

Staff Report 05

APPLICANT:

City of Fort Bragg

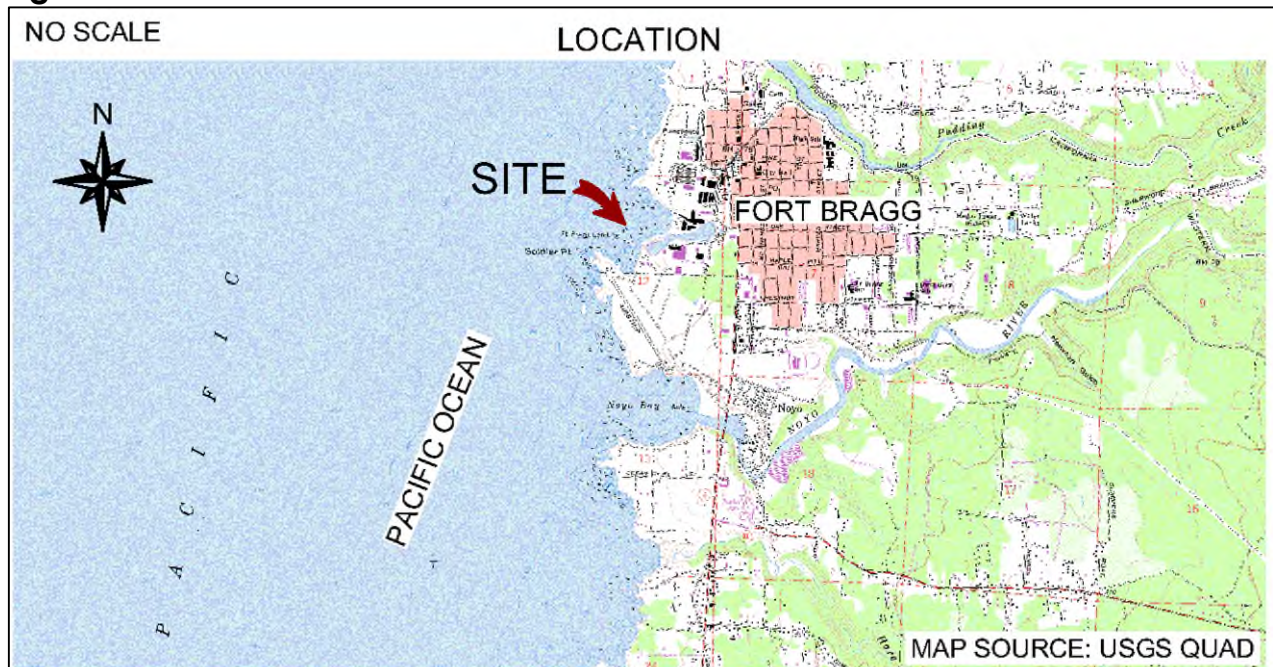
PROPOSED ACTION:

Issuance of a General Lease – Public Agency Use.

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the Pacific Ocean, Mill Bay, near Fort Bragg, Mendocino County (as shown in Figure 1).

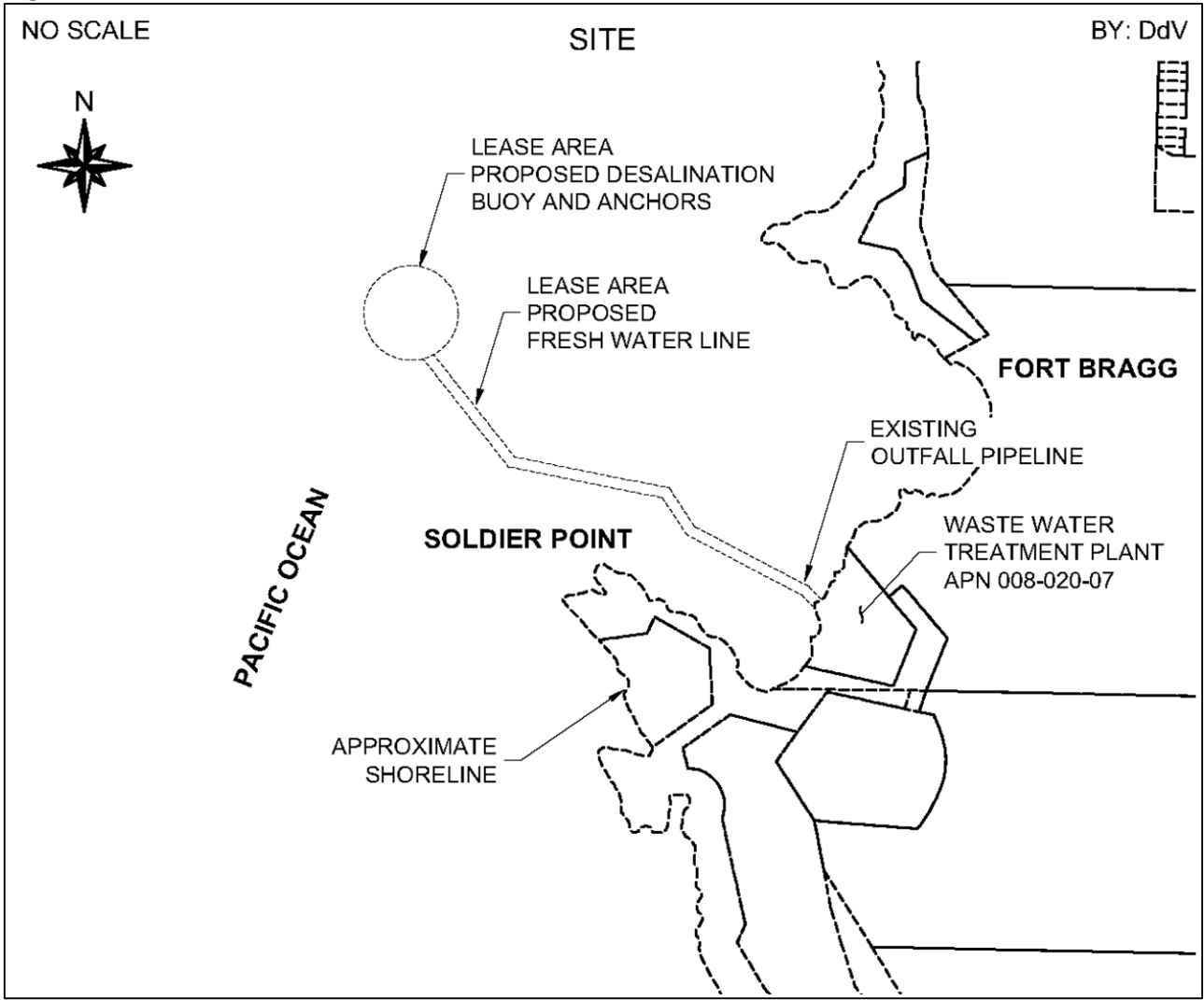
Figure 1. Location



AUTHORIZED USE:

Installation, use, and removal of a desalination pilot project (as shown in Figure 2).

Figure 2. Site Map



NOTE: This depiction of the lease premises is based on unverified information provided by the Applicant or other parties and is not a waiver or limitation of any State interest in the subject or any other property.

TERM:

2 years, beginning August 21, 2025.

CONSIDERATION:

The public use and benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest.

SPECIFIC LEASE PROVISIONS:

- Lessee will fully carry out, implement, and comply with all mitigation measures and reporting obligations applicable to the Lessee as set forth in the Mitigation Monitoring and Reporting Program (MMRP).
- Lessee will adhere to Best Management Practices to control turbidity and protect aquatic resources and habitats from excessive siltation in the general vicinity of the project.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6501.1, 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

The City of Fort Bragg (City) is applying for a General Lease – Public Agency Use, for the installation, use, and removal of an ocean desalination pilot project in the Pacific Ocean at Mill Bay, in the City of Fort Bragg. In May 2023, the City was awarded a \$1,490,000 grant from the California Department of Water Resources to test a wave-powered desalination system. The City has partnered with Oneka Technologies to deploy a wave powered desalination system pilot project to demonstrate the system's effectiveness and obtain data to inform a future utility-scale deployment within the City and other locations within the State.

The pilot study includes the installation of one desalination buoy, located 0.5 miles offshore, that will produce on average 13,200 gallons of desalinated water per day for 12 months. The desalination buoy weighs 22 tons and measures approximately 20 by 29 feet and is held in place with a concrete gravity anchor and mooring system. A secondary mooring system will include four marker buoys and four surface buoys.

Desalinated water will be conveyed through an approximately 2,900 foot long, 3-inch-diameter HDPE pipeline. The pipeline will be secured to the ocean floor using concrete mats and ballast weights.

Desalinated water will be analyzed at the City's onshore wastewater treatment plant and then returned to the ocean via the City's existing wastewater outfall. The brine produced will be discharged from the buoy near the water surface through

the buoy's brine discharge system. All pilot project components will be removed from the lease premises following the conclusion of the pilot study.

The proposed lease does not alienate the State's fee simple interest or permanently impair public rights. The lease is limited to a 2-year term and does not grant the lessee exclusive rights to the lease premises.

CLIMATE CHANGE:

INTRODUCTION:

The climate crisis and rising sea levels are impacting coastal California now. As underscored in the [State of California Sea Level Rise Guidance](#) (Ocean Protection Council, 2024), the combination of extreme weather events and the persistent and accelerating rise in sea levels will lead to increased coastal hazards, such as wave impacts, storm surges, and erosion. These impacts may affect the temporary (12-month) pilot project of a wave-powered seawater desalination buoy, anchoring system, and a freshwater pipeline subject to the proposed lease, located in the Pacific Ocean, near Fort Bragg.

DATA & PROJECTIONS:

Sea levels along most of the California coast rose four to eight inches during the last century, and this trend will accelerate throughout this century. The current rate of sea level rise is triple the rate during the last century. There is growing confidence that by 2050 sea levels will be approximately ten inches higher than they were in 2000. The severity of sea level rise beyond 2050 is contingent on future levels of greenhouse gas emissions. The California Ocean Protection Council updated the State of California Sea Level Rise Guidance in 2024 to provide a synthesis of the best available science on sea level rise projections and rates for multiple emissions scenarios. To apply a precautionary approach, Commission staff evaluated the "intermediate-high" and "high" scenarios due to the vulnerability and exposure of the lease location and the continued global reliance on fossil fuels. The Arena Cove tide gauge was used for the projected sea level rise scenario for the region, as listed in Table 1, below.

Table 1. Projected Sea Level Rise for Arena Cove

Year	Intermediate-High (feet)	High (feet)
2040	0.6	0.7
2060	1.4	1.8
2080	2.8	3.9
2100	4.5	6.4

Source: Table 12, State of California Sea-Level Rise Guidance: 2024 Update

Note: Projections are with respect to a 2000 baseline.

ANALYSIS:

Since the desalination buoy pilot project will only last 12 months, rising sea levels are not expected to affect the project. However, episodic or short-term events, such as extreme storms, very high or King tides, and El Niño events, alone or in combination, would increase the vulnerability of the desalination buoy, anchoring system, and freshwater pipeline, and could expose them to high water levels and strong storm, wind, and wave conditions. As a result, the buoy may sustain damage and dislodgement over the lease term, requiring repairs and maintenance to retain its function.

Regular maintenance, as referenced in the terms of the lease, may reduce the likelihood of severe structural degradation or dislodgement. Pursuant to the proposed lease, the Lessee acknowledges that the lease premises are located in an area that may be subject to the effects of climate change, including strong storm conditions and other coastal hazards.

CONCLUSION:

For all the reasons above, staff believes the issuance of this lease will not substantially impair the public rights to navigation and fishing or substantially interfere with Public Trust needs and values at this location, at this time, and for the term of the proposed lease; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects the use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. If the Commission denies the application, the Applicant cannot proceed with the pilot project.

2. This action is consistent with the “Meeting Evolving Public Trust Needs” and “Leading Climate Activism” Strategic Focus Areas of the Commission’s 2021 – 2025 Strategic Plan.
3. The purpose of the California Environmental Quality Act (CEQA) is to “avoid or minimize environmental damage where feasible.” (CEQA Guidelines section 15021).

A Mitigated Negative Declaration (MND), State Clearinghouse No. 2025030927, and a Mitigation Monitoring and Reporting Program (MMRP) were prepared by the City of Fort Bragg (City) and adopted on May 28, 2025, for this project. Staff reviewed these documents and determined that the MND adequately analyzes and mitigates all potentially significant adverse environmental impacts that fall within the Commission’s jurisdiction.

Pursuant to State CEQA Guidelines section 15096, subdivision (g)(1), and 15097, subdivision (a), and in conjunction with approval of this Project, staff recommends that the Commission adopt the City’s Applicant Proposed Measures in their MMRP ([provided for reference, as linked, Section 3](#)) for the portion(s) of the Project located on State lands, and delegates reporting and monitoring responsibilities to the City as the CEQA lead agency, per CEQA Guidelines section 15097. The City will remain responsible for enforcing the MMRP, unless otherwise delegated by such agency or until the Project is completed per CEQA Guidelines section 15097.

4. This activity involves lands which have NOT been identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq.; however, the Commission has declared that all lands are “significant” by nature of their public ownership (as opposed to “environmentally significant”). Since such declaration of significance is not based upon the requirements and criteria of Public Resources Code section 6370 et seq., use classifications for such lands have not been designated. Therefore, the finding of the project’s consistency with the use classification as required by California Code of Regulations, title 2, section 2954 is not applicable.

APPROVALS OBTAINED:

- U.S. Army Corps of Engineers
- U.S. Coast Guard

- National Marine Fisheries Service
- California Coastal Commission
- North Coast Regional Water Quality Control Board
- California Department of Fish and Wildlife

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that a Mitigated Negative Declaration, State Clearinghouse No. 2025030927, and a Mitigation Monitoring and Reporting Program were prepared by the City of Fort Bragg and adopted on May 28, 2025, for this project and that the Commission has reviewed and considered the information contained therein; that in the Commission's independent judgment, the scope of activities to be carried out under the lease to be issued by this authorization have been adequately analyzed; that none of the events specified in Public Resources Code section 21166 or the State CEQA Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore no additional CEQA analysis is required.

Adopt the Mitigation Monitoring and Reporting Program, as referenced by name.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the proposed lease will not substantially impair the public rights to navigation and fishing or substantially interfere with the Public Trust needs and values at this location, at this time, and for the term of the lease; and is in the best interests of the State.

AUTHORIZATION:

Authorize issuance of a General Lease – Public Agency Use to the Applicant beginning August 21, 2025, for a term of 2 years, for installation, use, and removal of a desalination pilot project; consideration being the public use and benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest.