

Staff Report 13

APPLICANT:

Sonoma County Water Agency

PROPOSED ACTION:

Issuance of a General Lease – Public Agency Use.

AREA, LAND TYPE, AND LOCATION:

Sovereign tide and submerged land in the Russian River and the Pacific Ocean, at Goat Rock State Beach, near Jenner, Sonoma County (as shown in Figure 1).

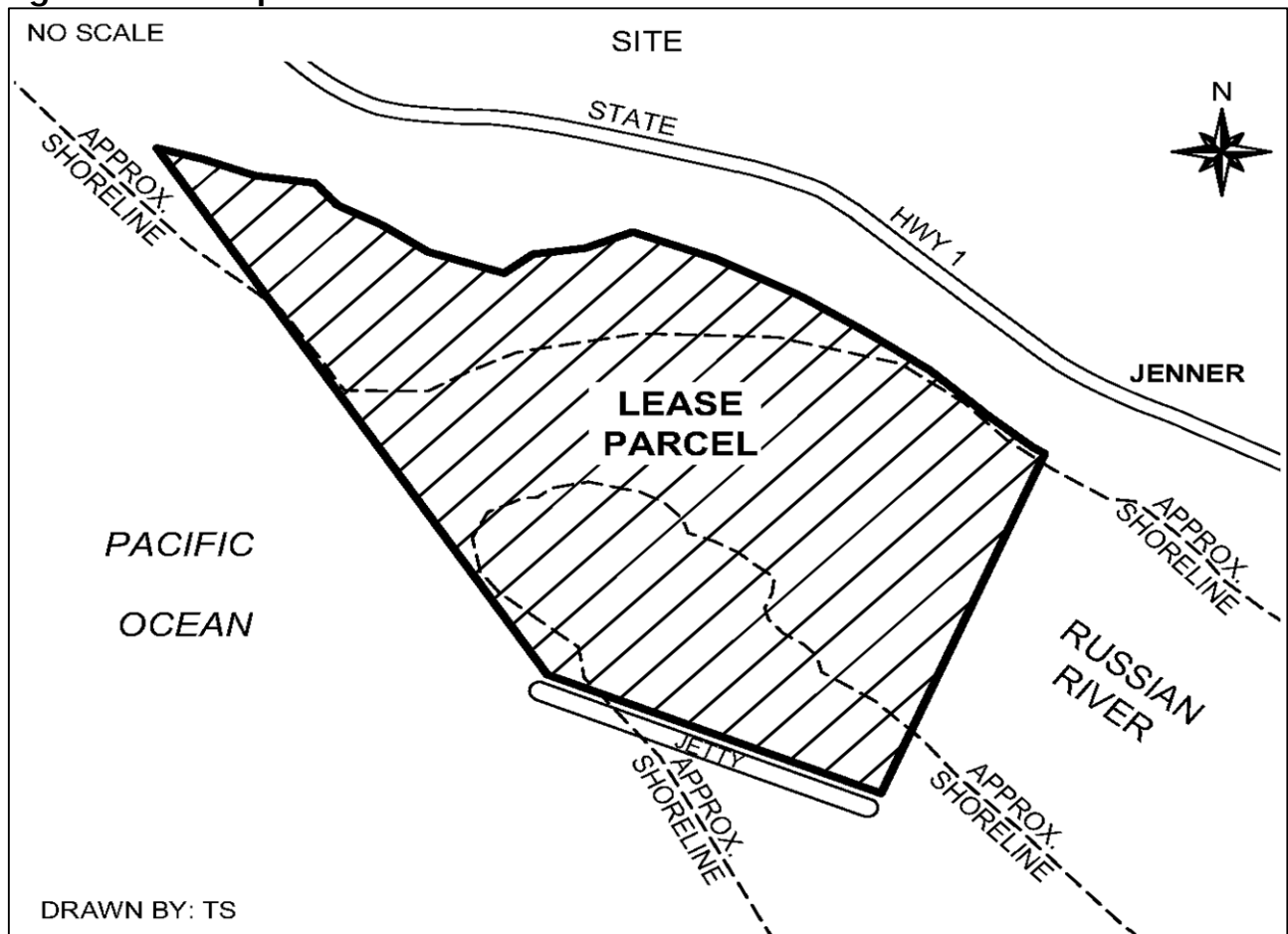
Figure 1. Location



AUTHORIZED USE:

Continued periodic breaching of the mouth of the Russian River to prevent flooding, and construction of an outlet channel to form a freshwater lagoon for fish habitat enhancement and to prevent flooding in the Russian River (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:

20 years; beginning January 1, 2024.

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 interests.

SPECIFIC LEASE PROVISIONS:

- Prior to the start of breaching, Lessee will contact the California Department of Parks and Recreation lifeguards and post signs and barriers to remain for the duration of the breaching to minimize potential hazards to the public.
- Lessee will continue to fully carry out, implement, and comply with all mitigation measures and reporting obligations identified as the responsibility of Lessee, as set forth in the Mitigation Monitoring Program (MMP) adopted as part of the Commission's January 26, 2012, project approval.

BACKGROUND:

Beginning in the mid-1990s, the Sonoma County Water Agency (SCWA) artificially breached the sandbar at the mouth of the Russian River (River) when it has closed and water levels in the Russian River Estuary (Estuary) have threatened low-lying properties. On October 20, 2005, the Commission authorized a five-year General Lease – Public Agency Use with SCWA for continued year-round periodic breaching at the mouth of the Russian River to create an outlet channel for flood control and habitat protection purposes ([Item 29, October 20, 2005](#)). The lease expired on December 31, 2010. In 2008, the National Marine Fisheries Service (NMFS) issued the Russian River Biological Opinion, in response to Section 7 consultation by the U.S. Army Corps of Engineers (USACE) for operation of upstream dams. The Biological Opinion found that artificially elevated inflows to the estuary due to upstream dam operations during the low flow season (May 15 through October 15) and historic artificial breaching practices had significant adverse effects on the River's estuarine rearing habitat for steelhead, coho salmon, and Chinook salmon. As a result, SCWA developed the Russian River Estuary Management Project (Project) to make the required changes in the Estuary's management.

The Project has been implemented since 2009 as required by NMFS and since the 2009 California Department of Fish and Wildlife (CDFW) determination that the Biological Opinion is consistent with the California Endangered Species Act.

On January 26, 2012, the Commission authorized a three-year General Lease – Public Agency Use to the Applicant for the continued periodic breaching of the mouth of the Russian River to prevent flooding; and construction and maintenance of an outlet/pilot channel to form a freshwater lagoon for fish habitat enhancement and to prevent flooding in the Russian River. The lease for the new

approach to flood and habitat management at this location was limited to a three-year term in consideration of the adaptive management approach and potential for project modifications ([Item 90, January 26, 2012](#)). The lease expired on May 14, 2015.

On February 20, 2015, the Commission authorized a nearly nine-year General Lease – Public Agency Use to the Applicant for the continued periodic breaching of the mouth of the Russian River to prevent flooding; and construction of an outlet channel to form a freshwater lagoon for fish habitat enhancement and to prevent flooding in the Russian River ([Item 15, February 20, 2015](#)). The lease began on May 15, 2015, and expired on December 31, 2023, to correspond with the terms of the Biological Opinion and the USACE permit. The Biological Opinion prescribed a program of potential, incremental phases until 2023 to accomplish the Project. Earlier phases have been successful in meeting the performance criteria, and subsequent phases will not be needed.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

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

PUBLIC TRUST AND STATE'S BEST INTERESTS:

The Applicant is now applying for a new General Lease – Public Agency Use for the continued periodic Project activities and received a Right of Entry Permit from the California Department of Parks and Recreation to access Sonoma State Park for purposes of carrying out the Project.

The Estuary is open to the Pacific Ocean for much of the year but, at times, a sandbar across the mouth of the River forms and restricts the tidal connection to the ocean, creating a perched lagoon (lagoon above tidal elevations). Rising river levels from the blocked connection to the ocean pose public safety concerns for floodplain property owners, visitors and employees of the State Beach, and SCWA maintenance staff. With tidal inflows blocked from the lagoon, river inflow increases the depth and area of freshwater habitat, improving young salmonid rearing habitat.

Between October 16 and May 14, a relatively steep, narrow pilot channel would be periodically excavated to breach the sandbar naturally forming at the River mouth to maintain tidal circulation and to prevent flooding. This would occur when the Estuary water level rises between 4.5 to 7.0 feet, as measured by the gage at the Jenner Visitor's Center. Typical breaching work would result in a pilot channel approximately 100 feet long by 25 feet wide and six to eight feet deep, generating up to 1,000 cubic yards of dredged material side cast and smoothed on the adjacent sand bar below the high tide line.

Between May 15 to October 15 a perched lagoon would be maintained to promote appropriate fresh and brackish water conditions for rearing salmonids not yet acclimated to oceanic salinity and their invertebrate prey and to reduce the flushing of young salmonids into the ocean. Management includes monitoring and refinement of activities to support biological productivity and desired water quality while simultaneously providing flood control for properties adjacent to the Estuary.

The lagoon would have an average daily water surface elevation of at least 7 feet higher than the ocean tides, thereby increasing the extent and duration of the inundated floodplain. To prevent flooding, a stable, relatively low velocity lagoon outlet channel would be excavated diagonally across the beach to optimize lagoon water elevations for rearing salmonids and to move water from the Estuary over the sandbar to prevent water levels from rising above the flood stage.

When configuring the outlet channel for the first time each year, machinery may operate on up to two consecutive working days. It is anticipated that maintenance of the outlet channel could be necessary on a weekly basis.

Heavy equipment such as bulldozers and excavators would be used at the River mouth to create the temporary channels. The Applicant will adhere to state and federal agency permits that affect outlet channel management, including limits on channel dimensions and volume, scheduling to minimize interference with public access, limiting beach actions to no more than two consecutive days, and constraining access during marine mammal pupping season.

River flows and tidal action usually reestablish the natural beach contour within the same day of breaching, and public access at the State Beach is maintained during management actions. The beach would be accessed from the paved parking lot at Goat Rock State Beach through an existing access point. Recreational activities at the beach include fishing, kayaking, surfing, hang gliding, hiking, beachcombing, picnicking, wildlife viewing, and sunbathing.

The proposed Project will provide local, regional, and statewide benefits, through fish habitat enhancement and flood prevention to protect members of the public inhabiting the local area as well as those recreating at the beach, which are consistent with the Public Trust Doctrine.

The proposed lease does not alienate the State's fee simple interest or permanently impair public rights. In addition, the lease has a limited 20-year term and does not grant the lessee's exclusive rights to the lease premises and allows the Commission flexibility to determine if the Public Trust needs of the area have changed over time. Furthermore, the lessee will be subject to lease terms and conditions which promote public use and safety.

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 runup, storm surges, flooding, and erosion. Shorelines will move inland due to rising seas, exposing more of the natural and human-built environment to coastal hazards. The resulting damage will occur repeatedly and incrementally over years and, in extreme cases, over the span of a few large winter storms. These conditions may affect the management activities of the Russian River Estuary, which includes periodically building a seasonal berm, breaching the river mouth, and creating an outlet channel, subject to the proposed lease, located near the Pacific Ocean, near Goat Rock State Beach, Sonoma County.

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” scenario due to the lower vulnerability and exposure of the lease location. The Point Reyes tide gauge was used for the projected sea level rise scenario for the lease area, as listed in Table 1.

Table 1. Projected Sea Level Rise for Point Reyes

Year	Intermediate (feet)
2040	0.6
2050	0.8
2070	1.4
2100	3.1

Source: Table 5, State of California Sea Level Rise Guidance: 2024 Update

Note: Projections are with respect to a 2000 baseline.

ANALYSIS:

Commission staff used the online sea level rise mapping tool, [Our Coast Our Future](#), to evaluate risks to the lease premises and structures from sea level rise. At 0.8 feet of sea level rise, in combination with a regular winter storm (sometimes called an ‘annual’ storm, because a storm of its strength is expected to occur every year)¹, the lease premises will become regularly flooded and subjected to stronger and more frequent wave impacts and erosion, potentially damaging any structures or improvements on the lease premises. Based on sea level rise projections in Table 1, this could occur as soon as 2050.

Short-term events, such as extreme storms, very high or King tides, El Niño, and regular (“annual”) storms, alone and in combination, occur now and are a major driver of the management program to breach the river mouth berm and implement the outlet channel when necessary. These activities will likely be carried out with increasing frequency over the duration of the lease, as the flooding risk factors, described above, are expected to also increase over the next two decades.

Active management of the Russian River Estuary will improve the resiliency of the lease premises to climate change impacts because it will reduce the flooding risk

¹ Barnard, P.L., Erikson, L.H., Foxgrover, A.C., Finzi Hart, J.A., Limber, P., O’Neill, A.C., van Ormondt, M., Vitousek, S., Wood, N., Hayden, M.K., and Jones, J.M., 2019. Dynamic flood modeling essential to assess the coastal impacts of climate change. Scientific Reports, Volume 9, Article #4309. <http://dx.doi.org/10.1038/s41598-019-40742-z>.

to adjacent upland properties, the lease premises itself, and the surrounding beach.

Regular maintenance, as referenced in the terms of the lease, may reduce the likelihood of severe degradation of the lease premises. Pursuant to the proposed lease, the Lessee acknowledges that the lease premises and adjacent upland (not within the lease area) are located in an area that may be subject to the effects of climate change, including sea level rise and rising groundwater levels.

CONCLUSION:

For all the reasons above, staff believes issuance of the lease will not substantially impair the public rights to navigation, fishing, and commerce, 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.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. The lessee also has no right to a new lease or to renewal of any previous lease.
2. This action is consistent with the "Leading Climate Activism", "Meeting Evolving Public Trust Needs", and "Committing to Collaborative Leadership" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.
3. An Environmental Impact Report (EIR), State Clearinghouse No. 2010052024, was prepared by the Sonoma County Water Agency (SCWA) and certified on August 16, 2011. As part of its project approval, SCWA made a Statement of Facts and Findings and Statement of Overriding Considerations and adopted a Mitigation Monitoring Plan (MMP). Commission staff reviewed the EIR and MMP pursuant to the provisions of the California Environmental Quality Act (CEQA)(Pub. Resources Code, § 21081.6) and adopted by the lead agency.

The Commission considered the EIR at its January 26, 2012 meeting ([Item 90](#)). As part of the Commission's approval of the lease, the Commission adopted SCWA's MMP and made independent Findings as well as a Statement of Overriding Considerations, in conformance with the CEQA Guidelines (Cal. Code Regs., tit. 14, §§ 15091, 15093, and 15096), as contained on file in the

Sacramento office of the Commission and incorporated by reference hereto. The Commission's previously adopted MMP remains in full force and effect. No substantial changes to the project, to the circumstances in which the project occurs, or other new information requires a subsequent or supplemental EIR for the project to continue. The Applicant will be required by the terms of the proposed lease to continue to implement the Commission's previously imposed MMP.

4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq. At the time the Commission considered the EIR in 2012, staff concluded that such activity would not affect those significant lands and the Commission found the activity to be consistent with its use classification pursuant to Public Resources Code section 6370 et seq.

APPROVALS OBTAINED:

- County of Sonoma
- California Coastal Commission
- California Department of Fish and Wildlife
- National Marine Fisheries Service (NMFS)
- North Coast Regional Water Quality Control Board
- U.S. Army Corps of Engineers
- California Department of Parks and Recreation

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that an EIR, State Clearinghouse No. 2010052024, was prepared for this project by Sonoma County Water Agency and certified on August 16, 2011, and that the Commission has reviewed and considered the information contained therein; that in the Commission's independent judgement, 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 CEQA Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore no additional CEQA analysis is required.

Find that the Commission's previously adopted Mitigation Monitoring Program remains in full force and effect.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the proposed lease will not substantially impair the public rights to navigation, fishing, and commerce or substantially interfere with 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 January 1, 2024, for a term of 20 years, for the continued periodic breaching of the mouth of the Russian River to prevent flooding and construction of an outlet/pilot channel to form a freshwater lagoon for fish habitat enhancement and to prevent flooding in the Russian River; consideration being the public use and benefit, with the State reserving the right to set a monetary rent if the Commission finds such an action to be in the State's best interest.