessary) for irrigation water.

In 1996, the Monterey County Water Resources Agency (MCWRA) and the Monterey Regional Water Pollution Control Agency (MRWPCA, now known as Monterey OneWater) entered into contracts to build a major regional wastewater reclamation project expressly to provide supplemental irrigation water supplies to the Castroville/Marina coastal area of Monterey County so as to protect existing potable percolated groundwater supplies from advancing seawater intrusion caused by excessive pumping in the basin. The area to be benefitted by this supplemental supply of reclaimed wastewater was, and is approximately 12,000 acres of prime, actively cultivated coastal farmlands. The entirety of the 12,000 acres in the "benefitted area" all hold unimpaired, percolated overlying groundwater rights in the non-adjudicated Salinas Valley Groundwater Basin. The reclaimed wastewater project was funded by USEPA, in part, to address the protection of potable groundwater supplies and the protection and enhancement of productivity of protected coastal farmlands in the basin. This federal funding from USEPA was provided to advance the adopted U.S. Congressional directives to insure the permanent preservation of the productivity of prime coastal farmlands for the protection of the national food supply.

The reclaimed wastewater project is now known as MCWRA Zone 2B, or the "purple valve project", started delivering reclaimed water in 1998. That was the year that Ag Land Trust began to use the reclaimed wastewater so as to conserve our potable groundwater resources. A large portion of the reclamation and piping project was built with assessment district funds voluntarily paid for by the landowners that hold senior, overlying groundwater rights within the 12,000 acre area of benefit.

At the time of the initiation of the wastewater reclamation project construction, the overlying landowners within the assessment area had voluntarily subscribed to 97% of the reclaimed water that was to be produced, expressly to protect their existing wells and senior potable groundwater supplies from seawater intrusion. All of the "subscription contracts" to receive reclaimed wastewater between the MCWRA and the overlying land owners (of which Ag Land Trust is one) expressly acknowledged that the use of the reclaimed wastewater was not intended to, and would not result in, any forfeiture or abandonment of the overlying groundwater rights of the land owners who were going to voluntarily buy the supplemental reclaimed wastewater from the MCWRA/MRWPCA as part of the comprehensive plan to conserve their existing, senior, potable groundwater supplies and groundwater rights in the overdrafted Salinas Valley Groundwater Basin.

With the execution of these "subscription contracts", both the California Department of Water Resources AND CALEPA (of which the SWRCB was a subsidiary agency) were fully advised of the terms of those contracts so that future challenges to the retained groundwater rights by the overlying landowners would be avoided. These express agreements make any arguments about unfounded assertions of the potential for that acquisition of "salvaged water rights" (by "third party, junior, non-overlying potential appropriators") MOOT. Moreover, it is imperative to note that the "subscription contracts" did not require ANY abandonment or cessation of the use of groundwater wells by the overlying landowners. In fact, at the beginning of the reclamation project, reclaimed water was not available during the winter months and irrigated winter vegetable crops (cauliflower, celery, and broccoli) were irrigated with groundwater from the landowners' existing wells. Ag Land Trust owns two groundwater wells on our Armstrong Ranch that may be used pursuant to these comprehensive supplemental water supply contracts and groundwater conservation programs.

Ag Land Trust used 312-acre feet of reclaimed wastewater for agricultural irrigation purposes in 2023-24 (July 1, 2023 – June 30, 2024), in lieu of exercising our senior overlying groundwater rights and pumping groundwater from our existing groundwater wells. This reclaimed wastewater use can be confirmed by the attached property tax bill showing our annual paid assessments for the reclaimed water project and piping AND the attached bill showing the reclaimed water purchased for the purposes of irrigating multiple crops on our prime coastal farmlands. A letter from our farmer (Oceanmist Farms) confirming the 321 acre feet of reclaimed water use is also attached. As indicated, we have been actively pursuing this water conservation effort and strategy on our ranch annually since 1998.

Please record this Notice of our annual efforts to conserve our existing groundwater rights and resources with the SWRCB Division of Water Rights and the SWRCB Office of the Chief Counsel.

Most Respectfully,

Heather Golden Jensen, Board Chairperson of the Ag Land Trust

Gmail

Marc Del Piero <marc@aglandtrust.org>

Armstrong Ranch CSIP Usage

1 message

Bobby Bellew <rbellew@oceanmist.com> Wed, Jun 5, 2024 at 11:02 AM
To: "marc@aglandtrust.org" <marc@aglandtrust.org>

Good morning Marc,

We have used a total of 234 acre feet of water from turnout #74 on the Armstrong Ranch from last July until April 1st. Based off what we have used April 1st- June 30th historically, I would estimate another 87 acre feet for a grand total of 321 acre feet. Please let me know if you need anything else.

Best,

Bobby

Bobby Bellew | Director of Farming | Oceanmist.com
[p] 831-970-2641



vzf1a

Notice: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient(s) is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your file system. Thank you.
vzf1b

STATE OF CALIFORNIA

ENVIRONMENTAL PROTECTION AGENCY

STATE WATER RESOURCES CONTROL BOARD

FINAL REPORT OF THE BOARD AS REFEREE

in

City of Marina v. RMC Lonestar

Superior Court of California, County of Monterey, Case No. 20CV001387

Hon. Thomas Wills, Department 15

Prepared by the Administrative Hearings Office,

State Water Resources Control Board

June 25, 2025

Approved by:

June 25, 2025

Date

Eric Oppenheimer
Executive Director
State Water Resources Control Board

Table of Contents

1 INTRODUCTION 1

2 BACKGROUND 1

2.1 Proposed Project 1

2.2 *City of Marina v. RMC Lonestar*, Monterey County Superior Court 2

2.2.1 Summary 2

2.2.2 Parties 3

2.2.3 Referral to the State Water Resources Control Board 4

2.3 Location and Physical Setting 5

2.3.1 Salinas Valley Groundwater Basin (SVGB) 5

2.3.2 180/400-Foot Aquifer Subbasin 6

2.3.3 Monterey Subbasin 6

2.3.4 Hydrogeologic Features 7

2.3.5 Dune Sand Aquifer 8

2.3.6 180-Foot Aquifer 9

2.3.7 400-Foot Aquifer 9

2.3.8 Deep Aquifer 9

2.3.9 Subbasin Interface Zone 10

2.4 Proposed Monterey Peninsula Water Supply Project 11

2.4.1 California Public Utilities Commission Permit 11

2.4.2 Environmental Review and Findings 12

2.4.3 Return Water Settlement Agreement 12

2.4.4 Groundwater Monitoring Program 14

2.4.5 Coastal Development Permit 15

2.4.6 Test Slant Well 16

2.5 Prior State Water Board Involvement 16

2.5.1 State Water Board Orders 16

2.5.2 Order WR 95-10 16

2.5.3 Order WR 2009-0060 17

2.5.4 Order WR 2016-0016 17

2.5.5 2013 State Water Board Staff Report 17

2.6 Other Legal and Administrative Background 18

2.6.1 Annexation Agreement and Groundwater Framework 18

2.6.2 Cal-Am Option Agreement and Easement to Occupy CEMEX Property 19
2.6.3 Sustainable Groundwater Management Act 19
3 ADMINISTRATIVE HEARINGS OFFICE PROCEEDING 22
3.1 Procedural Background 22
3.1.1 Assignment to the Administrative Hearings Office 22
3.1.2 Statutory Procedure for Court References 22
3.2 Public Hearing 23
3.2.1 Site Visit 23
3.2.2 Hearing Phases 1, 2, and 3 23
3.3 Significant Procedural Rulings 28
3.4 Proposed Text for Report of Referee and Closing Briefs 29
3.5 Preparation of Report of Referee and Approval by the Executive Director 30
3.6 Administrative Record and Evidentiary Record 31
4 GROUNDWATER MODELING 31
4.1 Groundwater Models in the Salinas Valley Groundwater Basin 31
4.2 Groundwater Modeling for this Proceeding 32
5 LEGAL DISCUSSION 37
5.1 Rights to Groundwater 37
5.1.1 Overlying Rights 37
5.1.2 Appropriative Rights 37
5.1.3 Prescriptive Rights 38
5.1.4 Sustainable Yield of a Groundwater Basin 38
5.1.5 Prohibition on Wasteful or Unreasonable Use or Method of Diversion of Water 39
5.1.6 Developed or Salvaged Water 40
5.1.7 Replacement Water 41
5.2 Injury to Water Rights 42
5.2.1 Material and Significant Impacts 43
5.2.2 Impairment of Water Quality 43
5.2.3 Injury to Groundwater Rights 45
5.3 Physical Solution 46
6 THE COURT'S QUESTIONS 50
6.1 Question 1 50
6.1.1 Locations of Subsurface Drawing Source Points 50
6.1.2 Screened Intervals of the Test Slant Well 50
6.1.3 Screened Intervals of Proposed Slant Wells 2 through 7 51

6.1.4 Capture Zones 56
6.1.5 Discussion....57
6.1.6 Analysis 59
6.2 Question 2....61
6.2.1 Locations of the Slant Well Screens....61
6.2.2 Sources of the Slant Wells 62
6.2.3 Quantities of Water from Onshore and Offshore Sources....62
6.2.4 Quantities of Water from the Dune Sand Aquifer beneath the CEMEX Property 64
6.2.5 Relative Amounts Drawn for Project Alternatives 66
6.2.6 Quantities from beneath the CEMEX Property 66
6.2.7 Origin of the Water....67
6.2.8 Sources Other Than Ocean Water 67
6.2.9 Extent of Sources beneath the CEMEX Property 67
6.2.10 Quantities of Ocean Water and Non-Ocean Water....67
6.2.11 Relative Amounts Drawn for Project Alternatives 69
6.2.12 Quantities Exceed 500 afy from Non-Ocean Water....69
6.3 Question 3....70
6.3.1 Connectivity Between the Aquifers....71
6.3.2 Dune Sand and 180-Foot Aquifers....71
6.3.3 400-Foot Aquifer 72
6.3.4 Deep Aquifers 73
6.3.5 Between Bulletin 118 Groundwater Subbasins....73
6.4 Question 4....73
6.4.1 Definition of Seawater Intrusion....74
6.4.2 Model Results 75
6.4.3 Dune Sand Aquifer....76
6.4.4 180-Foot Aquifer 77
6.4.5 Upper 180-Foot Aquifer....77
6.4.6 Lower 180-Foot Aquifer....79
6.4.7 400-Foot Aquifer 80
6.4.8 Deep Aquifer....81
6.4.9 Analysis 81
6.4.10 Area 3 in the Upper 180-Foot Aquifer....82
6.4.11 Area 4 in the Dune Sand Aquifer....83
6.4.12 Area 4 in the 400-Foot Aquifer 83

6.4.13 Conclusion 83
6.5 Question 5 84
6.5.1 Groundwater Table 84
6.5.2 Model Results 84
6.5.3 Dune Sand Aquifer 86
6.5.4 180-Foot Aquifer 86
6.5.5 400-Foot Aquifer 87
6.5.6 Conclusion 88
6.5.7 Storage Space 88
6.5.8 Groundwater Stored in the Dune Sand Aquifer 89
6.5.9 Analysis 90
6.5.10 Conclusion 91
6.5.11 Subbasin Cross-Boundary Flows 91
6.5.12 Parties' Positions 91
6.5.13 Analysis – Changes in Cross-Boundary Flows 92
6.5.14 Analysis – Water Budget/Sustainable Yield 95
6.6 Question 6 96
6.7 Question 7 96
6.7.1 Marina's Water Rights 96
6.7.2 MCWD's Water Rights 97
6.7.3 Injury to MCWD's Water Rights 99
6.7.4 Impacts to Quantity of Groundwater 99
6.7.5 Impacts to Quality of Groundwater 101
6.7.6 Conclusion 101
6.8 Question 8 101
6.8.1 Extraction of Ocean Water 102
6.8.2 Extraction of Groundwater 102
6.8.3 Availability of Surplus Water 104
6.8.4 Avoidance of Injury to Existing Uses and Users 105
6.8.5 Avoidance of Unreasonable Harm 106
6.8.6 Physical Solution 109
6.8.7 Monitoring and Adaptive Management 111
6.8.8 Conclusion 112
7 CONCLUSION 113
8 GLOSSARY – TECHNICAL CONCEPTS AND TERMS 121

8.1 Hydrogeology Terms 121
8.2 Groundwater Modeling Terms 123
9 APPENDIX A – FIGURES ..... A
10 APPENDIX B – CAL-AM OBJECTIONS RESPONSE TABLE ..... B
11 APPENDIX C – CITY OF MARINA RESPONSE TABLE C
12 APPENDIX D – MCWD OBJECTIONS RESPONSE TABLE ..... D

1 INTRODUCTION

The State Water Resources Control Board (State Water Board or Board) submits this Final Report of the Board as Referee to the Superior Court of the County of Monterey in the matter of *City of Marina v. RMC Lonestar* (Monterey Sup. Ct. Case No. 20CV001387.) This report is submitted pursuant to the court's order of October 7, 2021, seeking the expert opinion of the State Water Board on eight questions included in the order.

2 BACKGROUND

2.1 Proposed Project

California-American Water Company (Cal-Am) proposed the Monterey Peninsula Water Supply Project (MPWSP or proposed project) as a desalination project that would draw water from slant wells drilled from a location near the shoreline of the Pacific Ocean within the City of Marina (Marina or City), in Monterey County, beneath Monterey Bay. (See Figure 1 – General Area Map.)

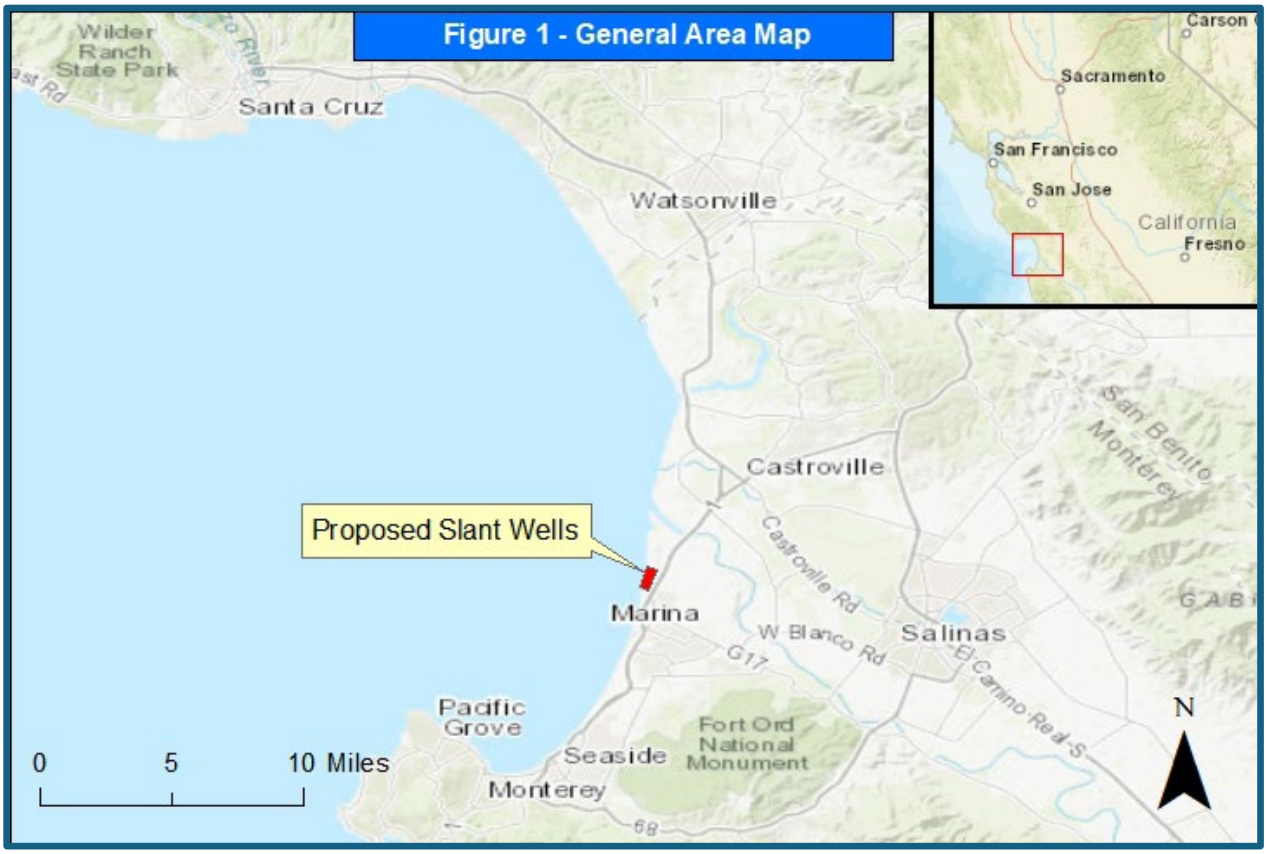


Figure 1 – General Area Map

The MPWSP consists of several components, including a source water intake system, a desalination plant, a brine discharge system, product water conveyance pipelines, water storage facilities, an Aquifer Storage and Recovery program, and a water purchase agreement for 3,500 acre-feet per year (afy) of product water from the Pure Water Monterey Groundwater Replenishment Project. (2025-01-31 City of Marina's Comments on 12-31-24 Draft Report, p. 6; 2018-09-20 CPUC Dec.18-09-017, pp. 16, 18; Exh. Cal-Am-38(d), pp. 5.4–51-58, Figure 5.4-5, Tbl. 5.4 9.)[1]

2.2 *City of Marina v. RMC Lonestar*, Monterey County Superior Court

2.2.1 Summary

Marina filed the lawsuit underlying this administrative proceeding in Monterey County Superior Court, *City of Marina v. RMC Lonestar*, Case No. 20CV001387. The City asserts two claims against the defendants: (1) a declaratory relief claim that defendant CEMEX violated the 1996 Annexation Agreement and Groundwater Mitigation Framework for Marina Area Lands (1996 Agreement) (Exh. Marina-8)[2] by purporting to grant an easement to Cal-Am over a 39-acre portion of its property for operation of the proposed project; and (2) a declaratory relief claim that operation of the proposed project would violate the Monterey County Water Resources Agency Act.

Marina Coast Water District (MCWD) subsequently filed a cross-complaint in which MCWD claims, among other allegations, that Cal-Am's operation of the proposed project (1) will injure MCWD's right to extract groundwater from the groundwater basin, (2) constitutes an unreasonable method of extracting groundwater in violation of article X, section 2, of the California Constitution, and (3) violates the 1996 Agreement. (2020-11-03 MCWD's First Amended Cross-Complaint.)

[1] For the court's and parties' convenience, staff from the Administrative Hearings Office (AHO) has copied all documents in the administrative record that are cited in this report, except for the parties' exhibits, and placed them in a new folder called "Copies of Administrative Record Supporting Documents" in the administrative record for this proceeding. These documents are saved with the date followed by the original file name.

[2] Unless the context indicates otherwise, references in this report to exhibits are to exhibits accepted into evidence during the hearing in this proceeding. These exhibits are filed in a folder titled "Parties' Hearing Exhibits" within the Hearing Documents folder in the administrative record for this proceeding. Within the Parties' Hearing Exhibits folder, there is a separate subfolder for the exhibits of each party that participated in the hearing, and within each subfolder for each party, there is a subfolder titled "Accepted Exhibits" that contain the parties' exhibits accepted into evidence.

2.2.2 Parties

The parties to this proceeding and the underlying lawsuit pending in Monterey County Superior Court are Cal-Am, MCWD, Marina, and RMC Pacific Materials, LLC (RMC Pacific or CEMEX).[3]

Cal-Am is a California corporation with its principal place of business in San Diego. (Cal-Am Proposed Report Part 1, p. 3.)[4] Cal-Am is an investor-owned water utility regulated by the California Public Utilities Commission (CPUC). In Monterey County, Cal-Am serves approximately 100,000 people in portions of the Monterey Peninsula, including Carmel-by-the-Sea, Monterey, Pacific Grove, Seaside, Del Rey Oaks, Sand City, and some unincorporated areas. (*Ibid.*) Cal-Am does not supply any potable water to the City of Marina. (Exh. Marina-1, p. 5, ¶ 12.)

MCWD is a special district formed in 1960 for the purpose of installing and operating a water supply system, water distribution system, and wastewater collection system for Marina and neighboring communities in Monterey County. (Exh. MCWD-1, p. 4.) MCWD serves approximately 35,000 people in Marina, Seaside, the Ord military community, and neighboring areas. (*Ibid.*) MCWD's service area is north of and adjacent to Cal-Am's service area on the Monterey Peninsula. (*Ibid.*) MCWD's production wells are located generally in and around Marina.

Marina is an incorporated municipality of approximately 22,500 residents located along the coast of the Pacific Ocean in northern Monterey County. (MCWD-Marina Proposed Report Part 1, p. 3.) Marina receives all its drinking water from MCWD, which is sourced from MCWD's groundwater production wells in the Salinas Valley Groundwater Basin (SVGB). (*Id.* at p. 4.) The "CEMEX Property," where Cal-Am proposes to site the wells for the MPWSP, is located within Marina's boundaries. (Exh. Marina-1, p. 5, ¶ 17.)

RMC Pacific is a Delaware limited liability company. (Cal-Am Proposed Report Part 1, p. 4.) RMC Pacific owns the CEMEX Property, where RMC Pacific's and its

[3] Monterey County Water Resources Agency is also a defendant in the underlying lawsuit but did not participate in this proceeding.

[4] The AHO has saved the parties' proposed reports of referee and closing briefs in the folder marked "Closing Briefs" in the "Hearing Documents" folder in the administrative record for this proceeding. Unless otherwise indicated, citations in this order to page numbers of documents and exhibits are to the pages of the PDF files. These page numbers often are different from the text page numbers in the documents or exhibits. In some instances, we have also provided the printed page numbers in brackets, following the PDF page numbers.

predecessors previously operated a sand mining facility known as the Lapis Sand Plant. (*Ibid.)* RMC Pacific does business as CEMEX. (*Ibid.)*

2.2.3 Referral to the State Water Resources Control Board

On August 30, 2021, Cal-Am, joined by RMC Pacific, filed a motion for the court to refer certain water rights-related issues that MCWD raised in its cross-complaint to the State Water Board under Water Code sections 2000 to 2048. (2021-08-30 Cal-Am Not. of Mtn. for State Board Referral; see also 2021-08-30 Cal-Am Memo. ISO Mtn. for Reference to SWRCB; 2021-08-31 RMC Pacific Material's Not. of Joinder Cal-Am Mtn. for Ct. Reference.) Marina and MCWD opposed the motion. (2021-09-13 City of Marina MPA Opp. to Ref. to State Bd.; 2021-09-13 Marina CWD's Opp. to Ref. to SWRCB.) On October 7, 2021, the court granted Cal-Am's motion. (2021-10-07 Order After Hearing.)[5]

The Court seeks the opinion of the State Water Board on the following eight issues, reproduced here:

1. *Where are the subsurface drawing source points (including capture zones) for each of the currently proposed Cal-Am wells located in relation to:*
    a. *seawater in the ocean itself;*
    b. *drawing source points for the Marina Coast Water District ("MCWD") production wells;*
    c. *the Subbasin Interface Zone;*
    d. *the 180/400-foot Aquifer Subbasin;*
    e. *the Monterey Subbasin;*
    f. *the Cemex property;*
    g. *the MCWD wells.*

2. *Would water drawn by any of the currently proposed Cal-Am wells come from any source other than seawater from directly beneath the Ocean?*
    a. *If so, from which sources? And which if any of these sources lie in whole or in part beneath the Cemex property?*
    b. *If so, can one approximate with reasonable certainty in what quantities the water would be drawn from each source? Can this be expressed in percentages?*

[5] As noted in footnote 1, for ease of reference, the AHO has placed copies of documents from the underlying court proceeding cited in this report in the "Copies of Administrative Record Supporting Documents" folder in the administrative record for this proceeding. These documents are also saved in the folder called "Documents from Court's Files" in the administrative record. The AHO has retained original naming conventions, and in some instances, these are inconsistent as between documents (e.g., "2nd" instead of "Second").

c. *If so, do the relative amounts drawn from each source vary depending upon amounts drawn by the slant wells?*
d. *If so, can it be said with reasonable certainty that the amount drawn by the Cal-Am wells will not exceed 500 acre-feet per year ("afy") from any water source beneath the Cemex property?*

3. *What is the hydrogeological connectivity, if any, between the areas from which Cal-Am proposes to draw water and the areas from which MCWD extracts water?*

4. *Is it likely that any of the proposed draw for the Cal-Am wells would (a.) result in or (b.) increase any seawater intrusion into the Subbasin Interface Zone, the 180/400 [F]oot Aquifer or the Monterey Aquifer, or any source for the MCWD production wells? If so, what is the likely extent of the intrusion?*

5. *Is it likely that any of the proposed draw will (a.) lower the groundwater table or (b.) reduce the storage space in any source other than seawater and if so, can the extent be approximated?*

6. *Has MCWD been pumping water from the Subbasin Interface Zone and, if so, for approximately what period of time?*

7. *What effect, if any, would the proposed draw by Cal-Am slant wells have upon any primary or paramount water right of Marina or MCWD?*

8. *Does SWRCB have an opinion as to whether:*
    a. *there is any legal theory upon which Cal-Am may rely to extract the proposed draw; and*
    b. *the proposed Cal-Am extraction would infringe upon MCWD's appropriative rights to groundwater?*

(*Id.* at pp. 1–3.)

2.3 Location and Physical Setting

2.3.1 Salinas Valley Groundwater Basin (SVGB)

The SVGB underlies the Salinas Valley. The Salinas Valley is bounded by the Gabilan Range on the east and the Sierra de Salinas and Santa Lucia Range on the west. The

valley is drained by the Salinas River, which flows into Monterey Bay. (DWR Bull. 118, 180/400-Foot Aquifer Subbasin Description, p. 4.)[6]

The SVGB is made up of nine subbasins. (California's Groundwater Update 2020 App. F (Bull. 118) Tbl. F-3, p. 8, & Tbl. F-6, p. 18.) Those subbasins are: 180/400-Foot Aquifer, Monterey, East Side Aquifer, Forebay Aquifer, Langley Aquifer, Paso Robles Area, Upper Valley Aquifer, Atascadero Area and Seaside Subbasins. (*Ibid*.) The 180/400-Foot Aquifer Subbasin (180/400 Subbasin) and the Monterey Subbasin are directly relevant to this proceeding.

2.3.2 180/400-Foot Aquifer Subbasin

The 180/400 Subbasin encompasses 89,700 acres in the northern SVGB. The California Department of Water Resources (DWR) designated it as a high priority and critically overdrafted subbasin.[7] (Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) Combined GSP 2020-0123, pp. ES-3, 1-1, 5-33.)[8] On June 3, 2021, DWR approved the 180/400-Foot Aquifer Subbasin Groundwater Sustainability Plan (180/400 Subbasin GSP) developed by the SVBGSA. (Exh. MCWD-132.)

2.3.3 Monterey Subbasin

The Monterey Subbasin encompasses 30,850 acres in the northwestern SVGB. DWR designated it as a medium priority subbasin. (Monterey Subbasin GSP, p. 28.) On April 27, 2023, DWR approved the Monterey Subbasin Groundwater Sustainability Plan developed by the Marina Coast Water District Groundwater Sustainability Agency and the SVBGSA. (Exh. MCWD-133.)

---

[6] As noted in footnote 1, for ease of reference, the AHO has placed copies of the cited documents related to DWR Bulletin 118 in the "Copies of Administrative Record Supporting Documents" folder in the administrative record. A copy of this document and all documents in the record related to DWR Bulletin 118 are available in the administrative record, in a folder called "Historical Documents" in a subfolder marked "DWR Bulletin 118 documents."

[7] DWR defines the boundaries of the state's alluvial groundwater basins and subbasins and designates them as either high, medium, low, or very low priority. Local public agencies in high and medium priority basins are required to comply with the Sustainable Groundwater Management Act (SGMA) by forming groundwater sustainability agencies (GSAs) that must develop and implement groundwater sustainability plans (GSPs or plans), as discussed further in Section 2.6.4.

[8] We take official notice of this document under California Code of Regulations, title 22, section 648.2 and California Evidence Code section 452, subdivisions (c) and (h). Groundwater sustainability plans are maintained on DWR's webpage under the "SGMA Portal" at https://sgma.water.ca.gov/portal/gsp/all. The AHO saved a copy of this document in the folder called "Copies of Administrative Record Supporting Documents."

2.3.4 Hydrogeologic Features

There are four primary aquifer units and three aquitards[9] within the SVGB in the areas of the proposed project and the MCWD production wells. The Dune Sand, 180-Foot, 400-Foot, and Deep Aquifers are separated or partially separated by the Fort Ord-Salinas Valley Aquitard (FO-SVA), and the 180/400-Foot and 400-Foot/Deep Aquitards. The 180-Foot Aquifer is further divided into the Upper and Lower 180-Foot Aquifers, separated by the 180-Foot Intermediate Aquitard. Figure 2 shows a schematic cross-section of the area with the relative locations of these aquifers and aquitards, the ocean, the CEMEX Property, the Test Slant Well (see Section 2.4.5), and the MCWD production wells.[10] Figure 2 also shows the approximate extents of seawater intrusion in the 180-Foot and 400-Foot Aquifers (labeled "Seawater Intrusion Front").

The precise locations, extents, and physical properties of these aquifers, aquitards, and seawater intrusion fronts are somewhat uncertain, and the parties disagree about some of these characteristics. The parties generally object to this report's descriptions of physical features and use of exhibits if the description or exhibit is inconsistent with the party's view of the characteristics of that physical feature. (See 2024-06-25 Cal-Am Initial Objections to Draft Report of Referee Part 1; 2024-06-25 Marina Comments on 5-22-24 Draft Report; 2024-06-25 MCWD Comments on 5-22-24 AHO Partial Draft Report of Referee & 2024-07-08 Errata to MCWD Comments on Partial Draft Report of Referee; 2024-07-08 MCWD Request for Immediate Status Conference or MTS New Evidence; 2024-07-09 Cal-Am's Opposition to MCWD Request for Immediate Status Conference, or in the Alternative, Motion to Strike.)

We use these exhibits and describe the physical features in this section to introduce the general and relative locations of the physical features, but do not propose factual findings with respect to these disputed characteristics. We note that there may be some inaccuracies in an exhibit or description where the precise locations are not known and where the parties' technical experts have differing opinions.

We do not list or attempt to resolve these disagreements in this report. Instead, we invited the parties' technical experts to work collaboratively to resolve the disagreements during this proceeding as they developed groundwater models intended to address the court's questions. (See Section 4.2.) The parties' experts were not able to resolve every disagreement, and the remaining disagreements are reflected in the

[9] The AHO has included a glossary of technical concepts and terms in Section 8 of this report.

[10] The AHO has included certain figures and tables from the parties' exhibits and used the word "adapted" to indicate that the AHO has cropped these figures for size (but has not made other changes to the content of these figures and tables). The AHO has included copies of the parties' original exhibits in an appendix at the end of this report.

construction of the parties' respective groundwater models. We use the results from these models to depict a range of outcomes to address the court's technical questions and for our analysis of the legal issues without resolving most of these remaining disputes.

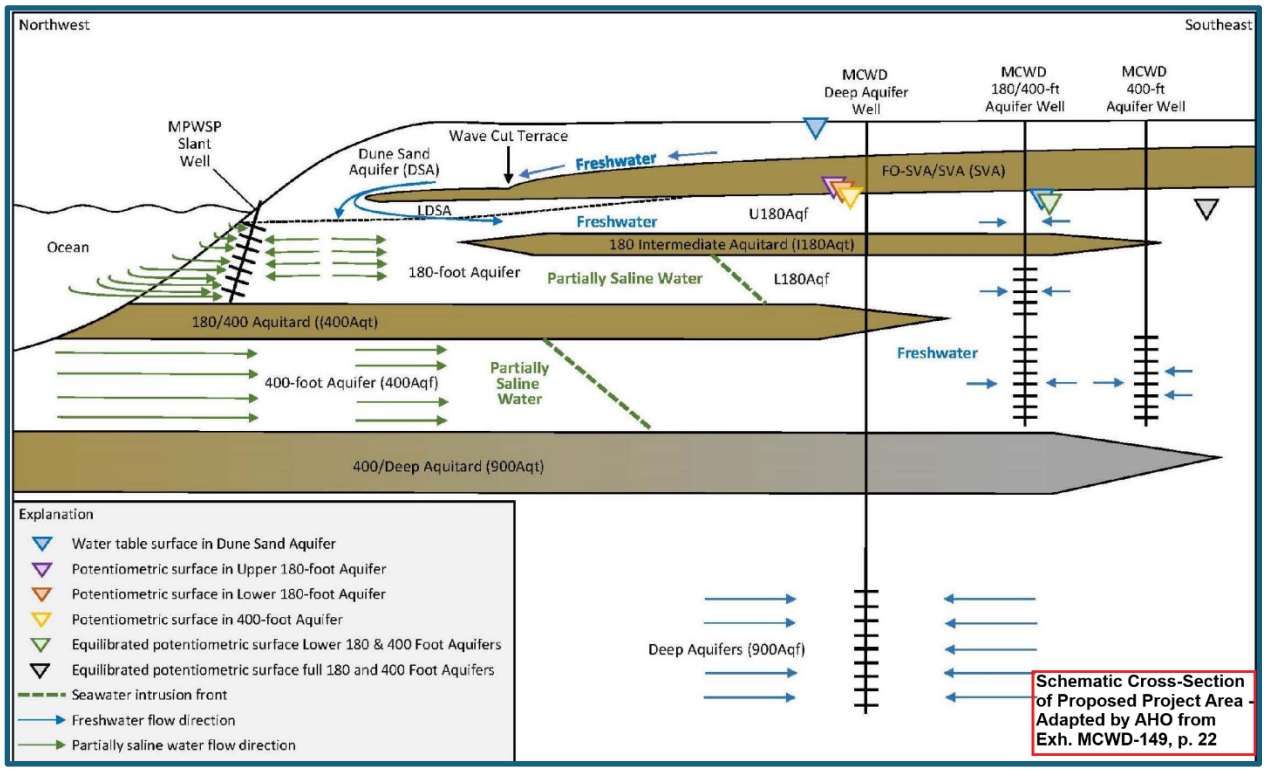


Figure 2 – Schematic cross-section showing hydrogeologic features in the area of the proposed project

2.3.5 Dune Sand Aquifer

The unconfined Dune Sand Aquifer is the uppermost aquifer in the area of the proposed slant wells. In the vicinity immediately surrounding the proposed slant wells and within the CEMEX Property, the Dune Sand Aquifer extends to depths up to 110 feet below the ground surface (Exh. Cal-Am-38(a), p. 8 [4.4-8])[11] and lies directly above the 180-Foot

[11] Cal-Am introduced the CalAm Monterey Peninsula Water Supply Project Final Environmental Impact Report / Environmental Impact Statement SCH #2006101004 (EIR/EIS) as Exhibit Cal-Am-38 and included a link to all the sections of the EIR: https://ia.cpuc.ca.gov/Environment/info/esa/mpwsp/comms_n_docs.html
For ease of reference, the AHO has downloaded sections of the EIR/EIS that we cite in this report, labeled them exhibits Cal-Am-38(a) through -38(g), and saved them in the Cal-Am subfolder in the Parties' Hearing Documents folder. We also revised Cal-Am's Exhibit Identification Index and saved a copy in the administrative record, showing the addition of these new exhibit numbers. We refer here to PDF page numbers, and we have also added printed page numbers in brackets.

Aquifer with no confining layer separating them, such that the two aquifers are hydraulically connected. (*Id.* at p.10 [4.4-10]; Exh. MCWD-149, p. 22.) Further inland, the Dune Sand Aquifer is separated from the 180-Foot Aquifer by the Fort Ord-Salinas Valley Aquitard. (Exh. MCWD-149, p. 22.)

Much of the water in the Dune Sand Aquifer along the coast has been intruded by seawater and is considered saline to brackish. (Exh. Cal-Am-38(a), p.8 [4.4-8].) Inland, there are fewer effects of seawater intrusion because infiltration of precipitation and applied agricultural water has a greater influence on groundwater quality. (*Ibid.*)

2.3.6 180-Foot Aquifer

In the area of the proposed slant wells, the 180-Foot Aquifer is semi-confined and extends to depths up to 240 to 255 feet below the ground surface. (Exh. Cal-Am-38(a), p. 13 [4.4-13].) In this location, the 180-Foot Aquifer lies directly beneath and is hydraulically connected to the Dune Sand Aquifer and lies above the 180/400-Foot Aquitard. (*Ibid.*) Further inland, the 180-Foot Aquifer is separated into the Upper and Lower 180-Foot Aquifers by an intermediate aquitard. (Exh. MCWD-165 p. 11; Exh. Cal-Am-141, p. 17.)

Seawater intrusion, here defined as chloride concentrations in excess of 500 mg/L, is present in the 180-Foot Aquifer extending inland beyond the area of the proposed project toward the MCWD production wells. (Exh. Cal-Am-38(a), Figure 4.4-10, p. 32 [4.4-32].)

2.3.7 400-Foot Aquifer

In the areas of the proposed slant wells and the MCWD production wells, the 400-Foot Aquifer is located beneath the 180/400-Foot Aquitard and above a low-permeability clay layer referred to as the 400-Foot/Deep Aquitard. (Exh. Cal-Am-38(a), p. 13 [4.4-13].) The 180/400-Foot Aquitard is somewhat discontinuous inland from the project site. (Exh. Cal-Am-141, p.89; Exh. MCWD-131 (revised), p. 6.)

Seawater intrusion, again defined as chloride concentrations in excess of 500 mg/L, is present in the 400-Foot Aquifer extending inland beyond the area of the proposed project toward MCWD production wells. (Exh. Cal-Am-38(a), Figure 4.4-11 [p. 4.4-33].)

2.3.8 Deep Aquifer

The Deep Aquifer, as we refer to it in this report, is an aquifer zone made up of two separate hydrological units below the 400-Foot/Deep Aquitard in the area of the proposed slant wells and the MCWD production wells. (Exh. Cal-Am-38(a), pp. 13–14 [4.4-13-14].)

2.3.9 Subbasin Interface Zone

MCWD introduced the term "Subbasin Interface Zone" in its First Amended Cross-Complaint as a label for an area south of the Salinas River, encompassing adjacent portions of the 180/400 and Monterey Subbasins. MCWD contends that within the Subbasin Interface Zone, the adjacent portions of the subbasins are "substantially hydrologically connected" by and through the alluvial materials and aquifers, and that "the groundwater beneath the whole of the Subbasin Interface Zone constitute a common source for their production wells and the proposed slant wells." (2020-11-03 Marina CWD's First Amended Cross-Complaint, p. 14, ¶¶ 39–41.)

MCWD expert Vera Nelson testified that MCWD defined the Subbasin Interface Zone "for the purposes of the cross-complaint to easily be able to discuss this area which includes both the slant wells and the MCWD's wells." (Combined Hearing Transcript, p. 1534:15-19.)[12] The proposed slant wells and MCWD's production wells are in different groundwater subbasins, and Ms. Nelson testified that MCWD's use of a single term for the area is intended to "explain that although there is this political boundary which DWR has drawn between these two subbasins, there's no physical reason that the groundwater can't move between the two areas." (*Id.* at p. 1536:18-22.)

Cal-Am objects that the area MCWD labeled as the Subbasin Interface Zone is not a technical hydrogeological term, nor is it a place, location, or term utilized in DWR's groundwater basin identification system. Cal-Am's expert testified that the Subbasin Interface Zone is a label MCWD created for an undefined amorphous area, so its location in relation to Cal-Am's proposed slant wells cannot be identified and is irrelevant to the issues raised in the underlying lawsuit. (Exh. Cal-Am-3, p. 3, ¶ 7, & p. 6, ¶ 19.)

We conclude for the purposes of this report, consideration of the Subbasin Interface Zone as a distinct area is not relevant to the technical or legal issues presented by the

[12] For convenience, the AHO created a combined file of the reporter's transcripts for all the hearing days, except for December 8 and 9, 2022, which were not transcribed. The combined file is called "Combined Hearing Transcript." This report cites to that document as the record of testimony or statements made during the hearing. The audio and video recordings are the Board's official record of the proceedings, however, and would control in the case of any conflict with the reporter's transcripts. As noted in footnote 2, the files cited here are in the "Copies of Administrative Record Supporting Documents" folder in the record. The hearing recordings are in the "Hearing Documents" folder in the "Hearing Recordings and Transcripts" subfolder in the administrative record. The court reporter's transcripts, which were used to create the Combined Hearing Transcript, are in the "Court Reporter Hearing Transcripts" subfolder in the administrative record.

court. The parties do not dispute that the groundwater subbasin boundary between the proposed slant wells and MCWD's production wells does not describe a physical boundary and that the portions of the aquifers that are within the 180/400 Subbasin are hydrologically connected to the respective portions of the aquifers within the Monterey Subbasin. The Subbasin Interface Zone as a distinct area is similarly irrelevant to the legal issues the court referred to the Board because the area does not describe any regulatory or management boundary.

In Sections 6.1 and 6.6 we directly address the court's questions regarding the undisputed locations of the proposed slant wells in relation to the Subbasin Interface Zone and the undisputed length of time MCWD has been pumping from within the Subbasin Interface Zone. We do not, however, further address the Subbasin Interface Zone with respect to the proposed project's impacts on seawater intrusion because these impacts are incorporated in our discussion of the expected impacts to the 180/400 and Monterey Subbasins.

2.4 Proposed Monterey Peninsula Water Supply Project

2.4.1 California Public Utilities Commission Permit

In April 2012, Cal-Am submitted Application A.12-04-019 to the CPUC, seeking approval of the MPWSP and authorization to recover present and future costs of the project through increased rates. (Exh. Cal-Am.38(g) [2012-10 CPUC Notice of Preparation - EIR for CalAm Monterey Peninsula Water Supply Project], p. 3.) The MPWSP consists of several components, including a source water intake system utilizing slant wells, a raw water pipeline, a desalination plant, a brine discharge system, product water conveyance pipelines, water storage facilities, an aquifer storage and recovery program, and a water purchase agreement for 3,500 afy of product water from the Pure Water Monterey Groundwater Replenishment Project. (CPUC Dec. 18-09-017, pp. 13, 178;[13] Exh. Cal-Am-38(d), pp. 5.4-51, Figure 5.4-5, Tbl. 5.4-9.)

The source water intake system for the 6.4 million gallons per day (mgd) production capacity project[14] would consist of "seven new subsurface slant wells (five active and two on standby; these would consist of the converted test slant well and six new wells)" on the CEMEX Property. (CPUC Dec. 18-09-017, p. 178.) The slant wells would be grouped into six well sites, including three sites with one well each and two sites with

[13] The two documents saved as "2018-09-13 CPUC Decision Issuing CPCN and certifying EIR-EIS" and "2018-09-20 CPUC Dec. 18-09-017 Approving Project and Certifying FEIR" appear to be identical. For ease of reference, the AHO cites to content contained in these identical documents as "CPUC Decision 18-09-017."
[14] The 6.4 mgd production capacity project would draw 15.5 mgd from the source. 6.4 mgd is equivalent to approximately 7,300 afy.

two wells. (Exh. Cal-Am-38(d), Tbl. 5.4 9.) In a 2016 Amended Application, Cal-Am revised the proposed location of the slant wells to be further inland. (2025-01-31 City of Marina's Comments on 12-31-24 Draft Report, p. 12.)

2.4.2 Environmental Review and Findings

The CPUC and the National Oceanic and Atmospheric Administration (NOAA) were the lead agencies for the proposed project under the California Environmental Quality Act and the National Environmental Policy Act, respectively. The CPUC and NOAA were responsible for preparing the combined environmental impact report (EIR) and environmental impact statement (EIS). The CPUC issued a Final EIR/EIS in March 2018 and certified the Final EIR/EIS on September 13, 2018, when the CPUC approved the proposed project. (CPUC Dec. 18-09-017.)

The Final EIR/EIS analyzes a 9.6 mgd production capacity project as initially proposed by Cal-Am in its application to the CPUC, as well as a reduced production capacity project of 6.4 mgd. (CPUC Dec. 18-09-017, p. 81.) For the purpose of environmental analysis, the Final EIR/EIS assumed the wells would operate 24 hours per day, 365 days per year. (Exh. Cal-Am- 38(b), p. 3-58.) The analysis relies on the North Marina Groundwater Model discussed in Section 4.1.

The CPUC concluded that the No-Project/No-Action Alternative was the environmentally superior alternative but that it failed to meet the basic project objectives and therefore was not feasible. (CPUC Dec. 18-09-017, p. 82.) Of the feasible alternatives, the CPUC found that the reduced production capacity project of 6.4 mgd was the environmentally superior alternative. The CPUC concluded in the Final EIR/EIS that operation of the proposed project would have a less than significant impact on groundwater supplies and groundwater quality. (Exh. Cal-Am- 38(a), pp. 4.4-61–4.4-107; Tbl. 4.4-9.)

2.4.3 Return Water Settlement Agreement

The Return Water Settlement Agreement is incorporated as a condition of the CPUC's approval of the MPWSP that requires Cal-Am to supply water to the SVGB in an amount equal to the percentage of non-brackish water extracted from the SVGB by the proposed project based on the calculation methodology included in the agreement. (2018-09-20 CPUC Dec. 18-09-017, pp. 2, 111, 161, 207 & 215; Exh. Cal-Am-67.) The Return Water Settlement Agreement assumes the freshwater component of the Ocean Water Percentage (OWP) calculation consists of groundwater that has a total dissolved

solids (TDS) concentration of 500 mg/L[15] and the remaining component is ocean water. (Exh. Cal-Am-67, p. 119.)[16]

The "return water" would be made available by Cal-Am as municipal water to the Castroville Community Services District and agricultural water to the Castroville Seawater Intrusion Project which is operated by the Monterey County Water Resources Agency (MCWRA). *(*Exh. Cal-Am-67, p. 5.) The Castroville Community Services District and the agricultural users supplied by the Castroville Seawater Intrusion Project would refrain from pumping groundwater in an amount equal to the return water supplied by Cal-Am. (*Id.* at pp. 8–10.) The agreement establishes the rates to be paid by Castroville Community Services District and MCWRA for each acre-foot of return water supplied by Cal-Am. (*Id.* at p. 15.)

The amount of return water that must be made available by Cal-Am each year would be calculated in accordance with the "Base Return Water Obligation Methodology" in Appendix H of the Return Water Settlement Agreement. (Exh. Cal-Am-67, p. 119.) This methodology utilizes measurement by an accredited laboratory of TDS values of the water extracted from the project's wells, to determine the percentages of seawater and "fresh" groundwater extracted from the SVGB. (Exh. Cal-Am-42, p. 2.) Absent other changes to groundwater conditions in the basin, the ratio of seawater to groundwater that makes up the source of water for the proposed project is expected to change over time, with the percentage of seawater becoming higher. (*Id.* at p. 14.) As a result, the amount of return water that Cal-Am would be obligated to make available may decrease over time.

If the agreements between Cal-Am and Castroville Community Services District and MCWRA for the purchase of return water are terminated or expire after the initial term of 30 years, Cal-Am must continue to make return water available for delivery within the SVGB for use in lieu of groundwater unless Cal-Am demonstrates that return water is not needed to prevent legal injury to senior groundwater right holders or to avoid significant adverse effects on groundwater conditions within the basin. (Exh. Cal-Am-67, pp. 13–14, ¶ 8.) The Return Water Settlement Agreement acknowledges that Cal-Am could be legally required by a regulatory agency or by a court to make water deliveries to other locations overlying the SVGB to mitigate impacts to groundwater conditions caused by operation of the proposed project. (Exh. Cal-Am-67, p. 11, ¶ 4.) Cal-Am's

[15] As discussed in Section 6.4.1, the maximum recommended contaminant level for TDS in drinking water is 500 mg/L. In comparison, in presenting model results, the parties utilized the TDS concentration isocontour of 1,500 mg/L to identify the boundary of seawater intrusion in the basin.

[16] The proportion of the water drawn by the proposed slant wells that originates from the ocean is referred to as the "ocean water percentage" (OWP).

obligation to make return water available to Castroville Community Services District and MCWRA would be reduced in the event and to the extent that a regulatory agency or court requires Cal-Am to deliver water in a manner or to a location that is different from that specified in the agreement. (*Ibid.*)

2.4.4 Groundwater Monitoring Program

The CPUC adopted the mitigation and monitoring measures identified in the Mitigation, Monitoring, and Reporting Program (MMRP) attached as Appendix D to the Final Environmental Impact Report, as conditions of its approval of the project. (Exh. Cal-Am-131.) The MMRP includes a measure 4.4-3, titled "Groundwater Monitoring and Avoidance of Well Damage." (*Id.* at pp. 13–14.) According to this measure, prior to construction of the slant wells, Cal-Am must develop a groundwater monitoring and reporting program to the satisfaction of MCWRA that augments MCWRA's existing regional groundwater monitoring network to focus on areas that could be affected by the proposed project. (*Ibid.*)

The groundwater monitoring program requires Cal-Am to offer an opportunity for owners of active supply wells within the monitoring area to enroll their wells in the program. Before pumping from the proposed slant wells begins, MCWRA must retain and direct a California-certified hydrogeologist to evaluate the conditions and characteristics of enrolled active supply wells. If MCWRA identifies (1) a "consistent and measurable drawdown in groundwater levels" after the MPWSP begins operations, and (2) MCWRA determines that the drawdown is potentially attributable to Cal-Am's slant well pumping and is "independent of seasonal or multi-year groundwater level fluctuations or any regional trends," then the hydrogeologist will determine whether the observed degree of drawdown would damage or adversely affect any of the active supply wells in the program. The hydrogeologist will also consider active supply wells not enrolled in the program for potential damage if the owners submit "substantial, credible evidence … concerning damage or adverse effects" and Cal-Am and the hydrogeologist verify the effects. (Exh. Cal-Am-131, p. 14.) If the hydrogeologist verifies damage or adverse effects caused by MPWSP pumping, Cal-Am and the hydrogeologist shall coordinate with the well owner to develop and implement a remedy, which may include deepening the existing well, improving well efficiency, facilitating a replacement supply of water (of the same or better quality), constructing a new well, or compensating the owner for increased pumping costs.

2.4.5 Coastal Development Permit

On June 22, 2018, Cal-Am applied to Marina for a Coastal Development Permit (CDP) to install components of the MPWSP located within Marina's defined coastal zone. (Exh. Marina-11, p. 1.) The components included, among other things, subsurface slant intake wells, pipeline vaults, electrical enclosures, surge tanks, pipelines, and outfall pipeline components. (*Ibid*.) The Marina Planning Commission reviewed the application, including holding a public workshop and public hearings, and denied it on March 7, 2019. (*Id.* at pp. 1–3.)

Following the Marina Planning Commission's denial of Cal-Am's application for a CDP, Cal-Am appealed the decision to the California Coastal Commission (Coastal Commission). (Exh. Cal-Am-118.) The Coastal Commission held a hearing in November 2019 on Cal-Am's appeal and CDP application. (*Id.* at p. 3.) The Coastal Commission did not act at this hearing but directed Cal-Am to provide additional information. (*Ibid.*) Cal-Am subsequently withdrew its consolidated CDP application and resubmitted its application in November 2020. Cal-Am further modified the application in October 2022. (*Id.* at p. 48.) On November 17, 2022, the Coastal Commission held a public hearing and approved the CDP, with conditions, for the MPWSP. (*Id.* at pp. 11–12; Exh. MCWD-125, p. 11.)

Special Condition 1 of the development permit requires Cal-Am to submit a final judgment in *City of Marina v. RMC Lonestar, et al.*, Monterey County Superior Court No. 20CV001387 or a Final Report of Referee from the State Water Board. *(*Exh. MCWD-125, pp. 12–13.) Special Condition 1 further provides that the permit shall not issue if the final judgement or report demonstrates that "(a) the Applicant does not have, and cannot feasibly obtain, water rights (to the extent applicable) for the Project or (b) Cal-Am's Project would cause harm to any aquifer that is a source of drinking water to the City of Marina or the Marina Coast Water District." (*Id.* at p. 13.)

Like the CPUC, the Coastal Commission required in Special Condition 12 of the development permit that Cal-Am develop and comply with a groundwater monitoring plan. (*Id.* at pp. 29–31.) The groundwater monitoring plan must include a statement of monitoring goals to detect any change in the rate of seawater intrusion that may be caused by operation of the proposed slant wells, a description of monitoring methods and frequency, thresholds for TDS to indicate or predict potential harm to groundwater supplies, a method of data analysis (which may include groundwater modeling) to assess impacts to groundwater, proposed remedial measures and operational controls if thresholds are reached, and annual reporting. (*Ibid*.)

On December 29, 2022, the City of Marina, Monterey Peninsula Water Management District, MCWD, and MCWD Groundwater Sustainability Agency jointly filed a Petition

for Writ of Mandate and Complaint for Declaratory and Injunctive Relief in Monterey County Superior Court (Case No. 22CV004063) against the Coastal Commission challenging the Commission's CDP approval decisions. (2023-11-13 Cal-Am's Proposed Draft Referee's Report, p. 21.)

2.4.6 Test Slant Well

To evaluate potential impacts from operation of the proposed project, Cal-Am installed a Test Slant Well and nested monitoring wells on the CEMEX Property. (Exh. Cal-Am-3.) The Test Slant Well is approximately 724 feet in length, drilled at an angle of 19 degrees below horizontal, and screened in the Dune Sand Aquifer at 40 to 145 feet and in the 180-Foot Aquifer at 400 to 710 feet. (Exh. Cal-Am-38(c), p. 39.) Cal-Am completed construction of the Test Slant Well in 2015.

Cal-Am conducted short-term and long-term pumping tests using the Test Slant Well. (Exh. Cal-Am-38(c), pp. 21, 55–57.) The long-term pumping test at 2,000 gallons per minute (gpm) started in April 2015 and extended through February 2018. (Exh. Cal-Am-3, p. 9:7–9.) The long-term pumping test was briefly interrupted between June and October 2015 to address a change in permit conditions and between March and May 2016 to address a mechanical issue. (*Id.* at p. 9:9–11.) During the pumping test, Cal-Am collected water level data and conducted periodic collection of water to test the water quality. (*Id.* at pp. 11–16; Exh. Cal-Am-38(c), p. 57.)

2.5 Prior State Water Board Involvement

2.5.1 State Water Board Orders

Three orders issued by the State Water Board in 1995, 2009, and 2016, are relevant to this proceeding because they required Cal-Am to significantly reduce its diversion from the Carmel River and prompted Cal-Am to seek alternate sources of water to supply its customers. The MPSWP is Cal-Am's primary proposal for developing an alternate source of water.

2.5.2 Order WR 95-10

Cal-Am owns and operates the water supply system serving the Monterey Peninsula. (Order WR 95-10, pp. 5, 6, & 18.)[17] Prior to the Board's 1995 order, the Carmel River was the source of approximately 70 percent of the municipal water Cal-Am supplied in the region. (*Id.* at p. 2.) On July 6, 1995, the State Water Board adopted Order WR 95-10, in which the Board concluded that Cal-Am had a legal right to pump 3,376 afy from

[17] We cite to the official Water Board orders found on the State Water Board's webpage at https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/. For ease of reference, the AHO has included copies of the orders cited in this report, where the orders were not otherwise included among the parties' exhibits, in the folder called "Copies of Administrative Record Supporting Documents."

the Carmel River system but did not have a legal right to 10,730 additional afy that it was diverting from the river. (*Id.* at pp. 25, 39.)

The State Water Board recognized that Cal-Am could not immediately reduce its diversion of water from the river because the "people and businesses on the Monterey Peninsula must continue to be served water from the Carmel River in order to protect public health and safety." (Order WR 95-10, p. 37.) The order directed Cal-Am to "(a) diligently proceed in accord with a time schedule to obtain rights to cover its existing diversion and use of water and (b) implement measures to minimize harm to public trust resources." (*Id*. at pp. 2 & 40–44.) The order also directed Cal-Am to develop and implement urban water management and irrigation conservation plans and other specific reduction and mitigation actions. (*Id.* at pp. 40–44.)

2.5.3 Order WR 2009-0060

On October 20, 2009, the State Water Board adopted Cease and Desist Order WR 2009-0060 to address Cal-Am's failure to comply with the requirements of Order WR 95-10. (Exh. Cal-Am-92.) The State Water Board found that Cal-Am had failed to "diligently implement actions to terminate its unlawful diversions" (*id*. at p. 27) and had diverted an average of 7,632 afy without a basis of right for the prior 13 years. (*Id*. at pp. 33–34). WR 2009-0060 ordered Cal-Am to "diligently implement actions to terminate its unlawful diversions from the Carmel River" and "terminate all unlawful diversions from the river no later than December 31, 2016." (*Id*. at p. 57.)

2.5.4 Order WR 2016-0016

On July 19, 2016, the State Water Board adopted Order WR 2016-0016, which extended the deadline for Cal-Am to terminate its unlawful diversions from the Carmel River until December 31, 2021. (Order WR 2016-0016, pp. 1–2.) The order recognized that Cal-Am could not meet the December 31, 2016, deadline and adopted a new compliance schedule based on milestones for Cal-Am's proposed alternative projects. The order required, however, that "unauthorized diversions end by December 31, 2021, regardless of whether the envisioned projects are timely built." (*Id*. at p. 2.)

According to testimony by Cal-Am's witnesses during this proceeding, Cal-Am is now complying with the maximum diversion limit of 3,376 acre-feet annually from the Carmel River, in accordance with its water right. (Combined Hearing Transcript, p. 74:18–22.)

2.5.5 2013 State Water Board Staff Report

In September 2012, the CPUC asked the State Water Board to prepare a report analyzing whether Cal-Am would likely possess or be able to obtain legal rights to the source water for the proposed project and avoid injury to other legal users of water in the basin. (2012-09-26 CPUC ltr. to SWRCB.)

On July 31, 2013, the State Water Board transmitted a staff report to the CPUC entitled "State Water Resources Control Board Final Review of California American Water Company's Monterey Peninsula Water Supply Project." (2013-07-31 SWRCB review of Cal-Am MPWSP.) The State Water Board submitted the 2013 Staff Report to the CPUC "in an advisory role only" and stated that the report is "not binding on any party or entity…." (*Id.* at p. 59.) In the report, State Water Board staff concluded that the information provided to the State Water Board was insufficient for staff to "definitively address the issue of how the proposed project would affect water rights in the [Salinas Valley Groundwater] Basin." (*Id.* at p. 11.) The report includes recommendations for additional studies to clarify the hydrogeologic conditions in the area. (*Id.* at pp. 10, 77.)

2.6 Other Legal and Administrative Background

2.6.1 Annexation Agreement and Groundwater Framework

In 1996, MCWD, Marina, MCWRA, RMC Lonestar, and other neighboring property owners executed a document entitled the "Annexation Agreement and Groundwater Mitigation Framework for Marina Area Lands" (1996 Annexation Agreement). (Exh. Marina-8.) The 1996 Annexation Agreement was intended "to help reduce seawater intrusion and protect the groundwater resource and preserve the environment of the Salinas River Groundwater Basin through voluntary commitments by the Parties to limit, conserve and manage the use of groundwater from [this basin] and to provide the terms and conditions for the annexation of certain territory in the Marina area to the Monterey County Water Resources Agency's benefit assessment Zones 2 and 2A." (*Id.* at p. 10.) One of the properties proposed to be annexed was the CEMEX Property. (*Id.* at p. 14, § 4 [describing Exhibit D, the "Lonestar Property"].)

A term and condition of the 1996 Annexation Agreement is that RMC Lonestar will "limit the withdrawal and use of groundwater from the Basin to Lonestar's historical use of 500 afy [acre-foot per year] of groundwater." (*Id.* at p. 26, § 7.2.) The Agreement defines "Basin" as "the Salinas River Groundwater Basin." (*Id.* at p. 11.)[18] Marina and MCWD contend that this 500 afy groundwater extraction limit is a restrictive covenant or equitable servitude that runs with the land and is binding on all future owners, easement holders and all other persons who have or claim interests in the CEMEX Property, including CEMEX and Cal-Am. (2020-10-15 City of Marina 2nd Amend. Compl. for Dec Relief, p. 9, ¶ 29; 2020-11-03 Marina CWD's First Amended Cross-Complaint, p. 10, ¶ 19.)

The validity, applicability, and meaning of the 1996 Annexation Agreement is a contested issue in the lawsuit from which this administrative proceeding arises but is not

[18] The Salinas Valley Groundwater Basin is sometimes also referred to as the "Salinas River Groundwater Basin."

an issue the court referred to the State Water Board. The Court does ask, however, whether the Board can say "with reasonable certainty that the amount drawn by the Cal-Am wells will not exceed 500 acre-feet per year from any water source beneath the Cemex property." (2021-10-07 Order After Hearing, p. 2.)

2.6.2 Cal-Am Option Agreement and Easement to Occupy CEMEX Property

CEMEX and Cal-Am entered into an Option Agreement dated November 4, 2014, which grants an option for Cal-Am to purchase permanent easements to construct and operate slant wells, pipelines, roads and other facilities contemplated for the MPWSP. (Exh. Marina-10.) Section 9(d) of the Option Agreement states: "California American Water is not granted any groundwater rights or withdrawal rights by CEMEX under this Agreement, the Option, or the Permanent Easements." (*Id*. at p. 8.) This section further requires Cal-Am to "obtain and maintain any and all necessary rights to pump, withdraw, and use water in compliance with any and all applicable water rights laws and the 1996 Annexation Agreement if, and to the extent, the Annexation Agreement is applicable ...." (*Ibid*.)

In 2018, CEMEX conveyed a permanent easement to Cal-Am for portions of the CEMEX Property to authorize construction and operation of the slant wells, related facilities, pipelines, roads, and other coastal structures for the MPWSP. The permanent easement area for the slant wells, related facilities, and pipelines covers 35.9 acres of beach and sand dune areas adjacent to the Mean High Water line and an access easement for 3.5 acres of other beach and dune land. (Exh. Marina-9, pp. 7 & 11.) Marina and MCWD contest the validity of the easement CEMEX conveyed to Cal-Am, although the court did not refer that issue to the State Water Board and the issue is not further addressed in this report.

2.6.3 Sustainable Groundwater Management Act

The purpose of the 2014 Sustainable Groundwater Management Act (SGMA) is to provide for the sustainable management of groundwater basins in California. (Wat. Code, § 10720.1.) SGMA provides for groundwater management by local agencies to the extent feasible, with state intervention only to the extent necessary to achieve sustainable management. (*Id.* subd. (h).) DWR prioritized the alluvial groundwater basins or subbasins in the state to identify those that require management. (See Wat. Code, § 10720.1.) Local public agencies in all basins or subbasins[19] DWR designated as high- or medium-priority were required to form one or more GSAs to develop, adopt,

[19] SGMA defines "basin" to mean a groundwater basin or subbasin identified and defined in Bulletin 118. (Wat. Code, § 10721, subd. (b).) Subbasins identified in Bulletin 118 "refer generally to any subdivision of a basin based on geologic and hydrologic barriers or institutional boundaries …." (Cal. Code Regs., tit. 23, § 341, subd. (g)(2).)

and implement one or more groundwater sustainability plans (GSPs) to meet SGMA's sustainability goal. (Wat. Code, §§ 10721, subd. (n), 10720.7, 10723, subd. (a), 10727, 10735.2, subd. (a)(1).) Once a groundwater sustainability agency (GSA) is formed and undergoes specific noticing procedures, it becomes the exclusive GSA within its service area, as described in its notice. (Wat. Code, § 10723.8, subd. (d).) If two or more agencies file overlapping notices, none are exclusive, and the area remains unmanaged. If an area is unmanaged, SGMA provides that the county where the unmanaged area lies will be presumed to be the GSA unless it declines this role. (*Id.* at § 10724.)

GSAs for high- and medium-priority groundwater basins or subbasins were required to develop and submit to DWR for review a GSP that includes "[m]easurable objectives, as well as interim milestones in increments of five years, to achieve the sustainability goal in the basin within 20 years of the implementation of the plan." (Wat. Code, § 10727.2, subds. (a)-(c).) The "sustainability goal" is the implementation of a plan for the basin or subbasin that achieves "sustainable groundwater management" and ensures that the basin or subbasin is operated within its "sustainable yield." (Wat. Code, § 10721, subd. (u).) SGMA defines "sustainable groundwater management" as the management and use of groundwater in a manner that does not cause undesirable results and defines "sustainable yield" as the maximum quantity of water that can be withdrawn annually from a groundwater supply without causing an undesirable result. (*Id.*, subds. (v), (w).)

As defined by SGMA, an undesirable result is one or more of the following effects caused by groundwater conditions occurring throughout the basin (or subbasin):

(1) Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued;
(2) significant and unreasonable reduction in groundwater storage,
(3) significant and unreasonable seawater intrusion,
(4) significant and unreasonable degraded water quality,
(5) significant and unreasonable land subsidence, and
(6) Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

(*Id.*, subd. (x).)

In enacting SGMA it was the "intent of the Legislature to preserve the security of water rights in the state to the greatest extent possible consistent with the sustainable management of groundwater." (Wat. Code, § 10720.1, subd. (b).) SGMA does not alter the law governing rights to groundwater or surface water. "Nothing in this part or in any groundwater management plan …determines or alters surface water rights or groundwater rights under common law or any provision of law that determines or grants surface water rights." (*Id.* at § 10720.5, subd (b).) "Nothing in this part shall be

construed as authorizing a local agency to make a binding determination of the water rights of any person or entity ….” (*Id.* at § 10726.8, subd. (b).)

The year following SGMA’s passage, the Legislature amended both SGMA and the Code of Civil Procedure to include provisions harmonizing SGMA with comprehensive adjudications. Courts are required to conduct any groundwater adjudication consistent with SGMA, and “shall not approve entry of judgment in an adjudication action for a basin required to have a groundwater sustainability plan … unless the court finds that the judgment will not substantially impair the ability of a [GSA], the board, or the department to comply with this part and to achieve sustainable groundwater management.” (Wat. Code, §10737.8; Code Civ. Proc., § 850, subd. (b).) In determining rights to groundwater, SGMA states that “[t]he approval of a groundwater sustainability plan by the department shall not be construed [by the court in an adjudication] to be a determination by or otherwise an opinion of the department that the allocation of groundwater pumping rights in the plan are consistent with groundwater rights law.” (Wat. Code, §10738.)

As described above in Section 2.3.1, the 180/400 and Monterey Subbasins are high- and medium-priority subbasins, respectively. In 2017, MCWD posted a notice of intent to become the GSA for the City of Marina and the former Fort Ord Area portions of the 180/400 Subbasin and SVBGSA posted a notice of intent to become the GSA for the 180/400 Subbasin, including the Fort Ord and CEMEX areas. Marina subsequently posted a notice of intent to become the GSA for the 180/400 Subbasin CEMEX area. These overlapping notices caused the Fort Ord and CEMEX areas to remain unmanaged. In 2019, MCWD and SVBGSA resolved the overlap regarding the Fort Ord area but Marina and SVBGSA did not resolve their overlap, leaving the CEMEX area unmanaged. Subsequently, the County of Monterey chose to serve as the GSA under Water Code section 10724. The County then entered into a coordination agreement with SVBGSA for the CEMEX area. (See *City of Marina v. County of Monterey* (2023) 97 Cal.App.5th 17 [affirming SVBGSA as the exclusive GSA for the CEMEX area].) The SVBGSA therefore has the authority to regulate Cal-Am’s groundwater extractions from the 180/400 Subbasin. With respect to the Monterey Subbasin, MCWD and SVBGSA agreed to cooperatively develop one GSP. As a result, both subbasins are managed pursuant to GSPs that DWR approved and that separate GSAs adopted, each with exclusive jurisdiction of their respective subbasins. SGMA also requires DWR to periodically review GSPs, including to determine whether a GSP “adversely affects the ability of an adjacent basin to implement their [GSP] or impedes achievement of sustainability goals in an adjacent basin.” (Wat. Code, § 10733.)

3 ADMINISTRATIVE HEARINGS OFFICE PROCEEDING

3.1 Procedural Background

3.1.1 Assignment to the Administrative Hearings Office

Water Code section 1110 established the AHO within the State Water Board. Water Code section 1112, subdivision (c)(2), provides that the Board may assign an adjudicative hearing to the AHO. Water Code section 1112, subdivision (c)(3), provides that an AHO hearing officer may perform additional work requested by the Board, including, but not limited to, presiding over hearings on non-adjudicative matters, mediations, and overseeing investigations.

On November 17, 2021, the Executive Director for the State Water Board transmitted a memorandum to the Presiding Hearing Officer of the AHO, assigning this court reference to the AHO to conduct an adjudicative hearing and any necessary related proceedings, and to prepare a proposed report of referee answering Questions 1 through 8 in the court's October 7, 2021 Order, for transmittal to and consideration by the Board. (2021-12-13 Notice of Assignment and Status Conference.)

3.1.2 Statutory Procedure for Court References

Water Code section 2000 authorizes a court to order a reference to the State Water Board of any or all issues involved in a suit concerning a determination of rights to water. Water Code section 2001 further authorizes a court to refer to the State Water Board for investigation of, and report upon, any or all the physical facts involved in the suit.

The Board may base its report solely upon its own investigations or may additionally hold hearings and take testimony. (Wat. Code, § 2010.) The report of the Board acting as referee may contain opinions on the law and facts as the Board deems proper in view of the issues submitted to it by the court. (*Id.* at § 2011.) The Board must include in its report the findings of fact and conclusions of law required by the court's order of reference. (*Id.* at § 2012.)

Before the Board files a final report of referee with the court, the Board must issue a draft report and provide notice to the parties or their attorneys. (Wat. Code, §§ 2013 & 2014.) Within thirty days after the date the Board mails the draft to the parties, or such further time as the court may for good cause allow, any party may file objections to the draft report with the Board. (*Id.* at § 2015.) After the Board has considered any objections and conducted any additional hearing, the Board must file its report of referee with the clerk of the court and give notice of the filing of the report to the parties or their attorneys. (*Id.* at § 2016.)

The Board's report of referee is subject to review by the court based on any exceptions filed by any party with the clerk of the court within thirty days from receiving notice of the Board's filing of the final report with the clerk of the court. (Wat. Code, § 2017.) No exception to the report shall be considered by the court, except in the court's discretion or for good cause shown, unless the issue was submitted to the Board as an objection to the draft report. (*Id*. at § 2018.) The Board's report of referee is prima facie evidence of the physical facts found in the report. (*Id*. at § 2019.)

3.2 Public Hearing

The AHO conducted 26 days of hearing, a site visit, and 14 pre-hearing or status conferences to prepare an adequate evidentiary and administrative record on which to base this report. The evidentiary portion of the hearing extended over the course of a year, beginning on October 26, 2022, and concluding on October 12, 2023.

The hearing officer required the parties to submit witness testimony in writing in advance of the hearing. (2022-05-06 AHO Hearing Notice, p. 13.) Before the public hearing began, the hearing officer allowed the parties to take depositions of witnesses for whom the parties had submitted written testimony. (*Id.* at pp. 6–7.) During the hearing, the parties were permitted to provide an opening statement, present summaries of their witnesses' direct testimony, and cross-examine opposing parties' witnesses. (*Id.* at pp. 19–20.)

3.2.1 Site Visit

Then-Presiding Hearing Officer Alan Lilly and State Water Board staff assisting the hearing officer, and representatives of Cal-Am, MCWD, and Marina, participated in a site visit on November 2, 2022. (2022-11-01 Notice of Site Visit.) The purpose of the site visit was for the AHO personnel to view facilities and topographical features relevant to this proceeding and the court's questions.[20] Each location of the site visit is described in the November 1, 2022 Notice of Site Visit, but generally included several of MCWD's wells, the CEMEX Property, the proposed location of the desalination plant, the locations of certain monitoring wells, and a location in Castroville where pumping from existing wells would be reduced or eliminated pursuant to the Return Water Settlement Agreement.

3.2.2 Hearing Phases 1, 2, and 3

Phase 1 of the hearing addressed the court's questions as reproduced in the May 6, 2022, Notice of Hearing and consisted of opening statements, presentation of summaries of written testimony, and cross-examination of witnesses. (2022-05-06 AHO

[20] Audio and video recordings of each location on the site visit and photographs from the site visit are included in the administrative record in a folder titled "Site Visit" within the Hearing Documents folder.

Hearing Notice, pp. 3–4.) The AHO conducted hearing days in Phase 1 of the proceeding on October 26 through 28, and 31, 2022; November 1 and 3, 2022; December 7-9, 12, and 14-15, 2022; January 31, 2023; February 2, 2023; and March 1 and 16, 2023. After the parties had presented their witnesses and conducted cross-examination, concluding on December 12, 2022, the parties, their expert witnesses, and the hearing officer discussed approaches to resolving disagreements over Cal-Am's modeling approach, the need for additional model work to adequately address the court's questions, and preparation of the draft report of referee. These discussions occurred during the hearing days on December 14, December 15, January 31, February 2, March 1, and March 16, 2023. (See Section 4.2 for additional discussion of the collaborative modeling effort.)

Phase 2 of the hearing addressed the collaborative modeling efforts of the parties to address the court's questions, except for exhibits and testimony about solute transport model analysis and dual-density or variable density model analysis – which subjects were addressed in Phase 3. (2023-06-30 Status Conference Order; Notice of Hearing p. 2.) The AHO conducted Phase 2 of the hearing on July 17, and July 19 through 21, 2023.

Phase 3 of the hearing addressed the description, analyses and modeling results of the solute transport model and dual-density or variable density model, and four additional issues described in the July 26, 2023, Post-Hearing Order the AHO issued after the completion of Phase 2. (2023-07-26 Post-Hearing Order, pp. 1–3.) The AHO conducted Phase 3 of the hearing on September 11 through 15, and 26, and October 12, 2023.

Summary of Hearing Dates and Witness Testimony:

Phase 1		
Date	***Witness & Relevant Exhibits***	***General Subject***
October 26 to October 28, 2022	*Cal-Am, Vice President of Engineering:* Ian Crooks (Exhs. Cal-Am-1 & 2) *Cal-Am, Expert Witnesses:* Timothy Durbin (Exhs. Cal-Am-70 to 77) Peter Leffler (Exhs. Cal-Am-3 to 33, 78 to 87, & 104)	General information about the proposed project. Hydrogeologic and groundwater modeling, and potential impacts from proposed project.

	Johnson Yeh (Exhs. Cal-Am-56 to 58 & 88)	
October 31, & November 1, 2022	*MCWD, General Manager:* Remleh Scherzinger (Exhs. MCWD-1, 5, 89, & 100) *MCWD, Expert Witness:* Theodore Asch (Exhs. MCWD-4, 27 to 30, 77, 91, 101, 102, & 108)	MCWD operations, water sources, groundwater management, and water rights. Airborne electromagnetic surveys.
November 3, 2022	*Marina, City Manager:* Layne Long (Exhs. Marina-1, 25, 32, & 33)	Marina's water sources, wells, water rights. Annexation Agreement, vernal ponds, groundwater use, and impacts of proposed project.
December 7 to December 9, 2022	*MCWD, Expert Witnesses:* Vera Nelson (Exhs. MCWD-2, 9, 10, 92, 93, 113, & 117) Todd Kincaid (Exhs. MCWD-3, 17, 90, 114, 115, 118 to 120, & 122)	Hydrology at site of proposed slant wells and effects of the proposed project. Evaluation of modeling related to proposed project.
December 12, 2022	*Marina, Expert Witness:* Mark Trudell (Exhs. Marina-2 to 4, 28, 29, & 39 to 41)	Hydrogeology, groundwater, and related subjects.
December 14 & December 15, 2022	None	Hearing officer questions to expert witnesses.
January 31, February 2, March 1, & March 16, 2023	None	Discussion among experts, parties, and hearing officer about development of model improvements and procedural issues.

Phase 2		
Date	***Witness & Relevant Exhibits***	***General Subject***
July 17 & July 19, 2023	*Cal-Am, Expert Witnesses:* Tim Durbin (Exhs. Cal-Am-134 to 137, 152, & 160 to 163) Johnson Yeh (Exhs. Cal-Am-138 to 141, 157, 158, & 168) Peter Leffler (Exhs. Cal-Am-143 to 145, 153 to 156, & 167)	Regional model (SVSM) inputs used by Cal-Am and MCWD. Water level, water quality, and seawater intrusion model results using Cal-Am WBSSM^{2023}. Expert opinions on scenarios. Results of Phase 2 modeling using MCWD WBSSM^{2023} and Cal-Am WBSSM^{2023}.
July 20, 2023	*MCWD, Expert Witnesses:* Vera Nelson (Exhs. MCWD-126, 128 to 131, 150, 152, 153, & 155 to 160) Todd Kincaid (Exhs. MCWD-127, 149, 151, & 161)	Similarities and differences between MCWD WBSSM^{2023} and Cal-Am WBSSM^{2023}, modeling scenarios, and results. Model results in relation to Court's questions, details and results of MCWD WBSSM^{2023}, and differences between the models.
July 21, 2023	*Marina, Expert Witness:* Mark Trudell (Exhs. Marina-43 to 46, & 54 to 56)	Model representation of hydrogeologic characteristics, model calibration, modeling results.

Phase 3		
Date	***Witness & Relevant Exhibit***	***General Subject***
September 11, 2023	None	Discussion of procedural and evidentiary issues.
September 12 & September 13, 2023	*Cal-Am, Expert Witnesses:* Tim Durbin (Exhs. Cal-Am-176, 179, 185 to 187, 189, 192) Johnson Yeh (Exhs. Cal-Am-174, 177, 183, 187, 190) Peter Leffler (Exhs. Cal-Am-175, 177, 178, 180, 184, 187, 191)	 Hydrogeology, water level profiles, effects on protective heads (water levels), and resulting effects on salinity. Solute transport modeling, effects of project on TDS, aquifer storage, freshwater availability, seawater intrusion.
September 14, September 15, & September 26, 2023	*Marina, Expert Witnesses:* Mark Trudell (Exhs. Marina-58 to 61, & 67) Michael Tietze (Exhs. Marina-62, 63, 65, & 68) *MCWD, Expert Witnesses:* Vera Nelson (Exhs. MCWD-163, 165, 166, 168, & 175) Todd Kincaid (Exhs. MCWD-164, 167, 169, & 176)	 Solute transport model development and results, seawater and freshwater flows, and groundwater storage. Modeling approach used by Cal-Am. Cal-Am and MCWD flow and transport modeling, changes in TDS and protective heads, seawater movement, and groundwater storage. Effects of flow modeling on results of modeled seawater movement, particle tracking results.
October 12, 2023	None	Procedural issues regarding admission of exhibits.

3.3 Significant Procedural Rulings

On July 11, 2022, Hearing Officer Lilly issued a ruling on a June 22 joint motion in limine filed by Marina and MCWD to exclude testimony of Dave Owen submitted by Cal-Am. The hearing officer excluded the testimony because it lacked evidentiary value and consisted solely of legal argument regarding legal issues in the proceeding. (2022-7-11 Ruling on City of Marina Motion in Limine, p. 3.)

On August 31, 2022, Hearing Officer Lilly issued a ruling on Cal-Am's August 9 motion in limine to exclude, among other evidence, Marina's proposed written testimony and related exhibits regarding wetlands and vernal pools, and the potential effects of Cal-Am's proposed project on them. (2022-08-31 AHO Ruling on Cal-Am Mtn. in Limine, p. 5.) The hearing officer excluded the exhibits because they "[did] not concern any potential water rights of Marina or [M]CWD," and therefore were not relevant to the hearing issues. (*Id.* at p. 6.)

On December 21, 2022, after reviewing the written testimony and cross-examination of the parties' witnesses, the hearing officer directed the parties to work collaboratively to conduct additional modeling work. (2022-12-21 Post-Hearing Order and Notice of Additional Hearing Dates, pp. 2–3; see also Section 4.2, *infra*.) The hearing officer also directed the parties to prepare technical memoranda and to report areas of agreement and disagreement about the collaborative modeling effort in a joint status report. (*Id.* at pp. 4–5.) This collaborative modeling effort is described in more detail in Section 4.2.

On February 6, 2023, the hearing officer circulated a draft outline for the report of referee and asked the parties to prepare proposed text for some of those sections, to coordinate "consensus text" for as many sections and answers as possible, and to submit this text to the AHO by March 20, 2023. (2023-02-06 Post-Hearing Order, pp. 4–5.)

On March 7, 2023, the hearing officer directed the parties' technical experts to run designated model scenarios. (2023-03-07 Post-Hearing Order, p. 2.) The hearing officer also updated his questions to these experts in the December 21, 2022, Post-Hearing Order about model assumptions, model calibration, and other analyses, and updated the list of exhibits to be submitted to the AHO. (*Id.* at pp. 3–6; see also 2023-03-20 Post-Hearing Order, pp. 3–4 [modifying March 7, 2023, text regarding model scenarios and comparisons of results].) The hearing officer later postponed the deadlines for submittal of the requested technical memoranda, written testimony, and related exhibits at the request of the parties. (2023-04-25 Status Conference Order, p. 2; 2023-05-03 Status Conf. Order; Notice of New Status Conf., p. 2; 2023-05-30 Status Conf. Order; Notice of Hrg., pp. 2–3.)

On June 30, 2023, the AHO issued a status conference order clarifying that Phase 2 of the proceeding would not address solute transport model analyses and dual-density

model analyses, and that these issues would be addressed in Phase 3. (2023-06-30 Status Conference Order; Notice of Hearing p. 2.)

After conducting Phase 2 of the hearing in July 2023, the hearing officer issued a July 26 Post-Hearing Order. This procedural ruling identified the issues to be addressed in Phase 3 of the hearing, directed the submission of specific exhibits, and set deadlines for submission of exhibits, proposed text for all sections of the draft report of referee, and closing briefs. (2023-07-26 Post-Hrg. Order.) The hearing officer directed the parties to address in their closing briefs the questions of whether a physical solution as described in *City of Lodi v. East Bay Mun. Util. Dist.* (1936) 7 Cal.2d 316, 339–341 and subsequent reported court decisions might be appropriate. (*Id.* at p. 3.) Finally, the order stated that, effective August 1, 2023, Nicole Kuenzi, the newly-appointed Presiding Hearing Officer of the AHO, would become the assigned hearing officer for the proceeding.[21]

The AHO held Phase 3 of the hearing from September 11 to 15 and an additional hearing day on September 26, 2023. (2023-09-21 Procedural Ruling & Notice of Additional Hearing Day, p. 2.) The hearing officer also extended the parties' deadline to prepare closing briefs and proposed text for all remaining sections to October 31, 2023. (*Ibid.*) The hearing officer later extended this deadline to November 13, 2023. (2023-10-17 N. Kuenzi email to Service List.) The AHO held an additional procedural hearing day on October 12, 2023, to address evidentiary matters. (2023-10-04 Procedural Ruling & Notice of Additional Hearing Day, p. 2.)

3.4 Proposed Text for Report of Referee and Closing Briefs

The hearing officer directed the parties to submit proposed text for the State Water Board's report of referee. Part 1 of the draft text submitted by the parties was to address parts of the February 6, 2023, hearing officer's outline and some of the court's questions. Part 2 of the draft text submitted by the parties was to address the remaining sections of the draft outline and the remaining questions from the court.

On March 27, 2023, the parties filed Part 1 of their proposed text for the report of referee. Cal-Am filed a Proposed Draft Report of Referee (Part 1 of 2) and Marina and MCWD jointly filed "Draft Referee Report Sections to AHO," along with a separate single-page file titled "3/27/2023 AHO Draft Referee Report – Q.6, A.1."[22]

[21] This re-assignment of hearing officers occurred because of Hearing Officer Lilly's retirement from the State Water Resources Control Board.

[22] The draft reports of referee sections submitted in March 2023 are in the Communications and Transmittals subfolder, while the draft reports submitted in November 2023 are in the Closing Briefs subfolder within the Hearing Documents folder in the administrative record for this proceeding.

On November 13, 2023, the parties filed Part 2 of their proposed text for the report of referee. Cal-Am filed a 2023-11-13 Cal-Am's Proposed Draft Referee's Report. Marina and MCWD jointly filed a 2023-11-13 City of Marina Joint Draft Referee Report Sections 11–13.

Cal-Am, Marina, and MCWD each filed a closing brief on November 13, 2023. (2023-11-13 Cal-Am's Closing Brief; 2023-11-13 MCWD's Closing Brief; 2023-11-13 City of Marina's Closing Brief.)[23]

3.5 Preparation of Report of Referee and Approval by the Executive Director

On May 22, 2024, the AHO circulated a partial draft report of referee to the parties for comment. The partial draft included relevant background sections and addressed the court's Questions 1 through 5. On June 25, 2024, the parties submitted comments on the partial draft report of referee. (2024-06-25 Cal-Am Initial Objections to Draft Report of Referee Part 1; 2024-06-25 MCWD Comments on 5-22-24 AHO Partial Draft Report; 2024-06-25 Marina Comments on 5-22-24 Draft Report.)[24]

On December 31, 2024, the AHO, on behalf of the State Water Board, transmitted by e-mail a complete Draft Report of Referee to the parties' representatives pursuant to Water Code section 2013. The AHO received objections from the parties by the deadline of January 31, 2025. (2025-01-31 Cal-Am's Objections to Report of Referee; 2025-01-31 MCWD's Objections and Comments to Draft Report; 2025-01-31 City of Marina's Comments on 2024-12-31 Draft Report.) The AHO responded to the objections, which are in Appendices B, C, and D of this Final Report, and revised th Final Report accordingly.

In June 2025, the AHO submitted the Final Report of Referee to the Executive Director of the Board for his consideration. (2025-06-20 Memo to E. Oppenheimer Re Marina.) The Executive Director approved this Final Report pursuant to the Board's delegation of authority to the Executive Director of the Board in Resolution No. 2023-0036, and directed the AHO to file the Final Report and the underlying administrative record with the court. (See Wat. Code, § 2016.) The AHO filed the Final Report on behalf of the Board by United States Mail with the clerk of the court on June 25, 2025, and transmitted a copy of the Final Report to the representatives of the parties by e-mail.

[23] The documents identified in this section are in the "Hearing Documents" folder, in the subfolder for "Closing Briefs."
[24] These documents are also in the "Hearing Documents" folder, in the subfolder for "Closing Briefs."

3.6 Administrative Record and Evidentiary Record

The administrative record for this proceeding includes the evidentiary record; all recordings and transcripts of proceedings; documents from this proceeding such as recordings from the site visit, closing briefs and procedural rulings; Court documents; and any other documents the Board considered in preparing this report. The State Water Board has made the administrative record associated with this proceeding available to the parties and the public on the Board's FTP site. The State Water Board is transmitting the administrative record to the court on a digital storage device with the Final Report of Referee. (As described below, model files are part of the administrative record and are available upon request.)

The evidentiary record is a subset of the administrative record, which includes all exhibits admitted into evidence and oral testimony made under oath during the hearing. The evidentiary record is the basis for the Board's factual findings in the Final Report of Referee.

Functioning model files received by the AHO from the parties were accepted into the evidentiary record for this proceeding. The Board did not rely directly on the functioning model files for any finding of fact, however, but rather relied on the technical reports and model results the parties provided. Because of the very large digital size of the model files and because the Board did not directly rely on the files to reach any conclusion, the Board has not included the model files in the administrative record submitted on the digital storage device with this report. We can provide the functioning model files upon request.

4 GROUNDWATER MODELING

Mathematical modeling is an important element of decision-making for virtually all complex groundwater management matters. Computer models are used as tools to simulate groundwater flow systems for educational, investigatory, management, and legal purposes. There are inherent uncertainties in mathematical groundwater modeling, as it relies on a series of assumptions and extrapolations from limited known data. However, groundwater modeling results are an important source of information on which decision-makers may rely to understand these complex systems.

4.1 Groundwater Models in the Salinas Valley Groundwater Basin

During the development and environmental review of the MPWSP, Cal-Am and the CPUC used several iterations of groundwater models to analyze the potential impacts of the proposed project on the groundwater basin.

In 2008, Dr. Johnson Yeh, of Geoscience Support Services, Inc. (Geoscience), developed a transient groundwater and solute transport model,[25] called the North Marina Groundwater Model (NMGWM), to evaluate the potential groundwater impacts from various coastal water supply projects. (Exh. Cal-Am-56, p. 4, ¶14.) Dr. Yeh constructed the model by integrating the Salinas Valley Integrated Ground and Surface Water Model (SVIGSM) aquifer parameters, recharge and discharge terms, and boundary conditions. (*Ibid.)*

Between 2013 and 2015, Dr. Yeh and Geoscience updated and recalibrated the NMGWM to include two additional model layers to represent the Dune Sand Aquifer and Salinas Valley Aquitard, incorporate the updated and recalibrated SVIGSM, and extend the model calibration period. (Exhs. Cal-Am-60, p. 17 & Cal-Am-56, p. 4, ¶ 15.) Dr. Yeh used predictive model runs to simulate changes in water level, the seawater intrusion front, and Ocean Water Percentages (OWP) drawn from the proposed project wells. (See Exh. Cal-Am-60.) The CPUC relied on these model runs in the 2015 Draft EIR for the proposed project. (See Exh. MCWD-22.)

After the CPUC publicly released the 2015 Draft EIR, the CPUC retained HydroFocus, Inc. (HydroFocus) to review and update the model. HydroFocus developed the NMGWM^{2016} and converted it to a superposition model to conduct the analysis presented in the 2018 revision to the Draft EIR. (Exh. Cal-Am-8, p. 35 [DEIR p. 8.2-29]; Exh. MCWD-23.)

In 2020, Weiss Associates (Weiss) conducted additional modeling using the NMGWM^{2016} for predictive model scenarios. (Exh. Cal-Am-48.) Weiss' modeling focused on capture zones of the proposed wells, OWP of water drawn from the proposed wells, and drawdown cause by operation of the proposed wells. (*Ibid.*)

4.2 Groundwater Modeling for this Proceeding

The expert witnesses based many of their opinions addressing the court's questions on results from groundwater modeling conducted specifically for this proceeding. The groundwater models on which the experts relied were developed from existing models for the SVGB that the experts modified and refined through the proceeding before the AHO to address some of the criticisms of the existing models and to respond to the court's questions.

NMGWM^{2022}

In 2022, Dr. Yeh and Geoscience updated the NMGWM^{2016} model to produce the model known as NMGWM^{2022}. (Exh. Cal-Am-89.) The 2022 update added a new model layer,

[25] Definitions of groundwater modeling terms are found in the Glossary in Section 8.

extended the calibration period, and incorporated recharge and discharge terms and boundary conditions from the 2022 SVSM model developed by Tim Durbin. (Exh. Cal-Am-56, pp. 5–6, ¶ 17.) Cal-Am submitted testimony in Phase 1 of this proceeding based on modeling results from NMGWM^{2022}. (See Exh. Cal-Am-89.)

MCWD's expert, Dr. Todd Kincaid of Shannon & Wilson, Inc., evaluated NMGWM^{2022} and ran predictive model scenarios with a steady-state version of the model that he developed. (See Exh. MCWD-115.) MCWD submitted testimony by its experts in Phase 1 of this proceeding that addressed the disagreements and concerns their experts had with the modeling and model results Cal-Am submitted. These opinions are presented in MCWD experts' written direct, rebuttal, and sur-rebuttal testimony for Phase 1 of this proceeding. (See Exhs. MCWD-2, 3, 90, 92, 113, & 114.) In Phase 1, MCWD's experts also presented some limited model results based on Dr. Kincaid's steady-state version of NMGWM^{2022}. (*Ibid.)*

Collaborative Modeling Effort

Following Phase 1, the AHO hearing team determined that the evidence in the record was insufficient to address the court's questions. In lieu of inviting Cal-Am to directly respond to the criticisms of NMGWM^{2022} and prior models presented by MCWD and Marina in Phase 1,[26] the hearing officer directed the parties to undertake a cooperative effort to develop a joint model that addressed the concerns and disagreements of MCWD's experts with the construction and results derived from NMGWM^{2022} and prior models, and to present results from this model in supplemental hearing days. (See Combined Hearing Transcript, pp. 1960:1–1964:21; 2022-12-21 Post-Hearing Order and Notice of Additional Hearing Dates.)

The parties' technical experts met several times in December 2022 and January 2023 but were unable to resolve their disagreements sufficiently to develop one joint model for Phases 2 and 3 of this proceeding. The hearing officer directed the parties to develop separate models referred to as the Cal-Am and MCWD Water Board Steady-State Models (Cal-Am WBSSM^{2023} and MCWD WBSSM^{2023}) and to continue to collaborate on the models as much as possible. (2023-03-07 Post-Hearing Order.)

The parties continued to develop their models in parallel and presented results from their flow models in Phase 2 of the hearing and results from their solute transport models in Phase 3 of the hearing.

[26] The hearing officer did not invite Cal-Am to respond to MCWD and Marina experts' criticisms of NMGWM^{2022} and prior models presented in Phase 1 of this proceeding, and we do not evaluate those criticisms because the evidence was superseded by the testimony and other evidence submitted in Phases 2 and 3.

Water Board Steady-State Models

The Cal-Am WBSSM^{2023} and MCWD WBSSM^{2023} are steady-state flow models and solute transport models developed from the NMGWM^{2022} presented in Phase 1 of this proceeding. The models are similar because the parties' technical experts were able to agree on most of the models' construction, calibration, and parameters. The technical experts did not reach agreement on several issues, however, and these disagreements resulted in some differences in the model results presented the parties presented.

The areas of agreement and disagreement between the parties' technical experts, as well as their more general concerns with the applicability of the modeling techniques used in Phases 2 and 3, are identified and discussed in the technical memoranda the parties' experts submitted. (See, e.g., Exhs. Cal-Am-141 & MCWD-128 [flow models]; Cal-Am-177 & MCWD-165 [transport models].)

We acknowledge these concerns and disagreements between the parties' technical experts. However, we conclude that the Cal-Am WBSSM^{2023} and MCWD WBSSM^{2023} represent the technical experts' best efforts to simulate the potential effects of the proposed project based on the available information and time to develop these models. We rely on the results of these models in our responses to the court's questions and generally consider the results from the two models to be reliable evidence of a range of possible outcomes from operation of the proposed project.

Model Scenarios

The AHO hearing officer directed the parties to run 12 model scenarios using the parties' respective models. The hearing officer also directed the parties to present model results comparing scenarios with project pumping to scenarios with no project pumping. (2023-03-07 Post-Hearing Order.) The scenarios include three project pumping configurations:

1. No project pumping;
2. 11.6 mgd project pumping; and
3. 15.5 mgd project pumping.

For each pumping configuration, the scenarios consider four calibration and potential SGMA implementation options, which are identified as Options A, B, C, and D. Figure 3 shows a matrix of the 12 scenarios identified by numbers for the pumping configurations and letters for the calibration and SGMA implementation options.

Cal-Am MPWSP Slant Well Pumping Rate	Calibration and SGMA Implementation Scenarios			
	Option A	Option B	Option C	Option D
	WY 2019-2021 Calibration, No SGMA Implementation	WY 2009-2021 Base Period, No SGMA Implementation	WY 2009-2021 Base Period, Cal-Am SGMA Implementation	WY 2009-2021 Base Period, MCWD/Marina SGMA Implementation
None	A1	B1	C1	D1
11.6 MGD Slant Well Pumping (for 4.8 MGD Production)	A2	B2	C2	D2
15.5 MGD Slant Well Pumping (for 6.4 MGD Production)	A3	B3	C3	D3

Figure 3 – WBSSM Predictive Model Scenarios (adapted from 2023-03-07 Post-Hearing Order, p. 3.)

Option A, the "Calibration Scenario," assesses the impacts of project pumping configurations if climate conditions and groundwater elevations remain consistent with those observed during water years 2019 to 2021 and future conditions in the groundwater basin do not change due to SGMA implementation projects.

Option B assesses the impacts of project pumping configurations if climate conditions remain consistent with those observed during water years 2009 to 2021 and future conditions in the groundwater basin do not change due to SGMA implementation projects.

Option C assesses the impacts of project pumping configurations if climate conditions remain consistent with those observed during water years 2009 to 2021 and future conditions in the groundwater basin include a regional extraction barrier. A regional extraction barrier is a series of extraction wells intended to form a barrier to seawater intrusion and is one of nine potential priority projects identified in the 180/400 Subbasin GSP. (SVBGSA Combined GSP 2020-0123, p. 345.)

Option D assesses the impacts of project pumping configurations if climate conditions remain consistent with those observed during water years 2009 to 2021 and future conditions in the groundwater basin include significant reductions in annual groundwater extraction by groundwater users within the 180/400 Subbasin. As noted by MCWD in its objection to the Draft Report, Scenario D could serve as a proxy for a SGMA-compliance scenario that relies on a combination of reduction in extractions and groundwater recharge. (2025-01-25 MCWD Objections and Comments to Draft Report, p. 15.)

The inclusion of both Option A and Option B arose from a disagreement between the parties' experts regarding the appropriate data set for recharge values for the predictive model scenarios. During the March 1, 2023 Status Conference, the parties' experts discussed this issue but were not able to reach agreement (See 2023-03-01 City of Marina v. RMC Lonestar Hearing Transcript (Morning), pp. 98–112.) The hearing officer directed the parties to present model results for both the 2019 to 2021 dataset (as Option A) and the 2009 to 2021 dataset (as Option B).

The analysis in this report of model results is nearly all from only Option B scenarios. During Phases 2 and 3 of this proceeding, the parties' experts generally focused their presentations of model results comparing changes in groundwater elevations and TDS concentrations on Option B scenarios. (See Exhs. MCWD-161; MCWD-165; Cal-Am-143 & Cal-Am-175.) In addition, the model results from Options A and B are not substantially different, and the differences in elevation or TDS concentration changes between the options would not change our conclusions in our responses to the court's questions.

Options C and D are included in the model scenarios to assess the effects that future groundwater management actions or projects, intended to help achieve sustainability in the 180/400 Subbasin, might have on the model-simulated effects of the proposed project. However, model results for these options are more speculative than results for options without potential SGMA implementation actions. This is because we cannot predict, based on the evidence in the record, the likelihood, extent, or timeline for implementation of an extraction barrier project or a reduction in groundwater pumping. Because of the high degree of uncertainty, we do not evaluate the results from Option C and D scenarios in our responses to the court's questions that rely on groundwater modeling results. Furthermore, Options C and D assume actions that mitigate the impacts of overdraft on groundwater conditions in the subbasins.

Analyzing the potential impact of the project absent other mitigating actions should produce a "worst case" scenario to assess the potential impacts of the proposed draw. The overall magnitude of the impact of Cal-Am's proposed draw may vary depending on future SGMA compliance actions and resulting conditions in the basin, but overall conditions in the basin under Option C and D scenarios should be improved as compared to the no-mitigation alternative of the Option B scenario. These improved conditions would reduce the likelihood that the proposed draw by Cal-Am may injure other legal users or result in unreasonable harm.

5 LEGAL DISCUSSION

5.1 Rights to Groundwater

In California, rights to groundwater are generally categorized as overlying, appropriative, or prescriptive. (*Antelope Valley Groundwater Cases* (2021) 62 Cal.App.5th 992, 1023.)

5.1.1 Overlying Rights

An overlying right attaches to land overlying a groundwater basin and consists of an equitable share of the sustainable yield of the basin, correlative to the rights of other overlying users, for use on overlying lands. (*Katz v. Walkinshaw* (1903) 141 Cal. 116, 118, 135–136.)[27] An overlying user can pump as much water as the user can apply to reasonable and beneficial use on the overlying parcel so long as other overlying users are not injured. (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1240.) In times of shortage, pumping must be curtailed correlatively, to provide each overlying user with a reasonable share of the available supply. (*Id.* at p. 1241.) Overlying rights generally take priority over appropriative rights and are not lost through non-use. (*Antelope Valley Groundwater Cases*, *supra,* 62 Cal.App.5th at pp. 1022–1023.) Extractions under overlying rights are not subject to the water right permit and license system administered by the State Water Board. (See Wat. Code, §§ 1201, 1202.)

5.1.2 Appropriative Rights

Appropriative rights to groundwater authorize the pumping and use of groundwater that is surplus to the needs of overlying users but within the sustainable yield of the basin. (*Antelope Valley Groundwater Cases*, *supra*, 62 Cal.App.5th at p. 1023.) An appropriator is "limited to taking *only* the remainder (or surplus) of the basin's 'safe yield.'" (*Id*. at p. 1024.) Once the needs of overlying water users are fully satisfied, appropriative rights to any surplus are governed by the principle of first in time, first in right. (*City of Santa Maria v. Adam* (2012) 211 Cal.App.4th 266, 279.)

Water extracted under an appropriative water right is not limited to use on overlying lands and may be exported for use outside of the basin. The extraction of groundwater for public use such as a municipal water supply, where not applied to a city's own property, is an appropriative use of water rather than an overlying use. (*City of San Bernardino v. City of Riverside* (1921) 186 Cal. 7, 24–25.)

Groundwater appropriations are not subject to the water permit and license systems unless the appropriations are from subterranean streams in known and definite

[27] In relevant precedential decisions, courts have used the terms "sustainable yield" and "safe yield" essentially interchangeably. These terms are discussed in more detail in Section 5.1.4.

channels, a narrow class of groundwater not at issue in this proceeding. (See Wat. Code, § 1201.) As against those with an existing right, a proposed new appropriator has the "burden of proving the existence of a surplus from which it can extract the quantity it desires … without injury to the uses and requirements of those who have prior rights." (*Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist*. (1935) 3 Cal.2d 489, 535; see also *Peabody v. City of Vallejo* (1935) 2 Cal.2d 351, 381.) A valid appropriation of groundwater includes the following elements: "(1) [t]he intent to appropriate water and apply it to a beneficial use; (2) the actual . . . extraction from a ground-water basin; and (3) the application of water to a beneficial use within a reasonable time." (*Turlock Irrigation District v. Zanker* (2006) 140 Cal. App. 4th 1047, 1055; see also Hutchins, The California Law of Water Rights (1956) p. 108.)

5.1.3 Prescriptive Rights

A prescriptive right to groundwater is a right acquired by taking water to which someone else has a superior claim. This may be accomplished by the extraction and use of water that exceeds the basin's sustainable yield. "An appropriative taking of water which is not surplus is wrongful and may ripen into a prescriptive right where the use is actual, open and notorious, hostile and adverse to the original owner, continuous and uninterrupted for the statutory period of five years, and under claim of right." (*City of Santa Maria*, *supra*, 211 Cal.App.4th at p. 279; *California Water Service Co. v. Edward Sidebotham & Son* (1964) 224 Cal.App.2d 715, 726.)

5.1.4 Sustainable Yield of a Groundwater Basin

"'Safe yield' is defined as 'the maximum quantity of water which can be withdrawn annually from a ground water supply under a given set of conditions without causing an undesirable result[,]' i.e. a gradual lowering of the groundwater levels." (*Cent. & W. Basin Water Replenishment Dist. v. S. California Water Co.* (2003) 109 Cal.App.4th 891, 899, fn. 4 [as modified on denial of reh'g (July 9, 2003)] [quoting *City of Los Angeles v. City of San Fernando* (1975) 14 Cal.3d 199, 278].) "The phrase 'undesirable result' is understood to refer to," among other possible harms to the basin, "a gradual lowering of the ground water levels resulting eventually in depletion of the supply." (*City of Los Angeles v. City of San Fernando* (1975) 14 Cal.3d 199, 278 [citing *City of Pasadena v. City of Alhambra* 33 Cal.2d at p. 929] [disapproved on other grounds by *City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224].) SGMA defines "sustainable yield" as "the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result." (Wat. Code, § 10721, subd. (w).)

Although a decrease in the amount of groundwater stored in the basin from pumping in excess of replenishment may be immaterial when considered on an annual basis, over time, the cumulative overdraft may injure existing uses and users or cause unreasonable harm. “Each taking of water in excess of the safe yield . . . was wrongful and was an injury to the then existing owners of water rights, because the overdraft, from its very beginning, operated progressively to reduce the total available supply.” (*City of Pasadena, supra,* 33 Cal.2d at p. 929; *City of Santa Maria, supra*, 211 Cal.App.4th at p. 292.)

A quantification of the sustainable yield of a groundwater basin should include all parts of the basin with significant hydrological connection to one another such that withdrawal of groundwater from one part of the basin affects groundwater conditions in the other hydrologically connected parts. The interconnected groundwater within the basin is a common source from which legal users may draw in accordance with the priority of their rights. (See, e.g., *City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1234 [describing the five hydrologic subareas of Alto, Centro, Baja, Oeste, and Este Basin within the Mojave River Basin as “a single interrelated source” because the [ ] “basins are interconnected”]; *Antelope Valley Groundwater Cases* (2020) 59 Cal.App.5th 241, 251 & 255, fn. 8 [considering hydraulic connectivity to determine whether portions of the Butte Subbasin should be treated as a separate basin]; *City of Los Angeles v. City of San Fernando* (Super. Ct. L.A. County, 1979, No. 650079 pp. 18–19 [describing the groundwater basins as “separate underground reservoirs” with impediments to inter-basin groundwater flow such that “the extractions of water in the respective basins … do not significantly or materially affect the groundwater levels in any of the other basins”]; see also *O.W.L. Foundation v. City of Rohnert Park* (2008) 168 Cal.App.4th 568, 587 [quoting DWR, California’s Groundwater: Bulletin 118-Update 2003 (Oct. 2003) at p. 88 (“A groundwater basin is defined as an ‘alluvial aquifer or a stacked series of alluvial aquifers within reasonably well-defined boundaries in a lateral direction and a definable bottom’”)]; but see (Cal. Code Regs., tit. 23, § 341, subd. (g)(2) [subbasins as defined by Bulletin 118 “refer generally to any subdivision of a basin based on geologic and hydrologic barriers or institutional boundaries ….”].)

5.1.5 Prohibition on Wasteful or Unreasonable Use or Method of Diversion of Water

Under article X, section 2 of the California Constitution and section 100 of the Water Code, the exercise of all water rights, regardless of the basis under which the right is held, are constrained by the rule of reasonableness. (*Peabody v. Vallejo* (1935) 2 Cal.2d 351, 366-367; *California Farm Bureau Federation v. State Water Resources Control Bd.* (2011) 51 Cal.4th 421, 429, *as modified* (Apr. 20, 2011); *Modesto Properties Co. v. State Water Rights Bd.* (1960) 179 Cal.App.2d 856, 862.)

Article X, section 2 provides in relevant part:

> It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented …. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water.

The rule that water diversions and use must be reasonable is "the overriding principle governing the use of water in California." (*People ex rel. State Water Resources Control Board v. Forni* (1976) 54 Cal.App.3d 743, 750; *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 198–199.) "What is a reasonable use or method of use of water is a question of fact to be determined according to the circumstances in each particular case ... Such an inquiry cannot be resolved *in vacuo* isolated from statewide considerations of transcendent importance." (*Joslin v. Marin Mun. Water Dist.* (1967) 67 Cal.2d 132, 139–140.)

5.1.6 Developed or Salvaged Water

An appropriator may claim a superior right to water that the right holder has developed or salvaged, which superior claim applies against all other right holders. The principles of "salvaged" water and "developed" water are similar, the terms often used interchangeably, and "[t]he general rules governing rights to the use of salvaged and developed water are the same, viz., that the person who by his own efforts makes such waters available is entitled to use them, provided that in doing so he is not infringing on the prior rights of others." (Hutchins, The Law of California Water Rights, *supra*, at p. 383.) The technical difference between the two is that salvaged water refers to water that is saved from the supply, "water that is saved from waste," and developed water refers to new water that is added to the supply. (*Ibid*.; *City of Santa Maria, supra*, 211 Cal.App.4th at pp. 266, 299, 304–305 [recognizing a superior right to water in the groundwater basin that was stored as surface water and released at a rate to allow infiltration into the basin rather than flowing downstream to the ocean].)

"[A] priority right to salvaged water belongs to the one who made it available." (*Id.* at p. 304; see also *Pomona Land & Water Co. v. San Antonio Water Co.* (1908) 152 Cal. 618, 624–625 [finding appropriator had superior right to water made available by construction of a pipeline to avoid losses by seepage, percolation, and evaporation]; *Wiggins v. Muscupiabe Land & Water Co.* (1896) 113 Cal.182, 196 [finding that the defendant was

entitled to salvaged water that would have been lost by absorption and evaporation absent salvage efforts]; *Cohen v. La Canada Land & Water Co.* (1907) 151 Cal. 680, 691–693 [holding that an upstream water user could take water that otherwise would have been lost to the earth and would never have reached downstream users].) As with the development of any other appropriative right, however, the burden is on the appropriator to demonstrate that its diversion and use of developed or salvaged water will not injure other legal users.

5.1.7 Replacement Water

Replacement water is another means by which a junior water user may acquire a right to divert or extract water even when water would not otherwise be available for appropriation. (See generally, MacDonnell, *Out-of-Priority Water Use: Adding Flexibility to the Water Appropriation System*, (2004) 83 Neb. L. Rev. 485.) A right holder may supply replacement water to senior users to prevent injury caused by a more junior diversion. In the context of rights to groundwater, replacement water may offset extractions that would otherwise exceed the sustainable yield of the basin or otherwise cause injury to other right holders, or result in unreasonable harm that would violate the rule of reasonableness.

Replacement water is a common element of settlement agreements or physical solutions in California groundwater adjudications, in which users who extract more than their apportioned share must either provide replacement water or pay a fee for the purchase of replacement water to prevent undesirable results in the basin. (See, e.g., *Antelope Valley Groundwater Cases*, Judgment and Physical Solution, Judicial Council Coordinated Proceeding No. 4408, Santa Clara County Case No. 1-05-CV-049053 (Dec. 23, 2015); *City of Barstow v. Mojave Water Agency*, Judgment, Riverside County Case No. 208568 (Jan. 10, 1996); *California Water Service v. City of Compton*, Amended Judgment, Los Angeles County Case No. C 506 806 (Dec. 5, 2014); *Upper San Gabriel Valley Municipal Water Dist. v. City of Alhambra*, Amended Judgment, Los Angeles County Case No. 924128 (June 21, 2012); *Southern California Water Co. v. City of La Verne*, Judgment, Los Angeles County Case No. KC029152 (Dec. 18, 1998); *California American Water v. City of Seaside*, Amended Decision, Monterey County Case No. M66346 (Feb. 9, 2007) (using the term “replenishment water”). Like California, several other western states authorize out-of-priority diversions with the provision of replacement water to prevent injury to senior users in observance of the priority system and to maximize beneficial use of the states’ waters.[28]

[28] “Commonly, an augmentation plan authorizes out of priority diversions for beneficial use to the extent that a replacement supply of water is made available to substitute for the otherwise diminished amount of water available to supply other water rights. This

5.2 Injury to Water Rights

The proprietary interest in water includes the right to divert and use water of a quantity and quality necessary for the use. Injury to a water right is a material and unreasonable interference with the exercise of the right, whether by interference with physical availability, water quality, method of diversion, or other types of harms. For example, injury may occur from diversion of water that causes water to be physically unavailable to a user with senior priority. Or injury may occur from interference in the senior user's access to water that causes the senior user to sustain material costs to divert and use the quantity of water to which the user has a right. Possible remedies to address injury to a water right include curtailment of the junior user's diversion, payment of damages,

---

allows the junior diversion to operate without injury to senior vested water rights. Augmentation plans allow for flexibility and maximum utilization of water while protecting senior rights…." Colorado Division of Water Resources, Department of Natural Resources, https://dwr.colorado.gov/services/water-administration/augmentation-plans (last visited June 19, 2025.) "Augmentation plans implement the Colorado doctrine of optimum use and priority administration, which favors management of Colorado's water resource to extend its benefit for multiple beneficial purposes. Out-of-priority diversions can occur only when a replacement supply of water, suitable in quantity and quality, is made available to substitute for the otherwise diminished amount of water available to supply other water rights exercising their priorities." (*Williams v. Midway Ranches Property Owners Assn.* (Colo. 1997) 938 P.2d 515, 522; see also *Dry Gulch Ditch Co. v. Hutton* (Or. 1943) 133 P.2d 601, 675 ["A subsequent appropriator may assert the right to take the waters of the stream from which the prior appropriation has been made and give the prior appropriator in return therefor other water from a different source, but of like quantity and quality delivered at such a place that the prior appropriator can make full use thereof without being injured in any way"]; Wyo. Stat. Ann. § 41-3-106, subd. (a) & (d) [(a) "Any appropriator owning a valid water right in and to the use of the ground, surface or reservoir waters of the state, where the source of the appropriation is at times insufficient to fully satisfy such appropriation, or better conservation and utilization of the state's water can be accomplished, or the appropriator can develop appropriable water but cannot economically convey it to its point of use, may petition the state engineer for an order allowing an exchange and the use of stored, direct flow, or ground water from another source or from another appropriation from the same source … (d) It is the policy of the state to encourage exchanges. The state engineer shall not issue an exchange order if the rights of other appropriators will be injuriously affected thereby, or if the proposed exchange would, in the opinion of the state engineer, be too difficult to administer or would be adverse to the public interest"]; *Pima Farms Co. v. Proctor* (Ariz. 1926) 245 P. 369 ([authorizing junior appropriator to provide replacement water to avoid injury to senior right holder from lowering groundwater levels]; MacDonnell, *supra,* 83 Neb. L. Rev. at p. 522 [discussing similar examples].)

or a physical solution, such as the provision of replacement water to the senior user to make up for the losses from a junior's use.

5.2.1 Material and Significant Impacts

Not every interference with the exercise of a water right constitutes injury. Injury occurs if the interference is material and significant, and the cost to the senior right holder of avoiding the harm is unreasonable. "An injury occurs when the change materially diminishes the quantity of water or deteriorates the quality for the intended uses." (State Water Board Order WR 79-22, p. 7; see *Hudson v. Dailey* (1909) 156 Cal. 617, 630 [to make a case for an injunction against another water user, the plaintiff must "show substantial injury"]; *Waterford Irr. Dist. v. Turlock Irr. Dist.* (1920) 50 Cal.App. 213, 221 ["There must be a substantial as distinguished from a mere technical or abstract [injury]"]*; Phoenix Water Co. v. Fletcher* (1863) 23 Cal. 481, 487 ["A mere temporary or trivial irregularity in the flow of water, such as does not cause actual injury to the proprietor below, will not amount to an actionable injury"].)

A senior right holder may be required to incur some reasonable expense to allow another to beneficially use available water. "The mere inconvenience, or even the matter of extra expense, *within limits which are not unreasonable*, to which a prior user may be subjected, will not avail to prevent a subsequent appropriator from utilizing his right." (*Peabody v. Vallejo* (1935) 2 Cal.2d 351, 376 [emphasis in original] [quoting *Waterford Irr. Dist., supra,* 50 Cal.App. at p. 221]); see also State Water Board Decision 421 (1938) at p. 9; *Rancho Santa Margarita v. Vail* (1938) 11 Cal.2d 501, 561 ["[I]t would be an unreasonable use to require the flow of the surface stream if such cattle can reasonably be watered at reasonable expense by some artificial means"].) This principle accords with the mandate in article X, section 2 of the California Constitution, which requires that the state's water resources be "put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented."

5.2.2 Impairment of Water Quality

An impairment of water quality may infringe upon a water right even if an adequate quantity of water is available. (*Joerger v. Pacific Gas & Electric Co.* (1929) 207 Cal. 8, 25–26 [upholding cause of action for temperature pollution of waters from power generation resulting in water quality not suited for stock or domestic use]; *Phoenix Water Co. v. Fletcher* (1863) 23 Cal. 481, 487 [finding that a right holder is "clearly entitled to protection against acts which materially … deteriorate [the water's] quality for the uses to which he wishes to apply it"].) "[U]nder the law of this state, an appropriator of water from a stream for domestic and similar uses has the right to enjoin the pollution of the stream above him, so that the water may flow down to his place of diversion in a

condition as suitable for those uses as it was in at the time he acquired his right to take it." (*Town of Antioch v. Williams Irr. Dist.* (1922) 188 Cal. 451, 459.)

Like impairments to physical access to water, impairments to water quality constitute injury only if the impacts to the senior right holder are significant and unreasonable. For example, in *Hill v. Smith*, (1865) 27 Cal. 476, the court held that junior appropriators of water for mining purposes whose claims were located upstream of other more senior mining diversions had no right to run their mining tailings in such a manner as either to obstruct the flow of water into the lower ditch or to so deteriorate the quality of the water so as to render it unfit for mining purposes. "[B]ut the mere fact that their mining operations muddy the water, rendering it less valuable, though not unfit for mining purposes, or deposit sediment in the ditch to only such an extent as may easily be removed, without great cost, does not render them liable…." (*Id.* at p. 478.)

In the context of water quality impacts from seawater intrusion, courts have considered the rule of reasonableness and the interest in maximizing the beneficial use of the water resources of the state to allow junior right holders to divert and use water even though the resulting seawater intrusion injured a senior user. A significant amount of water is generally required to flow to the ocean to hold back the advancement of saltwater. "[W]hile common law clearly affords water rights holders relief from pollution, it is debatable whether such protection include the right to require upstream subsequent appropriators to curtail their use of water solely to permit a sufficient flow to resist natural saltwater intrusion." (*United States v. State Water Resources Control Bd.* (1986) 182 Cal.App.3d 82, 117, citing *Town of Antioch v. Williams Irr. Dist.* (1922) 188 Cal. 451, 460.)

In *Town of Antioch v. Williams Irrigation District*, the court relied on the public interest in maximizing the beneficial use of the state's limited water resources to conclude that there was no injury to a senior right holder from seawater intrusion that was exacerbated by upstream diversions by junior users. (*Town of Antioch v. Williams Irr. Dist.* (1922) 188 Cal. 451.) The Town of Antioch was a senior diverter of fresh water from the Sacramento-San Joaquin Delta for domestic and municipal uses. Antioch's intakes were located near the point within the Delta where freshwater and seawater intermingled, the location of which fluctuated depending on the tides and flows in the Sacramento and San Joaquin Rivers. Antioch filed suit against diverters of water from the Sacramento River upstream, alleging that their diversions diminished flows to an extent that allowed saltwater that was unsuitable for domestic purposes to reach the location of Antioch's intakes.

The court concluded that Antioch did not have a right to prevent upstream diversions of water to maintain the saltwater line from incoming tides below Antioch's intake. The

court held that to allow Antioch to prevent the amount of upstream diversions as would be necessary to hold back the saltwater tides below its intake would "under the circumstances existing in this state, would be extremely unreasonable and unjust to the inhabitants of the valleys above, and highly detrimental to the public interests besides." (*Id*. at p. 465.) To hold otherwise would have allowed a single downstream appropriator to "keep more than 300,000 acres of fertile land in the valley above dry and unproductive… [The appropriator] would, in effect, appropriate all the water flowing in both of these large rivers. It would be hard to conceive of a greater waste for so small a benefit." (*Id.* at p. 461.)

In contrast, in *Allen v. California Water & Telephone* (1946) 29 Cal.2d 466, the Supreme Court upheld the determination of the trial court to enjoin the holder of a junior appropriative groundwater right from pumping and exporting groundwater. The trial court found that the defendant's continued pumping was "an existing hazard to all overlying owners" because of the threat of "permanent injury through mineralization and salt water intrusion." (*Id.* at pp. 482, 485.) The defendant also presented a physical solution to the trial court that would have limited extractions based on the impact of pumping on a series of test wells, and included an agreement to pay for the deepening of plaintiffs' wells. The court rejected the proposal as "unworkable." (*Id.* at p. 487.) The Supreme Court upheld the trial court's finding that the junior user's pumping exceeded the safe yield (or sustainable yield) of the basin, but allowed pumping by the junior exporter at times when there were surface flows in the Tijuana River, which flowed through and replenished the basin. The court retained jurisdiction to modify the decree based on evidence of additional available supplies from the operation of a new upstream project that might increase groundwater recharge and therefore the sustainable yield of the basin. (*Id.* at p. 488.)

5.2.3 Injury to Groundwater Rights

In a groundwater basin, injury to other legal users of water may be more difficult to identify than in a surface stream. Extractions in excess of the safe or sustainable yield of a basin may lower groundwater levels but generally will not eliminate the supply. Groundwater is still available but may be more expensive to extract or have impaired water quality, or the extractions may cause significant and unreasonable results in the basin such as reduced groundwater supplies, land subsidence, seawater intrusion, or unreasonable impacts to public trust or other beneficial uses of surface waters.

Injury to a senior groundwater right holder may result from substantial lowering of groundwater levels caused by a junior right holder's extractions, particularly where the senior right holder must deepen its wells to continue to access the supply. (See, e.g., *Burr v. Maclay Rancho Water Co.* (1908) 154 Cal. 428, 432-433, 437-438 [defendant's groundwater pumping permanently lowered groundwater levels as much as seven feet over an 18-month period and the plaintiff was unable to operate his pumps while

defendant was pumping]; *Lodi v. East Bay Municipal Utility Dist.* (1936) 7 Cal.2d 316, 331, 334, 339 [defendant's diversions would cause a progressive decline in water levels of at least one foot per year and the plaintiff would be required to continually lower its wells to access water]; *Corona Foothill Lemon Co. v. Lillibridge* (1937) 8 Cal.2d 522, 524–525 [defendant's groundwater pumping was materially lowering groundwater levels in the basin and would eventually "exhaust the water therein"]; *Smith v. Wheeler* (1951) 107 Cal.App.2d 451, 455–456 [defendant's pumping would lower water levels to such an extent that the plaintiffs' wells could not operate]; *Monolith Portland Cement Co. v. Mojave Public Utilities Dist*. (1957) 154 Cal.App.2d 487, 493–494 [defendant's groundwater pumping would lower groundwater levels to such an extent that other pumpers had to lower their wells to continue pumping].)

Injury may also occur when lowering of the groundwater table results in impairment of water quality, often in the form of seawater intrusion. (See *Allen v. California Water & Tel. Co.* (1946) 29 Cal.2d 466, 485–486 [finding that where there is a threat of salt water intrusion, overlying owners are entitled to protection "against any exportation of the water that would unduly increase their costs or lower the groundwater level below the danger point"]; *City of Lodi v. East Bay Municipal Dist.* (1936) 7 Cal.2d 316, 345 (*Lodi v. EBMUD)* [holding that the city has a right to maintenance of groundwater levels above the "danger level" to protect its municipal supply].)

Groundwater extractions in excess of the sustainable yield of the basin may be injurious even if there is no immediate harm to other users. In *City of Pasadena v. City of Alhambra*, the court described the injury as not "an immediate disability to obtain water, but, rather … the continual lowering of the level and gradual reducing of the total amount of stored water, the accumulated effect of which, after a period of years, would be to render the supply insufficient to meet the needs of the rightful owners." (*City of Pasadena v. City of Alhambra* (1949) 33 Cal.2d 908, 929; see also *Lodi, supra,* 7 Cal.2d at p. 339.) "Each taking of water in excess of the safe yield … was wrongful and was in injury to the then existing owners of water rights, because the overdraft, from its very beginning, operated progressively to reduce the total available supply." (*City of Pasadena, supra*, 33 Cal.2d at p. 929.)

5.3 Physical Solution

"The phrase 'physical solution' describes an agreed upon or judicially imposed resolution of conflicting claims to water in a manner that advances the constitutional rule of reasonable and beneficial use of the state's water supply." (*City of Santa Maria*, *supra*, 211 Cal. App. 4th at p. 287 [cited by *Antelope Valley Groundwater Cases*, *supra,* 62 Cal. App. 5th at p. 1025].) Because article X, section 2 of California's Constitution mandates that "the water resources of the State be put to beneficial use to the fullest extent of which they are capable," a court must consider in cases involving disputes

over water rights, whether a physical solution is available to allow the further development of the state's water resources while protecting existing right holders from injury. (See State Water Board Decision 1631, § 2.5 at p. 10 ["Adoption of a physical solution is consistent with the constitutional goal of promoting maximum beneficial use of the State's water resources"].) "[I]t is not only within the power, but it is also the duty of the trial court to admit evidence relating to possible physical solutions, and if none is satisfactory to it to suggest on its own motion such physical solution. The court possesses the power to enforce such solution regardless of whether the parties agree." (*Lodi v. EBMUD* 7 Cal.2d at p. 341; see also *California American Water v. City of Seaside* (2010) 183 Cal.App.4th 471, 480; *Central Basin Municipal Water Dist. v. Fossette* (1965) 235 Cal.App.2d 689, 699–700; *Montecito Valley Water Co. v. City of Santa Barbara* (1904) 144 Cal. 578, 591–592.)

In *Lodi v. EBMUD*, the City of Lodi brought an action against the East Bay Municipal Utility District (EBMUD) seeking, among other relief, to restrain EBMUD from diverting and storing water from the Mokelumne River in a manner that reduced the supply of groundwater available to the city. The Mokelumne River was (and remains) a significant source of recharge to the groundwater basin from which Lodi pumped water for its municipal supply. Lodi asserted that EBMUD's upstream diversions reduced the amount of water that infiltrated into the groundwater basin, particularly in wet years when flood flows would otherwise recharge groundwater levels, causing lowering groundwater levels over time and injury to Lodi's senior appropriative groundwater right. The trial court concluded that to maintain the level of groundwater recharge necessary to avoid injury to Lodi's right to pump up to 3,600 afy, EBMUD must release 120,000 to 360,000 acre-feet of surface water from storage annually.

The appellate court held that article X, section 2 of the California Constitution "compels the trial court … to ascertain whether there exists a physical solution of the problem presented that will avoid the waste, and that will at the same time not unreasonably and adversely affect the prior appropriator's vested property right." (*Lodi v. EBMUD*, *supra*, at pp. 339–340.) The appellate court remanded the matter to the trial court to take evidence as to the elevation to which groundwater levels could be lowered in the basin, with an appropriate margin of safety, without affecting the city's water supply. If water levels dropped below the threshold designated by the court, EBMUD must supply water to the city or artificially raise the groundwater levels or be limited in the amount of water EBMUD could store under its rights to maintain the amount of recharge that would occur naturally. (*Id.* at p. 343.) "Such a decree would adequately meet the requirements of the Constitution by preventing an unreasonable waste of the waters of the stream, and at the same time would adequately protect the prior rights of the city of Lodi." *(Id*. at p. 344.)

In *Rancho Santa Margarita v. Vail*, the plaintiff sued for a declaration of its riparian rights to the waters of the Santa Margarita River and an injunction preventing the defendants from using more than a reasonable share of the available water pursuant to their riparian rights. (*Rancho Santa Margarita, supra,* 11 Cal.2d at pp. 508–509.) The plaintiff contended that absent the defendants' upstream diversions, the Santa Margarita River was a perennial surface stream through the plaintiff's property, but due to the defendant's diversion, the river consisted of only subsurface flow during the dry portions of the year. As a result, the plaintiff was required to "scrap[e] out shallow water holes about 50 feet square in the bed of the stream" to water its cattle. (*Id.* at p. 554.)

The appellate court held that neither the plaintiff nor the defendant was entitled to satisfy their need for water from the surface stream if those demands could be economically met through a physical solution. (*Id.* at pp. 556–559.) The court noted that there may be reservoir sites available to the defendants, and that by diversion and storage of high winter flows, the defendants' water demands could be fully met during the dry months with minimal additional diversions. (*Id.* at p. 560.) The court further noted that, in the alternative, there may be reservoir sites available on the plaintiff's property for storage of high winter flows for use during the summer for livestock watering. Based on the available evidence, the court concluded that there appeared to be "a strong possibility of working out some physical solution, at a reasonable cost, that may be of benefit to both parties." (*Ibid*.) "[I]f the facts warrant it, [the trial court] can grant an injunction in favor of [the plaintiff] unless [the defendants] agree to bear a fair proportion of the expense necessary to construct the required improvements on respondent's ranch. This would appear to be a fair, just and equitable rule." *(Id.* at p. 561.)

The courts have also imposed physical solutions, even over the objection of some of the parties, in comprehensive groundwater adjudications. These physical solutions can include approaches to groundwater management that are not otherwise explicitly authorized under the common law, such as the transfer of overlying rights and carryover of un-pumped rights, management by a water master, requirements for artificial groundwater replenishment, varying requirements depending on wet or dry conditions, and other equitable provisions. (McGlothlin & Acos, *The Golden Rule of Water Management*, (2015) 9 Golden Gate U. Envtl. L.J. 109, 120, fn. 57 [citing *Tulare Irrigation Dist*. *v. Lindsay–Strathmore Dist.* (1935) 3 Cal.2d 489]; fn. 58 [citing *California American Water v. City of Seaside* (2010) 183 Cal.App.th 471, 474–476] & fn. 59 [citing *City of Pasadena v. City of Alhambra* (1949) 33 Cal. 2d 908)].) This proceeding and the underlying lawsuit is not, however, a comprehensive groundwater adjudication. A comprehensive groundwater adjudication requires notice to all claimants of a right to extract and use water from the basin or subbasin and is subject to specific statutory procedures.

Ultimately, “[e]ach case must turn on its own facts, and the power of the court extends to working out a fair and just solution, if one can be worked out, of those facts.” (*Rancho Santa Margarita, supra,* at pp. 560–561 [cited in *Antelope Valley Groundwater Cases*, *supra,* 62 Cal. App. 5th at p. 1026].) The solution must not unreasonably or adversely affect the existing legal rights and respective priorities of the parties (cf. *City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1243–1244, 1250–1251), but “[n]o injunction should be granted if its effect will be to waste water than can be used.” (*Rancho Santa Margarita, supra,* 11 Cal. 2d at pp. 558–559.) “[I]n this type of case the trial court is sitting as a court of equity, and as such, possesses broad powers to see that justice is done in the case. The state has a definite interest in seeing that none of the valuable waters from any of the streams of the state should go to waste…” (*Id.* at pp. 560–561.) “[O]ur Supreme Court has encouraged the trial courts to be creative in devising physical solutions to complex water problems to ensure a fair result consistent with the constitution's reasonable-use mandate.” (*City of Santa Maria, supra,* 211 Cal. App. 4th at p. 288 [citing *Tulare Irrigation Dist., supra,* 3 Cal.2d at p. 574].)

Courts are authorized to refer the development of a physical solution to the State Water Board (or its predecessor, the State Water Commission) pursuant to Water Code section 2000 et seq. (See *Tulare Irr. Dist., supra,* 3 Cal. 2d at p. 575; *City of Lodi, supra,* 7 Cal.2d at p. 341; State Water Board Resolution No. 88-78 (June 16, 1988) Lower American River Court Reference, *Environmental Defense Fund, Inc. v. East Bay Municipal Utility District*, Alameda County Superior Court Case No. 425955 [non-precedential resolution under Gov. Code, § 11425.60].)

6 THE COURT'S QUESTIONS

6.1 Question 1

Where are the subsurface drawing source points (including capture zones) for each of the currently proposed Cal-Am wells located in relation to:

a. *seawater in the ocean itself;*
b. *drawing source points for the Marina Coast Water District ("MCWD") production wells;*
c. *the Subbasin Interface Zone;*
d. *the 180/400-foot Aquifer Subbasin;*
e. *the Monterey Subbasin;*
f. *the Cemex property;*
g. *the MCWD wells.*

Graphic depictions, if available, would be helpful.

6.1.1 Locations of Subsurface Drawing Source Points

The locations of the subsurface drawing source points for the proposed slant wells are the locations of the screened intervals of the wells. Slant Well 1 (which is also the Test Slant Well) is constructed, and the dimensions of the screened sections of the well are known and described below. Slant Wells 2 through 7 have not been constructed and the proposed depths and lengths of the screened sections of these wells are not in the evidentiary record, except that the wells "would be screened for approximately 400 to 800 linear feet at depths corresponding to both the Dune Sand Aquifer and the underlying 180-Foot Aquifer." (Exh. Cal-Am-38(b), p. 3-18.)

6.1.2 Screened Intervals of the Test Slant Well

The Test Slant Well head is located in the southern portion of the CEMEX Property (the state plane coordinates are northing 2,154,702.56 and easting 5,739,561.92). (Exh. Cal-Am-38(c), p. 53.) The well shaft is drilled toward the ocean at an angle of 19 degrees below horizontal, extending to a total length of 724 feet. (Exh. Cal-Am-38(c), p. 38.)[29] The well casing extends 720 feet and is screened from 140 to 245 feet in the Dune Sand Aquifer, and 400 to 710 feet in the 180-Foot Aquifer. (*Ibid.*) The end of the well

[29] There is a discrepancy between dimensions of the Test Slant Well in Table 3-2 of the EIR/EIS and in Appendix E3, Part 1 of the EIR/EIS. (Exhs. Cal-Am-38(b) & Cal-Am-38(c).) Table 3-2 lists proposed offshore, onshore, and total lengths of casings for Slant Wells 1 through 10. Appendix E3, Part 1 describes the dimensions of the Test Slant Well as constructed. We assume that the description of the dimensions as constructed in Appendix E3, Part 1 is the more accurate.

casing interval is approximately 170 feet horizontally offshore,[30] at a vertical depth of 235 feet below the well head, which is -200 feet NAVD88. (*Ibid.*)

From these dimensions, we calculate that the end of the well casing interval is approximately 180 feet offshore along the well shaft,[31] the length of the well casing located offshore that is not screened is 10 feet,[32] and the length of the screened interval located offshore is 170 feet.[33] The proportion of the well casing located offshore that is screened is approximately 94 percent.[34] The total length of the screened intervals is 415 feet,[35] of which approximately 41 percent is located offshore.[36]

6.1.3 Screened Intervals of Proposed Slant Wells 2 through 7

Proposed Slant Wells 2 through 7 will be drilled at approximately 14 degrees below horizontal to extend between 63 to 225 feet offshore. (Exh. Cal-Am-38(b), Tbl. 3-2, p. 3-19.) The well heads of Slant Wells 2 and 3 would be located at well Site 2 about 600 feet south of the Test Slant Well head at Site 1. (Exh. Cal-Am-38(b), pp. 3–18 & 3–19.) The remaining well heads would be located at Sites 3, 4, and 5, which would be spaced approximately 250 feet apart southward from Site 2. (Exh. Cal-Am-38(b), pp. 3–18 & 3–19.)

Figure 4 shows the approximate locations and layout of the proposed slant wells.

---

[30] There is potentially conflicting evidence in the record regarding the location of the Test Slant Well head relative to the MHW line. The well completion report for the Test Slant Well depicts the well head to be located 800 feet from the "Pacific Ocean." (Exh. MCWD-68, p. 2.) If the Test Slant Well is located 800 feet from the MHW line, the 724-foot Test Slant Well could not have any portion located beneath the ocean. However, based on the testimony of the parties' expert witnesses during the hearing, we rely on the description of the dimensions in Appendix E3, Part 1 for our analysis in this report.
[31] Cos(19 degrees) = 0.945; (170 feet / 0.945) = 179.9 feet.
[32] (720 feet – 710 feet) = 10 feet.
[33] (180 feet – 10 feet) = 170 feet.
[34] (170 feet / 180 feet) = 0.944, approximately 94 percent.
[35] Screened interval in Dune Sand Aquifer is (245 feet – 140 feet) = 105 feet. Screened interval in the 180-Foot Aquifer is (710 feet – 400 feet) = 310 feet. Total screened interval is (105 feet + 310 feet) = 415 feet.
[36] (170 feet / 415 feet) = 0.409, approximately 41 percent.

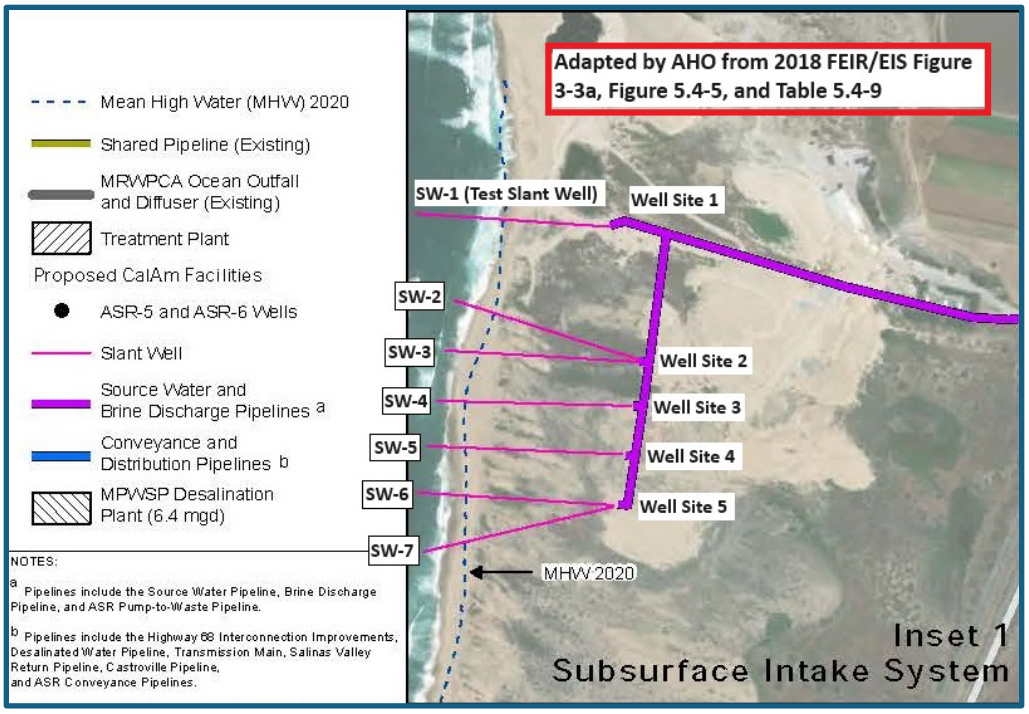


Figure 4 – Approximate locations of proposed slant wells

Figure 5 lists the proposed well casing dimensions, adapted from Table 3-2 of the EIR/EIS. (Exh. Cal-Am-38(b), Tbl. 3-2, p. 3-19.)

Adapted by AHO From Draft EIR/EIS, Table 3-2, p. 3-19

LENGTH OF PERMANENT SLANT WELLS SEAWARD OF MEAN HIGH WATER LINE

Well	Total Length	2020		2040		2060	
		Offshore	Onshore	Offshore	Onshore	Offshore	Onshore
Test Slant Well, SW-1	685	166	519	290	395	423	262
SW-2	970	63	907	219	751	385	585
SW-3	966	202	764	325	641	455	511
SW-4	961	162	799	292	669	431	530
SW-5	961	130	831	254	707	385	576
SW-6	961	174	787	298	663	428	533
SW-7	957	225	732	347	610	479	478

NOTES:

All lengths in feet.
MHW = Mean high water - A tidal datum. The average of all the high water heights observed over the National Tidal Datum Epoch. The 2020 MHW at the Monterey Tide Gauge NOAA#9413450 equals 1.53 m (5.02 ft) NAVD88, considering a high sea level rise scenario of 8.1 cm (3.2 in) by 2020 (5.46 ft by 2100). See also Appendices C1 and C2.

The lengths provided in this table indicate the total length of the well casing extending seaward of the MHW line. Because the slant wells would be drilled at an approximately 14-degree angle, the total horizontal distance seaward of the MHW line would be slightly shorter than the length of the well casing. The total horizontal distance seaward of the MHW line can be determined by dividing the length by 1.03.

SOURCE: Geoscience, 2017

Figure 5 – Proposed slant well casing dimensions

In the absence of precise dimensions, we can approximate the offshore and onshore lengths and proportions of the screened intervals for Slant Wells 2 through 7 using screened interval lengths of 400 and 800 feet as a range. We use the well casing dimensions listed in Table 3-2 of the EIR/EIS and assume that the proportion of the proposed slant well casing length offshore that is screened is 94 percent, similar to the proportion of the Test Slant Well casing offshore as described in the EIR/EIS. Figure 6 summarizes the offshore and onshore slant well screened interval dimensions based on our calculations for the Test Slant Well and approximations for proposed Slant Wells 2 through 7.

Well	Well Casing Interval Lengths[2] (feet)			Length of Screened Interval Offshore[3] (feet)	Offshore and Onshore Well Screen Lenths (feet) and Proportions for 400 ft. Total Well Screen Length				Offshore and Onshore Well Screen Lenths (feet) and Proportions for 800 ft. Total Well Screen Length			
	Total Length	Offshore	Onshore		Total Length[4]	Proportion Offshore	Onshore Length[5]	Proportion Onshore	Total Length[4]	Proportion Offshore	Onshore Length[5]	Proportion Onshore
SW-2	970	63	907	59	400	15%	341	85%	800	7%	741	93%
SW-3	966	202	764	190	400	47%	210	53%	800	24%	610	76%
SW-4	961	162	799	152	400	38%	248	62%	800	19%	648	81%
SW-5	961	130	831	122	400	31%	278	69%	800	15%	678	85%
SW-6	961	174	787	164	400	41%	236	59%	800	20%	636	80%
SW-7	957	225	732	212	400	53%	189	47%	800	26%	589	74%
Average	963	159	803	150	400	37%	250	63%	800	19%	650	81%
Test Slant Well[1]	720	180	540	170	415	41%	245	59%				

[1] The dimensions of the well casing intervals for the Test Slant Well are decribed in Appendix E3 part 1 of the EIR/EIS.
[2] The dimensions of the well casing intervals for Slant Wells 2 through 7 are listed in Table 3-2 of the EIR/EIS.
[3] The lengths of the screened intervals located offshore is calculated as the offshore lengths of well casings multuplied by 0.94.
[4] The total length range of screened intervals for Slant Wells 2 through 7 from EIR/EIS p. 3-18 for Slant Wells 2 through 7.
[5] The length of well screen intervals located onshore is calculated as the length of the well screen interval located offshore subtracted from the total length of the screened intervals.

Figure 6 – Offshore and onshore lengths and proportions of screened intervals for Slant Wells 2 through 7 and Test Slant Well

Cal-Am objects to this analysis of the likely locations and dimensions of Slant Wells 2 through 7 based on the descriptions of the proposed slant wells in the EIR/EIS because Special Condition 11 of the California Coastal Commission's approval of the project requires Cal-Am to "install the Project's slant wells to extend at least 1,000 feet seaward of the proposed well head locations and shall screen the wells so they extract water as far seaward as is feasible and without penetrating the 400-Foot Aquifer." (Exh. MCWD-125, p. 29; see also 2025-01-31 Cal-Am's Objections to Report of Referee, pp. 20-21.) This requirement will likely require some changes in the final design of the slant wells as described in the EIR/EIS but Cal-Am did not submit evidence about specific modifications to address Special Condition 11. This report's approximation of offshore and onshore lengths and proportions of screened intervals for Slant Wells 2 through 7 relies on the available evidence.

The Pacific Ocean is the western boundary of the CEMEX Property (Exh. MCWD-2, p. 7), the Subbasin Interface Zone (Exh. MCWD-9, p. 22), and the Monterey and 180/400

Subbasins (Exh. MCWD-2, p. 7.) The screened intervals of the proposed slant wells located onshore would be located beneath the CEMEX Property and the Subbasin Interface Zone, within the 180/400 Subbasin, approximately 0.5 to 0.75 miles north of the boundary between the Monterey and 180/400 Subbasins. (See Exh. MCWD-9, Figs. 3-1 & 3-4, pp. 17 & 24.) The screened intervals of the proposed slant wells located offshore would not be beneath the CEMEX Property or the Subbasin Interface Zone, and not within either the Monterey or 180/400 Subbasin. Figure 7, adapted from Figure 3-1 of Exhibit MCWD-9, shows the location of the proposed slant wells in relation to the MCWD production wells, 180/400 Subbasin, Monterey Subbasin, and CEMEX Property.

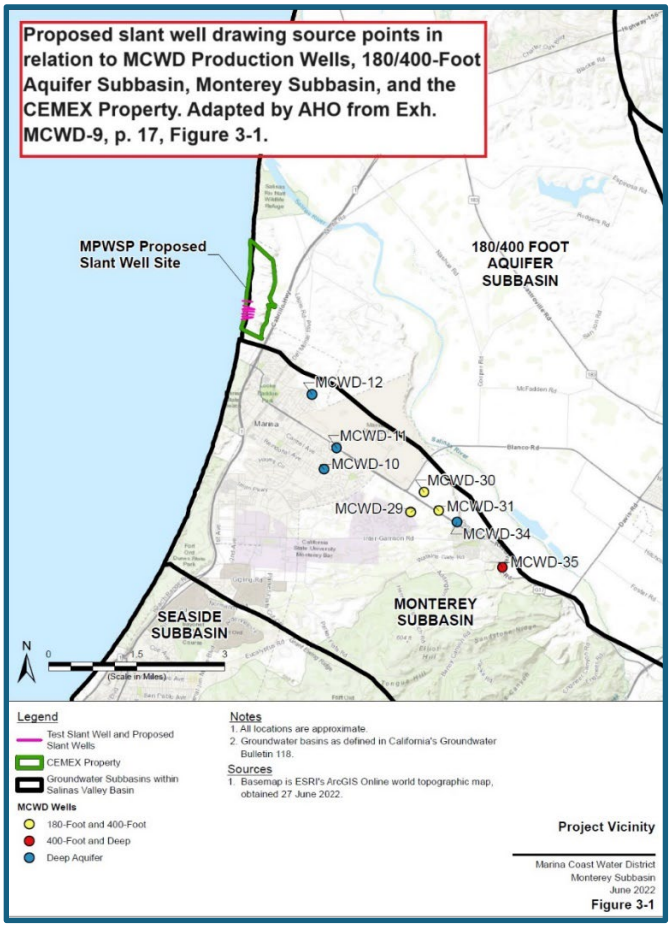


Figure 7 – Location of the proposed slant wells in relation to the MCWD production wells, 180/400-Foot Aquifer Subbasin, Monterey Subbasin, and CEMEX Property

We estimate the location of the drawing source points of the proposed slant wells in relation to the drawing source points for the eight MCWD production wells using a GIS analysis of the surface locations of the Test Slant Well head and MCWD production well heads collected by AHO staff during the site visit. The locations of the Test Slant Well head and the MCWD production well heads are appropriate approximations for the locations of the subsurface drawing points because the distances between the Test

Slant Well head and the proposed slant well casings are negligible compared to the distances between the Test Slant Well head and the MCWD production well heads. The drawing source points for the MCWD production wells are also directly below the well heads.

The approximate distance between the Test Slant Well head and MCWD Wells 10, 11, and 12, which are screened only in the Deep Aquifer, is between 1.9 to 3.1 miles. The approximate distance between the Test Slant Well head and MCWD Wells 29, 30, and 31, which are screened in the 180-Foot and 400-Foot Aquifers, is between 4.4 to 4.8 miles. The approximate distances between the Test Slant Well head and MCWD Well 34, which is screened only in the Deep Aquifer, and MCWD Well 35, which is screened in the 400-Foot and Deep Aquifers, are 5.1 and 6.2 miles respectively. Figure 8 summarizes the distances between the Test Slant Well head and MCWD production wells.

MCWD Well Number	Screened Aquifers	Distance to Test Slant Well (miles)
10	Deep	3.1
11	Deep	2.9
12	Deep	1.9
29	180-Foot/400-Foot	4.5
30	180-Foot/400-Foot	4.4
31	180-Foot/400-Foot	4.8
34	Deep	5.1
35	400-Foot/Deep	6.2

Figure 8 – Table showing distances between the Test Slant Well and MCWD production wells

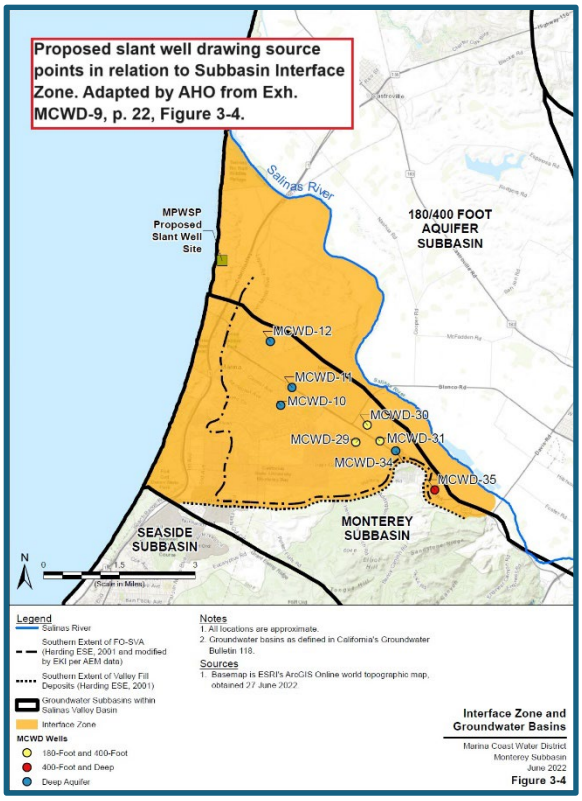


Figure 9 – Proposed slant wells in relation to the Subbasin Interface Zone

6.1.4 Capture Zones

A capture zone for a well is the "area from which subsurface water flows toward and is captured by the slant wells' screened openings." (Exh. Cal-Am-3, p. 2:19-20.) The capture zone is the three-dimensional spatial extent within an aquifer containing water that will eventually be drawn into the well. (See USEPA, A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems Final Project Report (Jan. 29, 2008) p. 10.)

In a simple groundwater system with a uniform flow field, the capture zone generally extends in the upgradient direction from the well. The capture zone of a well can be modeled using reverse particle tracking to estimate the spatial extent within each aquifer that a particle originating from the slant well field will travel when a flow model is run in reverse. (Testimony of Dr. Kincaid, Combined Hearing Transcript, p. 2541:12-18.)

Near the proposed slant wells, however, the groundwater conditions are relatively complex, and the capture zones for a groundwater system with a uniform flow field do not reflect these conditions. The proposed slant wells would draw water from two hydrologically connected aquifers with opposite groundwater gradient directions (the Dune Sand Aquifer with a seaward gradient and the 180-Foot Aquifer with a landward

gradient) and no confining layers between them in the area of the proposed draw (see Section 6.3). (Testimony of Vera Nelson, Combined Hearing Transcript, p. 1357:17-1358:24.)

This complexity resulted in disagreements between the parties' experts about the extent of the capture zone for the proposed slant wells and the significance of the concept of a capture zone in relation to the court's question.

6.1.5 Discussion

Cal-Am's experts contend that "the definition of capture zones is based on a uniform flow field with a hydraulic gradient in one direction." (Exh. Cal-Am-78, p. 5:3-5.) Given this definition, they argue the term "capture zone" is "no longer relevant" in this proceeding because there are mixed seaward and landward gradients. (*Id*. at 5:1-2.) Instead, Cal-Am applies the concept of a mixing zone to demonstrate how water will be extracted by the proposed slant wells. A mixing zone, as Cal-Am uses the term, is the region where the flow paths of source water to the proposed slant wells come from the ocean. (Testimony of Peter Leffler, Combined Hearing Transcript, p. 494:16-24.) Therefore, by definition, the mixing zone delineated by Cal-Am does not encompass areas where water may be drawn into the wells from inland sources.

Cal-Am submitted figures showing the extent of the mixing zone in the area around the proposed slant wells. (Exh. Cal-Am-141, p. 144.) These figures depict the flow lines of seawater traveling through the onshore portions of the aquifers that are drawn into the slant wells and depict a blue bar to represent the area where inland aquifer water mixes with the seawater. Notably, the figures do not show flowlines for water from the inland aquifers that crosses the blue bar into the mixing zone. If marked, the area east of the blue bar would depict the extent of the capture zone inland from the proposed slant wells. The figures also do not show the flowlines of seawater drawn into the wells that does not cross the Mean High Water (MHW) line before being captured.

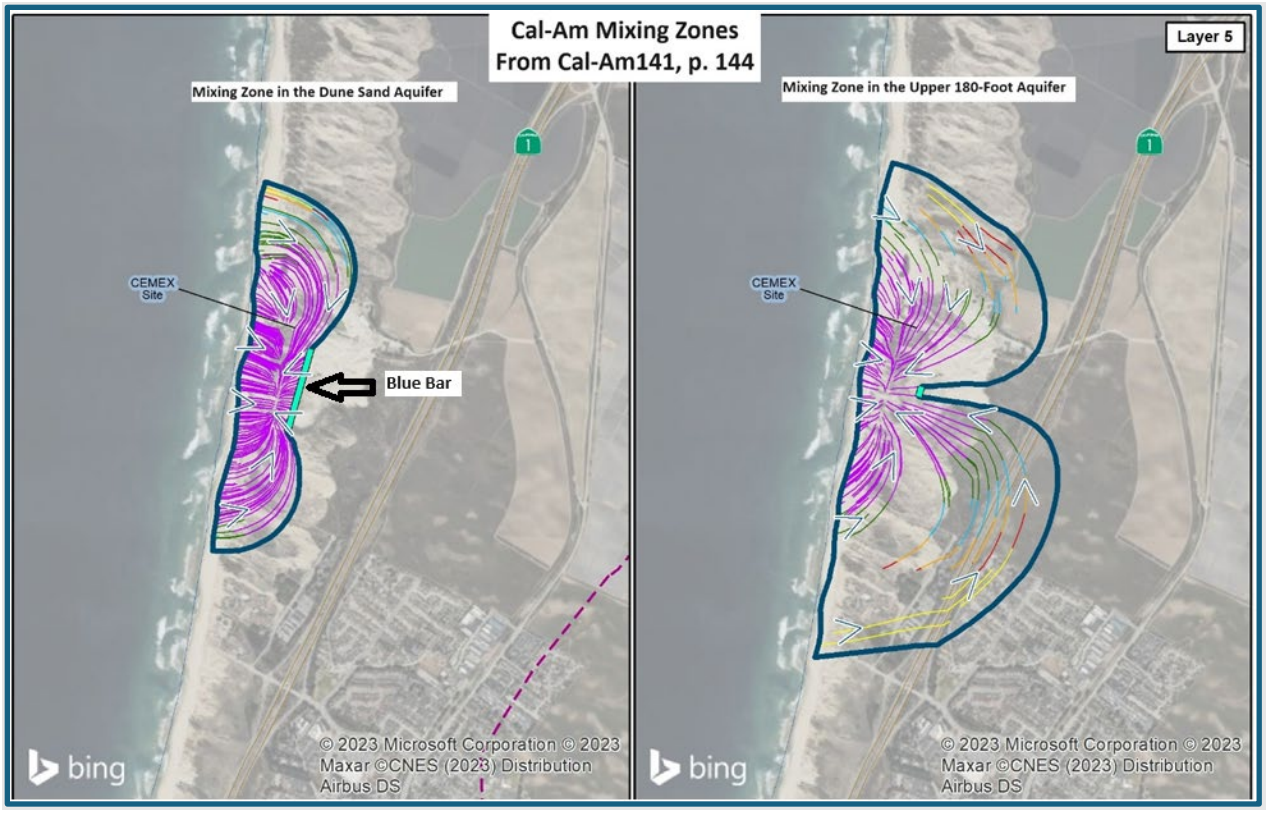


Figure 10 – Mixing zones in the Dune Sand and 180-Foot Aquifers submitted by Cal-Am. (Exh. Cal-Am-141, p.144.)

MCWD asserts that mixing zones are not equivalent to capture zones, and that estimates of mixing zones are not responsive to the court's question. (Exh. MCWD-92, p. 12.) MCWD submitted figures showing the extent of the capture zones for the proposed slant wells in the Dune Sand, 180-Foot, and 400-Foot Aquifers based on their model results, and the Dune Sand Aquifer based on Cal-Am's model results.[37] (Exh. MCWD-161, p. 2.) The figures depict the capture zones in the 180-Foot and 400-Foot Aquifers extending seaward to the portions of those aquifers under the ocean floor, and

[37] Cal-Am objects to the Board's use of Figure 11 (Exh. MCWD-161, p. 2) to depict the capture zones of the proposed slant wells. Cal-Am asserts that the timeframe MCWD used for the particle tracking analysis is "far too long and speculative to have any practical predictive value," (2024-06-25 Cal-Am Initial Objections to Draft Report of Referee Part 1, p. 17) and could "mislead the Court into drawing erroneous inferences of imminent harm." (*Id.* at p. 7.) Cal-Am technical expert Peter Leffler testified that a water molecule located in the Dune Sand Aquifer in the vicinity of MCWD's wells would travel for approximately 700 years before reaching a location where it could be captured by the slant wells. (Exh. Cal-Am-167, Slide 42.) We note that none of MCWD's production wells located in the vicinity of the capture zones depicted in this figure are screened in the Dune Sand Aquifer, and we do not rely on this particle tracking analysis in our consideration of potential harm caused by the proposed project.

inland toward MCWD's production wells in the Dune Sand Aquifer. Although it appears that the capture zone in the Dune Sand Aquifer is relatively close to MCWD's production wells in the aerial view, none of these wells are screened in the Dune Sand Aquifer, and the capture zone in the Dune Sand Aquifer in this area is vertically separated from the drawing source points for the MCWD production wells in the 180-Foot and 400-Foot Aquifers by the Fort Ord-Salinas Valley Aquitard. (See Section 6.3.1.)

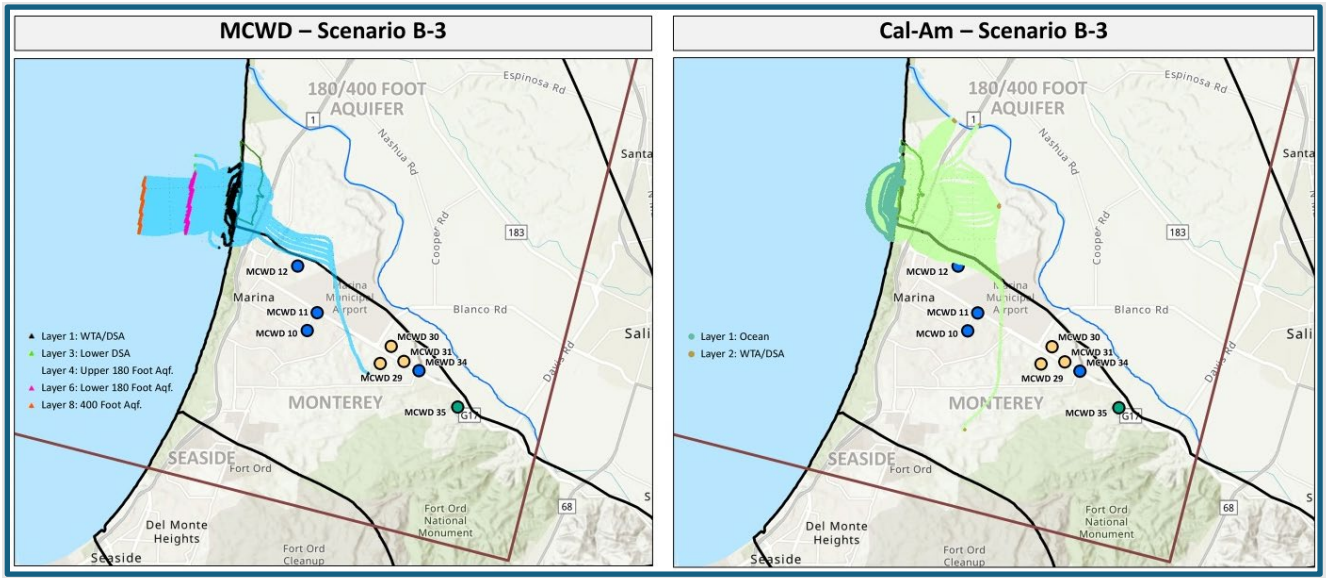


Figure 11 – Capture zones in the Dune Sand, 180-Foot, and 400-Foot Aquifers submitted by MCWD (Exh. MCWD-161, p. 2.)

6.1.6 Analysis

MCWD's depiction of the capture zones in Figure 11 above addresses the court's question about the locations of the capture zones in relation to the features and locations the court identified. Generally, the capture zones extend from the drawing source points toward the direction of higher groundwater elevations within each aquifer in and around the CEMEX Property, within the Subbasin Interface Zone, and in the Monterey and 180/400 Subbasins near the boundary between the subbasins.

In the Lower 180-Foot and 400-Foot Aquifers, most of the area of the capture zones extends west underneath the ocean beyond the MHW line, and so are not within the boundaries of the groundwater basin or subbasins, beneath the CEMEX Property, or within the Subbasin Interface Zone.

In the Dune Sand Aquifer, the capture zone extends inland in the area surrounding the CEMEX Property in the 180/400 and Monterey Subbasins.

While the court did not ask about the location and extent of a mixing zone, Cal-Am's description of a mixing zone is a useful tool to estimate the boundary for the area where

seawater migrating inland because of pumping by the proposed slant wells will be drawn into the wells. Seawater migrating inland because of pumping by the proposed slant wells outside of this mixing zone is not drawn into the proposed slant wells.

6.2 Question 2

Would water drawn by any of the currently proposed Cal-Am wells come from any source other than seawater from directly beneath the Ocean?

a. *If so, from which sources? And which if any of these sources lie in whole or in part beneath the Cemex property?*
b. *If so, can one approximate with reasonable certainty in what quantities the water would be drawn from each source? Can this be expressed in percentages?*
c. *If so, do the relative amounts drawn from each source vary depending upon amounts drawn by the slant wells?*
d. *If so, can it be said with reasonable certainty that the amount drawn by the Cal-Am wells will not exceed 500 acre-feet per year ("afy") from any water source beneath the Cemex property?*

There is some ambiguity in the definition of the term "source" as the term is used in the court's question. The source of water may be described by the *location where water is drawn* within physical features, such as aquifers, or within administrative areas, such as groundwater basins and subbasins or property boundaries. Alternatively, the source of water may be described by the *location of the origin of the water* rather than the location where it is drawn.

Both interpretations may be relevant to this proceeding. Therefore, we discuss the source of water as it relates to locations of the screened intervals of the proposed slant wells within the Dune Sand and 180-Foot Aquifers, the CEMEX Property, and the 180/400 Subbasin in the SVGB. We also discuss the source as the portion of the water drawn by the proposed slant wells that will originate from the ocean and sources other than the ocean.

6.2.1 Locations of the Slant Well Screens

The source of the water drawn by the proposed slant wells can be described by the locations of the drawing source points in relation to the MHW line. The drawing source points are the screened intervals of the proposed slant wells within the Dune Sand and 180-Foot Aquifers. We refer to locations within aquifers and along the proposed slant well shafts that are landward of the vertical plane of the MHW line as "onshore" and locations seaward of the MHW Line as "offshore." Onshore sources of water are the screened intervals located beneath the CEMEX Property and within the boundaries of the 180/400 Subbasin in the SVGB. Offshore sources of water are the screened intervals located beneath the ocean and are not within the boundaries of any groundwater basin or subbasin.

MCWD and Marina assert that the location where water would be extracted by Cal-Am's proposed slant wells is relevant to issues related to the 1996 Annexation Agreement. (MCWD-Marina Proposed Report Part 2, p. 76.) They assert that approximately 83 percent of the slant well screens, by distance, would be in the Dune Sand and 180-Foot Aquifers beneath the CEMEX Property, and approximately 17 percent of the well screens would be seaward of the MHW Line. (*Id.* at p. 78.)

MCWD and Marina also argue that if the court is "simply asking whether the water that Cal-Am will extract will come from a groundwater basin or from the ocean … all of the water extracted by the Project will be groundwater from the 180/400 Subbasin and the Monterey Subbasin, which are both within the Basin referenced by the Annexation/Groundwater Framework Agreement." (MCWD-Marina Proposed Report Part 2, pp. 76–77.)

6.2.2 Sources of the Slant Wells

The water drawn by the proposed slant wells will come from locations within the Dune Sand and 180-Foot Aquifers both onshore and offshore. The screened portions of the slant wells would be located in part beneath the ocean and not within the boundaries of any groundwater basin or subbasin, and in part onshore, beneath the CEMEX Property and within the boundaries of the 180/400 Subbasin in the SVGB. (See Section 6.1.)

The Dune Sand and 180-Foot Aquifers each lie, in part, beneath the CEMEX Property. They extend inland, from the west beneath the ocean floor, to the east beyond the CEMEX Property, and along the coastline from areas to the north and south of the CEMEX Property. (See depictions of the aquifers in Exh. Cal-Am-40, p. 97 and the capture zones in Exh. MCWD-161, p. 2.) The portions of the screened intervals of the proposed slant wells located onshore would be wholly beneath the CEMEX Property. (See Section 6.1.1.)

6.2.3 Quantities of Water from Onshore and Offshore Sources

The quantities of water that would be drawn from onshore and offshore sources depend on several factors, including the proportions of the screened intervals located offshore and onshore, the hydraulic conductivity of the areas around the screened intervals, and the total quantity of water pumped.

Marina's expert, Dr. Mark Trudell, estimated that an average of 17.4 percent of the screened intervals of the proposed slant wells will extend offshore based on data from Table 1 of his written testimony. (Exh. Marina-2, p. 7:17-19; Figure 12 below; Exh. Marina-2, p. 8.) Dr. Trudell assumed that the length of the screened interval located offshore would be equal to the length of the well casing located offshore, then estimated the average proportion of the screened intervals located offshore for Slant Wells 1

through 7 as the sum of the lengths of the slant well casings located offshore divided by the sum of the total lengths of the slant well casings (160 / 923 = 0.174). (Exh. Marina-2, p. 8, Notes 1 & 2.)

Source: Exh. Marina 2, Table 1, p. 8.

Table 1 - Length of Permanent Slant Wells Seaward of Mean High-Water Line

Well	Total Length (ft)	2020		% Screen Offshore
		Offshore (ft)	Onshore (ft)	
Test Slant Well, SW-1	685	166	519	24%
SW-2	970	63	907	6%
SW-3	966	202	764	21%
SW-4	961	162	799	17%
SW-5	961	130	831	14%
SW-6	961	174	787	18%
SW-7	957	225	732	24%
SW-8	955	257	698	27%
SW-9	970	228	742	24%
SW-10	970	0	970	0%

Modified from Geoscience (2017) and EIR (2018).
1. "% Screen Offshore" indicates the % of the well screen, as a % of total length, that is offshore, seaward of the mean high tide water line.
2. The lengths provided in this table indicate the total length of the well casing extending seaward of the MHW line. Because the slant wells would be drilled at an approximately 14-degree angle, the total horizontal distance seaward of the MHW line would be slightly shorter than the length of the well casing. The total horizontal distance seaward of the MHW line can be determined by dividing the length by 1.03.

Figure 12 – Proposed slant well dimensions - Exh. Marina-2, Tbl. 1, p. 8

Dr. Trudell then estimated that the amount of water drawn in the screened intervals located onshore beneath the CEMEX Property “would be approximately 83% of the total amount of water extracted because that is the percentage of well screening for the slant wells that is under the land.” (Exh. Marina-2, p. 22:19-21.)

As discussed in Section 6.1.1, we calculated the proportion of the screened interval located offshore and onshore for the Test Slant Well and estimated this proportion for Slant Wells 2 through 7, as the offshore and onshore lengths of the screened intervals divided by the total length of the screened intervals. For each slant well, the total length of the slant well casing is larger than the total length of the screened interval, and Dr. Trudell’s estimate of the average proportion of the screened intervals located onshore (83 percent) is larger than the proportion we calculated for the Test Slant Well (59 percent) and estimated for Slant Wells 2 through 7 (between 63 and 81 percent).

Dr. Trudell also assumes that the proportion of the water extracted from screened intervals located onshore is equal to the proportion of the screened intervals located onshore. This assumption is not supported by the evidence in the record.

MCWD expert Dr. Todd Kincaid discussed in his testimony that pumping proportions depend in part on the hydraulic conductivities of the substrate in the areas where the screened intervals are located. Discussing how he would assign pumping proportions to different model layers, Dr. Kincaid stated, "[t]he correct way to do this…is essentially based on the distribution of thicknesses in the layers from which the pumping will occur…so to most accurately reflect what each model would say about the impacts of pumping, [the pumping proportions] should be defined on the basis of how those respective models define those layer thicknesses and hydraulic conductivities." (Testimony of Dr. Kincaid, Combined Hearing Transcript, p. 2537:9-18.)

The parties did not attempt to estimate the impact that hydraulic connectivity might have on the proportion of water drawn from the portions of the screened intervals of a well located onshore as opposed to offshore, and, therefore, we cannot calculate with any reasonable certainty the quantities of water drawn from screened intervals located onshore versus offshore based on the evidence in the record.

6.2.4 Quantities of Water from the Dune Sand Aquifer beneath the CEMEX Property

The parties did consider hydraulic conductivity to assign relative percentages of water pumped from the Dune Sand and 180-Foot Aquifers for their Phase 2 and 3 modeling. Using the relative percentages approximated by MCWD and Cal-Am for modeling purposes, we approximated a range of quantities of water that would be drawn from the Dune Sand Aquifer.

For their Phase 2 and 3 modeling, MCWD experts initially assigned 19 percent of the pumping to draw from the Dune Sand Aquifer and 81 percent to draw from the 180-Foot Aquifer based on hydrostratigraphic unit thickness and hydraulic conductivities.[38] (Testimony of Dr. Kincaid, Combined Hearing Transcript, pp. 2536:17–2538:19.) Cal-Am experts assigned 44 percent to draw from the Dune Sand Aquifer and 56 percent to draw from the 180-Foot Aquifer based in part on the Test Slant Well's orientation and layout within their model grid (Exh. Cal-Am-141, p. 30) and in part because the HydroFocus model NMGWM^{2016}, on which the Cal-Am flow model is based, used these percentages. (Testimony of Dr. Yeh, Combined Hearing Transcript, p. 2398:2-5.) Dr. Yeh

[38] MCWD later assigned 44 percent to the Dune Sand Aquifer to match the proportion assigned by Cal-Am experts, as directed by the hearing officer, to facilitate a more direct comparison between models.

added that using those percentages resulted in “very good calibration for the drawdown Test Slant Well pumping.” (*Id*. at p. 2399:1.)

We acknowledge that the parties’ experts did not approximate these relative pumping percentages with the intent of directly addressing this question from the court. Nevertheless, we consider these percentages to represent the technical experts’ opinions of reasonable percentages to simulate the effects of the proposed project. Based on these relative percentage assignments, we can approximate that the proportion of total project pumping that will draw from the Dune Sand Aquifer ranges between 19 and 44 percent.

Under the 15.5 mgd project alternative, the proposed project will pump a total of 17,362 afy.[39] Of that, applying the pumping percentages used by the parties’ modelers, approximately 3,300 to 7,600 afy will be drawn by the wells from the Dune Sand Aquifer.[40] Under the 11.6 mgd project alternative, the proposed project will pump a total of 12,993 afy,[41] of which approximately 2,500 to 5,700 afy will be drawn from the Dune Sand Aquifer.[42]

Any water drawn from the Dune Sand Aquifer can be assumed to have been drawn from screened intervals of the wells located onshore. We reach this conclusion based on the maximum depth of the aquifer beneath the CEMEX Property and the geometries of the Test Slant Well and proposed Slant Wells 2 through 7. The Dune Sand Aquifer extends to depths up to 110 feet below the ground surface beneath the CEMEX Property, or -75 feet NAVD88. (Exh. Cal-Am-38(a), p. 8.) Any screened intervals located above 110 feet below ground surface are screened within the Dune Sand Aquifer.

The locations and dimensions of the screened intervals of the Test Slant Well are described in Appendix E3 part 1 of the EIR/EIS. The Test Slant Well is screened from 140 to 245 feet along the well shaft in the Dune Sand Aquifer. (Exh. Cal-Am-38(c), p. 38.) This interval along the well shaft corresponds to depths of 46 to 80 feet below ground surface at the well head.[43] Of the proposed Slant Wells 2 through 7, Slant Well 7 has the shortest length of well casing onshore, and as a result, also has the shallowest depth below ground surface at the well head when it passes through the vertical plane of the MHW line. The well casing for proposed Slant Well 7 will be drilled toward the ocean at an angle 14 degrees below horizontal and will extend 957 feet from the well head, 732 feet of which will be located onshore. (Exh. Cal-Am-38(b), Tbl. 3-2, p. 3-19.)

---

[39] 15.5 mgd x (1/892.7) afy/mgd = 17,362 afy.
[40] 17,632 x 0.19 = 3,299 afy; 17,632 x 0.44 = 7,639 afy.
[41] 11.6 mgd x (1/892.7) afy/mgd = 12,993 afy.
[42] 12,993 x 0.19 = 2,469 afy; 12,993 x 0.44 = 5,717 afy.
[43] Sin(19 degrees) = 0.325; (0.325) x (140) = 46 feet; and (0.325) x (245) = 80 feet.

The depth where the well shaft will pass through the vertical plane of the MHW line is 177 feet below ground surface at the well head.[44] Consequently, the well shafts for the proposed Slant Wells 2 through 7 will each pass through the vertical plane of the MHW line at depths greater than or equal to 177 feet from the ground surface, or 67 feet below the maximum depth of the Dune Sand Aquifer, and any water drawn from the Dune Sand Aquifer by these wells must come from screened intervals located onshore.

6.2.5 Relative Amounts Drawn for Project Alternatives

The relative amounts of total project pumping drawn from the Dune Sand Aquifer beneath the CEMEX Property do not vary depending on the total project pumping amounts in this analysis because the percentage of water pumped from the Dune Sand Aquifer, as assigned by the parties, does not vary depending on the amounts of water drawn by the slant wells.

6.2.6 Quantities from beneath the CEMEX Property

We cannot say with reasonable certainty that the amount drawn by the Cal-Am wells *will not exceed* 500 afy from any source beneath the CEMEX Property. To the contrary, the evidence strongly supports the conclusion that the amount drawn by the proposed slant wells will significantly exceed 500 afy from beneath the CEMEX Property.

Five hundred afy represents approximately 3 percent[45] of total project pumping for the 15.5 mgd alternative and approximately 4 percent[46] for the 11.6 mgd alternative. As we discuss above, the range of the parties' approximations for pumping from the Dune Sand Aquifer is 19 to 44 percent, which is significantly higher than 3 or 4 percent. We approximate the amounts drawn by the proposed slant wells from beneath the CEMEX Property will be at least approximately 2,500 afy for the 11.6 mgd alternative, and 3,300 afy for the 15.5 mgd alternative, each significantly more than 500 afy.

The quantities of water drawn from the 180-Foot Aquifer would be the total quantities of water drawn by the proposed project minus the quantities of water drawn from the Dune Sand Aquifer. We cannot approximate with reasonable certainty the amounts of water drawn from the 180-Foot Aquifer from beneath the CEMEX Property because, unlike the Dune Sand Aquifer, we cannot assume the relative proportion of water drawn from screened intervals located onshore versus offshore. Regardless, the screened intervals for the Test Slant Well and proposed Slant Wells 2 through 7 include a portion screened onshore in the 180-Foot Aquifer, and some quantity of water in addition to the quantity of water drawn from the Dune Sand Aquifer will be drawn from the 180-Foot Aquifer

[44] Sin(14 degrees) = 0.242; (0.242) x (732) = 177 feet.
[45] 500 afy / 17,362 afy = 0.029.
[46] 500 afy / 12,993 afy = 0.038.

beneath the CEMEX Property and within the boundaries of the 180/400 Subbasin in the SVGB.

6.2.7 Origin of the Water

The source of water drawn by the proposed slant wells can also be described by the location of the origin of the water, following an initial transitional period in which the groundwater system's response to project pumping stabilizes. The water either originates from the ocean or from sources other than the ocean. The proportion of the water drawn by the proposed slant wells that originates from the ocean is the Ocean Water Percentage (OWP). The OWP can be estimated by measuring the TDS concentration of water drawn from the well and comparing the TDS concentration of the water drawn by the proposed slant wells to the TDS concentration of seawater (assumed to be 33,500 mg/L) and the TDS concentration of groundwater in the basin (assumed to be 500 mg/L).

6.2.8 Sources Other Than Ocean Water

Initially, the water drawn by the proposed slant wells when pumping commences will be water in the Dune Sand and 180-Foot Aquifers in the offshore and onshore areas immediately surrounding the screened intervals. Over time, the water pumped from these areas will be replaced by ocean water drawn through the ocean floor and non-ocean water drawn through the aquifers from inland areas. (Combined Hearing Transcript, p. 564:6-12.; MCWD-Marina Proposed Report Part 2, p. 78.)

6.2.9 Extent of Sources beneath the CEMEX Property

The water drawn by the proposed slant wells from sources other than the ocean is drawn from the capture zones in the Dune Sand and 180-Foot Aquifers. The capture zones extend from the west beneath the ocean floor to the east beyond the CEMEX Property, and along the coastline from areas to the north and south of the CEMEX Property including, in part, the area beneath the CEMEX Property. (See Section 6.1.2.)

6.2.10 Quantities of Ocean Water and Non-Ocean Water

Cal-Am discusses several analyses used to approximate the percentage of water drawn into the slant wells that would originate from the ocean, including analytical calculations, steady state modeling, and transient modeling. (Cal-Am Proposed Report Part 2, pp. 97–99.) Cal-Am asserts that all these analyses show that at least 90 percent of the water captured by the proposed slant wells will originate directly from the ocean. (*Id.* at p. 97) The remaining 10 percent or less of water drawn into the proposed slant wells will originate from a non-ocean source consisting of "unusable, brackish to saline water drawn from the zone of seawater intrusion inland of the shoreline that is both beneath and outside the CEMEX boundaries." (*Id.* at p. 99.)

MCWD argues that it is not possible to approximate with reasonable certainty the relative quantities of water that would be drawn either from the ocean or from the inland portions of the aquifers. MCWD asserts that "[t]here are inherent uncertainties in the type of modeling conducted in this proceeding, as it relies on a series of assumptions and extrapolations from limited known data to project the likely impact of the Project on a highly complex underground system of aquifers." (MCWD-Marina Proposed Report Part 2, p. 82.) However, MCWD and Marina also state that "the parties have conducted modeling based upon the best available data, and the State Board can provide a range of likely outcomes with respect to how much water may be drawn from each source." (*Ibid.*) MCWD and Marina's experts estimate that the OWP range is between 87.5 and 92 percent, assuming a background concentration in the SVGB of 500 mg/L of TDS. (*Id.* at p. 87.)[47]

Cal-Am objects that MCWD and Marina inappropriately assumed a TDS concentration of 29,800 mg/L in its analysis, rather than 33,500 mg/L for ocean inflow from the constant head ocean boundary flowing through the Dune Sand Aquifer. (2025-01-31 Cal-Am's Objections to Report of Referee, p. 6.) Cal-Am asserts that a change in the assumed ocean water concentration would change MCWD and Marina's model results to estimate an OWP of 96 percent for Scenario 3B (well pumping of 15.5 mgd). (*Ibid.*; Exh. Cal-Am-187, p. 25.) The Board does not make any finding of fact as to whether MCWD and Marina's use of 29,800 mg/L rather than 33,500 mg/L as a TDS concentration for ocean water in the OWP calculation was appropriate. Because Cal-Am estimates an OWP greater than 90 percent, Cal-Am's proposed correction to MCWD and Marina's calculation would not change the lower range of the estimate of OWP included in this report.

In comments on the May 22, 2024 partial draft report of referee, Marina objects to the method used by Cal-Am and its own experts to calculate the percentage and amount of water originating from the groundwater basin "primarily relat[ing] to the total dissolved solids (TDS) benchmark that is utilized to identify water that is suitable or usable for drinking water and other beneficial use purposes." (Marina Comments on 5-22-24 Draft Report, pp. 32–33.) As we understand, however, the assumed concentration of TDS used in the formula to calculate OWP is to identify the source and not the utility of the water. The concentration of TDS in water from the non-ocean sources is eliminated from both sides of the equation to reflect that not all the TDS in water drawn from the wells is from the ocean. The selection of 500 mg/L of TDS should reflect the background

[47] The equation used by the parties to calculate OWP is: $OWP = 100 \times (C_{pw} - 500)/(C_s - 500)$ where C_{pw} = Salinity (TDS in mg/L) concentration from project wells, C_s = Salinity (TDS in mg/L) concentration of ocean water, and 500 = Assumed Fresh Water TDS in mg/L. (Exh. Cal-Am-42, p. 2.)

concentration of TDS in groundwater in the basin to obtain an accurate OWP. (See DWR Bulletin 118, 180-400 Foot Aquifer Subbasin Description, p. 3 [describing average values of TDS of 478 mg/L and 556 mg/L].) During cross-examination, Mr. Leffler stated, "my understanding of this formula when it was developed is that [500 mg/L of TDS] was intended to be the background TDS value… [T]hat's the value that was, you know, assumed in this formula to be representative of the background level of the TDS…." (Combined Hearing Transcript, pp. 421:21-24–422:2-6.) Marina does not raise any argument or evidence that 500 mg/L is an inaccurate estimate of the background concentration of TDS in the basin. Marina also did not object to the use of 500 mg/L of TDS concentration as a background concentration when its experts estimated an OWP range between 87.5 and 92 percent. (MCWD-Marina Proposed Report Part 2, p. 87.)

The ranges for OWP estimated by the parties (87.5 to 92 percent by MCWD and Marina and greater than 90 percent by Cal-Am) overlap, and we conclude that 90 to 92 percent represents a reasonable approximation of the range of the parties' estimates.

Applying this range of OWP to the quantities of water pumped for the 11.6 mgd and 15.5 mgd project alternatives, we estimate that the 11.6 mgd project will pump approximately 11,694 to 11,953[48] afy of water originating from the ocean, and 1,039 to 1,299[49] afy of water originating from sources other than the ocean. We estimate that the 15.5 mgd project will pump approximately 15,626 to 15,973[50] afy of water originating from the ocean, and 1,389 to 1,736[51] afy of water originating from sources other than the ocean.

6.2.11 Relative Amounts Drawn for Project Alternatives

The parties agree, and the modeling results presented in Phase 3 of OWP estimates for the 11.6 and 15.5 mgd scenarios support the conclusion that the relative amounts of water drawn from each source do not vary depending on the amounts drawn by the proposed slant wells. (MCWD-Marina Proposed Report Part 2, p. 91; Cal-Am Proposed Report Part 2, p. 100.)

6.2.12 Quantities Exceed 500 afy from Non-Ocean Water

At any given time, there is a certain amount of water located in the Dune Sand and 180-Foot Aquifers in the three-dimensional space directly beneath the CEMEX Property. This amount of water is determined by the volume of the space within the aquifers and the physical properties of the aquifer materials. Cal-Am technical expert Mr. Leffler estimated that this space would yield approximately 11,100 acre-feet of water

[48] 12,993 afy x 0.90 = 11,694 afy; 12,993 afy x 0.92 = 11,953 afy.
[49] 12,993 afy – 11,953 afy = 1,039 afy; 12,993 afy – 11,694 afy = 1,299 afy.
[50] 17,362 afy x 0.90 = 15,626 afy; 17,362 afy x 0.92 = 15,973 afy.
[51] 17,362 afy – 15,973 afy = 1,389 afy; 17,362 afy – 15,626 afy = 1,736 afy.

(Combined Hearing Transcript, p. 563:6-10), and that most of that water would likely be extracted after roughly a year of project pumping during the transitional period in which the groundwater system's response to project pumping stabilizes. (*Id.* at p.563:11-564:5.) After this initial transition, the water in the aquifers beneath the CEMEX Property drawn by the proposed project will be replaced by water drawn into the aquifers from the ocean and sources other than the ocean. (*Ibid.* & MCWD-Marina Proposed Report Part 2, p. 78.)

The parties' estimated OWPs represent the percentage of water originating from offshore sources as opposed to onshore sources after this initial transitional period. We approximate the amounts drawn by the proposed slant wells from sources other than the ocean, based on the higher-end approximation of OWP of 92 percent, to be approximately 1,039 afy for the 11.6 mgd alternative and 1,389 afy for the 15.5 mgd alternative. Both results are significantly more than 500 afy. After the initial transition period, some of this water would be drawn from screened portions of the slant wells located beneath the CEMEX Property although the water would have originated from portions of the aquifers outside of the CEMEX Property boundary and migrated within the CEMEX Property boundary because of the draw of the wells.

6.3 Question 3

What is the hydrogeological connectivity, if any, between the areas from which Cal-Am proposes to draw water and the areas from which MCWD extracts water?

The parties adopted different approaches to respond to this question and applied the term "area" in different ways. Cal-Am focused on the connectivity between the aquifers from which the slant wells and MCWD's wells draw, while Marina and MCWD focused on connectivity between the groundwater subbasins from which the slant wells and MCWD's wells draw.

Cal-Am contends there is "no physical hydrogeologic connectivity between the areas from which Cal-Am slant wells will draw water and some of the MCWD production wells, and there is no functional hydrogeologic connectivity between the areas from which Cal-Am slant wells will draw water and certain other MCWD production wells."[52] (Cal-Am Proposed Report Part 2, p.102.)

[52] We take Cal-Am's contention that there is no functional connectivity to mean that although there may be physical connectivity between areas where Cal-Am's proposed slant wells will draw water and where MCWD's productions wells draw water, the proposed draw will not substantially affect groundwater conditions at the MCWD production wells. We address physical connectivity in this section. We address any

Marina and MCWD contend that some of MCWD's production wells are screened in the same aquifer as the proposed slant wells so there is connectivity between the two areas. (MCWD-Marina Proposed Report Part 1, p. 55.) Although the proposed slant wells and MCWD's production wells are screened in different groundwater subbasins, there are no hydraulic barriers between the Monterey Subbasin and the 180/400 Subbasin and groundwater flows freely between these subbasins. (Exh. MCWD-9, p. 20.)

We address the court's question about hydrogeologic connectivity[53] both (1) as it relates to the connectivity between the specific areas of the Dune Sand Aquifer and 180-Foot Aquifer where the proposed slant wells will be screened and the areas in the 180-Foot, 400-Foot, and Deep Aquifers where the MCWD production wells are screened, and (2) as it relates to flow of groundwater across the boundary between the Monterey and 180/400-Foot Groundwater Subbasins.

6.3.1 Connectivity Between the Aquifers

The proposed slant wells will be screened within the Dune Sand and 180-Foot Aquifers beneath the CEMEX Property and under the ocean floor to the west of the CEMEX Property. For purposes of analyzing connectivity with the areas from which MCWD extracts water, we consider the proposed slant well field to be a single area because the screened intervals of the slant wells are all hydrologically connected and the distances between each of the slant wells are negligible compared to their distances from the MCWD production wells.

6.3.2 Dune Sand and 180-Foot Aquifers

The parties do not dispute that the Fort Ord-Salinas Valley Aquitard separates the Dune Sand Aquifer and the 180-Foot Aquifer in the area of MCWD Wells 29, 30, and 31, preventing the Dune Sand Aquifer and the 180-Foot Aquifer from being connected in this area. (See Exhs. Cal-Am-13, Cal-Am-89 p. 42 & MCWD-161, slide 38.) In the area where the proposed slant wells will draw water, however, the Dune Sand Aquifer and the 180-Foot Aquifer are connected, and there is no evidence in the record to suggest there is any barrier preventing horizontal flow within the 180-Foot Aquifer between this area and MCWD Wells 29, 30, and 31. (Exh. Cal-Am-89, p. 42.)

---

effect on groundwater conditions in the vicinity of MCWD's wells from the proposed draw in our responses to Questions 4 and 5.

[53] The court's question asks about hydrogeologic connectivity; however, the parties also address this question in terms of hydraulic and hydrologic connectivity. We address the question in terms of hydrogeologic connectivity, which we understand to include both hydraulic and hydrologic connectivity.

Cal-Am argues that even if there is physical connectivity between these areas, there is no functional connectivity between the areas where the slant wells and MCWD wells draw water because the seawater intrusion front within the 180-Foot Aquifer extends within 0.2 miles of MCWD Wells 29, 30, and 31, (Cal-Am Proposed Report Part 2, p. 102) and "[p]umping of MCWD-Wells #29, 30, and 31 will draw in pre-existing high salinity water within the present seawater intrusion, currently located between the proposed slant wells and these three MCWD wells, long before there is any potential for interaction…between MCWD-Wells #29, 30, and 31, and the proposed slant wells." (Cal-Am Proposed Report Part 2, p. 104.) To the contrary, however, the existence of seawater intrusion so close to MCWD's wells supports MCWD's argument that there is no barrier preventing horizontal flow within the 180-Foot Aquifer. The movement of highly saline water from the ocean near the proposed slant wells, inland to MCWD's wells, demonstrates that these areas are hydrologically connected. Additionally, results from both parties' groundwater models show drawdown of approximately half a foot to one foot in the 180-Foot Aquifer in the area of MCWD Wells 29, 30, and 31 from operation of the slant wells, again, demonstrating that the two areas are hydrologically connected. (See Section 6.5.)

6.3.3 400-Foot Aquifer

The parties' experts disagree about the extent to which the 180/400-Foot Aquitard prevents vertical flow between the 180-Foot and 400-Foot Aquifers in the area of MCWD Wells 29, 30, and 31. Cal-Am asserts that the 180/400-Foot Aquitard physically separates the 400-Foot Aquifer from the 180-Foot Aquifer so there is no connectivity between the proposed slant wells and the MCWD wells screened in the 400-Foot Aquifer. (Exh. Cal-Am-3, p. 4: 21.) MCWD asserts that there are gaps in the 180/400-Foot Aquitard allowing some vertical flow of groundwater between the aquifers. (Exh. Marina-56, slide 19 & Combined Hearing Transcript, pp. 2847:21–2848:3.)

The parties' opposing positions arise in part from different interpretations of the limited hydrogeologic data for the hydrostratigraphic units in the area. MCWD and Marina considered airborne electromagnetic method (AEM) and field data in reaching their conclusions. AEM is an exploratory geophysical surveying technology commonly used by groundwater managers to map and evaluate subsurface groundwater resources. (Exh. MCWD-35, p. 2.) In 2016, MCWD retained a consultant to collaborate with the Department of Geophysics at Stanford University to collect, process, and interpret AEM data, in conjunction with other available background information and data, to develop a 3D hydrogeologic framework of MCWD's service area. (Exh. MCWD-29, p. 3.) These efforts culminated in the publication of a report authored by Ian Gottschalk and Rosemary Knight of Stanford, and Ted Asch, Jared Abraham, and Jim Cannia of Aqua Geo Frameworks, LLC (AGF). (Exh. Marina-22.) In 2019, MCWD retained AGF to perform a second AEM investigation of selected areas within MCWD's service area that

had been previously surveyed in May 2017 as part of the Stanford/AGF 2018 AEM Report. (Exh. MCWD-29, p. 18.) Cal-Am's experts dispute MCWD's interpretation of the AEM data and the relevance of some of the field data. We do not address these disagreements because resolution would not alter the responses to the court's questions in this report.

Despite its stated position, Cal-Am submitted geologic cross-sections used to construct their WBSSM which depict a gap in the 180/400-Foot Aquitard in the area adjacent to MCWD Wells 29, 30, and 31. (Exh. Cal-Am-141, p. 82.) And although the proposed slant wells would not be screened in the 400-Foot Aquifer, results from both parties' groundwater models show drawdown of half a foot to one foot in the 400-Foot Aquifer at MCWD Wells 29, 30, and 31 because of project pumping. We therefore conclude that there is hydrologic connectivity between the proposed slant wells and the MCWD wells in the 400-Foot Aquifer, but that this connectivity is less than the connectivity between the proposed slant wells and the MCWD wells in the 180-Foot Aquifer.

6.3.4 Deep Aquifers

None of the parties assert that there is connectivity between the proposed slant wells and the MCWD production wells screened in the Deep Aquifer.

6.3.5 Between Bulletin 118 Groundwater Subbasins

The proposed slant wells would be located in the 180/400 Subbasin and MCWD's wells are in the Monterey Subbasin. Because we conclude there is connectivity between the area where the proposed slant wells would draw water and the area where MCWD production wells draw water in the 180-Foot Aquifer, and to a lesser extent, in the 400-Foot Aquifer, we also conclude that there is connectivity in these aquifers between the area in the 180/400 Subbasin where the proposed slant wells would draw water and the area in the Monterey Subbasin where MCWD's production wells draw water.

6.4 Question 4

> *Is it likely that any of the proposed draw for the Cal-Am wells would (a.) result in or (b.) increase any seawater intrusion into the Subbasin Interface Zone, the 180/400 [F]oot Aquifer or the Monterey Aquifer,[54] or any source for the MCWD production wells? If so, what is the likely extent of the intrusion?*

Cal-Am asserts that operation of the proposed slant wells would not increase the extent of seawater intrusion in either the 180/400 Subbasin or the Monterey Subbasin and

[54] We presume the court is referring to the 180/400 Subbasin and the Monterey Subbasin.

would not impact any sources of water for any active MCWD production wells. (Cal-Am Proposed Report of Referee, p. 113.)

MCWD asserts that the proposed slant well pumping would cause additional ocean inflows and widespread increases in TDS concentrations north and south of the CEMEX Property in the 180/400 Subbasin and Monterey Subbasin, including areas of the subbasins that are not currently considered seawater intruded. (2023-11-13 City of Marina, Joint Draft Referee Report Sections 11–13, p. 93.)

6.4.1 Definition of Seawater Intrusion

The Monterey and 180/400 Subbasin Groundwater Sustainability Plans each define seawater intruded areas as those areas with chloride concentrations above 500 mg/L. (Exh. MCWD-60, p. 357, Tbl. 8-1, pp. 396–397; SVBGSA Combined GSP 2020-0123, pp. 285 [8-31], 291 [8-37]). MCWRA also utilizes an isocontour of 500 mg/L of chloride to track and identify seawater intrusion. (See, e.g., Exhs. Cal-Am-83; Cal-Am-84; MCWD-136, pp. 22–29; Monterey Subbasin GSP, p. 213 [referencing MCWRA's definition of the seawater intrusion threshold as 500 mg/L of chloride].)

The United States Environmental Protection Agency (USEPA) sets secondary maximum contaminant levels (MCL) for chloride and TDS in drinking water. These secondary MCLs are non-mandatory water quality standards established as guidelines to assist public water systems in managing drinking water for aesthetic considerations, such as taste, color, and odor. Contaminants at these levels do not present a risk to human health. (Exh. Cal-Am-91, p. 1.)

California has adopted regulations consistent with USEPA's secondary MCLs for chloride and TDS to set secondary maximum contaminant levels for these constituents in water supplied by drinking water systems in the following concentration range:

	Recommended	**Upper**	**Short Term**
Chloride	250 mg/L	500 mg/L	600 mg/L
TDS	500 mg/L	1,000 mg/L	1,500 mg/L

(Cal. Code Regs., tit. 22, § 64449, subd. (a).)

Section 64449 states that constituent concentrations lower than the recommended contaminant level are desirable for a higher degree of consumer acceptance; constituent concentrations ranging to the upper contaminant level are acceptable if it is neither reasonable nor feasible to provide more suitable waters; and constituent concentrations ranging to the short term contaminant level are acceptable only for existing community water systems on a temporary basis pending construction of

treatment facilities or development of acceptable new water sources. (Cal. Code Regs., tit. 22, § 64449, subd. (d).)

For Phase 3 of this proceeding, the parties agreed to use TDS concentrations, rather than chloride concentrations, as an indicator of seawater intrusion. (See 2023-07-26 Post-Hrg. Order, p. 4, [hearing officer directing the parties to meet and confer to decide whether to use TDS or chloride concentrations for tables and figures in Phase 3].) The parties utilized the isocontour of 1,500 mg/L of TDS to depict the boundary of seawater intrusion. (See Cal-Am-177, p. 10; MCWD-165, p. 13.) The chloride to TDS concentration conversion factor is site-specific, and in the area relevant to this proceeding, a TDS concentration of 1,500 mg/L is equal to a chloride concentration of approximately 650 mg/L. (Exh. Cal-Am-178, p. 2.)

To respond to the court's question, we consider model results relative to the 1,500 mg/L TDS isocontour and do not specifically analyze other changes in TDS concentrations. A landward progression of the TDS isocontour is, however, a proxy to indicate associated increases in TDS concentration in the vicinity, both landward and seaward, of the 1,500 mg/L TDS isocontour. Changes in TDS concentrations at MCWD's wells from operation of the proposed project as indicated by the model results are addressed in response to the court's Question 7 (see Section 6.7).

6.4.2 Model Results

In Phase 3 of this proceeding, the parties presented model results of simulated TDS concentrations for model layers corresponding to the Dune Sand, 180-Foot, and 400-Foot Aquifers. These results show changes in TDS between the no project and with project scenarios within each aquifer in the Monterey and 180/400 Subbasins. The parties evaluated seawater intrusion to include areas with TDS concentrations above 1,500 mg/L and estimated the changes to the extent of seawater intrusion caused by the proposed draw by comparing the 1,500 mg/L TDS isocontour between no-project and with-project scenarios.

We evaluate changes to seawater intrusion caused by the proposed draw in each aquifer in four relevant areas, described in the following paragraphs, by considering the prevailing direction of movement (seaward, landward, or no change) and the maximum approximate magnitude of the movement, in miles, of the 1,500 mg/L TDS isocontour. The prevailing direction is the direction we consider to best represent the direction of movement of the isocontour in a relevant area.

For each aquifer, we consider four areas within the groundwater subbasins that we defined for purposes of this analysis. In each of these four areas we identify whether any changes to seawater intrusion are predicted to occur because of project pumping. The areas from north to south are: (1) Central and Northern portions of the 1,500 mg/L

isocontour in the 180/400 Subbasin; (2) Southern portion of the isocontour in the 180/400 Subbasin near the subbasin boundary; (3) Northern portion of the isocontour in the Monterey Subbasin near the subbasin boundary; and (4) Central and Southern portions of the isocontour in the Monterey Subbasin.

As depicted in Figures 10 through 17, the inland extents and shapes of the 1,500 mg/L isocontours vary between aquifers and between models. We define and identify the areas used for our analysis of changes in seawater intrusion as light blue ovals overlayed on the figures submitted by the parties for each aquifer in each model.

6.4.3 Dune Sand Aquifer

The predicted TDS concentration changes in the Dune Sand Aquifer for each model are depicted below in Figures 13 and 14.

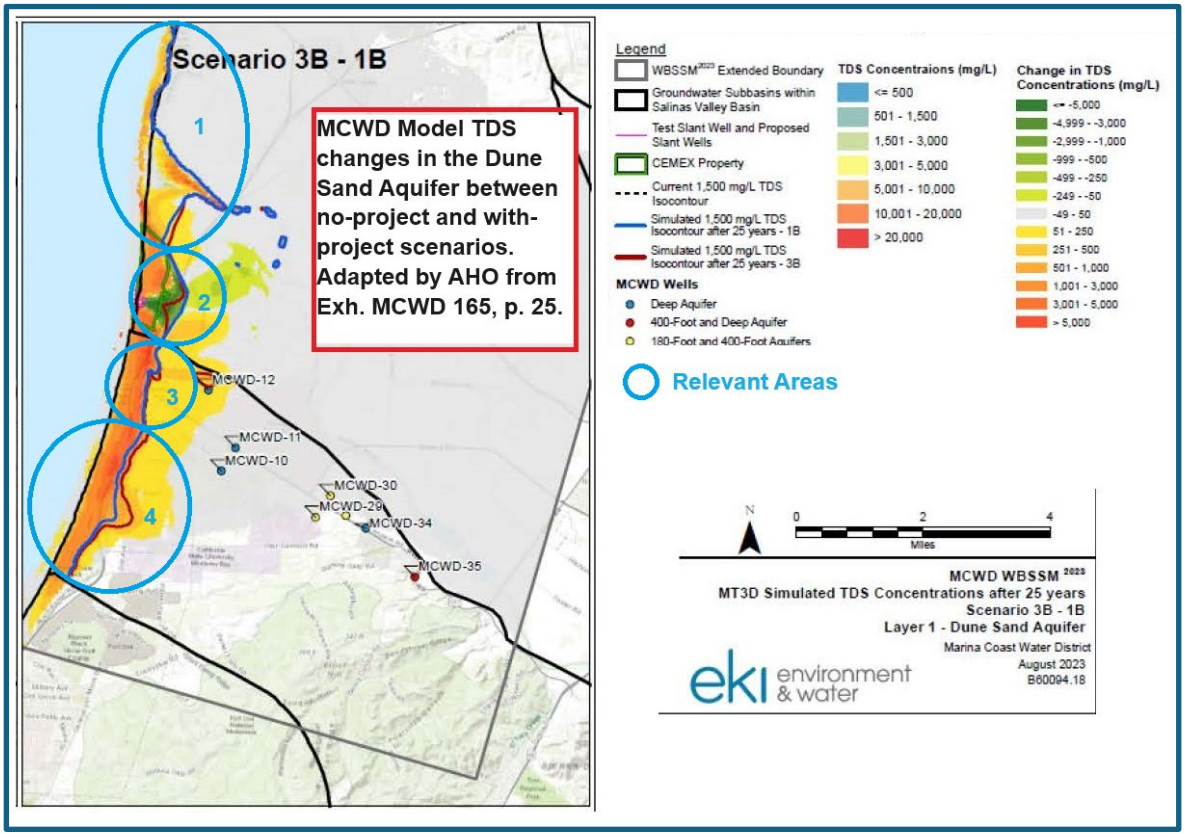


Figure 13 – MCWD model predicted TDS changes between no project and with project scenarios in the Dune Sand Aquifer

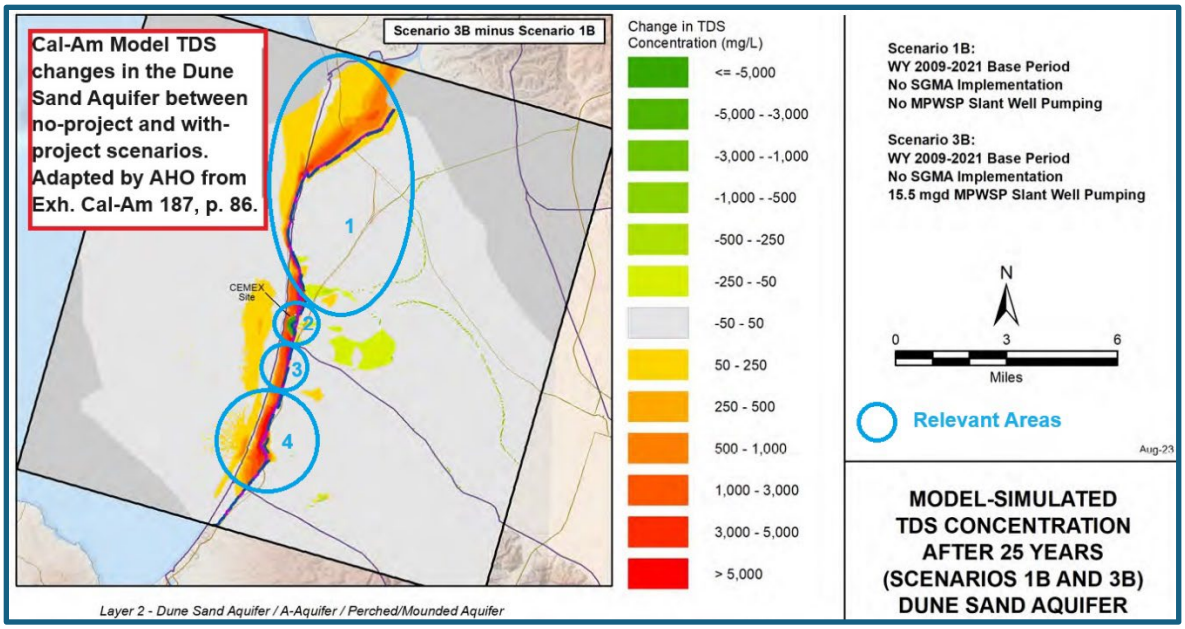


Figure 14 – Cal-Am model predicted TDS changes between no project and with project scenarios in the Dune Sand Aquifer

6.4.4 180-Foot Aquifer

Both models use two model layers to represent the 180-Foot Aquifer. The aquifer is sometimes considered as two separate aquifers identified as the Upper 180-Foot Aquifer and the Lower 180-Foot Aquifer. The parties presented model results for both the Upper and Lower 180-Foot Aquifers, and we evaluate them separately in this section.

6.4.5 Upper 180-Foot Aquifer

The predicted TDS concentration changes in the Upper 180-Foot Aquifer for each model are depicted below in Figures 15 and 16.

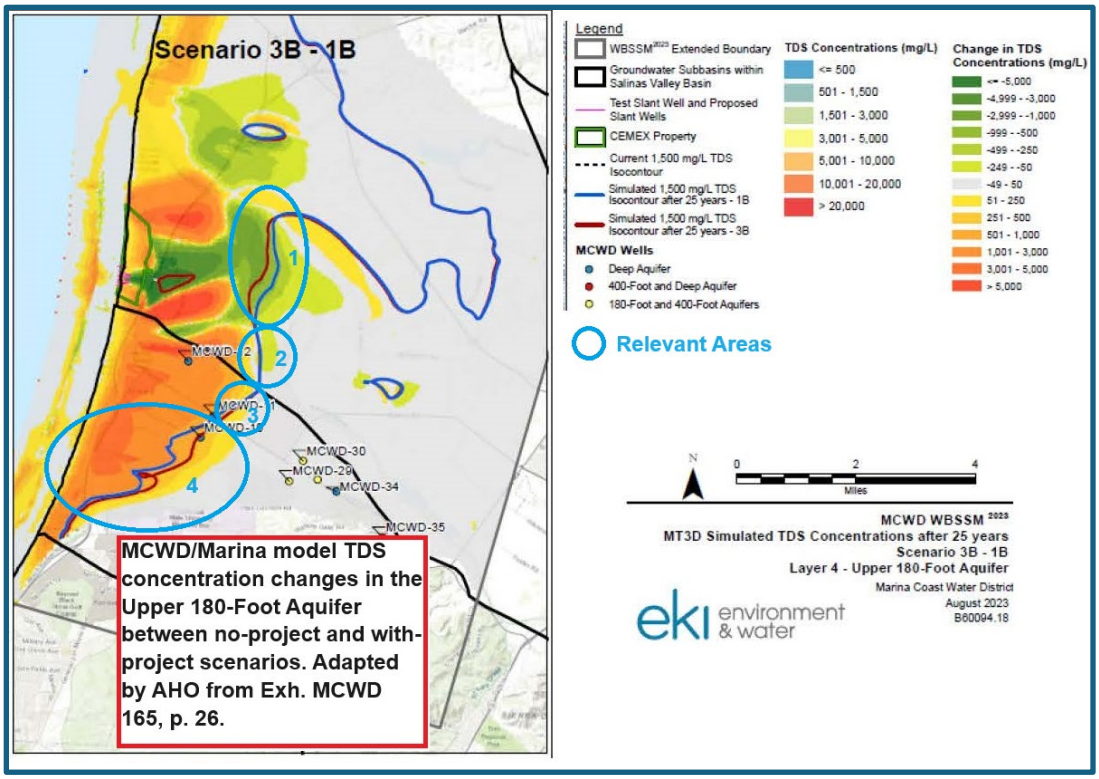


Figure 15 – MCWD model predicted TDS changes between no project and with project scenarios in the Upper 180-Foot Aquifer

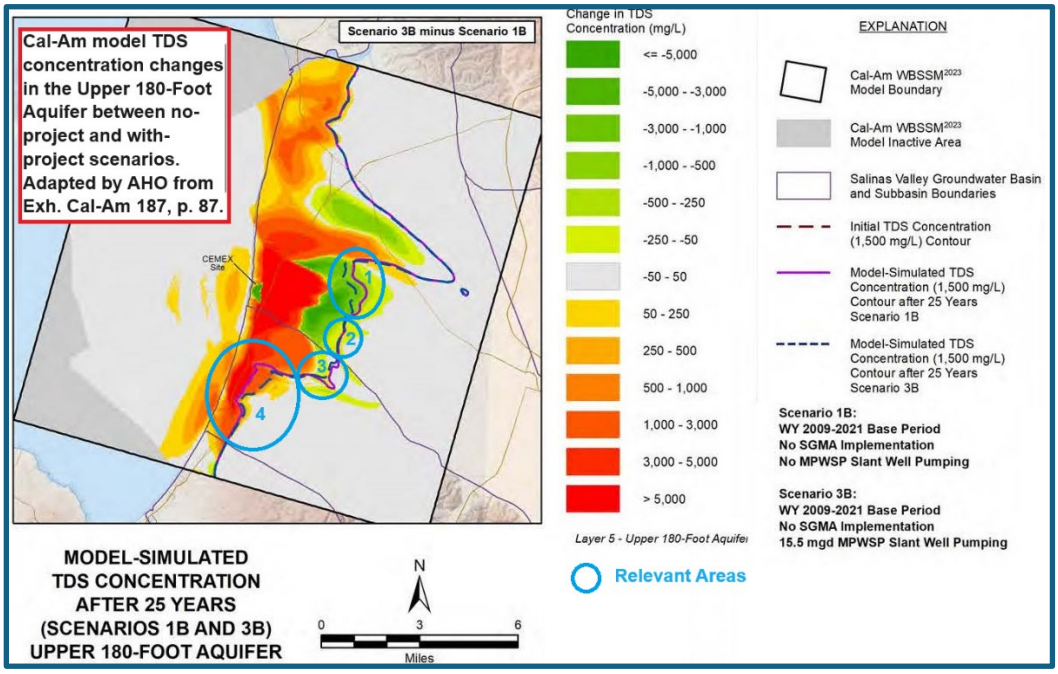


Figure 16 – Cal-Am model predicted TDS changes between no project and with project scenarios in the Upper 180-Foot Aquifer

6.4.6 Lower 180-Foot Aquifer

The predicted TDS concentration changes in the Lower 180-Foot Aquifer for each model are depicted below in Figures 17 and 18.

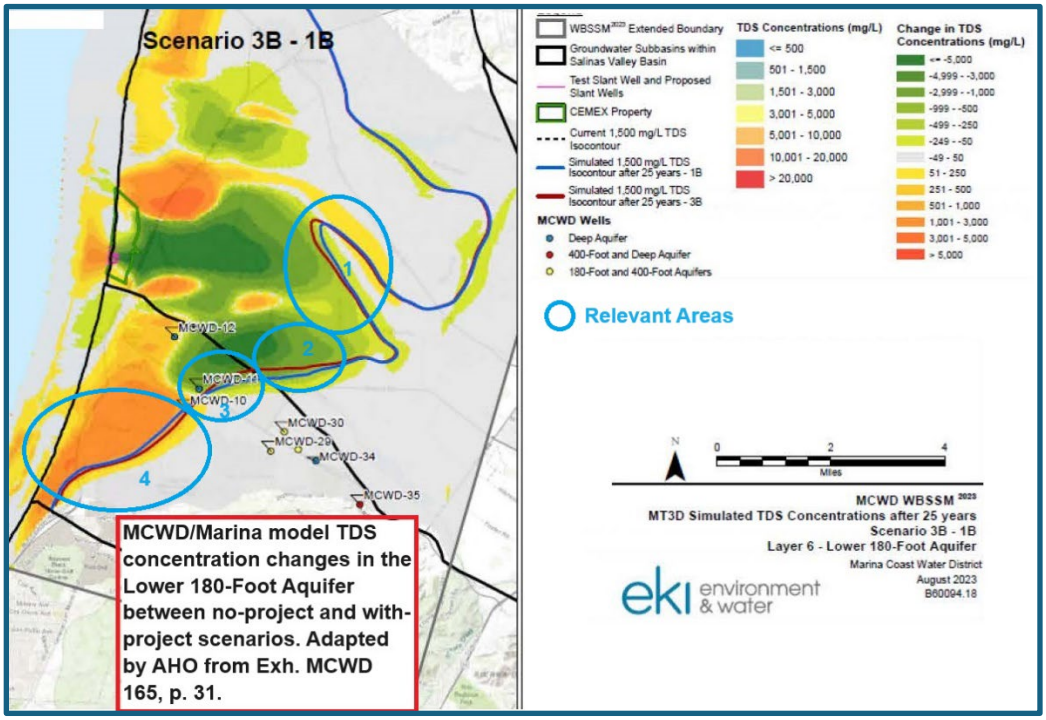


Figure 17 – MCWD model predicted TDS changes between no project and with project scenarios in the Lower 180-Foot Aquifer

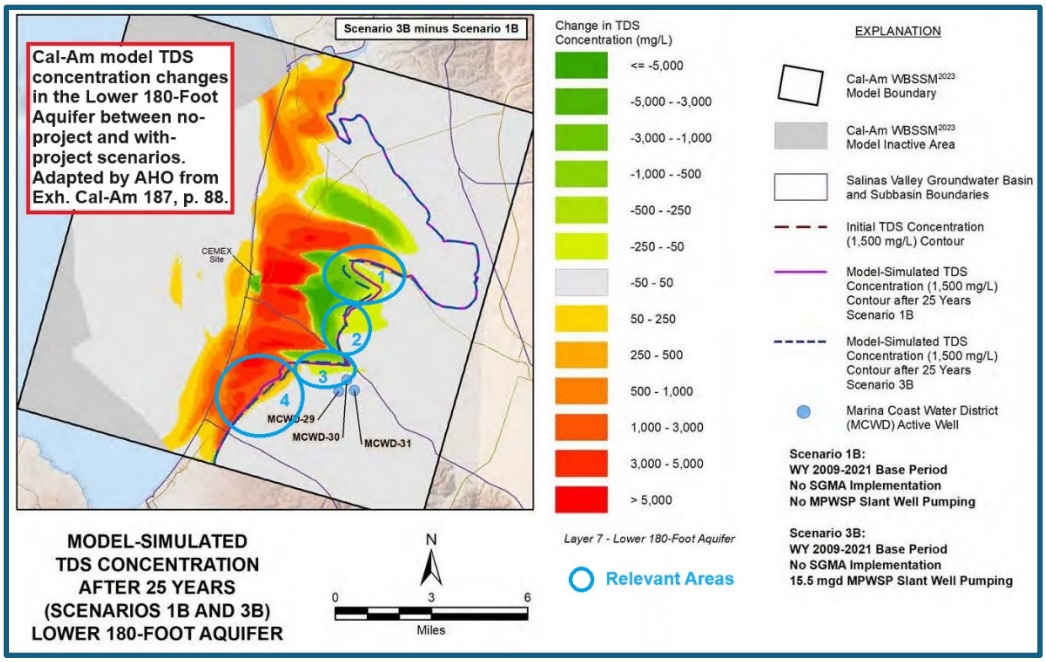


Figure 18 – Cal-Am model predicted TDS changes between no project and with project scenarios in the Lower 180-Foot Aquifer

6.4.7 400-Foot Aquifer

The predicted TDS concentration changes in the 400-Foot Aquifer for each model are depicted below in Figures 19 and 20.

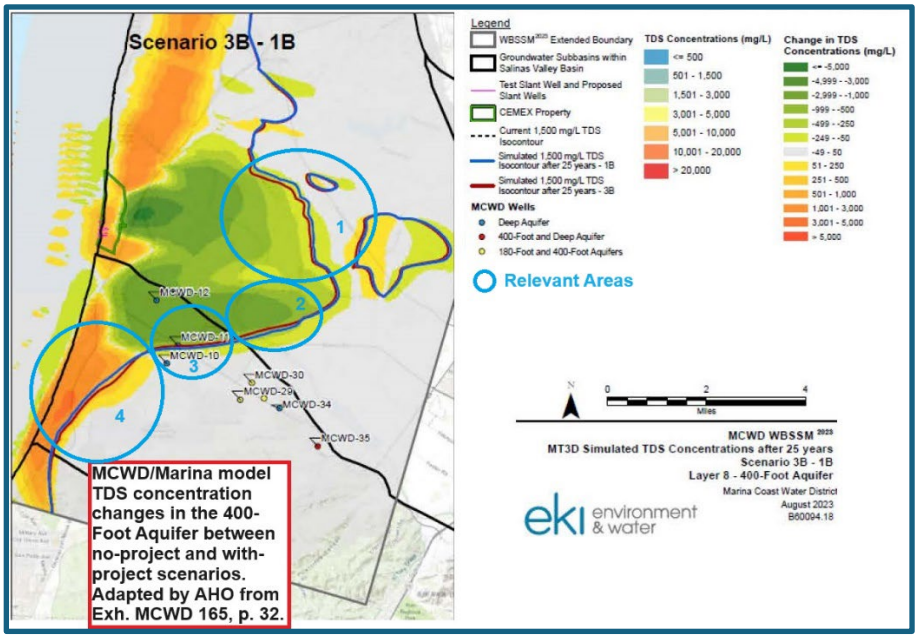


Figure 19 – MCWD model predicted TDS changes between no project and with project scenarios in the 400-Foot Aquifer

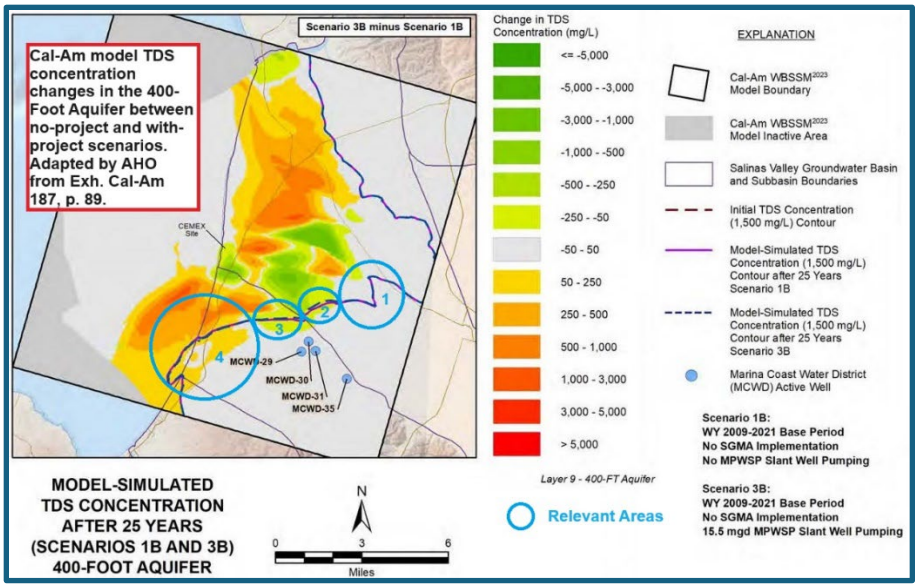


Figure 20 – Cal-Am model predicted TDS changes between no project and with project scenarios in the 400-Foot Aquifer

6.4.8 Deep Aquifer

The parties did not present model results or assert that the draw from the proposed slant wells will result in or increase seawater intrusion in the Deep Aquifer.

6.4.9 Analysis

Figure 21 summarizes the prevailing direction of movement of the 1,500 mg/L TDS isocontour predicted by each model for each of the four areas, as measured in miles, in each aquifer considered in this section.

	Aquifer	Dune Sand		Upper 180-Foot		Lower 180-Foot		400-Foot	
	Model	MCWD/ Marina	Cal-Am	MCWD/ Marina	Cal-Am	MCWD/ Marina	Cal-Am	MCWD/ Marina	Cal-Am
	Section of the 1,500 mg/L isocontour	Prevailing Movement of the 1,500 mg/L Isocontour (miles)							
180/400-Foot Aquifer Subbasin	(1) - Northern and central	No Change	No change	0.5 Seaward	0.5 Seaward	0.5 Seaward	0.5 Seaward	0.25 Seaward	No change
	(2) - Southern near the subbasin boundary	0.5 Seaward	0.5 Seaward	No change	No change	0.5 Seaward	No change	0.25 Seaward	0.25 Seaward
Monterey Subbasin	(3) - Northern near the subbasin boundary	No change	No change	0.25 Landward	0.5 Seaward	0.5 Seaward	No change	0.25 Seaward	No change
	(4) - Southern and central	0.5 Landward	No change	0.75 Landward	0.75 Landward	0.25 Landward	0.25 Landward	0.25 Landward	No change

Figure 21 – Summary of prevailing directions of model predicted movements of 1,500 mg/L isocontours

Although the shapes and magnitudes of movement of the 1,500 mg/L isocontours differ among the models, the model results agree on the question of whether the proposed draw will result in or increase seawater intrusion in 13 of the 16 relevant areas we considered.

In the 180/400 Subbasin, the models predict either no movement or seaward movement of the 1,500 mg/L TDS concentration isocontour in areas (1) and (2) in each aquifer. These results suggest that it is not likely the proposed draw will result in seawater intrusion or inland movement of the seawater intrusion front in the 180/400 Subbasin in areas (1) and (2) in any aquifer.

In the Monterey Subbasin area (3), the models predict either no movement or seaward movement in the Dune Sand, Lower 180-Foot, and 400-Foot Aquifers. In the Upper 180-Foot Aquifer in area (3), the model results disagree on the question of whether the proposed draw would increase seawater intrusion.

In the Monterey Subbasin area (4), the models predict landward movement of approximately 0.75 miles in the Upper 180-Foot Aquifer and approximately 0.25 miles in the Lower 180-Foot Aquifer. The model results disagree on whether the proposed draw would result in increased seawater intrusion in the Dune Sand and 400-Foot Aquifer.

These results suggest that it is not likely that the proposed draw will result in seawater intrusion or inland movement of the seawater intrusion front in the Monterey Subbasin in area (3) in the Dune Sand, Lower 180-Foot, and 400-Foot Aquifers, while it is likely that the proposed draw will result in seawater intrusion and inland movement of the seawater intrusion front in area (4) up to 0.75 miles in the Upper 180-Foot Aquifer and 0.25 miles in the Lower 180-Foot Aquifer.

6.4.10 Area 3 in the Upper 180-Foot Aquifer

In area (3) in the Upper 180-Foot Aquifer, the MCWD model predicts landward movement up to 0.25 miles for the 1,500 mg/L TDS concentration isocontour, while the Cal-Am model predicts seaward movement of 0.5 miles. Unlike the other two areas where the models disagree, the range of results of the two models in this area include both landward and seaward movement of the 1,500 mg/L isocontour. In addition to the different directions and magnitudes of movement, the shape of the 1,500 mg/L isocontours in this area differs notably between models.

The MCWD model predicts the isocontour for the no-project scenario, seen as the blue line within area (3) in Figure 15, will be generally straight and oriented in a southwest to northwest direction across the area. The isocontour for the with-project scenario, seen as the red line within area (3) in Figure 15, is inland from and generally tracks the shape and orientation of the no-project isocontour. The Cal-Am model predicts the isocontour

for the no-project scenario, seen as the purple line in area (3) in Figure 16. This isocontour will have a similar southwest to northwest orientation across the area, but rather than a generally straight line, the isocontour protrudes inland in two locations in the direction of MCWD Wells 29, 30, and 31 (the wells are not depicted on Exhibit Cal-Am-187 p. 87 or Figure 16). The isocontour for the with-project scenario, seen as the dashed blue line in area (3) in Figure 16, generally tracks but does not protrude inland as far as the no-project isocontour.

These results are inconclusive as to whether the 1,500 mg/L TDS concentration isocontour will move inland or seaward because of the proposed draw in area (3) in the Upper 180-Foot Aquifer. Either result does not affect our conclusions with respect to potential impact or injury to MCWD's water rights (see Questions 7 and 8), although any landward change in the 1,500 mg/L TDS concentration isocontour could affect any conclusion as to whether the proposed draw will cause unreasonable harm (see Question 8).

6.4.11 Area 4 in the Dune Sand Aquifer

In area (4) in the Dune Sand Aquifer, the MCWD model predicts landward movement up to 0.5 miles for the 1,500 mg/L TDS concentration isocontour, while the Cal-Am model predicts that there will be no movement of the isocontour. These results suggest that it is likely that the proposed draw will result in some seawater intrusion and inland movement of the seawater intrusion front in area (4) between 0 and 0.5 miles in the Dune Sand Aquifer.

6.4.12 Area 4 in the 400-Foot Aquifer

In area (4) in the 400-Foot Aquifer, the MCWD model predicts landward movement up to 0.25 miles for the 1,500 mg/L TDS concentration isocontour, while the Cal-Am model predicts that there will be no movement of the isocontour. These results suggest that it is likely that the proposed draw will result in some seawater intrusion and inland movement of the seawater intrusion front in area (4) between 0 and 0.25 miles in the 400-Foot Aquifer.

6.4.13 Conclusion

Based on the model results presented by the parties in Phase 3 of this proceeding, we conclude that it is likely the proposed draw will result in seawater intrusion in the central and southern sections of the Monterey Subbasin in the following aquifers and magnitudes: between 0 and 0.5 miles in the Dune Sand Aquifer; up to 0.75 miles in the Upper 180-Foot Aquifer; up to 0.25 miles in the Lower 180-Foot Aquifer; and between 0 and 0.25 miles in the 400-Foot Aquifer.

We also conclude that it is not likely that the proposed draw will result in or increase seawater intrusion in any aquifer in any portion of the 180/400 Subbasin, or in any

aquifer in the northern portion of the Monterey Aquifer Subbasin. Figure 22 summarizes our conclusions based on the model results for each area in each aquifer considered in this section.

	Aquifer	Dune Sand	Upper 180-Foot	Lower 180-Foot	400-Foot
	Section of the 1,500 mg/L isocontour	Range or Maximum Inland Movement of Seawater Intrusion Front (miles)			
180/400-Foot Aquifer Subbasin	(1) - Northern and central	None	None	None	None
	(2) - Southern near the subbasin boundary	None	None	None	None
Monterey Subbasin	(3) - Northern near the subbasin boundary	None	Inconclusive	None	None
	(4) - Southern and central	Between 0 and 0.5	Up to 0.75	Up to 0.25	Between 0 and 0.25

Figure 22 – Summary of Seawater Intrusion Conclusions

6.5 Question 5

Is it likely that any of the proposed draw will (a) lower the groundwater table or
(b) reduce the storage space in any source other than seawater, and if so, can the extent be approximated?

6.5.1 Groundwater Table

This section addresses whether the proposed draw by the slant wells is likely to lower the groundwater table in any source other than seawater.

6.5.2 Model Results

The parties presented model results of simulated drawdown for model layers corresponding to the Dune Sand, 180-Foot, and 400-Foot Aquifers. These results show changes in hydraulic head between the no project and with project scenarios within each aquifer in the Monterey and 180/400 Subbasins.

Hydraulic head in an aquifer refers to the total energy possessed by a unit volume of groundwater at a specific point. It considers two key components of groundwater energy: Elevation head and pressure head. Elevation head represents the potential energy due to the height of the water table or the groundwater level relative to a reference point, often sea level. Pressure head represents the energy due to the pressure exerted by the water itself.

A water table is a term used to describe the depth at which groundwater pressure head is equal to atmospheric pressure. The elevation of the water table is the elevation of the water surface of an unconfined aquifer, such as the Dune Sand Aquifer.

A potentiometric surface is a reference water surface defined by the hydraulic head of groundwater throughout an aquifer. It is primarily used to describe the virtual elevation of the water surface, which may be higher than the actual surface due to pressure head in confined aquifers, such as the 180-Foot and 400-Foot Aquifers.

We use the term “drawdown” to describe both lowering of the elevation of groundwater table in an unconfined aquifer and lowering the potentiometric surface in a confined aquifer caused by groundwater pumping.

We evaluate drawdown caused by the proposed draw in each aquifer in six general locations chosen to facilitate analysis of any predicted changes to groundwater table elevations, and whether any such changes will occur close enough to the MCWD production wells to impact the quantity of water available for extraction by MCWD. The areas from west to east include: 1) the immediate vicinity of the proposed slant wells; 2) west of Highway 1 near the proposed slant wells; 3) between Highway 1 and MCWD Well 12; 4) between MCWD Well 12 and MCWD Well 30; 5) between MCWD Well 30 and MCWD Well 34; and 6) near MCWD Well 35.

MCWD submitted figures comparing drawdowns predicted by both the MCWD and Cal-Am model in the Dune Sand, Upper and Lower 180-Foot, and 400-Foot Aquifers due to project pumping for the 15.5 mgd project (Exh. MCWD-161, pp. 11–14), which we analyze with respect to each of the six above-described areas.

6.5.3 Dune Sand Aquifer

Figure 23 shows the model predicted drawdowns in the Dune Sand Aquifer.

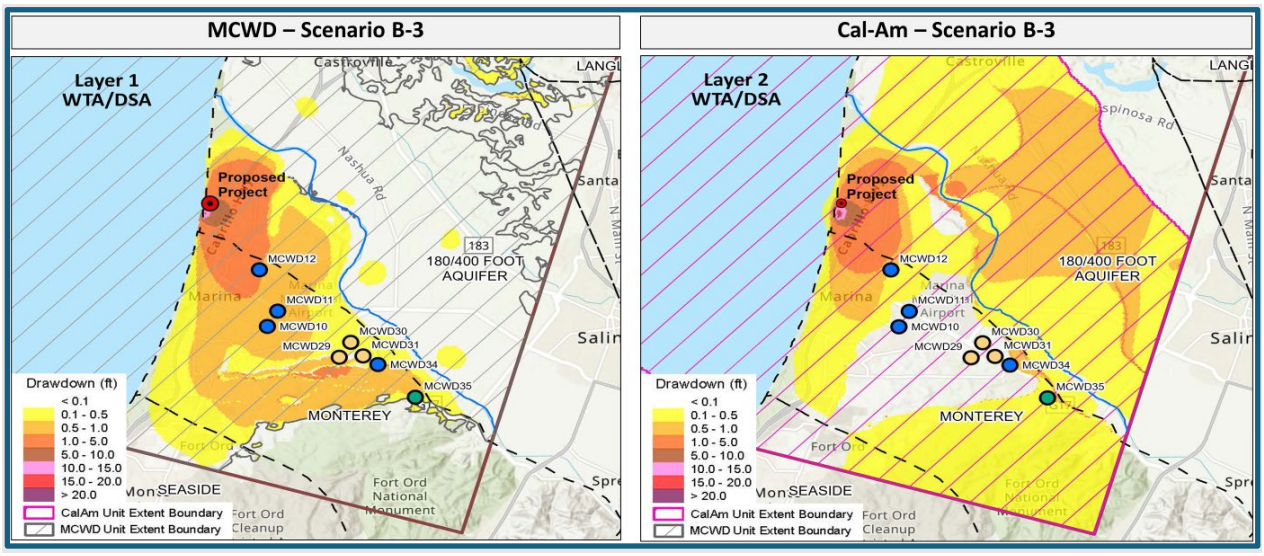


Figure 23 – Model predicted drawdowns in the Dune Sand Aquifer

6.5.4 180-Foot Aquifer

Figure 24 shows the model predicted drawdowns in the Upper 180-Foot Aquifer.

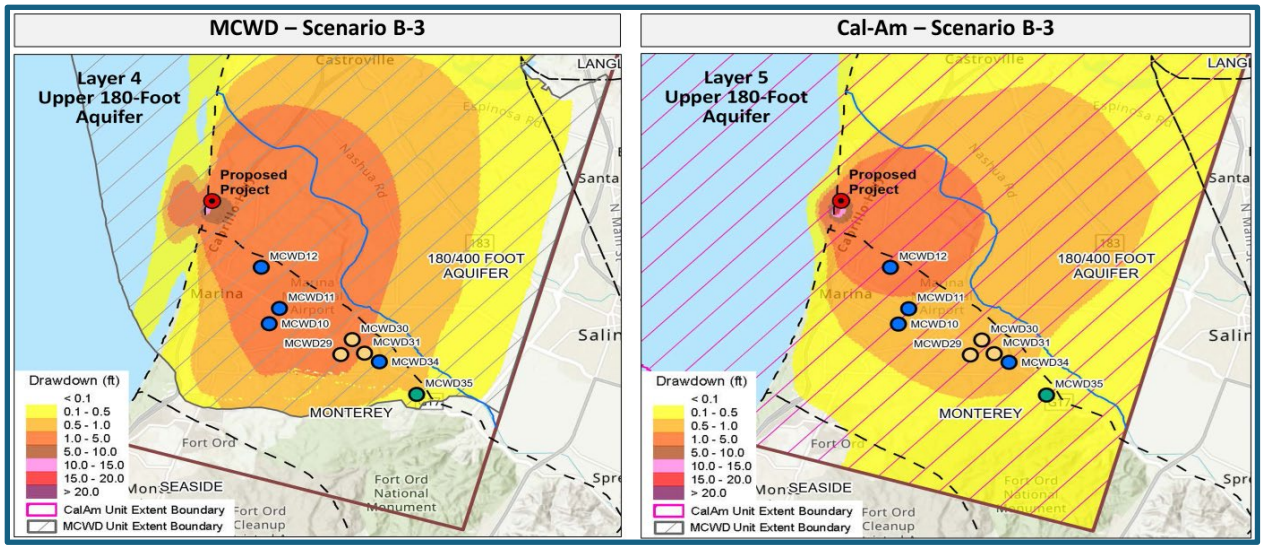


Figure 24 – Model predicted drawdowns in the Upper 180-Foot Aquifer

Figure 25 shows the model predicted drawdowns in the Lower 180-Foot Aquifer.

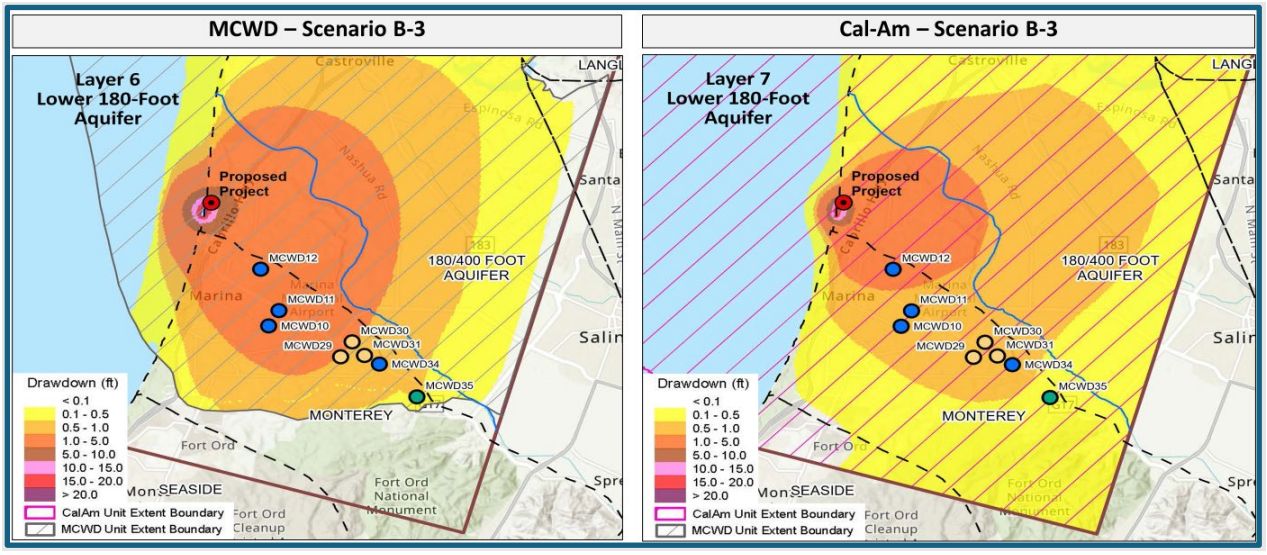


Figure 25 – Model predicted drawdowns in the 180-Foot Aquifer

6.5.5 400-Foot Aquifer

Figure 26 shows the model predicted drawdowns in the 400-Foot Aquifer.

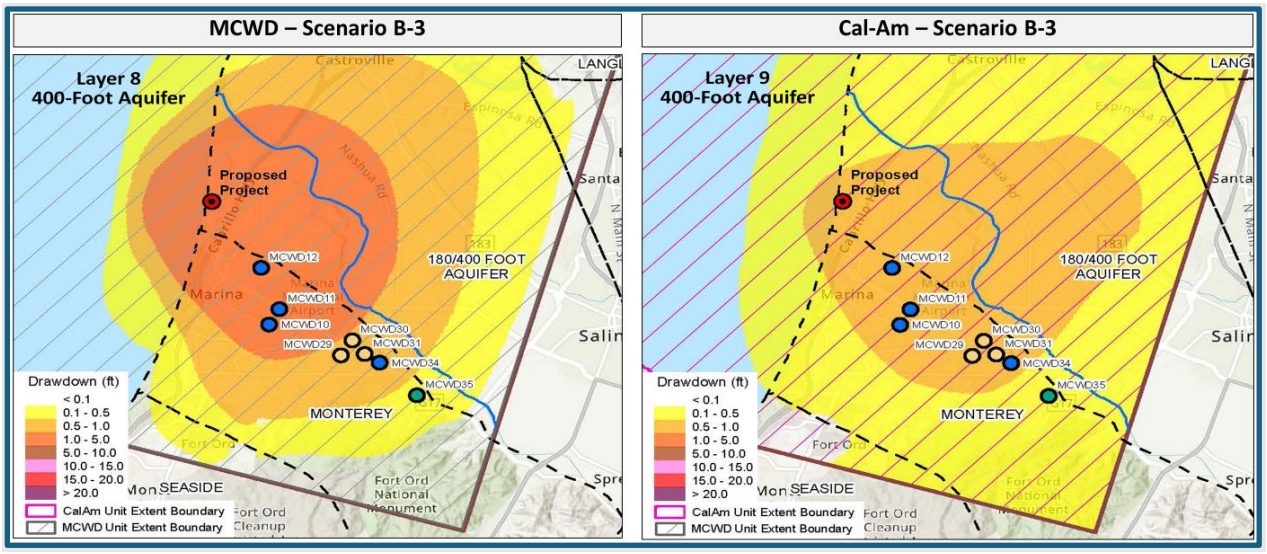


Figure 26 – Model predicted drawdowns in the 400-Foot Aquifer

Figure 27 summarizes the drawdown predicted by each model for each of the areas defined by our analysis, in each aquifer.

Aquifer	Dune Sand		180-Foot		400-Foot	
Model	MCWD/Marina	Cal-Am	MCWD/Marina	Cal-Am	MCWD/Marina	Cal-Am
Location	Drawdown Range (Feet)					
Immediate vicinity of the proposed slant wells	10 to 20	10 to 20	10 to 20	10 to 20	1 to 5	0.5 to 1
West of Highway 1 near the proposed slant wells	5 to 10	5 to 10	5 to 10	5 to 10	1 to 5	0.5 to 1
Between Highway 1 and MCWD Well 12	1 to 5	1 to 5	1 to 5	1 to 5	1 to 5	0.5 to 1
Between MCWD Well 12 and MCWD Well 30	0.5 to 1	Less than 0.1	1 to 5	0.5 to 1	1 to 5	0.5 to 1
Between MCWD Well 30 and MCWD Well 34	0.1 to 0.5	Less than 0.1	0.5 to 1	0.5 to 1	0.5 to 1	0.5 to 1
Near MCWD Well 35	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5

Figure 27 – Model predicted drawdown summary

6.5.6 Conclusion

Based on the model results the parties presented, we conclude that the draw of the proposed slant wells will lower the groundwater table or potentiometric surface in sources other than seawater. The drawdown in each aquifer is largest near the proposed slant wells and generally declines across the area between the proposed slant wells and MCWD Well 35. In the Dune Sand and 180-Foot Aquifers, drawdown ranges from a maximum of 10 to 20 feet in the immediate vicinity of the proposed slant wells, to a minimum of less than half a foot near MCWD Well 35. In the 400-Foot Aquifer, the drawdown ranges from a maximum of 1 to 5 feet in the immediate vicinity of the proposed slant wells, to a minimum of less than half a foot near MCWD Well 35.

6.5.7 Storage Space

There is some ambiguity in the definition of the term “storage space” as the term is used in the court’s question. The term might either describe (1) the space in which water can be stored in an aquifer, or (2) the amount of water stored in the aquifer.

The space in which water can be stored in an aquifer can be reduced if the proposed draw causes subsidence in confined aquifers or if the proposed draw causes seawater

intrusion to displace storage of water of a quality that is suitable for use. MCWD asserts that an "increase in seawater intrusion will reduce water quality in the [Monterey] Subbasin, reduce storage space in the Subbasin, and jeopardize the ability of MCWD to rely on its production wells." (2023-11-13 MCWD's Closing Brief, p. 25.) Cal-Am responds that the portions of aquifers that are already seawater intruded are not usable for fresh groundwater storage, and any increase in TDS concentrations in these portions of the aquifers from the operation of the slant wells is not a loss of usable storage space. (Exh. Cal-Am-183, ¶ 12.) None of the parties submitted evidence of storage loss from subsidence or attempted to quantify any loss in storage space from displacement by seawater intrusion. Such a calculation would require a judgment as to the TDS or chloride concentration that constitutes a "loss" of storage space, delineation of the change in the isocontour for that concentration, and quantification of the depth of the aquifer. The information necessary to make such an estimate is not in the evidentiary record so we do not further address this type of loss in storage space.

Alternatively, storage space may describe the amount of groundwater stored in an unconfined or semi-confined aquifer. The amount of water stored in an unconfined or semi-confined aquifer is reduced by an amount proportional to the drawdown. Because there is information in the record to estimate this type of potential loss in storage space, we focus our response to the court's question on evidence of a reduction in storage space from a reduction in the amount of water stored in the unconfined or semi-confined aquifers based on model-predicted drawdown.

6.5.8 Groundwater Stored in the Dune Sand Aquifer

MCWD asserts that both models demonstrate that project pumping would reduce groundwater storage in the Dune Sand Aquifer within the Monterey and 180/400 Subbasins from drawdowns in groundwater elevation. (MCWD-Marina Proposed Report Part 2, p. 98.) Cal-Am does not dispute this assertion but argues that the seawater intruded portions of aquifers are not usable for fresh groundwater storage, and any increase in TDS concentrations in such aquifers resulting from the operation of the slant wells does not constitute the loss of fresh groundwater storage space. (Exh. Cal-Am 183, ¶ 12.)

Storage loss in an unconfined aquifer can be roughly estimated by calculating the volume of the unsaturated space created by the model predicted drawdown over the area in which the drawdown occurs and multiplying that volume by the specific yield of the aquifer.[55] The specific yield is the ratio of the volume of water the saturated space

[55] This storage loss estimate is based on differences in groundwater elevations between with-project and no-project scenarios in the stead-state models. As such, it represents an overall loss resulting from project pumping, and not a "per year" loss.

will yield by gravity to the total volume of the space. The parties submitted model results for losses in groundwater storage in the Dune Sand Aquifer across the entire model domain and for the area south of the Salinas River. The Salinas River is the northern boundary of the Subbasin Interface Zone as defined by MCWD.

Within the Dune Sand Aquifer, the MCWD model results predict a storage loss of 1,531 acre-feet for the 11.6 mgd project alternative, and 2,046 acre-feet for the 15.5 mgd project alternative (Exh. MCWD-128, p. 71). MCWD also presented modeling results from the Cal-Am model, which predicts a storage loss of 3,681 acre-feet for the 11.6 mgd project alternative, and 5,993 acre-feet for the 15.5 mgd project alternative. (Exh. MCDW-175, p. 26.)

For the area south of the Salinas River, the MCWD model predicts a storage loss of 1,284 acre-feet for the 11.6 mgd project alternative, and 1,715 acre-feet for the 15.5 mgd project alternative. The Cal-Am model predicts a storage loss of 1,409 acre-feet for the 11.6 mgd project alternative, and 1,783 acre-feet for the 15.5 mgd project alternative.

Cal-Am calculates the loss of "usable storage space," which discounts impacts to areas of existing seawater intrusion by excluding storage losses in areas with (1) existing TDS concentrations greater than 1,000 mg/L (the upper (long-term) secondary MCL for drinking water) and (2) predicted drawdown of less than 0.2 ft. (Exh. Cal-Am-177, p. 32.) Cal-Am calculates "usable storage loss" in the Dune Sand Aquifer to range from 1,463 acre-feet for the 11.6 mgd project alternative to 2,055 acre-feet for the 15.5 mgd project alternative. (Exh. Cal-Am-177, p. 33.)

6.5.9 Analysis

Both models predict that the proposed draw will lower the groundwater table in the Dune Sand Aquifer and correspondingly predict a reduction in the amount of water stored in the aquifer. Figure 28 summarizes the model predicted losses in water stored in the Dune Sand Aquifer.

Storage Losses in the Dune Sand Aquifer (AF)			
Project Alternative (mgd)	MCWD Response (Exh. MCDW-175, p. 26.)		Cal-Am Response (Exh. Cal-Am-177 p. 33.)
	MCWD Model	Cal-Am Model	
11.6	1,531	3,681	1,463
15.5	2,046	5,993	2,055

Figure 28 – Storage losses in the Dune Sand Aquifer

6.5.10 Conclusion

We conclude that it is likely that the proposed draw will reduce the groundwater storage in the Dune Sand Aquifer. Based on the model results, the reduction in storage will range from 2,046 to 2,055 acre-feet. (Exh. MCWD-128, p. 71, Exh. Cal-Am-177, Tbl. 3-10, p. 33.)[56]

We do not directly analyze changes in groundwater storage in the remaining aquifers because the technical experts did not report model-calculated groundwater storage fluctuations in confined aquifers. Aquifers in the vicinity of the proposed project other than the Dune Sand Aquifer are generally confined and declines in the potentiometric head in these aquifers do not directly correspond to changes in actual groundwater storage. (Exh. MCWD-128, p. 70.)

6.5.11 Subbasin Cross-Boundary Flows

After Phase 2 of this proceeding, the AHO hearing officer asked the parties to address whether the projected Cal-Am slant well pumping will result in losses in groundwater storage or sustainable yield in the Monterey Subbasin due to increased flows from the Monterey Subbasin into the 180/400 Subbasin. (2023-07-26 Post-Hrg. Order, p. 2.) We refer to flows from the Monterey Subbasin to the 180/400 Subbasin as cross-boundary flows.

6.5.12 Parties' Positions

MCWD and Marina assert that the proposed draw would result in an increase in subbasin cross-boundary flow from the Monterey Subbasin to the 180/400 Subbasin between 1,605 and 2,103 afy, and of these increased flows, between 666 and 1,164 afy will occur in the Dune Sand and 180-Foot Aquifers. (Exh. MCWD-165, at pp. 50–54.) They assert that the subbasin cross-boundary flows will reduce the volume of groundwater in the Monterey Subbasin absent replacement of the water from other sources, and the Monterey Subbasin's sustainable yield will be correspondingly reduced. (Exh. MCWD-168, p. 22:1-3, 18-23.) MCWD also asserts that the increase in cross-boundary flows will cause harm by impacting MCWD's ability to meet SGMA requirements by reducing the groundwater supply that is legally available for extraction under the groundwater sustainability plan. (*Id.* at p. 22:17-19.)

Cal-Am does not contest that cross-boundary flows into the 180/400 Subbasin from the Monterey Subbasin will increase because of the proposed draw. Cal-Am asserts that the change in cross-boundary flows is small, and the effects caused by these increased

[56] We note that although the parties' responses to this question appear to be similar, these results are not an "apples to apples" comparison. MCWD's results include losses within the entire model domain, while Cal-Am's results do not include losses from areas of the Dune Sand Aquifer they contend are not usable.

cross-boundary flows will not injure MCWD or Marina. (Exh. Cal-Am-177, pp. 35–36; Cal-Am Closing Brief, pp. 34:24–35:3.)

6.5.13 Analysis – Changes in Cross-Boundary Flows

MCWD estimated cross-boundary flows with a zone budget analysis for all layers using each model, but did not report changes to inflows from other sources such as the ocean or Seaside Subbasin. (Exh. MCWD-165, pp. 50–54.) MCWD considered two reaches along the subbasin boundary within the model domain to quantify cross-boundary flow. The first reach, which we refer to as the capture zone reach, extends from the ocean to the boundary of the capture zone (or mixing zone). The second reach, which MCWD calls Reach A, extends from the boundary of the capture zone to the boundary of the model domain. Figure 30 shows the capture zone reach (yellow line), the capture zone (blue shaded area), and Reach A (light green line). (Exh. MCWD-165 p. 52, Figure 6-1.)

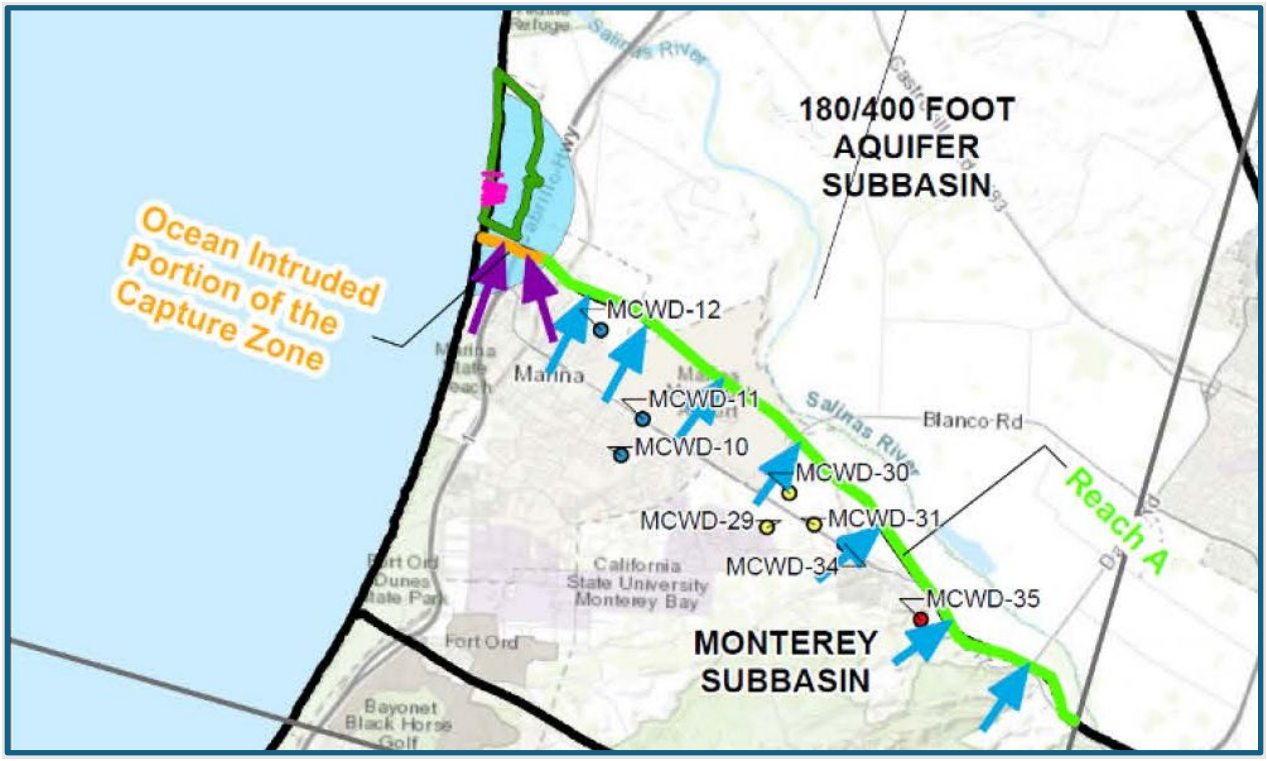


Figure 29 – Subbasin cross-boundary flow reaches submitted by MCWD

Using its own model, MCWD calculates that 15.5 mgd of slant well pumping (Scenario B3) will cause a total increase in cross-boundary flow for all model layers of 2,103 afy,[57] consisting of 833 afy in Reach A and 1,270 afy in the capture zone reach. (Exh. MCWD-

[57] This value is based on the amounts provided in Table 4. The amount is reported as 2,102 afy on page 50 of Exh. MCWD-165. The difference in amounts is assumed to be due to a rounding error.

165, pp. 50, 127 [Tbl. 4].) For the model layers that include only the Dune Sand Aquifer and Upper 180-Foot Aquifer, MCWD calculates an increase in cross-boundary flow of 228 afy in Reach A and 438 afy in the capture zone reach, totaling 666 afy across both reaches. (*Id.* at p. 53, Tbl. 6-1.) Using the Cal-Am model, MCWD calculates an increase in cross-boundary flow for all model layers of 749 afy in Reach A and 856 afy in the capture zone reach, totaling 1,605 afy across both reaches. (*Id.* at pp. 135 [Tbl. 12], 50.)

MCWD asserts that the increase in cross-boundary outflows along Reach A in freshwater aquifers represents a loss in the sustainable yield of the Monterey Subbasin, and that the increase in cross-boundary flows along the capture zone reach includes a mix of freshwater originating from inland sources and seawater. MCWD asserts that the portion of these cross-boundary flows originating from freshwater inland sources represent an additional loss in sustainable yield to the Monterey Subbasin. (Exh. MCWD-165, at p. 50.)

Cal-Am estimated subbasin cross-boundary flows with a zone budget analysis using their model and reported inflows from the ocean and other subbasins as well as flows across the subbasin boundary (1) within the capture zone; (2) within the seawater intrusion front (but outside the capture zone); and (3) outside the seawater intrusion front. Figure 30 shows the reaches considered by Cal-Am and the calculated flows. (Exh. MCWD-165, at pp. 131–132, Figs. 83 & 84.)

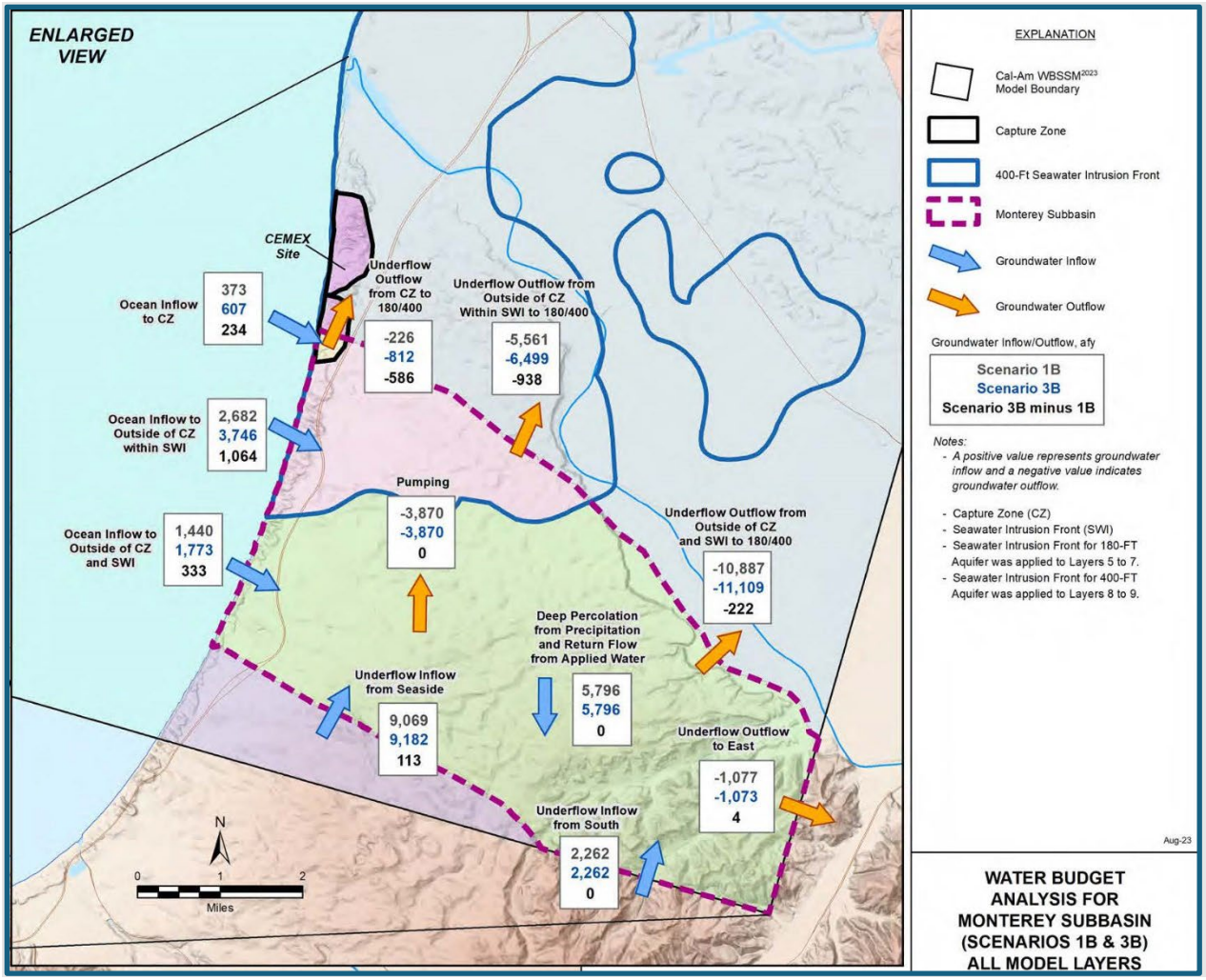


Figure 30 – Subbasin cross-boundary flow reaches submitted by Cal-Am

Cal-Am calculates increases in cross-boundary flows from the Monterey Subbasin to the 180/400-Foot Subbasin of 586 afy in the capture zone, 938 afy within the seawater intrusion front (but outside the capture zone), and 222 afy outside the seawater intrusion front, totaling 1,746 afy across the entire boundary within the model domain. Cal-Am did not submit more specific information about cross-boundary flow, such as volume of flow by individual model layer or aquifer.

Cal-Am also calculated the expected increase of inflows into the Monterey Subbasin. Cal-Am calculated increased inflows from the ocean of 234 afy in the capture zone, 1,064 afy within the seawater intrusion front (but outside the capture zone), and 333 afy outside the seawater intrusion front, and 113 afy from the Seaside Subbasin, totaling 1,744 afy.

Cal-Am experts concluded that the change in inflows from the ocean of 1,064 afy to the zone of seawater intrusion within Monterey Subbasin (and outside of the proposed slant well capture zone) are approximately equal to the change in outflows of 938 afy from Monterey Subbasin to the 180/400 Subbasin within the zone of seawater intrusion (but outside the proposed slant well capture zone), resulting in no net loss to the Monterey Subbasin. They estimated the increase in outflows from Monterey Subbasin to the 180/400 Subbasin outside the zone of seawater intrusion would result in a net loss of 222 afy. (Exh. Cal-Am-177, p. 35.)

6.5.14 Analysis – Water Budget/Sustainable Yield

Both parties estimate that cross-boundary flows will increase with the proposed project, and their calculation of the volume of increase are consistent. MCWD used both its own model and Cal-Am's model to calculate a cross-boundary flow range from 1,605 afy to 2,103 afy. Cal-Am used the Cal-Am model to estimate a total cross-boundary flow of 1,746 afy. Cal-Am's analysis indicates that the total cross-boundary flow increases from the Monterey Subbasin to the 180/400 Subbasin (1,746 afy) are approximately balanced by inflows to the Monterey Subbasin from the ocean and the Seaside Subbasin (1,744 afy). In contrast, MCWD's analysis is incomplete because MCWD does not consider water movement across other boundaries of the basin. MCWD does not provide sufficient information about changes in inflows to the subbasin to conclude whether their model results show a loss in groundwater storage to the subbasin overall.[58] Therefore, MCWD's analysis does not directly address impacts from changes in cross-boundary flow on storage or sustainable yield in the Monterey Subbasin. We rely on Cal-Am's model results to conclude that operation of the proposed project will not directly impact groundwater storage within the Monterey Subbasin because increased inflows to the subbasin will offset increased outflows to the 180/400 Subbasin.

The parties differ in their characterization of the salinity of cross-boundary flows, which could result in a loss of useable "fresh" groundwater storage even if the amount of groundwater in storage remains constant. We conclude, however, that changes in the salinity of groundwater in the subbasins from operation of the proposed project is better

[58] MCWD's methodology is also inconsistent with the water budget calculation in the GSP for the subbasin. The water budget for the Monterey Subbasin includes recharge, well pumping, net inter-basin flows (freshwater and seawater), and net surface water exchange. (Monterey Subbasin GSP, Table ES-1, p. 37.) The freshwater net inter-basin flows in the GSP include inflow from the Seaside Subbasin and outflows to the 180/400 Subbasin. The seawater net inter-basin flows include inflow from the ocean and outflow to the 180/400 Subbasin. (*Ibid*.)

characterized by the subbasin-wide water quality model results addressed in Section 6.4, rather than by a more limited analysis of the salinity of cross-boundary flows.

6.6 Question 6

Has MCWD been pumping water from the Subbasin Interface Zone and, if so, for approximately what period?

All of MCWD's production wells are located within the areal extent of the Subbasin Interface Zone. (Exh. MCWD-9, p. 22 [Fig. 3-4].) MCWD General Manager Remleh Scherzinger testified that the district has been pumping groundwater since it was formed in 1960 (Exh. MCWD-1, p. 6), and Ms. Vera Nelson testified that the district has used groundwater from the Subbasin Interface Zone since that time. (Exh. MCWD-2, p. 63.)

MCWD provided pumping records for calendar years 2006 through 2020 by well, subbasin location, screening depth, and volume in Exhibit MCWD-8. Cal-Am did not dispute this testimony about MCWD's pumping or the pumping information listed in Exhibit MCWD-8.

6.7 Question 7

What effect, if any, would the proposed draw by Cal-Am slant wells have upon any primary or paramount water right of Marina or MCWD?

What impact on quantity and quality of the water sourced by MCWD wells is likely?

6.7.1 Marina's Water Rights

Marina does not claim or present any evidence of an appropriative right to extract groundwater from the SVGB. Marina does not own or operate any wells in the basin. The residents of Marina are customers of MCWD and receive water from MCWD. (See Exhs. MCWD-1, p. 4:13-18; Marina-1, p. 4:2-4.) Marina claims to own property overlying the basin, and as an overlying owner, Marina likely has overlying rights to groundwater for use on those properties. We conclude that Marina does not have any appropriative right to extract groundwater from the basin that would be paramount to the proposed draw by Cal-Am but may have unexercised overlying rights.

Marina asserts that as an overlying landowner, it has overlying rights to groundwater for use on its properties. (2025-01-31 City of Marina's Comments, p. 60.) Marina does not identify any evidence in the record for this proceeding as to the extent of its overlying landholdings, but we assume that Marina owns some property overlying the basin to which an overlying right may attach. (*Ibid.)* Even so, an overlying groundwater right is a usufructuary right. The overlying owner has a right to protect its reasonable and beneficial use of water from injury. "[O]verlying owners and appropriators are entitled to

the protection of the courts against any substantial infringement of their rights in water which they reasonably and beneficially need." (*City of Pasadena v. City of Alhambra* (1949) 33 Cal. 2d 908, 926 [citing *Peabody v. City of Vallejo* (1935) 2 Cal.2d 351, 368–369, 374].) "[T]he rights of the riparian and overlying landowners were limited to the amount of their actual or prospective reasonable beneficial use of the water." (*Corona Foothill Lemon Co. v. Lillibridge* (1937) 8 Cal. 2d 522, 530.)

To the extent that Marina has a current or prospective reasonable beneficial use of groundwater on its overlying property, significant and unreasonable impacts to the quantity or quality of groundwater available for extraction and beneficial use at the overlying property caused by Cal-Am's proposed draw may injure the exercise of Marina's overlying right. It is not possible to assess any such risk of injury, however, while Marina's intent to extract water remains speculative and without more information about the location of Marina's overlying property, the location of any proposed wells, the type of proposed beneficial use to be made, and when the proposed extraction and use would occur. Furthermore, the doctrine of reasonableness would apply to any prospective overlying use by Marina to prohibit unreasonable interference with maximum beneficial use of the state's water resources. (See *Town of Antioch, supra,* 188 Cal. 451; Cal. Const., art. X, § 2.) A physical solution might address any injury to Marina's exercise of its claimed overlying rights when and if Marina seeks to exercise those rights.

Marina also argues that Cal-Am's proposed project will "cause irreparable harm to the City's beneficial uses of the vernal ponds," and that this "is a water rights issue that the State Water Board must consider in this proceeding." (2022-08-22 City of Marina Opposition to Motion in Limine, p. 13:4-8.) Marina does not cite any legal authorities to support its argument that it has water rights for the *in situ* uses of water in vernal pools or wetlands within its boundaries. Marina presents no evidence that it owns any lands that have overlying or riparian rights associated with vernal pools or wetlands. And appropriative water rights do not extend to *in situ* uses in the absence of pumping, diversion, or another method of capture or control of water from the natural source. (See *Fullerton v. State Water Resources Control Bd.* (1979) 90 Cal.App.3d 590, 604; *California Trout, Inc. v. State Water Resources Control Bd.* (1979) 90 Cal.App.3d 816, 820.) Marina therefore has not demonstrated any "primary or paramount water right," as those terms are used in Question 7, to water in vernal pools or wetlands within its boundaries. (2022-08-31 AHO ruling on Cal-Am mtn. in limine, pp. 5–6.)

6.7.2 MCWD's Water Rights

MCWD has been pumping groundwater from the SVGB since the district was formed in 1960. (Exh. MCWD-1, p. 4.) MCWD now serves approximately 35,000 people in Marina, Seaside, the Ord Military Community, and neighboring areas. (*Ibid*.) MCWD submitted

pumping records for calendar years 2006 through 2020 by well, subbasin location, screening depth, and volume in Exhibit MCWD-8. Figure 31, prepared by AHO staff, summarizes the information in Exhibit MCWD-8 to show the total amount of groundwater that MCWD pumped from the basin and from each aquifer in each calendar year from 2006 to 2020.

Summary of MCWD Groundwater Pumping between 2006 and 2020 from Exh. MCWD-8 (Acre-Feet per Year)												
Year	MCWD Production Wells								Aquifers			Total
	Deep			180-Foot and 400-Foot			Deep	-Foot and D	Deep	180-Foot and 400-Foot	400-Foot and Deep	
	10	11	12	29	30	31	34	35/WG				
2006		1,278	508	504	883	1,122			1,786	2,509	0	4,295
2007		1,164	458	520	1,155	1,266			1,622	2,941	0	4,563
2008	650	875	308	462	896	911			1,833	2,269	0	4,102
2009	841	869	251	394	892	791			1,961	2,077	0	4,038
2010	687	845	213	555	882	953			1,745	2,390	0	4,135
2011	699	864	136	554	898	896			1,699	2,348	0	4,047
2012	893	909	12	549	530	1,216	15	1	1,829	2,295	1	4,125
2013	830	621	16	671		740	543	1,009	2,010	1,411	1,009	4,430
2014	717	894	8	390		411	750	856	2,369	801	856	4,026
2015	544	869	7	159		461	550	638	1,970	620	638	3,228
2016	593	710	0	185	73	328	528	609	1,831	586	609	3,026
2017	721	866		165	404	330	492	260	2,079	899	260	3,238
2018	769	974		233	357	508	532	32	2,275	1,098	32	3,405
2019	663	763		221	272	351	351	569	1,777	844	569	3,190
2020	594	622		205	310	416	448	698	1,664	931	698	3,293

Figure 31 – Summary of MCWD Groundwater Pumping between 2006 and 2020 from Exh. MCWD-8 (Acre-Feet per Year)

Cal-Am does not dispute the pumping information listed in Exhibit MCWD-8. Because there is no dispute that MCWD has been continuously pumping for municipal uses, MCWD appears to have perfected either an appropriative or prescriptive right to groundwater in the SVGB. This appropriative or prescriptive right would be senior in priority to any appropriative right developed by Cal-Am to extract groundwater from the basin.

The maximum annual amount of groundwater to which MCWD may have perfected a right cannot exceed the maximum amount of its historical extraction and beneficial use in any one year. MCWD's maximum annual extraction based on the available evidence occurred in 2007 and was 4,563 afy from the SVGB and 2,941 afy from the aquifers that would be affected by the proposed project. It is not necessary to precisely quantify the

amount of MCWD's water right to determine whether the right may be affected or injured by operation of the proposed slant wells. The evidence does not show that the operation of the slant wells is likely to materially impact MCWD's ability to extract the amount of water per year up to the historical maximum to which it may be entitled.

It is possible that MCWD could, in the future, perfect a right to extract and use more water than the volume of its historical maximum use with a priority date senior to any right acquired by Cal-Am. To demonstrate a prior right to this additional volume of water, MCWD must show an intent to appropriate the additional amount as of the date of the claimed priority and show that, since that time, MCWD pursued extraction and beneficial use with reasonable diligence. (See, e.g., *State of Arizona v. State of California*, (1936) 298 U.S. 558 ["The appropriator first in time is prior in right over others upon the same stream, and the right, when perfected by use, is deemed effective from the time the purpose to make the appropriation is definitely formed and actual work upon the project is begun, or from the time statutory requirements of notice of the proposed appropriation are complied with, provided the work is carried to completion and the water is applied to a beneficial use with reasonable diligence"].) To demonstrate potential injury to such a future-perfected right, MCWD must identify the amount of water claimed, the aquifer from which the additional water would be drawn, the location of the wells, and the use of the water. There is no such evidence in the record in this proceeding.

6.7.3 Injury to MCWD's Water Rights

Because the draw of the slant wells is not hydrologically connected to the Deep Aquifer (see Section 6.3.1), there would be no effect of the proposed draw on MCWD's water rights associated with wells that are screened solely in the Deep Aquifer (MCWD Wells 10, 11, 12, and 34).

In contrast to the Deep Aquifer, the 180-Foot and 400-Foot Aquifers are hydrologically connected to sources for the proposed slant wells (see Section 6.3.1). As a result, the proposed draw could affect MCWD's water rights associated with wells screened in those aquifers. MCWD Well 35 is screened in part in the 400-Foot Aquifer, and MCWD Wells 29, 30, and 31 are screened in the 180-Foot and 400-Foot Aquifers. As discussed in further detail below, the parties' modeling results and other evidence show that although the proposed draw may have some impact on groundwater conditions at MCWD Wells 29, 30, 31, and 35, the impacts would most likely be insignificant and not rise to the level of an injury to MCWD's senior rights.

6.7.4 Impacts to Quantity of Groundwater

The proposed draw of Cal-Am's slant wells will not affect the amount of water physically available to MCWD for extraction under its water rights, nor will it result in any significant increase in pumping or other costs for MCWD to exercise its right.

Even with the proposed draw from Cal-Am's slant wells, the steady state model results show that there will be sufficient water within the aquifers to meet MCWD's documented historic maximum use of 4,563 afy, which is the greatest amount of water for which MCWD has demonstrated entitlement under its senior water rights. (See Section 6.7.2.) Although operation of the project will result in some drawdown of water levels, the models predict drawdown ranges of half a foot to one foot (Cal-Am) and one to five feet (MCWD) near MCWD's wells screened in the 180-Foot and 400-Foot Aquifers. (See Section 6.5.1 & Figure 27.)

Cal-Am objects that the one to five feet predicted drawdown range for the MCWD model "are misleading as the value is much closer to 1 than 5." (2025-01-31 Cal-Am Objections to Report of Referee, pp. 50–51.) Regardless, MCWD did not present any evidence that this relatively small amount of drawdown would require MCWD to increase the depth of its well casings or well screens to access groundwater, significantly increase the cost of operating its pumps, or otherwise materially impact MCWD's ability to extract groundwater. (See Exh. Cal-Am-157, ¶ 52(d).)

As discussed in Section 5.2.1, not every interference with the exercise of a water right constitutes injury. Injury occurs if the interference is material and significant, and the cost to the senior right holder of avoiding the harm is unreasonable. Those cases in which courts have found injury to senior groundwater rights from drawdown of groundwater levels involved significant declines in groundwater levels or continuous and cumulative declines over time that were collectively significant. (See *Burr v. Maclay Rancho Water Co.* (1908) 154 Cal. 428, 432–433, 437–438 [defendant's groundwater pumping prevented plaintiff from operating his pumps and permanently lowered groundwater levels as much as seven feet over an 18-month period]; *City of Lodi, supra,* 7 Cal.2d at pp. 331, 334, 339 [defendant's diversions would cause a progressive decline in water levels of at least one foot per year and plaintiff would be required to continually lower its wells to access water]; *Corona Foothill Lemon Co. v. Lillibridge* (1937) 8 Cal.2d 522, 524-525 [defendant's groundwater pumping was materially lowering groundwater levels in the basin and would eventually "exhaust the water therein"]; *Smith v. Wheeler* (1951) 107 Cal.App.2d 451, 455–456 [defendant's pumping would lower water levels to such an extent that the plaintiffs' wells could not operate]; *Monolith Portland Cement Co. v. Mojave Public Utilities Dist.* (1957) 154 Cal.App.2d 487, 493–494 [defendant's groundwater pumping would lower groundwater levels to such an extent that other pumpers had to lower their wells to continue pumping].)

Based on the evidence presented in this proceeding, the proposed draw would not injure MCWD's water rights by materially or unreasonably affecting the amount of water available to MCWD at its existing wells, either now or over time, or the cost of extracting and using that water.

6.7.5 Impacts to Quality of Groundwater

Based on the parties' model results, the proposed draw of Cal-Am's slant wells is unlikely to cause significant or unreasonable impacts to the quality of water drawn from MCWD's Wells 29, 30, 31, or 35, and the quality of water drawn from those wells will remain suitable for municipal use.

Cal-Am's model results showed no expected change in TDS at MCWD Wells 29, 30, 31, or 35. (Exh. Cal-Am-183, ¶ 16.) MCWD's modeling as depicted in Figures 15, 17, and 19 of this report, shows that operation of the proposed slant wells would not, after 25 years of operation, cause the quality of water in the 180-Foot or 400-Foot Aquifers to increase in TDS concentration more than 50 mg/L at MCWD Wells 29, 30, 31, or 35. Because MCWD did not offer a more refined quantitative analysis of the change in TDS, it is possible that the model results showed no change in TDS concentration. MCWD also did not present any evidence that, if an increase in TDS of up to 50 mg/L did occur, the change would significantly or unreasonably increase the cost to MCWD of treating and delivering water for municipal use.

Instead, MCWD argues that the proposed draw from the slant wells will result in harm because of the "significant increases in TDS levels (decreases in water quality) in portions of both the Monterey Subbasin and the 180/400 Foot-Aquifer Subbasin," and eastward advancement of the seawater intrusion front in some areas. (Exh. MCWD-164, at pp. 5–6; see Marina and MCWD Proposed Report Part 2, pp. 102–03.) These arguments are not specific to MCWD's wells. MCWD presents no evidence that MCWD would be injured by impacts to the quality of water available at its wells. We address in further detail in response to Question 8 (see Section 6.8) whether operation of the proposed slant wells may injure other legal users of water or cause unreasonable harm.

6.7.6 Conclusion

Based on the model results, the proposed draw by the slant wells will not injure or infringe upon any water rights held by MCWD or Marina. Marina has not demonstrated that it has any rights to groundwater in the basin that could be injured. The declines in groundwater levels and water quality at the location of MCWD's wells that may result from the proposed draw would not prevent MCWD from extracting the volume of water to which it has a right, increase the cost of pumping or treatment, or otherwise cause significant and material impacts to MCWD's exercise of its rights.

6.8 Question 8

Does SWRCB have an opinion as to whether:

a) there is any legal theory upon which Cal-Am may rely to extract the proposed draw; and

b) the proposed Cal-Am extraction would infringe upon MCWD's appropriative rights to groundwater?

[Question 8(b) is addressed in part in the Board's response to Question 7, above.]

The proposed draw from Cal-Am's wells would primarily consist of water originating from the ocean but would include some amount of water originating from the SVGB. As addressed in Section 6.2.2, Cal-Am's proposed 15.5 mgd project would pump 17,362 afy in total, of which approximately 1,389 to 1,736 afy (8 percent to 10 percent) will be water from sources other than the ocean (i.e., water from the SVGB). We conclude that Cal-Am may lawfully extract this ocean water. We also conclude that Cal-Am may extract groundwater from the SVGB if the extraction neither (1) injures other legal users of water nor (2) causes unreasonable harm. To avoid injury or harm, Cal-Am may be required to provide replacement water to offset impacts from the proposed extraction.

6.8.1 Extraction of Ocean Water

To our knowledge, there is no decision by a California court or a court of any other state or federal jurisdiction, or any precedential decision by the State Water Board, that limits the diversion or beneficial use of ocean water or requires a water right to divert and use ocean water. Marina and MCWD do not challenge Cal-Am's right to draw water from the ocean for treatment and beneficial use. State Water Board staff concluded in its 2013 Report to the CPUC, "Cal-Am needs no groundwater right or other water right to extract seawater from Monterey Bay." (Exh. Cal-Am-93, p. 39.) We agree that Cal-Am either needs no water right to draw ocean water or may obtain such a right by diverting and using the water, and that Cal-Am may lawfully draw the proposed amount of ocean water for desalination and service to its customers.

MCWD objects that Cal-Am is not proposing to extract ocean water because the water will be captured through screened portions of the wells located in the Dune Sand and 180-Foot Aquifers and not the Monterey Bay. (MCWD Closing Brief, p. 27.) We disagree that water drawn from the aquifers cannot be ocean water. Although the slant wells will capture water within the Dune Sand and 180-Foot Aquifers, and much of the water captured will enter the wells landward of the MHW line, the originating source of approximately 90 to 92 percent of the water will be from the Pacific Ocean. (See Section 6.2.2.) The water would move from the ocean, through the ocean floor, and into the Dune Sand and 180-Foot Aquifers, where it would be captured by the slant wells. This water is ocean water, not water originating from the SVGB.

6.8.2 Extraction of Groundwater

As described in Section 5.1, rights to extract and use groundwater are generally of three types: overlying, prescriptive, or appropriative. Of these three, Cal-Am may be able to

rely on an appropriative right to extract and use the portion of the slant-wells' draw that would originate from the SVGB and not the ocean.

Cal-Am cannot purchase or develop an overlying groundwater right that would authorize its proposed extraction and use. Cal-Am intends to serve the water that it draws from the slant wells to customers located outside of the boundaries of the SVGB for municipal use. Because the uses will be on lands that do not overlie the basin, and because the use will be municipal, an overlying groundwater right cannot authorize Cal-Am's proposed extraction and use.

A prescriptive right to groundwater is developed by adverse use over time. Cal-Am cannot claim a prescriptive right unless it extracts and uses groundwater over the prescriptive period of five years, adverse to the rights of others. Furthermore, private parties such as Cal-Am cannot obtain prescriptive rights against public entities. (Cal. Civ. Code, § 1007; *City of Los Angeles v. City of San Fernando* (1975) 14 Cal.3d 199, 292.)

Cal-Am might develop an appropriative right to extract groundwater from the basin if surplus water is available or Cal-Am otherwise prevents injury to existing users and unreasonable harm that might be caused by the extraction. The rule of priority applies to appropriations of groundwater. In general, a new appropriator must avoid injury to existing senior rights by pumping and beneficially using only that amount of groundwater that is surplus to the rights of overlying users and within the sustainable yield of the basin.[59] (See Section 5.1.2; *City of Los Angeles v. City of San Fernando* (1975) 14 Cal.3d 199, 277 [defining "safe yield" (or sustainable yield) as "the maximum quantity of water which can be withdrawn annually from a ground water supply under a given set of conditions without causing an undesirable result"] [disapproved on other grounds by *City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224].) A proposed new appropriator has the "burden of proving the existence of a surplus from which it can extract the quantity it desires …without injury to the uses and requirements of those who have prior rights." (*Tulare Irr. Dist., supra,* 3 Cal.2d at p. 535; *Allen v. California Water & Tel. Co.*, *supra,* 29 Cal.2d at p. 481; *City of Los Angeles, supra,*14 Cal.3d at p. 214.) If no surplus water is available in the basin, Cal-Am could make an out-of-priority appropriation by implementing a physical solution that would prevent injury to senior right holders and any other unreasonable harm.

[59] Cal-Am is not required to obtain a water right permit from the State Water Board before extracting and using groundwater from the Salinas Valley Groundwater Basin. As explained in Section 5.1.2, the State Water Board's water right permitting authority does not extend to the appropriation of percolating groundwater.

Rather than developing a new right, Cal-Am could obtain an appropriative right to extract groundwater through purchase or lease of an existing right. The exercise of any transferred right to extract groundwater would, however, be similarly conditioned on avoidance of injury to other legal users of water and unreasonable harm resulting from the transfer. (See *City of San Bernardino v. City of Riverside* (1921) 186 Cal. 7, 28–29 [appropriator may "change the place of use thereof, or the character of the use, without affecting his right to take it" and "may change the place from whence the water is taken out of the source, provided others are not injured by such change"].)

In summary, Cal-Am might lawfully draw water from the SVGB if the extraction will neither injure other legal users of water nor cause unreasonable harm. Cal-Am may avoid injury to other legal users and prevent unreasonable harm by: (1) demonstrating that the proposed draw would extract only water that is surplus to the rights of overlying users and within the sustainable yield of the basin, if any such surplus water is available, or (2) implementing a physical solution, such as the provision of replacement water, to prevent any injury to legal users and unreasonable harm that might otherwise result.

6.8.3 Availability of Surplus Water

MCWD asserts that there is no surplus water available for appropriation by Cal-Am in the 180/400 or Monterey Subbasins. (2023-11-13 MCWD's Closing Brief, p. 21.) MCWD relies on current conditions of overdraft in the subbasins and alleged increases in cross-boundary flows from the Monterey to the 180/400 Subbasin caused by the proposed project, to support its assertion. (*Ibid.*) We conclude that the overdrafted conditions of the subbasins is prima facie evidence that no surplus water is available for extraction, but this evidence must be considered with any other available evidence to determine whether the project Cal-Am proposes would injure existing users or cause unreasonable harm.

Where outflows from a groundwater system exceed inflows, the system is deficient. Groundwater basins with chronic groundwater deficits are commonly referred to as overdrafted. Chronic overdraft is evidence that extractions from the basin are exceeding the sustainable yield of the basin and that no surplus water is available for appropriation.

The 180/400 and the Monterey Subbasins are overdrafted subbasins, in which historic pumping levels have caused lowering of groundwater elevations, decreases in groundwater storage, and seawater intrusion. (SVBGSA Combined GSP 2020-0123, pp. 45 [1-1], 212 [6.8.5]; MCWD-60, p. 280 [Tbl. 6-4].) Because these are coastal subbasins, extractions of groundwater in excess of groundwater recharge generally cause ocean water to flow into hydrologically connected portions of the basin. (See, e.g., California's Groundwater Update 2020 (Bull. 118), p. 333 ["Seawater intrusion is

the process of the natural seawater-freshwater interface migrating landward within a groundwater basin because of changes in the hydraulic gradient in the basin caused by groundwater extraction"].) The current conditions of overdraft in the 180/400 and Monterey Subbasins is general evidence that an additional draw from the subbasins, absent the implementation of some physical solution, would injure existing users or cause unreasonable harm. This evidence should be considered with other available project-specific evidence to determine whether injury to legal users or unreasonable harm will result from Cal-Am's proposed draw.

Cal-Am asserts that the relatively small amount of brackish groundwater that the proposed project will extract from the SVGB is "salvaged" water not of a quality suitable for any of the existing uses or users in the basin, and therefore, "surplus" water available for appropriation. (Cal-Am's Proposed Report of Referee, p. 139.) Cal-Am seems to take the position that this water should not be considered in the subbasin water budget to determine overdraft or sustainability because it is not suitable for use unless desalinated. But regardless of whether the brackish water is characterized as "salvaged" water and whether it is properly considered in the basin's water budget, Cal-Am concurs that the water is only "available for use by Cal-Am if such use can be made without injuring the Basin or other water rights holders." (Cal-Am Proposed Report Part 2, p. 141.)

MCWD relies on changes in cross-boundary flow from the Monterey to the 180/400 Subbasin, in addition to the general conditions of overdraft in these subbasins, to show that no surplus water is available for appropriation by Cal-Am. (2023-11-13 MCWD's Closing Brief, p. 21.) As addressed in Section 6.5.3, MCWD's analysis of changes in cross-boundary flow from the Monterey to the 180/400 Subbasin does not necessarily show an increase in net groundwater deficit to the Monterey Subbasin because MCWD did not consider corresponding changes in inflow to the subbasin. Therefore, MCWD's analysis does not directly address impacts from cross-boundary flow on the amount of surplus water or sustainable yield in the Monterey Subbasin.

6.8.4 Avoidance of Injury to Existing Uses and Users

Marina and MCWD allege that the proposed draw will injure MCWD's water rights and the water rights of other users of groundwater from wells in the 180/400 and Monterey Subbasins. (2023-11-13 MCWD's Closing Brief, pp. 28–29; MCWD-Marina Proposed Report Part 2, p. 109.)

As addressed in our response to Question 7, the proposed draw by Cal-Am is unlikely to cause a material or significant impact to the quantity or quality of water extracted by MCWD from its wells and is therefore not likely to injure MCWD in the exercise of its groundwater rights.

The evidentiary record does not address injury to any other legal users of water that may be affected by the proposed draw.[60] Although the evidence the parties submitted includes some general information about the existence of other wells, the record does not include sufficient information to determine whether injury may occur. (See 2013-07-31 SWRCB review of Cal-Am Monterey Peninsula Water Supply Project, p. 33 [approximately 14 wells are identified in the State Water Board's Groundwater Ambient Monitoring and Assessment Database within two miles of the proposed location of the slant wells, but "it is not clear how many other wells are located in this area, or at what depths the wells are screened"]; Exh. MCWD-150, pp. 7–8 [depicting modeled production wells, of which six wells in the 180-Foot Aquifer and approximately 50 wells in the 400-Foot Aquifer appear to be closer to the location of the proposed slant wells than MCWD's Wells 29, 30, and 31].) Such a determination would depend upon where any such wells are located, the aquifers from which the wells draw, the type and amount of the water right associated with the wells, the quantity and quality of water drawn from the wells, and the beneficial uses to which the extracted water is applied. Based on the model results, it is possible that Cal-Am's proposed extraction could impact groundwater conditions in the basin in proximity to the slant wells and injure the rights of other groundwater users. Absent more specific information about the location and nature of the alleged senior water right holders' extractions and use, we cannot offer more definitive conclusions about the risk of injury.

Cal-Am may, however, avoid injury to any such users of water — if there are legal users that might be injured by its proposed extraction – by reaching an agreement with the right holder or by providing replacement water of an appropriate quantity, quality, and location to offset the injury, in accordance with a physical solution.

6.8.5 Avoidance of Unreasonable Harm

MCWD and Marina assert that Cal-Am's proposed extraction will cause unreasonable harm to the 180/400 and Monterey Subbasins by causing further drawdown of groundwater levels, increases in TDS concentrations, and inland progression of the seawater intrusion front.[61] (2023-11-13 MCWD's Closing Brief, pp. 28–29.) Further, MCWD asserts that an inland progression of the seawater intrusion front beyond the "minimum threshold" identified in MCWD's groundwater sustainability plan makes Cal-Am's proposed extraction per se unreasonable under article X, section 2, of the

[60] No such legal users (persons or entities other than MCWD who have groundwater rights in the SVGB) are parties to this proceeding.

[61] Marina also argues for the first time in comments on the Draft Report that Cal-Am's proposed extraction will cause unreasonable harm to the 180/400 Subbasin by causing significant and unreasonable impacts on beneficial uses supported by vernal pools and wetlands located within the City of Marina. (2025-01-31 City of Marina Comments on 12-31-24 Draft Report, pp. 61–62.)

California Constitution. (2025-01-31 MCWD's Objections and Comments to Draft Report, pp. 11–13.)

The groundwater sustainability plans for the 180/400 and Monterey Subbasins identify any landward advancement of the seawater intrusion contour, defined as an isoconcentration of 500 mg/L of chloride, as a significant and unreasonable impact. (Exh. MCWD-60, p. 357, Tbl. 8-1, pp. 396–397; SVBGSA Combined GSP 2020-0123, pp. 285 [8-31], 291 [8-37].) The model results show that there would likely be some advancement of the seawater intrusion front in the Monterey Subbasin caused by the proposed draw, absent remedial measures. Other modeled impacts, such as lowering of groundwater elevations in portions of the subbasins near the proposed slant wells, may also exceed quantitative thresholds for significant and unreasonable declines in groundwater elevations set in the subbasins' groundwater sustainability plans.

The quantitative thresholds for undesirable results set in the groundwater sustainability plans for the 180/400 and Monterey Subbasins are based on evidence compiled in the plans and the groundwater sustainability agencies'[62] understanding of local basin conditions. We consider the agencies' conclusions in these plans, which DWR has approved, to have significant persuasive value in identifying thresholds for unreasonable harm to the subbasin and these conclusions should be afforded deference. SGMA does not, however, contain any language establishing that every determination in a GSP is entitled to absolute judicial deference. Rather, SGMA requires that the judgment in a comprehensive adjudication must not "substantially impair" the ability of the GSA to achieve sustainable management. (Wat. Code, §10737.8; see also Code Civ. Proc., § 850, subd. (b).) And this proceeding is not a groundwater adjudication (see Section 2.6.3.) Accordingly, while some deference is appropriate, there is no basis for treating any deviation from the GSA's determinations as unreasonable per se.

To determine whether the impacts caused by the proposed draw would be unreasonable requires balancing of the benefits of the project, which would make ocean water available for beneficial use, against the potential injury to legal users of groundwater and the risk and significance of harm to the basin. (See *United States v. State Water Resources Control Bd.* (1986) 182 Cal.App.3d 82, 130 [describing the determination of an unreasonable method of use as "essentially a policy judgment requiring a balancing of the competing public interests"].) Such a balancing of factors was not directly addressed by the parties and would likely require a more expansive evidentiary record than was developed in this proceeding.

[62] Marina Coast Water District Groundwater Sustainability Agency and the SVBGSA are the GSAs for the Monterey Subbasin.

Cal-Am defends that the brackish water that it will extract from the basin is salvaged water, and that this salvaged water is surplus to the demands of other users because it is not of a quality suitable for use. (Cal-Am's Proposed Report of Referee, p. 139.) The calculation of an OWP in Cal-Am's proposed draw that presumes a background concentration of 500 mg/L of TDS for non-ocean water, suggests that such water would be available to other users absent the proposed draw. This assumption supports the conclusion that the extracted water is neither salvaged nor developed. Salvaged or developed water is water made available through some intentional effort, and absent that effort, would not be available for beneficial use. (See Section 5.1.6.) For this reason, the person who makes such water available for use is entitled to a prior right to that water. If, absent Cal-Am's extraction, this relatively high quality groundwater would have been available to other legal users in the basin for beneficial use, it is not developed or salvaged by Cal-Am.

In the alternative, Cal-Am argues that its proposed draw will not harm the basin because Cal-Am will provide replacement water to the SVGB in the amount it extracts pursuant to the Return Water Settlement Agreement (see Section 2.4.3.) (2023-11-13 Cal-Am's Proposed Report of Referee, p. 149.) Cal-Am submitted two model scenarios that incorporate the Return Water Settlement Agreement (RWSA) with project operations, which assume 6 percent and 9 percent of the water extracted from the slant wells would be returned to the basin in the Castroville area. (Exh. Cal-Am-177, pp. 156–159, 169, 170.) These model runs show some difference in groundwater elevations but do not address changes in water quality, and these results do not change the conclusion in this report that the record is not adequate to determine whether the proposed draw will cause unreasonable harm.

The model results show that Cal-Am's proposed draw will cause some lowering of groundwater elevations, declines in groundwater quality, and further progression of seawater intrusion in portions of the 180/400 and Monterey Subbasins, as discussed in our responses to the court's Questions 4 and 5. These model results are evidence tending to show that the proposed project may cause unreasonable harm to the basin absent the provision of replacement water or another type of physical solution.[63] Cal-Am may be able to prevent any unreasonable harm to the subbasins that results from operation of the slant wells by providing replacement water in an appropriate quantity, quality, and location to offset the expected impacts, as discussed in the following

[63] The model results also show, however, that in some areas within the 180/400 Subbasin, operation of the project may cause the seawater intrusion isocontour to move seaward, benefitting conditions in the basin. This benefit should be considered in determining whether the impacts are, overall, unreasonable.

section. The details of any such physical solution necessary to avoid unreasonable harm would, however, require additional evidence.

6.8.6 Physical Solution

Cal-Am may be able to demonstrate that its project would not injure existing users or cause unreasonable harm to the basin by providing replacement water to potentially affected users in the basin, which might include MCWD, in conjunction with ongoing monitoring to ensure that the replacement water is supplied in an adequate quantity, quality, and location. The provision of replacement water is a physical solution that could allow Cal-Am to lawfully make the proposed draw, even if the proposed extraction would otherwise cause injury or unreasonable harm. (See Section 5.3.) The State Water Board's 2013 final staff report similarly concluded that "[a] physical solution could be implemented to ensure all rights are protected while maximizing the beneficial uses of the Basin's waters." (2013-07-31 SWRCB review of Cal-Am Monterey Peninsula Water Supply Project, pp. 49–50.) "Adoption of a physical solution is consistent with the constitutional goal of promoting maximum beneficial use of the State's water resources." (State Water Board Decision 1631, § 2.5 at p. 10.)

The hearing officer directed the parties to address the applicability of the physical solution doctrine to the operation of Cal-Am's proposed project in their draft reports of referee. MCWD argued only that "no physical solution has been proposed or discussed that would mitigate the harm that the Project will cause MCWD and other users in the Monterey Subbasin," not that a physical solution could not adequately address the alleged injury to water users and harm to the basin. (2023-11-13 MCWD's Closing Brief, p. 33.) Marina similarly asserts that "Cal-Am has never proposed a physical solution to MCWD or the City of Marina." (Marina Closing Brief, p. 110.)

Cal-Am asserts that certain "protective measures" already incorporated into its project would "prevent and address any potential, *unforeseen*, detrimental impacts," and would operate "analogous to the water law concept of a 'physical solution.'" (2023-11-13 Cal-Am's Proposed Draft Referee's Report, p. 149.) These protective measures include the Return Water Settlement Agreement, pursuant to which Cal-Am will provide replacement "fresh" water to the basin, a Mitigation, Monitoring, and Reporting Program required by the CPUC, and a similar monitoring and mitigation program imposed by the California Coastal Commission. The mitigation and monitoring programs require ongoing monitoring and remedial actions by Cal-Am if monitoring demonstrates injury to other groundwater users from operation of the proposed slant wells or exceedance of certain groundwater quality thresholds.

Under the Return Water Settlement Agreement, Cal-Am will supply water to the Castroville Community Services District and agricultural water to the Castroville Seawater Intrusion Project. Both recipients are in the northern portion of the 180/400

Subbasin. Cal-Am will supply water in an amount equal to the percentage of water of a quality of less than 500 mg/L of TDS ("fresh" water) that would effectively be extracted from the basin by the slant wells, based on the calculation methodology included in the agreement. (2018-09-20 CPUC Dec. 18-09-017, pp. 2, 111, 161, 207 & 215; Exh. Cal-Am-67.) The return water agreement offsets this "fresh" water drawn from the basin by providing usable water in lieu of pumping by other groundwater users. As described by Cal-Am, the return water would "put the [SVGB] in a 'no net loss' position in terms of fresh water quantity." (2023-11-13 Cal-Am's Proposed Draft Referee's Report, p. 150 [citing the FEIR/EIS, p. 4.4-70].) Cal-Am submitted model results that show that with implementation of the Return Water Settlement Agreement the change in groundwater elevation in the 180-Foot Aquifer in the vicinity of the MCWD supply wells would be less than half a foot. (Exh. Cal-Am-177, p. 159.)

Marina objects that even if the Return Water Agreement results in "no net loss" to the basin, the water provided from the project under the Agreement would not address alleged impacts to the Monterey Subbasin because the return water will be provided to users in the northern 180/400 Subbasin. (2023-11-13 City of Marina's Closing Brief, p. 110.) Marina's objection is likely valid. Even if the amount of replacement water provided by Cal-Am is sufficient to maintain the balance of water stored in the basin overall, the location where Cal-Am will deliver any replacement water is relevant to whether the water will offset potential injury to water users or localized harm to the basin. Based on the evidentiary record in this proceeding and the areas of modeled potential impact, replacement water provided by Cal-Am to locations within the Monterey Subbasin or the southern portion of the 180/400 Subbasin may be necessary to offset some of the effects of the proposed draw. For example, Cal-Am might deliver replacement water to MCWD in lieu of pumping from its own wells to mitigate impacts to the basin.

Marina also argues that the amount of return water to be provided under the agreement is insufficient because the calculation methodology fails to address extraction of water from the basin that exceeds 500 mg/L in TDS, and the potential beneficial uses of that water. (2023-11-13 City of Marina's Closing Brief, p. 112.) Marina does not appear to consider that the water Cal-Am would provide under the Return Water Settlement Agreement will be of a quality of 500 mg/L or less of TDS. This relatively high-quality water could be mixed with brackish water to produce a larger amount of lower-quality water. The evidentiary record before us is not, however, adequate to reach any definitive conclusions about the details of a physical solution, such as the amount, quality, and location of replacement water necessary to avoid injury to existing users or unreasonable harm to the basin or monitoring necessary to ensure that the solution is effective.

6.8.7 Monitoring and Adaptive Management

The conclusions reached in this report rely heavily on the results of the highly complex and sophisticated modeling the parties conducted. There are inherent uncertainties in this type of modeling, as the models rely on a series of assumptions and extrapolations from limited known data to project the likely impact of the proposed project on a highly complex underground system of aquifers. Furthermore, the models were developed with limited time and resources, and likely could be improved in future iterations. Yet, we conclude that the methodologies employed in developing these models meet scientific standards and the model results are the most reliable information the parties offered about the expected impacts of the project.

There is a reasonable likelihood that the actual impacts of the project will be either greater or less than the modeled range. Not only are the models themselves imperfect, but there are numerous other future conditions that were not incorporated into the models that could affect groundwater within the basin during the operation of the project. Monitoring and incremental management actions based on monitoring results, often called adaptive management, might address this uncertainty to prevent injury to MCWD's water rights or other those of other legal users, and unreasonable harm to the basin.

The concept of adaptive management arises from the recognition that natural resources are generally complex systems of which our knowledge is inherently uncertain. Adaptive management approaches are intended to "mitigate the difficulty of predicting the outcome of decisions that must be made based on currently available but incomplete information ... [by] provid[ing] policymakers with some assurance that they will have the flexibility to respond if their initial assumptions and projections about future resource conditions were misinformed or they were incapable of foreseeing the flow of future events." (Glicksman & Page, *Adaptive Management and NEPA: How to Reconcile Predictive Assessment in the Face of Uncertainty with Natural Resource Management Flexibility and Success* (2022) 46 Harv. Env't L. Rev. 121, 125.)

Although the model results the parties submitted in this proceeding show that the proposed draw from the slant wells is unlikely to injure MCWD's water rights, contingent actions triggered by observed conditions could provide further assurance that the proposed draw will not injure MCWD's or other legal users' water rights or cause unreasonable harm. Monitoring and reporting of the effects of pumping by Cal-Am's proposed wells at key locations could show whether the range of impacts predicted by the models are reflected in actual conditions. If the empirical data collected through monitoring shows changes in groundwater conditions that differ from those predicted by

the models, additional management actions, such as restrictions on pumping from the slant wells, may be necessary to prevent injury or other unreasonable results.

An adaptive management plan would also likely be necessary to ensure that any physical solution will prevent, in application, injury to legal users and unreasonable harm. The amount, quality, and location of any replacement water supplied by Cal-Am would likely need to be re-evaluated over time, first to ensure that the replacement water is effectively addressing impacts that might otherwise result, and secondly, to address changing conditions that may affect the impacts of the proposed draw on the basin.

6.8.8 Conclusion

To make the proposed extraction, Cal-Am may be able to develop a new appropriative water right or obtain an existing appropriative water right. In either circumstance, Cal-Am bears the burden of demonstrating that its proposed draw will not injure other existing users or cause unreasonable harm. Although Cal-Am has demonstrated through modeling that the proposed draw will not injure MCWD's water rights, and Marina has not exercised any claimed rights to groundwater, the potential impacts to other users in the basin are not fully addressed in the record for this proceeding. Secondly, the modeling results show that Cal-Am's proposed draw may cause unreasonable harm in portions of the 180/400 and Monterey Subbasins. Cal-Am's Return Water Agreement might not be sufficient to offset these potential impacts.

Both the injury to unknown existing users and any unreasonable harm to the basin might be addressed with a physical solution. It is possible that provision of an appropriate quantity and quality of replacement water to relevant locations would prevent injury to other legal users and avoid unreasonable harm. A monitoring and adaptive management program, similar to that already required by the CPUC and California Coastal Commission, could help determine whether the replacement water is remedying any injury to legal users and unreasonable harm that might otherwise be caused by the proposed draw. Such a program could also verify whether the results of the groundwater models presented in this proceeding captured the range of impacts to the basin caused by operation of the slant wells.

7 CONCLUSION

Question 1: Where are the subsurface drawing source points (including capture zones) for each of the currently proposed Cal-Am wells located in relation to:

a. seawater in the ocean itself;

The locations of the subsurface drawing source points for the proposed slant wells are the locations of the screened intervals of the wells. Figure 6, reproduced below, depicts the Board's estimate of offshore and onshore lengths and proportions of screened intervals for Slant Wells 2 through 7 and the Test Slant Well.

Well	Well Casing Interval Lengths[2] (feet)			Length of Screened Interval Offshore[3] (feet)	Offshore and Onshore Well Screen Lenths (feet) and Proportions for 400 ft. Total Well Screen Length				Offshore and Onshore Well Screen Lenths (feet) and Proportions for 800 ft. Total Well Screen Length			
	Total Length	Offshore	Onshore		Total Length[4]	Proportion Offshore	Onshore Length[5]	Proportion Onshore	Total Length[4]	Proportion Offshore	Onshore Length[5]	Proportion Onshore
SW-2	970	63	907	59	400	15%	341	85%	800	7%	741	93%
SW-3	966	202	764	190	400	47%	210	53%	800	24%	610	76%
SW-4	961	162	799	152	400	38%	248	62%	800	19%	648	81%
SW-5	961	130	831	122	400	31%	278	69%	800	15%	678	85%
SW-6	961	174	787	164	400	41%	236	59%	800	20%	636	80%
SW-7	957	225	732	212	400	53%	189	47%	800	26%	589	74%
Average	963	159	803	150	400	37%	250	63%	800	19%	650	81%
Test Slant Well[1]	720	180	540	170	415	41%	245	59%				

[1] The dimensions of the well casing intervals for the Test Slant Well are decribed in Appendix E3 part 1 of the EIR/EIS.
[2] The dimensions of the well casing intervals for Slant Wells 2 through 7 are listed in Table 3-2 of the EIR/EIS.
[3] The lengths of the screened intervals located offshore is calculated as the offshore lengths of well casings multuplied by 0.94.
[4] The total length range of screened intervals for Slant Wells 2 through 7 from EIR/EIS p. 3-18 for Slant Wells 2 through 7.
[5] The length of well screen intervals located onshore is calculated as the length of the well screen interval located offshore subtracted from the total length of the screened intervals.

Figure 6 - Offshore and onshore lengths and proportions of screened intervals for Slant Wells 2 through 7 and Test Slant Well

MCWD's depiction of the capture zones in Figure 11, reproduced below, addresses the court's question about the locations of the capture zones in relation to the features and locations the court identified. Generally, the capture zones extend from the drawing source points toward the direction of higher groundwater elevations within each aquifer in and around the CEMEX Property, within the Subbasin Interface Zone, and in the Monterey and 180/400 Subbasins near the boundary between the subbasins. In the Lower 180-Foot and 400-Foot Aquifers, most of the area of the capture zones extends west underneath the ocean beyond the MHW Line, and so are not within the boundaries of the groundwater basin or subbasins, beneath the CEMEX Property, or within the Subbasin Interface Zone. In the Dune Sand Aquifer, the capture zone extends inland in the area surrounding the CEMEX Property in the 180/400 and Monterey Subbasins.

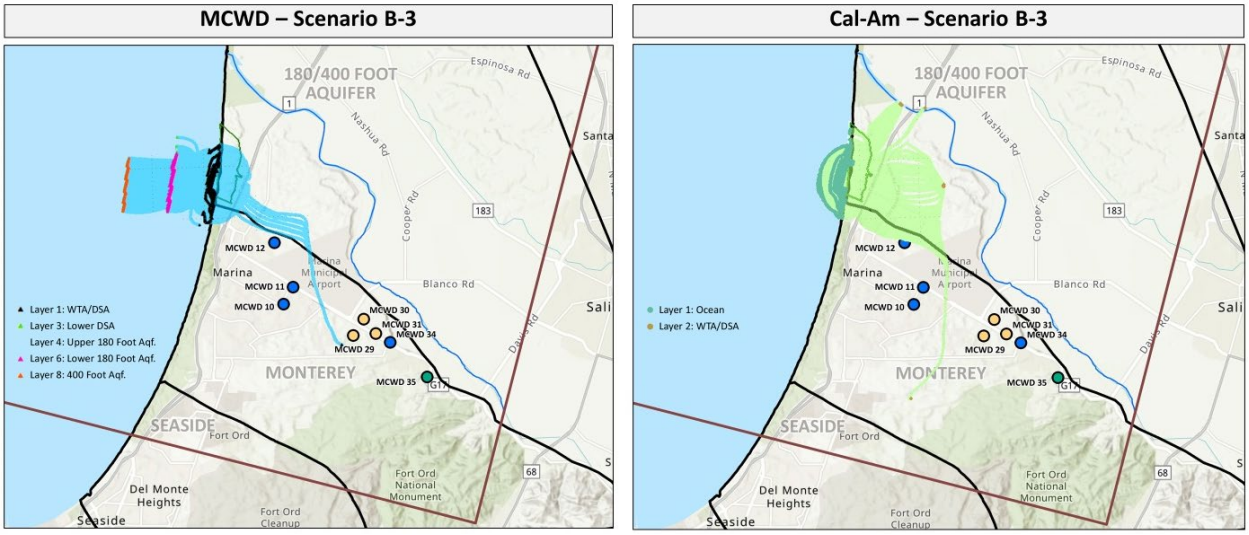


Figure 11 - Capture zones in the Dune Sand, 180-Foot, and 400-Foot Aquifers submitted by MCWD. (Exh. MCWD-161, p. 2.)

b. drawing source points for the Marina Coast Water District ("MCWD") production wells;

See Figure 6 and Figure 11, reproduced above.

c. the Subbasin Interface Zone;

Figure 9, reproduced below, depicts the location of the proposed slant wells in relation to the Subbasin Interface Zone (depicted in yellow).

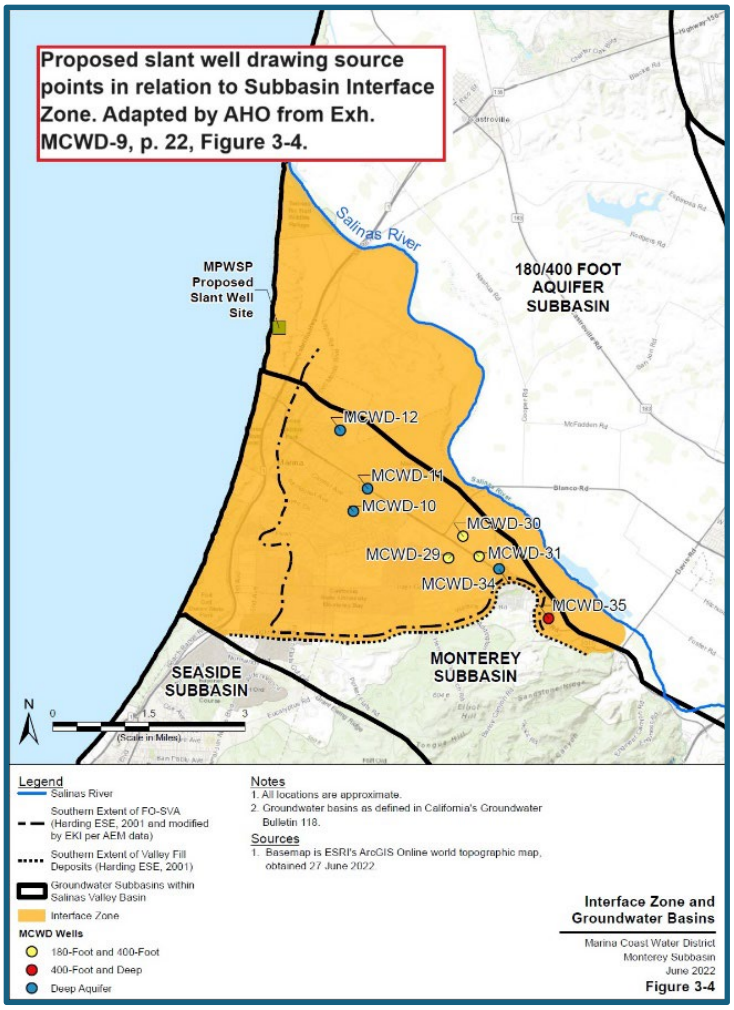


Figure 9 - Proposed slant wells in relation to the Subbasin Interface Zone

d. the 180/400-foot Aquifer Subbasin;

See Figure 6 and Figure 11, reproduced above.

e. the Monterey Subbasin;

See Figure 6 and Figure 11, reproduced above.

f. the Cemex property;

See Figure 6 and Figure 11, reproduced above.

g. the MCWD wells.

See Figure 6 and Figure 11, reproduced above.

Question 2: ***Would water drawn by any of the currently proposed Cal-Am wells come from any source other than seawater from directly beneath the Ocean?***

Yes.

If so, from which sources? And which if any of these sources lie in whole or in part beneath the Cemex property?

The sources of water can be described by the locations within the aquifers from which the proposed slant wells would draw water. The water drawn by the proposed slant wells will come from locations within the Dune Sand and 180-Foot Aquifers both onshore (beneath the CEMEX Property) and offshore (beneath the ocean).

The sources of water drawn by the proposed slant wells can also be described by the location of the origin of the water. The water either originates from the ocean or from sources other than the ocean.

If so, can one approximate with reasonable certainty in what quantities the water would be drawn from each source? Can this be expressed in percentages?

We cannot calculate with any reasonable certainty the quantities of water drawn from screened intervals located onshore versus offshore based on the evidence in the record.

We can approximate a range of quantities of water that would be drawn from the Dune Sand Aquifer, which we consider to be a minimum amount of water drawn from screened intervals located beneath the CEMEX Property. Under the 15.5 mgd project alternative, approximately 3,300 to 7,600 afy will be drawn by the wells from the Dune Sand Aquifer. Under the 11.6 mgd project alternative, the proposed project will pump a total of 12,993 afy, of which approximately 2,500 to 5,700 afy will be drawn from the Dune Sand Aquifer.

We estimate that approximately 90 to 92 percent of the water drawn by the proposed project will originate from the ocean. Under the 15.5 mgd project alternative, approximately 15,625 to 15,973 afy of water will originate from the ocean, and 1,389 to 1,736 afy of water will originate from sources other than the ocean. Under the 11.6 mgd project alternative, approximately 11,693 to 11,953 afy of water will originate from the ocean, and 1,039 to 1,299 afy of water will originate from sources other than the ocean.

If so, do the relative amounts drawn from each source vary depending upon amounts drawn by the slant wells?

The relative amounts of total project pumping drawn from the Dune Sand Aquifer beneath the CEMEX Property, or from the ocean versus non-ocean sources, do not vary depending on the total project pumping amounts.

If so, can it be said with reasonable certainty that the amount drawn by the Cal-Am wells will not exceed 500 acre-feet per year ("afy") from any water source beneath the Cemex property?

We cannot say with reasonable certainty that the amount drawn by the Cal-Am wells *will not exceed* 500 afy from any source beneath the CEMEX Property. To the contrary, the evidence strongly supports the conclusion that the amount drawn by the proposed slant wells will significantly exceed 500 afy from beneath the CEMEX Property.

Question 3: ***What is the hydrogeological connectivity, if any, between the areas from which Cal-Am proposes to draw water and the areas from which MCWD extracts water?***

In the area where the proposed slant wells will draw water, the Dune Sand Aquifer and the 180-Foot Aquifer are connected. There is no evidence of any barrier preventing horizontal flow within the 180-Foot Aquifer between this area and the MCWD Wells in the 180-Foot Aquifer. There is also hydrologic connectivity between the proposed slant wells and the MCWD wells in the 400-Foot Aquifer, but this connectivity is less than the connectivity between the proposed slant wells and the MCWD wells in the 180-Foot Aquifer. None of the parties assert that there is connectivity between the proposed slant wells and the MCWD production wells screened in the Deep Aquifer.

The proposed slant wells would be located in the 180/400 Subbasin and MCWD's wells are in the Monterey Subbasin. There is connectivity in these aquifers between the area in the 180/400 Subbasin where the proposed slant wells would draw water and the area in the Monterey Subbasin where MCWD's production wells draw water.

Question 4: ***Is it likely that any of the proposed draw for the Cal-Am wells would (a.) result in or (b.) increase any seawater intrusion into the Subbasin Interface Zone, the 180/400 Foot Aquifer or the Monterey Aquifer, or any source for the MCWD production wells? If so, what is the likely extent of the intrusion?***

It is likely the proposed draw will result in seawater intrusion in the central and southern sections of the Monterey Subbasin in the following aquifers and magnitudes: between 0 and 0.5 miles in the Dune Sand Aquifer; up to 0.75 miles in the Upper 180-Foot Aquifer; up to 0.25 miles in the Lower 180-Foot Aquifer; and between 0 and 0.25 miles in the 400-Foot Aquifer. We also conclude that it is not likely that the proposed draw will result in or increase seawater intrusion in any aquifer in any portion of the 180/400 Subbasin, or in any aquifer in the northern portion of the Monterey Aquifer Subbasin.

Figure 22, reproduced below, summarizes our conclusions based on the model results for each area in each aquifer considered in this section.

	Aquifer	Dune Sand	Upper 180-Foot	Lower 180-Foot	400-Foot
	Section of the 1,500 mg/L isocontour	Range or Maximum Inland Movement of Seawater Intrusion Front (miles)			
180/400-Foot Aquifer Subbasin	(1) - Northern and central	None	None	None	None
	(2) - Southern near the subbasin boundary	None	None	None	None
Monterey Subbasin	(3) - Northern near the subbasin boundary	None	Inconclusive	None	None
	(4) - Southern and central	Between 0 and 0.5	Up to 0.75	Up to 0.25	Between 0 and 0.25

Figure 22 - Summary of Seawater Intrusion Conclusions

<u>Question 5:</u> ***Is it likely that any of the proposed draw will (a) lower the groundwater table or (b) reduce the storage space in any source other than seawater, and if so, can the extent be approximated?***

Figure 27, reproduced below, summarizes the drawdown predicted by each model for each of the areas defined by our analysis, in each aquifer.

Aquifer	Dune Sand		180-Foot		400-Foot	
Model	MCWD/Marina	Cal-Am	MCWD/Marina	Cal-Am	MCWD/Marina	Cal-Am
Location	Drawdown Range (Feet)					
Immediate vicinity of the proposed slant wells	10 to 20	10 to 20	10 to 20	10 to 20	1 to 5	0.5 to 1
West of Highway 1 near the proposed slant wells	5 to 10	5 to 10	5 to 10	5 to 10	1 to 5	0.5 to 1
Between Highway 1 and MCWD Well 12	1 to 5	1 to 5	1 to 5	1 to 5	1 to 5	0.5 to 1
Between MCWD Well 12 and MCWD Well 30	0.5 to 1	Less than 0.1	1 to 5	0.5 to 1	1 to 5	0.5 to 1
Between MCWD Well 30 and MCWD Well 34	0.1 to 0.5	Less than 0.1	0.5 to 1	0.5 to 1	0.5 to 1	0.5 to 1
Near MCWD Well 35	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5

Figure 27 - Model predicted drawdown summary.

Based on the model results the parties presented, we conclude that the draw of the proposed slant wells will lower the groundwater table or potentiometric surface in sources other than seawater. The drawdown in each aquifer is largest near the proposed slant wells and generally declines across the area between the proposed slant wells and MCWD Well 35. In the Dune Sand and 180-Foot Aquifers, drawdown ranges from a maximum of 10 to 20 feet in the immediate vicinity of the proposed slant wells, to a minimum of less than half a foot near MCWD Well 35. In the 400-Foot Aquifer, the drawdown ranges from a maximum of one to five feet in the immediate vicinity of the proposed slant wells, to a minimum of less than half a foot near MCWD Well 35.

Question 6: ***Has MCWD been pumping water from the Subbasin Interface Zone and, if so, for approximately what period of time?***

All of MCWD's production wells are located within the areal extent of the Subbasin Interface Zone. The district has been pumping groundwater since it was formed in 1960 and has used groundwater from the Subbasin Interface Zone since that time. MCWD provided pumping records for calendar years 2006 through 2020 by well, subbasin location, screening depth, and volume in Exhibit MCWD-8.

Question 7: ***What effect, if any, would the proposed draw by Cal-Am slant wells have upon any primary or paramount water right of Marina or MCWD? What impact on quantity and quality of the water sourced by MCWD wells is likely?***

Based on the model results and the evidentiary record, the proposed draw by the slant wells will not injure or infringe upon any water rights held by MCWD or Marina. The declines in groundwater level and water quality at the location of MCWD's wells that may result from the proposed draw would not prevent MCWD from extracting the volume of water to which it has a right, increase the cost of pumping or treatment, or otherwise cause significant and material impacts to MCWD's exercise of its rights. Marina has not demonstrated that it is exercising any rights to groundwater in the basin that could be injured.

Question 8: ***Does SWRCB have an opinion as to whether: there is any legal theory upon which Cal-Am may rely to extract the proposed draw; and whether the proposed Cal-Am extraction would infringe upon MCWD's appropriative rights to groundwater?***

The proposed draw from Cal-Am's wells would primarily consist of water originating from the Pacific Ocean but would include some amount of water originating from the SVGB. Cal-Am's proposed 15.5 mgd project would pump 17,362 afy in total, of which approximately 1,389 to 1,736 afy (8 percent to 10 percent) will be water from sources other than the ocean (i.e., water from the SVGB). We conclude that Cal-Am may lawfully extract this ocean water as proposed. We also conclude that Cal-Am may

extract groundwater from the SVGB if the extraction neither (1) injures other legal users of water nor (2) causes unreasonable harm to the basin, but there is insufficient evidence in the record to conclude whether the proposed draw is likely to injure legal users of water who are not parties to this proceeding or cause unreasonable harm. To avoid injury or harm, Cal-Am could be required by the court to provide replacement water or take other action pursuant to a physical solution to offset impacts from the proposed extraction.

8 GLOSSARY – TECHNICAL CONCEPTS AND TERMS

In this report we discuss technical concepts and terms related to hydrogeology, groundwater pumping, and groundwater modeling. While we do not intend this report to be a technical reference, we describe in this section the concepts and terms necessary for our analysis of the testimony of the parties' technical experts and our responses to the court's questions.

8.1 Hydrogeology Terms

Hydrogeology is the study of groundwater that exists beneath the Earth's surface in saturated soil or rock formations. The terms below are commonly used in hydrogeology.

Aquifer

An aquifer is an underground layer of rock or sediment that can be saturated or partially saturated with water. Aquifers are typically made of porous materials and are permeable, which means that water can flow relatively easily through them.

Aquitard

An aquitard, also known as a confining layer, is an underground layer of rock or sediment that is less permeable than an aquifer.

Aquifer, Confined

A confined aquifer is a fully saturated aquifer with confining layers above and below it. Because the upper boundary is confined, water in the aquifer is pressurized and a reduction in pressure does not necessarily lower the elevation of the upper boundary.

Aquifer, Unconfined

An unconfined aquifer is an aquifer without a confining layer above it. The groundwater table is the upper boundary and can be raised or lowered depending on recharge and withdrawal of water.

Capture Zones

A capture zone for a well, as we use the term in this report, is the three-dimensional spatial extent within an aquifer containing water that will eventually be drawn into the well. The extent of a capture zone can be approximated by modeling using a method known as reverse particle tracking.

The simplest example of a capture zone is a single vertical well extracting water from an aquifer with a uniform groundwater flow direction. In this example, the capture zone extends from the area near the well toward higher groundwater elevations (see figure below, adapted by AHO from 2008-01-29 USEPA - 2008 - Capture Zones.)

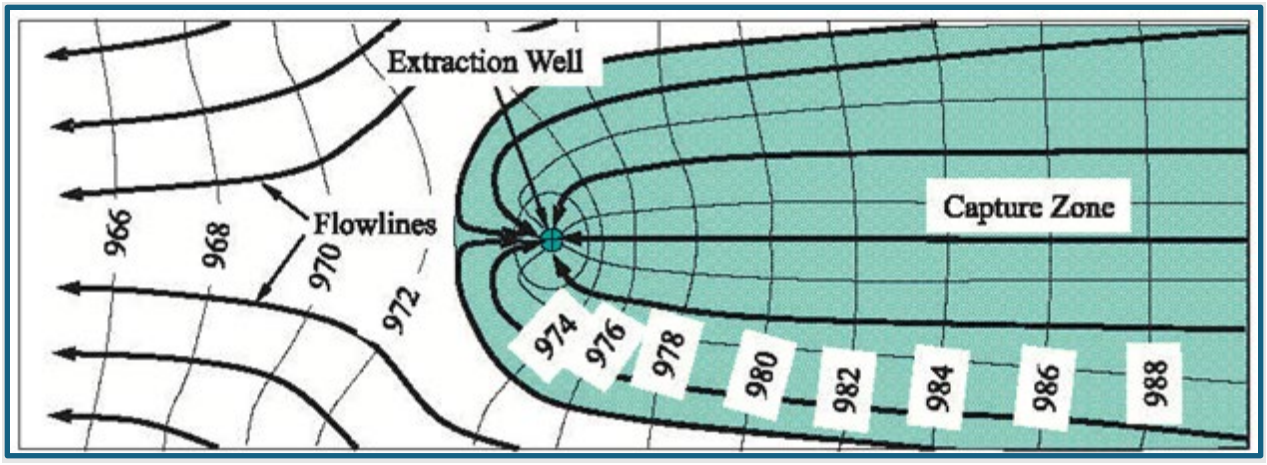


Illustration of a map view of a capture zone with a uniform groundwater flow direction

The flow conditions in the area where the proposed slant wells will extract water, however, are more complex. The proposed slant wells will draw water from more than one aquifer with different hydraulic gradients and flow directions, which requires a more sophisticated analysis to identify the anticipated capture zone. We discuss the capture zones for the proposed slant wells in our response to the court's Question 1 in Section 6.1.2.

Connectivity

Connectivity in a groundwater system is a broad term that encompasses how well water and solutes can move and interact within the system. In this report, we discuss three related and sometimes overlapping types of connectivity for aquifers: hydrologic, hydraulic, and hydrogeologic connectivity.

Drawdown

We use the term "drawdown" to describe both lowering of the elevation of the groundwater table in an unconfined aquifer and lowering the potentiometric surface in a confined aquifer caused by groundwater pumping.

Hydraulic Connectivity

Hydraulic connectivity in an aquifer refers to the ability of water to move within the aquifer, that is, how well different parts of the aquifer are connected for water flow.

Hydrologic Connectivity

Hydrologic connectivity in an aquifer refers to how well an aquifer is connected to other water bodies, including surface water, or parts of the hydrologic cycle.

Hydrogeologic Connectivity

Hydrogeologic connectivity is similar to hydrologic connectivity but specifically focuses on the connections between groundwater and other geologic features within a

groundwater system. It describes how well water and solutes can move and interact between different parts of the groundwater system.

Hydraulic Gradient

Hydraulic gradient is the rate of change of hydraulic head over a distance. It is commonly estimated as the slope of the water table in unconfined aquifers or the slope of the potentiometric surface in confined aquifers. Groundwater naturally flows along the hydraulic gradient from areas with higher hydraulic head to areas with lower hydraulic head.

Hydraulic Head

Hydraulic head in an aquifer refers to the total energy possessed by a unit volume of groundwater at a specific point. It considers two key components of groundwater energy: elevation head and pressure head. Elevation head represents the potential energy due to the height of the water table or the groundwater level relative to a reference point, often sea level. Pressure head represents the energy due to the pressure exerted by the water itself.

Potentiometric Surface

A potentiometric surface is a reference water surface defined by the hydraulic head of groundwater throughout an aquifer. It is primarily used to describe the virtual elevation of the water surface in confined aquifers, which may be higher than the actual surface due to pressure head.

Seawater Intrusion

Seawater intrusion is a general term for the movement of saline oceanic water into freshwater aquifers. In this proceeding, we consider seawater intrusion to be present in areas within an aquifer if the chloride concentration is greater than 500 mg/L, as defined in the Groundwater Sustainability Plans for the Monterey and 180/400 Subbasins. (Exh. MCWD-44, p.16.)

Water Table

A water table is a term used to describe the depth at which groundwater pressure head is equal to atmospheric pressure. The elevation of the water table is the elevation of the water surface of an unconfined aquifer.

8.2 Groundwater Modeling Terms

In this section, we identify some fundamental groundwater modeling concepts and terms necessary for our analysis.

Boundary Conditions

Boundary conditions are the model inputs representing the exchange of flow between the model and the external system. These conditions can be imported from other models, estimated from field data, or defined by the modeler.

Density-Dependent Flow Model

A density-dependent flow model is a type of solute transport model that accounts for different densities of groundwater and how dissolved chemical concentrations influence the density of groundwater, which in turn, affect the hydraulic gradient and groundwater flow. For example, density of a dependent flow model can account for the higher density of seawater versus freshwater and is commonly used to model seawater intrusion into coastal groundwater basins.

Groundwater Flow Model

A groundwater flow model simulates groundwater movement and hydraulic head in a groundwater system and can be used to estimate changes in groundwater flow and head caused by pumping.

Hydrogeologic Conceptual Model

A hydrogeologic conceptual model is a generalized representation of the major properties and processes at work in a groundwater system. It is informed by available data and expert knowledge about hydrologic processes. This preliminary representation helps modelers estimate and predict the characteristics of the groundwater system.

Model Calibration

Model calibration is a standard procedure where a model is run for a historical period and model outputs are compared to actual historical data from the groundwater system of interest. The aim of calibration is to refine estimates of model inputs that cannot be measured directly, or for which direct measurements are relatively uncertain.

Model Domain

A model domain is the geographic area simulated by a model. It defines the boundaries within which the model considers the movement and behavior of groundwater.

Model Inputs

Model inputs are the values of the parameters used by the model to simulate groundwater conditions. Input parameters include geologic and hydrogeologic properties, boundary conditions, and operational inputs which represent human-made influences on the aquifer, such as pumping or recharge activities.

Particle Tracking and Reverse Particle Tracking

The extent of a capture zone for a well can be approximated by modeling using a method known as reverse particle tracking. This method runs the model in reverse and tracks the paths of particles from the point of capture at the well to their location at the start of the model run.

Steady-State Model

A steady-state groundwater model simulates long-term average conditions at infinite time with constant recharge and discharge values. It does not account for seasonal, year-to-year, or long-term climate fluctuations or changes in recharge or discharge.

A steady-state model is generally less complex and resource intensive to develop than a transient model and is appropriate when the objectives of the investigation do not require information about the time it takes for the system to respond to new stresses or how the system responds between periods of relative equilibrium.

Solute Transport Model

A solute transport model builds on a flow model to simulate movement of dissolved chemical constituents, such as salinity, in a groundwater system and can be used to estimate movement of seawater intrusion.

Superposition Model

A superposition model simulates a groundwater system response due only to the stresses imposed by a proposed project by holding all boundary conditions, recharge, and other discharge values to zero. They do not calculate absolute values for groundwater levels, but only the changes in these values.

Transient Model

A transient groundwater model simulates conditions at defined time-steps over a defined time with variable recharge and discharge values. They can account for seasonal, year-to-year, and long-term climate fluctuations or changes in recharge or discharge.

A transient model is generally more complex and resource intensive to develop than a steady state model and is appropriate when the objectives of the investigation require information about the time it takes for the system to respond to new stresses or how the system responds between periods of relative equilibrium.

Zone Budget Analysis

A zone budget analysis is a technique to quantify the flow of water into or out of defined regions or zones in a model domain. The boundaries of each zone can be further split into reaches to account for flows across each reach.

9 APPENDIX A – FIGURES

Figure 1 - General Area Map

Figure 2 - Schematic cross-section showing hydrogeologic feature in the area of the proposed project.

Figure 3 - WBSSM Predictive Model Scenarios (adapted from 2023-03-07 Post-Hearing Order, p.3.)

Figure 4 - Approximate locations of proposed slant wells.

Figure 5 - Proposed slant well casing dimensions.

Figure 6 - Offshore and onshore lengths and proportions of screened intervals for Slant Wells 2 through 7 and Test Slant Well.

Figure 7 - Location of the proposed slant wells in relation to the MCWD production wells, 180/400-Foot Aquifer Subbasin, Monterey Subbasin, and CEMEX Property.

Figure 8 - Table showing distances between the Test Slant Well and MCWD production wells.

Figure 9 - Proposed slant wells in relation to the Subbasin Interface Zone.

Figure 10 - Mixing zones in the Dune Sand and 180-Foot Aquifers submitted by Cal-Am. (Exh. Cal-Am-141, p.144.)

Figure 11 - Capture zones in the Dune Sand, 180-Foot, and 400-Foot Aquifers submitted by MCWD. (Exh. MCWD-161, p. 2.)

Figure 12 - Proposed slant well dimensions. (Exh. Marina-2, Tbl. 1, p. 8.)

Figure 13 - MCWD model predicted TDS changes between no project and with project scenarios in the Dune Sand Aquifer.

Figure 14 - Cal-Am model predicted TDS changes between no project and with project scenarios in the Dune Sand Aquifer.

Figure 15 - MCWD model predicted TDS changes between no project and with project scenarios in the Upper 180-Foot Aquifer.

Figure 16 - Cal-Am model predicted TDS changes between no project and with project scenarios in the Upper 180-Foot Aquifer.

Figure 17 - MCWD model predicted TDS changes between no project and with project scenarios in the Lower 180-Foot Aquifer.

Figure 18 - Cal-Am model predicted TDS changes between no project and with project scenarios in the Lower 180-Foot Aquifer.

Figure 19 - MCWD model predicted TDS changes between no project and with project scenarios in the 400-Foot Aquifer.

Figure 20 - Cal-Am model predicted TDS changes between no project and with project scenarios in the 400-Foot Aquifer.

Figure 21 - Summary of prevailing directions of model predicted movements of 1,500 mg/L isocontours.

Figure 22 - Summary of Seawater Intrusion Conclusions.

Figure 23 - Model predicted drawdowns in the Dune Sand Aquifer.

Figure 24 - Model predicted drawdowns in the Upper 180-Foot Aquifer.

Figure 25 - Model predicted drawdowns in the 180-Foot Aquifer.

Figure 26 - Model predicted drawdowns in the 400-Foot Aquifer.

Figure 27 - Model predicted drawdown summary.

Figure 28 - Storage losses in the Dune Sand Aquifer.

Figure 29 - Subbasin cross-boundary flow reaches submitted by MCWD.

Figure 30 - Subbasin cross-boundary flow reaches submitted by Cal-Am.

Figure 31 - Summary of MCWD Groundwater Pumping between 2006 and 2020 from Exh. MCWD-8 (Acre-Feet per Year).

Appendix A - Figures

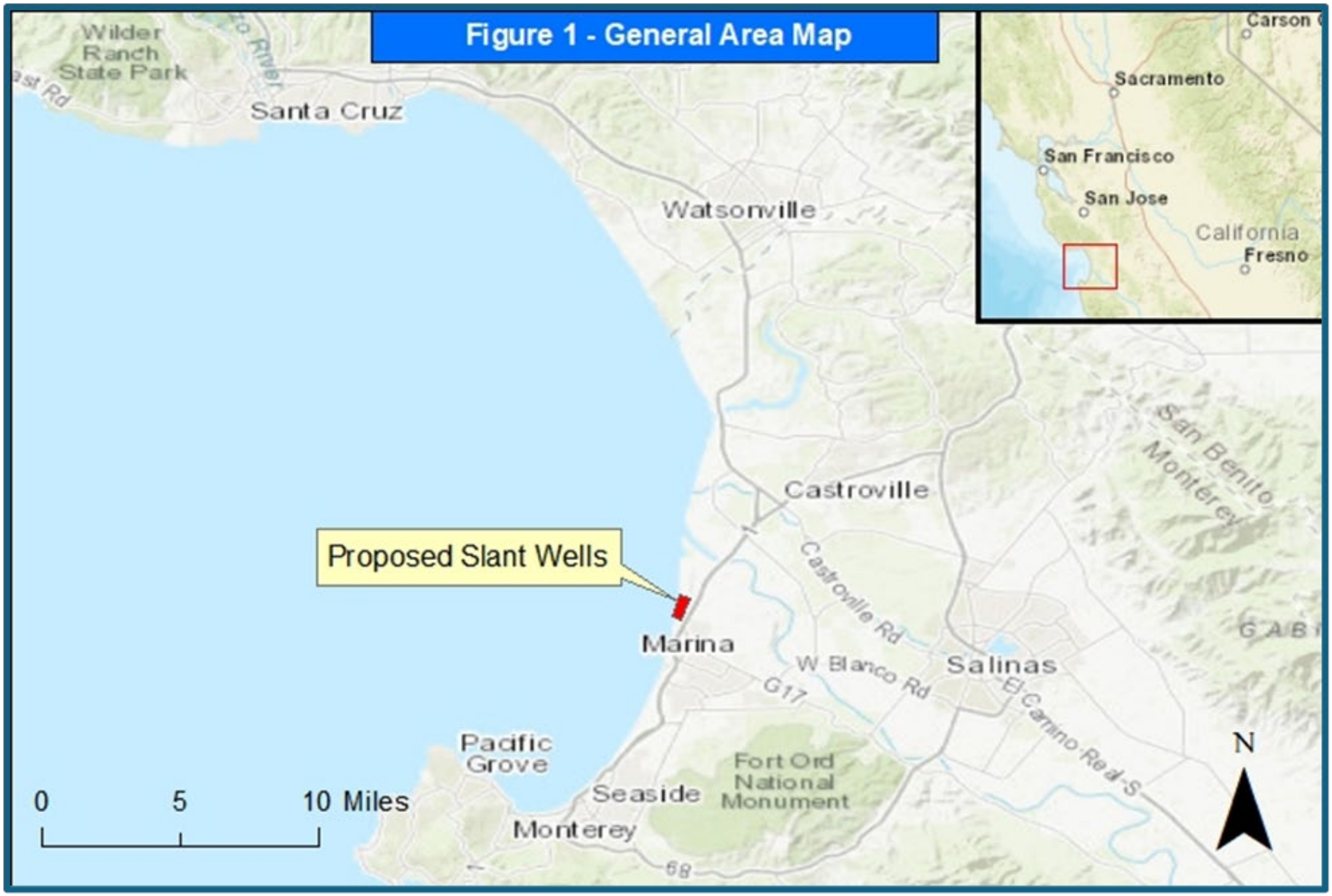


Figure 1 – General Area Map

Appendix A - Figures

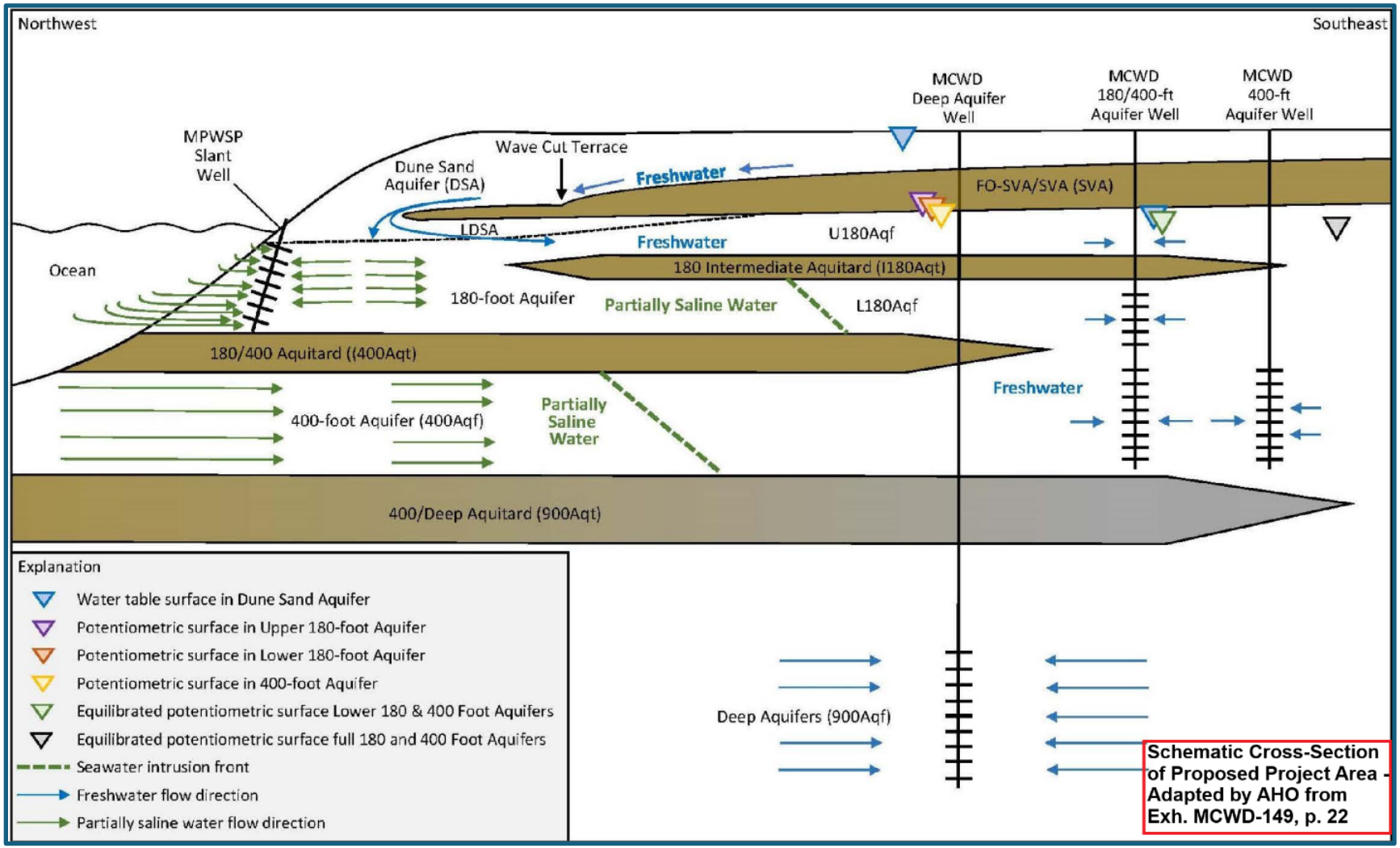


Figure 2 – Schematic cross-section showing hydrogeologic features in the area of the proposed project

Appendix A - Figures

Cal-Am MPWSP Slant Well Pumping Rate	Calibration and SGMA Implementation Scenarios			
	Option A	Option B	Option C	Option D
	WY 2019-2021 Calibration, No SGMA Implementation	WY 2009-2021 Base Period, No SGMA Implementation	WY 2009-2021 Base Period, Cal-Am SGMA Implementation	WY 2009-2021 Base Period, MCWD/Marina SGMA Implementation
None	A1	B1	C1	D1
11.6 MGD Slant Well Pumping (for 4.8 MGD Production)	A2	B2	C2	D2
15.5 MGD Slant Well Pumping (for 6.4 MGD Production)	A3	B3	C3	D3

Figure 3 – WBSSM Predictive Model Scenarios (adapted from 2023-03-07 Post-Hearing Order, p. 3.)

Appendix A - Figures

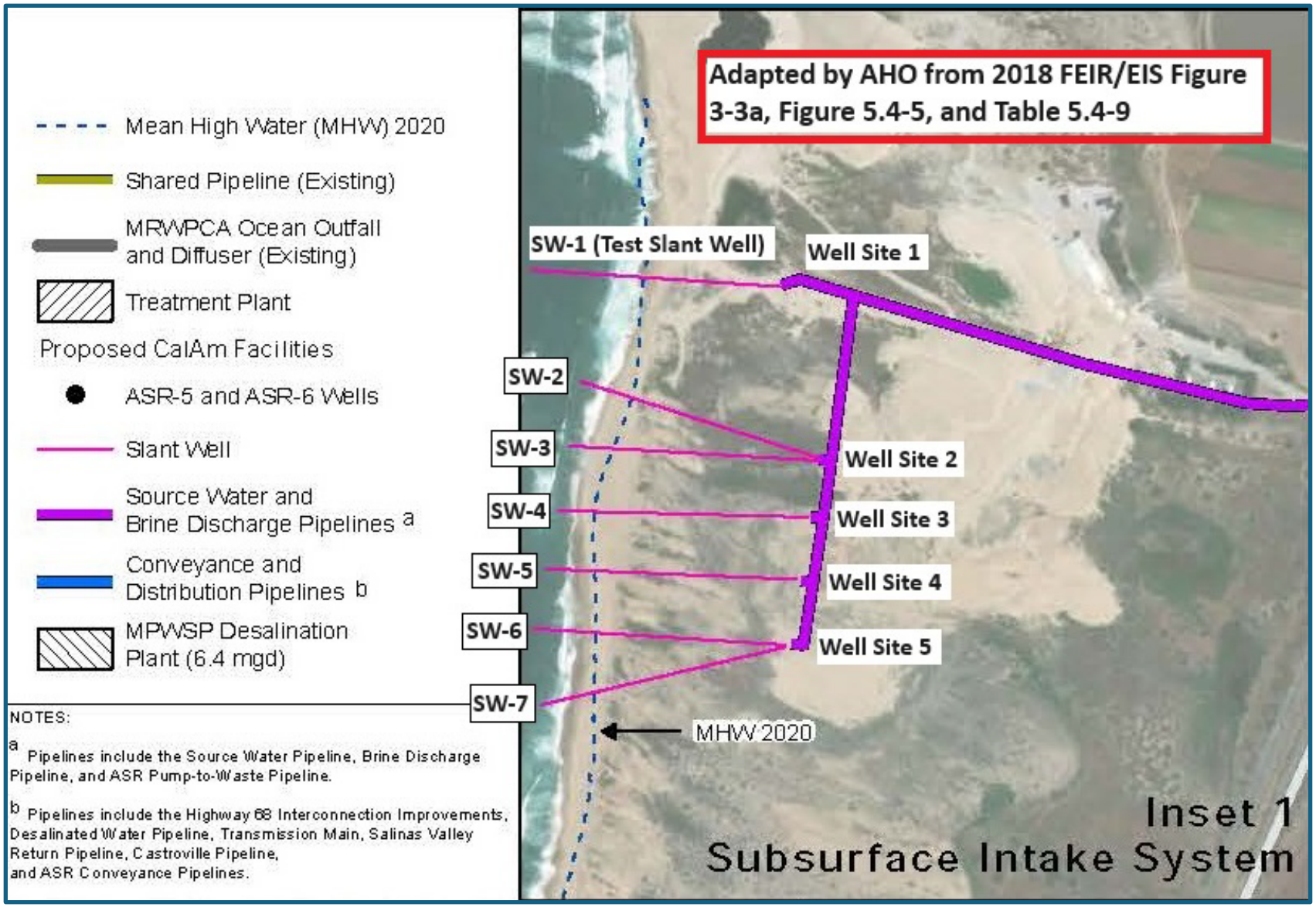


Figure 4 – Approximate locations of proposed slant wells

Appendix A - Figures

Adapted by AHO From Draft EIR/EIS, Table 3-2, p. 3-19

LENGTH OF PERMANENT SLANT WELLS SEAWARD OF MEAN HIGH WATER LINE

Well	Total Length	2020		2040		2060	
		Offshore	Onshore	Offshore	Onshore	Offshore	Onshore
Test Slant Well, SW-1	685	166	519	290	395	423	262
SW-2	970	63	907	219	751	385	585
SW-3	966	202	764	325	641	455	511
SW-4	961	162	799	292	669	431	530
SW-5	961	130	831	254	707	385	576
SW-6	961	174	787	298	663	428	533
SW-7	957	225	732	347	610	479	478

NOTES:

All lengths in feet.
MHW = Mean high water - A tidal datum. The average of all the high water heights observed over the National Tidal Datum Epoch. The 2020 MHW at the Monterey Tide Gauge NOAA#9413450 equals 1.53 m (5.02 ft) NAVD88, considering a high sea level rise scenario of 8.1 cm (3.2 in) by 2020 (5.46 ft by 2100). See also Appendices C1 and C2.

The lengths provided in this table indicate the total length of the well casing extending seaward of the MHW line. Because the slant wells would be drilled at an approximately 14-degree angle, the total horizontal distance seaward of the MHW line would be slightly shorter than the length of the well casing. The total horizontal distance seaward of the MHW line can be determined by dividing the length by 1.03.

SOURCE: Geoscience, 2017

Figure 5 – Proposed slant well casing dimensions

Appendix A - Figures

Well	Well Casing Interval Lengths[2] (feet)			Length of Screened Interval Offshore[3] (feet)	Offshore and Onshore Well Screen Lenths (feet) and Proportions for 400 ft. Total Well Screen Length				Offshore and Onshore Well Screen Lenths (feet) and Proportions for 800 ft. Total Well Screen Length			
	Total Length	Offshore	Onshore		Total Length[4]	Proportion Offshore	Onshore Length[5]	Proportion Onshore	Total Length[4]	Proportion Offshore	Onshore Length[5]	Proportion Onshore
SW-2	970	63	907	59	400	15%	341	85%	800	7%	741	93%
SW-3	966	202	764	190	400	47%	210	53%	800	24%	610	76%
SW-4	961	162	799	152	400	38%	248	62%	800	19%	648	81%
SW-5	961	130	831	122	400	31%	278	69%	800	15%	678	85%
SW-6	961	174	787	164	400	41%	236	59%	800	20%	636	80%
SW-7	957	225	732	212	400	53%	189	47%	800	26%	589	74%
Average	963	159	803	150	400	37%	250	63%	800	19%	650	81%
Test Slant Well[1]	720	180	540	170	415	41%	245	59%				

[1] The dimensions of the well casing intervals for the Test Slant Well are decribed in Appendix E3 part 1 of the EIR/EIS.

[2] The dimensions of the well casing intervals for Slant Wells 2 through 7 are listed in Table 3-2 of the EIR/EIS.

[3] The lengths of the screened intervals located offshore is calculated as the offshore lengths of well casings multuplied by 0.94.

[4] The total length range of screened intervals for Slant Wells 2 through 7 from EIR/EIS p. 3-18 for Slant Wells 2 through 7.

[5] The length of well screen intervals located onshore is calculated as the length of the well screen interval located offshore subtracted from the total length of the screened intervals.

Figure 6 – Offshore and onshore lengths and proportions of screened intervals for Slant Wells 2 through 7 and Test Slant Well

Appendix A - Figures

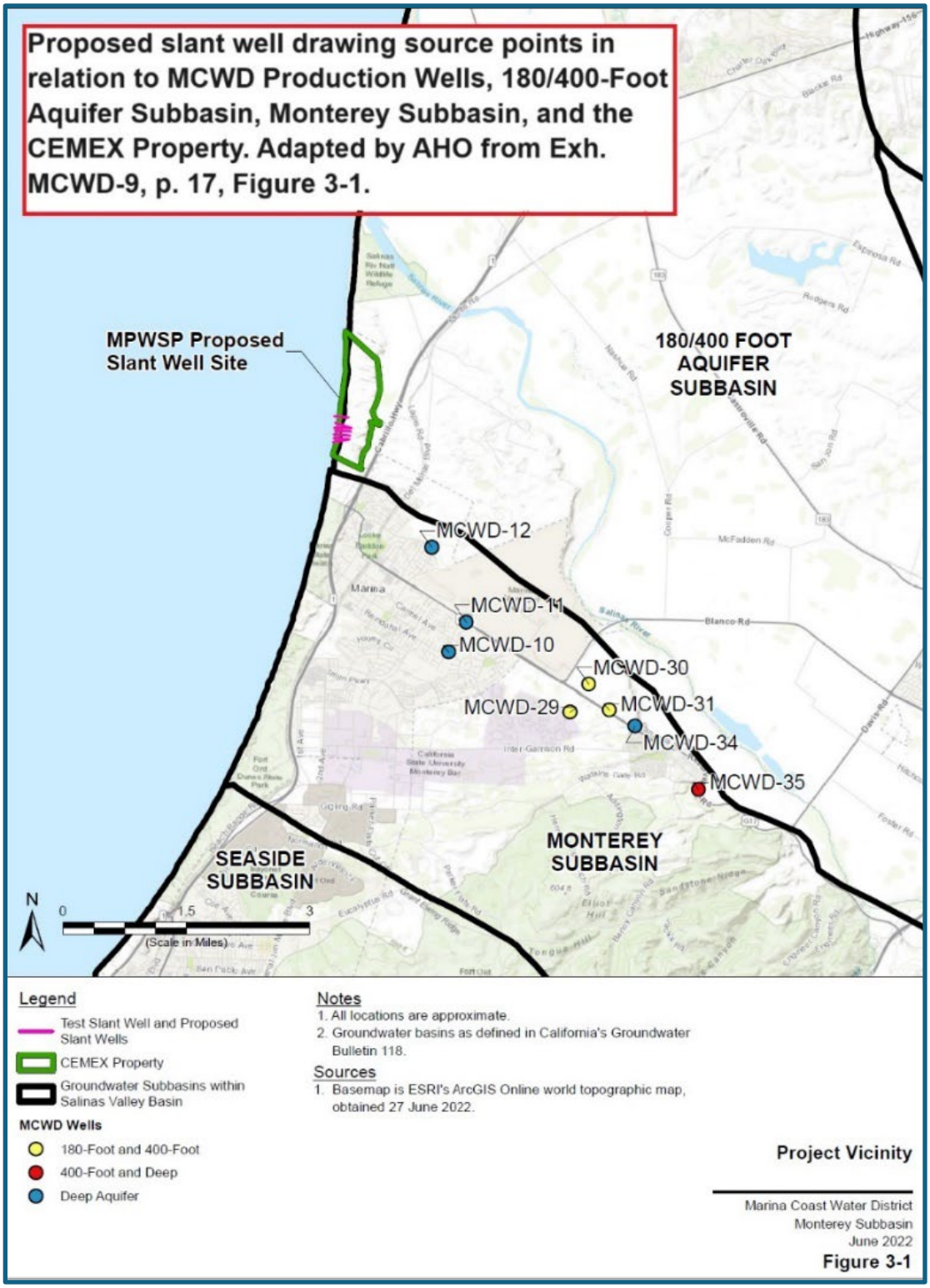


Figure 7 – Location of the proposed slant wells in relation to the MCWD production wells, 180/400-Foot Aquifer Subbasin, Monterey Subbasin, and CEMEX Property

Appendix A - Figures

MCWD Well Number	Screened Aquifers	Distance to Test Slant Well (miles)
10	Deep	3.1
11	Deep	2.9
12	Deep	1.9
29	180-Foot/400-Foot	4.5
30	180-Foot/400-Foot	4.4
31	180-Foot/400-Foot	4.8
34	Deep	5.1
35	400-Foot/Deep	6.2

Figure 8 – Table showing distances between the Test Slant Well and MCWD production wells

Appendix A - Figures

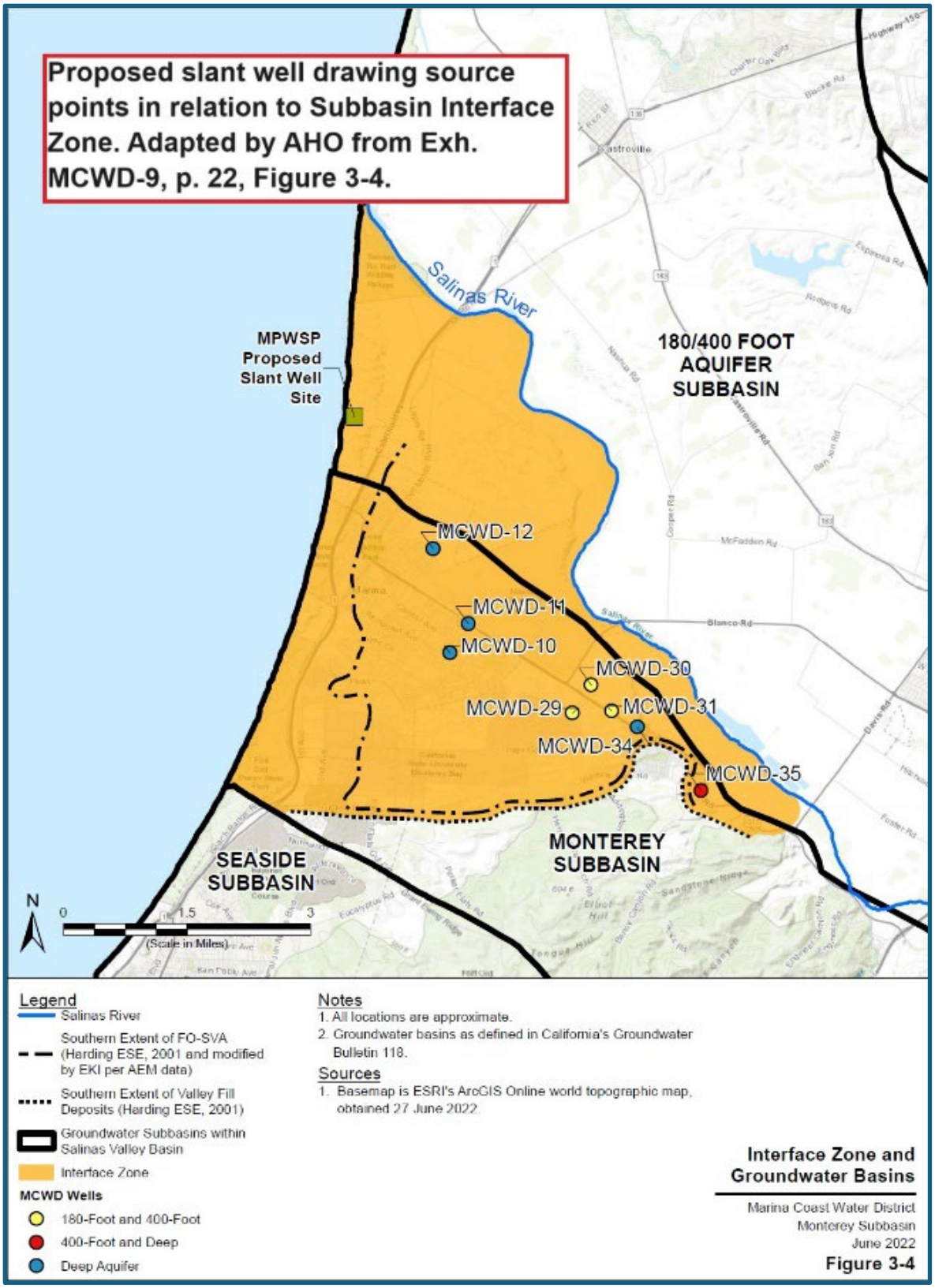


Figure 9 – Proposed slant wells in relation to the Subbasin Interface Zone

Appendix A - Figures

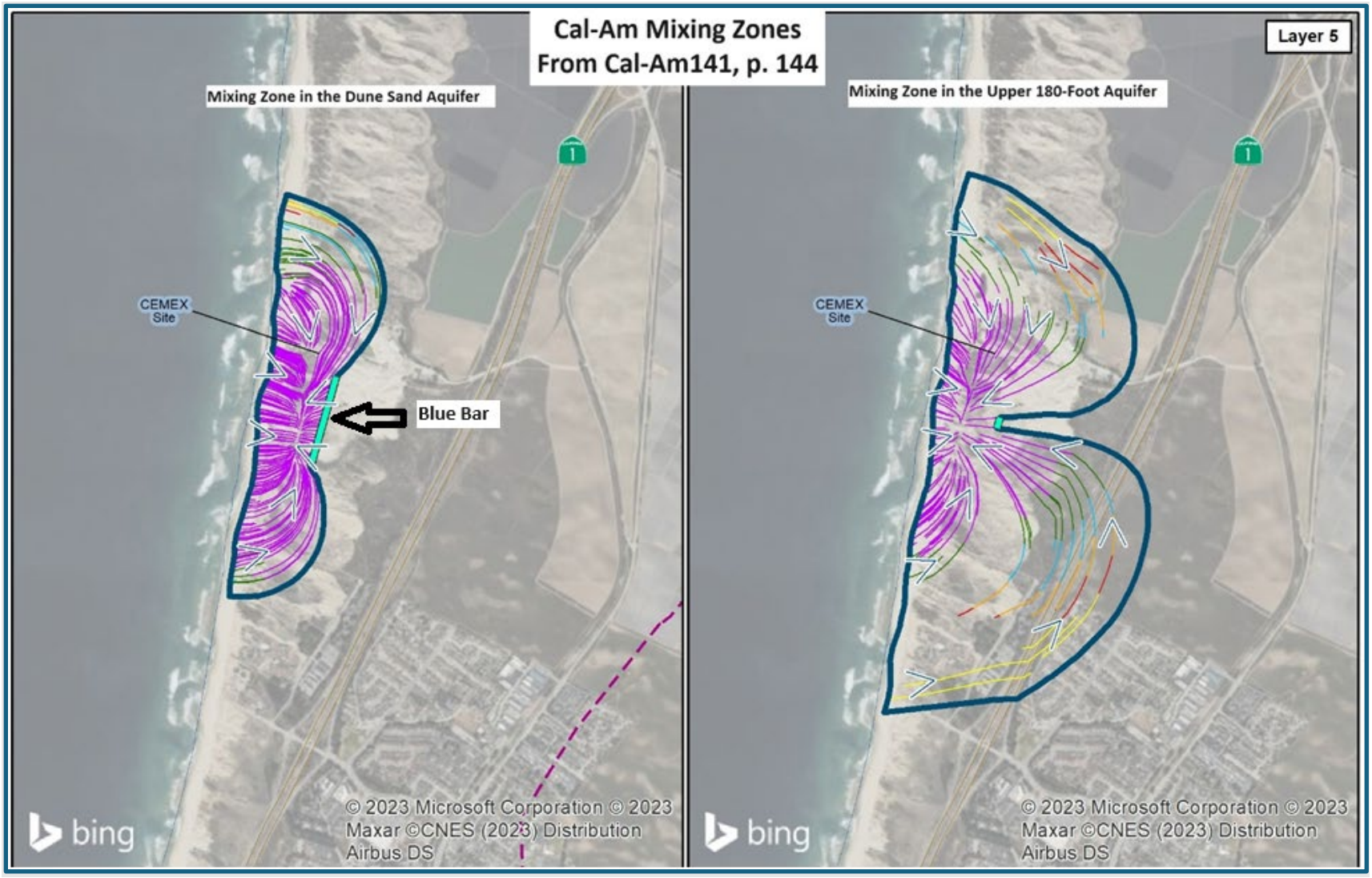


Figure 10 – Mixing zones in the Dune Sand and 180-Foot Aquifers submitted by Cal-Am (Exh. Cal-Am-141, p.144)

Appendix A - Figures

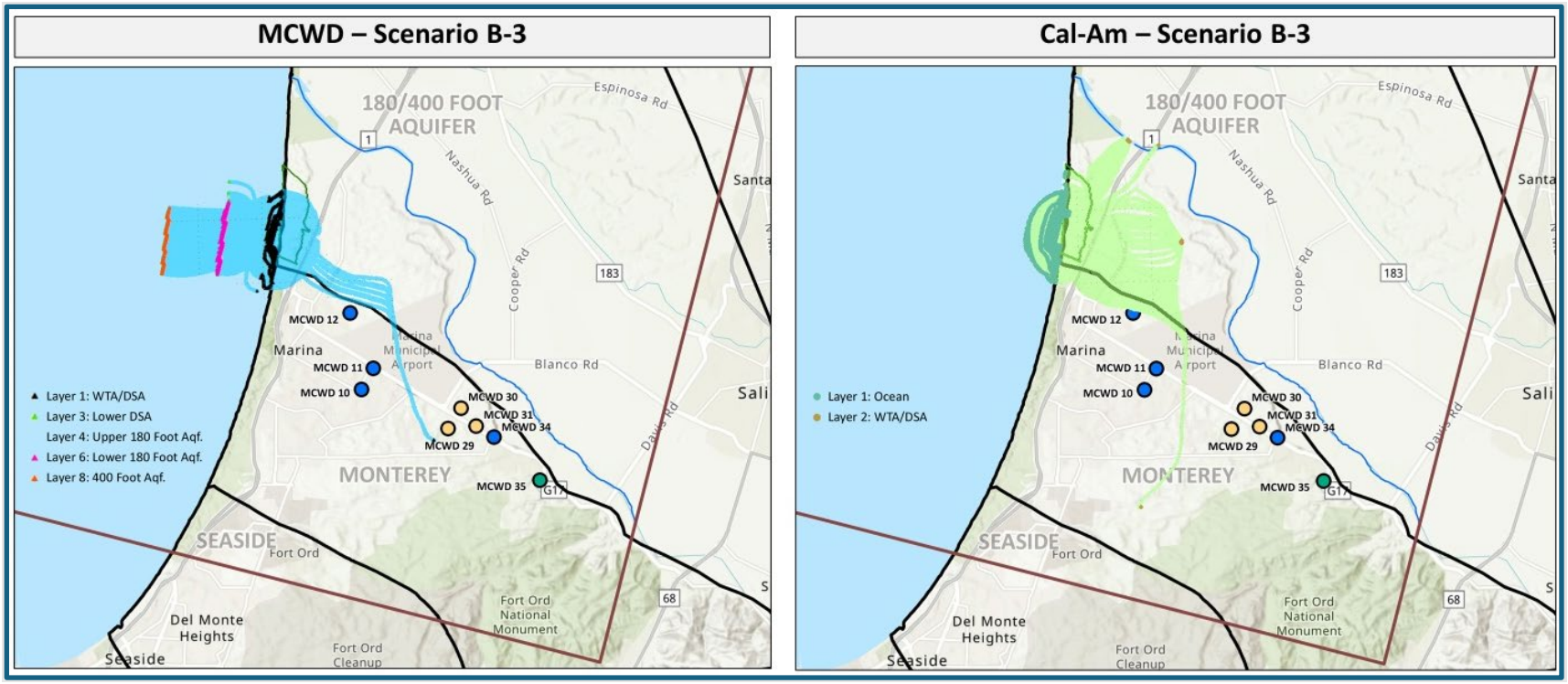
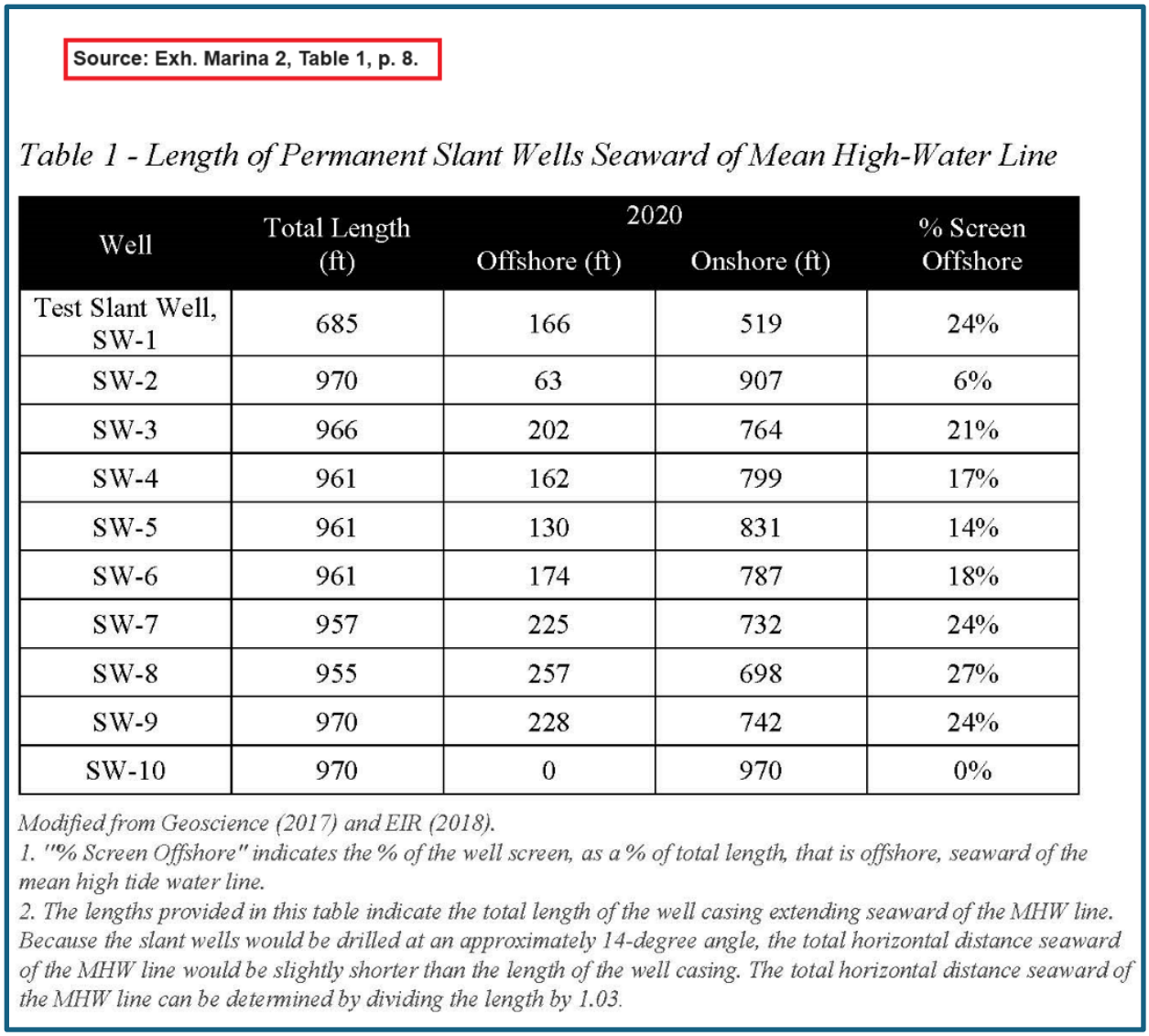


Figure 11 – Capture zones in the Dune Sand, 180-Foot, and 400-Foot Aquifers submitted by MCWD (Exh. MCWD-161, p. 2)

Appendix A - Figures



Source: Exh. Marina 2, Table 1, p. 8.

Table 1 - Length of Permanent Slant Wells Seaward of Mean High-Water Line

Well	Total Length (ft)	2020		% Screen Offshore
		Offshore (ft)	Onshore (ft)	
Test Slant Well, SW-1	685	166	519	24%
SW-2	970	63	907	6%
SW-3	966	202	764	21%
SW-4	961	162	799	17%
SW-5	961	130	831	14%
SW-6	961	174	787	18%
SW-7	957	225	732	24%
SW-8	955	257	698	27%
SW-9	970	228	742	24%
SW-10	970	0	970	0%

Modified from Geoscience (2017) and EIR (2018).
1. "% Screen Offshore" indicates the % of the well screen, as a % of total length, that is offshore, seaward of the mean high tide water line.
2. The lengths provided in this table indicate the total length of the well casing extending seaward of the MHW line. Because the slant wells would be drilled at an approximately 14-degree angle, the total horizontal distance seaward of the MHW line would be slightly shorter than the length of the well casing. The total horizontal distance seaward of the MHW line can be determined by dividing the length by 1.03.

Figure 12 – Proposed slant well dimensions - (Exh. Marina-2, Tbl. 1, p. 8)

Appendix A - Figures

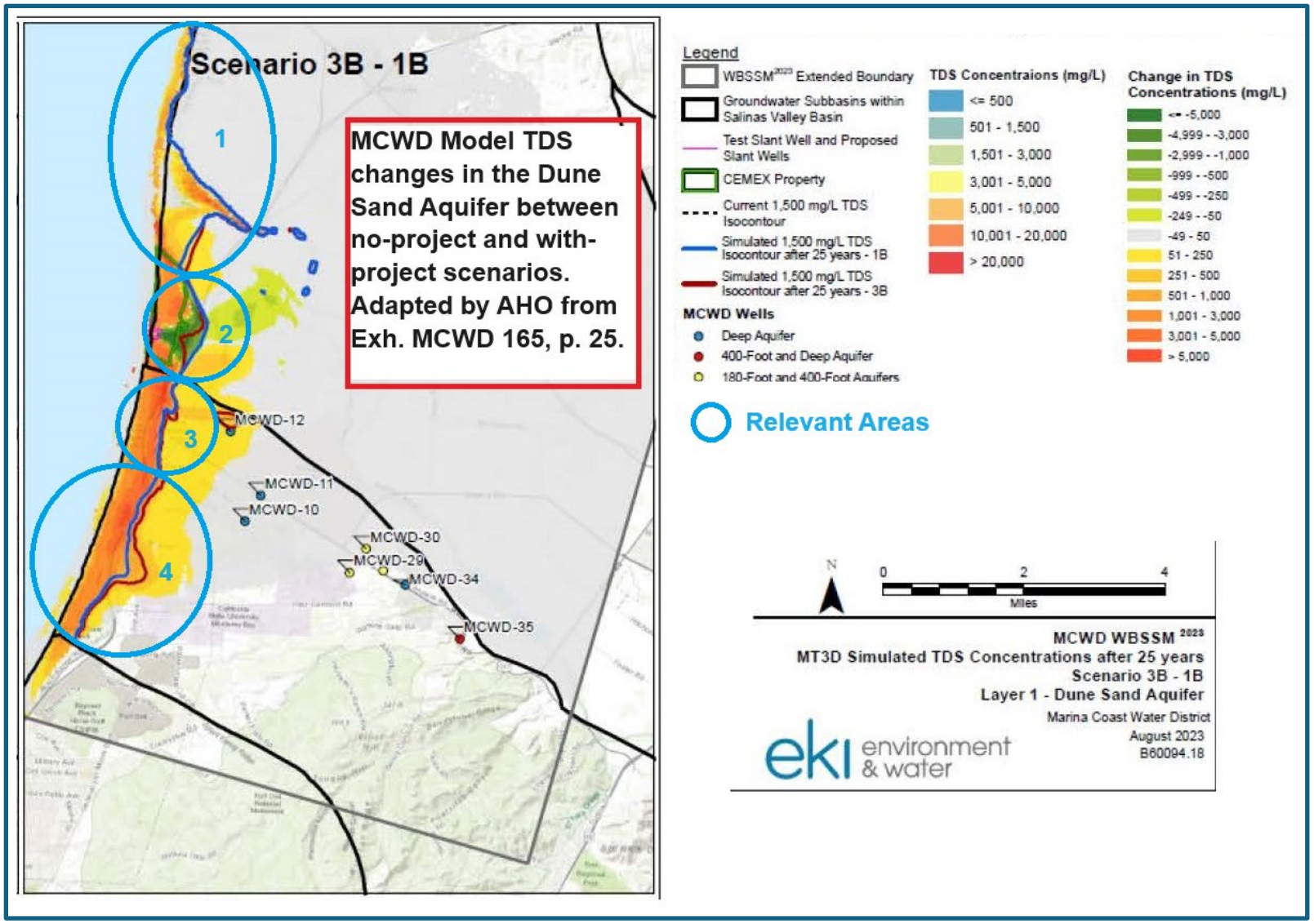


Figure 13 – MCWD model predicted TDS changes between no project and with project scenarios in the Dune Sand Aquifer

Appendix A - Figures

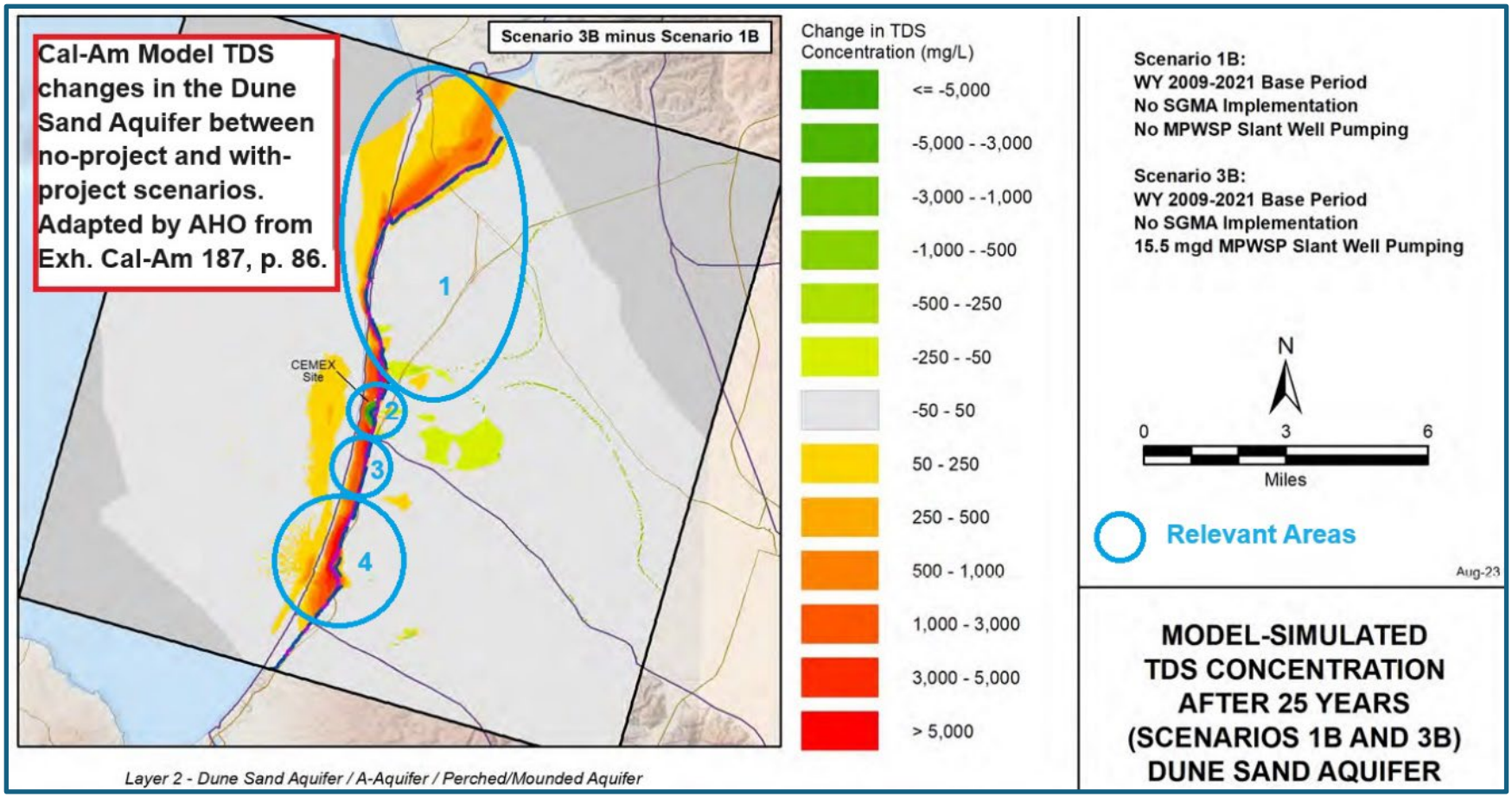


Figure 14 – Cal-Am model predicted TDS changes between no project and with project scenarios in the Dune Sand Aquifer

Appendix A - Figures

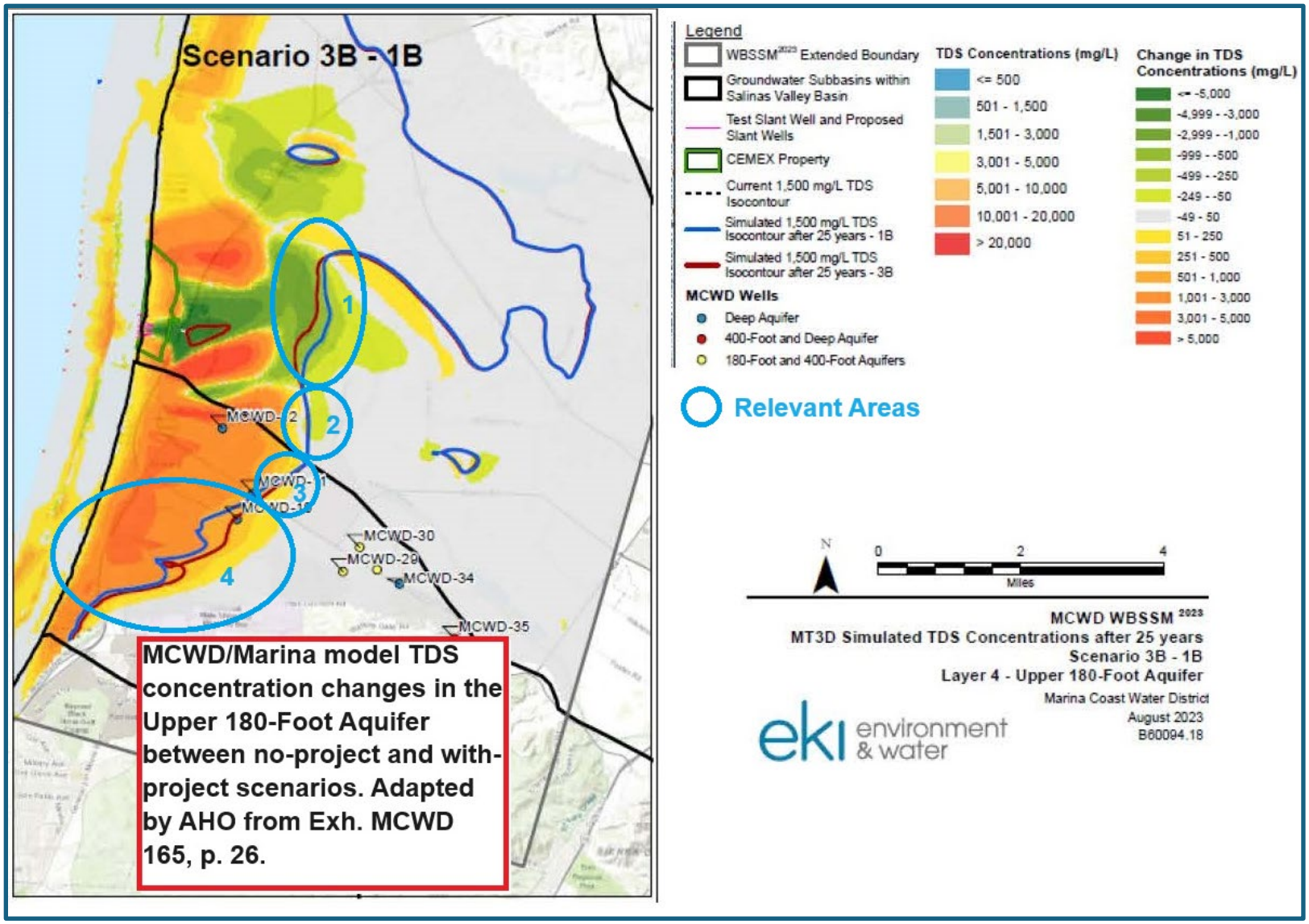


Figure 15 – MCWD model predicted TDS changes between no project and with project scenarios in the Upper 180-Foot Aquifer

Appendix A - Figures

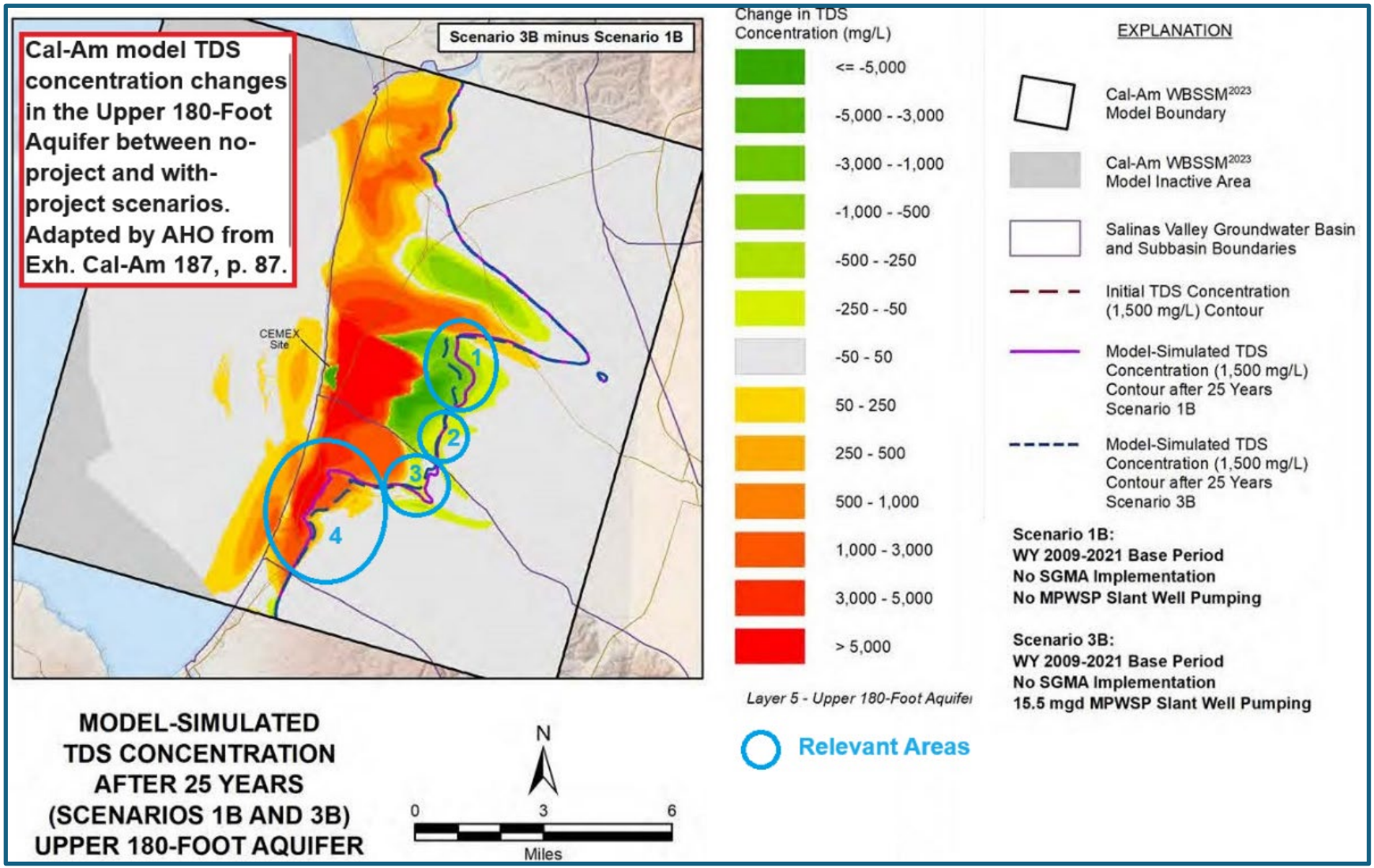


Figure 16 – Cal-Am model predicted TDS changes between no project and with project scenarios in the Upper 180-Foot Aquifer

Appendix A - Figures

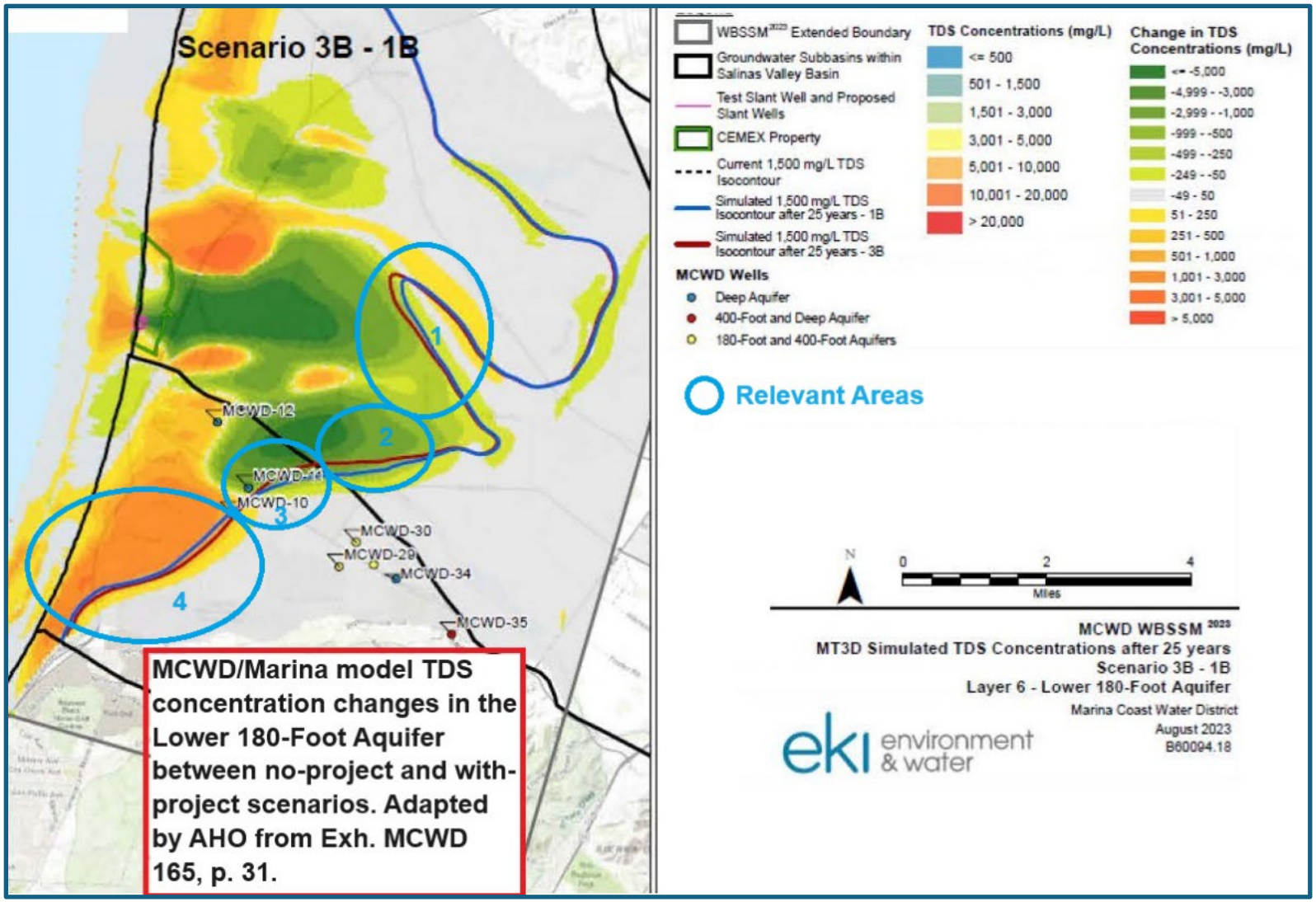


Figure 17 – MCWD model predicted TDS changes between no project and with project scenarios in the Lower 180-Foot Aquifer

Appendix A - Figures

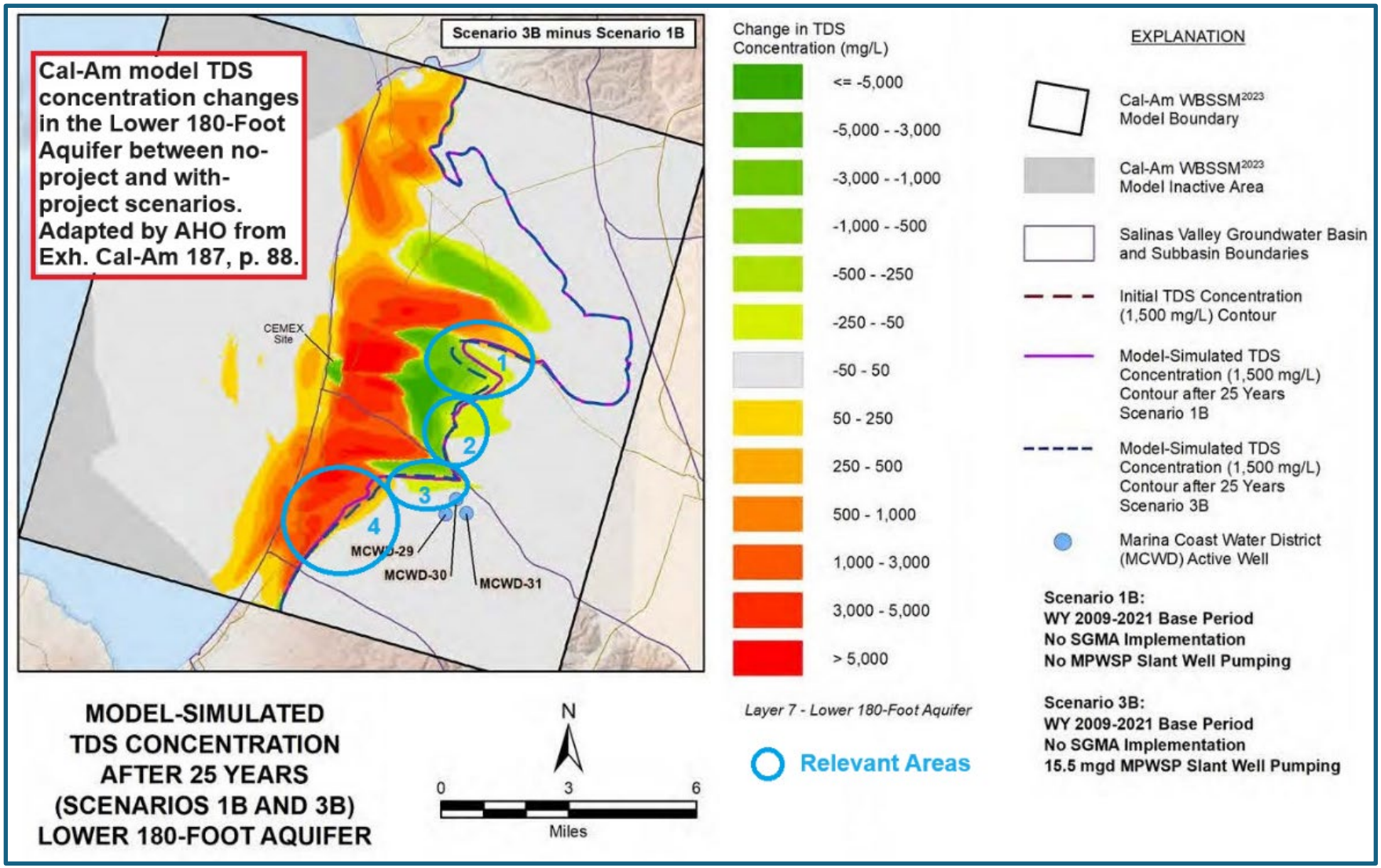


Figure 18 – Cal-Am model predicted TDS changes between no project and with project scenarios in the Lower 180-Foot Aquifer

Appendix A - Figures

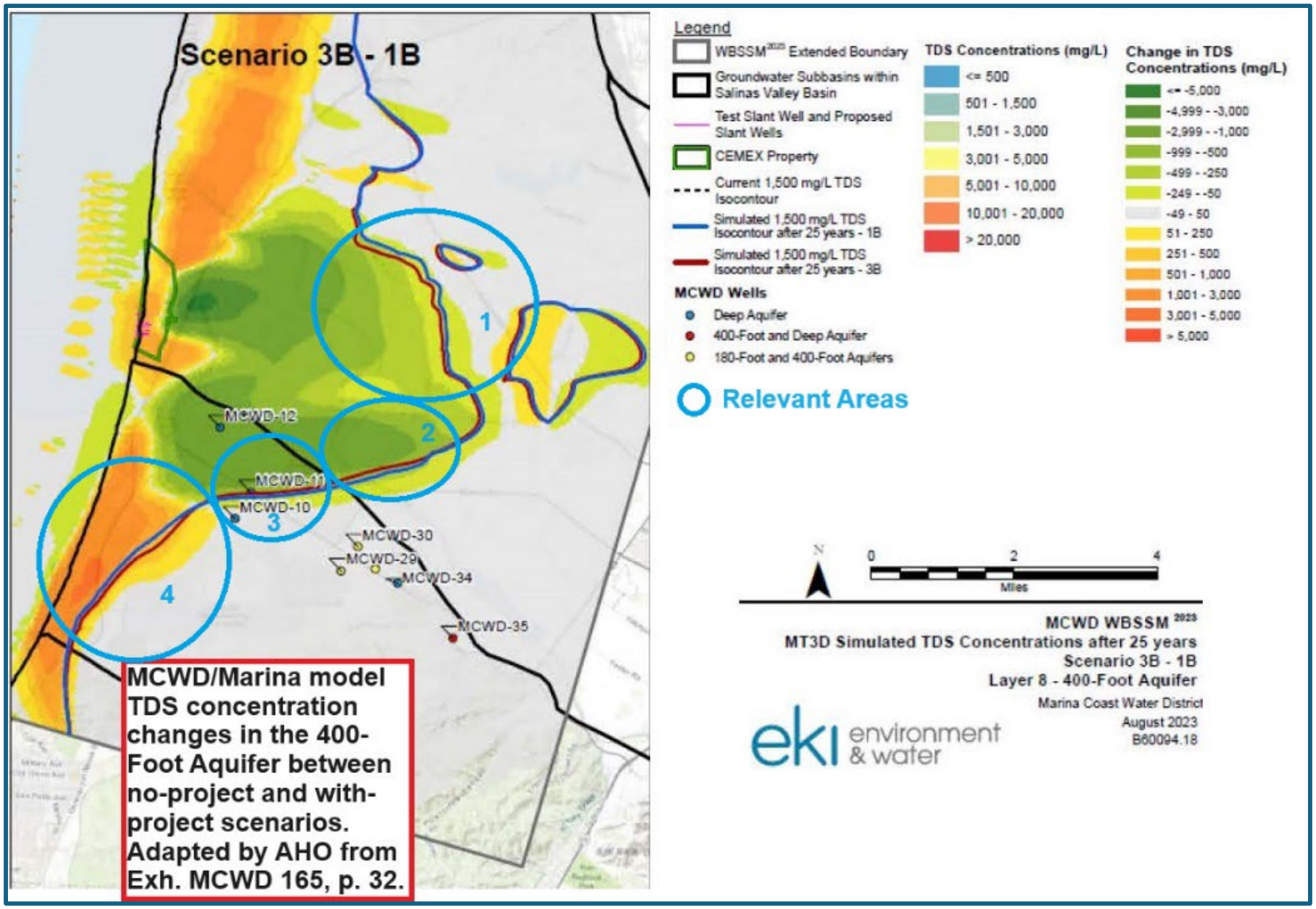


Figure 19 – MCWD model predicted TDS changes between no project and with project scenarios in the 400-Foot Aquifer

Appendix A - Figures

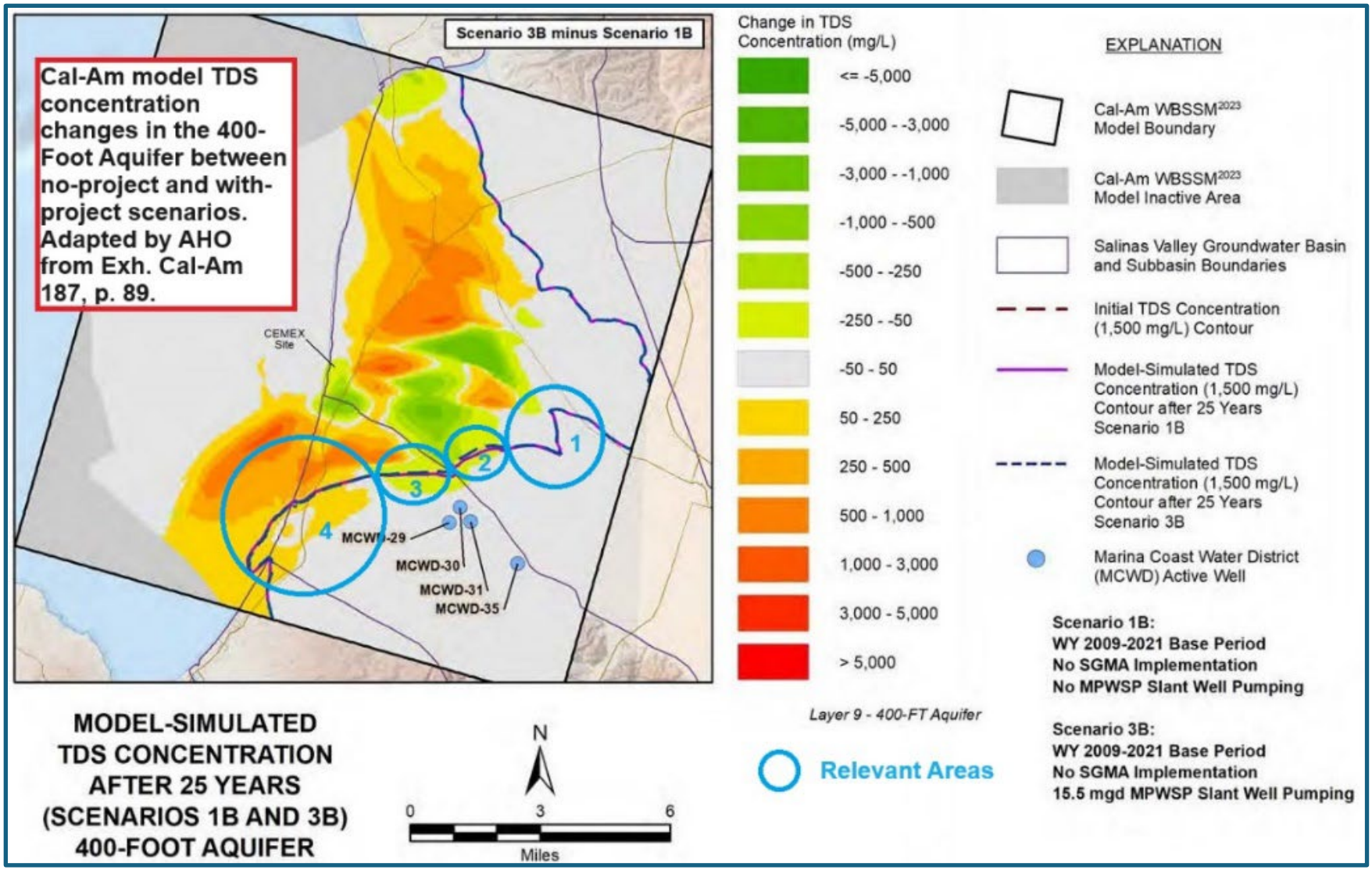


Figure 20 – Cal-Am model predicted TDS changes between no project and with project scenarios in the 400-Foot Aquifer

Appendix A - Figures

	Aquifer	Dune Sand		Upper 180-Foot		Lower 180-Foot		400-Foot	
	Model	MCWD/ Marina	Cal-Am	MCWD/ Marina	Cal-Am	MCWD/ Marina	Cal-Am	MCWD/ Marina	Cal-Am
	Section of the 1,500 mg/L isocontour	Prevailing Movement of the 1,500 mg/L Isocontour (miles)							
180/400-Foot Aquifer Subbasin	(1) - Northern and central	No Change	No change	0.5 Seaward	0.5 Seaward	0.5 Seaward	0.5 Seaward	0.25 Seaward	No change
	(2) - Southern near the subbasin boundary	0.5 Seaward	0.5 Seaward	No change	No change	0.5 Seaward	No change	0.25 Seaward	0.25 Seaward
Monterey Subbasin	(3) - Northern near the subbasin boundary	No change	No change	0.25 Landward	0.5 Seaward	0.5 Seaward	No change	0.25 Seaward	No change
	(4) - Southern and central	0.5 Landward	No change	0.75 Landward	0.75 Landward	0.25 Landward	0.25 Landward	0.25 Landward	No change

Figure 21 – Summary of prevailing directions of model predicted movements of 1,500 mg/L isocontours

Appendix A - Figures

	Aquifer	Dune Sand	Upper 180-Foot	Lower 180-Foot	400-Foot
	Section of the 1,500 mg/L isocontour	Range or Maximum Inland Movement of Seawater Intrusion Front (miles)			
180/400-Foot Aquifer Subbasin	(1) - Northern and central	None	None	None	None
	(2) - Southern near the subbasin boundary	None	None	None	None
Monterey Subbasin	(3) - Northern near the subbasin boundary	None	Inconclusive	None	None
	(4) - Southern and central	Between 0 and 0.5	Up to 0.75	Up to 0.25	Between 0 and 0.25

Figure 22 – Summary of Seawater Intrusion Conclusions

Appendix A - Figures

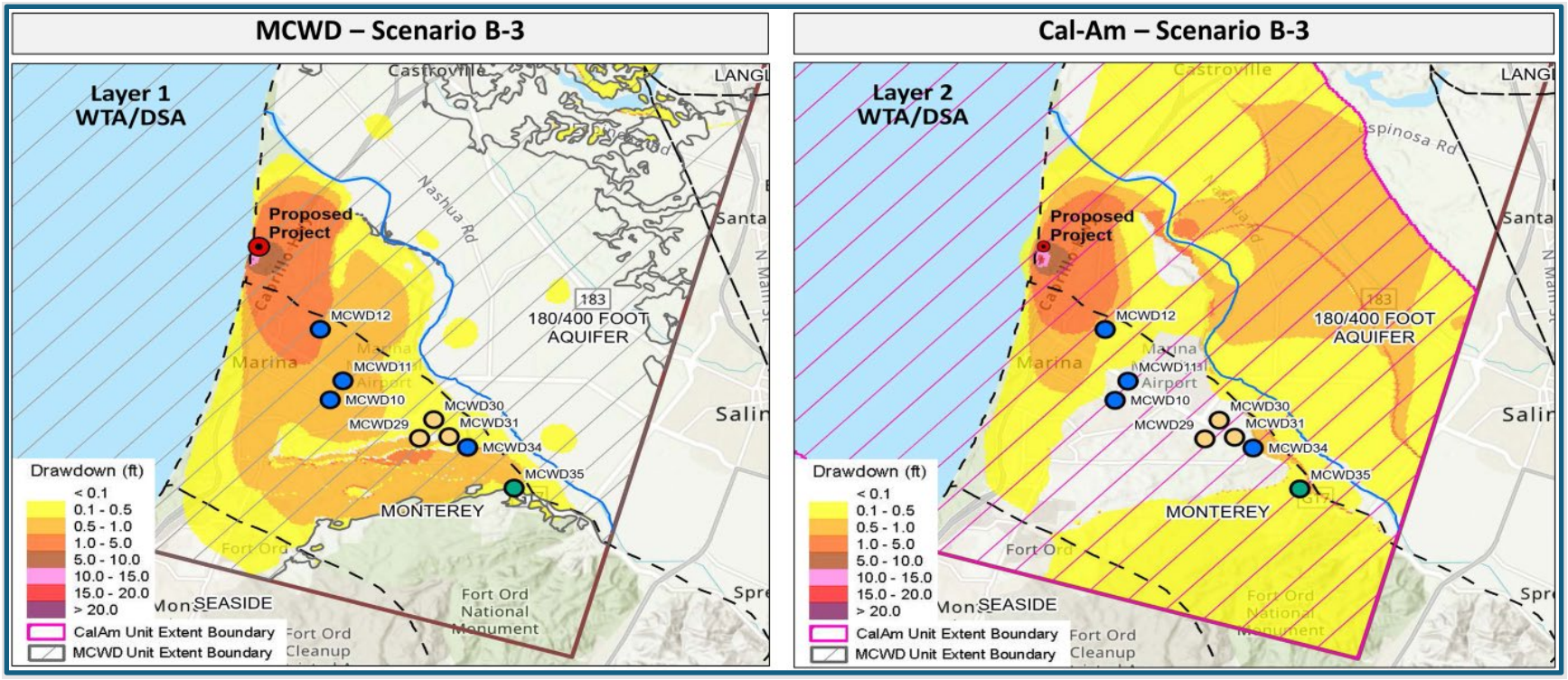


Figure 23 – Model predicted drawdowns in the Dune Sand Aquifer

Appendix A - Figures

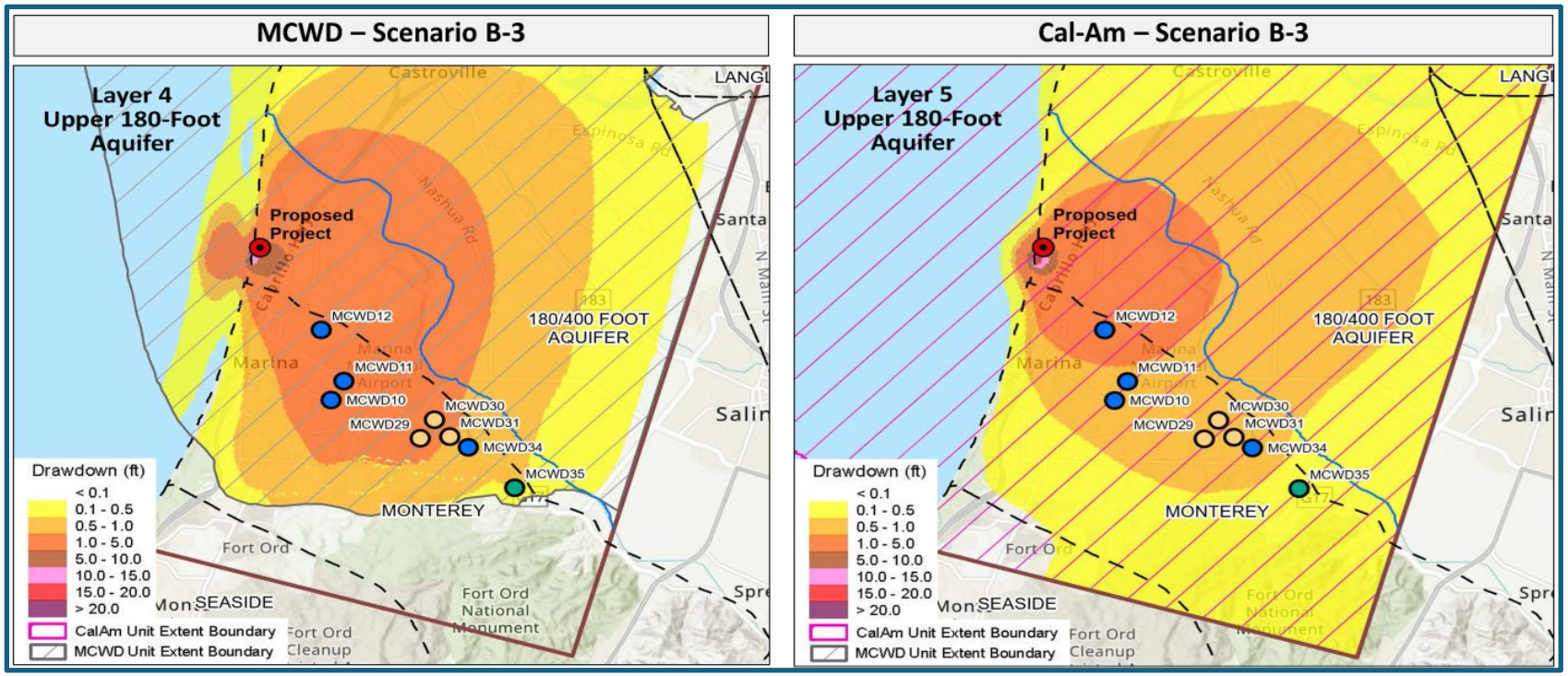


Figure 24 – Model predicted drawdowns in the Upper 180-Foot Aquifer

Appendix A - Figures

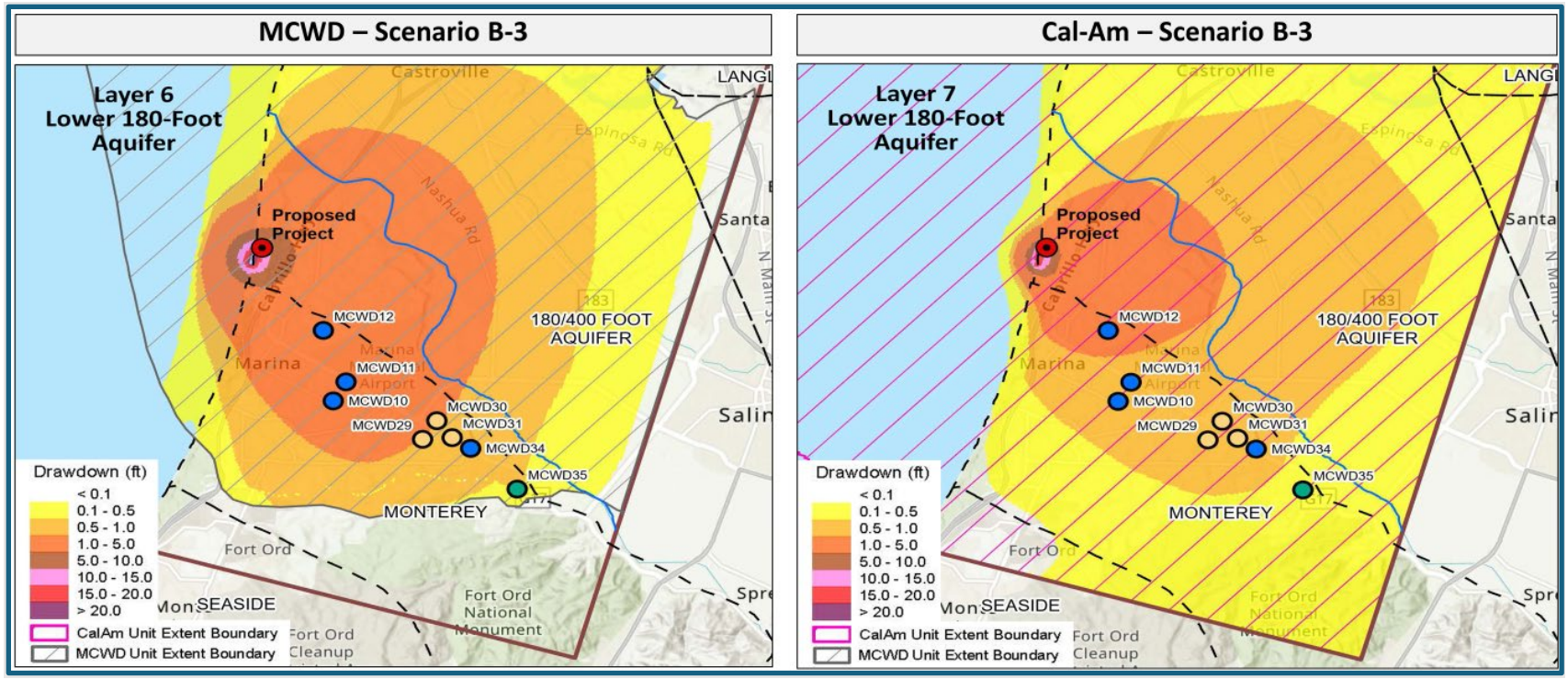


Figure 25 – Model predicted drawdowns in the 180-Foot Aquifer

Appendix A - Figures

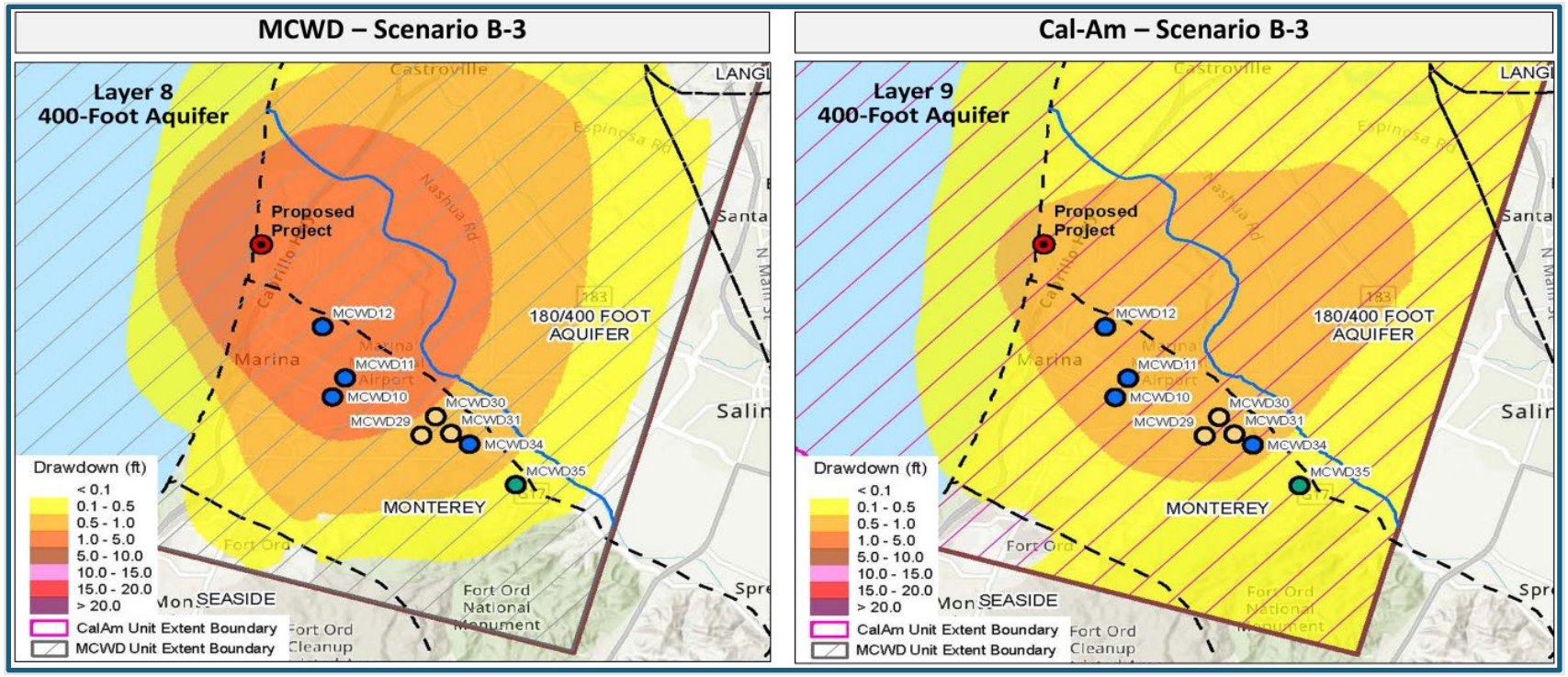


Figure 26 – Model predicted drawdowns in the 400-Foot Aquifer

Aquifer	Dune Sand		180-Foot		400-Foot	
Model	MCWD/Marina	Cal-Am	MCWD/Marina	Cal-Am	MCWD/Marina	Cal-Am
Location	Drawdown Range (Feet)					
Immediate vicinity of the proposed slant wells	10 to 20	10 to 20	10 to 20	10 to 20	1 to 5	0.5 to 1
West of Highway 1 near the proposed slant wells	5 to 10	5 to 10	5 to 10	5 to 10	1 to 5	0.5 to 1
Between Highway 1 and MCWD Well 12	1 to 5	1 to 5	1 to 5	1 to 5	1 to 5	0.5 to 1
Between MCWD Well 12 and MCWD Well 30	0.5 to 1	Less than 0.1	1 to 5	0.5 to 1	1 to 5	0.5 to 1
Between MCWD Well 30 and MCWD Well 34	0.1 to 0.5	Less than 0.1	0.5 to 1	0.5 to 1	0.5 to 1	0.5 to 1
Near MCWD Well 35	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5	0.1 to 0.5

Figure 27 – Model predicted drawdown summary

Appendix A - Figures

Storage Losses in the Dune Sand Aquifer (AF)			
Project Alternative (mgd)	MCWD Response (Exh. MCDW-175, p. 26.)		Cal-Am Response (Exh. Cal-Am-177 p. 33.)
	MCWD Model	Cal-Am Model	
11.6	1,531	3,681	1,463
15.5	2,046	5,993	2,055

Figure 28 – Storage losses in the Dune Sand Aquifer

Appendix A - Figures

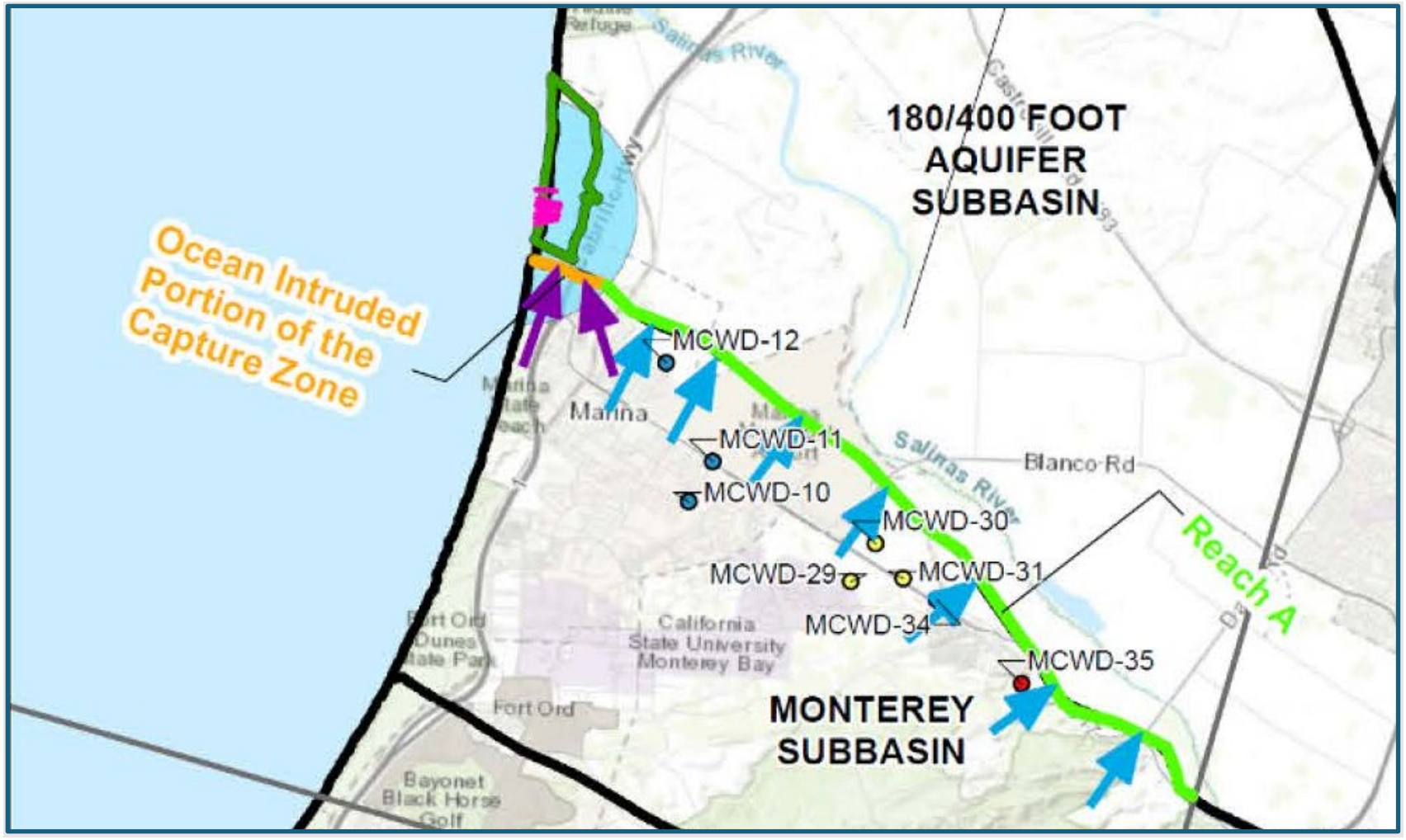


Figure 29 – Subbasin cross-boundary flow reaches submitted by MCWD

Appendix A - Figures

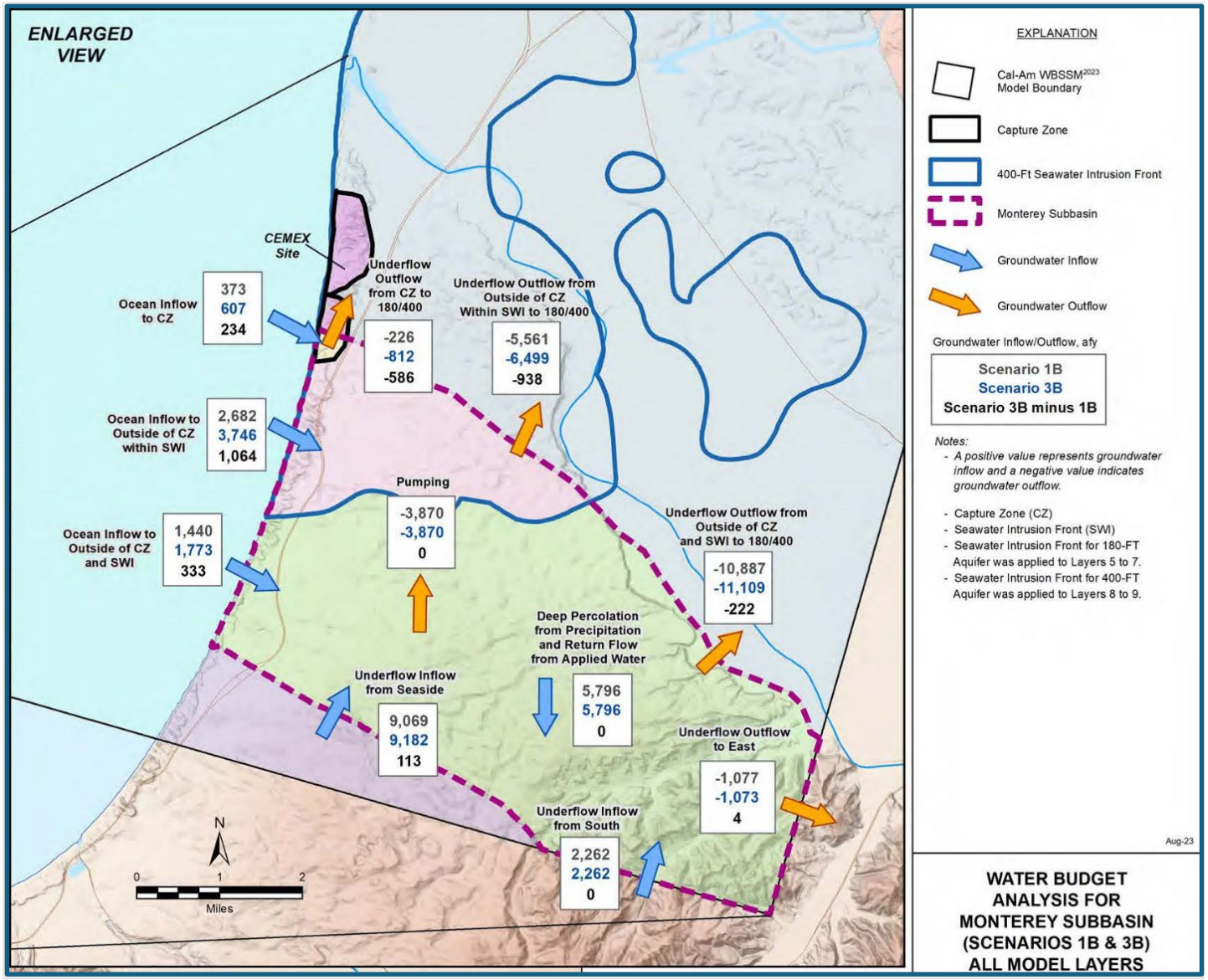


Figure 30 – Subbasin cross-boundary flow reaches submitted by Cal-Am

Appendix A - Figures

Summary of MCWD Groundwater Pumping between 2006 and 2020 from Exh. MCWD-8 (Acre-Feet per Year)												
Year	MCWD Production Wells								Aquifers			Total
	Deep			180-Foot and 400-Foot			Deep	-Foot and D	Deep	180-Foot and 400-Foot	400-Foot and Deep	
	10	11	12	29	30	31	34	35/WG				
2006		1,278	508	504	883	1,122			1,786	2,509	0	4,295
2007		1,164	458	520	1,155	1,266			1,622	2,941	0	4,563
2008	650	875	308	462	896	911			1,833	2,269	0	4,102
2009	841	869	251	394	892	791			1,961	2,077	0	4,038
2010	687	845	213	555	882	953			1,745	2,390	0	4,135
2011	699	864	136	554	898	896			1,699	2,348	0	4,047
2012	893	909	12	549	530	1,216	15	1	1,829	2,295	1	4,125
2013	830	621	16	671		740	543	1,009	2,010	1,411	1,009	4,430
2014	717	894	8	390		411	750	856	2,369	801	856	4,026
2015	544	869	7	159		461	550	638	1,970	620	638	3,228
2016	593	710	0	185	73	328	528	609	1,831	586	609	3,026
2017	721	866		165	404	330	492	260	2,079	899	260	3,238
2018	769	974		233	357	508	532	32	2,275	1,098	32	3,405
2019	663	763		221	272	351	351	569	1,777	844	569	3,190
2020	594	622		205	310	416	448	698	1,664	931	698	3,293

Figure 31 – Summary of MCWD Groundwater Pumping between 2006 and 2020 from Exh. MCWD-8 (Acre-Feet per Year)

10 APPENDIX B – CAL-AM OBJECTIONS RESPONSE TABLE

Cal-Am's Primary Objections to the AHO's December 31, 2024, Draft Report of Referee:

No.[1]	Section/Page of Text in Draft Report	PDF page of Cal-Am's Objection[2]	Board's Response or Ruling
1	Section 6.2.2 (Origin of the Water), pp. 67-70 [63-66][3]	6-7	In reaching an estimate of ocean water percentage (OWP) in the draw from the proposed wells, the Board considered the range of OWP calculated by each of the parties. The Board concludes that the overlap in this range provides a general estimate sufficient to respond to the court's questions. Cal-Am's proposed change in the total dissolved solids (TDS) concentration utilized by MCWD and Marina to calculate the OWP would result in an overlapping range in the parties' estimates of 90 to 96 percent rather than 90 to 92 percent, which does not affect the lower range of the estimate. (See Exh. Cal-Am-187, p. 25; MCWD-Marina Proposed Report Part 2, p. 87.) Therefore, the Board declines to make a finding of fact as to whether MCWD's use of a TDS concentration of 29,800 mg/L rather than 33,500 mg/L was appropriate. The Board revised the report to note Cal-Am's objection.
2	Section 6.8.2.4 (Physical Solution), pp. 106-108 [102-104]	7-9	Cal-Am submitted two model scenarios that incorporate the Return Water Settlement Agreement (RWSA) with project operations and assume 6 percent and 9 percent return water. (Exh. Cal-Am-177, p. 156.) A reference to this information is now included in the Report of Referee. (Final Report, p. 109.) These model runs show some difference in groundwater elevations but do not address changes in water quality. These model results do not change any of the conclusions in the report.

[1] For ease of reference, we have added numbering to the text describing the objections.
[2] All references to objections are to Cal-Am's January 31, 2025, objections, saved in the Hearing Documents folder and in the Communications and Transmittals subfolder as "2025-01-31 Cal-Am's Objections to Report of Referee".
[3] Unless otherwise indicated, citations to page numbers of documents and exhibits are to the pages of the PDF files. These page numbers often are different from the text page numbers in the documents or exhibits. We have also provided the printed page numbers in brackets, following the PDF page numbers.

			Any mitigation of impacts from the RWSA should be considered when determining whether the potential harmful impacts shown in the model results are unreasonable. The RWSA is one form of a physical solution, however, as stated in the Final Report, "[b]ased on the evidentiary record in this proceeding and the areas of modeled potential impact, replacement water provided by Cal-Am to locations within the Monterey Subbasin or the southern portion of the 180/400 Subbasin may be necessary to offset some of the effects of the proposed draw." (Final Report, p. 111.) The RWSA may be insufficient as a physical solution without additional measures, to avoid injury to legal users and unreasonable harm.
3	Section 6.8.2 (Physical Solution), pp. 106-108 [102-104]; Section 6.8.3 (Monitoring and Adaptive Management), pp. 108-110 [104-106]	9-16	The groundwater monitoring programs required by the California Public Utilities Commission (and California Coastal Commission may be appropriate monitoring and adaptive management programs to prevent injury to other legal users of groundwater. Because these users are not parties to this proceeding, however, these right holders had no notice or opportunity to provide information for the Board's consideration about their extractions and uses of groundwater and how those uses might be impacted by operation of the slant wells. The Final Report also concludes that there is insufficient information in the record to determine whether the draw from the proposed slant wells will cause unreasonable harm – for the same reasons, the Board cannot determine whether the existing monitoring and adaptive management plans would address any unreasonable harm. The State Water Board therefore does not reach any conclusion as to the adequacy of the programs to prevent injury and unreasonable harm.
4	Section 6.8.2.2 (Avoidance of Injury to Existing Uses and Users), pp. 104-105 [100-101]	16-18	This court proceeding does not include, as parties, legal users of water other than MCWD. Therefore, the Final Report does not address whether the proposed project would or would not injure the rights of any of these legal users, as they have had no notice or opportunity to present evidence. The Board also does not reach the question of the relative burden of proof for a party to demonstrate the absence of injury to other legal users of water when no other user presents evidence to support a claim of right.

5	Section 6.4 (Question 4, generally), pp. 69-80 [73-84]; Section 6.5 (Question 5, generally), pp. 80-91 [84-95]	18-19	Special Condition 2 in the California Coastal Commission approval provides conditional approval of the 6.4 mgd project. (Exh. MCWD-125, p. 14.) The Report of Referee primarily evaluates groundwater conditions resulting from the 6.4 mgd project because the modeled effects of slant well pumping are greater for the larger project as compared to the reduced pumping 4.8 mgd project.
6	Section 6.1.1 (Locations of Subsurface Drawing Points), p. 51 [47]; Section 6.2.1 (Location of Slant Well Screens), p. 65 [61]; Section 7 (Conclusion), p. 110 [106]	20-21	The Special Conditions included in the California Coastal Commission approval may influence the final design of the slant wells. (Exh. MCWD-125, pp. 12-40.) However, the record does not include evidence describing specific changes to the proposed slant well design in the FEIR/EIS, that would address Special Condition 11. The Report relies on the available evidence.
7	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 105 [101]	21-25	The Final Report does not reach any conclusion as to whether the extent of seawater intrusion predicted by the modeling would be unreasonable, and the Board declines to describe the model results as “insignificant” or “unreasonable” without adequate evidence in the record to balance the expected benefits and harms of the project. Cal-Am does not dispute that such a conclusion would require balancing of benefits of the proposed project, including any reduction in seawater intrusion in portions of the basin, against any harm. (See 2025-01-31 Cal-Am's Objections to Report, p. 21.) The Board has revised the Final Report is revised to state that the further progression of seawater intrusion is evidence tending to show that the effect of the slant well pumping may be unreasonable.

8	Section 7 (Conclusion), p. 113 [109]	25-28	Objection noted.
9	Section 4.2 (Groundwater Modeling for this Proceeding), p. 35 [31]	28-29	Objection noted.

Cal-Am's Specific Objections to the AHO's December 31, 2024, Draft Report of Referee:

No.	Page of Text in Draft Report	PDF page of Cal-Am's Objection	Board's Response or Ruling
1	Section 2.3.2 (Hydrogeologic Features), p. 7 [11], 1st paragraph	29	Objection noted.
2	Section 2.3.2 (Hydrogeologic Features), p. 7 [11], 1st paragraph	30	Objection noted.
3	Section 2.3.2 (Hydrogeologic Features), p. 9 [13], 1st full paragraph	31	Objection noted.
4	Section 2.3.2 (Hydrogeologic Features), p. 9 [13], 1st paragraph under "180-Foot Aquifer"	31	Objection noted.
5	Section 2.3.3 (Subbasin Interface Zone), p. 9 [13],	31	Objection noted.

	1st paragraph under "400-Foot Aquifer"		
6	Section 2.3.3 (Subbasin Interface Zone), p. 10 [14], paragraph 4	32	Objection noted.
7	Section 2.4.1 (California Public Utilities Commission Permit), p. 11 [15], 2nd paragraph	32	Objection noted.
8	Section 2.4.3 (Return Water Settlement Agreement), pp. 12-13 [16]	32	The potential effects of the RWSA on modeled groundwater conditions, as described in Exh. Cal-Am-177, do not change the legal analysis in our responses to the court's Questions 7 and 8.
9	n/a		There is no comment 9.
10	Section 3.2.2 (Hearing Phases 1, 2, and 3), p. 24 [28]	32	Objection noted.
11	Section 3.2.2 (Hearing Phases 1, 2, and 3), p. 25 [29]	32	Objection noted.
12	Section 4 (Groundwater Modeling), p. 29 [33], 1st full paragraph	33	Objection noted.
13	Section 4.2 (Groundwater Modeling for this Proceeding), p. 30 [34], 1st full paragraph	33	Objection addressed in modified Footnote 26.
14	Section 4.2 (Groundwater Modeling for this Proceeding), p. 30 [34], 2nd paragraph under "NMGWM2022"	33	Objection addressed in modified Footnote 26.
15	Section 4.2 (Groundwater Modeling for this	34	Objection noted.

	Proceeding), p. 30 [34], last paragraph and Footnote 24		
16	Section 6.1.2 (Capture Zones), pp. 53-56 [57-59]	35	Objection noted.
17	Section 6.1.2 (Capture Zones), p. 54 [58], Figure 10	35	Objection noted.
18	Section 6.1.2 (Capture Zones), p. 56 [60], last paragraph	36	Objection noted.
19	Section 6.2 (Question 2), pp. 57-66 [61-70]	36	Objection noted.
20	Section 6.2.1 (Locations of the Slant Well Screens), p. 58 [62], 2nd paragraph	38	Objection noted.
21	Section 6.2.1 (Locations of the Slant Well Screens), p. 58 [62], 2nd paragraph under “Sources of the Slant Wells”	38	Objection noted.
22	Section 6.2.1 (Locations of the Slant Well Screens), p. 61 [65], 2nd paragraph	38	Objection noted.
23	Section 6.2.2 (Origin of the Water), p. 63-64 [67-68]	39	Added assumed concentrations of seawater and groundwater.
24	Section 6.2.2 (Origin of the Water), Section 6.2.2 (Origin of the Water), pp. 64-65 [68-69]	39	Objection noted.
25	Section 6.2.2 (Origin of the Water), p. 65 [69], last paragraph	41	Objection noted.

26	Section 6.3.1 (Connectivity Between the Aquifers), p. 68 [72], 3rd full paragraph	41	Edited the paragraph.
27	Section 6.3.1 (Connectivity Between the Aquifers), p. 68 [72], last paragraph before “Deep Aquifers”	43	Objection noted and edited to change “gaps” to “a gap”.
28	Section 6.4.2 (Model Results), p. 71 [75], 1st full paragraph	44	Objection noted.
29	Section 6.4.3 (Analysis), pp. 77-80 [81-84]	46	Objection noted.
30	Section 6.4.3 (Analysis), p. 78 [82], 1st paragraph	47	Objection noted.
31	Section 6.4.3 (Analysis), p. 80 [84], Figure 22	48	Objection noted.
32	Section 6.5.1 (Groundwater Table), p. 8 [87]3, Figure 27	50	Objection noted and edited figure to correct value in lower left cell.
33	Section 6.5.1 (Groundwater Table), p. 84 [88], 1st paragraph	52	Objection noted.
34	Section 6.5.2 (Storage Space), p. 86 [90], 1st paragraph under “Conclusion”	53	Objection noted.
35	Section 6.5.2 (Storage Space), p. 86 [90], last paragraph before Section 6.5.3	53	Edited the paragraph.
36	Section 6.5.3 (Subbasin Cross-Boundary Flows), p. 91 [95], 1st paragraph	53	Objection noted.

37	Section 6.7.2 (MCWD's Water Rights), p. 93 [97], 2nd paragraph	54	The Board modified this sentence to include the year of recorded maximum historical use (2007). The Board did not modify the sentence to include the word "potentially," as suggested by Cal-Am. The prior sections of the report document impacts to the 180-Foot and 400-Foot Aquifers predicted by the model results from operation of the proposed project, though these impacts are not predicted to be material or significant at the locations where MCWD's wells draw groundwater.
38	Section 6.7.3 (Injury to MCWD's Water Rights), p. 93 [97], last 2 lines	54	No change. The referenced Section 6.3.1 describes the conflicting positions of the parties about the extent of hydrologic continuity between the 180-Foot and 400-Foot Aquifers and the basis for the Board's conclusion "that there is hydrologic connectivity between the proposed slant wells and the MCWD wells in the 400-Foot Aquifer, but that this connectivity is less than the connectivity between the proposed slant wells and the MCWD wells in the 180-Foot Aquifer." (Final Report, p. 74.)
39	Section 6.7.3 (Injury to MCWD's Water Rights), p. 94 [98], 1st paragraph	55	No change. As described in Section 6.7.3.2, MCWD did not present its water quality model results in sufficient detail to identify whether no change or up to a 50 mg/L increase in TDS concentrations is predicted by its model to occur at Wells 29, 30, 31, or 35. The Report acknowledges that the model results may show that some impact to water quality is predicted to occur at these wells, but concludes that these impacts would not be significant.
40	Section 6.7.3.2 (Impacts to Quality of Groundwater), p. 95 [99], 2nd paragraph of section	56	See above response to Objection 39.
41	Section 6.8 (Question 8), p. 96 [100], last paragraph before Section 6.8.1	56	No change. The statement is not limited to potential impacts to water quality but includes other potential impacts such as declines in groundwater levels. In addition, as noted in the Final Report, the evidentiary record does not include detailed information about other existing production wells in the area so the Board cannot reach a conclusion as to the potential for injury to these other legal users, if there are any such users.

42	Section 6.8.2.2 (Avoidance of Injury to Existing Uses and Users), pp. 100-101 [104-105]	57	See above response to Objection 41.
43	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 101 [105], 1st paragraph of section	57	Objection noted.
44	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 101 [105], 3rd paragraph of section	58	Sentence edited to replace "will" with "may." As described in the following paragraphs in this section, the Groundwater Sustainability Plans for the 180/400 and Monterey Subbasins define any inland advancement of the 500 mg/L isocontour for chloride in the subbasins to be significant and unreasonable. This per se analysis does not acknowledge potential benefits of the project, as described by Cal-Am, which may offset harms resulting from further seawater intrusion in some portions of the subbasins. "[T]o determine whether these impacts are unreasonable also requires balancing of the benefits of the project, which would make significant quantities of ocean water available for beneficial use, against the potential injury to legal users of groundwater and the risk and significance of harm to the basin … Such a balancing of factors was not directly addressed by the parties and would likely require a more expansive evidentiary record than was developed in this proceeding." (Final Report, p. 108.)
45	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 101 [105], last paragraph	59	Objection noted.
46	Section 6.8.2.3 (Avoidance of Unreasonable Harm), pp. 101-102 [105-106]	59	The recent mapping referenced by Cal-Am is not part of the evidentiary record on which the Report is based and Cal-Am cites no evidence in the record of ongoing advancement of the seawater intrusion front. A physical solution, as described in the Final Report, should offset any unreasonable impacts or injury that may be caused by the proposed project. Although a physical solution would not generally require

			mitigation of existing conditions or impacts from extractions by other users, existing conditions in the Monterey and 180/400-Foot Subbasins and extractions by existing users may affect the extent of impacts caused by Cal-Am's proposed draw. In addition, any water right Cal-Am developed to extract groundwater from the basin would be junior in priority to the rights of existing legal users. The relative priority of water rights may be relevant to ascribing responsibility for cumulative impacts to groundwater conditions in the basin.
47	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 102 [106], 1st full paragraph	60	Objection noted. The court explicitly asked for the Board's opinion as to whether the proposed draw from the Cal-Am wells would result in or increase any seawater intrusion into the Monterey or 180/400-Foot Subbasins and the likely extent of any intrusion. The Board's response to the court's Question 4 quantifies the model results as to both the landward and seaward movement of the seawater intrusion isocontour. The statement in the Report referenced by Cal-Am in its objection is intended to include the relative benefits and harms of these changes in the seawater intrusion isocontour.
48	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 102 [106], last paragraph of section	60	See above responses to the General Objections.
49	Section 7 (Conclusion), p. 113 [117], 1st full paragraph	61	No change. The Final Report clarifies in the preceding sentence the different ways to describe the "source" of the water drawn by the proposed wells. The sentence referenced by Cal-Am describes the "locations within the aquifers from which the proposed slant wells would draw water," in other words, the point of capture by the slant wells. (Final Report, p. 117.) This point of capture of water are "locations within the Dune Sand and 180-Foot Aquifers both onshore (beneath the CEMEX property) and offshore (beneath the ocean)." (*Ibid.)*

11 APPENDIX C – CITY OF MARINA RESPONSE TABLE

City of Marina's Objections to the AHO's December 31, 2024, Draft Report of Referee:

No.[1]	Section/Page of Text in Draft Report	PDF page of Marina's Objection[2]	Board's Response or Ruling
1	Section 2.1 (Proposed Project), p. 15 [11][3]	6	Report revised to include requested text.
2	Section 2.3.2 Generally, pp. 11-14 [7-10]	6	Objection noted.
3	Section 2.3.2 (Dune Sand Aquifer), p. 13 [9]	8	Objection noted.
4	Section 2.3.2 - Proposed New Subsection (FO-SVA), p. 13 [9]	9	Objection noted. Declined to add new section.
5	Section 2.3.2 (180-Foot Aquifer), p. 13 [9]	10	Objection noted.
6	Section 2.3.2 (180/400-Foot	11	Objection noted. Declined to add new section.

[1] For ease of reference, we have added numbering to the text describing the objections.
[2] All references to objections are to the City of Marina's January 31, 2025, objections, saved in the Hearing Documents folder and in the Communications and Transmittals subfolder as "2025-01-31 City of Marina's Comments on 12-31-24 Draft Report."
[3] Unless otherwise indicated, citations to page numbers of documents and exhibits are to the pages of the PDF files. These page numbers often are different from the text page numbers in the documents or exhibits. We have also provided the printed page numbers in brackets, following the PDF page numbers.

	Aquitard), p. 13 [9]		
7	Section 2.3.2 (400-Foot Aquifer), p. 13 [9]	11	Objection noted.
8	Section 2.4.1 (California Public Utilities Commission Permit), p. 14 [11]	12	Report revised to include requested text.
9	Section 2.4.2 (Environmental Review and Findings), p. 14 [11]	12	Report revised.
10	Section 2.4.3 (Return Water Settlement Agreement), pp. 16-17 [12-13]	13	Report revised.
11	Section 2.4.5 (Test Slant Well), p. 18 [14]	13	Objection noted.
12	Section 2.5.1 (State Water Board Orders), pp. 18-20 [14-16]	13	No change. This section focuses on the State Water Board's orders and does not discuss specific water supply projects.
13	Section 2.6.1 (Annexation/Groundwater Framework Agreement), p. 21 [17]	14	Report revised.

14	Section 2.6.2 (Cal-Am Easement to Occupy CEMEX Property), pp. 21-22 [17-18]	14	Report revised.
15	Section 2.6.3 (Sustainable Groundwater Management Act), pp. 22-23 [18-19]	15	The Board does not agree in full with the proposed edits. Exceedance of the quantitative threshold set by a groundwater sustainability agency in a groundwater sustainability plan does not necessarily result in injury to other water users in the basin. Injury occurs when there is an actual or threatened significant and material interference with the extraction of water by a legal user for a beneficial use. The model results in the evidentiary record do not show that such an interference with the exercise of MCWD's water rights is likely to occur because of the proposed draw, even over time. There is insufficient evidence in the record to conclude whether such an interference might occur with respect to any other legal user of groundwater in the basin. The Board has partially revised the report to remove citations to statutory sections relevant to comprehensive groundwater adjudications. This proceeding is not a comprehensive adjudication of groundwater and provisions in the Water Code that govern groundwater adjudications do not apply. The Board declines to add additional text about required basin management actions under Sustainable Groundwater Management Act (SGMA) because these summaries appear to address potentially disputed questions of law that are not directly presented by the Court's questions. Marina asserts that 3,000 mg/L of Total Dissolved Solids (TDS) is an appropriate standard to define the extent of fresh water in the groundwater basin. (2025-01-31 City of Marina Objections to Draft Report, p. 43.) The Final Report uses the seawater isocontour of 1,500 mg/L of TDS to depict the boundary of seawater intrusion because the parties selected this

			threshold and did not explicitly depict other isocontours in their model results. An increase in TDS concentration of water in the aquifers of a quality between 1,500 mg/L and 3,000 mg/L of TDS may constitute harm. The Final Report does not reach any conclusion as to whether such an increase would be unreasonable. This determination would require a more comprehensive evidentiary record than developed in these proceedings and may implicate the legal interests of other groundwater users who are not parties to this proceeding. The Board disagrees with Marina and MCWD's assertion that an extraction of water that causes an "undesirable result" as defined by the applicable groundwater sustainability plan is per se unreasonable and binding on any court conducting a judicial determination of water rights. No court has reached such a conclusion. The Department of Justice did not make this assertion in the joint letter submitted on behalf of the California Department of Water Resources and the State Water Resources Control Board in *Indian Wells Valley Groundwater Authority v. Superior Court*, Court of Appeal of the State of California, Fourth Appellate District, Division Three, Case No. G064757. In that letter, the agencies expressed concern that a court might conduct a "*de novo* trial on a basin's safe yield" rather than affording deference to the determinations in the groundwater sustainability plan. (2025-01-31 MCWD's Objections to Draft Report, p. 75 (Attachment 1, Letter from Department of Justice to Presiding Justice and Associate Justices regarding Case No. G064757, Oct. 17, 2024, p. 4.) The State Water Board expresses a consistent position here, concluding that "the agencies' conclusions in these plans, which plans have also been approved by DWR, [] have significant persuasive value in identifying thresholds for unreasonable harm to the subbasin." (2024-12-31 Draft Report, p. 105.) SGMA does not alter the law governing rights to groundwater or surface water. "Nothing in this part or in any groundwater management plan …determines or alters surface water rights or groundwater rights under common law or any provision of law that determines or grants surface water

			rights." (Wat. Code, §10720.5, subd (b).) "Nothing in this part shall be construed as authorizing a local agency to make a binding determination of the water rights of any person or entity …." (*Id.* at §10726.8, subd. (b).) To allow local groundwater sustainability agencies to determine the sustainable yield of a basin and set quantitative thresholds for undesirable results in a manner that is absolute and unreviewable by a court in a subsequent determination that affects groundwater rights, would effectively authorize these local agencies to alter and determine groundwater rights. The Board agrees, however, that the determinations of groundwater sustainability agencies in groundwater sustainability plans that set thresholds for undesirable results should be afforded substantial deference. Groundwater sustainability agencies' determinations are based on comprehensive technical evidence and policy considerations, with input from the public as required by SGMA. These plans have also been approved by the Department of Water Resources as consistent with SGMA and the Department's regulations governing the development and adequacy of groundwater sustainability plans.
16	Proposed New Section 2.7 (California Coastal Commission Proceedings), p. 23 [19]	18	Report revised.

17	Section 3.1.1 (Assignment to the Administrative Office), p. 23 [19]	19	In this context, the term "adjudicative hearing" means "an evidentiary hearing for determination of facts pursuant to which an agency formulates and issues a decision." (Gov. Code, § 11405.20.) The State Water Board's Administrative Hearings Office (AHO) is explicitly authorized by statute to conduct these types of proceedings, and the Board's Executive Director referred the matter to the AHO to conduct an adjudicative hearing. The Board relied on the evidence compiled through the AHO's hearing process, conducted in accordance with the Administrative Procedure Act, to reach the factual determinations included in the Report of Referee.
18	Section 3.2.2 (Hearing Phases 1, 2 and 3), pp. 26-29 [22-25]	19	Report revised.
19	Section 3.3 (Significant Procedural Rulings), pp. 30-31 [26-27]	23	Report revised.
20	Section 3.4 (Proposed Text for Report of Referee and Closing Briefs), p. 31 [27]	25	Report revised.
21	Section 4.1 (Groundwater Models in the Salinas Valley Groundwater Basin), pp. 33-34 [29-30]	25	The requested text is included in the Final Report.
22	Section 4.1 (Groundwater	26	Objection noted.

	Models in the Salinas Valley Groundwater Basin), pp. 33-34 [29-30]		
23	Section 4.2 (Water Board Steady-State Models), p. 35 [31]	26	Objection noted.
22	Section 4.2 (Model Scenarios), pp. 35-36 [31-32]	27	Objection noted.
25	Section 4.2 (Model Scenarios), pp. 35-36 [31-32]	27	Objection noted. See response to MCWD General Objection No. 1 (Appendix D).
26	Section 4.2 (Model Scenarios), p. 37 [33]	27	The table referenced by Marina in the Draft and Final Report is a general summary of the topics of witness testimony and identifies Peter Leffler's testimony about the referenced variable density groundwater model. The Board did not rely on this testimony in responding to the court's questions and therefore does not cite the testimony or underlying report in its discussion of the model at issue here, in the Final Report. (Exhs. Cal-Am-175 & 178.) The Board did not reach any conclusion as to the veracity or adequacy of the model assumptions, methodology, or results.
27	Section 4.2 (Groundwater Modeling For This Proceeding), p. 37 [33]	29	The Board has revised the report to reflect that in addition to representing a scenario with significantly reduced groundwater extractions, Scenario D could also be considered as a proxy for a scenario that includes a combination of reductions in extraction and groundwater recharge. The Final Report of Referee concludes that the specific SGMA-compliance scenarios considered in the modeling of Scenarios C and D are speculative

			as compared to an assumption that existing levels of extraction and recharge will continue. Scenarios C and D assume actions that mitigate the impacts of overdraft on groundwater conditions in the subbasins such as progressive seawater intrusion and lowering of groundwater elevations. The Final Report's analysis of the potential impact of the project absent other mitigating actions provides a "worst case" assessment of the potential impacts of the proposed draw. The overall magnitude of the impact of Cal-Am's proposed draw may vary depending on future SGMA compliance actions and resulting conditions in the basin. However, conditions in the basin under Scenarios C and D would be improved as compared to the no-mitigation alternative of Scenario B. These improved conditions would reduce the likelihood that the proposed draw by Cal-Am may injure other legal users or result in unreasonable harm. Because the Board does not consider the amount of replacement water that may be necessary to avoid injury to other legal users or unreasonable harm to the basin, the Board does not consider the use of Scenario D model results for this purpose.
28	Section 5.1.6 (Developed Or Salvaged Water), pp. 41-42 [37-38]	30	The calculation of an ocean water percentage in Cal-Am's proposed draw assumes a background concentration of 500 mg/L of TDS of non-ocean water that originates from the groundwater basin, and seems to presume that such "fresh" groundwater would be available to other users in the basin absent the proposed draw. This extracted "fresh" water from the basin would neither be salvaged nor developed water. Salvaged or developed water is water made available through some intentional effort, and absent that effort, would not be available for beneficial use. (See Section 5.1.6.) The person who makes such water available for use is entitled to a prior right to that water. The Board agrees that if, absent Cal-Am's extraction, this high-quality groundwater would have been available to other legal users in the basin for beneficial use, it is not developed or salvaged by Cal-Am. The Board added these conclusions to the Report.
29	Section 5.1.7 (Replacement	32	The Final Report provides several California examples of groundwater adjudications in which pumpers are authorized to take water in excess of the

	Water Objection), p. 42 [38]		amount allocated under their water right and the safe yield of the basin (an "out-of-priority" diversion), by providing replacement water or compensating the basin's water master for the purchase of replacement water. In addition, the State Water Board allows new appropriations of surface water even when water is otherwise unavailable (out-of-priority diversions), with the provision of replacement water. Water Right Order 91-07 identifies stream systems in California that are fully appropriated, and in which no unappropriated water is available. Order 91-07 states that the Board may issue a water right permit for a new appropriation even in these fully appropriated systems if a water transfer or water exchange provides replacement water to avoid injury to existing right holders. (WR Order 91-07, p. 25, section 5.1.) Such rights are appropriative water rights. The same legal theory should apply analogously to the appropriation of groundwater, as it does in other western states. For example, pursuant to this provision of Order 91-07, the State Water Board authorized appropriation of water from the fully-appropriated Tuolumne River system with the following permit term: "Diversion of water under this permit during the period from June 16 through October 31 of each year is subject to maintenance of the Water Exchange Agreement executed on December 12, 1992, between the permittee and the Modesto and Turlock Irrigation Districts. Pursuant to the Agreement, permittee shall provide replacement water to New Don Pedro Reservoir for all water diverted under this permit during the period from June 16 to October 31 of each year. The source, amount, and location at New Don Pedro Reservoir of replacement water discharged to the reservoir shall be reported to the State Water Resources Control Board with the annual Progress Report by Permittee." (Water Right Permit 20784 (March 23, 1995), Term 19.) Marina correctly notes that the elements of a physical solution presented by Cal-Am are the Return Water Settlement Agreement (Exh. Cal-Am-67), the Mitigation, Monitoring, and Reporting Program (Exh. Cal-Am-98), and the

			groundwater monitoring plan required by California Coastal Commission Special Condition 12 (Exh. MCWD-125 at pp. 29-31.) Cal-Am submitted two model scenarios that incorporate the Return Water Settlement Agreement (RWSA) with project operations and assumes 6 percent and 9 percent return water. (Exh. Cal-Am-177, p. 156.)
30	Section 5.2.2 (Impairment of Water Quality), p. 44 [40]	34	See response above to Objection 14.
31	Section 5.2.2 (Impairment of Water Quality), pp. 44-46 [40-42]	36	In the case of *Town of Antioch v. Williams Irrigation District* (1922) 188 Cal. 451 ("*Antioch*"), the court articulates the standard for injury to a legal user of water and applies the common law doctrine of reasonableness (the case was decided before amendment of the California Constitution to include article X, section 2). Although the court in *Antioch* may not have anticipated that similar facts might arise in any case "except one arising upon these two rivers concerning a similar claim of some prior appropriator near the outlets thereof," (*id.* at p. 464), the facts in this proceeding present some similarities. Here, Cal-Am proposes to extract a combination of ocean and groundwater that would constitute, in part, a new supply to the basin (the 15.5 million gpd project would produce an estimated 7,167 afy of water of a quality suitable for municipal use). (CPUC Dec.18-09-017, p. 178.) These potential benefits should be considered in determining reasonableness of the proposed draw, just as the benefits of the upstream junior diversions were considered by the court in *Antioch* in determining whether those diversions should be enjoined to protect a senior right holder. In addition, the court considered the availability of a physical solution that could prevent the claimed harm to Antioch, finding that "by moving its pump a few miles up the river it could obtain water free from saline solution. It is not altogether improbable that if it had devoted the same amount of energy and expenditure to a change of its place of diversion as it has to the present litigation, it would have had the water uncontaminated by salt with less delay than had already occurred and at no more expense." (*Antioch*, *supra*, at p. 465.)

			Any physical solution in this proceeding would likely be significantly more complex than the relocation of a single point of diversion, if any such solution is feasible. But the *Antioch* case presents a relevant application of the rules of injury and reasonableness in the context of seawater intrusion. *Allen v. California Water and Telephone* (1946) 29 Cal.2d 466, is also relevant precedent identified by MCWD and Marina in which the Supreme Court enjoined the holder of a junior appropriative groundwater right from pumping and exporting groundwater except at times when there were surface flows in the Tijuana River. The trial court found that the defendant's continued pumping was "an existing hazard to all overlying owners" because of the threat of "permanent injury through mineralization and salt water intrusion." (*Id.* at pp. 482, 485.) The defendant presented a physical solution to the trial court, which imposed limitations on extractions based on the impact to a series of test wells, and included an agreement to pay for the deepening of plaintiffs' wells. The court rejected the proposal as "unworkable." (*Id.* at p. 487.) The Supreme Court upheld the trial court's determination that except at times when surface flows were in the river, the junior user's pumping exceeded the safe yield (or sustainable yield) of the basin. The court retained jurisdiction to modify the decree based on evidence of additional available supplies from the operation of a new upstream project located in Mexico that may have increased the sustainable yield of the basin. The evidentiary record in this proceeding does not include sufficient evidence to determine whether the proposed draw by Cal-Am is likely to injure existing right holders other than MCWD. In the *Allen* case, the defendant "put in issue the right of all overlying owners," through its pleadings and cross-complaint. (*Id.* at p. 484.) As a result, all overlying users in the basin who sought to participate in the proceeding had the opportunity to present evidence as to the threat of injury to their overlying uses and the potential harm from the extractions. There has been no similar opportunity in this proceeding. The Final Report declines to address the questions of injury

			to other legal users or the reasonableness of the proposed draw because of the limits of the evidentiary record. The Supreme Court noted in *Allen* the "[d]ifficulties in the formulation of a decree which will protect the supply and at the same time prevent the waste of surplus water …." (*Id*. at p. 486.) Similar difficulties are presented by this case, particularly because not all of the right holders in the basin are represented.
32	Section 5.2.3 (Injury To Groundwater Rights), p. 46 [42]	37	See Response to MCWD General Objection No. 1 (Appendix D).
33	Section 5.3 (Physical Solution), pp. 47-51 [43-47]	38	See Response to MCWD Specific Objection No. 13 (Appendix D).
34	Section 6.1.1 (Court's Question 1 -- Locations of Subsurface Drawing Source Points), pp. 51-56 [47-52]	39	There is ambiguous and potentially conflicting information in the evidentiary record about the distance between the test slant well and the MHW line. The Final Report relies on the information about the test slant well in the FEIR, which provides the precise location of the test slant well head by state plane coordinates and describes the end of the well casing as located "approximately 170 ft seaward of the mean high water line." (Exh. Cal-Am-38(c), p. 38.) The well completion report for the Test Slant Well depicts the well head to be located 800 feet from the "Pacific Ocean." (Exh. MCWD-68, p. 2.) There is no other information in the record about the distance between the test slant well head and the MHW water line. The information in the well completion report is ambiguous, because there is no information about the method and precision of measurement of the distance between the well head and the Pacific Ocean and the relationship of the boundary depicted as the Pacific Ocean and the MHW water line. If the boundary of the Pacific Ocean is estimated based on the approximate water line at the time of observation, then this boundary will fluctuate depending on the tide and the season. The Final Report relies on the

			information in the FEIR because it is specific as to the relationship between the well casing and the MHW line although there is no further information about the basis of the statement. The accuracy of the information in the FEIR could be verified and documented through the submission of additional evidence to the court.
35	Section 6.1.2 (Court's Question 1 -- Capture Zones), pp. 57-60 [53-56]	40	Objection noted.
36	Section 6.2.1 (Court's Question 2 -- Quantities from Beneath the CEMEX Property), p. 66 [62]	41	Objection noted.
37	Section 6.2.2 Generally (Origin of the Water), pp. 63-66	41	Objection noted.
38	Section 6.2.2 (Court's Question 2 -- Origin of the Water), pp. 67-69 [63-65]	43	Objection noted.
39	Section 6.4 (Court's Question 4), p. 73 [69]	47	Objection noted.

40	Section 6.5.2 (Storage Space), pp. 88-90 [84-86]	58	Objection noted.
41	Section 6.5.3 (Subbasin Cross-Boundary Flows), pp. 90-95 [86-91]	59	Objection noted.
42	Section 6.7.1 (Marina's Water Rights), pp. 95-96 [91-92]	60	The Board revised the draft order to reflect that Marina may have unexercised overlying rights to groundwater for use on any overlying property Marina owns. The remainder of this objection does not allege injury to a water right holder. The hearing officer excluded evidence about the vernal ponds and wetlands because it was unrelated to any alleged injury to Marina or MCWD's water rights. Marina now asserts that the proposed draw would result in unreasonable harm by causing significant and unreasonable impacts on beneficial uses of surface water in the form of impacts to these vernal ponds and wetlands. It is unclear whether such an allegation is within the scope of the court's Question 8, although the potential for significant and unreasonable impacts to beneficial uses of surface water is relevant to determining whether Cal-Am's proposed draw is reasonable. The Monterey Subbasin groundwater sustainability plan identifies the vernal pools as groundwater-dependent ecosystems that are a beneficial use of water. (Exh. MCWD-60, p. 247.) Because admission of the evidence offered about potential impacts to vernal pools would likely necessitate the opportunity for additional hearing days at this late stage in the proceeding, and given that Marina did not previously raise this argument, the Board will not re-open the evidentiary record to accept additional evidence on this issue. The Board might address this issue in more detail, with the submission of additional evidence, if directed to do so by the court.

43	Section 6.7.2 & 6.7.3 (MCWD's Water Rights & Injury to MCWD's Water Rights), pp. 96-98 [92-94]	63	Marina objects that the Draft Report "limits its analysis of harm to MCWD's water rights to a narrow view of well interference." (2025-01-31 City of Marina Objections to Draft Report, p. 63.) The Final Report conducts an analysis of the potential for the proposed draw to cause legal injury to MCWD's water rights under the Water Code and the common law. Absent interference with the quantity or quality of water available to MCWD at its historical points of diversion and purposes of use, there is no injury to its rights. Pursuant to this analysis, the evidence in the record supports the conclusion that MCWD's appropriative water rights are not likely to be injured. Although Marina points to evidence of increased seawater intrusion and alleges that there may be a loss of protective heads that prevents further intrusion, the model results do not support a conclusion that groundwater quality at MCWD's wells would be significantly affected. Marina asserts that the Board should consider "whether the aggregated pumping of all water rights holders can be pumped without damaging the basin, particularly in terms of seawater intrusion, but also in terms of chronically exceeding the basin safe yield." (2025-01-31 City of Marina Objections to Draft Report, p. 68.) The Board agrees that determining whether a proposed extraction is reasonable, as distinguished from causing injury to a particular legal user, depends in part on the harm that may result. Although the Board has concluded based on the model results that some harm is likely to result from the proposed draw, including additional seawater intrusion and lowering of groundwater elevations in certain portions of the subbasins, there was insufficient evidence for the Board to conduct a complete balancing of the benefits of the proposed project against the potential harms to the basin. Therefore, the Board cannot conclude whether the proposed draw would be reasonable or whether a physical solution could reduce or prevent the potential impacts. Marina also alleges that the operation of the proposed slant wells will require additional management actions to achieve sustainability of the basin under SGMA, which may include additional restrictions on pumping from MCWD's

			wells. SGMA authorizes groundwater sustainability agencies to regulate groundwater pumping to achieve sustainability. Limitations imposed on the exercise of a groundwater right, that are properly adopted by a groundwater sustainability agency as authorized by SGMA, do not result in legal injury to the rights. Finally, the Final Report does not address whether cessation of Cal-Am's proposed draw may injure MCWD's water rights. That issue is not directly identified in the court's questions and any estimate of the timing of such an occurrence and future conditions when pumping may cease, would be speculative.
44	Section 6.7.3.1 (Impacts to Quantity of Groundwater), pp. 98-99 [94-95]	68	As addressed above, the Board agrees that the court should consider whether the added draw by Cal-Am's proposed slant wells would, when taken in the aggregate with other extractions of water, cause unreasonable harm to the basin. This consideration is relevant to determine whether Cal-Am's proposed extraction would be a wasteful or unreasonable diversion or use of water. (Cal. Const., art. X, § 2.) Exceedance of the "safe yield" of the basin, defined as an aggregate quantity of water that may be extracted from the basin on an average annual basis without causing unreasonable harm, is prima facie evidence that there is no surplus water available in the basin for appropriation. The Board concluded based on the model results that some harm to the basin is likely to result from the proposed draw, including additional seawater intrusion and lowering of groundwater elevations in certain portions of the subbasins. There was, however, insufficient evidence for the Board to conduct a complete balancing of the benefits of the proposed project against the potential harm. A physical solution might address potential impacts of the project to prevent any unreasonable harm. Such a solution may also support the objectives of SGMA by preventing the project from causing undesirable results as those results are defined in the applicable groundwater sustainability plans.

45	Section 6.7.3.2 (Impacts to Quality of Groundwater), p. 99 [95]	68	The groundwater sustainability agency for the 180/400 Aquifer Subbasin has the authority to regulate Cal-Am's extraction of groundwater from the subbasin to achieve sustainable groundwater management. Cal-Am's extraction would be junior to overlying and senior appropriative groundwater users. The groundwater sustainability agencies would have the authority to reduce Cal-Am's pumping before regulating pumping by other more senior right holders.
46	Section 6.8, 6.8.1 and 6.8.2 (Court Question 8, Extraction of Ocean Water, Extraction of Groundwater), pp. 100-102 [96-98]	69	The Board maintains its conclusion that water that originates from the ocean but that migrates towards and is captured by the slant wells landward of the MHW line, is ocean water and not groundwater under applicable law. Such a characterization accurately reflects that the proposed draw of ocean water is of water that would not be located within the groundwater basin absent operation of the wells. Section 5.1.7 describes and identifies relevant case law that discusses the doctrines of replacement or augmentation water, pursuant to which a junior appropriator may take water out of priority (in other words, divert or extract water when water would not otherwise be available for appropriation) by providing a suitable quantity and quality of replacement water to satisfy other legal users and prevent unreasonable harm. This doctrine is distinct from the doctrines of salvaged or developed water.
47	Section 6.8.2.2 (Avoidance Of Injury To Existing Uses and Users) pp. 104-105 [100-101]	72	The statement in the report quoted and objected to by Marina was intended to reflect that some amount of replacement water, of a suitable quality and delivered to a suitable location, could ensure that other legal users are not injured by the proposed draw. That conclusion is not speculative — it is a statement of law. Whether such injury would actually occur, and the amount and quality of replacement water and the location of delivery of that replacement water that would be necessary to prevent injury, is not addressed because the evidentiary record before the Board is not adequate to resolve that issue. Marina asserts that the Board had a duty to conduct an independent investigation to identify legal users other than MCWD and Marina that might

			be injured by the proposed project. The Board did not understand the reference from the court and the court's questions to include any direction to conduct an independent investigation. The Board assigned the matter to the Administrative Hearings Office based on its understanding that the parties to the proceeding would submit relevant evidence through an administrative hearing process on which the Board would base its Final Report.
48	Section 6.8.2.4 (Physical Solution), pp. 106-110 [102-104]	75	The Board has not taken a position regarding the burden of proof as between the parties on legal or factual issues presented in the court's questions. Based on the record before the Board, Cal-Am has not demonstrated that its proposed draw would avoid injury to other legal users of water and unreasonable harm to the basin. Marina and MCWD have not demonstrated that the implementation of an appropriate physical solution, such as the provision of replacement water, could not address any injury to other legal users of water or unreasonable harm to the basin that might otherwise result from the proposed draw. Marina objects that a physical solution and the use of replacement water cannot be relied upon to prevent injury or harm from a new appropriation. Marina cites no support for this assertion, and it is the Board's conclusion that the physical solution doctrine can apply in such a manner to allow a new appropriation. The use of replacement water to prevent injury or unreasonable harm is similar to an exchange or augmentation plan as described in Footnote 28 (Final Report, p. 43). The Final Report addresses the bases for utilizing a background concentration of 500 mg/L of TDS to calculate the ocean water percentage in the proposed draw, and Marina raises no new arguments in its objection. (Final Report, p. 68.) If the ocean water percentage is used to determine the amount of replacement water that Cal-Am is to provide, then this same background concentration of TDS should be the maximum background concentration of TDS in any replacement water. If the ocean water percentage is calculated using a higher assumed background concentration of TDS, which is then utilized to calculate the quantity and quality of

			replacement water, then Cal-Am will be required to provide a higher quantity of lower quality replacement water. The Board revised the December 31, 2024 Draft Report to address the ambiguities identified by Marina on page 102 of the draft. The court asked the Board whether it has "an opinion as to whether there is any legal theory on which Cal-Am may rely to extract the proposed draw." (Final Report, pp. 5, 102, 120.) The Board's answer is yes; Cal-Am may be able to rely on the physical solution doctrine to make the proposed extraction. The Board cannot determine, based on the record before it, the specific elements of such a physical solution that would prevent injury to other legal users and unreasonable harm.
49	Section 7 (Conclusion), pp. 110-117 [106-113]	78	Objections noted.

12 APPENDIX D – MCWD OBJECTIONS RESPONSE TABLE

MCWD's General Objections to the AHO's December 31, 2024, Draft Report of Referee:

No.[1]	Section/Page of Text in Draft Report	PDF page of MCWD's Objection[2]	Board's Response or Ruling
1	(1) Section 6.8.2.3 (Avoidance of Unreasonable Harm), pp. 105-106 [101-102][3] (2) Section 4.2 (Groundwater Modeling for this Proceeding), p. 37 [33]	7	Marina Coast Water District (MCWD) argues that an extraction of water that causes an "undesirable result" as defined by the applicable groundwater sustainability plan (GSP) is per se unreasonable and that this determination is binding on any court conducting a judicial determination of water rights. No court has reached such a conclusion. The Department of Justice did not make this assertion in the joint letter submitted on behalf of the California Department of Water Resources and the State Water Resources Control Board in *Indian Wells Valley Groundwater Authority v. Superior Court*, Court of Appeal of the State of California, Fourth Appellate District, Division Three, Case No. G064757. In that letter, the agencies expressed concern that a court might conduct a "*de novo* trial on a basin's safe yield" rather than affording deference to the determinations in the groundwater sustainability plan. (2025-01-31 MCWD's Objections to Draft Report, p. 75 (Attachment 1, Letter from Department of Justice to Presiding Justice and Associate Justices regarding Case No. G064757, Oct. 17, 2024, p. 4).) The State Water Board expresses a consistent position here, concluding that "the agencies' conclusions in these plans, which DWR has approved,

[1] For ease of reference, we have added numbering to the text describing the objections.
[2] All references to objections are to MCWD's January 31, 2025, objections, saved in the record as "2025-01-31 MCWD's Objections and Comments to Draft Report."
[3] Unless otherwise indicated, citations to page numbers of documents and exhibits are to the pages of the PDF files. These page numbers often are different from the text page numbers in the documents or exhibits. We have also provided the printed page numbers in brackets, following the PDF page numbers.

			to have significant persuasive value in identifying thresholds for unreasonable harm to the subbasin." (2024-12-31 Draft Report, p. 105.) To add clarity, the Board has amended the Final Report to include that the agencies' conclusions "should be afforded deference." (Final Report, p. 108.) Contrary to MCWD's assertion (2025-01-31 MCWD's Objections and Comments to Draft Report, p. 12), the Sustainable Groundwater Management Act (SGMA) does not authorize groundwater sustainability agencies to define per se unreasonable uses of water under article X, section 2 of the California Constitution. The State Water Board, in contrast, has been granted such authority by the Legislature in Water Code section 275: "The department and board shall take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state." The Legislature has made no similar grant of authority to groundwater sustainability agencies. Even if we agreed with MCWD's arguments as to the per se and binding effect of the definition of undesirable results in a GSP, however, the Final Report's ultimate response to the court's question remains the same. In the Board's opinion, there is a legal theory upon which Cal-Am may rely to extract the proposed groundwater. Cal-Am may be able to rely upon a physical solution to avoid injury to legal users and unreasonable harm from the proposed draw. The Board has revised the Final Report to reflect that in addition to representing a scenario with significantly reduced groundwater extractions, Scenario D could also be considered as a proxy for a scenario that includes a combination of reductions in extraction

			and groundwater recharge. The Final Report concludes that the specific SGMA-compliance scenarios considered in the modeling are speculative as compared to an assumption that existing levels of extraction and recharge will continue to occur. In addition, Scenarios C and D assume actions that mitigate the impacts of overdraft on groundwater conditions in the subbasins such as seawater intrusion and groundwater elevations. Analyzing the potential impact of the project absent other mitigating actions provides a “worst case” scenario to assess the potential impacts of the proposed draw. The overall magnitude of the impact of Cal-Am’s proposed draw may vary depending on future SGMA compliance actions and resulting conditions in the basin. However, conditions in the basin under Scenarios C and D would be improved as compared to the no-mitigation alternative of Scenario B. These improved conditions would reduce the likelihood that the proposed draw by Cal-Am may injure other legal users or result in unreasonable harm. Because the Board does not consider the amount of replacement water that may be necessary to avoid injury to other legal users or unreasonable harm to the basin, the Board does not consider the use of Scenario D model results for this purpose.

2	Section 6.8.2 (Extraction of Groundwater), p. 102 [97]	17	Surplus water may be available on a localized or time-limited basis even if extractions from a basin exceed the safe yield of the basin considered as a whole or on average. The overdrafted conditions of the subbasins is prima facie evidence, however, that no surplus water is available for extraction. (Final Report, p. 105.) This evidence must be considered with any other available evidence to determine whether the project proposed by Cal-Am would cause unreasonable harm. The calculation of an ocean water percentage in Cal-Am's proposed draw that presumes a background concentration of 500 mg/L of TDS for non-ocean water, suggests that such water would be available to other users absent the proposed draw. This assumption supports the conclusion that the extracted water is neither salvaged nor developed. Salvaged or developed water is water made available through some intentional effort, and absent that effort, would not be available for beneficial use. (See Section 5.1.6.) The person who makes such water available for use is entitled to a prior right to that water. The Board agrees that if, absent Cal-Am's extraction, this relatively high-quality groundwater would have been available to other legal users in the basin for beneficial use, it is not developed or salvaged by Cal-Am. The Board added these conclusions to the Final Report. The Board updated the Final Report to clarify the lack of information about other wells in the proximity of the proposed slant well location, and the types of information that would be necessary for the Board to determine whether there is a risk of injury to these other legal users from the proposed draw by Cal-Am. (Final Report, p. 107.)

			The Board updated the Final Report to address the use of the word "or" in a manner that was unclear to MCWD. The report now states, "Cal-Am may extract groundwater from the SVGB if the extraction **neither** (1) injure**s** other legal users of water **n**or (2) cause**s** unreasonable harm." (Final Report, p. 103.)
3	Section 6.4.1 (Definition of Seawater Intrusion), pp. 73-74 [69-70]	20	To respond to the court's question about the likelihood and extent of seawater intrusion, the Final Report considers the seawater isocontour of 1,500 mg/L of TDS to depict the boundary of seawater intrusion. The parties selected this threshold and did not explicitly depict other isocontours in their model results. A landward progression of the TDS isocontour is, however, a proxy to indicate associated increases in TDS concentration in the vicinity, both landward and seaward, of the 1,500 mg/L TDS isocontour. An increase in TDS concentration of water in the aquifers may constitute harm. The Final Report does not reach any conclusion as to whether such an increase might be unreasonable. This determination would require a more comprehensive evidentiary record than developed in these proceedings and may implicate the legal interests of other groundwater users who are not parties to this proceeding.

4	Section 6.7.3 (Injury to MCWD's Water Rights), pp. 97-100, 117 [93-95, 113]	22	MCWD objects that the Draft Report limits its analysis of harm to MCWD's water rights to potential trespass or direct well interference. (2025-01-31 MCWD's Objections to Draft Report, p. 22.) The Final Report conducts an analysis of the potential for legal injury to MCWD's water rights under the Water Code and applicable case law. Absent interference with the quantity or quality of water available to MCWD at its historical points of diversion and for its purposes of use, there is no injury to its rights. Pursuant to this analysis, the evidence in the record supports the conclusion that the proposed draw is not likely to injure MCWD's appropriative water rights. Although MCWD points to evidence of increased seawater intrusion seaward of MCWD's wells and alleges losses of seawater protective heads, the evidence does not support a conclusion that groundwater quality at MCWD's wells would be significantly affected. MCWD suggests that it may extract groundwater from different locations in the basin at a future time. To the extent that MCWD changes an element of its appropriative right, such as relocating its wells, MCWD may not interfere with the extractions of a junior user. "A junior appropriator is entitled as against the senior to continuance of the conditions that existed when the junior appropriation was made." (Hutchins, The California Law of Water Rights (1956), p. 157; *Nevada Water Co. v. Powell* (1867) 34 Cal. 109, 119.) MCWD asserts that "the Project will have an impact on MCWD's ability to comply with SGMA, and by extension the [enjoyment] of its primary and paramount water right." (2025-01-31 MCWD Objections to Draft Report, p. 22.) MCWD alleges that the operation of the proposed slant wells will cause additional management actions to be necessary to achieve sustainability of

			the subbasin under SGMA, which actions may include restrictions on pumping from MCWD's wells. SGMA authorizes groundwater sustainability agencies (GSAs) to regulate groundwater pumping to achieve sustainability. (Wat. Code § 10725.2.) Limitations imposed on groundwater extractions by the GSA, within the scope of its authority, are not an injury to or impairment of water rights caused by the junior user. GSAs are authorized to regulate groundwater pumping to achieve sustainability and the exercise of this authority does not create a cause of action against any other user of water. To the extent that a senior user claims an infringement of its water rights because of pumping restrictions, any such claim would lie against the GSA. SGMA does not, however, require that restrictions on pumping imposed by the GSA to achieve sustainability strictly comply with water right priorities. Groundwater management by a GSA for the 180/400 Subbasin may not "impede[] achievement of sustainability goals in an adjacent basin." (Wat. Code, § 10733.) This provision must be considered by a GSA in developing its GSP and by the Department of Water Resources when considering whether to approve the GSP. This provision does not create a private cause of action as against individual groundwater pumpers. Although the evidence does not show a likelihood of injury to MCWD, the model results show that additional seawater intrusion and lowering of groundwater elevations in certain portions of the subbasins will likely occur, which MCWD describes as "harm." (2025-01-31 MCWD Objections to Draft Report, p. 22.) The evidence in the record does not, however, include sufficient information about current or reasonably anticipated uses of groundwater from the basin in proximity to the slant wells, other

			than MCWD's existing wells, to conclude whether any such extractions and uses may be materially impaired by the proposed draw. Absent a substantial effect on beneficial uses of water, the proposed draw would not be unreasonable. Finally, the Final Report does not address whether cessation of Cal-Am's proposed draw may injure MCWD's water rights. That issue is not directly identified in the court's questions and any estimate of the timing of such an occurrence and future conditions at that time would be highly speculative.
5	Section 6.8 (Question 8 Generally), pp. 101, 102, 106 [98, 102]	24	The Board agrees that Cal-Am has no existing right to extract groundwater from the Salinas Valley Groundwater Basin. The Board understood the court to ask whether there is any *legal theory* upon which Cal-Am might rely to obtain such a right and make the proposed extraction of groundwater. The Board's response to this question is yes, there is such a legal theory. First, Cal-Am may be able to demonstrate that its proposed draw would not injure other legal users or cause unreasonable harm, although the evidence in the record before the Board is insufficient to reach a conclusion. Second, Cal-Am may be able to demonstrate that a physical solution, such as the provision of replacement water, would be sufficient to prevent injury to other legal users and avoid unreasonable harm. Again, the evidence in the record before the Board on this point is inadequate to reach a conclusion. The Board did not understand that the court was seeking a definitive answer to these broader questions about the potential for injury to other legal users and unreasonable harm, which extend well beyond the court's more focused questions relevant to the threat of injury to MCWD's water rights (or any water rights Marina holds). The Board can conduct such an investigation, but

			such an undertaking would be complex and may require notice to all potentially affected groundwater users in the basin.

MCWD's Specific Objections to the AHO's December 31, 2024, Draft Report of Referee:

No.	Section/Page of Text in Draft Report	PDF Page of MCWD's Objection	Board's Response or Ruling
1	Section 2.3.2 (Hydrogeologic Features), p. 13 [9]	26	Deleted sentence about the Dune Sand Aquifer.
2	Section 3.1.1 (Assignment to the Administrative Hearings Office), pp. 23-24 [19-20]	28	The statement accurately describes the assignment of the matter by the Executive Director of the State Water Board to the Board's Administrative Hearings Office (AHO). The AHO is explicitly authorized by statute to conduct adjudicative hearings. (Wat. Code, § 1112, subd. (c).)
3	Section 3.1.2 (Statutory Procedure for Court References), p. 24 [20]	28	Changed sentence to match the statute.
4	Section 4 (Groundwater Modeling), Section 6.7.3.2 (Impacts to Quality of Groundwater), pp. 33, 100 [29, 96]	29	Noted.
5	Section 4.2 (Groundwater Modeling for this Proceeding), p. 37 [33]	29	Noted.
6	Section 4.2 (Groundwater Modeling for this Proceeding), p. 37 [33]	30	See Response to General Objection No. 1.

7	Section 5.1.4 (Sustainable Yield of a Groundwater Basin), p. 39 [35]	31	The bench book, *Adjudicating Groundwater: A Judge's Guide to Understanding Groundwater and Modeling, Dividing the Waters, The National Judicial College (2018),* was published by the Dividing the Waters Program at the National Judicial College. Dividing the Waters is a program intended for federal and state judges who are adjudicating water matters, to provide education and resources about water law and science. The bench book was developed to build judicial understanding of the science of groundwater. The Board, and the court, may consider the bench book as a learned treatise. The Final Report does not reference the bench book, however. The references in the Draft Report were helpful but not necessary to define the concept of sustainable yield.
8	Section 5.1.7 (Replacement Water), p. 42 [38]	32	MCWD erroneously asserts that "[u]nlike other jurisdictions, California law does not authorize out-of-priority diversions with provisions for replacement water." (2025-01-31 MCWD's Objections to the Draft Report, p.34.) The Final Report provides several California examples of groundwater adjudications in which pumpers are authorized to take water in excess of the amount allocated under their water right and the safe yield of the basin (an "out-of-priority" diversion), by providing replacement water or compensating the basin water master for the purchase of replacement water. In addition, the State Water Board allows new appropriations of surface water even when water is otherwise unavailable (out-of-priority diversions), with the provision of replacement water. Water Right Order 91-07 identifies stream systems in California that are fully appropriated, and in which no unappropriated water is available. Order 91-07 states that the Board may issue a water right permit for a new appropriation even in these fully appropriated systems if a water transfer or water exchange provides replacement water to avoid injury to existing right holders. (WR

			Order 91-07, p. 25, section 5.1.) Such rights are appropriative water rights. The same legal theory applies analogously to the appropriation of groundwater, as it does in other western states. For example, pursuant to this provision of Order 91-07, the State Water Board authorized appropriation of water from the fully-appropriated Tuolumne River system with the following permit term: "Diversion of water under this permit during the period from June 16 through October 31 of each year is subject to maintenance of the Water Exchange Agreement executed on December 12, 1992, between the permittee and the Modesto and Turlock Irrigation Districts. Pursuant to the Agreement, permittee shall provide replacement water to New Don Pedro Reservoir for all water diverted under this permit during the period from June 16 to October 31 of each year. The source, amount, and location at New Don Pedro Reservoir of replacement water discharged to the reservoir shall be reported to the State Water Resources Control Board with the annual Progress Report by Permittee." (Water Right Permit 20784 (March 23, 1995), Term 19.) See also C*ity of Lodi v. East Bay Mun. Util. Dist.* (1936) 7 Cal.2d 316, discussed in response to Objection No. 36, for an example of a new appropriation authorized by implementation of a physical solution to prevent interference with senior water rights.
9	Section 5.2.2. (Impairment of Water Quality), p. 45 [41]	35	*Town of Antioch v. Williams Irrigation District* (1922) 188 Cal. 451 (*Antioch*) applies the standard for injury to a legal user and the common law doctrine of reasonableness prior to constitutional incorporation of the doctrine through article X, section 2, enacted in 1928. Although the court in *Antioch* may not have anticipated that similar facts might arise in any case "except one arising upon these two rivers concerning a similar claim of some prior appropriator near the outlets thereof," (*id.* at p. 464), the facts in this proceeding present some similarities. If the court in this proceeding enjoins the

			proposed draw by Cal-Am because it concludes that the impact to MCWD's water rights constitutes injury or that the effects of the proposed draw will cause unreasonable harm, Cal-Am will be prevented from extracting and desalinating ocean water that would constitute a new supply to the basin (the 15.5 million gallons per day project would produce an estimated 7,167 afy of water of a quality suitable for municipal use). (CPUC Dec.18-09-017, p. 178.) These potential benefits should be considered in determining reasonableness of the proposed draw, just as the benefits of the upstream junior diversions were considered by the court in *Antioch* in determining whether those diversions should be enjoined to protect a senior right holder. In addition, the court considered the availability of a physical solution that could prevent the claimed harm to Antioch, finding that "by moving its pump a few miles up the river it could obtain water free from saline solution. It is not altogether improbable that if it had devoted the same amount of energy and expenditure to a change of its place of diversion as it has to the present litigation, it would have had the water uncontaminated by salt with less delay than had already occurred and at no more expense." (*Antioch, supra,* at p. 465.) Any physical solution in this proceeding would likely be significantly more complex than the relocation of a single point of diversion, if any such solution is feasible. But the *Antioch* case presents a potentially helpful application of the rules of injury and reasonableness in the context of seawater intrusion.
10	Section 5.2.3 (Injury to Groundwater Rights), p. 46 [42]	36	This statement reflects that lowering groundwater elevations may cause injury to other legal users, even if the injured right holders can, for a period of time, continue to access and extract the water to which they are entitled. As referenced by MCWD in its objection, such lowering of groundwater levels will tend to result in interference with the exercise of legal users' rights over time. (2025-01-31 MCWD's Objections to the Draft Report, p. 37.)

			Groundwater users are not required to wait until lowered groundwater levels interfere with the ability to extract the quantity and quality of water to which the right holder is entitled to demonstrate injury. (*City of Pasadena v. City of Alhambra* (1949) 33 Cal.2d 908, 929.) In this proceeding, however, the model results support the conclusion that there will be no interference with the exercise of MCWD's water rights from the proposed draw, even over time.
16	Section 5.3 (Physical Solution), p. 47 [43]	37	A physical solution in which Cal-Am provided sufficient replacement water to prevent any injury to senior right holders, such that these right holders would remain whole, is consistent with the rule of priority. In *City of Barstow v. Mojave Water Agenc*y (2000) 23 Cal.4th 1224, the California Supreme Court affirmed that the trial court erred by imposing a physical solution that relied upon the equitable apportionment doctrine rather than the rule of priority to allocate groundwater among competing users.
17	Section 6.1.1 (Location of Subsurface Drawing Source Points), pp. 51-52 [47-48]	38	Objection noted, see Footnote 30.
18	Section 6.1.1 (Location of Subsurface Drawing Source Points), p. 54 [50]	38	Adjusted sentence to reflect that the assumed proportion relates to the description of the Test Slant Well in the EIR/EIS.
19	Section 6.1.1 (Location of Subsurface Drawing Source Points), p. 54 [50]	39	Objection noted.
20	Section 6.1.1 (Location of Subsurface Drawing Source Points), p. 54 [50]	39	Objection noted.
21	Section 6.1.2 (Capture Zones), p. 60 [56]	40	Objection noted.
22	Section 6.1.2 (Capture Zones), pp. 61 [57]; 62 [58]	40	Objection noted.

23	Section 6.4.1 (Definition of Seawater Intrusion), p. 74 [70]	41	Objection noted.
24	Section 6.4.3 (Analysis), p. 81 [77]	42	Objection noted.
25	Section 6.4.3 (Analysis), p. 81 [77]	43	Objection noted.
26	Section 6.5.2 (Storage Space), p. 83 [79]	43	Objection noted.
27	Section 6.5.2 (Storage Space), p. 88 [84]	44	Objection noted.
28	Section 6.5.2 (Storage Space), p. 90 [86]	45	Amended language to address objection.
29	Section 6.5.3 (Subbasin Cross-Boundary Flows), pp. 90-94 [86-90]	46	Objection noted.
30	Section 6.7.3 (Injury to MCWD's Water Rights), p. 97 [93]	48	The type of indirect harm described by MCWD, even if it were to occur, would not constitute legal injury to its water rights.
31	Section 6.7.3 (Injury to MCWD's Water Rights), p. 97 [93]	49	See response to General Objection No. 4.
32	Section 6.7.3 (Injury to MCWD's Water Rights), p. 98 [94]	49	The model results show that there will be sufficient groundwater physically available for extraction from MCWD's wells to meet historical demands even with operation of the proposed project over time. (See also, response to General Objection No. 4.)
33	Section 6.7.3 (Impacts to Quantity and Quality of Groundwater), p. 98 [94]	50	Harm is not sufficient to demonstrate legal injury to a water right. The standard for legal injury is significant and material interference with the exercise of the right. The model results support the conclusion that the proposed draw from the slant wells would not significantly and materially interfere with the extraction of water from MCWD's wells.

			Cal-Am cannot, however, develop a right to extract water in a manner that would cause unreasonable harm. The Final Report of Referee concludes that there is insufficient evidence in the record to conduct the type of balancing necessary to determine whether Cal-Am's extraction would be unreasonable, although exceedance of the GSP's quantitative standards for undesirable results is persuasive evidence that the proposed draw would be unreasonable absent mitigation of those impacts. Such mitigation might include a physical solution that requires Cal-Am to provide replacement water. For example, Cal-Am might provide replacement water to MCWD in lieu of pumping from their wells, to offset impacts to the Monterey Subbasin.
34	Section 6.7.3 (Impacts to Quantity and Quality of Groundwater), p. 99 [95]	50	See responses to Objections 31-33. The court's questions referred to the State Water Board did not explicitly include consideration of potential impacts to legal users of water at a future time if the project ceases to operate. Therefore, this question is not addressed in the Final Report of Referee.
35	Section 6.7.3.2 (Impacts to Quality of Groundwater), p. 100 [96]	51	Cal-Am cannot develop a right to extract water in a manner that would cause unreasonable harm. The Final Report concludes that there is insufficient evidence in the record to conduct the type of balancing necessary to determine whether Cal-Am's extraction would be unreasonable, although exceedance of the GSP's quantitative standards for undesirable results is persuasive evidence that the proposed draw would be unreasonable absent mitigation of those impacts. Such mitigation might include a physical solution that requires Cal-Am to provide replacement water.
36	Section 6.8 (Question 8), p. 100 [96]	51	The cited text is revised to strike "as proposed."
37	Section 6.8.2 (Extraction of Groundwater), p. 101 [97]	52	See responses to General Objections.

38	Section 6.8.2 (Extraction of Groundwater), p. 101 [97]	52	See responses to General Objections.
39	Section 6.8.2 (Extraction of Groundwater), p. 102 [98]	52	See responses to General Objections.
40	Section 6.8.2 (Extraction of Groundwater), p. 102 [98]	53	A physical solution in which Cal-Am provided sufficient replacement water to prevent any injury to senior right holders, such that these right holders would remain whole, is consistent with the rule of priority. In *City of Barstow, supra,*, the California Supreme Court affirmed that the trial court erred by imposing a physical solution that relied upon the equitable apportionment doctrine rather than the rule of priority to allocate groundwater among competing users. In the case of C*ity of Lodi, supra*, the court applied the physical solution doctrine to require that upon lowering of groundwater below an elevation found by the trial court to affect the city's water supply with an appropriate margin of safety, EBMUD must supply water to the city, artificially raise the groundwater levels, or be limited in the amount of water EBMUD could store under its rights to maintain the amount of recharge that would occur naturally. (*Id.* at p. 344.) In *City of Lodi*, the court determined that a new appropriation could be supported by a physical solution to prevent injury to prior right holders. EBMUD held water right permits, but had not yet constructed the reservoirs necessary to divert and beneficially use water. EBMUD was allowed to proceed with its appropriation conditioned upon implementation of the physical solution to be established by the court.
41	Section 6.8.2 (Extraction of Groundwater), p. 102 [98]	53	The point of diversion, place of use, and purpose of use of a valid appropriative right, including an appropriative groundwater right, may be changed if the change does not injure other legal users. (*City of San Bernardino v. City of Riverside* (1921) 186 Cal. 7, 28-29.) It is theoretically possible that Cal-Am could purchase an existing appropriative right to groundwater in the Salinas Valley Groundwater Basin, and extract water pursuant to that right from the proposed slant wells. The evidentiary record does not reflect

			whether any such appropriative rights to groundwater might be purchased and whether any such change in the rights to allow extraction and use by Cal-Am, might injure other legal users or cause unreasonable harm.
42	Section 6.8.2 (Extraction of Groundwater), p. 102 [98]	54	See response to General Objection No. 2.
43	Section 6.8.2.1 (Availability of Surplus Water), pp. 102-103 [98-99]	54	See response to General Objection No. 1.
44	Section 6.8.2.1 (Availability of Surplus Water), p. 103 [99]	55	This statement in the Final Report is intended to note that, in certain limited circumstances, a basin or subbasin may be in overdraft as assessed at a general or average level, even though some surplus water may be available for appropriation in certain seasons, hydrological conditions, or areas. The relevance to the operation of the proposed slant wells and the 180/400 and Monterey Subbasins is not clear, however, so the sentence is not included in the Final Report of Referee.
45	Section 6.8.2.1 (Availability of Surplus Water), p. 104 [100]	55	See response to Objection No. 29.
46	Section 6.8.2.2 (Avoidance of Injury to Existing Uses and Users), p. 104 [100]	56	See responses to Objections Nos. 1, 3, 4, 9, 30, 32, and 34.
47	Section 6.8.2.2 (Avoidance of Injury to Existing Uses and Users), p. 104 [100]	56	See responses to Objection Nos. 3 and 23.
48	Section 6.8.2.2 (Avoidance of Injury to Existing Uses and Users), p. 105 [101]	56	See response to General Objection No. 5.
49	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 105 [101]	57	See response to General Objections Nos. 1 and 5.

50	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 105 [101]	57	See response to General Objection No. 1.
51	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 106 [102]	57	Application of the rule of reasonableness is, in general, a balancing test that incorporates a variety of factors on a case-by-case basis in determining whether a particular use or method of diversion of water is reasonable based on the particular circumstances and conditions. The doctrine incorporates evolving standards and principles and recognizes that a use that is reasonable at one time or in one location may be unreasonable at a future time or in other circumstances. (See *Joslin v. Marin Mun. Water Dist.* (1967) 67 Cal.2d 132, 140; *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.) The Board's Water Right Decision 1600 (*Imperial Irrigation District Alleged Waste and Unreasonable Use of Water*) (1984), identifies seven factors to be considered in determining the reasonableness of a particular use of water: (1) other potential beneficial uses, (2) whether water is wasted or otherwise put to some beneficial use, (3) benefits of water savings, (4) amount of water reasonably required for current use, (5) amount and reasonableness of the cost of saving water, (6) whether methods of saving water are conventional reasonable rather than extraordinary, and (7) whether a physical solution might meet the needs of competing users. A similar suite of factors would apply to an assessment of the reasonableness of Cal-Am's proposed draw, which would make previously unusable ocean water available for beneficial use but would also cause some amount of draw on and impacts to the groundwater basin. The State Water Board understood the court's questions to focus on the potential for injury to water rights held by MCWD or Marina from Cal-Am's proposed extraction from the slant wells. In addition, the parties' evidence focused on these questions and did not address the more general and complex question of whether the

			proposed draw might cause unreasonable harm independent from any interference with MCWD's water rights. The Board could address this question upon direction from the court, but doing so would likely require significant additional evidence. MCWD also asserts that the Board had a duty to conduct an independent investigation to identify legal users other than MCWD and Marina that might be injured by the proposed project. The Board did not understand the reference from the court and the court's questions to include any direction for the Board to conduct an independent investigation. The Board assigned the matter to the Administrative Hearings Office based on its understanding that the parties to the proceeding would submit the relevant evidence through an administrative hearing, on which the Board would base its report.
52	Section 6.8.2.3 (Avoidance of Unreasonable Harm), p. 106 [102]	62	The Final Report does not reach any conclusion about the quantity of return water that might be necessary to prevent any unreasonable harm, in the form of seawater intrusion, lowered groundwater elevations, or other effects of the proposed draw, and whether a physical solution is feasible. The Final Report also does not address whether the Scenario D model runs may be relevant to estimating the amount of replacement water that may be necessary to prevent any progression of seawater intrusion in the 180/400 Aquifer caused by the proposed draw.
53	Section 6.8.2.4 (Physical Solution), p. 106 [102]	63	Objection noted.
54	Section 6.8.2.4 (Physical Solution), p. 108 [104]	64	The Final Report of Referee does not include the referenced text.
55	Section 6.8.3 (Monitoring and Adaptive Management), p. 108 [104]	64	The referenced sentence is amended in the Final Report.

56	Section 6.8.3 (Monitoring and Adaptive Management), p. 109 [105]	67	See responses to Objection Nos. 1, 3, 4, 23, 32, 34, 54, and 55.
57	Section 6.8.3 (Monitoring and Adaptive Management), p. 109 [105]	67	See responses to Objection Nos. 1, 4, 11, 31, and 52
58	Section 6.8.3 (Monitoring and Adaptive Management), p. 109 [105]	68	See responses to Objection Nos. 1, 3, 4, 32, and 34.
59	Section 6.8.3 (Monitoring and Adaptive Management), pp. 109-110 [105-106]	69	See responses to Objection Nos. 1, 4, 11, 31, and 52.
60	Section 7 (Conclusion), p. 113 [109]	69	See responses to Objection Nos. 1, 3, 4, 32, and 34.
61	Section 7 (Conclusion), p. 114 [110]	69	See response to Objection No. 22.
62	Section 7 (Conclusion), p. 117 [113]	70	Objection noted.
63	Section 7 (Conclusion), p. 117 [113]	70	Objection noted.

Exhibit 2 – Ag Land Trust Exhibits

Maps

A. Map of North Monterey County LCP area (yellow) and Ag Land Trust farm (Armstrong Ranch zoned "Coastal Agricultural Preserve" CAP) outlined in RED. Proposed Cal-Am "test well" site shown in black. Ag Land Trust "Big Well" shown in black.

B. Ag Land Trust Armstrong Ranch in YELLOW; early proposed alternate seawater wells locations by Cal-Am

C. Cal-Am map that misrepresents the proposed location of the "test well" and the "drawdown" contours of the "cone of depression" from the "test well". Map fails to identify Ag Land Trust "Big Well" west of Highway 1 and within cone of depression and subject to seawater contamination from Cal-Am's proposed pumping.

D. Cal-Am map with notation of corrected location for "test well" and location of Ag Land Trust "Big Well". Adjusted "cone of depression" covers 75% of the Ag Land Trust property and shows seawater intrusion into "Big Well".

E. Cal-Am map that falsely indicated Ag Land Trust property as within the designated "Project Area". Insert is not to scale.

(A.)

North Monterey County LCP

SECTION 6 OF THE ZONING PLAN OF THE COUNTY OF MONTEREY



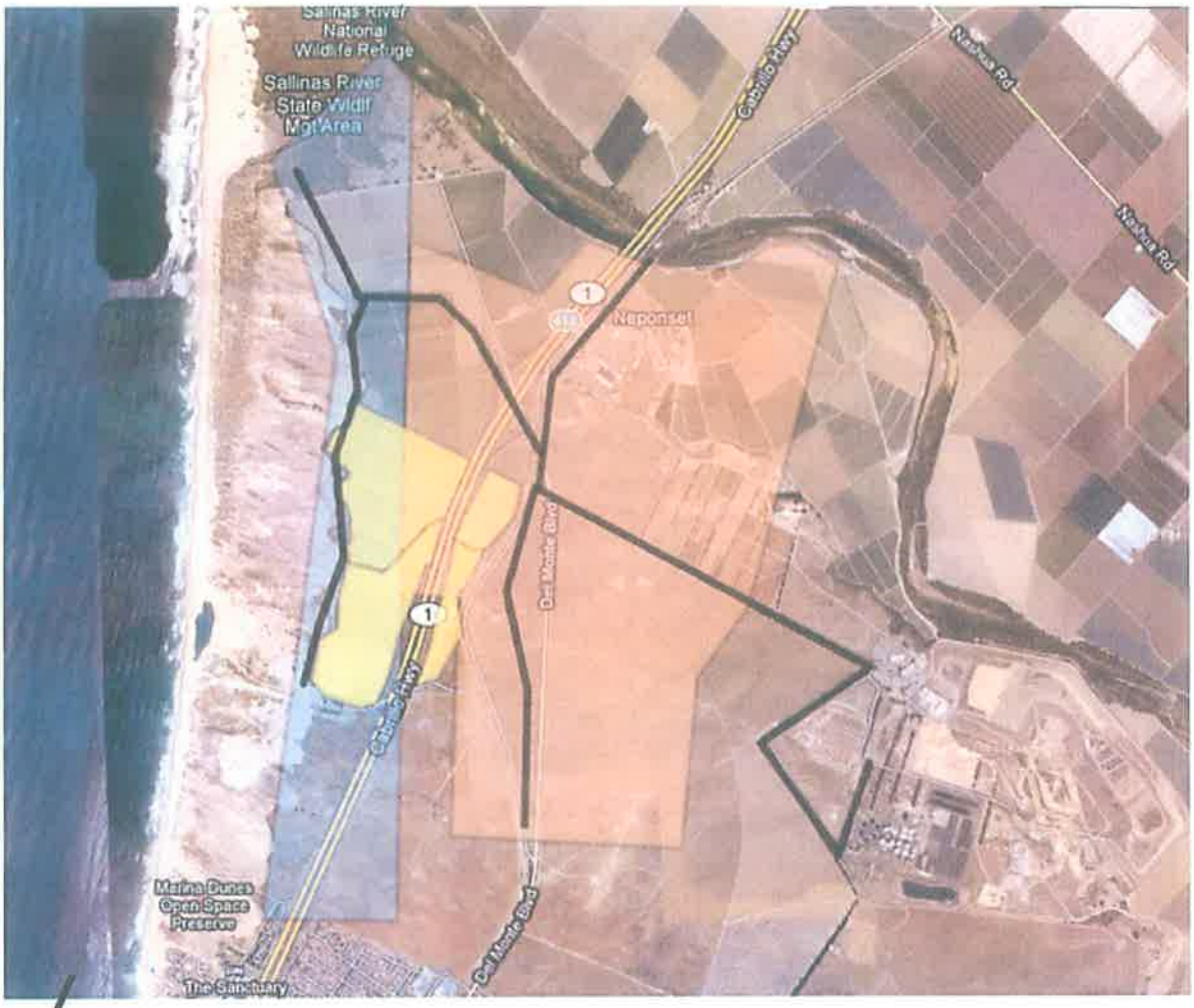
(A.) North Monterey County LCP boundaries in yellow

Ag Land Trust property zoned "Coastal Agricultural Preservation" outlined in "RED"

Ag Land Trust "Big Well"

Proposed Cal-Am "test well"

B



Yellow— Ag Land Trust (Monterey County Agricultural and Historic Land Conservancy) properties.

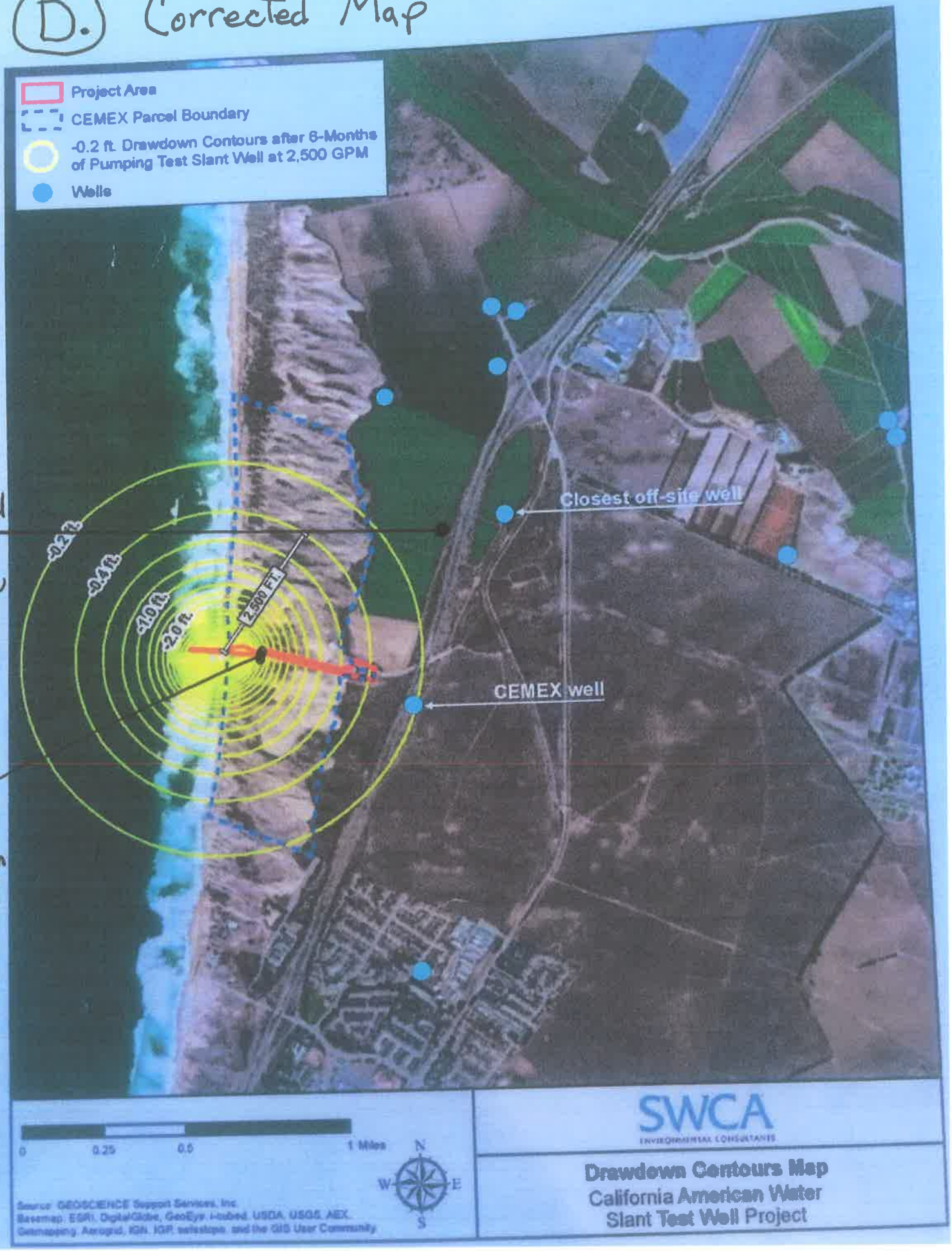
Pale Blue and Brown -- potential sea water wells and pipeline locations as extracted from Coastal Water Project FEIR Revised Figure 5-3.

NOTE: EIR Revised Figure 5-3 provides only a generalized representation of the sea water well areas with no references to properties included within their boundaries. Precise spatial data was not provided by the applicant or available from the EIR preparer.
This document was professionally prepared by a GIS Professional, using spatially accurate imagery, known physical features and property lines to provide a reliable representation of the Conservancy properties as they relate to the proposed sea well areas. Lack of access to the spatial data, if any, used in Revised Figure 5-3, has required some locational interpretation, which was performed using professional best practices.

C.

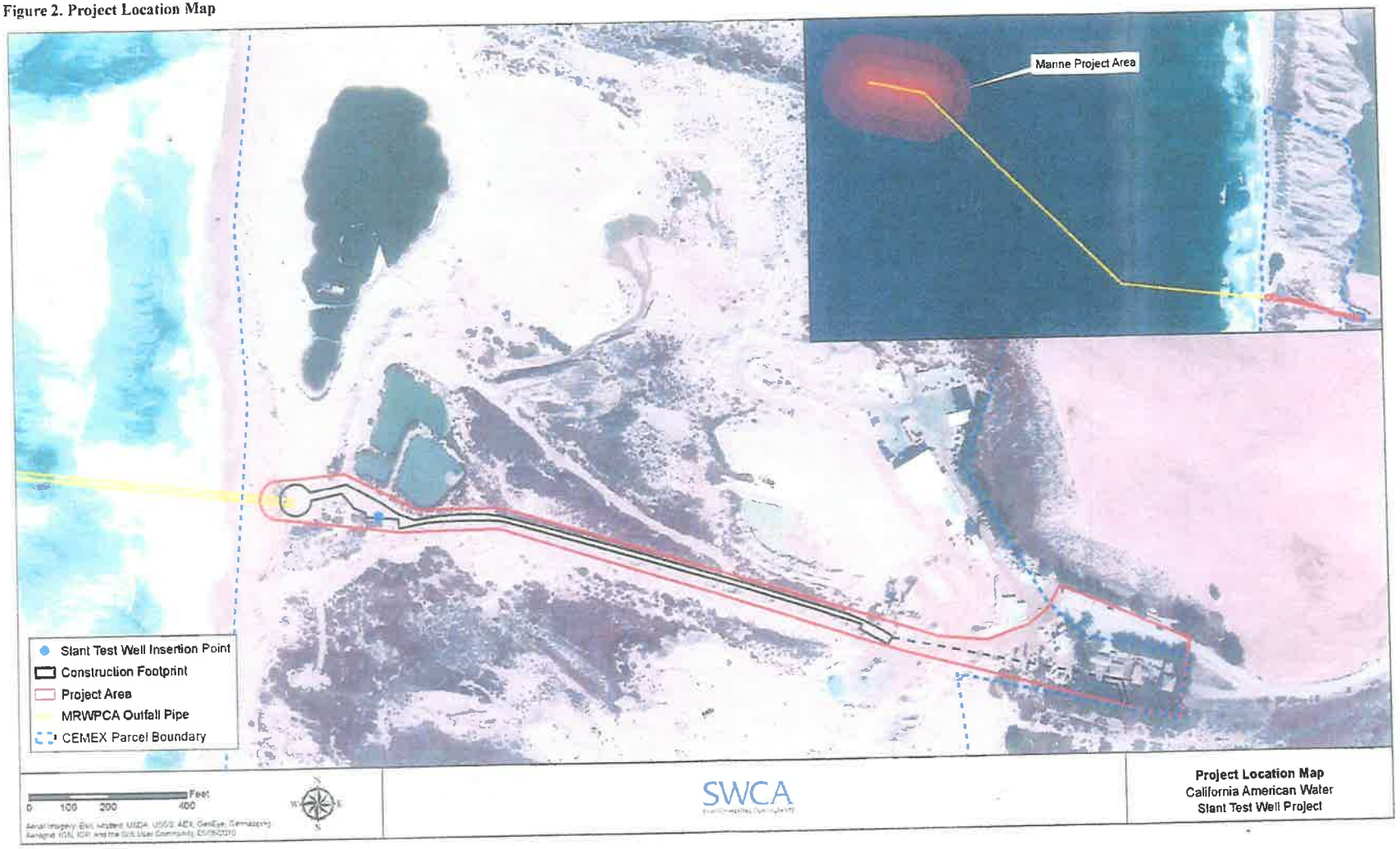

Project Area
CEMEX Parcel Boundary
-0.2 ft. Drawdown Contours after 6-Months of Pumping Test Slant Well at 2,500 GPM
Wells
-0.2 ft.
-0.4 ft.
-1.0 ft.
-2.0 ft.
2,500 Ft.
Closest off-site well
CEMEX well
0
0.25
0.5
1 Miles
N
W
E
S
Source: GEOSCIENCE Support Services, Inc.
Basemap: ESRI, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
SWCA
ENVIRONMENTAL CONSULTANTS
Drawdown Contours Map
California American Water
Slant Test Well Project

D. Corrected Map



E.

Figure 2. Project Location Map



A-3-MRA-14-0050 / 9-14-1735
EXHIBIT 2

Chief Counsel Seth Blackmon Meeting - State Lands Commission – Margaret-Anne Coppernoll and Marc del Piero

There are multiple reasons the CalAm industrial lease application to install four additional slant wells and convert the temporary one to a permanent one should be denied, rescheduled, or denied and the existing lease revoked: CalAm applied for this industrial lease application knowing full well prior to the application that its MPWSP does not qualify for approval; CalAm failed to disclose facts that would preclude approval, and intentionally deceived SLC staff, convincing them that the MPWSP is "non-controversial" or not in need of a CEQA required EIR. The CalAm desal project has been very controversial since 2012. The current CalAm application claims ocean water extraction, another serious untruth.

We are grateful to Chief Counsel Blackmon and staff for their open-mindedness and compassionate hearts, along with their desire to learn the truth. We present the factual history of the CalAm water struggle facing us, and are hopeful and prayerful for a positive outcome. It is fair and righteous that we arm you with the truth, as that is the only way you can determine a just recommendation to your commissioners.

It is paradoxical that after decades of struggling and suffering to save our water supplies, our communities are now at the mercy of a single state agency that holds our fate in one agenda item,

one staff recommendation, and a three-commissioner commission decision!

The lack of integrity and the intent to deceive to obtain application approval on false pretenses and misinformation can only be characterized as malignant fraud. CalAm knew its industrial application is disingenuous and illegal, as herein delineated:

1. CalAm applied to the SLC for a lease to install its test slant well at the CEMEX property **after** the City of Marina denied CalAm a permit. CalAm then sued the City of Marina, which has spent to-date $20 million defending its water supply from CalAm's water grab.

   Why is CalAm bulldozing its way like a Sherman tank into Marina's water supply? Because CalAm wants total control over our water supplies. To do so, it had to eliminate the Regional Water Project. Consumed by avaricious ambition, CalAm abruptly withdrew from the Regional Water Project because it objected to Marina Coast Water District (MCWD) being the lead operator of the project. MCWD had the water rights allocations while CalAm did not, but wanted sole control. After months of stalling, CalAm stated publicly that it was "in mediation" to resolve details of the project's administration, but suddenly withdrew only to propose its own full-blown MPWSP plan. This coup plot had an even more egregious aspect – to export

MCWD's water supply to the Monterey Peninsula, leaving the City of Marina without "a single drop of water" for its own communities. Exporting aquifer water out of the SVGB violates the Agency Act, California Water Law, and the Sustainable Groundwater Management Act of 2014.

The "in mediation" claim was a stalling tactic to camouflage its behind-the-scenes plot to enact a coup against MCWD as the agency in charge. Full control of water resources and financial power in a fast-developing community post-Fort Ord closure were the drivers behind the withdrawal, not the benefit or solution for our region's then existent water crisis. These are also the reasons CalAm has fiercely obstructed all efforts our public water agencies invested in developing recycled water supplies to supplement water allocations from the Carmel River and the Seaside Basin. In spite of CalAm's nefarious intentions and actions, our public water agencies have triumphed, and were nationally awarded, for their innovative water supply creations that have produced not only ample water supply but a surplus to cover at least thirty plus years. CalAm's MPWSP is not needed or wanted, as evidenced by voter-approved Measure J to proceed with the eminent domain buyout of CalAm, now in Monterey Superior Court.

2. CalAm knew its 4.8 mgd smaller proposed project did not have CPUC EIR certification, nor did CalAm apply for EIR certification, or even do an EIR, as required by CEQA.

CalAm did not seek CPUC certification because the CPUC had years ago dismissed this smaller size desal due to it being infeasible, cost ineffective, and ESHA harmful. The CPUC refused to consider it.

3. CalAm knew it does not have water rights for its MPWSP.
4. CalAm knew the CEMEX Consent Agreement precludes any further industrial development post Agreement signing.
5. CalAm knew SGMA mandates SVGB critically over-drafted aquifers be restored to a sustainable healthy condition by 2040. Marina Coast Water District is a certified Groundwater Sustainability Agency (GSA) under SGMA. CalAm is not.
6. CalAm knew its MPWSP would surreptitiously take water from underneath private farmland, depriving farmers of the ability to grow their crops, thereby impacting food availability. In the final analysis, the SWRCB Administrative Hearing Office, in its recent report to the Monterey Superior Court, confirmed two crucial facts: 1) CalAm does not have sufficient water rights to proceed with its MPWSP; 2) Evidence demonstrates that CalAm intends to illegally take water from underneath private farmlands without the farmer's knowledge. This would constitute a criminal act if CalAm is allowed to actualize its proven stated intentions. These two facts alone disqualify CalAm's industrial application from approval of any kind. Although the SLC has no jurisdiction over water rights, surely it must consider the SWRCB's official findings. Additionally, it would counter

common sense to allow CalAm to proceed at such a high cost, harmful community disruption, and unnecessary ESHA adverse impact risk.

7. CalAm knew its slant wells are engineered to induce seawater intrusion. By rendering the SVGB's threatened aquifers irretrievably seawater intruded, CalAm's goal, it could claim the MPWSP is indispensable. CalAm knew prior to application that its project would harm groundwater quality and diminish quantity, while seriously degrading the natural boundary between land and sea.
8. CalAm intends to take the City of Marina's entire water supply and export it to the Monterey Peninsula, while assuming full control of the SVGB aquifers and displacing Marina's public water agency, Marina Coast Water District.
9. CalAm knew its slant well technology is experimental, unworkable, and obsolete. See MCWD report on proven effective alternative desal technology by Ocean Wells.
10. CalAm misled SLC decision-makers when it lied on its application that it would extract ocean water. CalAm's hydrogeologist, Hydro Focus, confirmed in its report that that the slant wells must be placed over the 180/400 Foot and Dune Sand Aquifers, and would extract brackish and fresh aquifer water. This false claim allows CalAm to avoid being held accountable for illegally taking aquifer water because ocean water does not require water rights, a major requirement for extracting any aquifer water.

11. CalAm has requested M1W to modify its outfall pipe to accommodate the MPWSP's constant flow of brine through the outfall pipe. This brine would seriously harm the Monterey Bay Marine Sanctuary marine life as squid and other fish species use the upper levels as a nesting area where freshwater aquifer water seeps down to dilute brine. These fish species' eggs cannot survive in a heavy brine environment. The CalAm MPWSP would cause serious harm not only to nesting fish, but also to the local fisheries, restaurants, and other businesses that depend on a plentiful fish resource for their livelihoods. The SWRCB issued a Cease-and-Desist Order to stop CalAm's illegal over pumping of the Carmel River. CalAm's over-pumping caused the threatened Carmel River steelhead trout to greatly diminish in numbers, almost to extinction.
12. CalAm engages in malfeasance because it treats potable water as a CalAm shareholder enriching Wall Street commodity, not a human survival right. CalAm's ratepayers function as a golden cash cow, giving endlessly as water rates climb higher and higher, now the highest in the nation, yet CalAm is requesting the CPUC to approve a 25% rate increase. CalAm persists in its unsavory endeavors because the higher the company value, the higher the eminent domain buyout cost for the Monterey Peninsula. The one test slant well has a price tag of $245 million expended so far.

13. CalAm knew its MPWSP violates the California Constitution, the Agency Act, California water law, Marina's Local Coastal Plan, the CEMEX Consent Agreement signed by CEMEX (Lone Star RMC), Coastal Commission, City of Marina, State Lands Commission, as well as the Sustainable Groundwater Management Act of 2014.

14. CalAm knew its slant wells only have a twenty-five-year lifespan and that it has no relocation site for the wells when they are inundated by sand erosion due to sea level rise. According to a NASA published article on a sea level rise research study, sea level rise had risen twenty-four inches over the ten-year period of the study. This means an approximate sea level rise of close to five feet by 2050, the target year the CPUC used in its supply vs demand estimate evaluation. This means there will be a ZERO water supply from CalAm's desal project, accompanied by a massively exorbitant price tag, by 2050.

15. CalAm knew that CEQA frowns on piecemealing projects, which CalAm intends to do as a way to circumvent SLC and CCC jurisdictions for its desal facility regulatory requirements. If it can hoodwink the SLC, obtain approval for the five slant wells construction, it will bat a home run for the entire project. It is astounding that decision-makers do not ask why CalAm's MPWSP will be constructed In Marina, with 18 miles of water conveyance pipelines, instead of closer to its Monterey Peninsula ratepayers, like Monterey, Carmel or Seaside.

16. CalAm neglected to admit that the local public water agencies have solved the previous water shortage crisis by creating their innovative recycling water projects that have received national awards and acclaimed as the national role model for recycled water projects. Not only is there no water shortage, there now exists a surplus water supply with the Monterey One Water Expansion project fully operational.

Respectfully Submitted,

Margaret-Anne Coppernoll, Ph.D.
Co-founder, Citizens for Just Water ("C4JW")
Marina, California
Email:

May 10, 2026

Memorandum of Public Comment for June 23, 2026 State Lands Commission Meeting

Attn: State Lands Commission Commissioners and Staff

Red Flag Water Alert

The California State Lands Commission announced its June 23, 2026 meeting agenda will consider California American Water Company (CalAm)'s application for an industrial lease renewal for the CEMEX easement to construct four additional slant wells for its proposed desalination project, the Monterey Peninsula Water Supply Project (MPWSP). Opponents of MPWSP sound the alarm because the project, with an astronomical price tag, is doomed from the get-go. Here's why enabling MPWSP development is not a viable option:

First, its slant wells only have a twenty-five year life span at most but will be shortened due to sea level rise and concomitant sand erosion, with no relocation site available. Would a wise investor knowingly invest billions in a dud, a foreseen failure, certain bankruptcy? NASA revealed that a ten-year research study found sea level rose 24 inches over the ten-year study period. A substantial cause? Groundwater over-pumping! By 2050, sea level would rise 57-58 inches, or close to five feet. Thus, the slant wells would expire and not only be non-functional but also inundated by beach sand erosion, with no available re-location space. These facts alone preclude approval of MPWSP's industrial lease renewal application.

Second, MPWSP does not have the requisite water rights, per the State Water Resources Control Board's recent report, to target adversely impacted aquifers.

Third, MPWSP contravenes mandates of the Sustainability Groundwater Management Act (SGMA) that require Salinas Valley Groundwater Basin (SVGB)'s critically over-drafted aquifers be replenished to healthy condition, whereas the MPWSP will extract daily massive gallons (approximately 77,000) of this aquifer water with its slant wells.

Fourth, California Coastal Commission's conditional approval requirements cannot be fulfilled due to the dearth of water rights, incomplete, unattainable

permit certifications, and environmental justice, sensitive habitat and esthetic issues.

Fifth, the exorbitant cost. With only one test slant well to date, the MPWSP has spent more than $145 million, while CalAm water rates skyrocket, being the highest in the nation. CalAm's Coastal Development Foundation conceals costs while exposing nefarious goals.

Sixth, citizens vehemently oppose the MPWSP not only for the unaffordable cost, but also for CalAm's history of deceptive, manipulative, and malevolent business practices that countermand righteous societal conduct. Its abrupt withdrawal from the regional desalination project to assert its own plot to displace Marina's water purveyor while illegally

exporting endangered aquifer water out of the SVGB, leaving Marina without a single drop of its own water, is unthinkable. CalAm audaciously wants Marina to purchase back its own water, if any is available after it supplies the Monterey Peninsula's water needs. SGMA and water code regulations preclude this water exportation out of the SVGB.

Seventh, Monterey Peninsula citizens passed Measure J to buyout CalAm, which is now proceeding through Monterey Superior Court, making MPWSP lease approval costly, pre-mature, and unfair.

Eighth, CalAm's disruptive tactics and malevolent goals continue to create chaos and division

throughout our communities, using fear mongering and corporate political influence, fueled by greed, as manipulative tools deployed to accomplish its unjust goals. Skirting California Coastal Commission (CCC) oversight, the MPWSP's physical plant operates outside CCC jurisdiction. The MPWSP "piecemeal" development sanctions a disguised stealthy invasion of Marina Coast Water District's water supply.

Ninth, if MPSWP continues, SVGB aquifers will be irretrievably over-drafted and seawater intruded, triggering penalties and state supervision of our water supply per SGMA mandates. SGMA Groundwater Sustainability Agencies (GSA) have until 2040 to bring SVGB aquifers to a healthy sustainable condition, which SVGB subbasin plan

and implementation committees are charged to accomplish. MPWSP seriously impedes this SGMA commission.

Tenth, the MPWSP will not be operational in 2050, but, ignoring this fact, the CPUC projected an inaccurate water supply vs. demand, falsely claiming there will be a demand deficit of approximately 2,850 acre feet per year (afy) by 2050. CalAm convinced the CPUC it will have to approve the MPSWP because our public water agencies will fail to have sufficient water supply in 2050, despite all the creative and successful water innovations so far accomplished by our local public water agencies that are responsible to the people, not to corporate shareholders. The CPUC also ignored the official water supply vs demand statistics provided by the

AMBAG report as well as the analysis conducted by our public water agencies.

The hard-cold fact: if the MPWSP proceeds, there will be a ZERO WATER SUPPLY available in 2050! To their great credit, our public water agencies upend this tragedy with their nationally acclaimed, award-winning recycled water projects and technological advances to enable capturing storm water run-off for aquifer replenishment and storage. Due to their rapid responsiveness there will be an ample water supply in 2050 to preclude any shortages even during drought years.

Eleventh, the State Lands Commission is a signatory to the Consent Agreement with City of Marina, CEMEX, and CalAm. This Agreement contains a

legal restriction that no further industrial development can be undertaken on this property. CalAm is applying for an industrial lease renewal to construct four additional slant wells at the CEMEX easement site. Because the purpose of these slant wells are explicitly connected to a desalination plant facility to be constructed outside the purview of the Coastal Commission and the State Lands Commission jurisdictions, the four slant wells must be considered as a “piecemeal” construction and part of this larger industrial complex whose sole purpose per CalAm’s EIR and its consultant’s (Hydro Focus) report that confirm these slant wells will by operational necessity be positioned directly over the 180/400 Foot SVGB aquifers. These aquifers are on the California Critically-over-drafted

Groundwater Basin List and are under SGMA mandate supervision to be brought to functional sustainability by 2040. By further endangering these threatened aquifers, the MPWSP impedes sustainability accomplishment, and in fact, exacerbates groundwater depletion and contamination by its massive groundwater over-pumping, that in turn increases sea level rise, an avoidable risk if the MPWSP lease renewal is denied.

For all the above reasons, this CalAm industrial lease renewal is seriously flawed and cannot be mitigated. The State Lands Commission should not subvert the legal provisions in either the Consent Agreement, SGMA mandates, state water code, the state constitution (Article X, sec 2), or pre-empt

pending Superior Court processing that is based on the voter-approved Measure J that legally supports a CalAm citizen buyout. The State Lands Commission has a statutory responsibility to uphold these legal conditions as well as abide by environmental justice for impacted communities. To jeopardize the well-being, and even survival, of these communities is unconscionable, regardless of political/financial pressures to do so.

Please let the State Land Commissioners know our public water agencies, MCWD, MPWMD, M1W, are outstanding water stewards. They, NOT CalAm, have innovated creative water projects to protect and preserve ample future water supply; whereas Cal seeks to devastate it to favor its MPWSP. The MPWSP hydro-geologist report, as well as a third-

party hydro-geologist analysis (Barbara Ford's geological slant well report), confirm these MPWSP slant wells must be situated over the very SVGB threatened aquifers that SGMA is working to restore, conserve and preserve, the 180/400 Foot aquifers; plus the MPWSP extracts Dune Sand aquifer fresh water, putting our water supply at grave risk of contamination and depletion.

In the final analysis, our communities strongly support and want our public water agencies to continue their outstanding work. They should not have to contend with CalAm's obstructive actions that only portend future calamity. Stand up to support them now to ensure by 2050 our water supply will not only be intact but thriving. Do not saddle water ratepayers with $billions more in

unsustainable water costs or inevitable water supply bankruptcy! This CalAm industrial lease renewal application is an existential threat to the survival of our communities.

Our communities require State Land Commission relief; the MPWSP should not be approved. We implore you, do not enable CalAm to perform a "piecemeal" end-run to avoid regulatory controls.

Thank you for your consideration of our water plight and for your due diligence.

Margaret-Anne Coppernoll, Ph.D.
Co-founder, Citizens for Just Water ("C4JW")
Marina, California
Email:

May 14, 2026

Memorandum of Public Comment for June 23, 2026 State Lands Commission Meeting

Attn: State Lands Commission Commissioners and Staff

Subject: Objection to Lease Request by California American Water Company

Dear Commissioners and Staff:

The California State Lands Commission announced that its June 23, 2026 meeting agenda will consider California American Water Company (CalAm)'s application for an industrial lease renewal for the CEMEX easement to construct four additional slant wells and convert the current temporary test slant well to a permanent one for its proposed desalination project, the Monterey Peninsula Water Supply Project (MPWSP). I hereby strongly object to the lease request because the project, with an astronomical price tag and LACK OF LEGAL ENTITLEMENTS AND INADEQUATE ENVIRONMENTAL ANALYSIS AND MITIGATION IDENTIFICATIONS, is doomed from the get-go. Here's why enabling MPWSP development is not a viable option:

First, its slant wells have no more than a twenty-five-year life-span that will be substantially shortened due to sea level rise and concomitant sand erosion, with no relocation site available. Would a wise investor knowingly invest billions of dollars in an illegal dud, a foreseen failure, certain bankruptcy? So why should the state become partner to an illegal and financially irresponsible project that only generates obscene profits for CalAm? In the evidentiary records that have been submitted to you, NASA has revealed that a ten-year research study found sea level rose 24 inches over the ten-year study period. A substantial cause? Groundwater over-pumping for drinking water and irrigation!

By 2050, sea level would rise 57-58 inches, or close to five feet. Thus, the slant wells would expire and not only be non-functional but also inundated by beach sand erosion, with no obtainable re-location space. These facts alone preclude approval of MPWSP's industrial lease renewal application. It would be financially irresponsible and morally wrong to allow CalAm to burden ratepayers with even more escalating water costs when CalAm's water supply operation expects inoperability even before 2050 due to environmental conditions (sea level rise) and slant well shortened life-span. The temporary test slant well has an even shorter life-span remaining.

Second, MPWSP does not have the requisite percolated overlying groundwater rights to complete its proposed project. CalAm's project is currently being challenged in the Superior Court in Monterey County. According to the State Water Resources Control Board (SWRCB) Final Referee Report dated June 25, 2025 that was ordered by the Superior Court and admitted into evidence, CalAm's proposed project will illegally pump groundwater from (and illegally induce seawater intrusion) beneath adjacent state protected, privately owned prime coastal farmland **in direct violation of California Water Code Sec.1010 (See PAGES 117-120 of the Referee's Report). Moreover, the SWRCB Referee acknowledged to the Superior Court that CalAm's proposed illegally taking of groundwater NECESSITATES a court imposed (yet currently unidentified) mitigation so as to eliminate the massive adverse environmental consequences of CalAm's project on innocent third party prime farmland owners. A supplemental EIR is required to be prepared pursuant to CEQA which identifies the mitigation for these massive adverse impacts identified by the SWRCB Referee before a lease can be even considered by the SLC, let alone be approved.** Direct testimony and documented evidence were already admitted in court showing that CalAm intended to pump groundwater from beneath adjacent private lands **in violation of California Water Code Section 1010** and without any contact to the innocent third party

property owners whose groundwater CalAm intends to illegally take**.** CalAm's wrongfully requested lease from the State Lands Commission is like a bank robber soliciting the Chief of Police to "hold his gun" while violating state law and stealing groundwater previously conserved by other land owners (pursuant to California Water Code Sec 1010) with senior overlying groundwater rights. CalAm's project will adversely impact over-drafted Salinas Valley Groundwater Basin aquifers because the 500 acre feet per year (afy) accorded the entire CEMEX property of approximately 450 acres cannot suffice to support the MPWSP planned massive daily aquifer extractions. The factual evidence in the records possessed by SLC staff proves that the MPWSP is not feasible and cannot be allowed to mar the beautiful and legally protected coastal habitat (ESHA) in favor of a high-cost eye sore, which the slant wells would constitute. Any industrial lease approval will have dire ramifications legally, financially, as well as ethically.

Third, MPWSP contravenes the legal mandates of the Sustainability Groundwater Management Act (SGMA) that require Salinas Valley Groundwater Basin (SVGB)'s critically over-drafted aquifers be replenished to healthy condition by 2040**,** whereas the MPWSP will illegally extract daily thousands of acre feet of aquifer water with its slant wells. The severely over-drafted basin has been specifically identified by the state legislature, according to over 100 years of California water rights law. CalAm, as a "junior appropriator", has no groundwater rights and is expressly prohibited from acquiring any groundwater rights until the over-draft of the basin is actually cured.

Fourth, California Coastal Commission's MPWSP twenty conditional approval requirements cannot be fulfilled due to the dearth of water rights, incomplete, unattainable permit certifications, grave environmental justice issues, and sensitive habitat and esthetic issues. City of Marina denied MPWSP's permit application for all these reasons, and more. Disrespecting the City of Marina's decision, as well as its

Local Coastal Plan (LCP), has already produced negative repercussions costing the city millions of dollars in litigation defending its potable water supply from CalAm's water grab, money sorely needed for police and fire support. Marina is a designated disadvantaged city, already home to other industrial enterprises in addition to mandates to rid the former Fort Ord of WWII military training ordinance and asbestos-ridden soldier barracks. Can the SLC ethically justify replacing one expelled environmentally damaging industrial operation, the CEMEX sand mining, with another even more harmful one? Obviously, this would be unjust. One exported sand out of the area while the other, CalAm, intends to export aquifer water out of the area.

Fifth, the exorbitant cost. With only one test slant well to date, the MPWSP has spent more than $245 million, while CalAm water rates skyrocket, being the highest in the nation. CalAm's Coastal Development Foundation conceals costs while exposing nefarious goals. Already homelessness is increasing due in large part to unaffordable water rates, yet CalAm is requesting CPUC approval for even higher water rate charges and surcharges. Its MPWSP will cost in the $billions, a very bad investment given MPWSP's preordained untimely extinction due to sea level rise, beach sand erosion, and shortened slant well life.

Sixth, citizens vehemently oppose the MPWSP not only for the unaffordable cost, but also for CalAm's history of deceptive, manipulative, and malevolent business practices that countermand righteous societal conduct. Its abrupt withdrawal from the regional desalination project to assert its own sinister plot to displace Marina's water purveyor while illegally exporting endangered aquifer water out of the SVGB, leaving Marina without a single drop of its own water, is unthinkable, untenable! CalAm audaciously wants Marina to purchase back its own water, if any is available after it supplies the Monterey Peninsula's water needs. SGMA, the Agency Act, and water code regulations preclude this aquifer water exportation out of the SVGB.

Seventh, Monterey Peninsula citizens overwhelmingly voted for Measure J to buyout CalAm, which is now proceeding through Monterey Superior Court, putting MPWSP on shaky ground, so risking all the environmental, financial and water supply consequences of lease approval would be a disastrous mistake, from our perspective.

Eighth, CalAm's disruptive tactics, mendacious statements, and malevolent goals continue to create chaos and division throughout our communities, using fear mongering and corporate political influence, fueled by greed, as manipulative tools deployed to accomplish its unjust goals. Skirting California Coastal Commission (CCC) oversight, the MPWSP's physical desalination plant will operate outside CCC jurisdiction. The MPWSP "piecemeal" development sanctions a disguised stealthy invasion of Marina Coast Water District's water supply, while harming senior overlying water rights owners. The MPWSP would no longer be required to fulfill the CCC's twenty conditions imposed on CalAm for a coastal development permit (CDP) because the actual desalination plant facility will be built outside the purview and jurisdiction of both the SLC and the CCC.

Ninth, if MPWSP continues, SVGB aquifers will be irretrievably over-drafted and seawater intruded, triggering penalties and state supervision of our water supply per SGMA mandates. SGMA Groundwater Sustainability Agencies (GSA) have until 2040 to bring SVGB aquifers to a healthy sustainable condition, which SVGB subbasin plan and implementation committees are charged to accomplish.

MPWSP seriously impedes this SGMA commission.

Tenth, the MPWSP will not be operational in 2050, but unfortunately ignoring this fact, the CPUC projected an inaccurate 2050 water supply vs. demand estimate, falsely claiming there will be a demand deficit of approximately 2,850 acre feet per year (afy) by 2050. CalAm convinced the CPUC it will have to approve the MPWSP because our public water agencies will fail to have sufficient water supply in 2050, despite all the

creative and successful water innovations so far accomplished by our local public water agencies that are responsible to the people, not to corporate shareholders. The CPUC also ignored the official water supply vs demand statistics provided by their own Public Advocates Office (PAO) and the AMBAG annual growth report, as well as the analysis conducted by our public water agencies, who cannot be disingenuous in their analytic reporting in a public forum. The statistics forecast of all these agencies determined with analogous estimates that there will be sufficient, even surplus, water supply to meet 2050 demand, underscoring the community outcry to deny the MPWSP.

Eleventh, the State Lands Commission is a signatory to the Consent Agreement with City of Marina, CEMEX, and CalAm. This Agreement contains a legal restriction that no further industrial development can be undertaken on this property. CalAm is applying for an industrial lease renewal to construct four additional slant wells at the CEMEX easement site. Because the purpose of these slant wells is explicitly connected to a desalination plant facility to be constructed outside the purview of the Coastal Commission and the State Lands Commission jurisdictions, the four slant wells must be considered as "piecemeal" construction and part of this larger industrial complex whose sole purpose per CalAm's EIR and its consultant's (Hydro Focus) reports that confirm these slant wells will by operational necessity be positioned directly over the 180/400 Foot SVGB Aquifers and the freshwater Dune Sand Aquifers. The 180/400 Foot Aquifers are on the California Critically over-drafted Groundwater Basin List and are under SGMA mandate supervision to be brought to functional sustainability by 2040. By further endangering these threatened aquifers, the MPWSP impedes sustainability accomplishment, and in fact, exacerbates groundwater depletion and contamination by its massive groundwater over-pumping, that in turn increases sea level rise, an avoidable risk if the MPWSP lease renewal is denied.

For all the above reasons, this CalAm industrial lease renewal is seriously flawed and cannot be mitigated. The State Lands Commission should not subvert the legal provisions in either the CEMEX Consent Agreement, SGMA mandates, state water code, the state constitution (Article X, sec 2), or pre-empt pending Monterey Superior Court processing that is based on the voter-approved Measure J that legally supports a CalAm citizen buyout. The State Lands Commission has a statutory responsibility to uphold these legal conditions as well as abide by environmental justice for impacted communities. To jeopardize the well-being, and even survival, of our communities is unconscionable and reprehensible, regardless of political/financial pressures to do so.

The State Land Commission needs to acknowledge that our public water agencies, MCWD, MPWMD, M1W, are outstanding water stewards. They, NOT CalAm, have innovated creative water projects to protect and preserve ample future water supply; whereas CalAm seeks to commandeer our water supply in order to favor the MPWSP. The MPWSP hydro-geologist report, as well as a third-party hydro-geologist analysis (Barbara Ford's hydro-geological slant well analysis report), confirm these MPWSP slant wells must be situated over the very SVGB threatened aquifers that SGMA is working to restore, conserve and preserve, the 180/400 Foot Aquifers; plus, the MPWSP extracts Dune Sand aquifer's fresh (not brackish/seawater intruded) water, putting our water supply at grave risk of contamination and depletion.

In the final analysis, our communities strongly support and want our public water agencies to continue their outstanding work. They should not have to contend with CalAm's obstructive actions that only portend future calamity. Stand up to support them now to ensure by 2050 our water supply will not only be intact but thriving. Do not saddle water ratepayers with $billions more in unsustainable water costs or inevitable water supply bankruptcy! This CalAm industrial lease renewal application is an existential threat to the survival of our communities.

Conclusion: The hard-cold fact is: if the MPWSP proceeds, there will be a ZERO WATER SUPPLY available in 2050! To their great credit, our public water agencies upend this tragedy with their nationally acclaimed, award-winning recycled water projects and technological advances to enable capturing storm water run-off for aquifer replenishment and storage. Due to their rapid responsiveness, there will be an ample water supply in 2050 to preclude any shortages even during drought years.

***By granting industrial lease renewal for four additional slant wells for the MPWSP, which would be equivalent to giving the "green light go-ahead" for the <u>entire MPWSP</u> (5 CEMEX slant wells + desalination plant facility lying outside coastal permit jurisdiction), is a terrible, underhanded, and grossly unfair action, and unspeakably detrimental to the City of Marina which cannot sustain such a profound harm. Upholding this "piecemeal" development is not in concert with Coastal Act stipulations, per my understanding, and is thus not permittable.**

Our communities require State Land Commission relief. The MPWSP lease application currently requested by CalAm should not be approved. We implore you, do not enable CalAm to perform a "piecemeal" end-run to avoid regulatory controls and CEQA mandates. Although the SLC is fulfilling its statutory duty by holding this hearing on CalAm's application for an industrial lease renewal to install four additional slant wells, the SLC has no legal requirement to approve this lease renewal for the MPWSP. We urgently request you deny this application for the irrefutable reasons herein explained.

Thank you for your serious consideration of our water plight, and for your due diligence and good will in supporting the interest of We the People, who stand for truth and honor.

Very respectfully,

s/ Margaret-Anne Coppernoll

Margaret-Anne Coppernoll, Ph.D.
Co-founder, Citizens for Just Water (“C4JW”)
Marina, California
Email:

May 18, 2026

Addendum to Memorandum for Public Comment for State Lands Commission Meeting, June 23, 2026

The following information provides additional details not fully elucidated in the original Memorandum for Public Comment:

1. Dr. Rosemary Knight's team from Stanford University conducted a seawater intrusion research study on our beaches. Dr. Knight requested permission to survey the area of CalAm's test slant well. CalAm refused. Later, with more advanced research technology, Marina Coast Water District employed Aerial Electro-Magnetic (AEM) technology administered by helicopter, replicating Dr. Knight's earlier use of AEM, to reveal the extensive amount of seawater intrusion in the affected groundwater aquifers, namely the 180/400 Foot and Monterey Subbasin Aquifers. CalAm insists on steamrolling its MPWSP to completion no matter the cost to our communities or its ratepayers. To date, CalAm has expended $245,300,000 on its one test slant well. CalAm established a Coastal Development Fund as more proof of its intention to develop our coastal region in support of its MPWSP, despite all community objections and the highly productive new recycled water supplies that our public water agencies created, and which garnered national acclaim and awards for this engineering feat; this recycled water project was designated the national role-model for recycled water projects. When the City of Marina denied a MPWSP permit for its test slant well, CalAm sued the City of Marina. CalAm also sued Marina Coast Water District. To date, the City of Marina has spent approximately $4 million in litigation to defend its water rights and water supply for our communities. The State Lands Commission (SLC) granted CalAm a lease to install its MPWSP test slant well. The SLC renewed that lease despite serious objections from our community, claiming the lease is noncontroversial. As a result of these SLC lease approvals, all our communities have suffered enormous anxiety and expense for an extended period of time over this existential threat to our existence, as water is a

survival necessity without which life expires and agriculture crops do not thrive. This is the reason our communities seek State Lands Commission relief from this pending tragedy the SLC enabled to our great detriment.

2. The MPWSP also has the potential to harm the fish nesting areas in the Monterey Bay National Marine Sanctuary, especially affecting squid eggs. This area depends upon the water seep from the 180/400 Foot Aquifers as fish nesting areas cannot tolerate brine and will perish in a top-heavy brine environment. Protection is required not only for fish survival, but also for our local fisheries and restaurants whose livelihoods depend on the protection and production of fish resources. Any disruption can have grave economic impacts for our communities' food supply.

3. It is reprehensible that the State Lands Commission (SLC) has been enabling CalAm to proceed in piecemeal fashion to achieve a successful "taking" of water it has no right to take. The SLC is one of the agencies tasked to ensure this illegal "taking" of our groundwater does not occur. Instead, SLC has been the major enabler from the very beginning. The SLC did not do its due diligence; it ignored the community warnings and well-researched inputs on the ramifications of approving a lease under its purview that not only violated the Consent Agreement it signed to rid our area of the environmental hazard that was the CEMEX sandmining operation, but continued to violate the Consent Agreement by replacing the sandmining operation with an even more harmful industrial development, the MPWSP! For your information, the CEMEX sandmining business exported our communities' sand to Southern California for sell to foreign countries, which caused beach erosion so severe even Malibu homes collapsed. As stated in my public comment, the MPWSP is significantly even more injurious as it will completely drain/deplete our communities' potable water supply while depriving innocent private farmland owners of their livelihoods the aquifers sustain. Where is the SLC's moral compass in disregarding all the communities' objections and warnings? Any lease renewal that allows more industrial development at the CEMEX easement site is surely illegal and contrary to all our local coastal plans and solid, responsible potable water stewardship.

4. The MPWSP is a response to the State Water Resources Control Board (SWRCB) Cease-and-Desist Order (CDO) that required CalAm to cease its over pumping of the Carmel River. Local residents were up in arms because the over pumping caused a near depletion of the protected steelhead trout. The steelhead trout population is now thriving thanks to our public water agency, MPWMD, and its very successful spawning program to revive the steelhead trout. This is an enormous accomplishment, with ZERO thanks to CalAm. The CDO required CalAm to develop an alternate water supply source. IT DID NOT! Instead CalAm did all it could to prevent another water supply source developing in order to ensure its MPWSP could prosper. CalAm obstructed all possible alternative water supply projects developed by our public water agencies in order to push forward its surreptitious plan to displace our local public water agency, Marina Coast Water District (MCWD), and derail the innovative recycled water projects our public water agencies created and have finalized to ensure secure future water supply for all our communities. CalAm, a defiant water monopoly on the Monterey Peninsula, has been salivating at the prospect of expanding its monopoly by denigrating and obstructing the new water supplies developed by our local public water supply agencies as well as defeat the voter-approved buyout won by Measure J, that is now proceeding through Monterey County Superior Court

   SLC must not enable CalAm in its drive to deprive Marina's community of its vital water supply. The Ag Land Trust is a highly valued part of our community and has suffered much, like our City of Marina and the Monterey Peninsula residents, from the underhanded machinations CalAm has perpetrated on us for decades.

   As examples of CalAm's obstructive actions, I highlight the following:

a. CalAm refused to sign a water purchase agreement for M1W's and MPWMD's newly created recycled water supply project and caused a two-year delay in the Supplemental EIR for the new water supplies, at an additional cost to ratepayers of $250,000.

b. CalAm engages in mendacious statements to deceive and disrupt any opposition to its MPWSP, which is not a feasible Carmel River replacement. In fact, CalAm, in addition to severely over pumping the Carmel River, proceeded to do the same to the Seaside Basin causing Seaside Basin Court Adjudication to further restrict CalAm's over pumping that water resource. CalAm also used an injection well needed for replenishment of the Seaside Basin Aquifer Storage and Replenishment (ASR) project as an extraction well, thereby obstructing replenishment of the adjudicated aquifer, another tactic employed to promote its MPWSP.

c. CalAm plans to construct water conveyance pipelines extending approximately eighteen miles from its MPWSP site in north Marina all the way to the Monterey Peninsula in order to supply water to its Monterey Peninsula ratepayers, all at the expense of Marina, the Ag Land Trust, and other senior overlying water rights owners in the Salinas Valley Groundwater Basin. In other words, the same aquifer over pumping CalAm used against the Carmel River and the Seaside Basin, CalAm now intends to replicate for even worse aquifer devastation to the SVGB. Why doesn't CalAm establish its desalination plant in Carmel, closer to its ratepayers? Why in Marina so far away? Is this a sage action? Answer: No, it is water theft and profiteering from expanding development on the Former Fort Ord, a prize win that CalAm can arrogantly claim it "found the alternate water supply to fulfill the Cease-and-Desist Order (CDO) requirement, while discrediting the phenomenal achievements in water supply technology our public water agencies accomplished and continue to refine.

Caveat: CalAm malevolently intends to shipwreck our communities while it literally "takes" our entire potable water supply to export it to the Monterey Peninsula. **Not a viable water solution: once the MPWSP literally "takes" all of Marina Coast Water District's groundwater supply, our communities will be in an unsustainable situation because the SVGB is over-drafted and does not have any surplus groundwater available. CalAm's water grab would be a major catastrophe.**

Additionally, the MPWSP will wreak havoc on our city streets while disturbing our protected ESHA with the flow of heavy vehicle construction traffic and street and railroad upheaval, not to mention parking congestion in shopping areas the MPWSP plans to use for its heavy vehicles.

d. With its MPWSP, CalAm intends to totally decimate the Salinas Valley Groundwater Basin that is already in an over-drafted condition and under state mandate to bring these threatened aquifers to a healthy condition. Now under Sustainable Groundwater Management Act of 2014 (SGMA) state mandate and supervision, these aquifers are under political and financial threat as CalAm has enhanced its lobbying pay-to-play power not seen previously with the Carmel River CDO.

e. In addition to violating Marina's Local Coastal Plan, the MPWSP goes against the Coastal Zone Act Sec.30231 riparian habitats clause as well as the California Constitution, Article 10, Sec 2: all aquifer water must be put to beneficial use. CalAm's experimental slant well has, since inception, been extracting aquifer water only to allow it to flow out to sea without any beneficial use, adding to the over-drafted condition of the SVGB aquifers. Even if CalAm paid CEMEX a substantial fee to obtain usage of the 500-acre feet per year (afy) accorded the CEMEX property (approximately 450 acres of land), CalAm does not have a required permit from the City of Marina or the California Coastal Commission (CCC). Moreover, pursuant to the California law of groundwater rights, the 500-acre feet may not be used "off-site" from the CEMEX property because in an over-drafted basin, groundwater rights may not be taken by a junior appropriator for any new, off-site consumptive use.

Another example of CalAm's mendacity is the distortion of its reference to "ocean" water. "Brackish" water the MPWSP takes from the 180/400 Foot Aquifer is a combination of fresh aquifer water and seawater-intruded water. CalAm claims this "brackish" water is "ocean water" since "brackish" water contains ocean water, thus the seawater-intruded condition of the aquifers. But to be absolutely clear, "brackish" aquifer water is not ocean water, which is proven by their different chemical composition. To confuse regulators, CalAm cunningly claims this seawater-intruded water is ocean water, as ocean water does not require water rights. Also, CalAm moves on maps the location of its projected slant wells to confuse the source of its MPWSP, to imply it will be taking ocean water. It must be noted that the MPWSP test slant well also takes water from the freshwater aquifers, the Dune Sands Aquifers. CalAm initially attempted to extend its pipeline farther out to sea, but due to engineering failures and geological obstacles, abandoned this approach, thus their requirement to extract aquifer water from the 180/400 and Dune Sands Aquifers.

Furthermore, CalAm must show evidence that it in fact obtained, with its easement, the 500 acre feet per year (afy) of water rights belonging to CEMEX, or what portion it acquired, if not the entire 500 afy.

Per the Consent Agreement, the CEMEX property must be sold to an approved non-profit, so CalAm is not on solid ground except that CalAm secured its easement intact and has since obtained a permanent easement. The magnified exorbitant cost of the easement purchase, now permanent, along with any additional slant wells and desalination facility, will be passed onto the ratepayers if the MPWSP is allowed to proceed. CalAm should not continue without proper EIR certification or permits from concerned governing bodies. Notwithstanding, CalAm has boasted that it has "broken ground" for its MPWSP physical plant on land outside permitting jurisdictions. CalAm has, through deception, persuaded the CPUC to believe its false claims, contrary to its EIR, which stipulated the MPWSP would take water from the Dune Sands and 180/400 Foot Aquifers. Further CEQA requirements must be honored.

The California Coastal Commission (CCC) imposed a twenty conditions fulfillment requirement for the MPWSP's application for a Coastal Development Permit (CDP) to obtain final permit approval. The CCC's conditional approval prohibits CalAm from extracting any additional aquifer water beyond that required for upkeep for test slant well maintenance, so any SLC lease that accords permission to construct four additional slant wells would be pre-mature and illegal. Constructing four additional slant wells whose purpose is to extract aquifer water, not ocean water as CalAm mendaciously claims, but its EIR contradicts, would violate the CCC's conditional CDP, in addition to all the other California water rights law, Monterey County Agency Act, Coastal Act, and local coastal plan stipulations and restrictions, which the State Lands Commission statutorily must enforce.

Conclusively, the MPWSP is a consummate catastrophic project that should absolutely be rejected due to all the environmental injustice issues and legal impediments to approval. The City of Marina, the Ag Land Trust, Marina Coast Water District, Monterey Peninsula Water Management District, Monterey One Water, and all our MPWSP impacted community members, SVGB senior overlying water rights owners, and private innocent farmland owners deserve

environmental justice and preservation of their constitutional rights. The SLC has a humanitarian and statutory responsibility to deliver this relief, for which all of us will be profoundly grateful.

Respectfully submitted:

s/Margaret-Anne Coppernoll

Margaret-Anne Coppernoll, Ph.D.
Co-founder, Citizens for Just Water ("C4JW")
Marina, California

Chief Counsel Seth Blackmon Meeting, June 3, 2026

May I begin with a brief synopsis of who we are and the crisis issue we are facing?

As a way of background, I have grounding in legal matters due to my Master's Degree from the Fletcher School of Law and Diplomacy at Tufts University; My Ph.D. is from the University of Southern California. I have taken an oath to defend our constitution both as a military officer and an elected public official. I served as an Assistant Professor in the Foreign Language Department at the U.S. Military Academy at West Point, and also served in joint force assignments with the US Navy and US Air Force. I helped co-found Citizens for Just Water so our community could have a focused voice in this long water war we have been waging with CalAm since 2012.

Marc del Piero is an attorney and the most highly qualified water law and Public Trust Doctrine expert in our county. He served on the Monterey County Board of Supervisors and the State Water Resources Control Board, and has taught California water law for many years. He currently serves as the CEO and Managing Director of the Ag Land Trust.

Our communities have been submerged by exploitation, environmental injustice and unlawful activity for a long time. CalAm is like a Sherman tank bulldozing its way into our water

supply. We are blessed, and grateful, to have this opportunity to brief you on the crisis we are facing. We are counting on your good will and intelligence to help us resolve this crisis with a positive outcome.

First, the City of Marina filed a nuisance action against the CEMEX sandmining operation because it had for decades been exporting our beach sand out of the area, with no benefit locally, and selling the sand to foreign countries. The erosion was so severe it caused houses as far south as Malibu to collapse.

Second, the CEMEX Consent Agreement signed by the CCC, City of Marina, CEMEX and the SLC closed this sandmining operation. The Agreement allowed CalAm to keep its easement and test slant well on this property. CalAm had applied to the City of Marina for a permit to install its test slant well at the CEMEX property, but was denied. CalAm then sued the city. The city did not want to replace one harmful industrial operation with another one even more harmful, yet CalAm applied to the SLC which granted the easement lease for the test slant well and later renewed that lease for an additional five years, despite our objections. The SLC granted this lease even though it was not in line with the City of Marina's Local Coastal Plan or the city's permit denial. In addition to the longstanding sandmining operation, Marina

has had to cope with a landfill dump, recycled water plant, Former Fort Ord WWII military training ordinance clean-up, and asbestos ridden barracks removal to manage. Marina was finally able to close down the sandmining industry only to find the SLC enabling another unwanted industrial blight on our city, truly an environmental injustice.

<u>Third</u>, I focus on the CEMEX Consent Agreement because it contains a prohibition clause that no industrial development is allowed post signature, with the only exception being construction for conservation, recreation, or education purposes. Calam's current industrial lease application is in contravention of this Agreement. CalAm hopes the SLC will approve its application as a way to preempt current Monterey Superior Court pending court decisions, which comprise: 1) the voter approved eminent domain action to buyout Calam, and 2) the water rights issue re CalAm's MPWSP, which should have been addressed in the very beginning. That would have saved years of consternation.

<u>Fourth</u>, CalAm cannot fulfill the CCC's twenty conditions because it cannot obtain the required permits for its MPWSP. The SWRCB's recent report confirmed CalAm does not have the water rights needed for its project, as well as confirmed evidence proving that CalAm intends to take water belonging to private farmland owners without their knowledge. SWRCB

issued a CDO to CalAm to stop its illegal over pumping of the Carmer River. Later the Seaside Basin underwent court adjudication because CalAm was over pumping that aquifer. The CEMEX Consent Agreement cannot be contravened without the consent of all signatory parties. The SLC did not respect the City of Marina's Local Coastal Plan or its CalAm permit denial. Thus, the City of Marina had to agree to allow CalAm's easement and test slant well to be protected, as covered in the Agreement. Nevertheless, the SLC now in turn must honor the Agreement's legal stipulation that no further industrial development can proceed on the property. This means CalAm's industrial application to install four additional slant wells and convert the test slant well to a permanent one would, if approved, violate this Agreement. CEMEX has an interest in CalAm's lease since it approved its easement and receives substantial payments for that easement as well as any water rights it may have obtained with the easement. We do not know how much of the 500-acre feet per year of water rights CalAm was granted with its easement. CEMEX, a Mexican owned company, only has 500-acre feet per year for the entire 450 plus acres it owns. The property must be sold to an approved nonprofit so CalAm cannot purchase the entire property, thus the restricted easement.

We are requesting, imploring, the SLC to deny this new CalAm illegal industrial lease application or postpone any

consideration of it until after the Monterey Superior Court makes its decisions. It makes no logical sense to do otherwise. To decouple the purpose of these slant wells and their practical intended use from the application process goes against the Agreement as well. The purpose for any future industrial construction is explicitly stated as being restricted to conservation, recreation, or education exclusively. Slant wells pump aquifer water, and water rights are integral to that pumping and must be taken into consideration, not declared "not within our jurisdiction". SLC did not state conservation, recreation or education purposes are not within its jurisdiction. Thus, we can imply that purpose is within the SLC's jurisdiction. To re-emphasize, the purpose of the CalAm slant wells is to pump aquifer water, for which water rights are legally required. CalAm's EIR and its hydrogeological report from consultant, Hydro Focus, confirm CalAm's slant wells pump aquifer water, namely the 180/400 Foot Aquifers and the Dune Sands Aquifers. These slant wells would constitute a piecemeal action as the slant wells are integral to the whole desalination facility. While this facility lies outside the jurisdictions of both the CCC and the SLC, approving the slant wells implies piecemeal approval of the entire project. CalAm falsely claims it extracts ocean water because ocean water does not require water rights. The so-called "ocean water" is actually a component of seawater intruded aquifer water,

referred to as brackish water. Confusing the two confuses the listener who, if not informed, believes the falsehood. To clarify, aquifer water that is defined as seawater intruded contains ocean water mixed in with the aquifer water. Ocean water has a different chemical composition than the seawater intruded aquifer water. CalAm's slant wells, by engineering design, induce seawater intrusion, making them totally unacceptable.

<u>Fifth</u>, CalAm established a Coastal Development Foundation, indicating its intentions, and has expended more than $245 million on just one test slant well, a cost it hopes to add to the cost of its desalination plant so it can claim the total as a way to make the eminent domain buyout too high a price for the MPWMD to afford.

The Agreement stipulations must be honored. CalAm's industrial lease application is not legal, CalAm knows it, but hopes to hoodwink the SLC in order to preempt the Superior Court actions and to increase to the maximum the cost of the eminent domain CalAm buyout, which is now proceeding through court via voter approved Measure J. CalAm has cost the City of Marina $20 million so far in legal costs defending its water supply against this CalAm water grab. CalAm expends ratepayer funds on litigation, political lobbying efforts, and PR propaganda against us, not to mention its fear mongering and

constant false statements and advertising. CalAm sees its ratepayers as a lucrative cash cow that enriches its shareholders, while exhibiting little regard for the public interest.

<u>Lastly</u>, our communities have suffered more than enough and deserve environmental justice and fairness in legal enforcement of our constitutional rights. The SLC should not be acting against our Local Coastal Plan or enabling a water monopoly that has no jurisdiction in our community; it should not allow CalAm to invade and usurp our water that is already on the California critically over drafted groundwater basin list and under SGMA management. CalAm only seeks to harm us and contributes only obstruction and anxiety to our society, which is the reason the Monterey Peninsula voters voted for the eminent domain buyout of CalAm. We need relief and request this relief from the SLC, for which we will have immense gratitude.

SLC Meeting, June 16, 2026, 11-12 (SLC Executive Officer, Dr. Matthew Dumlao; Chief Counsel, Seth Blackmon; Grace Kato, Assistant Executive Officer; Senior Attorney, Lucinda Calvo; Drew Simpkin, Land Management; Attorney Marc del Piero, CEO, Ag Land Trust; Dr. Margaret-Anne Coppernoll, Co-Founder, Citizens for Just Water

We thank you for this team effort to hear our inputs. We, as We The People taxpayers, appreciate those we support financially to take seriously our concerns for our communities. You have a fiduciary responsibility to our humanity, while we work to inform you to ensure wisdom and knowledge in the decision-making process. We respect you immensely for this show of teamwork and responsible stewardship. Bravissimo!

As I explained to Chief Counsel Blackmon, our main issue, CalAm's water exploitation, began as a mole hill, expanded into a huge mountain, but now is more like an erupting volcano, thus the imperative urgency to meet with you.

Marc del Piero and I would like to provide an overview of our situation and answer any questions you may have.

The reasons we object to CalAm's industrial lease application are based on environmental justice, legal issues, and most importantly, human rights survival issues.

First, the Consent Cease and Desist Settlement Agreement of August 2017, was initiated primarily for **environmental justice issues**:

A) to rid our community of an industrial nuisance that caused severe beach erosion and the exporting of our sand for sale to foreign countries, with no benefit locally;
B) to preserve ESHA, open space, and public beach access;
C) to prohibit future industrial development that exploits our natural coastal resources;
D) to enforce City of Marina's Local Coastal Plan and its Permit denying CalAm's installation of additional experimental slant wells;
E) Marina, a designated disadvantaged community, is already burdened with industrial enterprises such as the landfill dump, Monterey One Water Sewer Facility, WWII former Fort Ord military training ordinance clean-up and asbestos-ridden soldier barracks removal;
F) Our communities do not want to replace the sandmining operation with an even more environmentally harmful seawater intrusion inducing desalination project with its heavy vehicle traffic and street upheavals to install water conveyance pipelines over an 18-mile distance. Why not Carmel, Monterey or Seaside? Why Marina? CalAm, consumed with avaricious ambition, wants our SVGB aquifers, which are already in a critically over-drafted condition.

Second, **legal Issues**: CalAm knew, prior to the current industrial lease application, that its Project, the MPWSP, does not qualify for approval, but CalAm persists because it needs to recoup the more than $245 million already spent on just one

slant well, political pay-to-play maneuvers, and unprovoked lawsuits.

1. CalAm applied to the SLC for its General Lease to install an experimental test slant well after the City of Marina denied CalAm a permit, for which CalAm sued the City of Marina for enforcing its Local Coastal Plan. To date the City has expended $20 million defending its water supply from CalAm's water grab encroachment, as there have been numerous legal attempts to assert its rights, such as the City of Marina v. Lone Star et al case, CPUC Proceedings, Coastal Commission hearings, CEMEX Cease and Desist Consent Settlement Agreement, plus other agency hearings and court litigation.

CalAm knew its 4.8 mgd smaller project did not have CPUC EIR certification. CalAm did not apply for EIR certification, or conduct an EIR as required by CEQA, because the CPUC had years earlier dismissed the 4.8 mgd as being infeasible, cost ineffective, and potentially even more ESHA harmful than the larger 6.4 mgd version due to later phasing disruptions.

2. CalAm knew it does not have water rights for its MPWSP. Its EIR, chapter 2, clearly stated CalAm must prove it has source water for its MPWSP, or the project will be dismantled. The SWRCB in its AHO Referee Report confirmed CalAm does not have sufficient water rights for its MPWSP, which CalAm knew because CEMEX only has 500-Acre Feet per year for its entire 450 acreage, not

nearly enough to legally extract CalAm's planned 55,000 gallons per day.

3. CalAm knew the CEMEX Consent Agreement precludes any further industrial development on the CEMEX property post Agreement signing, per Public Resource Code 30106. The Agreement only preserved the easement and the test slant well, but prohibited further industrial development.
4. CalAm knew the Sustainable Groundwater Management Act of 2014, or SGMA, mandates the Salinas Valley Basin's critically over-drafted aquifers be restored to sustainable healthy condition by 2040. CalAm knew its desalination project contradicts this mandate and even inhibits its success. Marina Coast Water District is a certified Groundwater Sustainability Agency (GSA) under SGMA. CalAm is not.

   Significant new information establishes that CalAm's desal project will cause seawater intrusion across multiple aquifer layers, substantiating that the MPWSP's groundwater impacts are substantially more severe than previously divulged in either the Coastal Commission's or the CPUC's environmental reviews. SGMA defines significant and unreasonable conditions that Groundwater Sustainability Agencies are legally required to avoid as impacts beyond specified thresholds: these impacts are defined as "undesirable results," per Monterey Subbasin Groundwater Sustainability Agency reports. **Because CalAm's Project would exceed thresholds that are legally**

required to be upheld, creating undesirable results, CalAm's industrial application must be rejected.

5. CalAm knew its slant wells are engineered to induce seawater intrusion that impairs groundwater quality and degrades quantity, with concomitant effects of impeding groundwater storage and recharge endeavors.
6. CalAm knew its sinister plot to export Marina's potable water supply outside the Salinas Valley Basin would leave Marina without a single drop of its own water while violating the Agency Act, California Water Code 1010, and SGMA mandates.
7. CalAm knew it was misleading the SLC when it stated on its industrial lease application that it would be extracting ocean water. CalAm's hydrogeologist, Hydro Focus, confirmed the slant wells must be positioned over the SVGB aquifers, namely the 180/400-Foot and Dune Sand Aquifers, and that they are designed to induce seawater intrusion. Independent hydrogeologist, Barbara Ford, confirmed in her analysis that slant wells are engineered to induce seawater intrusion.
8. CalAm knew its project requires Monterey One Water's outfall pipe be modified to accommodate constant brine flow, which puts at risk fish egg nesting areas in the Monterey Bay National Marine Sanctuary where aquifer water seeps down to dilute brine. Fish eggs cannot survive a heavy brine environment. This situation risks

endangering the fish industry economy such as fisheries, restaurants, etc.

9. CalAm knew its slant wells only have a twenty-five year life-span with no re-location site available. According to a NASA published research study on sea level rise, sea levels rose twenty-four inches over the ten-year period of the scientific study. This means by 2050, the slant wells will be inundated by sand due to an approximate sea level rise close to five feet. CalAm's project would be completely inoperable, leaving an eye-sore blight with no functionality but an exorbitant price tag for ratepayers.
10. CalAm knew CEQA frowns on project piecemealing, an undertaking CalAm engages in as a way to circumvent SLC and CCC jurisdictions and avoid regulatory scrutiny for its desal facility.
11. CalAm continues to falsely claim its project is necessary due to a Monterey Peninsula water shortage. With the nationally acclaimed innovative recycled water project and its Expansion fully operational, the Monterey Peninsula not only has an ample water supply, but additionally has a surplus in its Seaside Basin Aquifer Storage and Recovery (ASR).
12. CalAm knew its ratepayers suffer from the highest water rates in the nation, yet CalAm requested the CPUC approve a 25% rate increase. Unhappy ratepayers passed the voter-approved Measure J to proceed with eminent domain CalAm buyout. CalAm's charges and surcharges

for water ratepayers did not use due to their conservation efforts, and the continual obstruction of public water agencies' progress on creating new water supplies, propelled voters to take self-protective action.

The eminent domain CalAm buyout by public water agency, Monterey Peninsula Water Management District (MPWMD), was officially determined to be financially feasible and was court approved to move forward, with a final court hearing expected this Fall.

13. CalAm knew its MPWSP violates the California Constitution, the Agency Act, California Water Law, Marina's Local Coastal Plan, the Sustainable Groundwater Management Act of 2014, ESHA protection laws, and the CEMEX Consent Agreement signed by City of Marina, CEMEX, California Coastal Commission and State Lands Commission. CalAm knew it was arrogating water rights belonging to SVGB senior overlying water rights owners, without their consent or knowledge.

14. CalAm knew its slant well technology is unworkable and counter-productive. Alternative innovative, environmentally effective and efficient desal technology like Ocean Wells sub-ocean technology will supersede this doomed experimental slant well technology.

15. CalAm knew it intended to surreptitiously usurp water from underneath private farmland without the farmers' knowledge, depriving farmers of the ability to grow their crops, thus impacting food abundance. This fact was

verified with evidence in the SWRCB Administrative Hearing Office Referee Report of the Board, which also concluded CalAm does not have requisite water rights for its Project.

16. **Legal Conclusion**: There is no legal justification or rational explanation for CalAm to solicit the approval of the SLC to drill groundwater wells on state lands except for the purpose of securing SLC cooperation and complicity in CalAm's intended illegal appropriation of groundwater from the severely over-drafted Salinas Valley Groundwater Basin. Form, purpose, and function cannot be separated; water rights are integral to, and required by law, for slant well aquifer pumping; therefore, because water rights, legally adjoined to legitimate slant well installation, fall outside the State Lands Commission's jurisdiction, according to its attorneys, the CalAm lease applications to install slant wells that are indisputably positioned over SVGB aquifers, also fall outside SLC jurisdiction and are, by logical deduction, NOT subject to SLC approval or consideration, and must be denied. CalAm's claim that its MPWSP extracts ocean water, which does not require water rights, is false, as proven in its own EIR and hydrogeologist's report. Making fraudulent claims to obtain SLC lease approval should also be grounds for lease application denial.

Third, Human Survival Rights Issues:

- Our communities have the human right to preserve our own water supply, to support our Groundwater Sustainability Agencies in their efforts to bring our threatened aquifers to sustainable healthy condition by 2040.
- We have a human right to protect our ESHA environment and our agricultural heritage sustained by the SVGB.
- Water is a human survival right. CalAm should not be allowed to export our water to another jurisdiction.
- Our community has a constitutional right to our own natural resources without avaricious monopolistic corporations invading our communities to exploit us.
- Our human rights come from God, our Creator, and cannot be usurped or expunged by malevolent forces.
- We are counting on you, the State Lands Commission, for the secure preservation of our human rights.

Very respectfully submitted,
Margaret-Anne Coppernoll, Ph.D.
Co-Founder, Citizens for Just Water (“C4JW”)
Marina, California

Archived: Thursday, June 18, 2026 6:58:13 AM
From:
Sent: Thursday, June 18, 2026 1:33:41 AM
To: Lunetta, Kim@SLC;
Cc: Marc Jeffrey Del Piero
Subject: SLC June 23 meeting
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Hello Kim,

I want to thank you for arranging the meeting with Executive Officer Dr. Matthew Dumlao and Chief Counsel Seth Blackmon. They are impressive, highly intelligent and personable leaders. Marc del Piero and I very much appreciated our consultation with them and hope we were able to provide valuable information for their consideration.

As I mentioned earlier, it has come to my attention that the staff memorandum announcing the CalAm agenda item #60 for the SLC June 23rd meeting was apparently written by a CalAm consultant. If true, it seems implausible, just as having the fox guard the hen house is ill-advised. I bring this to your attention because the implication that the CCC approved and the CPUC certified CalAm's project is not correct. The CCC imposed twenty conditions on CalAm's project before CDP conditional approval could be considered complete. The CPUC did not certify CalAm's project. In fact, the CPUC years ago dismissed this 4.8 mgd project, judging it to be infeasible and cost ineffective, and if enlarged, would be even more harmful to ESHA due to renewed habitat disruptions. It was the larger 6.4mgd that was CPUC certified with a CPCN, but later investigation found the larger size too expensive and over-sized for the water needs at the time, thus the CalAm size reduction. However, CalAm never submitted an EIR for this smaller sized project, required by CEQA, primarily because the CPUC had rejected this size project in the past.

As I explained in my meeting talking points, the CEMEX Cease and Desist Consent Agreement contains the Public Resource Code stipulation that no further industrial development is allowed on the CEMEX property post Agreement signing, which occurred in August 2017. CalAm knows its industrial lease application is not legal, not only for this Agreement's constraints, but also because its project directly contradicts the legal requirements of the state mandates in the Sustainable Groundwater Management Act of 2014, plus the City of Marina denied CalAm's permit application.

The SLC Commissioners rely on accurate information to make decisions that have widespread impacts. The SLC leadership depends on staff to provide well-researched material, which is the reason I bring this situation to your attention - truth and facts matter. If SLC Commissioners think the CalAm project was CPUC certified and CCC approved, they will naturally be inclined to also approve the project, despite strenuous community objections and all the CalAm violations of California Water Laws and disregard for our communities.

The Commissioners may not have time to read all the submitted written public comments before the meeting, and having only one minute for spoken public comment is not nearly sufficient time for the public to express their agenda item #60 viewpoints. The public good is paramount in wise decision-making, but can be overlooked due to the burden of way too much to consider in one meeting. Avoiding misinformation or distorted facts is imperative, as having truth and facts explicitly and honestly presented creates an atmosphere for sound decisions that respect the public interest.

I submit these observations in good faith, to the best of my understanding, and a desire to support truth and facts in the flow of public information. I salute the SLC leadership for their openness and open-heart willingness to learn and to receive inputs from constituents. May God bless you and the SLC leadership and staff for the great work you do for our communities statewide. It is an awesome responsibility. We applaud you and express our deep gratitude.

Very respectfully,
Margaret-Anne Coppernoll, Ph.D.
Co-founder, Citizens for Just Water ("C4JW")
Marina, California
email:

SHARTSIS FRIESE LLP
One Maritime Plaza ♦ Eighteenth Floor
San Francisco, California 94111-3598

Paul P. "Skip" Spaulding, III
SSpaulding@sflaw.com
(415) 773-7203
Fax: (415) 421-2922

June 19, 2026

VIA EMAIL: CalAm@slc.ca.gov and CSLC.CommissionMeetings@slc.ca.gov

Chair Malia M. Cohen, Controller
Member Eleni Kounalakis, Lieutenant Governor
Member Joe Stephenshaw, Finance Director
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company (File: A4181)
Monterey Peninsula Water Supply Project
June 23, 2026 Meeting, Agenda Item No. 60

Dear Chair Cohen, Lieutenant Governor Kounalakis and Director Stephenshaw:

On behalf of the City of Marina ("City" or "Marina"), we submit this comment letter regarding the proposed General Lease - Industrial Use ("Lease") of sovereign tidelands and submerged lands sought by California-American Water Company ("CalAm") for the Monterey Peninsula Water Supply Project ("Project" or "MPWSP"). For the reasons stated herein, the City urges the State Lands Commission ("Commission" or "SLC") to deny a grant of this Lease.

Although the SLC prepared and posted an "Environmental Memorandum" in May 2026 (which focused on the single issue of whether further Project environmental review is necessary) and issued the agenda noting this matter on June 12, the SLC has not issued to the public any staff report, public trust doctrine analysis, staff recommendations, proposed mitigation, or other potential conditions for a Lease as of the date and time of this letter. As a result, members of the public have not been given a meaningful opportunity to evaluate and provide written comments to the Commission on these very important matters in advance of the upcoming hearing.

I. INTRODUCTION

Marina is a city of approximately 23,000 residents located along the Pacific Ocean in northern Monterey County, California. It is a working class, culturally diverse (64% non-white) community with special and unique natural resources, including its coastal ecosystems, that values its desirable quality of life. The California Public Utilities Commission ("CPUC") and the

California Coastal Commission have identified Marina as an environmental justice "community of concern."

The MPWSP is a large industrial desalination project that would be constructed in, around and through the City. The Project would install an expansive industrial wellfield with pipelines, other structures and roads within a 39-acre easement area on the beaches and dunes at the CEMEX property in Marina, including within sovereign tidelands. Although CalAm characterizes the Project as an "ocean" desalination project, it is actually a "groundwater basin" desalination project designed to extract 17,300 acre-feet per year ("afy") of fresh and brackish groundwater from the already-overdrafted Salinas Valley Groundwater Basin ("Basin") and to export it to the Monterey Peninsula communities to the south. The City is completely dependent on affordable water in this Basin for 100% of its drinking water.

This Project has been plagued by a remarkable series of fundamental problems and major issues. The MPWSP lacks any overlying, appropriate or prescriptive water rights and lacks any clear path to obtain them. The Project's massive groundwater extractions (which would be approximately five times the total of Marina Coast Water District's current extractions) threaten the continuing viability of Marina's groundwater sources. The Project will substantially interfere with public access and will cause significant adverse (and many permanent) impacts to protected wildlife species, to 25 acres of nearby coastal vernal ponds and wetlands, and to 35 or more acres of valuable coastal habitat. To make matters worse, sea level rise and dune recession, combined with the limited 20-year lives of the slant wells, mean that the Project would likely have only a 20-25 year life at the CEMEX property.

All of these issues are squarely at issue because of this Commission's legislative mandate. The Commission is the guardian of California's tidelands and submerged lands and holds them in trust for the people of California. As sea level rise rapidly progresses here as calculated by the latest Coastal Commission standards, the mean high tide line will move landward, causing tideland areas to increase in size and will include the entire length of the slant wells, along with their wellheads, structures and pipelines, bringing them within Commission jurisdiction. The public trust doctrine imposes a strong obligation on this Commission to protect and preserve a wide variety of public access, recreation, species habitat and coastal ecosystem protection trust uses applicable to the proposed Lease that have been recognized by the courts.

In this comment letter, Marina will explain the major reasons why the MPWSP should not receive a Lease in tidelands and submerged lands under the Commission's jurisdiction. First, at the outset, the Commission is mistakenly evaluating the wrong project. In a May 4, 2026 Order, the CPUC affirmed that it only granted approval to CalAm to construct and operate a ***6.4 mgd*** desalination project. The CPUC explicitly rejected in 2018 both a 4.8 mgd project and a phased project. At the June 23, 2026 hearing, the SLC is only considering a ***4.8 mgd*** project which it calls the "Phase 1 Project." Moreover, the Commission is only considering part of the project by excluding consideration of the environmental impacts of the Project's ocean outfall modifications and its Phase 2 environmental impacts. In so doing, it is illegally segmenting and piecemealing

the Project for both Lease consideration and associated California Environmental Quality Act ("CEQA") purposes.

Second, by approving the Lease, the Commission would not be correctly applying what it terms its "bold and transformative" Environmental Justice Policy . Since there is (so far) no staff report or any other document explaining how the Commission is carrying out its environmental justice obligations apart from seeking input from disadvantaged communities, there is no evidence that the Commission has complied with these obligations. By approving a Lease for the MPWSP, the Commission would be ignoring its stated obligations to "strive to minimize additional burdens on and increase benefits to" marginalized communities, to "prioritize the protection of coastal habitat and preservation of public access," and to "work with the applicant and impacted communities to develop strategies to decrease those impacts and increase benefits to the impacted communities." Marina is unaware of any effort by the SLC to minimize burdens or increase benefits to Marina, and it certainly has not proposed to Marina any strategies to decrease Project impacts. By granting the Lease, the SLC would not be prioritizing protection of coastal habitat or preservation of public access.

Third, in light of the significant new information relating to the Project and its impacts that has emerged in the last two years, the Commission is required to conduct additional environmental review under CEQA before considering the Lease.[1] In the Environmental Memorandum, SLC staff wrongly concluded that there were no new Project developments, impacts or information that required any further CEQA review for the Project. However, in doing so, Staff essentially ignored at least three important new developments that compel additional CEQA review. First, in June 2025, after more than three years of studies, groundwater modeling and evidentiary hearings, the State Water Board issued a Report finding that CalAm has no water rights for the Project, that the Project will extract more than 500 AFY of groundwater from the Property (which exceeds the property extraction limit on the CEMEX site), and that the Project will cause significant additional Basin impacts. Second, only last month, the CPUC affirmed that the only size Project that CalAm has the right to build is a 6.4 mgd Project. Third, in recent months, it has been disclosed that the outfall modification work for the Project is significantly more extensive than previously analyzed.

Fourth, the legal principles of the public trust doctrine mandate denial of the Lease for the Project. The important public trust uses protected by the doctrine include public access, public recreation and enjoyment, and protection of open space environmental values including protected species habitat and coastal ecosystems. Indeed, these considerations receive priority and heightened protection when a vulnerable community like Marina is involved. Although CalAm claims that its Project serves a public purpose based on a need for water, the Commission must

[1] The Marina Coast Water District ("MCWD"), which is the City's water purveyor, submitted a June 5, 2026 comment letter to the SLC which provides an extensive analyze of why the SLC must conduct additional and/or supplemental CEQA review of the Project before considering or taking action on a Lease decision. The City refers to and specifically incorporates that comment letter herein as part of the City's own comments.

also recognize that this use will likely significantly impair, and perhaps destroy, the existing public water supply for Marina and nearby communities derived from groundwater in the Basin.

In sum, the SLC must conduct further CEQA review of the Project and evaluate all components of the MPWSP before even considering the Lease. However, if the Commission does consider the Lease on June 23, it must refuse to grant, and should instead deny, the Lease for all of the reasons set forth herein.

II. THE COMMISSION CANNOT MOVE FORWARD WITH THE LEASE NOW BECAUSE IT IS CONSIDERING THE WRONG PROJECT AND HAS IMPROPERLY SEGMENTED AND PIECEMEALED PROJECT COMPONENTS.

In its Environmental Memorandum , the State Lands Commission states that the "project" being considered for a Lease is what it calls the "Phase 1 Project" rather than the "Original Project," which is the 6.4 mgd Project approved by the CPUC. *Id*. at 9. It appears that the SLC believes that the Coastal Commission had the authority to reduce the Project size and that the SLC can therefore proceed to consider this smaller project for a Lease. However, this belief is unfounded. It is undisputed that the CPUC approved only a 6.4 mgd Project and explicitly rejected a 4.8 mgd Project. CalAm cannot seek, and the SLC cannot approve, a Lease for a project not approved by the CPUC, which has exclusive authority over this determination.

In September 2018, the CPUC approved a Certificate of Public Convenience and Necessity for the MPWSP, which was authorized to deliver 6.4 mgd of desalinated water to CalAm customers, subject to other operational and environmental parameters. CPUC Decision 18-09-017. In so doing, the CPUC expressly rejected a 4.8 mgd project on both cost and environmental grounds in favor of the 6.4 mgd plant size. The Commission also rejected phasing from a 4.8 mgd to a 6.4 mgd Project in the future because such an approach would create "a higher likelihood that any expansion that includes permitting, drilling, and construction of an additional well to increase capacity will increase environmental impacts, face additional scrutiny in the permitting review process, and increase costs to ratepayers." *Id*. at 69. In a follow-up rehearing order, the CPUC further stated that "the 4.8 mgd plant was not analyzed as a reduced capacity alternative because it would not meet the basic objectives of the project or the purpose and need for the project, and a further reduced capacity alternative would not likely avoid or substantially reduce significant environmental effects of the project." CPUC Decision 19-01-051, at 61.

The CPUC has never modified, nor has it been petitioned by CalAm to modify, the Project's size from that authorized by the Commission (6.4. mgd). Instead, the CPUC has repeatedly confirmed in subsequent decisions that only the construction of a 6.4 mgd Project by CalAm has been authorized by the Commission. Most recently, on May 4, 2026, the CPUC confirmed this fact in an issued Order in Decision 26-04-046, in which it stated:

> There is no evidence in the record establishing construction of a 4.8 mgd desalination plant in lieu of the 6.4 mgd plant authorized in D.18-09-017, and in any event, D.18-09-017 provides a mechanism for adjustments if needed. (See D.18-09-017, Ordering Paragraph 22 [Cal-Am "shall seek any other [non-minor] project refinements by a petition to modify [D.18-09-017]."].)

This CPUC statement confirms yet again that the CPUC has solely authorized CalAm to construct a 6.4 mgd Project pursuant to its statutory authority, and a change in that Project size requires CalAm to file a petition to modify D.18-09-017. No such petition to modify has been filed by CalAm, despite its many public assertions over at least the past three years that, commencing in "mid-2026," the Project "will be constructed…at 4.8 mgd," not 6.4 mgd, and that CalAm is doing so as "approved by the Coastal Commission," not as authorized by the CPUC.

This CPUC confirmation prevents the SLC from approving a Project that the CPUC has clearly stated that CalAm is not authorized to build. And the Coastal Commission has no legal authority to vary this Project size. *See* Pub. Util. Code § 1001(a)(a water corporation regulated by the CPUC "shall not begin the construction of . . . a line, plant, or system or of any extension thereof, without having first obtained from the commission a certificate that the present or future public convenience and necessity require or will require its construction"). Moreover, as set forth in Section IV herein, this recent affirmation of Project size by the CPUC is important and substantial new information that requires the SLC to conduct additional and/or supplemental CEQA review as a responsible agency of all phases of the 6.4 mgd approved Project.

The second fatal deficiency in the Project evaluation by the SLC in the Environmental Memorandum is that, by only considering the "Phase 1 Project" for CEQA and Lease approval purposes, the SLC has segmented and piecemealed the approved CPUC Project. In so doing, the SLC has failed to evaluate critical Project components and impacts. First, the SLC did not analyze or mitigate for harm to environmentally significant habitat areas ("ESHA") caused by the slant well relocation that must occur after 20-25 years of the 60-year Project life. It is certain from the Coastal Commission's Final Decision that these wells must be relocated in 20-25 years in a different location. Second, the SLC only considered the first 25 years of operation and not the remaining 40 years of Phase 2. Third, the SLC failed to consider the Project's required outfall liner and diffuser work, which will be discussed in greater detail in Section IV herein.

Governing CEQA case law mandates that all Project impacts must be evaluated by the SLC now, regardless of whether the Project is being constructed in one phase or two. The term "phasing" means dividing a project into stages over time. Based on the CPCN decision and the certified Final EIR, the overall Project size and economic life have not changed. CEQA prohibits piecemeal review of projects. CEQA Guidelines Section 15003(h) states: "The lead agency must consider the whole of the action, not simply its constituent parts, when determining whether it will have a significant environmental effect," citing *Citizens Assoc. For Sensible Development of Bishop Area v. County of Inyo*, 172 Cal.App.3d 151 (1985). *See also* CEQA Guidelines § 15378(a) (defining a project to include the "whole of an action").

The seminal California Supreme Court case of *Laurel Heights Improvement Ass'n v. Regents of the Univ. of Cal.* states that the future expansion of a project must be analyzed "if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." 47 Cal.3d 376, 396 (1988)("*Laurel Heights I*"). Both prongs of the *Laurel Heights I test* are easily met here. The future expansion of the Project here a foreseeable consequence of Phase I because CalAm states that it this second phase is planned and the SLC has recognized that "CalAm proposed a two-phase MPWSP to minimize potential inconsistencies with the Coastal Act for project components located in the Coastal Zone." Environmental Memorandum, at 7. The future expansion will also change the scope and nature of the initial project along with its environmental effects. Phase 2 will involve relocating the entire industrial wellfield in a new location, with a new round of significant effects to dozens of acres of ESHA habitat and protected species.

The SLC has clearly stated that it is only considering Phase 1 of a two-phase Project in its Lease decision. The *Laurel Heights I* case directly disallows that approach and must be complied with by the SLC.

III. THE STATE LANDS COMMISSION'S ENVIRONMENTAL JUSTICE POLICY MANDATES DENIAL OF THE PROPOSED LEASE FOR THE MPWSP.

In 2018, this Commission adopted its Environmental Justice Policy ("EJ Policy"), which applies to all of its programs and policies. Remarkably, however, the SLC's Environmental Memorandum fails to acknowledge or apply the SLC's own EJ Policy. Instead, in the environmental justice section of the memorandum, the SLC only discusses the Coastal Commission's environmental justice policy. *Id*. at 41-43. This is a significant omission given the importance of correctly applying the SLC's EJ Policy here.

The EJ Policy's goals are "bold and transformative" (according to the SLC) and recognize that "[a]ddressing environmental justice is especially urgent now – at a time when the impacts of climate change on human health will disproportionately affect marginalized and disadvantaged communities and with it, the public's right to access and enjoy Public Trust lands." This Policy includes the following pertinent goals and strategies for the SLC:

- "Strive to minimize additional burdens on and increase benefits to marginalized and disadvantaged communities resulting from a proposed project or lease." (Goal 6(a))

- "Work to reduce and mitigate adverse impacts on vulnerable communities including climate change; sea-level rise; displacement; poor air, water, and soil quality; lost economic opportunities; and inadequate access to open space and Public Trust lands and resources." Goal 6(b))

- "Prioritize the protection of coastal habitat and preservation of public access, while balancing other Public Trust Uses and existing water-dependent infrastructure along the coast." (Goal 10(c))

- "As part of the application process, research impacts and work with the applicant and the impacted communities to develop strategies to decrease those impacts and increase benefits to the impacted communities." (Strategy 5.2)

- "Seek opportunities to preserve, protect, and expand public access to Public Trust lands and resources for everyone, and especially for marginalized, disadvantaged and tribal communities." (Strategy 6.3)

- "The Commission will leverage its management and authority over State-owned Public Trust and school lands to promote healthy communities around those lands by considering the values and the risks that a potential lessee will bring to those communities based on their needs and vulnerabilities." (Goal 8.0)

These environmental justice ("EJ") goals and policies are directly implicated for Marina in connection with this proposed Lease. What is at stake is Marina's future access to clean and affordable drinking water for its citizens, its equitable public access to its special coastal dune ecosystem and beaches, and the continued viability of Marina's ESHA and its vernal ponds and wetlands. Marina never requested or wanted this Project. Instead, it is being forced on Marina against its wishes. Marina will bear the brunt of this industrial Project's wide range of environmental, social and economic impacts, but will receive none of the water that would be produced.

The Coastal Commission recognized the extremely serious nature of the Project's impacts on Marina. In its Final Adopted Findings for the MPWSP permit ("Final Decision"), the Coastal Commission acknowledged that "This Project raises the most significant environmental justice issues the Commission has had to address since the 2019 adoption of the Commission's EJ policy." Final Decision, at 4.

According to the Coastal Commission's 2020 Staff Report, 66% of the population of Marina are persons of color, and 33% of the City's population has income below the 200% federal poverty level threshold. *Id*. at 88-89. In the Final Decision, the Coastal Commission determined: "At both its reduced 4.8 mgd scale and its full 6.4 mgd scale, the Project . . . would involve locating some of the Project components in a community [Marina] that has a long history of having a disproportionate share of industrial facilities and uses." Final Decision, at 4-5. These industrial developments include a regional landfill, regional composting facility and regional sewage plant, all of which serve areas outside Marina.

The Coastal Commission adopted a Project condition to partially address these EJ issues which requires CalAm to formulate and fund a community engagement plan to address public access, recreation and other issues. However, at the hearing, multiple Commissioners commented that the impacts to Marina were not fully addressed by this or other measures.[2] Moreover, the Plan is weak, ineffective and primarily notable for cutting out the City of Marina and its residents from more than token input. Since this misdirected provision does not forthrightly or properly address the Project's very significant EJ impacts on Marina, it is important for the SLC to do more to comply with its own EJ Policy.

Although the SLC staff has conducted outreach to Marina and some other disadvantaged communities about the Project's effects, there is no evidence that the SLC has proposed any steps to minimize burdens or increase benefits to marginalized and disadvantaged communities, or that it has worked to "reduce or mitigate" EJ effects, or that it has properly considered or applied these concerns as part of its public trust doctrine analysis as discussed below. Certainly, the SLC has not taken any affirmative steps to "prioritize the protection of coastal habitat and preservation of public access." Instead, the Commission has not followed the dictates of its EJ Policy. The Commission should not consider issuance of this Lease until it has complied in full. And, in any case, the SLC must deny the Lease to vindicate the important principles in this Policy.

IV. THE COMMISSION CANNOT TAKE ANY ACTION ON THE PROPOSED LEASE UNTIL IT CONDUCTS FURTHER ENVIRONMENTAL REVIEW UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

CEQA requires public agencies to conduct a careful and thorough review of environmental effects of projects that they approve. CEQA further compels a public agency to conduct additional CEQA review when (1) there are substantial changes to a project, (2) there is a substantial change in project circumstances or effects, or (3) there is new information regarding the project. Pub. Resources Code, § 21166; *see* CEQA Guidelines, § 15162. These are important requirements for a responsible agency. *See* Dept. of Water Resources Environmental Impact Cases 79 Cal.App.5th 556, 576 (2022) ("If another discretionary approval is required, such as when a modified or supplemental project is proposed, the agency must determine whether further environmental review is required due to changes in the project, changes in circumstances, or new information"). As described further below, at least three such events have occurred here.

When the CPUC approved the Project in 2018, it certified a Final Environmental Impact Report ("FEIR"). In the last eight years, there have been many significant Project changes,

[2] At the hearing, Commission Staff concluded that "[t]he proposed measures by Cal-Am and the additional conditions imposed by the Commission do not … address the impacts --- fully address the impacts. And as a result, some environmental justice issues still remain." Administrative Record ("AR") 40865. Even the Commission Chair acknowledged her belief "that there is a deficiency in the mitigation." AR41378. The Chair and several other Commissioners specifically requested that CalAm agree to a $25 million payment to Marina to address environmental justice impacts. *See, e.g.*, AR41364.

circumstances and effects, and many types of significant new information regarding key Project issues (water rights, groundwater impacts, Project size and Project changes) have occurred. The original FEIR and the Coastal Commission Staff Report are outdated in key respects and fail to comply with CEQA's important requirements. Despite this, the SLC has recently issued an Environmental Memorandum in which it purports to determine that it does not need to perform any further CEQA review. This conclusion is factually and legally wrong. *See* CEQA Guidelines, § 15162(c)(if significant new information appears after the initial EIR is certified, "no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified…"). CEQA and its case law require the SLC to conduct further CEQA review before it can consider whether or not to grant the Lease.

The three categories of new information and Project developments that have recently come to light and which must be analyzed by the SLC in subsequent CEQA review are: (1) the June 2025 issuance of the State Water Board Final Report on groundwater impact and water rights issues; (2) the CPUC's May 2026 confirmation that CalAm is only authorized to build a 6.4 mgd desalination project, not the 4.8 mgd project that CalAm is attempting to have the SLC approve now; and (3) the new and more extensive environmental impacts of the outfall liner and diffuser Project changes that have only recently been publicly disclosed and which resulted in the Coastal Commission's refusal to deem CalAm's request for an outfall coastal development permit amendment to be incomplete. We will discuss each development below.

A. The Project's Lack Of Water Rights And Severe Groundwater Impacts

First, on June 25, 2025, the State Water Board issued a Final Report that contained significant new information regarding the Project's lack of water rights and its unmitigated adverse effects on basin groundwater. The Board concluded that: (1) CalAm has no current water rights, has failed to demonstrate that its proposed extractions would not cause injury to the basin or other users, and has no clear path to obtain water rights for the Project; (2) Project pumping will cause groundwater levels to decline, will reduce available groundwater supply, will reduce groundwater storage, and will increase seawater intrusion and adversely affect groundwater quality; and (3) under all possible scenarios, the MPWSP will extract substantially more than 500 AFY of groundwater at the CEMEX property.[3]

CalAm's lack of current water rights or any reasonable path forward to obtain water rights continues to be the Achilles Heel of this Project. The SWRCB Report critically damaged CalAm's ability to demonstrate water rights. At the outset, the Report established that, to obtain water rights in the future, "Cal-Am bears the burden of demonstrating that its proposed draw will not injure

[3] The Annexation and Groundwater Framework Agreement entered into in 1996 by the City of Marina, MCWD, the Monterey County Water Resources Agency, and the CEMEX property owner at that time (among others) applicable to the CEMEX property limits groundwater extractions to less than 500 AFY and prohibits export of Basin groundwater outside of the Basin. As a result, the Project's extractions are barred.

other existing users" (Report, p. 103). CalAm contends that it will be able to obtain water rights in the future by using novel salvaged or developed water rights theories. The SWRCB did not agree with any of CalAm's contentions regarding current or future water rights:

- **Existing Rights:** "The Board agrees that Cal-Am has no existing right to extract groundwater from the SVGB." (Report, App. D, p. D-8)

- **Overlying Rights:** "Cal-Am cannot purchase or develop an overlying groundwater right that would authorize its proposed extraction and use." (Report, p. 103)

- **No Surplus in Basin**: "We conclude that the overdrafted conditions of the subbasins is prima facie evidence that no surplus is available for extraction." (Report, p. 104)

- **Developed/Salvaged Water:** "If absent Cal-Am's extraction, this relatively high quality groundwater would have been available to other legal users in the basin for beneficial use, it is not developed or salvaged by CalAm." (Report, p. 108)

- **CalAm's Burden:** "Cal-Am may extract groundwater from the SVGB if the extraction neither (1) injures other legal users of water nor (2) causes unreasonable harm." (Report, p. 119-20)

- **CalAm Failure To Meet Test:** "Based on the record before the Board, Cal-Am has not demonstrated that its proposed draw would avoid injury to other legal users of water and unreasonable harm to the basin." (Report, App. C, p. C-18)

The State Water Board Final Report also provided responses to a series of technical questions from the Court in the case of *City of Marina v. RMC Lonestar,* (Monterey County Superior Court, Case No. 20CV001387) regarding the potential groundwater impacts of the Project. In brief, the Report contains a large amount of new information of substantial importance regarding the wide range of major significant effects of the Project on groundwater resources. Contrary to the 2018 FEIR conclusions that these impacts would not be significant, the Report identifies significant and unmitigated impacts to the Basin and users including: (1) widespread drawdown of groundwater levels, which will likely lead to a permanent reduction of groundwater storage; (2) the Project will extract fresh water and thereby reduce the groundwater supply; (3) the Project will increase seawater intrusion and will advance the seawater intrusion front by up to 0.75 miles inland at certain location, and will also permanently degrade groundwater quality; and (4) the Project will reduce groundwater storage in these critically overdrafted subbasins.

One related and important aspect of these adverse groundwater effects is that the Project will impede the ability of the Groundwater Sustainability Agencies ("GSAs") for the 180/400 Foot Aquifer and Monterey Subbasins to successfully manage groundwater under the Sustainable Groundwater Management Act ("SGMA") adopted by the Legislature in 2014. These GSAs have adopted Groundwater Sustainability Plans ("GSPs") that contain quantitative and qualitative thresholds that signal "undesirable results" that constitute conditions that are significant and unreasonable that must be addressed by projects and management measures. For example, any movement of the seawater intrusion fronts after specified dates (which the SWRCB Report shows has already occurred) violates the seawater intrusion thresholds that have been established.

B. The CPUC's Confirmation The CalAm Is Only Authorized To Construct And Operate A 6.4 MGD Desalination Project

Second, as explained in Section II, the CPUC recently issued a new decision in which it confirmed that the only approved Project size is 6.4 MGD, not 4.8 MGD. In 2018, the CPUC issued a decision approving a 6.4 mgd desalination project and explicitly rejecting a 4.8 mgd project or a phased project. In 2022, CalAm announced (without CPUC approval) that it was planning to instead build a 4.8 mgd project. Most recently, CalAm has publicly stated that it plans to begin MPWSP construction before the end of 2026. On May 4, 2026, the CPUC issued an Order which, in part, reaffirmed that the approved project size is 6.4 mgd, rather than 4.8 mgd, and that any change to that determination would require further CPUC proceedings. Thus, the SLC is now mistakenly considering a 4.8 mgd project for issuance of a Lease, which is directly contrary to the directive of the CPUC, which has exclusive jurisdiction over the Project size.

This statement regarding Project size came at the end of a CPUC proceeding to determine water supply and water demand levels in CalAm's Monterey District. The testimony in this proceeding demonstrated that there is currently no water emergency in the District for two major reasons. First, there has been a precipitous and continuing decline in water demand, which is now in the range of about 9,000 AFY, according to CalAm's monthly System Delivery online reports. Second, CalAm's water supply has recently expanded significantly with the completion of the Pure Water Monterey Expansion Project, which has added 2,250 AFY to CalAm's water supply portfolio. CalAm's supply now totals 11,204 AFY, which leaves it with a current surplus of over 2,000 AFY. In June 2025, CalAm reported to the Department of Water Resources that it had an expected 42% supply surplus for the year ending June 30, 2026. CalAm Water Shortage Report dated June 25, 2025.

In a portion of its website relating to the MPWSP, the SLC has a section containing Frequently Asked Questions relating to the Project. One of the questions relating to the water supply and demand for the Project states that there will be a "shortfall of 2,528 AFY per year" for the Project. However, this statement is incorrect and inconsistent with the CPUC finding, which only stated that the shortfall of that amount will be occurring in 2050. In fact, the District currently has a huge surplus of water (over 2,000 afy). The CPUC did not make any finding regarding exactly when the current large surplus could become a deficit, but the expert testimony at the

CPUC indicated that the surplus should last at least 15 years. Several of the experts anticipated that the actual shortfall in 2050 would be significantly less than 2,528 AFY or that there would be no shortfall at all.

C. CalAm's Significant Expansion Of Work Relating the Outfall Liner and Diffuser

On March 31, 2026, Monterey One Water -- the owner of the ocean outfall -- applied on behalf of CalAm to the Coastal Commission to modify CalAm's existing coastal development permit to make extensive modifications to accommodate the Project's highly saline discharges through the outfall. These components of the Project will all be located directly within the sovereign land jurisdiction of the SLC.

In a Notice of Incomplete Application letter dated April 29. 2026, Coastal Commission staff informed CalAm and M1W that this application was "incomplete" for multiple reasons. One of the key missing items identified in the letter was confirmation from the "California State Lands Commission [for an] approved lease for the outfall and proposed outfall modifications" and "evidence of California State Lands Commission authorization for the offshore portion of the proposed work." *Id*., at 2. Since M1W and CalAm have now formally submitted an application for these outfall modifications, this Commission must analyze the plans, scope and potential environmental impacts from this significantly expanded work, which should be done before it considers granting of the Lease.

One important component of the outfall changes relates to the installation of a liner on the onshore portions of the outfall, including areas where there is public access and recreational activities occurring on the beach. In the April 29, 2026 notice, Coastal Commission staff determined that "the proposed onshore outfall liner work includes additional access pits, grouting pits, and work areas compared to that analyzed in the MPWSP Final EIR/EIS…." It appears that SLC consideration of the Lease will not include the expanded outfall modification work. This constitutes prohibited piecemealing and segmentation of the overall Project under both the standards applicable to the Lease decision and the standards established by CEQA. In addition, the significant new information regarding the outfall work shows that the environmental impacts will be substantially more severe. Not only is this portion of the MPWSP more extensive and will take a longer time, but CalAm apparently is proposing to construct the slant wells and the ocean outfall modifications at the same time, which is not the scenario analyzed in the CPUC's Final EIR.

In the Environmental Memorandum, the Commission fails to accurately summarize and address the status of these outfall modifications. First, the SLC incorrectly asserts that these proposed modifications are supposedly speculative because they "are still being evaluated by M1W and have not been finalized." *Id*., at 19. This is clearly untrue because M1W formally applied to the Coastal Commission for a CDP amendment to make these revisions about a month before the Memorandum was completed. So they are certainly not "speculative." Second, the

SLC makes the clearly erroneous statement that "no changes to the M1W Outfall are proposed as part of the Phase 1 Project." *Id*., at 35. The outfall cannot accept the highly saline discharges of the Project without the outfall and diffuser modifications. Thus, the Phase 1 Project (as defined as the 4.8 mgd project) cannot begin operations until these outfall modifications are completed. Thus, contrary to the SLC's position, the new and more extensive outfall modifications are an integral part of the Project and they must be the subject of subsequent CEQA review before the Lease can be considered by the SLC.

D. CEQA Conclusion

The Environmental Memorandum's conclusion that no further CEQA review is necessary before the SLC considers and acts upon the Lease is fatally flawed. Although the SLC was aware of the Final State Water Board Report, it failed to take its expert findings regarding the Project's groundwater impacts into account and instead wrongfully asserts that there is no new significant information on such impacts. Similarly, the Environmental Memorandum ignores the latest information of significance regarding what size project the CPUC has authorized for the MPWSP, and apparently plans to consider granting a Lease that CalAm has no right to construct. Third, with the new and more extensive outfall modifications, the Memorandum mischaracterizes the modifications as "speculative" even though they are the subject of a formal application and further asserts wrongly that they are not part of the Phase 1 Project. Contrary to these positions, the SLC must conduct further CEQA review before considering or acting upon CalAm's Lease application.

V. THE PUBLIC TRUST DOCTRINE COMPELS DENIAL OF THE MPWSP LEASE.

The public trust doctrine must be carefully considered by the Commission before deciding whether to grant CalAm a Lease for the Project. The Environmental Memorandum does not contain any discussions or conclusions regarding application of the public trust doctrine to the MPWSP. And the City has not seen any form of public trust doctrine analysis in any other documents. As of the date of this letter (which is being sent four days before the upcoming hearing), the SLC has not released any staff report for this matter.

There are at least three sets of critically important and recognized public trust uses that would be significantly and permanently harmed by granting a Lease for the Project (and thereby enabled if the SLC granted the Lease): (1) public access and recreation, (2) protection of valuable species habitat and environmentally sensitive beach and dune ecosystems; and (3) the Project extractions causing permanent groundwater drawdowns that threaten the viability of the groundwater-connected vernal ponds under Marina's supervision. These harms to lands within the public trust mandate compel denial of CalAm's application for the MPWSP Lease.

A. Applicability Of The Public Trust Doctrine To The MPWSP

The State Lands Commission is the administrator and guardian of tidelands and submerged lands, often referred to as sovereign lands, and holds them in trust for the benefit of the people of

California. The public trust doctrine is based on common law and continues to evolve over time. Not only does California case law authorize the Commission to manage tidelands, but it creates a Commission *obligation* to protect the public's interest in tidelands. *See, e.g., National Audubon Soc'y v. Superior Court*, 33 Cal.3d 419, 441 (1983) (the state has a duty "to protect the people's common heritage of . . . tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust").

It is now well accepted that there are a broad range of public interests protected by the public trust doctrine. The original triumvirate of recognized public uses was for navigation, commerce and fishing. The California Supreme Court has expanded those covered public interests to include the important uses of tidelands for "preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area." *Marks v. Whitney*, 6 Cal. 3d 251, 259-60 (1971). Public trust uses also encompass the public right to hunt, bathe or swim. *City of Berkeley v. Superior Court*, 26 Cal. 3d 515, 521 (1980). Public access is also a recognized public trust use as enshrined in the California Constitution. Cal. Const. Art X, § 4.

CalAm's MPWSP does not fit within the traditional array of public trust uses. It does not invoke any of the protected uses recited above. Rather, at best, it could be characterized as having a partial public purpose, which is legally different. The *National Audubon* court addressed this distinction and rejected the idea that public trust and public purpose were synonymous. It stated that a trustee could not grant trust property solely because the grant would serve "some public purpose, such as increasing tax revenues, or because the grantee might put the property to a commercial use." *National Audubon* at 440.

In the oft-cited case of *San Francisco Baykeeper, Inc. v. State Lands Commission*, 242 Cal.App.4th 202 (2015), the court addressed the SLC's decision to grant a lease for sand mining on the basis that "extraction of a mineral resource for commercial purposes is a public use because it serves a public need for construction grade sand." *Id*. at 235. The court rejected this position, stating that " a use does not qualify as a trust use simply because it might confer a public benefit . . . But by its very essence, a public trust facilitates public access, public enjoyment, or public use of trust land." *Id*. at 236. Similarly, in the *National Audubon* case, the Supreme Court held that the public trust resources of Mono Lake prevailed over the need for Los Angeles to divert water to create a new water source for Los Angeles. Thus, the installation of CalAm's industrial wellfield on public trust lands to create a new water source for its customers outside of the Basin is not a protected public trust use, but only a project that has a limited public purpose.

The proposed General Lease here would authorize the installation and operation of slant wells in tidelands below the ordinary high water mark (measured by the mean high tide line) and in submerged lands underneath the ocean. Accordingly, these features come squarely within the Commission's jurisdiction and require a vigorous and careful public trust analysis required by California case law. Moreover, due to sea level rise caused by climate change, the portion of the

Project that constitutes tidelands is anticipated to increase substantially as ocean rises over the 60-year life of the 6.4 mgd Project approved by the CPUC. These tidelands are ambulatory in nature over time. As the Coastal Commission stated in its Final Decision, "[t]he Bay shoreline near Cal-Am's proposed well field has exhibited the highest annual erosion rates in the state" and experiences "losses of as much as 100 feet of beach during a single event" along with "recession inland of the dune system located along the beach." Coastal Commission 2022 Staff Report at 92.

One recent public trust doctrine legal development also applies to the current Project. In 2018, a California court held that the public trust doctrine allowed the State Water Board to regulate groundwater pumping that could adversely affect a navigable waterway which is subject to a public trust. *Environmental Law Foundation v. State Water Resources Control Board*, 26 Cal. App. 5th 844 (2018). This case is relevant to the anticipated impacts caused by the Project groundwater extractions on the coastal vernal ponds in Marina as described further below.

B. Public Access And Recreation

The CEMEX Property, where the Project's industrial wellfield would be built, is a unique and important property within the City of Marina. For almost a century, it was the site of intensive sand mining, which caused a public nuisance in the City and resulted in far-reaching destructive effects to this entire coastline. After a combined enforcement effort by the City, the State Lands Commission and the Coastal Commission, the owner of the Property (RMC Pacific Materials, LLC, often referred to as "CEMEX"), voluntarily entered into settlement agreements with each of the three agencies. A critical part of the Coastal Commission Agreement was CEMEX's agreement to sell the property to an entity that would hold the property for conservation, educational and similar purposes.

This was an important success story for the SLC and Marina and served as a vindication and preservation of the many public trust uses of this site. Unfortunately, however, the new industrial wellfield contemplated by CalAm will simply replace one industrial use with another, and cause an even wider range of adverse impacts to public trust uses, completely undermining the successful outcomes of the agencies' enforcement actions for the CEMEX property.

The Project will cause a long list of adverse impacts to the trust public access and recreation uses. During construction, there may be temporary traffic closures or detours near the beach to allow for the installation of the slant wells and the Project's source water pipeline. Coastal Commission 2022 Staff Report, at 80. To install the modified diffuser components for the existing wastewater outfall, boats and divers would be active in the coastal waters and this could impact fishing or other uses. *Id.* Furthermore, due to the installation of the required outfall liner and the proposed clamp replacement, there may also be heavy equipment on the beach, placement of barriers and protective work zones around the installation, and other measures that would prevent lateral access along the shoreline for many months during the summer. Cumulatively, these construction activities will inhibit public access and recreational opportunities protected by the public trust. As discussed in further detail in these comments, the outfall liner is not being

considered here and likely was not included in CalAm's CDP application. Therefore, the full extent of its construction impacts and possible need for mitigation measures is not yet known and constitutes an independent reason to deny the CDPs.

During operation, there will be permanent impacts to public access and recreation because the Project is located on the CEMEX site that does not currently provide vertical access to the shoreline. Under the approved settlement agreement, the CEMEX facility will stop operating and the site will thereafter be reclaimed and dedicated to conservation and public recreational use(s). The City of Marina is one of the fastest growing cities in Monterey County and one of its newest and largest developments (Marina Station) is very close to this beach access point. Since Marina only has three total access points to its beaches, and this access point is the only one that can likely support wheelchair access, it is critical that this access not be impaired in any respect.

Unfortunately, CalAm has not provided documentation to assure that public access would be preserved and what, if any, lands CalAm intends to take out from public use, based on the permanent and access easements that CalAm claims on the CEMEX site. With respect to these easements, their size has inexplicably enlarged over time. A 2014 Memorandum of Option Agreement provided an easement size of approximately 33.5 acres for the permanent easement and approximately 2.4 acres for the access easement. Four years later, in May 2018, CalAm entered into an Easement comprised of a permanent easement of 36 acres and an access easement of 3.5 acres.

In the 2022 Staff Report, Coastal Commission Staff found it difficult to predict how the Project would impact public access and recreation due to the lack of information, However, enough is actually known about the Project's impacts on public access and recreation to conclude that it is not consistent with public trust uses. In fact, the easements stretch across the entire dunes to the water's edge, blocking both vertical and lateral access to the shore. Without any enforceable assurances from CalAm that public access will be protected, activities from construction, fencing, maintenance, and operation could occur anywhere within this 39-acre total area.

Such activities would directly conflict with the City's plans for the area once the CEMEX site is dedicated to conservation and public recreational use(s) pursuant to the CEMEX settlement agreement. In fact, the City has worked with a landscape architect to develop a conceptual plan that includes many proposed features. This area is particularly special because the City has only 2-3 flat access points to the ocean and this area is one of those access points. Moreover, having this industrial "scar" at the entrance to Marina's magnificent dunes and beaches would greatly detract from the resident and visitor experience. The Project Lease must be denied on this basis.

C. Protected Species Habitat And Coastal Ecosystem Impacts

The Project's industrial wellfield, pipelines and other components in the coastal zone would cause adverse impacts to at least 35 acres of valuable environmentally sensitive habitat areas ("ESHA"), including permanent impacts to potentially several dozen acres of unique

Flandrian dune and coastal habitat ESHA on the beaches and protected sand dunes in the City of Marina.

In its February 7, 2019 Report that is part of the administrative record for the City Planning Commission CDP denial, WRA summarized the extremely high biological value of the terrestrial ESHA that would be impacted by the Project:

> *The Project is proposed within a unique and very significant coastal dune habitat known as Flandrian dunes*. The Coastal Commission considers this habitat as ESHA and the City categorizes it as Primary Habitat with equivalent protections to ESHA. Flandrian dunes are a unique habitat bordering Monterey Bay. This habitat has developed on large sand dunes that shift over time by wind and wave action.
>
> *The presence of over 30 special status species including seven plants and four animal species listed as threatened or endangered within the Flandrian dune habitat and their complex linkages justify considering the entire coastal dune habitat as an Ecosystem ESHA.* Compensatory mitigation for individual species is largely inadequate when considering how to restore an entire ecosystem. Rather, mitigation for such ecosystem-level ESHAs must consider the foundational aspects of the habitat as well as the interactions between species.

In its 2022 Staff Report, the Coastal Commission emphasized the biological importance and unique nature of this habitat:

> *The CEMEX site largely consists of central foredune habitat, which is one of the most important, vulnerable, and geographically constrained environmentally sensitive habitat types in California.* In the 2010 update to the status of the state's natural communities, CDFW assigned central foredune habitat the highest rarity ranking as "critically imperiled," thus qualifying it as ESHA. Dunes form only under certain conditions where adequate sand supply and appropriate wind energy and direction allow. . . The habitat values in dune areas are therefore best understood in terms of the overall complex of dunes of which they are a part, and the Commission has typically found coastal dune habitat to be ESHA even when it is disturbed, due to its rarity, its important ecosystem functions, and its support of sensitive species.

2022 Staff Report, at 60-61 (emphasis added).

The Coastal Commission's prior 2020 Staff Report also carefully analyzed the anticipated Project impacts on ESHA, both for the appealed permit and the consolidated permit. It concluded that the Project's anticipated impacts to terrestrial ESHA would be up to several dozen acres within the City of Marina's jurisdiction, including a minimum of 7 acres of permanent impacts within the

well field area and potentially multiples of this amount of permanent impact acreage in the pipeline routes. There would be up to 24 acres of additional ESHA impacts in the consolidated permit areas, with an unknown amount consisting of permanent impacts. Staff Report, at 31.

The 2020 Staff Report also identified an additional adverse impact to ESHA resulting from "the need for Cal-Am to protect or relocate its well sites due to the effects of sea level rise and coastal erosion." Staff Report at 39. Since the slant wells will need to be replaced after 20-25 years and given the latest sea level rise expectations, the wells will likely need to be replaced and moved before the Project even reaches half of its 60-year life. However, this presents a fundamental problem since CalAm does not hold easement rights further landward from the current locations, and will not be able to obtain such rights. On this point, the Staff Report states: "Those areas inland of the currently proposed well sites are also within the area slated for restoration under the above-referenced CEMEX Settlement and are outside of Cal-Am's 30-acre easement, so relocation would require Cal-Am to obtain additional legal interest to any sites further inland -- which is something it is not clear Cal-Am will be able to do -- and would likely interfere with restoration efforts expected in those areas as part of the CEMEX Settlement." *Id*.

CalAm apparently asserts, as it has before, that it has a right to develop its Project on the CEMEX Property because this right was supposedly enshrined in the 2017 CEMEX Settlement Agreement. However, this argument has no factual basis. The CEMEX Settlement only recognized the real property easement rights established as of the date of the settlement. The Agreement clearly stated that "[n]othing in this Agreement guarantees or conveys any Right to development on the Site." CEMEX Consent Settlement Agreement and Cease and Desist Order CCC-17-CD-02, at § 2.1.

In short, the Project is anticipated to have wide-ranging permanent adverse impacts to dozens of acres of valuable ESHA habitat within the City of Marina. These substantial impacts to the conservation lands protected by the public trust doctrine, along with the other public trust impacts identified herein, must take priority over CalAm's Project. Accordingly, the requested Lease must be denied.

D. Wetlands And Vernal Ponds Impacts

There are seven sets of wetlands, vernal ponds and other groundwater-dependent ecosystems ("GDEs") totaling about 25 acres located in and near the City that are sustained by groundwater in the Dune Sand Aquifer, which is the uppermost Basin aquifer where the Project's slant wells would be constructed. These valuable coastal ecosystems are managed by a Comprehensive Management Plan prepared in 1994 by Marina and the Coastal Commission. Recent scientific research demonstrates that these ponds are groundwater dependent and would be dramatically affected by the Project's slant well extraction activities that cause groundwater drawdown.

On July 30, 2020, WRA prepared a report entitled "Biological Resource and Groundwater Dependency Analysis of Marina Vernal Ponds." WRA performed an assessment of biological resources at six of the seven identified Marina ponds. WRA updated earlier findings regarding the biological resources at the ponds and evaluated water salinity and water table characteristics at each of the six pond complexes. WRA concluded that there are a variety of sensitive biological communities at the ponds and many sensitive species that occur or are expected to be present. In a critical finding, WRA concluded that "all six ponds are reliant upon groundwater and should therefore be considered groundwater-dependent ecosystems." *Id*. at 31. Moreover, given the vegetation present, "all six ponds could therefore be adversely affected by future activities that cause groundwater drawdown." *Id*.

In August 2020, two CalAm consultants submitted to the Coastal Commission written critiques of Formation Environmental's April 13, 2020 report regarding the assessment and protection of these GDEs. In a report and a letter dated August 23 and August 22, 2020 respectively, Formation responded to these critiques. In brief, this report and letter collectively find that: (1) Formation followed an appropriate "systematic evaluation" to determine if a potential GDE should be considered groundwater dependent; (2) the Formation analysis properly relied on "the available data to assess, based on the available guidance and best available and accepted science" to make its GDE determinations; (3) a GDE is not disqualified as a GDE if it receives some surface as "most GDEs are dependent on a combination of surface and groundwater;" (4) the extrapolations made by the CalAm report authors is not based on a firm scientific foundation; and (5) the Dune Sand Aquifer is a Principal Aquifer.

There are also a series of Formation Environmental reports that demonstrate that each of these vernal ponds is dependent on groundwater. Moreover, given the Formation conclusions that the aquitards are discontinuous and that the data is not consistent "with perched aquifers that are isolated from an underlying aquifer system," Formation concludes that these GDEs are hydrologically connected with the Dune Sand Aquifer ("these areas are underlain with a continuous saturated zone that extends through the Dune Sand Aquifer to the GDEs"). Since this is one of the two aquifers which would be the source water for the MPWSP, there are very serious concerns regarding the drawdown effects of the Project on the biological health of the GDEs.

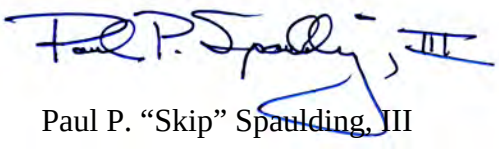
The 2020 Coastal Commission Staff Report determined that these reports (including that of the Commission's independent hydrogeology consultant) present valuable information regarding impacts of CalAm's slant well pumping on these coastal wetlands. It stated: "These recent analyses, although not comprehensive, strongly suggest that the identified drawdowns could adversely affect the functions and values at up to several dozen acres of these vernal ponds and wetlands, primarily at the Armstrong Ranch Ponds, and possibly at other nearby wetlands." Staff Report, at 52. The Staff Report details the range of adverse effects on the wetlands and concludes that it would be difficult to provide adequate mitigation for any adverse effects due to the extent and nature of the effects, particularly since several dozen acres of wetlands are involved. *Id*. at 53.

The decision in the *Environmental Law Foundation* case mentioned above stands for the proposition that pumping of groundwater that has effects on interconnected navigable waters which are within the public trust must be evaluated in a public trust doctrine analysis. Here, the best scientific evidence demonstrates that these vernal ponds are hydraulically connected to groundwater and that they will likely suffer severe adverse impacts from drawdowns caused by CalAm's proposed slant well pumping. Before considering the Lease and as part of its public trust doctrine analysis, the SLC must carefully analyze this issue. And, once it does so, the SLC must protect this public trust use by refusing to grant the Lease.

VI. CONCLUSION

The City of Marina appreciates the State Lands Commission's consideration of these written comments. Marina also intends to supplement its comments in writing or orally once the Commission publishes its staff report, recommendations, and any other materials relating to this decision. Please feel free to contact me if you have any questions about these comments or if you would like further information.

Very truly yours,



Paul P. "Skip" Spaulding, III

PPS:vak

cc: Mayor Bruce C. Delgado
Mayor Pro Tem Liesbeth Visscher
Council Member Brian McCarthy
Council Member Kathy Y. Biala
Council Member Jenny McAdams
City Manager Layne Long
Larisa A. Meisenheimer
Lucinda Calvo, SLC Senior Counsel

10931829

Archived: Thursday, June 18, 2026 8:30:00 AM
From: [redacted]
Sent: Wednesday, June 17, 2026 5:49:34 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Dear Chair Cohen and Commissioners,

As one of the Board Members of the Fort Ord Reuse Authority (FORA), who proudly approved the project to begin recycling Monterey Peninsula water, I am bewildered by your desal agenda item (File: A4181 / SCH #2006101004)

Why would we discuss (not to mention approve) a project that is no longer needed? It is disrespectful to the visionary hard work of good people who have already solved this problem so elegantly.

And, as a multi-decade peninsula property owner and utility payer in an increasingly unaffordable utility landscape, I beg you to respect all of us here working to make ends meet.

Please dismiss with prejudice or deny the CalAm permit request.

Thank you,
Victoria Beach
former Carmel Mayor pro tem

CSLC.CommissionMeetings@slc.ca.gov
A4181 / SCH #2006101004, and use the subject line "." We understand

Milton Marks Conference Center
State Lands Commission
455 Golden Gate Ave.
San Francisco, CA 94102

Monday, June 22, 2026, ~1:45 p.m.

Re: Commission Meeting, Tuesday, June 23, 2026 at 12 p.m.
Public Comments, Agent Item # 60:

> **CALIFORNIA-AMERICAN WATER COMPANY (APPLICANT)**
> Consider termination of a General Lease – Right-of-Way Use and issuance of a General Lease – Industrial Use, of sovereign land located in the Pacific Ocean, Monterey Bay, near Marina, Monterey County; for the construction, operation, and maintenance of four subsurface slant wells and the conversion, operation, and maintenance of one existing subsurface test slant well. CEQA Consideration: Environmental Impact Report/Statement, certified by the California Public Utilities Commission and Monterey Bay National Marine Sanctuary, respectively, State Clearinghouse No. 2006101004; California Coastal Commission Coastal Development Permit Nos. A-3-MRA-19-0034 and 9-20-0603, and adoption of a Mitigation Monitoring Program, Statement of Findings, and Statement of Overriding Considerations. (Lease 9177; A4181; RA# 2022354) (A 30; S 17) (Staff: D. Simpkin, Y. Ramirez)

Hello, Commissioners:

My name is Leslie Asher. I am a man who now lives in the City of Marina, California since retiring from a career in the technology industry and from teaching computer courses at several California Community Colleges.

Though water desalination, in appropriate places, can offer benefits, the California-America Water proposal at the City of Marina could potentially cause harm that might outweigh benefits.

A desalination plant that Cal-Am proposes here, as I understand it, would:
-- not draw salt water directly from the ocean
-- instead draw water from underground slant wells that might compromise aquifers beneath the City of Marina, which are vital to our city's fresh water supply
-- possibly exacerbate salt-water intrusion into our city's aquafers
-- not return any desalinated water to the City of Marina, nor any compensation or other benefit
-- increase water costs in the region that are reportedly among the highest anywhere.

Please consider these notions as part of your deliberations.

Sincerely,

(Mr.) Leslie Asher
[redacted]
Marina, CA [redacted]

[redacted]

Archived: Friday, June 19, 2026 10:50:59 AM
From: Michael Baer
Sent: Friday, June 19, 2026 10:16:47 AM
To: CSLC CommissionMeetings
Subject: Item 6O ~STOP CalAm Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Dear Commissioners of State Lands,

I am a long time Monterey Peninsula resident and Cal Am ratepayer. I, along with hundreds of allies, have been in opposition to CalAm's unnecessary, environmentally and ecnomically disasterous slant well desalination plant since 2013.

There are more than a dozen reasons why this plant is unfair, unjust, illegal, and just plain stupid at this point. Particularly now that the Montetey One Pure Water Recycling expansion project has met and exceeded our water demand while protecting the Carmel River and supplementing capacity via the Seaside aquifer injection wells.

I ask you to seriously look at the entire scope of the project and its issues, as Cal Am uses a piecemealing strategy to wriggle and wrangle its way through the oversight process.

In 2018 during the "final" EIR process conducted by the CPUC, I took a hard look at the brine outfall pipe aspect. It is an existing pipe used by Montetey One for treated wastewater disposal. It extends nearly two miles offshore but it terminates along a seabed sandy plain that is roughly only 100 feet below the surface.

Certain local biology professors and scientists have claimed that it is potentially a significant squid nursery. Squid lay eggs in sandy plain habitat such as this. Brine is heavier than seawater by its very definition, and the chance that the outfall briny discharge will sink, cover, and destroy the nursery of a large commercial fishing species is unknown.

Over the intervening years since 2018 I have asked certain local experts who might know if a baseline survey of the sealife at the outfall has ever been conducted. I have never received a clear yes or no answer.

You must demand such evidence be presented or conducted before considering granting a permit for any aspect of this project.

To reiterate; this is just one, of a multitude of issues that this project has failed to resolve.

Respectfully,

Michael Baer
Pacific Grove, CA

Yahoo Mail: Search, Organize, Conquer

Archived: Thursday, June 18, 2026 8:26:18 AM
From: Beverly Bean
Sent: Wednesday, June 17, 2026 6:37:52 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

Please deny the Cal Am lease application for their desalination project which is unnecessary since new water supplies are now online providing all the water needed. Due to conservation and the new supply from Pure Water Monterey, the proposed supply and demand needs for the Monterey Peninsula have changed. There is no longer a water shortage on the Peninsula. In fact, Cal Am now has surplus water supply that is being stored in the Seaside Basin.

Cal Am, a private utility, continues to pursue this outdated and unneeded project for one reason and one reason only - shareholder profits. Cal Am customers already pay the highest water rates in the country, even without the cost of a desal project.

The cost of this project has not been updated since 2018. The rate impacts on low-income Monterey Peninsula ratepayers cannot be known without updated cost projections. These would include construction cost increases since 2018; likely amortization over 25 rather than 60 years given sea level rise; the loss of scale economies from the smaller 4.8 MGD plant; likely below-capacity operation spreading fixed costs over an even smaller production base; and no binding agreement preventing Cal Am from substituting expensive desal water for cheaper available supplies. New groundwater impacts could also result in new costs if Cal Am has to mitigate damage to Marina's groundwater.

Please listen to the experts who represent the public: Marina Coast Water District, the City of Marina, the Monterey Peninsula Water Management District and LandWatch Monterey County.

The SLC's own EJ Policy requires it to minimize additional burdens on disadvantaged communities. But the SLC cannot even assess the environmental justice impact of this project without updated rate projections.

The CPUC's 2018 decision required Cal Am to revisit operating restrictions for the desal plant if it secured additional supply from Pure Water Monterey. Cal Am has secured additional supply but has not complied with the 2018 CPUC order. The CPUC decision was specifically designed to protect ratepayers from bearing expensive desal costs when cheaper water is available. Until it occurs, neither the CPUC nor the SLC has an accurate picture of what it will cost ratepayers.

Please vote to deny this lease application. You have an independent obligation to learn the facts. Do not accept what other agencies concluded about a different project design under different facts and conditions. The majority of the public, who will pay the outrageous costs for this project, oppose this boondoggle.

Thank you for your consideration.

Beverly G. Bean, VMD

[redacted]

Corral de Tierra, CA [redacted]

Archived: Monday, June 22, 2026 2:01:49 PM
From: Charles Biller
Sent: Friday, June 19, 2026 4:02:36 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181

Chair Cohen and Honorable Commissioners:

Voters rely on your integrity and thorough analysis to protect them from corporate greed and boondoggle projects like Cal Am's proposed desal plant. This project directly impacts my family and community.

I urge the State Lands Commission to either deny Cal Am's lease application or to do supplemental environmental review before considering it, due to significant new information. Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply demand an updated environmental review.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what other agencies have concluded about a different project design in the past.

Please protect the public and deny this application.

Sincerely,

Charles J. Biller

Monterey, CA

Archived: Tuesday, June 23, 2026 11:19:45 AM
From: Patricia B
Sent: Tuesday, June 23, 2026 9:17:37 AM
To: CSLC CommissionMeetings
Subject: Deny CalAm proposed Marina lease
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Please deny CalAm's proposed desalination project in Marina, Monterey CA. It is not needed and will cause harm to our water and surrounding land.

Patricia Bini
Resident of Marina

Archived: Monday, June 15, 2026 3:01:48 PM
From: Kristin
Sent: Saturday, June 13, 2026 1:07:26 PM
To: CSLC CommissionMeetings
Subject: Marina CA and CalAm Slant Wells
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

To Whom It May Concern,

I am a Marina, CA resident, and have been part of the resistance to the Cal Am desalination plant for what feels like an eternity now. This subsidiary of a major corporation continues to leverage its billions to fight a small California coastal town located on the Monterey Bay National Marine Sanctuary, a federally protected marine reserve, at the expense of our tax dollars.

Marina, a racially and culturally diverse community, has its own aquifer. Cal Am wants to use desalination to treat water for wealthier, white communities that have depleted their aquifers, to the detriment of our city's water supply. It is absurd that we must continue to fight this corporation, a subsidiary of the multi-billion-dollar American Water Works, but this is typical American corporate greed to own and profit from our natural resources.

Neither the cities that would receive water from a desalination plant nor the city whose water would be used to produce that product is in favor of the desalination plant. Cal Am has proven far more expensive than the currently implemented water reclamation system, which is also environmentally sound and will restore the depleted aquifers without interfering with Marina's existing, pristine aquifer.

Total Estimated Capital Costs: Cal Am has previously projected the capital costs to build the plant at around $329 million. Other local estimates, such as those from the Monterey Peninsula Water Management District, push projected capital costs closer to $420 million.

30-Year Out-of-Pocket Total: Including financing, maintenance, and 30 years of operating expenses, the total cost could exceed $1 billion.

Due to the steep preparatory and capital costs, the desalinated water could cost over $6,000 to $8,000 per acre-foot. This has raised significant environmental justice and affordability concerns for residents in Marina and the broader Monterey Peninsula.

I thereby urge you, members of the State Lands Commission, to rule against Cal Am's petition to drill into our aquifer for a desalination plant. Please consider the sea life in our sanctuary, the rate payers of Cal Am, and the citizens of Marina, CA.

Thank you,
Kristin Bitler

Archived: Friday, June 19, 2026 8:19:00 AM
From: Alex Brant
Sent: Thursday, June 18, 2026 6:35:48 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Dear Chair Cohen and Commissioners,

I respectfully urge the State Lands Commission to deny or defer approval of Cal-Am's slant well lease application until a current and complete analysis of the project is performed.

The circumstances that originally justified the desalination project have changed substantially. Conservation measures and Pure Water Monterey have significantly reduced the Peninsula's water supply deficit, and recent analyses indicate future water needs are far below the capacity of the proposed desalination plant. Before approving additional permits, the Commission should require a clear demonstration that this project remains necessary.

The economic impacts are also deeply concerning. Project costs have increased dramatically, while Cal-Am is now proposing a smaller facility that may operate well below capacity. Monterey Peninsula ratepayers could be required to pay some of the highest water costs in California for a project that may no longer be needed. Residents deserve a transparent and updated assessment of the project's true cost-effectiveness compared to available alternatives.

Finally, the environmental review appears outdated. The project now being discussed differs from the project evaluated in prior reviews, and new information regarding groundwater conditions, seawater intrusion, and related infrastructure impacts has emerged since those analyses were completed. The Commission should not rely on stale environmental documents when making a decision with long-term consequences for the Monterey Bay region.

For these reasons, I urge the Commission to defer action and require updated environmental and economic review before considering approval of the lease.

Thank you for your consideration.

Alex Brant
Carmel Valley Resident

Archived: Thursday, June 18, 2026 8:27:34 AM
From: Anna Brigantino
Sent: Wednesday, June 17, 2026 6:27:23 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Please deny Cal Am's Lease Application. (RE: California-American Water Company's General Lease Application (File:A4181; SCH #2006101004)

As a resident of Marina, I have been witness to the Marina community's almost unanimous opposition to the Cal Am desal project—and for good reason:

- The Cal Am desal project threatens Marina's sole source of water. (We are not customers of Cal Am.)
- Marina is a thriving community of over 3000 new homes and our area does not need the eyesore of the vastly huge Cal Am desal plant nor can we afford the damage that will be caused by its construction and its aftermath
- The community of Marina, where the desal plant is proposed, does not get one drop of water from the project.
- The construction of the desal plant will destroy sensitive dune habitat which is home to dozens of threatened plant and animal species. This habitat includes breeding areas for the snowy plover which currently number only 300 breeding pairs in the Central Coast.
- Cal Am has never secured water rights; only has an easement; is using data that is completely outdated and/or incorrect;
- CalAm is a bad actor who has played the regulatory process by getting incremental approvals, bouncing between agencies, but never having the whole project analyzed for total environmental impact nor whether there is an actual need for the project based on current usage data
- Sea Level rise will cause the desal plant to fail long before it reaches it projected lifespan
- Cal Am will not guarantee the amount of water the desal plant will produce or how much the water will cost its customers
- This project is not for the greater good of any of the communities on the Central Coast. This project only provides benefit to CalAm's bottom line.

Please deny the request by Cal Am to build its slant wells in my home of Marina, California.

Thank you,
Anna Brigantino
[redacted]
Marina, CA [redacted]

Paul B. Bruno

[redacted]

June 19, 2026

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825

RE: California American Water Company (Cal Am) Lease Application

Dear Commissioners,

I am a Monterey Peninsula resident and serve as a Director of the Seaside Groundwater Basin Watermaster. A significant portion of our local water supply currently comes from this over drafted groundwater basin. I have served on the Watermaster since its inception 20 years ago including many years as its Chair. I am submitting these comments to you as an individual.

I am writing to you today to respectfully request that you **VOTE TO APPROVE** Cal Am's lease application for the construction and use of four new subsurface slant wells and the conversion and use of one existing subsurface slant well for the proposed desalination plant.

My request is based upon knowledge gained being actively engaged as a community water supply advocate for over thirty years. I was in the 7th grade when we moved to the peninsula in 1977. At that time, the community was living under mandatory water rationing and in search of a water supply solution. I am now a 62 year old grandfather and we are still living in water poverty. Our water supply shortage has become a generational problem!

As a local business owner, I know firsthand how crucial a reliable water supply is for the region's economic development. The Peninsula's water supply shortage has made it difficult for many of my employees. Water insecurity has meant that housing is limited, reducing the options to live affordably and locally. A drought-proof water supply solution like the proposed desalination plant would provide the kind of sustainable infrastructure the community can rely on.

This project has been decades in the making. The plant has been extensively reviewed through the CEQA process and represents a responsible, necessary way of achieving the reliable water supply Monterey area businesses and residents need to thrive.

I urge you to approve this application so that my family and my employee's families will be able to flourish with the support of a reliable water supply.

Sincerely,

Paul B. Bruno

Archived: Friday, June 19, 2026 9:40:39 AM
From: BUCK JONES
Sent: Friday, June 19, 2026 9:38:15 AM
To: CSLC CommissionMeetings
Subject: AGENDA ITEM #60 CAL AMERICAN WATER LEASE APPLICATION
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

CALIFORNIAI STATE LANDS COMMISSION
100 HOWE AVENUE SUITE 100 - SOUTH
SACRAMENTO CA 95825
RE: CAL AM WATER GENERAL LEASE APPLICATION
FILE: A 4181 SCH# 200610104

Chairman Cohen and Honorable Commissioners
For the record:

Respectfully request the Commission deny California American Water's lease application on the basis that no one agency has reviewed the water availability in the current time frame, including the recycled water available via the online Monterey One recycled water treatment facility. The amount of water now available to Cal Am customers in combination with other presently permitted sources far exceeds the customer demand of record and will meet the projected demand for at least 20+ years. Hence, there is no need to issue a lease for an unnecessary desalination plant. At the very least the Commission should prepare a present-day environmental assessment to verify that the public necessity for the plant is valid.

Respectfully

BARNEY BUCK and EUGENIA LILLIAN NELSON JONES
[redacted]
Pebble Beach, CA [redacted]
[redacted]

Archived: Friday, June 19, 2026 12:19:43 PM
From: Melody Burgess
Sent: Friday, June 19, 2026 12:14:10 PM
To: CSLC CommissionMeetings
Subject: Opposition to de Sal project in Marina
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

As a resident of Marina, Ca, I oppose the desalination project. The slant well will endanger our water supply and the plant will harm our environment. We, the citizens of Marina, will see no benefit and only harm. It is unfair to impose this plant on our community. Let the community it serves find a site in their area.

Not only that, as a former resident of Monterey, we voted to rid ourselves of CalAm and a few people, some unelected in that jurisdiction, overturned our vote.

Also, it has been determined that this plant is not needed.

June 18, 2026

California State Lands Commission
100 Howe Avenue
Suite 100 South
Sacramento, CA 95825

RE: 6/23/26 Item 60: California American Water Company Lease Application

Dear Commissioners,

On behalf of CalDesal, I am writing in strong support of California American Water's lease application for the construction and use of four new subsurface slant wells and the conversion and use of one existing subsurface slant well for the proposed desalination plant in Monterey. I urge the Commission to approve the application at the July voting meeting to move this critical project forward.

CalDesal is a statewide association comprised of water industry leaders, representing public and private sector entities as well as non-profit organizations, integrating the use of desalination to ensure a sustainable water future for communities throughout California.

The state's policy calls for desalination, when cost-effective and environmentally appropriate, as an important component of California's water supply strategy. California American Water's desalination project in Monterey fits the criteria for a situation where desalination is the right solution to a long-standing water supply challenge. The proposed project will reduce over-reliance on the Carmel River, while the project's innovative slant well technology protects the ocean and its ecosystem. Slant well intakes are designed and intended to minimize potential impacts to marine life by naturally providing filtration and are less vulnerable to waves, storms, and surface pollution. These subsurface wells also draw water through sand and gravel, which protect fish and plankton and filter debris before treatment.

In addition to their direct environmental benefits, slant wells increase water quality and reliability by providing cleaner, more consistent feedwater with less need for treatment. Since these intakes are beneath the seafloor, the slant wells are also shielded from waves, storms, and spills while onshore access simplifies maintenance. And, with no visible offshore pipes or intake screens, these wells leave a small visual footprint.

California American Water's proposed desalination project aligns with the state's planning framework and would bring California closer to completing its goals of increasing the water supply provided by desalination projects while delivering water reliability and environmental benefits to the Monterey Peninsula. I urge the Commission to approve the lease application at the July voting meeting to further stabilize both the region's and the state's water supplies.

Please don't hesitate to contact me at glennf@caldesal.org or at (916) 216-1747 if you have any questions regarding CalDesal's comments on this lease application.

Sincerely,



GLENN A. FARREL
Executive Director, CalDesal

cc: Mr. Evan Jacobs, California and Hawaii American Water

Andrew Clarke
[redacted]
Del Rey Oaks, CA [redacted]

June 18, 2026

Via Email: CSLC.CommissionMeetings@slc.ca.gov

Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825

Re: June 23, 2026 Meeting; Agenda Item #60
Support for California American Water's Lease Application (A4181; SCH# 2006101004)

Dear Honorable Commissioners:

I am writing to urge you to approve California American Water's lease application for the construction and use of four new subsurface slant wells and conversion of one existing subsurface slant well. The approval of the lease is another critical step needed for the Monterey Peninsula Water Supply Project (MPWSP) that is desperately needed to provide a long-term solution to the Monterey peninsula continued water issues. As a former member of the Monterey Peninsula Water Management District, I am very aware of the water issues facing our community and what we need to do to get that resolve those issues.

The MPWSP is a critical part of the solution needed to answer to the State Water Resources Control Board's (SWRCB) 2009 Cease and Desist Order, which limits pumping from the Monterey Peninsula's primary water source, the Carmel River. This water project, in conjunction with the continued water conservation efforts of the Monterey peninsula that will help us replace our historical reliance on the Carmel river.

Your approval of this lease will help protect the Carmel River and will allow the Monterey Peninsula community to continue to comply with state regulations. The community has come together to bring the Carmel River back to its former glory and protect all of the plants and animals that rely on that environment.

The project has been the subject of an extensive environmental review by state and federal agencies and was unanimously approved by the California Public Utilities Commission (CPUC) in 2018. This project is not without its opponents but has been exhaustively reviewed in the 13,000-page EIR/EIS and found to be in compliance with all laws and regulations. In fact, the California Supreme Court previously denied a parties petitions for writ of review of the CPUC's approval, upholding the EIR and the CPUC's decision.

The project has been designed in an environmentally responsible manner. It utilizes a state-of-the-art subsurface intake well system and a commingled brine/wastewater discharge, a desalination technology that minimizes marine impacts and is preferred by the SWRCB, Monterey Bay National

Andrew Clarke
[redacted]
Del Rey Oaks, CA [redacted]

Marine Sanctuary and Coastal Commission. The project's subsurface intake wells will also be located on a disturbed former industrial site, reducing impacts to biological resources.

Without the approval of this lease application, our community may face severe water restrictions, including possible water rationing, unless a long-term permanent drought resistant source is put in place. Our community has undertaken various projects to supplement our water supply, including the expansion of Pure Water Monterey, however, there is no single project or effort that will solve the regions water issues. It will take all of the projects to provide safe reliable water for our community now and into the future.

The timing of this approval is critical as failure to complete the project in timely manner would be harmful for the Monterey Peninsula community and the environment. The construction schedule for the project requires work begin as soon as possible in order to the Cease and Desist Order lifted. Your approval of this important lease cannot be delayed.

My time serving on the MPWMD I worked very hard to get a new water supply online but was not successful. Approval of this lease will complete another critical step for our community to have the necessary water we need to provide economic opportunities that we have been held back from for the past 25+ years. Our community has become the gold standard in the state in water conservation. However, given the already low water usage rate, conservation alone cannot replace the shortfall between California American's water supplies and anticipated future demands.

The benefits of the Project are clear. I ask that you approve California American's lease application for the construction and use of four new slant wells at the earliest opportunity.

Sincerely,



Andrew Clarke

Archived: Friday, June 19, 2026 8:27:06 AM
From: Mike Cate
Sent: Thursday, June 18, 2026 11:47:48 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application."
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Dear Chair Cohen and the Commissioners
I am writing to you to ask that you deny Cal Am's Slant well leases that would be used for the proposed desalination plant. The water shortage has clearly been erased by Pure Water Monterey and future demands will surely be met in the same way.

Please deny the lease to Cal Am as the proposed desalination plant is economically wasteful and environmentally degrading.

Thank you for your attention to this important matter.

Sincerely
Michael Cate
Carmel CA

COALITION OF PENINSULA BUSINESSES

A coalition to resolve the Peninsula water challenge to
comply with the CDO at a reasonable cost

Members Include: Monterey County Hospitality Association, Monterey Commercial Property Owners' Association, Monterey Peninsula Chamber of Commerce, Carmel Chamber of Commerce, Pacific Grove Chamber of Commerce, Monterey County Association of Realtors, Monterey Peninsula Engineering, Community Hospital of the Monterey Peninsula

June 18, 2026

California State Lands Commission
100 Howe Avenue
Suite 100 South
Sacramento, CA 95825

Transmitted by fax to (916) 574-1810

RE: California American Water Company Lease Application

Dear Commissioners,

The Coalition of Peninsula Businesses, an association of business organizations across the Monterey Peninsula, respectfully requests that you vote to approve California American Water's lease application for the construction and use of four new subsurface slant wells and the conversion and use of one existing subsurface slant well for the proposed desalination plant in Monterey.

As employers, job creators, and community partners, our coalition understands firsthand how crucial a reliable water supply is for the region's economic vitality. The Peninsula's water supply shortage has constrained business growth, limited opportunities for expansion, and made it harder for local employers to recruit and retain workers.

Water insecurity has also contributed to constrained housing supply, reducing the options workers have to live affordably and locally. A drought-proof water supply solution such as the proposed desalination plant will provide the kind of sustainable infrastructure our businesses, employees, and broader community can rely on.

The plant has been extensively reviewed through the CEQA process and represents a responsible, necessary and sustainable way of achieving the reliable water supply Monterey Peninsula businesses need to thrive.

We urge you to approve this application so local businesses, workers, and the communities they serve can flourish with the support of a reliable, long-term water supply.

Sincerely,



Jeff, Davi, Chair

Archived: Friday, June 19, 2026 9:02:45 AM
From: GEORGE W CONNER
Sent: Friday, June 19, 2026 8:33:42 AM
To: CSLC CommissionMeetings
Subject: Desal in Marina
Sensitivity: Normal
Archived: Friday, June 19, 2026 9:02:45 AM

Attention: This email originated from outside of SLC and should be treated with extra caution.

Please do the appropriate supplemental Environmental Studies Before approving the CAL Am desalinization plant in Marina.

George Conner
[redacted]
Monterey Ca. [redacted]

June 19, 2026

California State Lands Commission
100 Howe Avenue
Suite 100 South
Sacramento, CA 95825

RE: 6/23/26 Item 60: California American Water Company Lease Application

Dear Commissioners,

On behalf of the California Water Association, I urge you to approve California American Water's lease application for the construction and use of four new subsurface slant wells and the conversion and use of one existing subsurface slant well for the proposed desalination plant in Monterey. CWA represents 84 drinking water utilities regulated by the California Public Utilities Commission (CPUC), providing safe, reliable, high-quality water service to approximately 6 million Californians, or 15% of the State's population.

A lack of reliable, drought-proof water supplies has resulted in a state-ordered building moratorium that has burdened the Monterey region for more than 30 years. The Monterey Peninsula, as a result, has become one of the lowest water users in the state, but it has come at the cost of housing affordability, economic development and adding new jobs in the region.

The Monterey Peninsula has needed a drought-resilient water supply for decades, and California American Water's proposed desalination project is the only true, drought-proof solution that can resolve Monterey's water supply crisis. Unlike the other parts of the Monterey Peninsula Water Supply Project, desalination is the only water supply source that would remain unaffected by unpredictable water availability during future drought years.

California American Water has developed industry-leading affordability programs in partnership with the California Public Utilities Commission (CPUC) to maintain ratepayer protections while building essential infrastructure. Just in the last year, California American Water:

- Requested the CPUC increase its customer assistance discount from 35% to 50% for essential water use in 2027.
- Proposed a new discount program to the CPUC for customers living in multi-family housing.
- Partnered with local non-profit organizations to provide crisis assistance to customers experiencing unexpected financial hardships.

We urge the Commission to approve California American Water's lease application at the June voting meeting to bring the Monterey Peninsula the drought-proof water supply it needs to thrive.

Sincerely,

J M Capitolo

Jennifer Capitolo
Executive Director
California Water Association

CWA
CALIFORNIA WATER ASSOCIATION

**WORKING TOGETHER.
ACHIEVING RESULTS.**

California Water Association
555 University Ave, Suite 230
Sacramento, CA 95825
510.392.4920
www.calwaterassn.com

Mailing Address:
39221 Paseo Padre Pkwy, Suite J
Fremont, CA 94538

Executive Director
Jennifer Capitolo
916.402.1155
jcapitoloecalwaterassn.com

Administrative Director
Samantha Raulinaitis
916.208.1342
sraulinaitisecalwaterassn.com

CWA President
Carmelitha Bordelon
San Jose Water Company

First Vice President
Craig Gott
Suburban Water Systems

Second Vice President
Joel Reiker
San Gabriel Valley Water Company

Third Vice President
Rami Kahlon
California Water Service

Treasurer
Jon Pierotti
Golden State Water Company

Archived: Monday, June 22, 2026 4:07:26 PM
From: Dustin Cook
Sent: Saturday, June 20, 2026 7:59:20 PM
To: CSLC CommissionMeetings
Cc: Dustin Cook
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners

June 19, 2026

California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

Honorable Commissioners,

Last year in its Supply and Demand hearing the CPUC ruled that Cal Am needed 2,528 AFY of additional water supply by 2050.
Cal Am is now attempting to change the scope of its desal project from 7,169 AFY (6.4 mgd) to 5,377 AFY (4.8 mgd) without CPUC approval.
At this point the CPUC 2018 EIR/EIS and the CCC 2022 CDP findings are outdated as neither of these reports fully addressed the 5,377 AFY (4.8 mgd)
as it is now designed.
When the CPUC analyzed the original 7,169 AFY (6.4 mgd) project, it denied the 5,377 AFY (4.8 mgd) phased approach that Cal Am now wants to use.
At this point the SLC needs a CEQA analysis that includes both the Phase 1 (5,377 AFY) and the Phase 2 (7,169 AFY) to bring this process current to 2026.

Thank you for reviewing this and safe guarding our future water supply needs.

Sincerely, Dustin Cook, Cal Am customer, Carmel Valley

Archived: Monday, June 22, 2026 2:11:04 PM
From: Jean Rasch
Sent: Friday, June 19, 2026 4:49:22 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181)

Chair Cohen and Honorable Commissioners:

Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River. Cal Am has an adequate and growing surplus supply which means Cal Am's numbers are out of date. We who live here need and deserve protection from corporate greed and wasteful projects like Cal Am's proposed desal plant. Marina desal water from the Cement plant location is not needed now; what Cal Am wants is for water users to pay for this desal plant at exorbitant costs, and then continue to bill customers among the highest rates for water in the country. PLEASE DON't let this happen! Stand up for justice!

Please either deny Cal Am's lease application or do supplemental environmental review before considering it, due to significant new information. Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply demand an updated environmental review.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what other agencies have concluded about a different project design in the past.

Please protect the voters and deny this application.

Sincerely,

Jean Rasch

--
Jean Rasch, Councilmember
District 3
City of Monterey
831-625-3200

Chair Andy Magnasco
Vice Chair Bart Bohn
Treasurer Peter Loewy
Phyllis Meurer
Scott Hennessy
Kristen Lovell
Michael Waxer
John Gaglioti
Lorin Letendre, Director Emeritus

Executive Director Abbie Beane

6/18/2026

California State Lands Commission
100 Howe Avenue
Suite 100 South
Sacramento, CA 95825

RE: 6/23/26 Item 60: California American Water Company Lease Application

Dear Commissioners,

On behalf of the Carmel River Watershed Conservancy, I urge you to approve California American Water's lease application for the construction and use of four new subsurface slant wells and the conversion and use of one existing subsurface slant well for the proposed desalination plant in Monterey.

The Carmel River has long been one of California's most ecologically significant — and most stressed — waterways. For decades, overreliance on the river as a primary water source has placed enormous pressure on its ecosystems, threatening steelhead trout, red-legged frogs, lamprey, and other species that depend on healthy river flows to survive. The path to lasting recovery for the Carmel River runs directly through finding a drought-proof water supply for the Monterey Peninsula.

That path is the proposed desalination project. By significantly reducing the region's dependence on the Carmel River, the project would allow the watershed to continue healing by restoring flows, rebuilding habitats, and providing native species the relief they need to thrive long-term. This project is the solution the river has needed for generations.

The urgency of this project is exacerbated by climate change. California's water supply is projected to decline by 10% over the next 20 years, making extreme dry periods more frequent and more severe. During droughts, rivers like the Carmel face the greatest risk. A drought-proof water source, such as desalination, would be a critical solution, protecting the Carmel River from over pumping when it is most vulnerable.

We urge the Commission to approve California American Water's lease application at the June voting meeting for the river and the species that have waited long enough for a sustainable future.

Signed,

Chair Andy Magnasco
Vice Chair Bart Bohn
Treasurer Peter Loewy
Lorin Letendre, Director Emeritus
Executive Director Abbie Beane

Directors:
Phyllis Meurer
Scott Hennessy
Kristen Lovell
Michael Waxer
John Gaglioti

The Carmel River Watershed Conservancy protects and improves the health of the Carmel River Watershed for the benefit of its natural environment and the public good. Carmelriverwatershed.org

Archived: Monday, June 22, 2026 8:53:12 AM
From: Mark Eckles
Sent: Friday, June 19, 2026 2:32:22 PM
To: CSLC CommissionMeetings
Subject: Agendaitem. #60 Cal Am LeaseApplication
Sensitivity: Normal
Archived: Monday, June 22, 2026 8:53:12 AM

Attention: This email originated from outside of SLC and should be treated with extra caution.

Sent from my
This is part and parcel of the public's effort to PAY for our resource water as much as the air we breathe. The Desal project is a scam in "CalAmity's" effort to continue to charge the public among the highest price for water in the USA. You are aware of the "misplaced" salinity sensor. The water they wish to take is from a deep aquaphor that belongs to farming, cities in the Salinas valley. If under its control Cal Am will charge prices that will further degrade the environment of the Monterey Peninsula. "Once there were valleys where rivers used to run." Do largely to the high cost of water bees are finished; I occasionally would call a bee keeoer to collect a hive. Bees are few to be seen. Frogs are nearly all gone. Swallows would seasonally come and be flying open spaces to feed upon insects, Flocks of Cedar Waxwings would descend upon our Holly tree to eat berries. As someone upon whose family Jon Audubon would study and document bird life whats happened to all wildlife related to lack of natural sustenance is an environmental disaster, a CalAmity. Please bring this assault of corporate greed to a halt. In honor of Greta, thank you members of the board. Mark Magruder Eckles

Archived: Thursday, June 18, 2026 8:25:11 AM
From: Ashley Edge
Sent: Wednesday, June 17, 2026 11:53:58 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Hi Chair Cohen and the Commissioners,

I'm writing in response to Agenda Item #60 Cal Am Lease Application.

Please **do not approve** Cal-Am's lease application for slant wells for the unnecessary, expensive, and damaging desalination plant. We don't need this; research shows we have enough water given conservation/efficiency efforts and the new supply from Pure Water Monterey. This desalination plant would cost ratepayers too much while offering too little value in return.

Thank you for reading.

Warmly,
Ashley

Ashley Edge, REALTOR® (she/her)
[redacted]

II. The Core Disparities and Rate Discrimination

Under the current administrative arrangement, an invisible jurisdictional line drawn from Chapter 526, Statutes of 1919, separates county-administered tidelands from city-administered tidelands. This historical boundary line has resulted in significant public policy and economic distortions:

1. **Rate Discrimination:** Identical physical uses of sovereign public waters (private recreational docks) are subjected to materially different fee structures based solely on an administrative jurisdictional distinction. This arrangement appears inconsistent with the statutory "no discrimination in rates, tolls, or charges" principles reflected in regional tideland grants, including Chapter 74, Statutes of 1978.
2. **Inequitable Burden Shifting:** While average recreational boaters, offshore mooring permittees, and many Newport Beach waterfront homeowners are subjected to tideland-related permit fees and increasing harbor-related costs, certain private residential dock owners occupying sovereign waters appear exempt from the standard residential dock permit fee structure applied elsewhere within Newport Harbor. Residential pier permit rates themselves also do not appear to have undergone substantial or regular revision during the past decade.

III. Legal and Constitutional Vulnerabilities

The current exemption of portions of Newport Harbor from uniform residential dock fee structures presents several significant legal and constitutional concerns:

- **Unlawful Gift of Public Funds (Cal. Const. Art. XVI, § 6):** By permitting private residential properties to utilize valuable sovereign water space for little or no comparable municipal fee collection, administrative trustees may effectively be conferring a disproportionate private benefit through the reduced-cost use of public trust assets without obtaining equivalent public compensation.
- **Equal Protection Concerns (Cal. Const. Art. I, § 7):** Creating materially different fee treatment for similarly situated residential dock users based solely on localized jurisdictional boundaries raises concerns regarding arbitrary classifications among users of sovereign tidelands.
- **Public Trust Doctrine Concerns:** Tidelands are held in trust for the benefit of all Californians for purposes including navigation, commerce, fisheries, and public access. When private docks permanently occupy and restrict public waters without

a reasonably uniform and equitable compensation structure, the state's fiduciary obligations under the Public Trust Doctrine warrant closer review.

- **Potential Inconsistency with Legislative Intent (Chapter 715, Statutes of 1984):** While Chapter 715 authorized leasing arrangements for certain filled lands and limited residential landscaping uses, it does not appear intended to exempt substantial over-water residential dock structures from broader harbor fee obligations or uniform tideland management principles.

IV. Action Requested

To address these apparent disparities and ensure consistent administration of sovereign tidelands within Newport Harbor, the California Coastal Commission and the California State Lands Commission should jointly undertake the following actions:

1. **Initiate an Audit:** Conduct a joint administrative review of County of Orange and City of Newport Beach sovereign land leases, permits, and fee structures affecting Harbor Island and similarly situated residential dock areas within Newport Harbor to determine the extent of any discrepancies in per-square-foot occupancy fees and related harbor charges.
2. **Evaluate Rate Uniformity:** Review whether existing local coastal program provisions, sovereign land lease arrangements, and municipal permit structures provide equitable and nondiscriminatory treatment among similarly situated residential dock users throughout Newport Harbor.
3. **Direct Revenues Toward Public Benefit:** To the extent additional revenues are identified through future fee harmonization or revised lease structures, ensure such funds are directed toward enhancing public coastal access, harbor maintenance, environmental dredging, and other public trust purposes within Newport Bay.

Sovereign state lands belong to all citizens of California. The current jurisdictional structure should be reevaluated to ensure equitable administration of sovereign tidelands and consistent treatment of similarly situated waterfront users.

Respectfully submitted,

A citizen of Newport Beach concerned with fairness

Archived: Tuesday, June 23, 2026 9:01:36 AM
From: Evalina H
Sent: Monday, June 22, 2026 11:14:45 PM
To: CSLC CommissionMeetings
Subject: Comment for meeting 6/23 Desal Plant
Sensitivity: Normal
Archived: Tuesday, June 23, 2026 9:01:36 AM

Attention: This email originated from outside of SLC and should be treated with extra caution.

Hello,

Desalination is not the answer. It's shown time and time again they do more harm than good. Without having a proper disposal of the salt that comes from the water. Proper disposal is not putting it back in the ocean. That raises salinity in the water and can cause irreversible damage to fish and other sea life. There are safer options, recycled or grey water can be used for crops, we can all cut down on water use to help. But we should not be building more houses and shopping centers if we do not have the water already to sustain them.

Evalina

Archived: Thursday, June 18, 2026 1:21:12 PM
From: Robert Evans
Sent: Thursday, June 18, 2026 12:34:25 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

State Lands Commission

I urge that you deny Cal Am's lease application for the following reasons:

1. Supply is no longer an issue. Monterey One Water can and will supply enough water for the expected build out of all lots of record in Can Am's service area.

2. Placing a Desal plant in a district outside of the service area is a bad idea! First, Marina does not want the plant in its service area. What if Marina wants to use the same area for their own purposes?

3. The test wells proved that Marina and the Salinas Valley Groundwater Basin will be impacted by Cal Am's proposed project. Not good for the region.

4. Sea level rise and coastal erosion pose likely compromise of the proposed site making the life span of the project suspect.

5. The impact of the increased brine in the outfall from both Monterey One Water plus Cal Am's Desal plant into the Marine Sanctuary has not been studied and is surly to have negative impacts on the Sanctuary.

Given the forgoing, please deny Cal Am's lease application.

Thank you,

Robert Evans
[redacted]
Monterey, CA
[redacted]

Farm Bureau Monterey

Keeping Farmers Growing Since 1917

June 18, 2026

California State Lands Commission
100 Howe Ave., Suite 100 South
Sacramento, CA 95825

RE: 6/23/26 Agenda Item 60:
California American Water Company Lease Application

Dear Commissioners:

Monterey County Farm Bureau represents family farmers and ranchers in the interest of protecting and promoting agriculture throughout our County. Since 1917, Farm Bureau strives to improve the ability of those engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of our local resources.

On behalf of the Board of Directors for Monterey County Farm Bureau, we respectfully request that you vote to approve California American Water's lease application for the construction and use of four new subsurface slant wells and the conversion and use of one existing subsurface slant well for the proposed desalination plant in the Monterey Bay region.

Agricultural communities throughout the region depend on reliable and affordable water. This region is known as the "Salad Bowl of the World" because of the scale and importance of its agricultural production; farms, farmworkers, harvest and packing operations, support local businesses, and their families all rely on stable water supplies to sustain jobs and the local economy. At the same time, many agricultural areas face serious water supply and water quality challenges, including seawater intrusion into groundwater basins; that intrusion threatens not only drinking water, but also the wells and water sources that support fields, food production, and the agricultural workforce.

For the farming community, a long-term, drought-proof water supply is not an abstract regional goal; it is essential to keeping people working, protecting family livelihoods, and preserving the agricultural economy that has defined the region for generations. The proposed desalination project would provide a reliable source of water to help protect groundwater wells from further seawater intrusion while supporting the water supply stability for growers, farmworkers, and residents needing to plan for the future.

Approval of this lease application would also support the infrastructure investment needed to strengthen the region's water supply future. Reliable water protects agricultural production, supports family-sustaining jobs, and helps ensure that farming communities are not left behind as California confronts drought, climate variability, and increasing pressure on groundwater supplies.

On behalf of the farming community in Monterey County, we urge you to approve California American Water's lease application and help deliver the reliable, drought-proof water supply the region needs for a stronger and more secure future.

Sincerely,



Norman C. Groot
Executive Director

1140 Abbott St., Ste. C, Salinas CA 93901 <> 831-751-3100 <> www.montereycfb.com

Archived: Thursday, June 18, 2026 1:22:23 PM
From: Arno
Sent: Thursday, June 18, 2026 12:35:26 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners;
I am taking a moment to write to you to express my dismay at the specter of Cal Am once again trying to manipulate the process in trying to finagle a Desal plant. I've been following this for many years and am part of the majority of Monterey County residents who voted to publicly own our water utility company and to buy out Cal Am. Since that inflection point, which was the culmination of years - that continue to this day - of ratepayer abuse with the highest rates for water in the country and minimal to negligent service - we've seen Cal Am view the ratepayers' desire as a hostile takeover, refusing to sell. The truth is they are a hostile monopoly, an outside corporation with loyalties to their shareholders and nothing else. This has resulted in the leveraging of their power to strong arm local agencies to do their bidding in absence of facts that bolster their position. There are environmental reviews that have NOT been conducted, there seems to be enough reclaimed water thru agencies like Pure Water Monterey to warrant NOT building a costly desal plant that very likely will result in even HIGHER rates for us residents as well as ruin groundwater in the Marina area. I am not the most eloquent on this issue, there are many more that can speak to the minutiae of this case. What I am is a concerned, irritated long-time resident that has to take time out of my day - AGAIN - to complain about this boondoggle of a process where regulatory agencies meant to protect residents and citizens from the predatory practices of corporations seem to consistently bend to the will of these corporations time and time again in spite of the facts and severe public opposition. Cal Am is NOT well loved in this community and all these shenanigans, the subterfuge, the lies, the strategy of making us fork out millions of dollars to fight them for years, merely justifies the hatred. It's enough to drive you to drink - something stronger than water.
I'm urging you to either flat-out deny Cal Am's lease application and put a stop to this madness or at the very least - do the supplemental environmental review before considering it. The facts will lead you to the right course of action, I am sure of it.

Thank you for your time,
Arno Featherstone/Seaside

Sent with Proton Mail secure email.

Archived: Monday, June 22, 2026 8:57:38 AM
From: Myrleen Fisher
Sent: Friday, June 19, 2026 3:11:12 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)
Email Subject line: **Agenda Item #60 Cal Am Lease Application**

Dear Commissioners:

Please help the citizen ratepayers of the Monterey Peninsula who are in need of keeping the cost of water as low as possible. We do not need expensive desal water at this time, we have all we need for the next thirty years. Cal Am claims otherwise but they are wrong….It is Cal Am that needs the desal plant. Why?

Cal Am needs to have another asset in order to be able to raise rates again. Rates are based on their assets. They have been accumulating more and more of them. Our rates are over the moon. We now have a drought-proof source of recycled water that is already in use and will serve us for at least 30 years. Desal is not needed or wanted. Please don't allow them to force it on us. At least require them to update the environmental review. Better yet; deny their lease application.

Yours sincerely,
Myrleen Fisher
[redacted]
Carmel, CA [redacted]

Archived: Monday, June 22, 2026 8:54:02 AM
From: Denise Foderaro
Sent: Friday, June 19, 2026 2:35:22 PM
To: CSLC CommissionMeetings
Subject: Fwd: Agenda Item # 60 Cal Am Lease Aplication (19 June 2026)
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Subject: Agenda Item # 60 Cal Am Lease Aplication (19 June 2026)

Chair Cohen and Honorable Commissioners

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

Dear Honorable Commissioners,

I own several properties on the Monterey Peninsula and have owned these same properties over 20 years. Water usage and the actions (and inactions) of Cal Am Water has been at the forefront of our concerns and has been an erosion to our way of life on the Peninsula.

These have been enumerated over many past hearings and won't be listed now other than to say that I speak for seniors in the area who no longer are able to take showers necessary for hygiene because of the escalating costs of water and the "tiered" use system of charging which is currently in place. Our city jurisdictions have ruled such tiered pricing as illegal- especially if you indeed have a current surplus of water.

Cal Ams pricing systems and past attempts at rationing have placed community members at odds with each other. In the past, seniors have been the target of Property vandalism if they have been seen watering their prized vegetable garden perhaps too liberally or on the wrong day according to some activist residents. Seniors have also been the victim of unnecessary and unwarranted charges like being charged an extra $300 per month for a 2" pipe that has existed on their property for 60 years (!!!)

— as a strong arm method to encourage them to change that incoming pipe to a narrower one as a method of water conservation. - not withstanding the fact that they charge us according to tier pricing- as another method of punitive use.

To read now that they have an additional source of water and perhaps a surplus is most disheartening . They truly don't wish further studies or a hearing on this matter! They truly have no regard for the people, especially seniors, and the hardship they constantly throw our way . Just this week.. Cal Am came to our property to shut my water off to put in a new smart meter. No notice…in the past, they did this in the wee hrs of the morning - no notice!!! Senior residents this week were left without water mid morning during their am care ; gardeners were unable to complete their tasks.. and there is no number to complain: the Monterey office where one was able to go to deal with such matters is no longer open to the public. We have no say or standing in the matter which affects us most: reliable , affordable water.

Adding the expensive potential desal costs going forward is just unthinkable. Seniors are already stretched to the hilt on what they currently pay for water. Do you know that at the end of the month , if you are slammed against the tier rationing allotments- that it is cheaper to bathe in Evian bottled water?!!!!

So, It's not right for you as a governmental agency to skip over the requirements of the 2018 CPUC order. It once again ignores the concerns of the residents you serve. We deserve a continued forum to be fully heard.
Vote no on Agenda item 60 - the current rendition of Cal Ams newest lease application

Sincerely
Denise Foderaro
Pebble Beach, CA

Archived: Wednesday, June 17, 2026 10:59:37 AM
From: Alice Ann Glenn
Sent: Wednesday, June 17, 2026 10:49:24 AM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

I urge the State Lands Commission (SLC) to deny Cal Am's lease application due to significant new information regarding groundwater impacts and the lack of cost updates as well as other issues and changed conditions, such as CalAm now being in compliance with legal restrictions on its water supply and having a surplus.

Cal Am has played the regulatory process by telling you, the CA SLC that various agencies have handled this issue, with the result that no single agency has ever analyzed the complete project as CURRENTLY DESIGNED. The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what others concluded about a different project design under different factual conditions.

1. Environmental Justice Concerns for Low-income Monterey Peninsula Ratepayers

Cal Am has not updated the cost of this project since 2018. It has already spent $200M of its $279M cost cap. The rate impacts on low-income Monterey Peninsula ratepayers cannot be known without updated cost projections, including construction, amortization and.new groundwater impacts if Cal Am has to mitigate damage to Marina's groundwater, to mention just a few.

The SLC's own EJ Policy requires striving to minimize additional burdens on disadvantaged communities. But the SLC cannot even assess the environmental justice impact of this project without updated rate projections.

The CPUC's 2018 decision required Cal Am to revisit operating restrictions for the desal plant if it secured additional supply from Pure Water Monterey. Cal Am has secured additional supply from the Pure Water Monterey Expansion Agreement but has not complied with the 2018 CPUC order. That review was specifically designed to protect ratepayers from bearing expensive desal costs when cheaper water is available. Until it occurs, neither the CPUC nor the SLC has an accurate picture of what it will cost ratepayers.

2. Sea Level Rise Makes this Project Unreliable

Cal Am proposes building a project whose source water wells have a 25-year life. The 2022 CCC staff report points out that the slant well network could be at risk from coastal erosion and sea level rise by 2045–2050, not 2060 as the CPUC had previously assumed. Since Cal Am has no place to move these wells inland it appears the project would be unable to deliver the 2,528 AFY the CPUC concluded would be needed in 2050.

3. Supply and Demand

Due to conservation and the new supply from Pure Water Monterey the proposed supply and demand needs for the Monterey Peninsula have changed. There is no longer a water shortage on the Peninsula. In fact, Cal Am now has surplus water supply that is being stored in the Seaside Basin. In last year's Supply and Demand hearing the CPUC updated both supply and demand for the Monterey Peninsula. The CPUC ruled that Cal Am would need only 2,528 AFY of additional water supply by 2050.

Cal Am is attempting to change the size of its desal project without CPUC approval to do so. But even a 4.8 mgd (million gallons per day) plant is far too large and completely unnecessary.

There are additional issues such as the CEQA Environmental Review needs to be updated; New Groundwater Impacts; and the impact of the M1W Outfall must be analyzed now.

As a Cal Am rate payer, I urge you to deny Cal Am's lease application.

Sincerely,
Rev. Alice Ann Glenn

Monterey, CA

Archived: Friday, June 19, 2026 8:20:50 AM
From: Kate Goff
Sent: Thursday, June 18, 2026 10:45:33 PM
To: CSLC CommissionMeetings
Subject: Comment for June 23 Commission meeting: No to Cal-Am Lease
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Hello,

I am a resident of Marina, California, where Cal-Am wants to put a desalination plant. I wholeheartedly reject this plan and I want you to deny their request for a lease. We keep saying NO to Cal-Am, and they keep trying to muscle their way back.

We, the residents and even our city officials, didn't ask for this. We don't want it. We don't want the destruction of our wetland and beaches, or the pollution likely to come with the construction. We don't want any more risk to our remaining aquifer (you know, the one the military didn't destroy that is our only source of water for the future).

We wouldn't even be getting the water that Cal-Am wants to extract from us. We'd just get the burden and not the benefit. We've already got the toxicity and literal stench of the regional dump, the composting facility, the regional sewage plant, and a contaminated site listed on the US EPA's national priorities list ... stuff that other, wealthier Peninsula communities do not have to bear the burden of.

Marina doesn't want any more destruction of our city, our beaches, our aquifers, our future, our quality of life.

Whoever is reading this, you're probably not living in Marina. So listen to us, the people who do live here, the people who will have to bear the burden. Deny the lease. Listen to residents.

Sincerely,

Kate Goff
Marina, CA

Archived: Friday, June 19, 2026 8:23:04 AM
From: Lisa Haas
Sent: Thursday, June 18, 2026 10:58:32 PM
To: CSLC CommissionMeetings
Subject: Please deny Cal Am's Lease application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Dear Commissioners,
As a concerned citizen living in Monterey for 40 years.. I have felt the impact of Cal Am's shady practices over decades from the stealing water from the Carmel river to blocking everything good about the current recycled water project! Our consumer costs for water have skyrocketed even after years of conserving! We actually have the highest water prices in the country!
That being said I URGE you to **Deny** Cal Am's lease application, or at least to do supplemental environmental review before considering it! There is new information regarding groundwater impacts and no cost updates! I am not willing to pay for another wasteful project as it will be passed on to us consumers! A desal plant is **unnecessary** and **threatens** the Marina groundwater and environment! We now have a surplus of water thanks to the Pure Water project!
Sincerely, Lisa Haas

Lisa Haas Design and Paint



Archived: Wednesday, June 17, 2026 10:20:48 AM
From: Jane Haines
Sent: Tuesday, June 16, 2026 10:08:18 PM
To: CSLC CommissionMeetings
Subject: Request for your independent review of Cal Am's claims
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Please either deny Cal Am's lease application, or to do supplemental environmental review before considering it. As a long-time Pacific Grove resident and Cal Am customer, I'm aware of Cal Am's long history of failing to adequately inform responsible agencies of important, relevant information such as its proposals' impacts on Monterey County's serious groundwater situation.

Thank you,
Jane Haines

Pacific Grove, CA

Archived: Friday, June 19, 2026 9:02:02 AM
From: [redacted]
Sent: Friday, June 19, 2026 8:29:22 AM
To: CSLC CommissionMeetings
Subject: Agenda item#60 Cal Am Lease
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission

I am a customer of Cal Am in the Monterey area where for years they have been pushing to build a desalination plant. Residents/customers voted to buy out Cal Am several years ago because we do not want nor need such an expensive addition to the water supply. The buyout is being pursued.

Now Cal Am wants to downsize the desal project while the impact of the proposed 1,000 foot slant well has not been independently vetted. Cal Am already has surplus water and there is no longer a shortage of water on the Monterey Peninsula due to the new supply from Pure Water Monterey. We can't afford Cal Am's attempt to increase their value by initiating a new project that is not necessary.

Please deny their application for a lease OR do a supplemental environmental review before consideration. At this time. no single agency has analyzed the complete project as currently designed. It is not needed.

Thank you,
Tamara Harris
Monterey, CA.

Archived: Monday, June 22, 2026 2:12:23 PM
From: Jeff Hawkins
Sent: Friday, June 19, 2026 4:55:53 PM
To: CSLC CommissionMeetings
Cc: Jeffrey Hawkins
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Please deny this unnecessary effort!!

On Tuesday, June 23, the California State Lands Commission (SLC) will consider whether to approve Cal-Am's lease application for slant wells that would feed its unnecessary, unaffordable, and environmentally damaging desalination plant — and we need your voice in the record before they do.

Why this project doesn't add up

Conservation and new supply from Pure Water Monterey have erased the Peninsula's water shortage. Cal-Am now has surplus water stored in the Seaside Basin, and the CPUC's own 2025 supply-and-demand update found the Peninsula needs only 2,528 acre-feet per year of additional supply by 2050 — a fraction of what this desal plant would produce. Cal-Am is now trying to shrink the project from 6.4 to 4.8 million gallons per day without CPUC approval, but even the smaller version is unnecessary.

Ratepayers would pay the price

Construction costs have jumped sharply since 2018, and Cal-Am has already burned through $200 million of its $279 million cost cap. A smaller plant loses economies of scale, and a 2022 Coastal Commission finding that sea level rise will force the wells to relocate within 25 years means costs get amortized over a much shorter project life. LandWatch's analysis projects desalinated water could cost over $11,000 per acre-foot at full capacity — and nearly $20,500 per acre-foot if the plant runs at the half-capacity actually needed. Compare that to Pure Water Monterey's roughly $2,800 per acre-foot. Cal-Am's only proposed relief is a $10/month cap for five years for customers on its assistance plan — no real protection for low-income and disadvantaged ratepayers facing these costs for decades.

The environmental review is outdated

The SLC is relying on stale CPUC and Coastal Commission reviews that never analyzed the phased 4.8-then-6.4 MGD project Cal-Am is now proposing. New 2025 findings from the State Water Resources Control Board show the project would worsen groundwater decline and seawater intrusion in Marina — impacts the SLC's own "Environmental Memorandum" doesn't address. Monterey One Water's outfall modifications for brine discharge haven't been studied either. Deferring that analysis would be textbook CEQA piecemealing.

Thanks for the opportunity to voice my opinion after watching CalAm stumble along for 30+

years on the Monterey Peninsula.
Jeff Hawkins

[redacted]

Carmel, CA [redacted]

Archived: Monday, June 22, 2026 4:04:29 PM
From: Brent Helmick
Sent: Saturday, June 20, 2026 11:45:23 AM
To: CSLC CommissionMeetings
Subject: Opposed to slant wells under Marina
Sensitivity: Normal
Archived: Monday, June 22, 2026 4:04:29 PM

Attention: This email originated from outside of SLC and should be treated with extra caution.

The Cal Am desal plan to remove water by slant wells under Marina is irresponsible beyond belief.

There can be no doubt that the impact on Marina's source of clean water will be devastating; all for the sake of profit.

Brent Helmick

Archived: Wednesday, June 17, 2026 10:21:39 AM
From: Donna
Sent: Wednesday, June 17, 2026 8:36:43 AM
To: CSLC CommissionMeetings
Subject: Proposed desalinization well in Marina California
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and the Honorable Commissioners of the
California State Land Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Dear Chair Owen's and Commissioners of the California State Lands Commission,

I'm sending this email to voice my strong opposition to Cal Am's proposal to build a desalinization plant in Marina, California.
I have been involved with Public Water Now for many years. There has been much research to show that the proposed desalinization plant is an overly costly and destructive method to obtain water. There are better ways to provide freshwater to the residences
of the Monterey Peninsula. Not only will it impact the aquatic life significantly but it will also degrade the coastline at the proposed site. It will also unfairly increase the rate payers monthly bills. The Monterey Peninsula water bills already are one of the highest,if not the highest water bills in the country.
I do fully support the expansion of Public Water Now. Community owned water programs throughout the country have shown consistently that they are cost effective and promote environmental justice in a very modern way to provide clean water to its customers.

I respectfully ask that you consider this when making your decision about Cal Am 's proposal to build a desalinization plant in Marina, California.

Thank you for your time and your consideration.

Respectfully submitted,
Donna Hepburn

Pacific Grove, California

Archived: Thursday, June 18, 2026 4:13:59 PM
From: Troy Ishikawa
Sent: Thursday, June 18, 2026 4:03:07 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application - June 23, 2026 Meeting
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

RE: California-American Water Company's General Lease Application (File: A4181; SCH #2006101004)

Dear Chair Cohen and Honorable Commissioners:

When was the last time California American Water (Cal Am) presented a cost study for their proposed Monterey Peninsula Water Supply Project (MPWSP) desalination plant? The answer, 2018. Yes, eight years ago. Costs have risen significantly, since that time. How much has Cal Am already spent on the MPWSP? The answer, $200 million with a cap of $279 million. This leaves only $79 million to complete their proposed desal plant. This is egregious to think Cal Am can build their proposed desal plant for this price.

Who does this affect? Ratepayers. In particular, low-income Monterey Peninsula ratepayers. The rate impacts alone cannot be known without updated cost projections.

According to your commission's mission statement.

"The California State Lands Commission provides the people of California with effective stewardship of the lands, waterways, and resources entrusted to its care based on the principles of **equity**, sustainability, and resiliency, through preservation, restoration, enhancement, responsible economic development, and the promotion of public access."

If **equity** is at the heart of the State Lands Commission and its mission is to protect California's lands, waterways, and resources **for the benefit of all the people,** there can be no justification to reward Cal Am's illegal extraction from a disadvantaged community. Why should the wealthier Monterey Peninsula benefit at the complete expense of the ethnically diverse, working-class city of Marina? Ironically, those for whom this water would be illegally extracted are also strongly opposed to the Cal Am Slant Well Desalination project on the grounds of extreme environmental costs and the availability of a sustainable, feasible and affordable preferred alternative of the Pure Water Monterey project, a regional recycled water project.

Who, then stands to benefit from this project? Cal Am, its shareholders and its allies: the tourist industry and business coalitions all have lower water rates in a tiered system. Those who lose are the citizens of Marina, Ord communities, the Peninsula ratepayers, the City of Marina and the Marina Coast Water District. Those who win seek profit and financial gain; those who lose are the public.

We ask the State Lands Commission to take into consideration these extremely significant undermining of Environmental Justice as it prepares for either granting a general lease application or **not** to the applicant, California American Water.

Sincerely,
Troy Ishikawa
Carmel, CA

Archived: Monday, June 22, 2026 7:59:33 AM
From: John Jett
Sent: Friday, June 19, 2026 2:27:45 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners
California State Lands Commission

The State Lands Commissioners have never received a message from me on the above subject, but certainly other commissions have over the course of ten years. For this reason, I encourage you to carefully research Cal Am's lease application with specific attention to the following areas, noting that much has changed over the last fifteen plus years:

1. SUPPLY AND DEMAND. The Monterey Peninsula residents have and continue to conserve water over many years. The newest supply of water from award-winning Pure Water Monterey has changed the trajectory for the Monterey Peninsula, and there no longer is a water shortage. Cal Am itself is now storing its surplus water in the Seaside Basin.
2. CEQA ENVIRONMENTAL REVIEW. Cal Am is presenting outdated information and is relying on data from 2018 and 2022 in order to construct a slant well of at least 1000 feet long. The existing—and failed-- test well is 700 feet long. The archaic data and the changed design together should trigger an additional CEQA review.
3. NEWLY IDENTIFIED GROUNDWATER IMPACTS. Cal Am's proposed project will cause significant seawater intrusion, thus negatively impacting groundwater quality. Cal Am's own 700-foot test well proved this very point. Sea level rise is another factor that likely will portend and hasten the demise of Cal Am's proposed cluster of slant wells as well as contribute to coastal erosion.
4. IMPACT ON THE M1W OUTFALL. The Commission is advised to analyze the recently proposed modifications to the M1W outfall as the Final EIR/EIS reveals new and additional severe environmental impacts. Please consider direct consultation with the M1W scientists.
5. CONSIDER THE ELEPHANT IN THE ROOM. Why is Cal Am trying to force this unnecessary behemoth of a project on the ratepayers of the Monterey Peninsula? The one and only answer is greed and to satisfy their shareholders.

Given the impacts identified above, would **you** and **your community** agree to be burdened with and forced into paying un-quantified rates for an unnecessary, unpredictable project just because a for-profit, out-of-the-affected area company needs to satiate its shareholders?
As you deliberate, please do your due diligence by researching and updating your knowledge because **a community other than your own is dependent on you making the right decision.**

Thank you for your time, service, and thoughtful consideration of this letter.
Sincerely,
Jeana M. Jett
City of Monterey and Cal Am rate payer

Archived: Monday, June 22, 2026 9:00:28 AM
From: Marta Kraftzeck
Sent: Friday, June 19, 2026 3:31:15 PM
To: CSLC CommissionMeetings
Subject: Cal Am Lease Application, File: A4181
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181

Chair Cohen and Honorable Commissioners:

Voters rely on your integrity and thorough analysis to protect them from corporate greed and boondoggle projects like Cal Am's proposed desal plant. This project directly impacts my family and community.

I urge the State Lands Commission to either deny Cal Am's lease application or to do supplemental environmental review before considering it, due to significant new information. Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply demand an updated environmental review.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what other agencies have concluded about a different project design in the past.

Please protect the public and deny this application.

Sincerely,
Marta Kraftzeck
[redacted]
Monterey, CA [redacted]

Archived: Monday, June 22, 2026 2:02:39 PM
From: Gary Kreeger
Sent: Friday, June 19, 2026 4:04:34 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw

California State Lands Commission

100 Howe Avenue, Suite 100 -South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

Chair Cohen and Honorable Commissioners:

Voters rely on your integrity and thorough analysis to protect them from corporate greed and boondoggle projects like Cal Am's proposed desal plant. This project directly impacts my family and community.

I urge the State Lands Commission to either deny Cal Am's lease application or to do supplemental environmental review before considering it, due to significant new information. Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply demand an updated environmental review.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what other agencies have concluded about a different project design in the past.

Please protect the public and deny this application.

Sincerely,

Gary Kreeger

Archived: Thursday, June 18, 2026 3:33:33 PM
From: Michael Kennedy
Sent: Thursday, June 18, 2026 2:42:49 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)
Agenda Item #60 Cal Am Lease Application

Dear Chair Cohen and Commissioners,

I am writing to urge the California State Lands Commission to **DENY** Cal Am's lease application for its proposed desalination slant wells in Marina.

- Due to conservation and the new supply from Pure Water Monterey the proposed supply and demand needs for the Monterey Peninsula have changed. There is no longer a water shortage on the Peninsula. In fact, Cal Am now has surplus water supply that is being stored in the Seaside Basin.

- Cal Am's modified slant well design would be "approximately 1,000 feet long or more." The existing test well is 700 feet long. The groundwater impacts of this extended well length have not been independently modeled or vetted. This is a design change that triggers the need for additional CEQA review under State Land Commission guidelines.

- Cal Am's slant well project will cause groundwater levels to decline and reduce available supply. It will extract fresh water and reduce the available groundwater supply to Marina.

- This project will increase seawater intrusion, adversely impact groundwater quality, and reduce groundwater storage in over-drafted Subbasins. It will obstruct the sustainable groundwater management of the Salinas Valley Groundwater Basin.

Please deny Cal Am's lease application for its proposed desalination slant wells in Marina.

Sincerely,

Michael Kennedy
Marina, Ca

Archived: Wednesday, June 17, 2026 10:16:54 AM
From: Michael DeLapa
Sent: Tuesday, June 16, 2026 6:18:05 PM
To: CSLC CommissionMeetings; calam@SLC
Subject: LandWatch Monterey County's Comments on California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)
Sensitivity: Normal
Attachments:
LandWatch Comments on Cal Am Slant Wells Lease Application June 16, 2026.pdf;

Attention: This email originated from outside of SLC and should be treated with extra caution.

[Comments attached as PDF]

Re: LandWatch Monterey County's Comments on California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

Dear Chair Cohen and Honorable Commissioners:

LandWatch Monterey County, a regional organization dedicated to sensible land use, transportation, and water policy, submits the attached comments in opposition to Cal-Am's lease application.

Cal-Am's insistence on building a desalination plant in Marina—despite the availability of an existing, less expensive, and less environmentally damaging water supply—is difficult to justify. The water is not needed for the next 20 years given the demand projected by the California Public Utilities Commission (CPUC) and the supply from the Pure Water Monterey (PWM) advanced wastewater recycling plant.

Desalinated water would be prohibitively expensive. Its high cost discriminates against low-income customers and disadvantaged communities. The desalination plant's economic and environmental impacts are socially unjust: benefits would accrue to privately owned Cal-Am while costs would be imposed on the residents of Marina and Cal-Am ratepayers generally. Cal-Am's proposal serves its private investors by maximizing asset value and shareholder returns— particularly relevant to CalAm as it anticipates a public condemnation proceeding.

The State Lands Commission and the public trust doctrine, however, must prioritize public benefits over private interests. In the case of Cal-Am's desalination plant, that judgment is not a close call.
LandWatch Monterey County respectfully requests a **"no" vote** on the decision to approve Cal-Am's lease application. Thank you for your careful consideration of our views.

Best Regards,

Michael

Please subscribe to the LandWatch newsletter and "like" us on Facebook.

_____

LANDWATCH
MONTEREY COUNTY

Michael D. DeLapa
Executive Director
execdir@landwatch.org
650.291.4991 m
www.landwatch.org

Subscribe • Facebook

Remember LandWatch in your will

Creating Monterey County's Tomorrow - Today

LANDWATCH
MONTEREY COUNTY

June 16, 2026

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
CSLC.CommissionMeetings@slc.ca.gov
CalAm@slc.ca.gov

Re: LandWatch Monterey County's Comments on California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

Dear Chair Cohen and Honorable Commissioners:

LandWatch Monterey County, a regional organization dedicated to sensible land use, transportation, and water policy, submits these comments in opposition to Cal-Am's lease application.

Cal-Am's insistence on building a desalination plant in Marina—despite the availability of an existing, less expensive, and less environmentally damaging water supply—is difficult to justify. The water is not needed for the next 20 years given the demand projected by the California Public Utilities Commission (CPUC) and the supply from the Pure Water Monterey (PWM) advanced wastewater recycling plant.

Desalinated water would be prohibitively expensive. Its high cost discriminates against low-income customers and disadvantaged communities. The desalination plant's economic and environmental impacts are socially unjust: benefits would accrue to privately owned Cal-Am while costs would be imposed on the residents of Marina and Cal-Am ratepayers generally. Cal-Am's proposal serves its private investors by maximizing asset value and shareholder returns— particularly relevant to CalAm as it anticipates a public condemnation proceeding.

The State Lands Commission and the public trust doctrine, however, must prioritize public benefits over private interests. In the case of Cal-Am's desalination plant, that judgment is not a close call.

The Commission Lacks the Information Needed to Act—and Must Deny the Lease If It Proceeds.

The State Lands Commission should not take action on a lease for the Cal-Am desalination facility at this time because it lacks critical information about the project. If the Commission decides it cannot delay action, it must deny the lease because it lacks the information required to make findings regarding the feasibility, environmental impacts, public welfare, and environmental justice effects of the project and its alternatives.

The CPUC Has Never Approved the 4.8 Million Gallons Per Day (MGD) Facility or the Phased Approach Cal-Am Now Proposes.

The California Public Utilities Commission (CPUC) has jurisdiction over Cal-Am as a privately regulated utility. Cal-Am admits that the project must be changed by proposing a new "phased" approach that starts with a 4.8 MGD facility. However, in 2018, the CPUC specifically rejected both the 4.8 MGD facility and the phased approach as more costly and more environmentally damaging—based on submissions and arguments from Cal-Am itself.

No Agency Has Assessed the Environmental Justice Impacts of the Predictable, Massive Rate Increases That Would Result from This Project.

The Commission cannot make findings in support of its Environmental Justice Policy because it has no current analysis of the water rates that would be imposed on lower-income ratepayers and disadvantaged communities. Water rates sufficient to recover project costs—in light of changes to the project and its supply and demand circumstances—would have to be substantially higher than those projected in 2018 when the CPUC approved a different project. Nor can the State Lands Commission rely on the rates Cal-Am suggested in 2022 in its brief letter to the Coastal Commission, provided without analysis or supporting detail, when the Coastal Commission gave conditional approval of a Coastal Development Permit subject to further CPUC review.

None of the permitting agencies have evaluated the actual rate impacts from changes in the project and its circumstances and new information. Accordingly, the State Lands Commission should not act on the lease application until it resolves the environmental justice impacts to lower-income ratepayers and disadvantaged communities from the following:

- Construction costs in the 8 years since 2018 have increased **55%**.
- The smaller 4.8 MGD facility will lose scale economies compared to the originally proposed 6.4 MGD facility.
- The period in which Cal-Am must amortize costs has been shortened from 60 to 25 years due to updated projections regarding sea level rise.
- Under the CPUC's 2025 determination of long-term demand and supply, **the desalination facility is not needed for at least 20 years**, and even by 2050 the facility would operate at only half of its capacity. Because most project costs are fixed, **operating at half capacity would approximately double** water costs.

How would water costs compare? Pure Water Monterey (PWM) water costs approximately $2,808 per acre-foot. In 2022, the Coastal Commission estimated Cal-Am's desalinated water from a 6.4 MGD facility operating at full capacity would cost around $6,600 per acre-foot. Accounting for construction cost increases since 2018 and the smaller 4.8 MGD facility, LandWatch projects desalinated water would now cost $11,052 per acre-foot at full capacity—and $20,489 per acre-foot at half capacity (the realistic utilization rate in 2050). Unless shareholders absorb these substantial cost increases, ratepayers must do so. Cal-Am's only mitigation commitment is to hold rate increases to $10 per month for five years for customers enrolled in the Customer Assistance Plan—providing no long-term relief for disadvantaged and lower-income communities.

Only the CPUC has the authority and responsibility to address the effects of these enormous increases in unit water costs. Without that analysis, the Commission lacks the information to make findings regarding the environmental justice impacts of the rate increases Cal-Am may seek to

impose on lower-income ratepayers and disadvantaged communities. We develop these environmental justice issues further in the attachment to this letter.

The Commission Must Prepare a Subsequent EIR Before Considering Lease Approval.

LandWatch joins in the June, 2026 comments by Marina Coast Water District, the Monterey Peninsula Water Management District, and the City of Marina. LandWatch agrees that the Commission's "Environmental Memorandum" is not adequate and that the Commission must prepare a subsequent or supplemental environmental impact report (SEIR) before considering the lease approval. Significant new information provided in the State Water Resources Control Board's recent analysis of pumping from the proposed slant wells demonstrates that, contrary to the CPUC's 2018 EIR, groundwater impacts will be significant. Changes to the project and its circumstances demonstrate that impacts from the project's outfall modifications will be significant. The phased construction will increase impacts by disturbing sensitive biological resources twice. Sensitive resources would also be disturbed again to relocate the slant wells to accommodate newly projected sea level rise, assuming CalAm could even control the inland sites needed for that relocation. Impacts from the new brine storage pond will be significant. None of these new or more substantial significant impacts have been reviewed under CEQA. Nor has any agency considered new information about feasible alternatives to the project, e.g., the OceanWell desalination project proposed by Marina Coast Water District.

Until the Commission—or the CPUC—assesses the CEQA significance of the changes to the project and its circumstances and the new information, no agency should extend any further approvals.

The Public Trust Doctrine Independently Bars the Commission from Approving the Slant Well Lease.

Marina Coast Water District's comments establish substantial groundwater impacts from the proposed slant well lease, based on new analysis by the State Water Resources Control Board. The District explained why this requires additional CEQA review. But the State Lands Commission should also determine that these impacts are barred by the public trust doctrine, which the Commission is uniquely authorized and obligated to consider as the trustee of the tidelands and affected water resources.

The courts have recognized the State's responsibility to protect public trust uses whenever feasible.[1] "The core of the public trust doctrine is the state's authority as sovereign to exercise a continuous supervision and control over the navigable waters of the state and the lands underlying those waters."[2] *Environmental Law Foundation v. State Water Resources Control Board* (2018) 26 Cal.App.5th 844 extends *Audubon's* protections to resources impaired by groundwater extractions. And in 2024, in *California Coastkeeper Alliance v. County of Sonoma*, the Sonoma County Superior Court recognized that a permitting agency is required to consider the impacts of groundwater extraction on public trust resources, *including groundwater resources*, and mitigate those impacts to the extent feasible.

The public trust doctrine serves the function in an integrated system of preserving the continuing sovereign power of the state to protect public trust uses, a power which precludes anyone from acquiring a vested right to harm the public trust, and it imposes a continuing duty on the state to take such uses into account in allocating water resources.[3] No party can acquire a vested right to appropriate water in a manner harmful to public trust interests; the state has "an affirmative duty"

[1] See, e.g., National Audubon Society v. Superior Court (1983) 33 Cal.3d 419, 435.
[2] Id. at 425.
[3] Audubon, supra, 33 Cal.3d 419, 452.

to take the public trust into account in regulating water use by protecting public trust uses whenever feasible.[4] Accordingly, the Commission must carefully consider the public trust consequences of permitting Cal-Am to impair groundwater resources through its slant well lease.

For these reasons, and as explained further in the detailed comments attached, LandWatch Monterey County respectfully requests a **"no" vote** on the decision to approve Cal-Am's lease application. Thank you for your careful consideration of our views.

Sincerely,



Michael DeLapa
Executive Director

[4] *Id.* at 446–447.

ATTACHMENT: Environmental Justice Issues from Rate Impacts

1. The Commission's Environmental Justice Policy Requires Assessment of Rate Impacts on Disadvantaged Communities.

The Commission's Environmental Justice Policy requires that it "[a]ssess and analyze how proposed Commission actions might impact environmental justice communities."[5] The purpose is to enable the Commission to "minimize additional burdens on and increase benefits to marginalized and disadvantaged communities resulting from a proposed project or lease."[6]

Several implementation strategies in the EJ Policy Appendix support this goal:

- 5.1. Modify lease application forms to require applicants to identify environmental justice communities in the area and to **identify potential impacts and mitigation**.
- 5.2. As part of the application process, research impacts and work with the applicant and impacted communities to **develop strategies to decrease those impacts** and increase benefits to impacted communities.
- 5.3. When there are concerns that a project will result in disproportionate burdens to vulnerable communities, weigh those against the merits of the project and, where feasible, **require reduction or elimination of those burdens**.[7]

The Commission's Environmental Memorandum cites prior environmental justice consideration by the CPUC and the California Coastal Commission—including findings of environmental justice impacts such as increased water costs. The Environmental Memorandum cites CPUC Mitigation Measure MM 4.9-1 and CCC Special Conditions 16 and 17 as full mitigation for environmental justice impacts and concludes the "project would not generate a new impact related to socioeconomic and environmental justice or substantially increase the severity of a previously identified impact."[8]

This conclusion is unfounded. The Environmental Memorandum contends that "there are no changed circumstances surrounding the Phase 1 Project or new information of substantial importance that would affect the Final EIR/EIS's conclusions related to socioeconomic and environmental justice."[9] But the Environmental Memorandum fails to identify or consider the unmitigated rate impacts caused by changes to the project, changed circumstances, and significant new information. Without that assessment, the Commission cannot find the proposed project consistent with its environmental justice policy. Substantial evidence demonstrates that the unmitigated effect of water rates on lower income ratepayers and disadvantaged communities will be significant.

[5] SLC, Environmental Justice Policy, Policy 5a
[6] Id., Policy 6a.
[7] *Id*., Appendix.
[8] Environmental Memorandum, p. 43.
[9] *Id.*

2. The Project and Relevant Circumstances Have Changed, and There Is Significant New Information.

The 2018 CPUC FEIR for the Monterey Peninsula Water Supply project (MPWSP) concludes that "[i]mplementation of the MPWSP would double the current water rates for ratepayers within Cal-Am's Monterey District (Truong, 2016)."[10] Critically, that conclusion rested on a 2016 email and cost estimates that are now a decade out of date.

As discussed below, the rate impacts of the MPWSP as Cal-Am now proposes the project would be substantially greater than this 2016 projection for three reasons. First, project changes—including the reduction in size from 6.4 MGD to 4.8 MGD and increased construction costs—would both reduce scale economies and directly increase capital costs. Second, changed circumstances—including reduced projected demand and the availability of substantial, less expensive Pure Water Monterey supplies—would result in excess capacity, the costs of which could be imposed on ratepayers. Third, new information, including updated sea level rise projections, would shorten the amortization period for the slant wells from 60 to 25 years, further increasing per-unit costs.

3. No Agency Has Assessed the Rate Effects of These Changes.

None of these factors have been assessed by the CPUC because it approved a different project in 2018, based on different supply and demand data and different sea level rise assumptions. In 2025, the CPUC reassessed demand and supply and found that the shortfall between 2050 demand and available annual production supply would be only 2.3 MGD—not the 5 MGD shortfall it found in 2018.[11] Yet the CPUC refused to open a third phase of proceedings to assess the effect of revised supply and demand assumptions on the need for desalination – leaving it to CalAm to initiate a request for CPUC approval of the 4.8 MGD facility.[12]

Crucially, Cal-Am has *not* sought CPUC permission for the phased 4.8 MGD project it now plans, even though the CPUC specifically rejected that approach in 2018.[13] Cal-Am appears to be pursuing approvals from other agencies first, even though those agencies lack the rate impact analysis of changed project circumstances that the CPUC alone would be charged to make.

In addition, in granting a conditional CDP in 2022, the Coastal Commission also failed to evaluate the rate effects. The Coastal Commission relied on the bottom-line summary of rate effects in Cal-Am's short letter purporting to assess "Impact on Customer Rates" from the 4.8 MGD phased facility. Cal-Am admitted that "the projections presented in this summary are estimates based on current available information, and have not been approved by the CPUC."[14]

---

[10] CPUC, MPWSP FEIR, p. 4.20-15.

[11] In 2018, the CPUC found 2050 demand to be 14,000 AFY and supply to be 9,055 AFY. (CPUC Decision D18-09-017, pp. 46, 50-51.) In 2025, the CPUC found 2050 demand to be 13,372 AFY and supply to be 11,204 AFY. (CPUC Decision D25-08-006, as modified by D25-10-001, p. 1.) A million gallons per day is 1,100 AFY.

[12] CPUC, Decision D26-04-046, pp. 5-6.

[13] The CPUC's 2018 approval of the desalination project was for a 6.4 MGD facility, i.e., Alternative 5a. (D.18-09-017, pp. 72, 79, 206, 207.) The CPUC specifically rejected the phased 4.8 to 6.4 MGD approach, finding there would be "little or no cost differential" and it would not avoid or substantially lessen any significant impacts of the project." (*Id.*, pp. 69-70.) Indeed, the CPUC found that a phased implementation would "increase environmental impacts, face additional scrutiny in the permitting review process, and increase costs to ratepayers." (*Id.*, emphasis added.) These findings were based on arguments and data submitted by Cal Am, which at the time did not want to proceed with a phased approach.

[14] Ian Crooks, Cal-Am, letter to Tom Luster, CCC, October 27, 2022, p. 1, available at pdf page 33 of Th7a8a-11-2022-exhibits.pdf.

Cal-Am told the Coastal Commission that its projected rated increases of $47 to $50 per month were based on "current modeling," but its letter did not provide that modeling.[15] There was no way for the public or the Coastal Commission to determine whether the Cal-Am "summary" of rate increases actually reflected the changed project, changed circumstances, or new information.

The only change that Cal-Am identified in its 2022 summary letter to the Coastal Commission on rate impacts was the reduction in the initial project size from 6.4 MGD to 4.8 MGD. There is no evidence that Cal-Am considered increased construction costs, the loss of scale economies, the shorter amortization period for slant wells, or the increased rates needed to cover fixed costs for a facility operating at a fraction of its capacity in light of changed supply and demand data. Cal-Am presented only the purported bottom line rate effect without showing its work. The Commission cannot rely on this without independent analysis.

The State Lands Commission should wait for Cal-Am to seek CPUC approval before proceeding. The existing record is inadequate to support an assessment of the effects of the new project on disadvantaged and lower-income communities.

4. Construction Cost Increases Would Substantially Increase Rates.

Since 2017 when Cal-Am determined project costs, there has been a **55.49% cumulative increase** in construction costs.[16] The Commission cannot assess the impact of this cost increase on rates without analysis, and the record provides none.

5. Loss of Scale Economies Would Substantially Increase Rates.

The 2022 Coastal Commission Staff Report concluded that water rates would be affected by the loss of scale economies from the smaller 6.4 MGD to 4.8 MGD facility.[17] Previous rate analysis assumed fixed costs would be spread over a 6.4 MGD facility. As the CPUC found in 2018, there are

---

[15] Id., pp. 2-3.

[16] See California Department of General Services, Construction Cost Index, available at https://www.dgs.ca.gov/RESD/Resources/Page-Content/Real-Estate-Services-Division-Resources-List-Folder/DGS-California-Construction-Cost-Index-CCCI.

[17] Coastal Commission 2022 Staff Report, Th7A & 8A, Nov. 4, 2022, pp. 141- 142, available https://documents.coastal.ca.gov/reports/2022/11/Th7a8a/Th7a8a-11-2022-report.pdf. ["The expected costs of Cal-Am's Project are much higher than those of the Pure Water Expansion. In its 2018 proceeding, the CPUC set a cost cap of $279 million for capital costs for the MPWSP, which included Cal-Am's 6.4 MGD desalination facility and the baseline Pure Water project. [footnote] At the time, CalAm estimated its operation and maintenance costs for the desalination plant to be approximately $19.3 million per year, for a total of approximately $579 million (in 2017 dollars) in operation and maintenance costs over 30 years.132 Current estimates are that Cal-Am's water would cost more than $6,100 per acre-foot, while the current Pure Water project provides water at cost of $2,808 per acre foot. [footnote] Recent figures for the Pure Water Expansion are estimated to include about $60 million in initial capital costs and about $190 million in operational and maintenance costs over a 30-year operating life. Although the desalination facility would produce more water than the Pure Water Expansion, its cost per unit of water would be about twice as much. Cal-Am has not provided an assessment of how its recently proposed Project phasing might affect the expected costs. Although the first phase would involve reduced initial capital costs for construction and some reduction in operations and maintenance costs, the overall cost per unit of water could be higher than expected, especially when it is not certain if and when additional water from the second phase might be made available to spread costs over a larger volume of water to be produced. As noted above, Cal-Am will also likely need to either account for recouping its Project costs over a shorter Project operating life - i.e., the 25 years it expects its wells to operate - or account for the additional costs to relocate or rehabilitate those wells if they are to continue operating beyond that period."].

few fixed cost savings in the 4.8 MGD facility, and those savings are offset by increased O&M costs for the smaller facility.[18] With the proposed 4.8 MGD facility, Cal-Am would spread essentially the same fixed costs over a smaller water volume, increasing unit costs. Again, the record provides no current analysis.

6. A 25-Year Amortization Period Would Substantially Increase Rates.

The Coastal Commission Staff Report found that Cal-Am may not be able to relocate its wells inland to avoid sea level rise because it lacks any legal interest in the necessary inland property.[19] Current Coastal Commission policy requires planning for greater sea level rise than was assessed by the CPUC, and current modeling projects that Cal-Am would need to relocate wells within approximately 25 years.[20] CalAm does not control or own the necessary site.[21]

Thus, Special Condition 6 limits the CDP term to 25 years or until January 1, 2050—based on Cal-Am's own characterization of the wells' approximately 20- to 25-year economic life. As the Coastal Commission Staff Report warned, "a shorter operating life of the desalination facility may also create substantial changes in the Project's financing and water rates, since Cal-Am may seek to recover its costs in a much shorter time than the anticipated 60 years."[22]The Staff Report further acknowledged that "Cal-Am has not provided an assessment of how its recently proposed Project phasing might affect the expected costs" and that the "overall cost per unit of water could be higher than expected."[23]

7. Excess Capacity Due to Changed Supply and Demand Circumstances Would Substantially Increase Rates.

Excess capacity could effectively double rates—yet it has not been assessed. In 2025, the CPUC found that due to Pure Water Monterey supplies, the supply-demand shortfall in 2050 will be only 2.3 MGD, not the 5 MGD found in 2018. **Additional capacity will not be needed until 2047**—two decades away. The table attached as Appendix A demonstrates this: assuming CPUC-determined annual supply production of 11,204 AFY and constant annual demand growth to reach 13,732 acre-feet by 2050[24] Cal-Am's aquifer storage capacity absorbs annual surpluses through 2047, when stored supplies are finally exhausted.

In short, even without the desalination facility, Cal-Am will have a surplus of water for the next 20 years. A 4.8 MGD desalination facility would remain idle for those 20 years if Cal-Am honored its must-take contract for the substantially less expensive Pure Water Monterey water.

8. The CPUC Must Resolve Whether Ratepayers or Shareholders Absorb Excess Capacity Costs.

Cal-Am appears to be planning to substitute more expensive desalinated water for less expensive alternative supplies, and/or to charge ratepayers for excess capacity. Cal-Am proposed to the Coastal Commission that it would construct and put the 4.8 MGD facility into operation by

[18] CPUC Decision D.18-09-017, pp. 69, 128-129.
[19] Coastal Commission 2022 Staff Report, pp. 8, 92-97.
[20] *Id.*, p. 97.
[21] *Id.*, p. 95.
[22] *Id.*
[23] *Id.*, p. 142.
[24] CPUC Decision D.25-08-006 as modified by D.25-10-001.

December 2026—decades before demand would justify it.[25]

The CPUC's 2018 Decision D.18-09-017 does not resolve whether ratepayers or shareholders would pay for excess capacity. It simply deferred the question, promising future "operational restrictions" if Cal-Am pursued a Pure Water Monterey expansion contract.[26]Despite this, Cal-Am applied for and received a Water Purchase Agreement without proposing the required operating restrictions. The CPUC has since left it to Cal-Am to petition for approval of the 4.8 MGD facility in its own time[27] —an approach that protects neither ratepayers nor the Commission's own record.

9. Rate Impacts from Excess Capacity Would Be Enormous.

Variable O&M costs are a very small portion of total desalinated water costs; the bulk are the fixed costs for equity, depreciation & amortization, taxes, and fixed O&M. Those fixed costs must be covered regardless of the volume of water produced.

In 2022, David Stoldt, General Manager of the Monterey Peninsula Water Management District, updated construction costs based on increases from 2018 to 2022 and evaluated unit water costs of a 6.4 MGD facility at various capacity utilization levels. [28],[29]Updating his analysis further to reflect Construction Cost Index increases since 2022 and the smaller 4.8 MGD facility (see Appendix B), LandWatch projects the following water costs:

- Desalination at **full capacity** (4,705 AFY): $**11,052**/AF
- Desalination at **50% capacity** (2,353 AFY, the realistic 2050 utilization rate): $**20,489**/AF
- Compare: Pure Water Monterey water costs $**2,808**/AF[30]

The last time any public agency considered the unit cost of Cal-Am's desalinated water—back in 2022—it was projected at $6,100 per acre-foot.[31] It is patently unreasonable to expect ratepayers to absorb costs of up to $20,000 per acre-foot for desalinated water when Pure Water Monterey water is available at $2,808 per acre-foot.

---

[25] Ian Crooks, letter to Tom Luster, Oct. 27, 2022, available at https://documents.coastal.ca.gov/reports/2022/11/Th7a8a/Th7a8a-11-2022-exhibits.pdf.
[26] CPUC Decision 18-09-017, p. 44.
[27] CPUC Decision D.18-09-017, Ordering Paragraph 22 (Cal Am shall seek approval of non-minor "project refinements by a petition to modify today's decision.")
[28]David Stoldt, Monterey County Herald Guest Opinion, When Did the Cost of New Water Become a Secret, Nov. 4, 2022, available at https://www.montereyherald.com/2022/11/04/guest-commentary-the-cost-of-new-water/.
[29] Stoldt initially evaluated the construction and financing cost increases since 2018 for the originally proposed 6.4 MGD facility, demonstrating that the unit water cost for a 6.4 MGD facility operating at *full* capacity would have increased to $7,981 per acre-foot by 2022. This figure is itself a substantial increase over the $6,100 per acre-foot cost cited by the Coastal Commission's Staff Report, which is based on a now-dated 2018 Cal Am estimate. (See Coastal Commission 2022 Staff Report at 111, citing CPUC Proposed Decision in Proceeding No. A-21-11-024 (modified October 31, 2022), in turn citing City of Marina Exhibit MARINA-01 at 9, in turn citing Coastal Commission Staff Report (dated August 2020), in turn citing Cal-Am's Advice Letter 1220, Attachment C-3, December 31, 2018.)
[30] Coastal Commission 2022 Staff Report, p. 141.
[31] *Id*.

Because the Commission has neither the data, the analysis, nor the authority to impose operating restrictions on Cal-Am, and because the rate effects of excess capacity would be substantial, the Commission should decline to proceed with lease consideration until these rate effects have been assessed by the CPUC. Absent that analysis, the Commission cannot make valid public welfare and environmental justice findings.

10. Existing Mitigation Is Not Sufficient.

The Environmental Memorandum cites mitigation for environmental justice impacts, but that mitigation is not sufficient to address rate impacts from project changes, changed circumstances, and new information.

First, the Environmental Memorandum cites CPUC Mitigation Measure MM 4.9-1, but that measure addresses only traffic impacts—not rate impacts.[32]

Second, the Environmental Memorandum cites Coastal Commission Special Condition 16, which caps rate increases at $10 per month for five years for customers enrolled in Cal-Am's Customer Assistance Plan. This mitigation is insufficient. As the Coastal Commission Staff Report concluded, "the $10 cost cap for five years will not address the *long-term* impacts this Project will have on low-income ratepayers and there is no certainty the additional proposals will be approved by the CPUC."[33]

Cal-Am also proposed a $500,000 contribution to the United Way Hardship Benefit Program.[34] Cal-Am acknowledges that as of 2022 it had 3,700 lower-income customers enrolled in its Customer Assistance Program.[35] However, assisting just 231 ratepayers over five years (2018–2022) cost $136,209.[36] Thus, Cal-Am's $500,000 offer will not meaningfully assist 3,700 lower-income ratepayers facing the rate increases described above.[37]

[32] CPUC, Cal Am MPWSP Mitigation Monitoring, Compliance, and Reporting Program, Sept 2019, pp. D-32 to D-34, available at MPWSP_MMCRP_Final.pdf.
[33] Coastal Commission 2022 Staff Report, p. 110, emphasis added.
[34] *Id.*, p. 43.
[35] Ian Crooks, Cal Am, letter to Tom Luster, CPUC, Oct. 27, 2022, p. 3, available at pdf p. 35 at Th7a8a-11-2022-exhibits.pdf.
[36] Coastal Commission 2022 Staff Report, p. 110.
[37] *Id.*

APPENDIX A – Exhibit 1: Water Supply and Demand Analysis (CPUC 2025 Determination)

Based on CPUC 2025 Determination of Supply and Demand (D.25-08-006)

Year	Future Customer Demand	CPUC Available Supply	Annual Surplus / (Shortfall)	Available Storage	Total Available Supply
2025	9,245	11,204	1,959	0	11,204
2026	9,424	11,204	1,780	1,959	13,163
2027	9,604	11,204	1,600	3,739	14,943
2028	9,783	11,204	1,421	5,339	16,543
2029	9,963	11,204	1,241	6,759	17,963
2030	10,142	11,204	1,062	8,000	19,204
2031	10,322	11,204	882	9,062	20,266
2032	10,501	11,204	703	9,944	21,148
2033	10,681	11,204	523	10,647	21,851
2034	10,860	11,204	344	11,170	22,374
2035	11,040	11,204	164	11,513	22,717
2036	11,219	11,204	(15)	11,678	22,882
2037	11,399	11,204	(195)	11,662	22,866
2038	11,578	11,204	(374)	11,468	22,672
2039	11,758	11,204	(554)	11,093	22,297
2040	11,937	11,204	(733)	10,540	21,744
2041	12,117	11,204	(913)	9,806	21,010
2042	12,296	11,204	(1,092)	8,894	20,098
2043	12,476	11,204	(1,272)	7,802	19,006
2044	12,655	11,204	(1,451)	6,530	17,734

2045	12,835	11,204	(1,631)	5,079	16,283
2046	13,014	11,204	(1,810)	3,448	14,652
2047	13,194	11,204	(1,990)	1,638	12,842
2048	13,373	11,204	(2,169)	(351)	11,204
2049	13,553	11,204	(2,349)	(2,520)	11,204
2050	13,732	11,204	(2,528)	(4,869)	11,204

Annual demand growth: 179.48 AFY. Note: 2048 is the first year in which accumulated storage is exhausted and additional supply is needed. Parentheses indicate negative values.

Key finding: Demand does not exceed total available supply (including stored water) until 2048. No additional supply is needed for the next 20+ years.

APPENDIX B – Exhibit 2: Cost of Cal-Am Desalination Water by Capacity Utilization

($ per AF) – Based on Capacity Utilization; Excludes Return Water Sales Revenue

	4,705	4,235	3,764	3,294	2,823	2,353	1,882	1,412	941	471	0
Capacity %	**100%**	**90%**	**80%**	**70%**	**60%**	**50%**	**40%**	**30%**	**20%**	**10%**	**0%**
Equity, Depreciation & Amortization, Taxes	$21.1	$21.1	$21.1	$21.1	$21.1	$21.1	$21.1	$21.1	$21.1	$21.1	$21.1
Operations & Maintenance - Fixed	$4.3	$4.3	$4.3	$4.3	$4.3	$4.3	$2.2	$2.2	$2.2	$2.2	$0.0
Operations & Maintenance - Variable	$7.6	$6.8	$6.1	$5.3	$4.6	$3.8	$3.0	$2.3	$1.5	$0.8	$0.0
Debt	$19.0	$19.0	$19.0	$19.0	$19.0	$19.0	$19.0	$19.0	$19.0	$19.0	$19.0
Total Annual Revenue Required ($M)	**$52.0**	**$51.2**	**$50.5**	**$49.7**	**$49.0**	**$48.2**	**$45.3**	**$44.5**	**$43.8**	**$43.0**	**$40.1**
Cost of Water ($/AF)	**$11,052**	**$12,101**	**$13,411**	**$15,096**	**$17,343**	**$20,489**	**$24,065**	**$31,548**	**$46,514**	**$91,413**	**∞**

Notes: Assumes Fixed O&M is cut in half after 50% utilization via layoffs and other reductions.

Assumes Fixed and Variable O&M is cut to zero at 0% utilization.

4,705 AFY yield at 100% is same ratio of 6,252 AFY delivered to the Peninsula for a 6.4 MGD plant.

Key finding: At the realistic 50% utilization rate projected for 2050, desalinated water would cost $20,489/AF—nearly 7x the cost of Pure Water Monterey water ($2,808/AF). The highlighted column shows the 50% capacity scenario.

Archived: Wednesday, June 17, 2026 10:19:31 AM
From: Cate Mulligan
Sent: Tuesday, June 16, 2026 8:59:03 PM
To: CSLC CommissionMeetings
Subject: AGENDA #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Thanks to Cal Am's scheming, there is not one single agency to analyze the complete Cal Am project as currently designed
WHY IS THAT? Because the resulting project would be a waste of tax payer money while not meeting the structural requirements
on top of not meeing the needs of the people who live here...

BECAUSE...We have already solved the problem with Monterey One Water! Now and projected into the future without ripping off the population.

They hate that they can't continue to power grab what is legally our water!!! Our choices!
Please stop hanging out with bullies
please stop Cal Am's grifting.

Seriously,

Cate Mulligan

Cate Mulligan

Archived: Friday, June 19, 2026 9:32:08 AM
From: Rodger Langland
Sent: Friday, June 19, 2026 9:29:27 AM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and the Commissioners,

I am writing in reference to File: A4181 / SCH #2006101004. This is Cal Am's request for approval for slant wells for their unneeded desalination plant. Please study the evidence Land Watch has provided showing that there is no need for the excessive water Cal Am would produce from the desal plant. It would also do environmental damage to the Bay and exacerbated the salt water intrusion problem that already exists. In addition our water rates are already some of the highest in the nation and producing water via desal would make the rates considerably higher.

Please deny the slant well application.

Sincerely,

Rodger Langland, Carmel Valley. CA

LABORERS' INTERNATIONAL UNION of North America
JUSTICE • HONOR • STRENGTH
270
SAN JOSE, CA

ENRIQUE ARGUELLO
Business Manager
Secretary-Treasurer

LUIS ARGUELLO
Assistant Business Manager
Recording Secretary

FERNANDO AMBRIZ
President

GILBERTO RIVERA
Vice-President

RENE CAMACHO
Executive Board

OSCAR JIMENEZ
Executive Board

JOSE ARRIAGA
Executive Board

2195 Fortune Drive
San Jose, CA 95131
(408) 297-2620 Office
(408) 297-6374 Fax

640 Eaton Street
Santa Cruz, CA 95062
(831) 475-7058 Office

117 Pajaro Street
Salinas, CA 93901
(831) 422-7077 Office

LiUNA! LOCAL 270

Feel the Power

June18, 2026

California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

RE: Support for Agenda Item 60, California American Water Lease Application for the Monterey Peninsula Water Supply Project

Dear Chair and Members of the California State Lands Commission:

I'm writing on behalf of LIUNA Laborers Local 270 to register our strong support for Agenda Item 60 and California American Water's lease application for the Monterey Peninsula Water Supply Project.

Local 270 represents nearly 7,000 skilled construction workers and their families across Santa Clara, Santa Cruz, San Benito, and Monterey Counties. A lot of our members live and work right there on the Peninsula, so this issue isn't abstract for them. They've lived through the drought restrictions and watched the region's water situation get more uncertain year after year.

The Monterey Peninsula has been dealing with water supply problems for decades, between drought, cutbacks on existing sources, and demand that keeps climbing. This project gives the region something it's been missing: a water source that doesn't depend on rainfall and won't leave the Peninsula scrambling every time the weather turns dry.

It's hard to overstate how much rides on reliable water. Schools, hospitals, small businesses, public safety, and housing all depend on having water you can count on. When that's not secure, it doesn't just make daily life harder. It puts a real ceiling on what the region can build and who it can support.

There's also a straightforward jobs case here, and as a labor organization, we'd be remiss not to mention it. A project like this means real construction work that supports families, plus the economic activity that comes with it. But we want to be clear that we're not just thinking about construction jobs. We see this as an investment in the people who already live here, the families who need water security to get through the next dry spell, the businesses that need it to stay open, the communities that need it to hang together when things get tight.

This project also gives the Peninsula room to plan for the future. California has a housing shortage that isn't going away, and you can't build your way out of it without water to support the growth. A secure supply means Monterey County can plan responsibly for new housing without putting existing residents or existing water resources at risk.

The ripple effects go beyond construction, too. Tourism, hospitality, the school system, healthcare, and the small businesses that make Monterey County what it is all rest on a stable water supply. Protecting that supply means protecting the jobs and the stability that come with it.

For these reasons, LIUNA Laborers Local 270 respectfully urges the Commission to approve Agenda Item 60 and let this project move forward.

Thank you for your consideration and for your work making sure California's communities have the infrastructure they need.

Sincerely,

Enrique G. Arguello

Enrique Arguello
Business Manager / Secretary-Treasurer
LIUNA Laborers Local 270

Archived: Thursday, June 18, 2026 8:26:51 AM
From: Ernest Long
Sent: Wednesday, June 17, 2026 6:29:12 PM
To: CSLC CommissionMeetings
Subject: "Agenda Item #60 Cal Am Lease Application."
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Dear Commissioners,

File: A4181 / SCH #2006101004,

Conservation and new supply from Pure Water Monterey have erased the Peninsula's water shortage. Cal-Am now has surplus water stored in the Seaside Basin, and the CPUC's own 2025 supply-and-demand update found the Peninsula needs only 2,528 acre-feet per year of additional supply by 2050 — a fraction of what this desal plant would produce. Cal-Am is now trying to shrink the project from 6.4 to 4.8 million gallons per day without CPUC approval, but even the smaller version is unnecessary.

Construction costs have jumped sharply since 2018, and Cal-Am has already burned through $200 million of its $279 million cost cap. A smaller plant loses economies of scale, and a 2022 Coastal Commission finding that sea level rise will force the wells to relocate within 25 years means costs get amortized over a much shorter project life. Professional analysis projects desalinated water could cost over $11,000 per acre-foot at full capacity — and nearly $20,500 per acre-foot if the plant runs at the half-capacity actually needed. Compare that to Pure Water Monterey's roughly $2,800 per acre-foot. Cal-Am's only proposed relief is a $10/month cap for five years for customers on its assistance plan — no real protection for low-income and disadvantaged ratepayers facing these costs for decades.

The SLC is relying on stale CPUC and Coastal Commission reviews that never analyzed the phased 4.8-then-6.4 MGD project Cal-Am is now proposing. New 2025 findings from the State Water Resources Control Board show the project would worsen groundwater decline and seawater intrusion in Marina — impacts the SLC's own "Environmental Memorandum" doesn't address. Monterey One Water's outfall modifications for brine discharge haven't been studied either. Deferring that analysis would be textbook CEQA piecemealing.

Please deny Cal-AM's application for slant wells!

Thank you.

Ernie Long

Carmel Valley

California State Lands Commission
100 Howe Avenue
Suite 100 South
Sacramento, CA 95825

RE: Support for California American Water Company Lease Application to Advance a Drought-Proof Regional Water Supply

Dear Commissioners,

As Mayor of Sand City and as a board member of Monterey One Water, I write to express my strong support for California American Water's lease application for the construction and use of four new subsurface slant wells and the conversion and use of one existing subsurface slant well for the proposed desalination plant in Monterey. From both a municipal and regional water management perspective, I understand firsthand that the Monterey Peninsula cannot wait any longer for a reliable, drought-proof water supply. This project is essential to protecting our residents, supporting our local economy, meeting housing needs, and strengthening the long-term resilience of our region.

Sand City and communities across the Monterey Peninsula have long faced the consequences of an uncertain and constrained water supply. Those constraints affect housing production, economic development, public services, environmental stewardship, and the daily quality of life for residents and businesses. As a Monterey One Water board member, I also recognize the importance of pursuing a diversified regional water portfolio that includes recycled water, conservation, groundwater management, and desalination. No single solution can meet the Peninsula's needs alone; the region needs a durable combination of supplies that can withstand drought, climate variability, regulatory pressure, and future demand.

For Sand City, water reliability is directly tied to responsible growth, housing affordability, job creation, community stability, and public health. New homes, local businesses, visitor-serving uses, public safety services, and essential infrastructure all rely on a dependable water supply. A drought-proof source of water would give local governments the certainty needed to plan responsibly, serve existing customers, and support future generations without being held back by chronic supply uncertainty.

Archived: Tuesday, June 23, 2026 11:46:31 AM
From: Ethan Lucas
Sent: Tuesday, June 23, 2026 11:26:23 AM
To: CSLC CommissionMeetings
Subject: CalAm's Proposed Desalination Project in Marina, CA
Response requested: No
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

As a resident of Marina, I strongly oppose CalAm's proposed desalination plant. The water produced by this desalination project would go solely to Monterey Peninsula customers, leaving Marina with a diminished and potentially contaminated water supply. Marina would also bear the major adverse environmental impacts of the project. CalAm has a dubious history and a poor track record when it comes to respecting water rights.

Also don't forget that Marina is already the dumping ground for the entire peninsula (ReGen Monterey), is absorbing the most new construction projects in the area, and has become unaffordable for many of its long-term residents over the past 15 years.

The CalAm desalination plant is not needed, as the Pure Water Monterey Expansion, a separate project, will meet Monterey's water needs without affecting Marina.

Respectfully,

Ethan Lucas
[redacted]
Marina, CA [redacted]

Archived: Monday, June 22, 2026 4:05:14 PM
From: Katalin Markus
Sent: Saturday, June 20, 2026 2:26:13 PM
To: CSLC CommissionMeetings
Subject: California -American Water Company's General Lease Application
Sensitivity: Normal
Archived: Monday, June 22, 2026 4:05:14 PM

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw
California State Lands Commission

Dear Chair and Commissioners,

Please deny Cal Am's lease application.
Monterey Peninsula has enough water and this project will effects badly the environment and will raise water prices which is already the highest in California.

Please protect the public from greedy corporations!

Sincerely,
Katalin Markus
Monterey, California
Sent from my iPad

I respectfully urge the Commission to approve the lease application and allow the desalination project to move forward without delay. The Monterey Peninsula needs drought-proof water supply right away, and advancing this project is an important step toward securing a more reliable, diversified, and climate-resilient future for Sand City and the entire region. Reliable water is not optional; it is the foundation for public health, housing, economic vitality, environmental responsibility, and regional sustainability.

Sincerely,

Mary Ann Carbone, Mayor of Sand City

MCAR
MONTEREY COUNTY | ASSOCIATION OF REALTORS®

June 19, 2026

California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: June 23, 2026 Meeting – Agenda Item 60

Dear Chair and Commissioners:

On behalf of the Monterey County Association of REALTORS®, we respectfully submit this letter regarding Agenda Item 60 on your June 23, 2026 meeting agenda.

For more than three decades, housing development throughout the Monterey Peninsula region has been constrained by the lack of a reliable, drought-proof water supply. While housing affordability and availability remain among the most pressing challenges facing our communities, meaningful progress toward addressing these issues continues to be bottlenecked by limitations on water availability. Simply put, the region cannot build the housing needed to serve current and future residents without a sustainable long-term water source.

The proposed desalination project being developed by California American Water represents the only water supply solution capable of providing the scale, reliability, and drought resilience necessary to meet the region's long-term needs. While the expansion of recycled water use has been a valuable and important component of local water management efforts, it remains only a partial solution. Recycled water supplies are inherently limited by the amount of source water available in the first place. During future droughts, those supplies will be impacted by the same constraints affecting the broader water system.

By contrast, a desalination facility offers a dependable and drought-proof source of water that is not subject to the same vulnerabilities. It provides the opportunity to create a sustainable water future for our region while supporting housing production, economic vitality, and long-term community stability.

The Monterey County Association of REALTORS® appreciates the thoughtful consideration the California State Lands Commission has given to this project and the complex issues surrounding it. We respectfully urge the Commission to take the actions necessary to move this critical project forward.

Thank you for your service and for your consideration of our comments.

Sincerely,

Adam Pinterits
Government & Community Affairs Director
Monterey County Association of REALTORS®

Archived: Monday, June 22, 2026 2:00:32 PM
From: Marli Melton
Sent: Friday, June 19, 2026 4:00:09 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application.
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

June 19, 2026

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application
File: A4181; SCH #: 2006101004

Dear Chair Cohen and Honorable Commissioners,

Please do NOT approve Cal Am's general lease application at this time.

Cal Am's application relies on seriously outdated information. Recent findings show that Cal Am's proposed desal facility is extremely likely to have negative consequences for the lands and people you are sworn to protect.

The world, technologies, and our understanding continue to change, often quite rapidly. If the data you need in order to make a sound decision is not yet available, please delay your decision until well-documented, evidence-based and up-to-date information is provided by other state agencies and/or your own careful research using current data.

Cal Am's lease request is premature. We will not need any of Cal Am's desal for at least 20 years, and possibly longer. There is no need for a lease now In fact, granting such a lease could harm the environment and thousands of people in local communities. Should you force local ratepayers to pay $11,000 to $20,000 per acre foot for water they do not need? Please delay or deny this lease decision so people can pay $2808 per acre foot for water that is currently available and will meet our needs for at least 20 years and possibly longer.

Activities resulting from granting this lease request could endanger local groundwater in irreversible ways. This is new, 2025 information, resulting from additional research and modeling required by the California Sustainable Groundwater Management Act . Data collection is continuing. It is already showing that the pumping proposed by Cal Am may seriously harm beneficial users of the groundwater basin in ways that cannot be mitigated.

Sea level rise may destroy the project before it is even needed. As powerful storms increase more rapidly than expected, it is now predicted that sea level rise combined with these stronger storms may destroy the proposed intake infrastructure by 2045-2050. The project will have an actual life only about 40% as long as originally proposed. Cal Am does not have a secure location to replace its pipes and related infrastructure. It has not addressed this issue adequately. Why approve a lease for an extremely expensive project that is likely to be destroyed before it is needed?

Kindly note that you do not have a sworn obligation to protect giant, out-of-state corporations or their shareholders.

In this case, though, denying the lease could be a big favor to Cal Am's parent company. Why be strung along pursuing a foolish project whose assets will be smashed out to sea? There are plenty of better opportunities. It is time for them to cut their losses and invest in something better.

Technology for desalination is also changing. Talented engineers continue to search for better, less polluting, less energy-intensive ways to produce desal. It is possible that these new solutions will emerge within the next few years. Cal Am's original proposal for a 6.4 MGD facility is already outdated. It has not gotten approval for the 4.8 MGD project it is pitching to you. That, too, is out of date. When and if local communities need to start planning for desal, they deserve the best technology AND a regional, affordable, environmentally sustainable, economically just project. Please do not shackle local people with this outdated proposal. We deserve better, and we rely on you and the Commissions to protect our lands and communities so we can all achieve a better future.

Thank you.

Sincerely,

Marli Melton, Carmel Valley

Archived: Thursday, June 18, 2026 8:57:05 AM
From: [redacted]
Sent: Thursday, June 18, 2026 8:53:26 AM
To: CSLC CommissionMeetings
Subject: June 23,2026 Agenda Item 60
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

I urge a YES vote on California American Water's lease application for the use of state lands as part of the proposed Monterey desalination project.

The Monterey desalination project is the only truly drought-proof supply that can be available to the Monterey Peninsula in a timely manner. While we have had some recent additions to our supply from the Pure Water Expansion, the availability of source water for that recycling project is in doubt as a large portion of the source water will likely be claimed in the future by Salinas Valley interests as they work to satisfy their Groundwater Sustainability requirements.

The Monterey Peninsula desperately needs to emerge from an extreme slow down of needed housing construction due to the current moratorium on new water hookups. Local residents and the local economy have suffered. Only a reliable, sustainable and drought proof water supply will allow us to move forward. While desal might be slightly more expensive than past sources, the economic damage of insufficient supply would have a much more negative impact on individuals and their communities.

My involvement with water issues spans decades. I learned a great deal through my former positions: City Council Member in Salinas; Board Member of Monterey1Water; Board Member of the Monterey County Water Resources Agency; Public Member of Monterey County Local Agency Formation Commission (LAFCO); Member of Monterey County Agricultural Advisory Committee. I currently serve as a Board Member of the Carmel River Watershed Conservancy. Our mission is to restore and protect a healthy Carmel River Watershed. We support a water supply portfolio that will guarantee the Carmel River will not be over pumped in the future either on a routine basis or in emergency situations. An appropriate portfolio of water supply options should include conservation, recycled water, aquifer storage of winter rain and high river flows, AND desalination.

A YES vote on CalAm's lease application is vital for the immediate and long-term economic and environmental health of our region.

Phyllis Meurer
[redacted]

Archived: Monday, June 22, 2026 2:07:32 PM
From: Mike Moeller
Sent: Friday, June 19, 2026 4:26:42 PM
To: CSLC CommissionMeetings; calam@SLC
Subject: Public Comment Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

June 19, 2026

Chair Cohen and Honorable Commissioners
California State Lands Commission
CSLC.CommissionMeetings@slc.ca.gov
CalAm@slc.ca.gov
Re: Lease Application (File: A4181; SCH #: 2006101004)

Dear Chair Cohen and Honorable Commissioners,

I am writing as a resident of Marina to respectfully urge the State Lands Commission to deny California American Water's application for a lease to construct four desalination slant wells beneath Marina State Beach. Given the unresolved questions surrounding the project, I do not believe the Commission has enough information to approve the lease at this time.

As I understand it, the circumstances surrounding this project have changed significantly since it was first proposed. Water conservation efforts and the success of Pure Water Monterey have reduced the need for new water supplies, and recent analyses indicate that existing supplies may be sufficient for decades to come. Given these changes, I question whether this expensive and environmentally risky project is still necessary.

I am also concerned that the Commission is being asked to approve a lease without complete and current information. Questions remain regarding groundwater impacts, seawater intrusion, sea level rise, project costs, and the financial burden that would ultimately be placed on ratepayers. If these issues have not been fully analyzed under the project's current design, approval would be premature.

The State Lands Commission has a long history of protecting California's public trust resources. In Marina, the Commission took action regarding the CEMEX sand mining operation, recognizing its responsibility to ensure that private activities affecting public trust resources receive proper oversight and authorization. I believe that same commitment to stewardship should guide the Commission's review of this lease application.

The shoreline, groundwater resources, and public trust lands of Marina belong to the people of California. Although the proposed project would not close access entirely, it would permanently dedicate portions of a public beach to the operations of a private utility and limit public use of areas that should be currently open and accessible. As trustee of California's public trust lands, the Commission should carefully consider whether that loss of public use is justified given the unresolved questions regarding the project's necessity, environmental impacts, and long-term benefits to the public.

Any proposal to use public trust resources for a private project should meet a very high standard of public benefit and environmental protection. Based on the information currently available, I do not believe that standard has been met.

For these reasons, I respectfully ask the Commission to deny Cal-Am's lease application or postpone any decision until a

comprehensive review of the project's current design, impacts, and necessity has been completed.

Thank you for your consideration.

Sincerely,

Mike Moeller
Marina, California

Archived: Monday, June 22, 2026 2:08:39 PM
From: [redacted]
Sent: Friday, June 19, 2026 4:30:15 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

Dear Chair Cohen and Honorable Commissioners:

I respectfully urge the State Lands Commission to deny Cal Am's lease application. However, if you are not prepared to deny it now, then it is imperative that the Commission do a supplemental environmental review before considering this matter. The reason a new review is necessary is because there is significant, material, new information you need to have in order to make an informed decision on this application.

The State Land Commission has an independent obligation as a CEQA responsible agency which requires that you examine new evidence. Your obligation is to conduct your own examination of pertinent facts and not to rely on what other agencies have concluded about a different project design in the past.

Among the important new facts are: Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and Cal Am now has a growing surplus supply demand. Such facts require an updated environmental review by the SSLC.
ma
We, the public, rely on you to perform your due diligence and make a new, thorough analysis to protect us from ill advised, unnecessary, economically unsound projects like Cal Am's proposed desal plant. This project directly impacts me and my and my community.

Please protect the public and deny this application now. Or else, do a supplemental environmental review before considering the application.

Sincerely,

Barbara Moore, Monterey, CA

Archived: Monday, June 15, 2026 3:00:53 PM
From: Cate Mulligan
Sent: Tuesday, June 9, 2026 2:10:01 PM
To: CSLC CommissionMeetings
Subject: Cal Am taking control of our water?
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Oh no! Cal Am continues down this path when they are now in compliance with legal water supply restrictions and have a water surplus!

The water pricing is OUTRAGEOUS and we don't want corporate or anyone else running our water issues when clearly we have solved all that they say we need?
JUST SAY NO (please)

Cate Mulligan

June 19, 2026

California State Lands Commission
100 Howe Avenue
Suite 100 South
Sacramento, CA 95825

RE: 6/23/26 Item 60: California American Water Company Lease Application

Dear Commissioners,

As a longtime Monterey Peninsula resident, I care deeply about the future of our community and our ability to secure a reliable water supply. I support California American Water's lease application and respectfully ask the Commission to approve it at the June voting meeting.

For decades, water scarcity has shaped life on the Peninsula. Residents have conserved, businesses have adapted, and housing projects have been delayed because we simply do not have the dependable water supply our region needs. Our community has done an admirable job reducing water use, but conservation alone cannot solve a long-term supply challenge.

A desalination plant offers a practical, drought-resistant source of water that can strengthen our local water portfolio. Unlike other sources, it is not dependent on rainfall, snowpack, or already-stressed groundwater supplies. The proposed project would provide 4.8 million gallons of water per day—enough to serve approximately 18,300 households—and represents a meaningful investment in the Peninsula's long-term water security.

Reliable water is about more than infrastructure. It affects whether families can find housing, whether employers can grow, and whether our communities can plan confidently for the future. Many of the people who keep Monterey County running—teachers, nurses, hospitality workers, public safety personnel, construction workers, and service employees—struggle to afford living in the communities they serve. When water availability is uncertain, housing projects become more difficult to approve and build, further worsening affordability challenges. A dependable water supply can help make workforce housing possible and support a community where working families can live, raise children, and build their futures.

Approving this lease application would be an important step toward a more stable and resilient water future for Monterey County. Desalination should be part of a balanced approach that helps protect our region from drought, supports responsible growth, and provides greater confidence that essential water needs can be met for generations to come.

Thank you for your consideration, and I respectfully urge you to approve the application and allow this project to move forward.

Sincerely,

Molly Nance

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

I am writing to urge the State Lands Commission (SLC) to either deny Cal Am's lease application, or to do supplemental environmental review before considering it due to significant new information regarding groundwater impacts and the lack of cost updates as well as other issues and changed conditions, such as CalAm now being in compliance with legal restrictions on its water supply and having a surplus.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what others concluded about a different project design under different factual conditions.

Supply and Demand

Due to conservation and the new supply from Pure Water Monterey the proposed supply and demand needs for the Monterey Peninsula have changed. There is no longer a water shortage on the Peninsula. In fact, Cal Am now has surplus water supply that is being stored in the Seaside Basin. In last year's Supply and Demand hearing the CPUC updated both supply and demand for the Monterey Peninsula. The CPUC ruled that Cal Am would need only 2,528 AFY of additional water supply by 2050.

Cal Am is attempting to change the size of its desal project from 6.4 mgd (7,169 AFY) to 4.8 mgd (5,377 AFY) without CPUC approval to do so. But even a 4.8 mgd (million gallons per day) plant is far too large and completely unnecessary.

CEQA Environmental Review Needs to be Updated

The SLC Memo states it will not perform any new CEQA environmental analysis. Instead, it relies on the outdated CPUC 2018 EIR/EIS and the CCC 2022 CDP findings. But neither of these fully analyzed the 4.8 MGD phased project as it is now designed. In fact, when the CPUC analyzed the original 6.4 mgd project; it rejected the 4.8 MGD phased approach that Cal Am wants to use. The SLC must do a CEQA analysis that includes both Phase 1 (4.8 mgd) and Phase 2 (6.4 mgd).

Cal Am's new slant well design would be "approximately 1,000 feet long or more." The existing test well is 700 feet long. The groundwater impacts of this extended well length have not been independently modeled or vetted. This is a design change that triggers the need for additional CEQA review under SLC Guidelines.

New Groundwater Impacts

Significant new information regarding Cal Am's desal project shows unmitigated adverse groundwater impacts that requires the State Lands Commission to prepare a subsequent or supplemental EIR.

New findings: This project will cause groundwater levels to decline and reduce available supply. It will extract fresh water and reduce the available groundwater supply to Marina.

This project will increase seawater intrusion, adversely impact groundwater quality, and reduce groundwater storage in overdrafted subbasins. It will obstruct the sustainable groundwater management of the Salinas Valley Groundwater Basin.

Significant new information demonstrates that the adopted mitigation plan for adverse groundwater impacts is inadequate.

Sea Level Rise Makes this Project Unreliable

Cal Am proposes building a project whose source water wells have a 25-year life.

The 2022 CCC staff report points out that the slant well network could be at risk from coastal erosion and sea level rise by 2045–2050, not 2060 as the CPUC had previously assumed. Since Cal Am has no place to move these wells inland, it appears the project would be unable to deliver the 2,528 AFY the CPUC concluded would be needed in 2050.

Impact of the M1W Outfall Must be Analyzed Now

Monterey One Water's application to modify their outfall to accommodate the brine discharge from Cal Am's plant contains significant new information that reveals unstudied environmental impacts. The Commission must analyze the recently proposed modifications to the M1W outfall before it considers the slant well lease application. The CDP application to modify the M1W outfall differs from the Final EIR/EIS and reveals new and substantially more severe environmental impacts.

M1W's outfall modifications have never been analyzed — and the Coastal commission (CCC) acknowledged they are significant. If the SLC were to defer analysis of a foreseeable, significant component of the project it would be a piecemealing violation.

6. Environmental Justice Concerns for Low-income Monterey Peninsula Ratepayers

Cal Am has not updated the cost of this project since 2018. It has already spent $200M of its $279M cost cap.

The rate impacts on low-income Monterey Peninsula ratepayers cannot be known without updated cost projections. These would have to include construction cost increases since 2018; likely amortization over 25 rather than 60 years given sea level rise; the loss of scale economies from the smaller 4.8 MGD plant; likely below-capacity operation spreading fixed costs over an even smaller production base; and no binding agreement preventing Cal Am from substituting expensive desal water for cheaper available supplies. New groundwater impacts could also result in new costs if Cal Am has to mitigate damage to Marina's groundwater.

The SLC's own EJ Policy requires striving to minimize additional burdens on disadvantaged communities. But the SLC cannot even assess the environmental justice impact of this project without updated rate projections.

The CPUC's 2018 decision required Cal Am to revisit operating restrictions for the desal plant if it secured additional supply from Pure Water Monterey. Cal Am has secured additional supply from the Pure Water Monterey Expansion Agreement but has not complied with the 2018 CPUC order. That review was specifically designed to protect ratepayers from bearing expensive desal costs when cheaper water is available. Until it occurs, neither the CPUC nor the SLC has an accurate picture of what it will cost ratepayers.

Sincerely,

Susan Nine, JD

Monterey Homeowner

Monte Vista Neighborhood Association, Director

Archived: Friday, June 19, 2026 8:25:44 AM
From: wallace notley
Sent: Thursday, June 18, 2026 11:10:51 PM
To: CSLC CommissionMeetings
Subject: Commissioners re: FILE: A4181; SCH#; 2006101004
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

DEAR CSLC COMMISSIONERS:

BECAUSE OF AWARD WINNING STATE OF THE ART RECLAIMED WATER FROM THE PURE WATER MONTEREY PROJECT FROM MONTEREY ONE WATER, WE HAVE A WATER SURPLUS ON THE PENINSULA THAT IS BEING STORED IN THE SEASIDE BASIN. AS A CALIFORNIA AMERICAN WATER (CAL AM) RATEPAYER, I CAN ATTEST TO THE FRUSTRATION OF PAYING ONE OF THE HIGHEST WATER RATES IN THE NATION EVEN THOUGH I USE ONE OF THE LEAST AMOUNTS IN THE AREA.

WE VOTED IN NOVEMBER 2018 FOR OUR PUBLIC AGENCY--MONTEREY PENINSULA WATER MANAGEMENT DISTRICT--TO BUY CAL AM OUT AND ADMINISTER AND MANAGE OUR OWN WATER LOCALLY. FOR OVER A DECADE CAL AM HAS TRIED EVERY TRICK IN THE BOOK TO STAY HERE THROUGH CAMPAIGN CONTRIBUTIONS TO LOCAL AND STATE OFFICIALS AND THROUGH NASTY LAWSUITS. CUSTOMERS HAVE APPEARED IN FRONT OF THE CPUC AND HAVE WRITTEN LETTERS TO THE CPUC AND THEIR CUSTOMER ADVOCATES OFFICE COMPLAINING ABOUT OUR HIGHEST WATER BILLS.

WE DO NOT NEED DESAL BECAUSE OF LESS WATER DEMAND AND RECYCLED WATER MAKES DESAL OUTDATED AND AND UNNEEDED. CAL AM'S DESAL PROJECT WILL CAUSE GROUNDWATER LEVELS TO DECLINE AND REDUCE THE AVAILABLE GROUNDWATER SUPPLY TO MARINA. ALSO, THIS PROJECT WILL INCREASE SEAWATER INTRUSION, ADVERSELY IMPACT GROUNDWATER QUALITY, AND REDUCE GROUNDWATER STORAGE IN OVERDRAFTED SUBBASINS. IT WILL OBSTRUCT THE SUSTAINABLE GROUNDWATER MANAGEMENT OF THE SALINAS VALLEY GROUNDWATER BASIN AND SEA LEVEL RISE MAKES THIS PROJECT UNRELIABLE. CAL AM PROPOSES BUILDING A PROJECT WHOSE SOURCE WATER WELLS HAVE AT BEST A 25 YEAR LIFE. MANY ADDITIONAL TECHNICAL HURDLES SPELL ENVIRONMENTAL DISASTER FOR THE MONTEREY PENINSULA WHO WILL SEE THEIR ALREADY MOST EXPENSIVE WATER BILLS SOAR ANOTHER 50% + FORCING LOW INCOME RATEPAYERS TO FURTHER STRAIN THEIR BUDGETS. THE SLC'S OWN ENVIRONMENT JUSTICE POLICY REQUIRES MINIMIZING ADDITIONAL BURDENS ON DISADVANTAGED COMMUNITIES WHICH CANNOT BE COMPLETED WITHOUT UPDATED RATE PROJECTIONS. MOST EGREGIOUS OF ALL WILL BE THE SEAWATER INTRUSION INTO MARINA'S SOLE POTABLE WATER SUPPLY. MARINA IS THE HOME OF SOME OF OUR LOWEST INCOME RESIDENTS IN THE AREA. I URGE THE STATE LANDS COMMISSION TO DENY CAL AM'S LEASE APPLICATION.

THANK YOU:
WALLACE NOTLEY
[redacted]
MONTEREY, CALIFORNIA
[redacted]

Archived: Friday, June 19, 2026 9:46:43 AM
From: olsenmckenzie
Sent: Friday, June 19, 2026 9:45:22 AM
To: CSLC CommissionMeetings
Subject: Upcoming Agenda Item #60 - Cal-Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

To: California State Lands Commission

Chair Cohen, and Honorable Commissioners

100 Howe Avenue, Suite 100-South Sacramento, CA 95825

My name is Monique Olsen, and I'm writing to you today in my individual citizen capacity, I reside in Monterey, CA. I ask the State Lands Commission deny Cal-Am's Lease Application, or do a supplemental environmental review before considering it. There is new significant information regarding groundwater impacts, as well as other importantant issues, and additional cost updates.

Cal-Am has now been in compliance with legal restrictions on its water supply and has had a surplus for multiple years.

Please consider denying the lease application, before all additional significant information is updated on the Groundwater impacts. This project will cause groundwater levels to decline, and reduce available supply. It will extract fresh water, and reduce the available groundwater supply to Marina.

Cal Am's new slant well design would be "approximately 1,000 feet long or more." The existing test well is 700 feet long. The groundwater impacts of this extended well length, have not been independently modeled or vetted. This is an intention design change that triggers the need for additional CEQA review under SLC Guidelines. The outdated EIR from 2018, needs to be a required update .

Additionally, due to conservation efforts of our residence in the service area, and the new supply from Pure Water Monterey, the proposed supply and demand needs for the Monterey Peninsula have changed significantly. These changes must not be ignored in any way.

There is no longer a water shortage on the Peninsula, Cal- Am now has surplus water supply that is being stored in the Seaside Basin.

Please consider the denial of the application until all updates in your agencies requirements are further provided, and deny the application at this time.

Thank you for your consideration to our Monterey Peninsula Community with fairness, and serious consideration for the environmental impact issues.

Kind Regards,

Monique Olsen

Archived: Thursday, June 18, 2026 11:16:21 AM
From: Hans Ongchua
Sent: Thursday, June 18, 2026 9:27:10 AM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application: OPPOSITION to CalAm Desalination Project
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Dear Chair Cohen and Commissioners,

I am writing to urge the State Lands Commission (SLC) to **DENY Cal Am's lease application for its proposed desalination slant wells in Marina**, or at the absolute minimum, require a supplemental environmental review.

Cal Am has bounced this project between regulatory agencies, **resulting in no single agency ever analyzing the complete project as it is currently designed**. The SLC has an independent obligation under CEQA to **evaluate the facts as they stand today**, rather than relying on outdated reviews.

Please deny this application based on the following critical issues:

- **THE PROJECT IS UNNECESSARY:** Thanks to community conservation and the new supply from Pure Water Monterey, **the Peninsula currently has a water surplus**. A massive new 4.8 million-gallon-per-day desalination plant is drastically oversized and completely unnecessary for our future needs.

- **SEVERE GROUNDWATER DAMAGE:** Significant **new findings show this project will extract fresh water from Marina, lower groundwater levels, increase seawater intrusion**, and obstruct sustainable groundwater management in already overdrafted subbasins.

- **OUTDATED ENVIRONMENTAL REVIEWS (CEQA VIOLATIONS): Cal Am has changed its design**, extending the slant wells from 700 to over 1,000 feet, **without independent modeling of the impacts**. Furthermore, deferring the analysis of the unstudied impacts from Monterey One Water's (M1W) outfall modifications is **a textbook CEQA "piecemealing" violation**.

- **VULNERABILITY TO SEA LEVEL RISE:** The Coastal Commission notes that **these wells will be at risk from coastal erosion and sea level rise by 2045–2050**. It is highly irresponsible to approve an expensive project that will become unviable and unreliable in just 25 years.

- **ENVIRONMENTAL JUSTICE AND RATEPAYER BURDENS:** Cal Am has not updated its project cost projections since 2018, yet has already burned through $200 million of its $279 million cost cap. Approving an unnecessarily expensive project **forces an unknown, exorbitant financial burden onto low-income ratepayers**, which directly **violates the SLC's own Environmental Justice policies**.

Please protect our groundwater, our coastal environment, and our disadvantaged communities from this reckless and unnecessary project. I strongly urge you to deny the Cal Am lease application.

Sincerely,
Hans Ongchua
Marina, CA

Archived: Thursday, June 18, 2026 8:24:19 AM
From: [redacted]
Sent: Thursday, June 18, 2026 7:36:35 AM
To: CSLC CommissionMeetings
Subject: Agenda item #60 Cal Am lease application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chairman Cohen & Commissioners:

RE: A4181 / SCH #2006101004

I am a Monterey resident. This project is unnecessary, unaffordable, and built on an outdated environmental review. I do not support and do not want to pay for this nonsense.

Respectfully,
Donna Owens
[redacted]
Monterey CA [redacted]

Sent from [redacted] for iOS

CHAMBER OF COMMERCE
& TOURIST CENTERS

June 18, 2026

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825

RE: California American Water Company Lease Application

Dear Commissioners,

On behalf of the Pacific Grove Chamber of Commerce and the businesses we represent, I respectfully urge you to approve California American Water's lease application for the construction and use of four new subsurface slant wells and the conversion and use of one existing subsurface slant well for the proposed Monterey desalination project.

A reliable and sustainable water supply is essential to the long-term vitality of the Monterey Peninsula. For decades, water uncertainty has constrained economic growth, limited housing opportunities, and created challenges for local businesses seeking to expand, invest, and recruit and retain employees. As far back as 1983–1985, local businesses were already bearing the costs of water shortages and conservation mandates. For example, the low-flow retrofit of a 312-room hotel represented a significant expense and created ongoing burdens related to repairs and maintenance. These challenges have persisted for generations and continue to affect not only our business community, but the overall quality of life for residents throughout the region.

The proposed desalination plant offers a drought-proof, locally controlled solution that will provide the dependable infrastructure our communities need for future generations. A secure water supply is fundamental to supporting housing, encouraging investment, sustaining jobs, and maintaining the vibrant communities that make the Monterey Peninsula such a special place to live, work, and visit.

This project has undergone extensive environmental review through the CEQA process and represents a thoughtful and responsible approach to addressing one of our region's most pressing challenges. Reliable water is not simply an economic issue… it is critical to the health, resilience, and sustainability of our entire community.

I respectfully encourage the California State Lands Commission to approve this application and help secure a stable water future for Monterey County. Doing so will support local businesses, residents, and future generations while ensuring our region can continue to thrive.

Thank you for your consideration and your service to the people of California.

Sincerely,

Christi Metzner
President & CEO
Pacific Grove Chamber of Commerce
831.373.3304

Archived: Thursday, June 18, 2026 8:31:39 AM
From: Joseph Patronik
Sent: Wednesday, June 17, 2026 4:26:29 PM
To: CSLC CommissionMeetings
Subject: "Agenda Item #60 Cal Am Lease Application."
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners:
I urge you to NOT approve Cal-Ams request for drilling slant wells in the Marina, CA area.
This project is a total disaster: economic, environmental, food production wise.
There is no need for that desalination plant.
To date Cal-Am has spent almost 73% of its total projected cost, with the bulk of expense yet to come.
Cal-Am already has sufficient water in their Seaside basin.
The salt water intrusion into the Salinas Valley will be an economic disaster to agriculture.
The cost of the desalinated water would be 7 times the current and projected cost of current water costs if it ran at 50% capacity.

I request this be on the agenda for your Tuesday, June 23, 2026 meeting.

Thank you,
Joseph Patronik
[redacted]
East Garrison, CA [redacted]

Archived: Monday, June 22, 2026 2:09:21 PM
From: Vicki Pearse
Sent: Friday, June 19, 2026 4:40:31 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw

California State Lands Commission

100 Howe Avenue, Suite 100-South Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181)

Chair Cohen and Honorable Commissioners:

Voters rely on your integrity and thorough analysis to protect them from corporate greed. Cal Am's proposed desalination plant is pure greed --- transparently unnecessary and hugely expensive.

The large amounts of energy that desal demands, the resulting greenhouse-gas emissions, and the disposal of highly saline and contaminated brine would be damaging to both the economy and the environment.

This project directly impacts my family and community and more.

I strongly urge the State Lands Commission to deny Cal Am's lease application.

You must at least do a critical environmental review before considering it, due to significant new information regarding groundwater impacts, costs, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply.

The State Land Commission's independent obligation as a CEQA responsible agency is in no way satisfied by your merely documenting what other agencies have concluded about a

different project design in the past.

Please protect the public and deny this application.

Sincerely,

Vicki Pearse

Pacific Grove, CA

Archived: Friday, June 19, 2026 9:01:18 AM
From: [redacted]
Sent: Friday, June 19, 2026 7:51:04 AM
To: CSLC CommissionMeetings
Cc: [redacted]
Subject: Agenda Item # 60 Cal Am Lease Aplication (19 June 2026)
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

The CPUC's 2018 decision required Cal Am to revisit operating restrictions for the desal plant if it secured additional supply from Pure Water Monterey. Cal Am has secured additional supply from the Pure Water Monterey Expansion Agreement but has not complied with the 2018 CPUC order. That review was specifically designed to protect ratepayers from bearing expensive desal costs when cheaper water is available. Until it occurs, neither the CPUC nor the SLC has an accurate picture of what it will cost ratepayers.

This is a "rush to judgment" that needs to be rejected.

Kenneth R. Pelletier, PhD, MD
Clinical Professor of Medicine
Full Time Resident - Carmel by the Sea

PORTOLA HOTEL & SPA
AT MONTEREY BAY

June 18, 2026

California State Lands Commission
100 Howe Avenue Suite 100-South
Sacramento, CA 95825

RE: Vote on June 23, 2026, Agenda Item 60

Dear California State Lands Commission,

I am writing today in full support of the Monterey Peninsula Water Supply project – Monterey's path forward to a sustainable, drought proof water supply.

This project has been gone through a long, drawn-out review and the environmental effects have been evaluated extensively by the CPUC, California Coastal Commission and other additional relevant agencies.

Waiting to act will further prolong the project schedule and delay the much-needed source of water. This supply is desperately needed to meet our community needs and it is long overdue to move to completion.

Please act today and vote **YES** on our only drought-proof solution to stabilize the Monterey Peninsula's water supply!

Sincerely,

Janine M. Chicourrat
Managing Director

Archived: Monday, June 22, 2026 9:03:49 AM
From: Dan Presser
Sent: Friday, June 19, 2026 3:43:02 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181)

Chair Cohen and Honorable Commissioners:

Voters rely on your integrity and thorough analysis to protect them from corporate greed and boondoggle projects like Cal Am's proposed desal plant. This project directly impacts my family and community.

I urge the State Lands Commission to either deny Cal Am's lease application or to do supplemental environmental review before considering it, due to significant new information. Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply demand an updated environmental review.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what other agencies have concluded about a different project design in the past.

Please protect the public and deny this application.

Sincerely,

Dan Presser

Dan Presser
Owner, FourWinds Travel
26080 Carmel Rancho Boulevard, Suite # 103
Carmel, CA 93923-8752

PO Box 22938
Carmel, CA 93923-0938
"*Where the Good Times Begin*"sm
Office: 831-622-0800
info@fourwindstravel.com
http://www.fourwindstravel.com
CST # 1000683-40

FourWinds Travel

Where the good times begin SM

Archived: Monday, June 22, 2026 2:04:55 PM
From: MWChrislock
Sent: Friday, June 19, 2026 4:21:06 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

June 19, 2026

Chair Malia Cohen and Commissioners Eleni Kounalakis and Joe Stephenshaw
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Subject: California American Water Application for a Lease on Commission Lands – File: A4181

Dear Chair Cohen and Honorable Commissioners:

Public Water Now (PWN) is a Monterey Peninsula non-profit with over 4,000 members, almost all of whom are Cal Am ratepayers. Our interest is in an affordable, sustainable water supply for the Monterey Peninsula. That goal could never be realized with Cal Am's proposed desal project. The cost of water here is already an extreme stress for many households.
Cal Am's desal would raise that cost by at least 50%, making this an environmental justice issue for the Peninsula's low-income residents.

History of this fight

The Peninsula, alongside the Marina community, has fought Cal Am's desal for over 10 years. The Monterey Peninsula does not need this water. And Marina gets no water from this project. But they risk seawater intrusion into the groundwater they depend on because the wells Cal Am is asking you to approve draw brackish groundwater, not ocean water.

Cal Am has been trying to build this desal plant since 2018, when it received CPUC approval. At that point, there was still a water supply shortage on the Peninsula. But since then, our public agencies working together have solved our water supply shortage with the Pure Water Monterey Project. Pure Water Monterey is a joint project of three public agencies – Monterey One Water, the Monterey Peninsula Water Management District, and the Marina Coast Water District. It now supplies 60% of the Monterey Peninsula's potable water. It has proven to be a dependable long-term water supply. It's also drought-proof as it relies on wastewater.

So why is Cal Am continuing to pursue this unnecessary project?

As you know, it's the practice of investor-owned utilities to build new projects to increase profits because their income is based on capital assets. Cal Am has said this will be a billion-dollar project. Over the years, we have often found conflict between Cal Am's need for profit and the truth.

Cal Am has routinely circumvented the regulatory process by telling the SLC the CPUC handled it, telling the RWQCB the CCC handled it, and telling the CCC the CPUC handled it. The result is that no single agency has ever analyzed the complete project as currently designed or its necessity based on current water supply and demand data.

Comments supporting this project from the farm community, the hotel lobby, or real-estate interests should be reviewed for facts. Their claims that the State's Cease and Order cannot be lifted without desal, or that Pure Water Monterey is unreliable or that farmers could suddenly take all the wastewater to solve the Salinas Valley's groundwater overdraft have no basis in fact. The wastewater used by Pure Water Monterey is under legal contract. Cal Am is now storing water because Pure Water Monterey is creating a surplus. The State's Cease and Order is under review and is expected to be lifted since no water beyond legal limits has been taken from the Carmel River in years.

Supply and Demand

Due to permanent conservation and the new supply from Pure Water Monterey, the proposed supply and demand needs for the Monterey Peninsula have changed. There is no longer a water shortage on the Peninsula. In fact, Cal Am now has surplus water supply stored in the Seaside Basin.

In the CPUC's 2025 Supply and Demand hearing, they updated supply and demand for the Monterey Peninsula. The CPUC ruled that Cal Am would need only 2,528 AFY of additional water supply by 2050.

Cal Am is attempting to change the size of its desal project from 6.4 mgd (7,169 AFY) to 4.8 mgd (5,377 AFY) without CPUC approval to do so. But even a 4.8 mgd plant is far too large

and completely unnecessary.

Why break ground now on a very expensive desal plant that would supply 7,169 AFY when the CPUC expects only 2,528 AFY will be needed twenty-five years from now? When a desal plant cannot run close to capacity it raises the cost of water produced to extreme levels. If Cal Am's plant runs at half its capacity, it could raise prices to $20,500 per acre-foot.

Sea level rise makes this project unreliable

Cal Am proposes building a project whose source-water wells have a 25-year lifespan. The 2022 CCC staff report points out that the slant well network could be at risk from coastal erosion and sea level rise by 2045–2050, not 2060 as the CPUC had previously assumed. Since Cal Am has no place to move these wells inland, it appears the project would be unable to deliver the 2,528 AFY when the CPUC concluded it would be needed in 2050.

Cal Am needs a CPCN

Cal Am does not have a CPCN for its 4.8 mgd plant. It needs to return to the CPUC for authorization of the 4.8 mgd plant before moving forward. In 2018, the CPUC rejected even analyzing a 4.8 mgd plant because it would not reduce environmental impacts or ratepayer costs. They also rejected a phased project.

New information requires CEQA update

The State Lands memo states it will not perform any new CEQA environmental analysis. Instead, it relies on the outdated CPUC 2018 EIR/EIS and the CCC 2022 CDP findings. But neither of those documents fully analyzed the 4.8 mgd phased project that Cal Am is now proposing. In fact, when the CPUC analyzed the original 6.4 mgd project; it rejected the 4.8 mgd phased approach that Cal Am wants to use. This phased desal project must be analyzed.

Neither the CPUC 2018 EIR/EIS nor the CCC 2022 CDP included the impact of the completed and operating Pure Water Monterey Project.

Cal Am's new slant well design would be "approximately 1,000 feet long or more." The existing test well is 700 feet long. The groundwater impacts of this extended well length have not been independently modeled or vetted. This is a design change that requires additional CEQA review under SLC Guidelines.

Significant new groundwater impact findings

New information on the groundwater impact on the Monterey subbasin was presented to Monterey Superior Court Judge Wills in the pending water rights case. The water rights case will be decided after November. The impact on groundwater is greater than the CPUC's EIR

assumed, and it will result in greater seawater intrusion. This new information has not been considered under CEQA. It is the responsibility of State Lands, as the next permitting agency, to conduct additional CEQA review.

Cal Am's desal will draw approximately 17,000 AFY of groundwater. It will cause groundwater levels to decline. It will extract fresh water, reducing Marina's available groundwater supply. This project will increase seawater intrusion, adversely impact groundwater quality, and reduce groundwater storage in overdrafted subbasins of the Salinas Valley Groundwater Basin. It will impede the SVBGSA's sustainable groundwater management of the Salinas Valley Groundwater Basin.

This significant new information demonstrates that the adopted mitigation plan for adverse groundwater impacts is completely inadequate.

Environmental Justice concerns for low-income Monterey Peninsula ratepayers

Cal Am has not updated the cost of this project since 2018. It has already spent $200M of its $279M CPUC cost cap.

The new groundwater impacts could result in new costs if Cal Am has to mitigate damage to Marina's groundwater source. There is no way to know the environmental justice impact of increased costs on low-income and disadvantaged water customers on the Monterey Peninsula until Cal Am returns to the CPUC and updates its costs.

Updated cost projections would have to include construction cost increases since 2018; likely amortization over 25 rather than 60 years given sea level rise; the loss of scale economies from the smaller 4.8 mgd plant; likely below-capacity operation spreading fixed costs over an even smaller production base; and no binding agreement preventing Cal Am from substituting expensive desal water for cheaper available supplies.

The SLC's own EJ Policy requires striving to minimize additional burdens on disadvantaged communities. But the SLC cannot even assess the environmental justice impact of this project on the Monterey Peninsula without updated rate projections.

The CPUC's 2018 decision required Cal Am to revisit operating restrictions for the desal plant if it secured additional supply from Pure Water Monterey.

Cal Am has secured additional supply from the Pure Water Monterey Expansion Agreement, but has not complied with the 2018 CPUC order. That review was specifically designed to protectratepayers from bearing expensive desal costs when cheaper water is available. Until it occurs, neither the CPUC nor the SLC has an accurate picture of what it will cost ratepayers.

The Impact of the M1W outfall must be analyzed now

Monterey One Water's application to modify its outfall to accommodate the brine discharge from Cal Am's plant contains significant new information that reveals unstudied environmental impacts. The Commission must analyze the recently proposed modifications to the M1W outfall before it considers the slant well lease application. The CDP application to modify the M1W outfall differs from the Final EIR/EIS and reveals new and substantially more severe environmental impacts.

M1W's outfall modifications have never been analyzed, and the CCC acknowledged they are significant. If the SLC were to defer analysis of a foreseeable, significant component of the project, it would constitute piecemealing.

Desal would drive up the cost of a buyout

In 2018, Public Water Now put Measure J on the ballot, asking voters to approve a municipal buyout of Cal Am. Cal Am spent millions of dollars to defeat Measure J, but it passed with 56% of the vote. Measure J mandated that the Monterey Peninsula Water Management District (MPWMD) pursue a buyout of Cal Am's Peninsula water system. In December 2023, MPWMD filed its eminent domain case to buy Cal Am's Monterey Peninsula system. It has been moving through the court process and is now in discovery.

One reason Cal Am may be in a hurry to build an unnecessary $500M-plus desal plant is to drive up the price of the buyout in hopes of defeating the community's will in Measure J.

Conclusion

Voters rely on your thorough analysis and integrity to protect them from corporate greed and boondoggle projects like this desal plant.

We urge the State Lands Commission (SLC) to either deny Cal Am's lease application or to do supplemental environmental review before considering it, due to significant new information. Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply demand an updated environmental review.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what others concluded about a different project design under past conditions.

Sincerely,

Melodie Chrislock
Managing Director

PUBLIC WATER NOW
P.O. Box 1293
Monterey, CA 93942
http://www.publicwaternow.org
mwchrislock@redshift.com

Archived: Friday, June 19, 2026 8:59:19 AM
From: Darius Rike
Sent: Friday, June 19, 2026 6:31:24 AM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application.
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Dear Chair Cohen and Commissioners, reference File: A4181 / SCH #2006101004

I am writing to express my strong opposition to the proposed General Lease for the Monterey Peninsula Water Supply Project (MPWSP) slant wells, which will be considered at your June 23, 2026 meeting.

As a public agency, the State Lands Commission has an environmental justice mandate and a duty to protect our sovereign tidelands and submerged lands for the public benefit. Granting this lease would directly undermine those responsibilities for the following reasons:

1. Lack of Water Rights: A June 2025 State Water Board report confirmed that the MPWSP has no water rights to extract groundwater at the CEMEX property. The project will extract substantially more than the 500 AFY allowed by pre-existing contracts, worsening seawater intrusion and drawing down a critically overdrafted basin.
2. Disproportionate Burden on a Disadvantaged Community: The City of Marina is a disadvantaged community of color that already hosts a regional landfill, a sewage plant, and an EPA national priorities listed site. Marina will bear all the groundwater and environmental risks of this project while receiving none of the water, which will be entirely exported to other jurisdictions.
3. Threat to Public Trust and Sensitive Ecosystems: The proposed industrial wellfield threatens Marina's primary drinking water supply, restricts public access to local beaches, and risks destroying 25 acres of nearby vernal pools and critical habitats for protected species.
4. Disregard for Regulatory Directives: The project size being considered (4.8 mgd) contradicts the CPUC's explicit mandate for a 6.4 mgd project. Furthermore, the lease review improperly excludes critical modifications to the ocean outfall needed to handle highly saline discharges.

There is no public emergency requiring this water; with the Pure Water Monterey Expansion complete, CalAm has a sufficient water supply for the next 15+ years.

I urge the Commission to uphold its public trust doctrine, protect the City of Marina, and deny this lease.

Sincerely,
Darius Rike
Resident
Marina, CA

Archived: Thursday, June 18, 2026 11:13:13 AM
From: Doug Rogers
Sent: Thursday, June 18, 2026 10:05:42 AM
To: CSLC CommissionMeetings
Cc:
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, California 95825

Dear Commissioners -

Regarding the fundamental issue of 'Supply & Demand', suggest considering another approach to the proposed size of the Cal Am desal proposal : NOT 6.4 mgd.....NOT 4.8 mgd.... YES 0.0 mgd.
Cal Am needs to stop 'playing games'..... suggest they focus their efforts on the World Cup, because the Peninsula water issue does not qualify as a 'sport'.

Appreciate your consideration and professional approach to this issue, which has wasted too-many millions to date.

Sincerely,
Doug Rogers
Monterey Peninsula Water Consumer

Archived: Thursday, June 18, 2026 1:28:15 PM
From: Robin R
Sent: Thursday, June 18, 2026 1:27:27 PM
To: CSLC CommissionMeetings
Subject: Cal Am's application – Agenda Item #60.
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

I am writing to request / demand denial of Cal Am's application.
The vast majority of Marina residents oppose this project.
With the rise of sea levels and the very real probability of contamination of Marina's ground water this project must be stopped.
Cal Am is using out dated data to get their way.
Marina is not a customer of Cal Am. Cal Ams big ugly non environmentally friendly project is bad on many levels.
In these days with so much corruption, greed & no regard for the average person politically and with corporations you must do the Correct and proper thing. DENY DENY DENY Cal Am.
Have the courage to be the HEROs that keeps Marina's own ground water, environment and the 13 endangered animals & plant safe from Corporate and political greed.

Kind Wishes
Robin Rosinski

Archived: Monday, June 22, 2026 4:05:53 PM
From: Tom Rowley
Sent: Saturday, June 20, 2026 3:27:31 PM
To: CSLC CommissionMeetings
Cc: [redacted]
Subject: Item 60 Tue June 23, 2026 --Slant Wells for CAW Desal Project
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

To: CA State Land Use Commissioners — I am writing your commission to provide strong support for allowing CAL AM Water continued permission to extract sea water by its slant wells for its proposed desal project at the location of the former CEMEX sand plant near the City of Marina. The test slant well and numerous technical studies have indicated that the slant well design together prevent damage to the ground level well locations in the Salinas Valley, and furthermore do not allow any additional salt water intrusion.

I am writing this support as President of the Fishermen Flats Homeowners & Residents Association in the City of Monterey. We are 153 Single Family Residences + 3 Senior Citizen Units + 48 units in the Planned Unit Development Monterey Woods — a total of approximately 200 units of housing located in the Flats & Foothills area of the Monterey Peninsula.

"Aloha" Tom Rowley, Pres FF HOs & Residents Assoc.
[redacted]
Monterey, [redacted]
Home TEL: [redacted]

Archived: Monday, June 22, 2026 9:04:21 AM
From: [redacted]
Sent: Friday, June 19, 2026 3:55:21 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181)

Chair Cohen and Honorable Commissioners:

I urge the State Lands Commission to deny Cal Am's lease application. Cal Am needs to do supplemental environmental review due to significant new information and changes regarding groundwater impacts. Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River the lack of cost updates, and has a has a growing surplus supply from Monterey One Water recycled water, which is much better for the environment that any proposed Cal Am project.

We who live on the Monterey Peninsula voted to have publicly owned water like 85% of Californians already have. Cal Am's corporate greed had led us to have the highest water rates in the country. Low income seniors, like myself, do ridiculous things to conserve water, doing without things most people would not---but still find our rates go up and up because of Cal Am's guaranteed profits. We cannot afford Cal Am's expensive projects, that are contested by the people of Marina, and not the best alternative for the environment.

Please help the people who have suffered under the Cal Am monopoly and deny their lease application that will only waste more or our money.

Thank you,

Nancy Runyon
[redacted]
Monterey, CA
[redacted]

Archived: Friday, June 19, 2026 12:16:00 PM
From: Timothy Sanders
Sent: Friday, June 19, 2026 11:49:13 AM
To: CSLC CommissionMeetings
Cc: mwchrislock
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

I strongly oppose approval of Agenda Item #60 Cal Am Lease Application by the California State Lands Commission. In doing so I join the large majority of Monterey Peninsula residents who some years ago voted to remove Cal Am from ownership of the Monterey Peninsula water distributorship. I join also members of Public Water Now and LandWatch Monterey County who currently express their opposition in their own comments to the Commission both in person and as members of those organizations.

The reasons for my opposition are substantive and numerous. Details may be found in the comments by those organizations and individuals commenting on the project. They include ambiguities in the size of the project (6.4 MGD, 4.8 MGD), excessive project size in view of currently available recycling and storage resources, inadequate analysis of slant well sizes, changes in impacts on groundwater supply and quality, etc.

Not only are physical impacts, insufficiently analyzed but economic, and social effects of the desal project underlying the application are entirely inadequately discussed in the document.

In short, the application is clearly deficient and should be rejected by the Commission.

Respectfully,

Timothy D Sanders
[redacted]
Pacific Grove, California [redacted]

Archived: Friday, June 19, 2026 9:00:24 AM
From: Lila Seldin
Sent: Friday, June 19, 2026 6:58:41 AM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application
(File: A4181; SCH #: 2006101004)
Agenda Item #60 Cal Am Lease Application

Dear Chair Cohen and Honorable Commissioners,

Our daughter and son-in-law are Marina homeowners and are raising our grandchildren there. We are very concerned about Cal Am's desalination proposal and its devastating environmental impacts.

This project will cause groundwater levels to decline and reduce available supply. It will extract fresh water and reduce the available groundwater supply to Marina.

New information regarding Cal Am's desal project shows unmitigated adverse groundwater impacts, requiring the State Lands Commission to prepare a subsequent or supplemental EIR.

This project will increase seawater intrusion, adversely impact groundwater quality, and reduce groundwater storage in overdrafted subbasins. It will negatively impact the sustainable groundwater management of the Salinas Valley Groundwater Basin.

Additionally, the new Cal Am slant well design change is so concerning that it triggers the need for additional CEQA review under SLC

Guidelines.

Due to conservation and the new supply from
Pure Water Monterey the proposed supply and demand needs for the Monterey Peninsula show there is no longer a water shortage on the Peninsula.

Thank you for your time and consideration.

Sincerely,

Lila and Cal Seldin

Cal Am Rate Payers and residents of Pacific
Grove

June 19, 2026

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825

Re: California American Water Company General Lease Application
File: A4181; SCH#: 2006101004
Agenda Item #60 Cal Am Leasing Application

Dear Chair Cohen and Honorable Commissioners:

This letter is to urgently advise that you deny this application. I am writing to you as a ratepayer who is also a resident of Seaside, one of the areas that will be negatively impacted by this project.

There are many reason to delay any decision related to this project until complete information is obtainable regarding the impacts of this project that California American Water has not revealed, which should be a decision to deny. I support the several other agencies that have submitted more technical analyses of why this application should be denied including Landwatch of Monterey County, Monterey Peninsula Water Management District, and Marina Coast Water agency. While I am addressing some of these, I will mention these and provide more depth about the economic impact on local ratepayers.

Please refer Cal Am back to the CPUC for actual approval of a very different project than was approved in 2018. The project that Cal Am is now proposing to build is the very project that was originally rejected by the CPUC at the time of approval. The CPUC in 2018 specifically rejected the 4.8 MGD facility as well as the phased in approach Cal Am is now proposing as more costly and environmentally damaging. No attempt has been made by Cal Am to take their changed project back to the CPUC for review. Instead, they continue to piece meal possible approvals on parts of the project from various agencies without the necessary environmental and cost evaluations required,

Second, **a key Legal Condition for the California Coastal Commission has not been met**. The California Coastal Commission Staff Report in November 2022 clearly sets as a condition for approval for the CDP "a final judgment or other final disposition of the entirety of th pending action entitled *City of Marina v. RMC Lonestar, et al.* Monterey Superior Court No. 20C001387…This condition clearly stated that a permit shall not be issued if that judgment or deposition demonstrates that (1) the applicant does not have and cannot feasibily obtain water rights…or (2) Cal Am's project would cause harm to any aquifer that is a source of drinking water to the City of Marine or Marina Coast Water District." The CCC staff report further notes: "Cal-Am's Project will also rely on the final determination of a lawsuit filed by the City of Marina regarding the amount of groundwater that can be extracted from the Project's well field site. Special Condition 1 requires Cal-Am, prior to issuance of the CDP, to submit final resolution of that lawsuit to the Executive Director and to submit a complete application to amend its Project if warranted."*(CCC staff report, Appeal -3-MRA-19-0034, November 2022, p. 14)*

This case is still in process and has NOT yet concluded and therefore, no approval should be granted to move this project forward that could possibly entail the issues involved in this case.

Clearly, approving the construction of the slant wells, which are now longer at 1,000 feet, than earlier proposed, falls within this mandated condition by the Coastal Commission.

Third, the problems with slant wells themselves: Estimated lifetime use of these wells are obsolete, having been evaluated much earlier. Newer estimates on sea rise present a much shorter time period for the sea rise that would necessitate moving these wells before becoming useless. And due to the reduced window of time that this plant will have in this regard, the lifetime of the wells will be shorter and there is no where to move them inland as prescribed by necessity. Cal Am has no legal rights to any land access further inland do accomplish this task. Cal Am has now changed the length of the pipes without further environmental review and is attempting approval without a full evaluation of the effects and credibility of their actions.

Fourth, the desalination plant in question is simply not needed, and there is no need for additional water supply for the next 20 years. With the activation of Pure Water Monterey and its expansion, there has been no illegal water taken from Carmel River. Because of intense conservation and a new water supply in Pure Water Monterey, there is no longer a water shortage on the peninsula. There is now a surplus being stored in the Seaside basin. In 2025 the CPUC updated both supply and demand and ruled that Cal Am would need only 2,528 AFY of additional water by 2050. Even with its reduced capacity to 4.8 mgd, Cal Am's plan is too large and completely unnecessary. If built, it will simply be a costly unnecessary burden due to Capacity Utilization as shown in the Landwatch chart submitted to you. At a possible $20,489AF for water vs. $2,808AF with Pure Water Monterey--it is simply unrealistic.

Finally, the Environmental Justice concerns related to cost have ballooned beyond credulity.

"As noted above, the Project raises the most significant environmental justice issues the Commission has had to address since the 2019 adoption of the Commission's environmental justice policy. At both its reduced 4.8 mgd scale and its full 6.4 mgd scale, the Project would result in the most costly water of any of the desalination projects the Commission has considered recently and would involve locating some of the Project components in a community that has a long history of having a disproportionate share of industrial facilities and uses. Staff conducted indepth analyses of these issues and identified several communities of concern that would be affected by Cal-Am's proposed Project – including the cities of Marina, Seaside, Sand City and Castroville. Overall, the analysis shows that Cal-Am's Project creates several serious environmental justice issues… From the Coastal Commission Staff Report, November 2022: And…"the proposed project would disproportionately burden communities of concern. Cal Am's project would create substantial hardships for significant segments of the communities of concern that would be affected by the relatively high water costs …" p. 75, Coastal Commission staff report, 2019

The estimation of impacts on ratepayers in 2022 are much more serious now than even outlined at that time. The possibility that the water produced by this expensive plant could reach $20,489/AF should be a clarion call for cancelling the entire project. Cal Am has refused to provide a 2026 projected cost for this project.

The supposed remedies offered by Cal Am during its CDP hearings were totally inadequate. Since that time, the cost for construction is 55.3% higher, and the inflation rate has shot up to twice what it was. Cal Am's offered remedy for increased costs to ratepayers for this situation was inadequate in 2022 and is now even more inadequate. The impacts of the desal project will be both onerous and possibly a breaking point for water costs, and could become a large factor for forcing lower income residents out of the coastal area.

We pay very high rates. Our **Cal Am bill for June 2026 for two people was for 4,712 gallons of water at a cost of $140.17**. A family of four with young children, or infants, would be much more. **Cal Am is currently before the CPUC requesting a general rate increase of 24%.** My current bill will then be $174.81. Imagine the cost of the average usage water bill if the desalination plant is built with the reduced phased in plant capacity utilization. (The CPUC Public Advocate's Office estimates average usage at 5,000 gallons).

Cal Am's Inadequate Assistance Program: Cal Am promotes ratepayer assistance. Income levels for assistance from Cal Am are much lower than for the California Housing Community Development. For HCDC a family of 4 is low income up to $115,700; for Cal Am they must make a much lower CARE qualifying amount of no more than $66,000.

Cal Am requires you have the water bill and meter in your name to qualify; therefore, many renters do not qualify. Cal Am has said they are going to start to include renters; I have seen no evidence of this. A majority of Seaside (65%), Pacific Grove (53%), and Monterey (66%), are renters. Mobile Home owners, primarily seniors on low income, do not qualify – the bill is sent to the property owner and passed on to the mobile home owner who pays.

Even very low-income ratepayers only receive partial relief. A ratepayer who is on disability income of $26,000 per year on the Cal Am CAP receives $12.50 offer her total bill of $66.37…a 20% discount, though Cal Am says discounts start at 30%. Seaside has a poverty rate of 16% (Census 2022) and a per capita income of $34,196 in 2022 dollars (US Census Quick Facts).

As noted in the CCC staff report in November 2020:

"The eligibility requirements themselves create barriers to access. The CAP program requires customers to be in an individually metered or flat-rate residential customer with the bill in the customer's name. However, many otherwise eligible ratepayers live in multi-family structures, where the water bill is in the name of a landlord or management company and not individually metered. Some landlords of single-family residences that rent to low-income tenants prefer to keep the water and sewer bill in their own name. In both cases, increases in utilities are passed through from the landlord to the tenants, without any options for the tenants to request assistance. While individuals may qualify as low-income based on the standards set by other state-administered assistance programs, they do not necessarily meet the eligibility criteria for Cal-Am's LIWAHP or CAP programs (p.108 CCC staff report, November 2020)

Coastal Commission and Rate Relief (Summarized from Staff Report, November 2022, p. 110-112). During the approval process for the desal, Cal Am offered the following 'relief' program for lower income ratepayers:

Cal-Am would increase its contribution to United Way Monterey's Hardship Benefit Program to $500,000. Since so many low-income ratepayers do not qualify for the program, this does not represent a solution.

Cal-Am would seek approval from the CPUC for proposals to offset cost impacts to low-income customers, from expanding participation to and increasing the Customer Assistance Program or CAP discount from 30% to 50%, possibly expanding programs to multi-family residences and to eliminating bill impacts related to the cost of the proposed desalination facility. This process would have to be approved by the CPUC. **Cal Am has not approached the CPUC on the desal project nor its assistance plan.** California Coastal Commission (CCC) staff raised concerns that ***the CPUC process could take years and may not result in an approval for their low-income rate relief plan.***

Cal-Am then proposed to offer all ratepayers enrolled in its CAP free installation of low-flow fixtures (sink and bathtub faucets, showerheads, and toilets) **…**the company and Monterey Peninsula Water Management District already offer rebates on these fixtures to ALL ratepayers and if renters, plumbing fixture replacement is done by the *owner.*

They also proposed that ratepayers enrolled in that Program, once delivery of desalinated water begin, would have a rate increase of no more than $10 per month for water for at least five years. *CCC staff responded that "**the $10 cost cap for five years will not address the long-term impacts this Project will have on low-income ratepayers and there is no certainty the additional proposals will be approved by the CPUC during this* time…"** Condition 16 calls for the $10 for the life of the project but it is still only for CAP enrollees, a totally insufficient solution, still requiring CPUC approval.

Ratepayers Subsidize The Assistance Program:

All of this will be funded by the ratepayers! All ratepayers are charged a fee on their monthly bill to subsidize this program. This includes those who are low income not qualifying for assistance, an added burden imposed on the very ratepayers who can afford it the least.

In addition, if the desal is built, the **ratepayers on the peninsula will subsidize the ratepayers in Castroville** because of the return water agreement required to replenish the Salinas Valley Groundwater Basin. 7,800 disadvantaged lower income ratepayers on the Peninsula already pay exorbitant rates but they will have to subsidize 766 people in Castroville to maintain their rates of $42.50 month! if the plant produces excess of what is needed for Castroville, and if over production causes excess water as it appears it will do, that expensive water will go to the **Salinas Valley growers for agriculture** at a cost of $100AF. (These points were Summarized from the CCC staff report, November 2020, pages 110-112.)

Ratepayers do not want this plant or California American Water. In 2018, the voters of Cal Am's Monterey district overwhelmingly voted to pass Measure J, which mandated, if feasible, a declaration of eminent domain and public takeover of the water system. That process is now in court proceedings. The ratepayers of this district do not want an unnecessary overpriced desal plant that will only benefit the profits of Cal Am and impose a cruel existential economic burden on ratepayers.

Please do not consider this application at this time. Please refer the applicant back to the CPUC for actual complete environmental and economic review of the new project. The desalination plant is simply not needed due to a surplus of water and decreased demand for the next 20 years. The cost environmentally and financially for this project to the local community is a violation of the public trust and welfare and should not be allowed. Thank you.

Sincerely,

Susan L. Schiavone, Seaside

Archived: Friday, June 19, 2026 10:47:06 AM
From: Carol Setinek
Sent: Friday, June 19, 2026 10:16:12 AM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application
(File: A4181; SCH #: 2006101004)

Pure Water Monterey has boosted supply, conservation has boosted demand. There is no longer a water shortage on the Peninsula. Cal Am now has surplus water supply that is being stored in the Seaside Basin. Last year the CPUC ruled that Cal Am would need only 2,528 AFY of additional water supply by 2050. Cal Am now wants to reduce its desal project from 6.4 mgd (7,169 AFY) to 4.8 mgd (5,377 AFY) without CPUC approval. But even this smaller desal is far too expensive, serves only to enrich Cal Am, and is unnecessary.

CEQA Environmental Review Needs to be Updated

The SLC Memo relies on the outdated CPUC 2018 EIR/EIS and the CCC 2022 CDP findings. But neither of these fully analyzed the 4.8 MGD phased project as it is now designed. The SLC must do a CEQA analysis that includes both Phase 1 (4.8 mgd) and Phase 2 (6.4 mgd).

Cal Am's new slant well design would be "approximately 1,000 feet long or more." The groundwater impacts of extending well length from 700 to 1000+ ft. have not been independently modeled This design change requires additional CEQA review under SLC Guidelines.

New Groundwater Impacts

This project will extract fresh water, reduce groundwater levels and Marina's available supply. This requires the State Lands Commission to prepare a subsequent or supplemental EIR. This project will increase seawater intrusion, adversely impact groundwater quality, and reduce groundwater storage. It will obstruct the sustainable groundwater management of the Salinas Valley Groundwater Basin. The mitigation plan for these adverse groundwater impacts is inadequate.

Sea Level Rise Makes this Project Unreliable

Cal Am proposes building a project whose source water wells have a 25-year life. The 2022 CCC staff report says the slant well network is at risk from coastal erosion and sea level rise by 2045–2050, not 2060 as previously assumed. Since Cal Am has no place to move these wells inland, the project will be unable to deliver the 2,528 AFY the CPC says will be needed in 2050.

Impact of the M1W Outfall Must be Analyzed Now

The Commission must analyze the recently proposed modifications to the M1W outfall before it considers the slant well lease application. The CDP application to modify the M1W outfall differs from the Final EIR/EIS and reveals new and substantially more severe environmental impacts. M1W's outfall modifications have never been analyzed — and the Coastal commission (CCC) acknowledged they are significant.The SLC must analyze these modifications.

Environmental Justice for Low-income Monterey Peninsula Ratepayers

Cal Am has not updated the cost of this project since 2018. It has already spent $200M of its $279M cost cap.

The rate impacts on low-income Monterey Peninsula ratepayers have not been updated. These would have to include construction cost increases since 2018; likely amortization over 25 rather than 60 years given sea level rise; lower economy of scale from the smaller 4.8 MGD plant; below-capacity operation spreading fixed costs over an even smaller production base; and no binding agreement preventing Cal Am from substituting expensive desal water for cheaper available supplies. Cal Am may have to pay to mitigate damage to Marina's groundwater.

The SLC's own EJ Policy requires striving to minimize additional burdens on disadvantaged communities. The SLC cannot assess the environmental justice impact of this project without updated rate projections.The CPUC's 2018 decision required Cal Am to revisit operating restrictions for the desal plant if it secured additional supply. Cal Am has secured additional supply from Pure Water Monterey, but has not revisited their operating restrictions. The review was specifically designed to protect ratepayers from expensive desal costs when cheaper water is available. Until reviewed, neither the CPUC nor the SLC has an accurate picture of what Cal Am's desal will cost ratepayers.

--

For every vision, there is an equal and opposite revision.

Archived: Tuesday, June 23, 2026 1:46:25 PM
From: Carol Setinek
Sent: Tuesday, June 23, 2026 11:58:04 AM
To: CSLC CommissionMeetings
Subject: Public comment from Carol Setinek
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

I wish to speak to the history of this conflict between MPWMD and Cal Am. Our local water district is the only entity who has brought us new water. Please look into Cal Am's checkered past of spending money on projects which DID NOT.
Cal Am has spent millions promoting their energy-intensive desal project because they own the patent on slant well technology. They stand to benefit financially from using it, while we lose from Cal Am shipping those dollars out of our community. Because of their continual price hikes and mismanagement, our citizens have voted to acquire their assets and deliver water through our local agency, a resounding vote of NO CONFIDENCE.

For every vision, there is an equal and opposite revision.

Archived: Monday, June 22, 2026 2:03:16 PM
From: Sheila Sheppard
Sent: Friday, June 19, 2026 4:19:38 PM
To: CSLC CommissionMeetings
Subject: Regarding Cal Am's Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)
Email Subject line: **Agenda Item #60 Cal Am Lease Application**

Dear Chair Cohen and Honorable Commissioners,

I am writing to urge the State Lands Commission to look more deeply into this situation and deny Cal Am's lease application.
There is new information to consider that is not in the outdated information regarding groundwater updates, new updated costs, as well as new water supplies from Pure Water Monterey.

The Monterey Peninsula future water needs have been updated to a more modest usage and the Peninsula is no longer dealing with a water shortage.
The proposed desal plant is not only extravagantly expensive even in a reduced size, it is not needed. Additionally, new findings indicate that this project will cause groundwater levels to decline and reduce available supply. It will also extract fresh water and reduce the available groundwater supply to Marina. Sea levels are rising and that will affect future functioning of a deal plant unsure.

There are many reasons to deny a new lease to Cal Am, not the least of which is the fact that the people of the Peninsula voted for a buy out over 6 years ago. Our public utilities commission should be helping us achieve that end. Instead Cal Am has used every delay, every loophole available, to maintain their highly profitable business intact for as long as possible. These delays and set backs are just costing the taxpayers more and more in a water system that is already the most costly in the country.

Thank you for your consideration.
Respectfully submitted,
Sheila Sheppard
Monterey Peninsula Resident

Archived: Thursday, June 18, 2026 11:15:48 AM
From: Sylvia Shih
Sent: Thursday, June 18, 2026 9:28:48 AM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

I am urging you to deny the application. I am a rate payer of Cal Am. The cost burden of building a desalination plant that is not needed is devastating to the ratepayers.

Due to conservation and the new supply from Pure Water Monterey the proposed supply and demand needs for the Monterey Peninsula have changed. There is no longer a water shortage on the Peninsula. In fact, Cal Am now has surplus water supply that is being stored in the Seaside Basin. In last year's Supply and Demand hearing the CPUC updated both supply and demand for the Monterey Peninsula. The CPUC ruled that Cal Am would need only 2,528 AFY of additional water supply by 2050.

Cal Am is attempting to change the size of its desal project from 6.4 mgd (7,169 AFY) to 4.8 mgd (5,377 AFY) without CPUC approval to do so. But even a 4.8 mgd (million gallons per day) plant is far too large and completely unnecessary.

Sincerely yours, Sylvia Shih (Seaside, CA)

Archived: Monday, June 22, 2026 2:11:52 PM
From: Grace Silva-Santella
Sent: Friday, June 19, 2026 4:55:42 PM
To: CSLC CommissionMeetings
Subject: File:A4181/SCH#2006101004 AGENDA ITEM #60
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Dear chair Cohen and commissioners,

I am writing to you to ask that you deny CalAm Water's lease application.

I have followed this project for many years and it is my belief that the project is unnecessary given the Monterey Peninsula and agriculture industry water conservation work and M1W success at providing a safe viable source of potable water.

Thank you,

Grace Silva-Santella
[redacted]
Marina
[redacted]

Archived: Tuesday, June 23, 2026 3:57:27 PM
From: [redacted]
Sent: Tuesday, June 23, 2026 2:25:37 PM
To: CSLC CommissionMeetings
Subject: Comment in opposition granting a lease to Cal-AM water for desalination in Marina CA
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Dear Commissioners,

My name is Greg Simmons, and I am a 17-year resident of Marina.

Please deny this lease application or require supplemental environmental review before taking action.

• Conditions have changed significantly since the original environmental review was completed.

• Pure Water Monterey now provides a substantial new water supply, demand has declined, and Cal Am has surplus water in storage.

• The Peninsula's water needs should be reevaluated before approving a major new desalination project.

• Significant new information raises concerns about groundwater impacts, including groundwater levels, seawater intrusion, groundwater storage, and water quality in the Marina area.

• The current project differs from what was previously analyzed, and no agency has evaluated the complete project as currently proposed.

• As a CEQA responsible agency, the State Lands Commission should require updated environmental review before granting this lease.

Thank you.

Greg Simmons

Marina CA

Archived: Monday, June 22, 2026 2:06:59 PM
From: Carol A Stollorz
Sent: Friday, June 19, 2026 4:23:06 PM
To: CSLC CommissionMeetings
Subject: Revisit of California-American Water Company:General Lease A
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

File: A4181: SCH#: 2006202004

Agenda Item #60 - Cal Am's Lease Application

Comment from
Carol A. Stollorz
[redacted]
Carmel, [redacted]

Comissioners: I have heard that this company has reduced the size of their proposed slant-well, de-sal project. I can't believe this process is still being considered! At the begining when this was being proposed, a group of us heard from many seeking to remedy the loss of water, due to the CA. Water Resources board calling for a "cease and desist" from using water from the Carmel River area. Cal Am had a method they proposed, that was certified by a man, as helpful to our need, despite the fact that it had never worked elsewhere, and a southern California county had lost a million, trying it out there. It was revealed that this man had a financial interest in the project, and his comments were disqualified in the newspaper, at the time. I recall that somehow they were able to convince Marina to allow them to do their test project on land formerly owned by Cemex. The first slant well did not prove much. The slant or attitude of the extension that ran under the sand, was changed as it was found it was too close to the water.
My concern is that no environment study has been done on this next shortened-concept. People with no real expertise were cited, in the past, to approve of something they were not qualified to approve. I can recall hearing Stanford scientists coming to Hopkins Marine Station to lecture on the Marine Sanctuary that exists in the Monterey Bay, and how its extreme depth generates vast amounts of rich food that clings to its walls, by means of the upwellings that allow vast numbers of living creatures to feed the ocean creatures who come from the north to procreate in warmer waters.
Thus locating a method of taking salt from this sensitive region, would beggar the question as to where the salt would be deposited. Would it be mixed with salt water to return to the bay? Would it be amassed somewhere to be located elsewhere by means of railroad? Would it be stock piled, subjecting the rich agricultural lands, contiguous to the bay to experience salt water intrusion?
These are not idle speculations. Is everyone assuming that we figure it out later?
What about the city that will soon be the largest in the county? Marina!! Their sights stretch to develop more of the former Fort Ord lands dedicated to them. Will this slant well method steal from their aquifer?
I live farther south in the county near Carmel by the Sea……and frenzy is already happening with more homes committed to development in Carmel Valley….with literally no provision to supply the water needed to treat sewage!!!! My concern is for my pocket book. Cal Am will float a bond issue, they negotiate the interest that the water user will pay, and they have not a care that it will thrust the cost of so-called low cost

housing into an even greater realm of implausibility, and they will be allowed to make their usual10% profit on the cost of the de-sal project, as well! Perhaps we should figure a way to flush our toilets with salt water, before we use expensive de-sal water? That is also an environmental concern, as our treated sewage, also goes back to the ocean.
Thank you for listening. Sincerely, Carol Stollorz

Archived: Monday, June 22, 2026 2:13:06 PM
From: Anna Thompson
Sent: Friday, June 19, 2026 4:58:19 PM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181

Chair Cohen and Honorable Commissioners:

I urge the State Lands Commission to either deny Cal Am's lease application or to do a supplemental environmental review before considering it, due to significant new information regarding groundwater impacts, the lack of cost updates, as well as other issues and changed conditions.

Due to conservation and the new supply from Pure Water Monterey the proposed supply and demand needs for the Monterey Peninsula have changed. There is no longer a water shortage on the Peninsula. In fact, Cal Am now has surplus water that is being stored in the Seaside Basin. In last year's Supply and Demand hearing the CPUC updated both supply and demand for the Monterey Peninsula. The CPUC ruled that Cal Am would need only 2,528 AFY of additional water supply by 2050.

Significant new information regarding Cal Am's desal project shows unmitigated adverse groundwater impacts that requires the State Lands Commission to prepare a subsequent or supplemental EIR.

This project will cause groundwater levels to decline and reduce available supply. It will extract fresh water and reduce the available groundwater supply to Marina.

This project will increase seawater intrusion, adversely impact groundwater quality, and reduce groundwater storage in overdrafted Subbasins. It will obstruct the sustainable groundwater management of the Salinas Valley Groundwater Basin.
Sea Level Rise Makes Cal Am's desalination project unreliable. The 2022 CCC staff report points out that the slant well network could be at risk from coastal erosion and sea level rise by

2045–2050, not 2060 as the CPUC had previously assumed. Since Cal Am has no place to move these wells inland, it would make the desal plant inoperable.
Cal Am's desal is too expensive, environmentally destructive, and it is not needed. Please protect the public and deny this application.

Thank you.

Anna Thompson
Carmel, CA

Archived: Wednesday, June 17, 2026 10:18:39 AM
From: tammie timmion
Sent: Tuesday, June 16, 2026 8:40:07 PM
To: CSLC CommissionMeetings
Subject: Please tell Cal Am to STOP
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

It's so ridiculous to even think about a desal plant in the Monterey Bay area. Cal Am is only in it because they think they can get away with this. We the rate payers are paying the bill for this nonsense. No slant wells! NO DESAL PLANT!

Archived: Thursday, June 18, 2026 8:56:31 AM
From: [redacted]
Sent: Thursday, June 18, 2026 8:39:30 AM
To: CSLC CommissionMeetings
Cc: [redacted]
Subject: Cal Am
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Commissioners,
It's hard to believe that Cal Am has the guts (or ignorance) to apply for slant Wells for a project that is overpriced and unneeded. For decades, they failed to find a reliable water source to serve Monterey Bay customers and now they're trying to cram it through, charge us more and feed their corporate coffers.
I urge you to do the right thing and deny even considering their request. Through other creative responsible parties, we have the water we need. Please do the right thing and keep Cal Am out of our bay and out of our pockets.
Sincerely,
Tony Tollner

[redacted]

Archived: Monday, June 22, 2026 9:02:58 AM
From: Tony T.
Sent: Friday, June 19, 2026 3:42:23 PM
To: CSLC CommissionMeetings
Subject: Re: California-American Water Company's General Lease Application (File: A4181
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Chair Cohen and Honorable Commissioners:

Voters rely on your integrity and thorough analysis to protect them from corporate greed and boondoggle projects like Cal Am's proposed desal plant. This project directly impacts my family and community.

I urge the State Lands Commission to either deny Cal Am's lease application or to do supplemental environmental review before considering it, due to significant new information. Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply demand an updated environmental review.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what other agencies have concluded about a different project design in the past.

Please protect the public and deny this application.

Sincerely,

Tony Tollner, Monterey

Archived: Thursday, June 18, 2026 11:10:42 AM
From: Cammy Torgenrud
Sent: Thursday, June 18, 2026 10:47:36 AM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and the Commissioners,

I live in Monterey County and am dismayed by Cal-Am's continuing attempt to use slant wells to increase their own profits at much cost to ratepayers and the environment. (reference File: A4181 / SCH #2006101004)

With Pure Water Monterey's recent projects adding to and storing sufficient water for community needs for the foreseeable future, I urge you to reconsider Cal-Am's plan. Desal is highly expensive, and the potential for higher saltwater intrusion and troubling groundwater degradation is alarming. If there have been additional reviews of the impact of the slant wells, as claimed by LandWatch, then those State Water Resources Control Board findings should surely be included in the decision making process before approval of the well leases is granted.

Cal-Am may have Monterey County citizens' interests in mind in pushing this project, but they surely have their shareholders'. The cynic in me believes corporate Cal-Am leaders want to bump up the price of the public buyout approved many years back, and adding desal will make that purchase figure much higher. Having paid high prices for residential water for decades now, I am not a fan. In addition, I urge you to evaluate with extreme due diligence any project that potentially jeopardizes the health of our current water storage system and the living ecosystems dependent on clean water in the bay and coastal environs.

Slant wells are a worry in both regards.
Cameron Torgenrud

Archived: Monday, June 15, 2026 3:06:22 PM
From: Daniel J. Turner
Sent: Sunday, June 14, 2026 4:40:58 PM
To: Ron Weitzman
Cc: CSLC CommissionMeetings;

Subject: Re: Why he Coastal Commission Should Deny Cal Am's Desal Permit Request
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

When Ron says, "No reason other than incompetence or malfeasance can support doing otherwise.", he's ignoring what I wrote about a day or two ago and that is that CalAm paid for this permit fair and square with its legalized political bribes that we call "campaign contributions" and that's why it is going to get its permit.

I always hope I'm wrong. Hope the Land Commish denies it. But I wouldn't bet a lot of money on the commish denying it. — Dan Turner

Archived: Monday, June 22, 2026 4:08:25 PM
From: sarah ultan
Sent: Sunday, June 21, 2026 7:49:18 AM
To: CSLC CommissionMeetings
Subject: Agenda item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)

I am urging you to deny the application. The cost burden of building a desalination plant that is not needed is devastating to the ratepayers.

Due to conservation and the new supply from Pure Water Monterey the proposed supply and demand needs for the Monterey Peninsula have changed. There is no longer a water shortage on the Peninsula. In fact, Cal Am now has surplus water supply that is being stored in the Seaside Basin. In last year's Supply and Demand hearing the CPUC updated both supply and demand for the Monterey Peninsula. The CPUC ruled that Cal Am would need only 2,528 AFY of additional water supply by 2050.

Cal Am is attempting to change the size of its desal project from 6.4 mgd (7,169 AFY) to 4.8 mgd (5,377 AFY) without CPUC approval to do so. But even a 4.8 mgd (million gallons per day) plant is far too large and completely unnecessary.

Thank you for your time.

Sincerely,

Sarah Ultan (Seaside, CA)

Archived: Monday, June 22, 2026 4:03:38 PM
From: Melina Wates
Sent: Saturday, June 20, 2026 12:28:11 AM
To: CSLC CommissionMeetings
Subject: Agenda item number 60 Cal Am lease application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181

Chair Cohen and Honorable Commissioners:

Voters rely on your integrity and thorough analysis to protect them from corporate greed and boondoggle projects like Cal Am's proposed desal plant. This project directly impacts my family and community.

I urge the State Lands Commission to either deny Cal Am's lease application or to do supplemental environmental review before considering it, due to significant new information. Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply demand an updated environmental review.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what other agencies have concluded about a different project design in the past.

Please protect the public and deny this application.

Sincerely,

Melina Wates

Pacific Grove

California

--
Melina

Ed Smith

Monterey City Council Member

408 Calle Principal Street, Monterey, CA 93940 ~ 831.601.5013

California State Lands Commission
100 Howe Avenue
Suite 100 South
Sacramento, CA 95825

RE: Support for California American Water Company Lease Application to Advance Reliable Water Supply for City of Monterey Housing Needs

Dear Commissioners,

As a member of the Monterey City Council, I offer my strong support for California American Water's lease application for the construction and use of four new subsurface slant wells and the conversion and use of one existing subsurface slant well for the proposed desalination plant in Monterey. My city needs reliable water and the availability is not an abstract infrastructure issue—it is essential to meet the everyday needs of our residents, which will also advance our city's new housing, and comply California's, Housing and Community Development with the City of Monterey's Regional Housing Needs Allocation (RHNA) obligations.

Monterey has accepted its responsibility to plan for additional homes across all income levels and to remove barriers to housing production. The City's certified housing element identifies the need to plan for 3,654 new homes by 2031, and water supply remains one of the most significant practical constraints on turning planned housing sites into actual homes for residents, workers, seniors, families, and future generations. Without a dependable, drought-resilient water source, local housing policy cannot be fully implemented, affordable housing opportunities will remain constrained, and the City's ability to meet state housing expectations will be jeopardized, if not impossible.

For Monterey residents, water reliability is directly tied to housing affordability, community stability, and quality of life. New homes cannot be built, occupied, nor can our community be properly served without water for domestic use, fire protection, schools, public services, local businesses, and the workforce infrastructure that supports our diverse community. A diversified water portfolio that includes desalination would help reduce vulnerability to drought, climate variability, and regulatory uncertainty while giving the City the certainty needed to make long-term housing and infrastructure decisions.

For the last 11 ½ years I have served on the Monterey City Council and time and after time we have seen viable projects fall by the wayside due to the dramatic shortage of a reliable and sustainable

water supply. I respectfully urge the Commission to approve the lease application and allow the desalination project to move forward without delay.

Advancing this project will help secure a long-term, drought-resilient water supply for the Monterey Peninsula, support the City of Monterey's ability to provide housing for its residents, and strengthen compliance with California's RHNA framework and housing goals. Reliable water supply is a prerequisite for any healthy community, and for our responsible growth, this project is an important step toward meeting that obligation.

Sincerely,

Ed Smith,

Vice Mayor
City Council
City of Monterey

Archived: Monday, June 15, 2026 3:02:58 PM
From: ronweitzman
Sent: Sunday, June 14, 2026 4:28:14 PM
To: CSLC CommissionMeetings
Cc:

Subject: Why he Coastal Commission Should Deny Cal Am's Desal Permit Request
Sensitivity: Normal
Attachments:
Tuning a Model in Climatology and Calibrating One in Hydrogeology_ An Informative Comparison, American Journal of Theoretical and Applied Statistics, Science Publishing Group.html ;Forensic Statistics_ Taking the Mishandling and Misuse of Statistics to Court.pdf ;

Attention: This email originated from outside of SLC and should be treated with extra caution.

Seven Reasons Why the Coastal Commission Should Deny Cal Am's Permit Application

First, the projected need for thr project, if any, is at least 25 years away, according to the CPUC, and the project's intake wells have a useful life of no longer than 25 years. So, obviously, now is not the time to implement the project.

Second, the plant of the size Cal Am is now proposing is so small that, according to the company itself, the project was too cost-ineffective for inclusion as a possible option in the project's proposal certified by the CPUC.

Third, the cost of the project's desalinated water is so high that even people with moderate incomes could not afford it. According to economists, water is supposed to account for no more than four percent of a family's budget. Ours, here on the Peninsula, is already over ten percent, without desal.

Fourth, The CPUC is extremely derelict in its responsibility to protect ratepayers from this outlandish cost, over $7,600 per acre-foot according to the Marina Coast Water District years ago and now compounded considerably by Cal Am's expenditure already of over $245 million on the project with only a single test-well to show for it.

Fifth, that expenditure is almost entirely accounted for by Cal Am's expensive and almost exclusive legal activity to keep the project alive by delaying, with procedural objections, any legal action by local agencies that would terminate the project. Hardly an accident is the choice of the current president of Cal Am, Sarah Leeper, an attorney, and an extremely accomplished one, at that.

Sixth, the project's Environmental Impact Report, even at a cost of over $11 million, is so flawed that it is almost entirely useless. I have published two articles in professional journals (attached) showing that the modeling of the project's environmental impact was corrupted by altering data to improve the appearance of the model' s unacceptably low predictive value,

Seventh. CalAm has no legal rights to aquifer water in the Salinas Valley other than 500 acre-feet per year Yet, its project needs over thirty times that amount of source water without direct access to sea water. Addressing that difference alone accounts for much of the millions of dollars in thr project's legal expenses.

The State Lands Commission should deny Cal Am's request for a permit to construct wells for its proposed desal

plant. No reason other than incompetence or malfeasance can support doing otherwise.

Ron Weitzman, President
Water Ratepayers Association of the Monterey Peninsula (AKA, Water Plus)

Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison

R. A. Weitzman
Published in *American Journal of Theoretical and Applied Statistics* (Volume 11, Issue 3)
Received: 17 April 2022 Accepted: 5 May 2022 Published: 12 May 2022
Views: 868 Downloads: 118
Download PDF
Share This Article

- Twitter
- Linked In
- Facebook

Abstract

A November 2021 article in the journal *Chance* on a misuse of statistics by hydrogeologists in their modeling of water levels below ground raises the question of whether climatologists might be committing the same statistical errors in their modeling of global warming above ground. In seeking to answer that question, the research reported in this article finds the answer to be, yes, both research communities corrupt data by altering values of independent variables to reduce error variation or to achieve particular model results. That data alteration not only creates an impermissible negative correlation between estimates and errors but also creates model estimates that exaggerate trends in the observations. The exaggerated trends occur regardless of the nature or the intent of the data alteration. For that reason, use of trends in model estimates resulting from data alteration as a guide to future research or as a basis for conclusions may lead researchers astray. This article suggests an alternative research strategy consisting of random sampling of observation zones which, by limiting a study to thousands rather than millions of zones, could enable researchers to obtain sufficiently accurate input data to make the alteration of data unnecessary. Use of this procedure could also help avoid exaggerated and misleading predictions from models.

Published in	*American Journal of Theoretical and Applied Statistics* (Volume 11, Issue 3)
DOI	10.11648/j.ajtas.20221103.11
Page(s)	83-88

Creative Commons	This is an Open Access article, distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution and reproduction in any medium or format, provided the original work is properly cited.
Copyright	Copyright © The Author(s), 2022. Published by Science Publishing Group

Previous article
Next article

Keywords

Tuning, Calibration, Linear Model, Estimation, Prediction, Error, Global Warming

References

[1] Bellprat, O., Kotlarski, S., Lüthi, D. & Schär, C. (2012). Objective calibration of regional climate models. Journal of Geophysical Research, 117, 1-13.

[2] Edwards, N. R., Cameron, D. & Rougier, J. (2011). Precalibrating an intermediate complexity climate model. Climate Dynamics, 37, 1469–1482.

[3] Flato, G., J. Marotzke, B. Abiodun, P. Braconnot, S C. Chou, W. Collins, P. Cox, F. Driouech, S. Emori, V. Eyring, C. Forest, P. Gleckler, E. Guilyardi, C. Jakob, V. Kattsov, C. Reason and M. Rummukainen, 2013: Evaluation of Climate Models. In: Climate Change: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T. F., D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P. M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

[4] Fisher, R. A.: 1922. On the mathematical foundations of theoretical statistics. Philosophical Transactions of the Royal. Society, A222, 309–368.

[5] Hourdin, F., Mauritsen, T, Gentleman, A., Golaz, J., Venkatramani, B., Duan, Q., Folini, D., Ji, D., Klocke, D., Rauser, F., Rio, C., Tomassini, L., Watanabe, M. & Williamson, D. (2017). The Art and Science of Climate Model Tuning, Bulletin of the American Meteorological Society, 98 (3), 589-602.

[6] Jackson, C. S., Sen, M. K., Huerta, G. Deng, Y. & Bowman, K. P. (2008): Error reduction and convergence in climate prediction. Journal of Climate, 21, 6698–6709.

[7] Koonin, S. E. (2021). Unsettled: What Climate Science Tells Us, What It Doesn't, and Why It Matters. BenBella Books, Inc., Dallas, TX.

[8] Lomborg, B. (2020). False Alarm: How Climate Change Costs Us Trillions, Hurts the Poor, and Fails to Fix the Planet. Basic Books, New York.

[9] Mauritsen, T., Roeckner, E., Crueger, T, Stevens, B. et al. (2012). Tuning the climate of a global model. Journal of Advances in Modeling Earth Systems, 4 (3), 1-18.

[10] Mauritsen, T., Bader, J., Becker, T., Behrens, J., Bittner, M., Brokopf, R., Brovkin, V. et al., (2019). Developments in the MPI-M Earth System Model Version 1.2 (MPI-ESM1.2) and Its Response to Increasing CO_2. Journal of Advances in Modeling Earth Systems, 11: 998–1038.

[11] Nijsse, F. J. M. M., Cox, P. M. & Williamson, M. S. (2020). Emergent constraints on transient climate response (TCR) and equilibrium climate sensitivity (ECS) from historical warming in CMIP5 and CMIP6 models." Earth System Dynamics 11, 737–750.

[12] Rougier, J. C. (2007): Probabilistic inference for future climate using an ensemble of climate model evaluations. Climatic Change, 81, 247–264.

[13] Shellenberger, M. (2020). Apocalypse Never: Why Environmental Alarmism Hurts Us All. Harper Collins, New York.

[14] Weitzman, R. A. (2021): From divining rods to statistics: a forensic analysis of the misuse of statistics in the estimation of environmental impact. Chance, 34 (4), 18-20.

[15] Wettzman, R. A. (2022). The determination of sample size in a Bayesian estimation of population proportions: how and why to do it in a regression framework American Journal of Theoretical and Applied Statistics, 11 (1), 13-18.

[16] Williamson, D., Goldstein, M., Allison, L., Blaker, A., Challenor, P., Jackson, L. & Yamazaki, K. (2013). History matching for exploring and reducing climate model parameter space using observations and a large perturbed physics ensemble. Climate Dynamics, 41, 1703–1729.

[17] Yang, B. & Coauthors (2013): Uncertainty quantification and parameter tuning in the CAM5 Zhang-McFarlane convection scheme and impact of improved convection on the global circulation and climate. Journal of Geophysical Research. 118 (2), 395–415.

[18] Zhang, T., Li, L., Lin, Y. Xue, W., Xie, F., Xu, H. & Huang, X. (2015). An automatic and effective parameter optimization method for model tuning. Geoscientific Model Development, 8, 3579–3591.

[19] Zou, L., Qian, Y. Zhou, T. &Yang, B. (2014). Parameter tuning and calibration of RegCM3 with MIT–Emanuel cumulus parameterization scheme over CORDEX East Asia domain. Journal of Climate, 27, 7687–7701.

Cite This Article

Plain Text BibTeX RIS

- APA Style

  R. A. Weitzman. (2022). Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison. *American Journal of Theoretical and Ap*

  Copy | Download

  ACS Style

  R. A. Weitzman. Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison. *Am. J. Theor. Appl. Stat.* **2022**, *11*(3), 83-88. doi

Copy | Download

AMA Style

R. A. Weitzman. Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison. *Am J Theor Appl Stat*. 2022;11(3):83-88. doi: 10

Copy | Download

- ```
  @article{10.11648/j.ajtas.20221103.11,
    author = {R. A. Weitzman},
    title = {Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison},
    journal = {American Journal of Theoretical and Applied Statistics},
    volume = {11},
    number = {3},
    pages = {83-88},
    doi = {10.11648/j.ajtas.20221103.11},
    url = {https://doi.org/10.11648/j.ajtas.20221103.11},
    eprint = {https://article.sciencepublishinggroup.com/pdf/10.11648.j.ajtas.20221103.11},
    abstract = {A November 2021 article in the journal Chance on a misuse of statistics by hydrogeologists in their modeling of water levels below grou
   year = {2022}
  }
  ```

Copy | Download

- ```
  TY  - JOUR
  T1  - Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison
  AU  - R. A. Weitzman
  Y1  - 2022/05/12
  PY  - 2022
  N1  - https://doi.org/10.11648/j.ajtas.20221103.11
  DO  - 10.11648/j.ajtas.20221103.11
  T2  - American Journal of Theoretical and Applied Statistics
  JF  - American Journal of Theoretical and Applied Statistics
  JO  - American Journal of Theoretical and Applied Statistics
  SP  - 83
  EP  - 88
  PB  - Science Publishing Group
  SN  - 2326-9006
  UR  - https://doi.org/10.11648/j.ajtas.20221103.11
  AB  - A November 2021 article in the journal Chance on a misuse of statistics by hydrogeologists in their modeling of water levels below ground raise
  VL  - 11
  IS  - 3
  ER  -
  ```

Copy | Download

Author Information

- R. A. Weitzman

  Naval Postgraduate School, Monterey, USA

Download PDF

- Sections

- Abstract
- Keywords
- References
- Cite This Article
- Author Information

×
Please type verification code Renew

Email:

Confirm Cancel

Cite This Article

×
Plain Text BibTeX RIS

- APA Style

  R. A. Weitzman. (2022). Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison. *American Journal of Theoretical and Ap*

  Copy | Download

  ACS Style

  R. A. Weitzman. Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison. *Am. J. Theor. Appl. Stat.* **2022**, *11*(3), 83-88. doi

  Copy | Download

  AMA Style

  R. A. Weitzman. Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison. *Am J Theor Appl Stat*. 2022;11(3):83-88. doi: 10

  Copy | Download

- ```
  @article{10.11648/j.ajtas.20221103.11,
    author = {R. A. Weitzman},
    title = {Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison},
    journal = {American Journal of Theoretical and Applied Statistics},
    volume = {11},
    number = {3},
    pages = {83-88},
    doi = {10.11648/j.ajtas.20221103.11},
    url = {https://doi.org/10.11648/j.ajtas.20221103.11},
    eprint = {https://article.sciencepublishinggroup.com/pdf/10.11648.j.ajtas.20221103.11},
    abstract = {A November 2021 article in the journal Chance on a misuse of statistics by hydrogeologists in their modeling of water levels below grou
   year = {2022}
  }
  ```

  Copy | Download

Cancel

Verification Code

×
Please type captcha Renew
Confirm Cancel

About Us
  ```

- TY - JOUR
  T1 - Tuning a Model in Climatology and Calibrating One in Hydrogeology: An Informative Comparison
  AU - R. A. Weitzman
  Y1 - 2022/05/12
  PY - 2022
  N1 - https://doi.org/10.11648/j.ajtas.20221103.11
  DO - 10.11648/j.ajtas.20221103.11
  T2 - American Journal of Theoretical and Applied Statistics
  JF - American Journal of Theoretical and Applied Statistics
  JO - American Journal of Theoretical and Applied Statistics
  SP - 83
  EP - 88
  PB - Science Publishing Group
  SN - 2326-9006
  UR - https://doi.org/10.11648/j.ajtas.20221103.11
  AB - A November 2021 article in the journal Chance on a misuse of statistics by hydrogeologists in their modeling of water levels below ground raise
  VL - 11
  IS - 3
  ER -

Copy | Download

Science Publishing Group (SciencePG) is an Open Access publisher, with more than 300 online, peer-reviewed journals covering a wide range of academic disciplines.

Learn More About SciencePG

Products

- Journals
- Special Issues
- Proceedings
- Books
- AcademicEvents
- ScholarProfiles

Information

- For Authors
- For Reviewers
- For Editors
- For Conference Organizers
- For Librarians

- Special Issues Guidelines
- Editorial Process
- Peer Review at SciencePG
- Open Access
- Ethical Guidelines

Important Link

- Manuscript Submission
- Propose a Special Issue
- Join as Editorial Board Member
- Become a Reviewer

Copyright © 2012 -- 2025 Science Publishing Group – All rights reserved.

Journal of Forensic Sciences And Criminal Investigation
ISSN: 2476-1311

Juniper Publishers key to the Researchers

Short Communication
Volume 17 Issue 1 - March 2023
DOI: 10.19080/JFSCI.2023.17.555955

J Forensic Sci & Criminal Inves
Copyright © All rights are reserved by R.A. Weitzman

Forensic Statistics: Taking the Mishandling and Misuse of Statistics to Court

R.A. Weitzman

Water Ratepayers Association of the Monterey Peninsula (president), Fairfield Place, Carmel, CA 93923, USA

Submission: March 09, 2023; **Published:** March 20, 2023

***Corresponding author:** R.A. Weitzman, Water Ratepayers Association of the Monterey Peninsula (president), Fairfield Place, Carmel, CA 93923, USA

Abstract

After briefly recounting a recently published story about the forensic use of statistics to uncover the mishandling and misuse of statistics in testing the accuracy of a model developed to predict the environmental impact of a desalination project proposed by a government-regulated private utility, this article shows how to challenge those statistical misdeeds in court and then concludes by identifying other, currently high-profile government-administered projects or policies supported by possibly, perhaps even likely, legally actionable mishandled or misused statistics as examples to illustrate the widespread applicability and potential consequentiality of forensic statistics.

Keywords: Forensic Statistics; Predictive Models; Misuse of Statistics; Fraud

Introduction

A 2021 article in the American Statistical Association Journal Chance [1] ended with the following sentences: "This story is only an example. Statistics may have widespread use as a forensic tool, even in the legal world itself, where an amateur sleuth like me might turn out to be an actual one." The following four sections will briefly recount that story and, carrying it a step further into the forensic realm, will show how to take the mishandling and misuse of statistics reported there to court. The concluding section will provide examples of other potentially consequential applications of forensic statistics.

Mishandling and Misuse of Statistics to Support a Project

Specifically, the story reported in that 2021 Chance article is about the forensic use of statistics to identify the mishandling and misuse of statistics in the Environmental Impact Report ("EIR") on a proposed California desalination project ("the project") in which hydrogeologists used a statistical model to predict possible creation or exacerbation of seawater intrusion into an aquifer supplying source water for the project. Because the owner of the water utility was a private company, the state Public Utilities Commission ("the Commission") was responsible for assuring the accuracy of the model's predictions.

Mishandling

The initial project modeler concealed the inability of the model to provide accurate estimates of water elevation in a seawater-intruded source-water aquifer by including that aquifer together with two others which did not supply source water in the dataset used to determine model accuracy. Although all three aquifers together yielded an acceptable measure of model accuracy, the source- water aquifer-when later independently evaluated alone-did not. Also excluded from the three-aquifer study was a freshwater aquifer shown later to provide about one-half to three-quarters of the project's source water. When this information was reported to the Commission, it responded by replacing the initial modeler with another to investigate and possibly resolve those problems.

Misuse

How did the second modeler meet this challenge? The model used by both modelers divided the measurement of the water level in an aquifer at a specific time and location into an estimated and an error component. The estimated component was a sum of unique contributions to aquifer water level by different possible influences on it that could vary in extent over time and location, like the rate at which a pump extracted water from the aquifer. In that sum, the influences were weighted statistically to minimize the variation of the error components of the measurements over time and location. All of that so far is good, but here is where the trouble comes. What both modelers did wrong was to attempt to reduce the error variation even further by altering

possibly inaccurate measurements of some of the influences without reweighting the model based on the altered information.

The result of that alteration was to create an impermissible predictive relationship between estimates and errors (errors, by definition, being unpredictable) that exaggerated estimates of the rise or fall of aquifer water level over time. That exaggeration, which reflected a negative correlation between estimates and errors, showed up in a consistent underestimation of the decline of aquifer water levels over time that was so troubling that it led the second modeler to reapply the model to changes in water levels rather than to the water levels themselves. Although that reapplication had no foundation in fact and was made solely because time was running out for completion of the modeling work, the Commission accepted the work and certified both the EIR and the project.

Possible Fraud in the Project's EIR Modeling

According to California law (Civil Code Sections 1709, 1710, 1572, and 1573), fraud may take, among others, either of the following two forms:

1. Concealment Fraud occurs when there is a fiduciary or other relationship between the parties where there is a duty of full disclosure. The concealing person, with an intention to deceive, does not disclose important facts that the concealing person knows but the victim does not and could not know. Further, the victim reasonably relied on and was harmed by the concealment."

2. Constructive Fraud (negligent misrepresentation) occurs when the perpetrator misrepresents to the victim that an important falsehood is true. But the perpetrator may have honestly believed that the false representation is true. Yet, the perpetrator had no reasonable grounds for believing the representation was true when he or she made it; and he or she intends that victim rely on the representation. The victim must reasonably rely on and be harmed by the false representation"

From these definitions, a judge or a jury might reasonably conclude that the first modeler committed concealment fraud on the Commission when in their contracted relationship the modeler concealed the inability of the model to provide accurate estimates of water elevation in the sea-water-intruded aquifer by including that aquifer with two non-source-water aquifers in the dataset used to determine model accuracy.

The concealment fraud perpetrated by the first modeler did not end there, According to the EIR, as noted earlier, the project could draw up to two-thirds of its source water from a freshwater aquifer, only the remainder being drawn from the saltwater-intruded aquifer, but the dataset used to measure the model's accuracy excluded that freshwater aquifer whose water levels-as shown later by the second modeler-the model could hardly predict at all.

The second modeler avoided concealment fraud-by confirming that the measure of model accuracy for the seawater-intruded aquifer was outside the acceptable range and that the correlation of errors with estimates was far from zero-but perpetrated constructive fraud by providing different interpretations of those numbers to help support the project.

For the measure of model accuracy, the second modeler arbitrarily raised the threshold of acceptability to accommodate the model and for the non-zero error-estimate correlation erroneously attributed it to model bias due to other non-zero correlations with error, including the one noted earlier in which estimates declined more rapidly than water levels.

The article in Chance had four independent peer reviewers representing the American Statistical Association to check its validity. So little or no doubt exists that the two modelers had mishandled and misused statistics in both the evaluation of their model and its application without evaluation to data different from the data the model had been developed to estimate. Although the article fell short of identifying this mishandling and misuse as fraud, a California judge or jury informed of the legal definitions of fraud presented earlier in this section might very likely do so.

Identification of a crime and even a criminal, of course, is not enough to go to court.

Needed as well are a legally chargeable defendant and a plaintiff having legal standing. Contract law in California requires that the Commission protect ratepayers from fraud. According to Public Contract Code Section 100(d), "it is the intent of the Legislature for public agencies " to eliminates favoritism, fraud, and corruption in the awarding of public contracts." Failing to do that, the Commission as the public agency that contracted with the EIR consultants to do their work certainly qualifies as a chargeable defendant in this case. The ratepayers being the ultimate injured party, the local water management district, whose board is elected by residents constituting a substantial majority of the ratepayers, would clearly have the required standing. Whether legal action takes place depends on whether the Commission continues its support of the project now that it has become aware of the fraud.

Conclusion

Contracted public work, of course, is not the only possible subject of statistical forensic analysis. Governmental support of efforts to control global warming based on predictions by models has already become a subject of such analysis [2]. Even actions by governments ostensibly to control the recent pandemic may be actionable. Post-mortem accounts of the pande-

How to cite this article: RA Weitzman. Forensic Statistics: Taking the Mishandling and Misuse of Statistics to Court. J Forensic Sci & Criminal Inves. 2023; 17(1): 555955. DOI: 10.19080/JFSCI.2023.17.555955

mic suggest that its economic and educational upheaval might have been avoided by governmental release of simple statistics like the proportions of people within different age groups who tested positive for the virus but avoided hospitalization. Acting on that information-that the only vulnerable people, aside from the elderly, were almost solely those who also suffered serious health problems like obesity and diabetes-the world could have avoided the mandates that kept adults home from work and children from school, with all the resulting chaos. Concealing those statistics or challenging their validity when exposed very likely constitutes prosecutable fraud by administrative branches of government.

References

1. R.A. Weitzman (2021) From divining rods to statistics: a forensic analysis of the misuse of statistics in the estimation of environmental impact. Chance 34(4): 18-20.
2. R.A. Weitzman (2022) Tuning a model in climatology and calibrating one in hydrogeology: an informative comparison. American Journal of Theoretical and Applied Statistics 11(3): 83-88.

This work is licensed under Creative Commons Attribution 4.0 License
DOI: 10.19080/JFSCI.2023.17.555955

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
  (Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission
https://juniperpublishers.com/online-submission.php

How to cite this article: RA Weitzman. Forensic Statistics: Taking the Mishandling and Misuse of Statistics to Court. J Forensic Sci & Criminal Inves. 2023; 17(1): 555955. DOI: 10.19080/JFSCI.2023.17.555955

Archived: Monday, June 22, 2026 2:08:07 PM
From: Vicki Williams
Sent: Friday, June 19, 2026 4:27:02 PM
To: CSLC CommissionMeetings
Subject: Agenda Item#60 Cal Am Lease
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Commissioners Kounalakis and Stephenshaw

California State Lands Commission

100 Howe Avenue, Suite 100-South

Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181

Chair Cohen and Honorable Commissioners:

Voters rely on your integrity and thorough analysis to protect them from corporate greed and boondoggle projects like Cal Am's proposed desal plant. This project directly impacts my family and community.

I urge the State Lands Commission to either deny Cal Am's lease application or to do supplemental environmental review before considering it, due to significant new information. Critical changes regarding groundwater impacts, the lack of cost updates, and the fact that Cal Am is now in compliance with its legal restrictions on water supply from the Carmel River and has a growing surplus supply demand an updated environmental review.

The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what other agencies have concluded about a different project design in the past.

Please protect the public and deny this application.

Sincerely,

Vicki M Williams

[redacted]

Monterey, CA [redacted]

Archived: Monday, June 22, 2026 8:07:25 AM
From: [redacted]
Sent: Friday, June 19, 2026 2:28:53 PM
To: CSLC CommissionMeetings
Cc: mwchrislock
Subject: PLEASE DENY CAL AM'S LEASE APPLICATION TO BUILD SLANT WELLS!
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004)
Email Subject line: **Agenda Item #60 Cal Am Lease Application**

Dear CSLC:

There is so much public resistance to CalAm's desal project, and it's only grown over the years that CalAm has been playing the regulators. Here's why:

1. There is no longer a water shortage on the Monterey Peninsula. Even CalAm's reduced desal project is too large and unnecessary.

2. CalAm is relying on outdated environmental reviews unrelated to its current slant well design. This should trigger additional CEQA review under State Lands Commission guidelines. There are additional unstudied impacts with regard to the brine discharge from CalAm's proposed plant.

3. In its mitigation plan for adverse consequences, CalAm doesn't take into account new information regarding groundwater impacts in Marina and the Salinas Valley Groundwater Basin.

4. CalAm is not taking into account the effect of sea level rise on its slant well network.

5. CalAm already has spent more than 70% of the initial budget for its desal plant. Where are its updated cost estimates? And what would be the real cost of its desal water for the ratepayers of the Monterey Peninsula?

Karen and Martin Wiskoff
Carmel, California

Archived: Monday, June 22, 2026 8:52:09 AM
From: Elizabeth Weiland
Sent: Friday, June 19, 2026 2:30:13 PM
To: CSLC CommissionMeetings
Subject: 6/23/26 Item 60: California American Water Company Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

June 19, 2026

California State Lands Commission
100 Howe Avenue
Suite 100 South
Sacramento, CA 95825

RE: 6/23/26 Item 60: California American Water Company Lease Application

Dear Commissioners,

I am writing from the perspective of a longtime Carmel River advocate and former Executive Director of the Carmel River Watershed Conservancy. My work has centered on the health of this watershed—its habitat, wildlife, and long-term ability to function as a living river system. With that experience in mind, I respectfully ask the Commission to approve California American Water's lease application for the proposed desalination project in Monterey, including the new and converted subsurface slant wells.

Over many years of conservation work, I have watched the Carmel River carry an outsized burden for the region's water supply. The river is more than a source of water; it is a corridor for native fish and wildlife, a foundation for riparian habitat, and a defining natural resource for this community. Steelhead, red-legged frogs, lamprey, and countless other species benefit when river flows are protected and the watershed is given room to recover.

For that reason, I view this project through an environmental lens as much as a water supply lens. A dependable source of water that does not rely on continued withdrawals from the Carmel River can help reinforce the restoration gains that local organizations, public agencies, and residents have worked hard to achieve. Reducing pressure on the river is one of the most practical ways to support healthier flows, stronger habitat conditions, and better prospects for native species over time.

This need is becoming more pressing as climate conditions grow less predictable. Longer dry spells and more severe drought cycles leave small coastal watersheds especially exposed. When the Carmel River is stressed, the consequences are felt not only in water management decisions, but also in the condition of the habitat itself. Developing a drought-resilient supply is therefore a concrete step toward giving the river a better chance to withstand future extremes.

I respectfully encourage the Commission to approve the lease application at the June voting meeting. From my years working on Carmel River stewardship, I believe advancing this project would support both a more secure water future for the Monterey Peninsula and a healthier, more resilient Carmel River watershed.

Sincerely,
Elise

Elise Weiland

Archived: Thursday, June 18, 2026 8:31:09 AM
From: Janet Whitchurch
Sent: Wednesday, June 17, 2026 4:46:39 PM
To: CSLC CommissionMeetings
Subject: #60 CalAm Lease Appplication
Sensitivity: Normal
Archived: Thursday, June 18, 2026 8:31:09 AM

Attention: This email originated from outside of SLC and should be treated with extra caution.

To: Chair Cohen and Commissioners (File A4181/SCH #2006101004)

Pleas do not allow CalAm to drill slant wells in the fragile area near Marina, or anywhere for that matter. Problems with saltwater seeping into water needed for agriculture is already a problem and the drilling would add to the problem. The desal plant is not needed. I feel like a broken record, repeating the same request on numerous occasions. We do not need water that is even more expensive than it already is.

Janet Whitchurch
[redacted]
Monterey, CA [redacted]
Sent from my iPad

Archived: Thursday, June 18, 2026 11:09:42 AM
From: Linda Zimmerman
Sent: Thursday, June 18, 2026 10:54:15 AM
To: CSLC CommissionMeetings
Subject: Agenda Item #60 Cal Am Lease Application
Sensitivity: Normal

Attention: This email originated from outside of SLC and should be treated with extra caution.

Chair Cohen and Honorable Commissioners
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Dear SLC Chair Cohen & Commissioners,

I am writing the SLC regarding California-American Water Company's General Lease Application (File: A4181; SCH #: 2006101004).
In short, I urge you to deny Cal Al's Lease Application. There is significant new information regarding groundwater impacts, the lack of cost updates and other changed conditions.

First of all, hasn't it been firmly established that there is no longer a water shortage on the Peninsula? In fact, Cal Am now has surplus water supply that is being stored in the Seaside Basin. In last year's Supply and Demand hearing the CPUC updated both supply and demand for the Monterey Peninsula. The CPUC ruled that Cal Am would need only 2,528 AFY of additional water supply by 2050. Cal Am is attempting to change the size of its desal project from 6.4 mgd (7,169 AFY) to 4.8 mgd (5,377 AFY) without CPUC approval to do so. But even a 4.8 mgd (million gallons per day) plant is far too large and completely unnecessary.

Also, it doesn't sit well with me and many others Peninsula residents that Cal Am has manipulated the regulatory process by telling the SLC the CPUC handled it, telling the RWQCB the CCC handled it and telling the CCC the CPUC handled it. The result is that no single agency ever analyzed the complete project as currently designed. The State Land Commission's independent obligation as a CEQA responsible agency is not satisfied by documenting what others concluded about a different project design under different factual conditions. Hold Cal Am responsible, please. Deny their misguided application.

Many thanks for considering public opinion on this.
Linda Zimmerman
Pacific Grove, CA