Meeting Date: 04/07/23 Lease Number: 7673 Staff: M. Schroeder

Staff Report 38

APPLICANT:

Reclamation District 2074

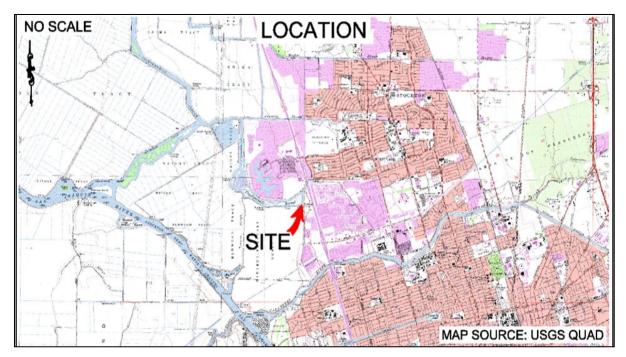
PROPOSED ACTION:

Issuance of a General Lease – Public Agency Use

AREA, LAND TYPE, AND LOCATION:

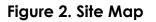
Sovereign land located along the south bank of Fourteen Mile Slough between Ten Mile Slough and I-5 Freeway Bridge crossing, Stockton, San Joaquin County (as shown in Figure 1).

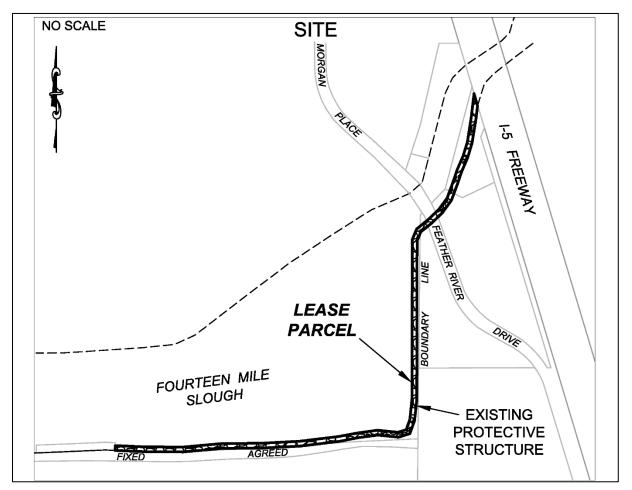
Figure 1. Location



AUTHORIZED USE:

Use and maintenance of bank protection (as shown on Figure 2).





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:

25 years, beginning April 1, 2023.

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:

- Lessee to provide a Shoreline Adaptation Strategy Report by April 1, 2028.
- Lessee to notify Lessor within 10 days of any "unacceptable" ratings through the U.S. Army Corps of Engineers Levee Safety Program. Lessee will provide to Lessor

confirmation of completed repairs to correct unacceptable conditions within 30 days of completion.

- Lessee agrees and acknowledges that any increase in the footprint, height, or intensity of the existing levee will require separate Commission action and additional environmental review.
- Lessee agrees and acknowledges that the hazards associated with sea level rise and climate change may require additional maintenance or protection strategies to ensure safe use of the lease premises.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6321, 6321.2, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

On February 25, 1993, the Commission authorized a General Permit – Public Agency Use to the Applicant for construction and maintenance of bank stabilization and protection of the south bank of the levee along Fourteen Mile Slough (<u>Item 4,</u> <u>February 25, 1993</u>). The permit expired on March 31, 2023.

The Applicant is responsible for ensuring that levees are maintained in a manner that reduces the risk of flooding. The levee system protects approximately 2,200 acres of fully developed urban property within Stockton. The area consists primarily of residential and commercial development.

The levee provides a 100-year level of flood protection, meaning a severe flood event with a 1-in-100 chance of occurring in any given year. The height of the levee is approximately 13 feet. The water elevation during a 100-year storm would be approximately 10 feet. The bank protection protects against erosion to the levee caused by wind-wave action and by boats creating waves. In addition, maintenance of the bank protection ensures the integrity of the levee is maintained preserving the Public Trust resources, such as water-related commerce, fishing, boating, open space, and recreation.

The proposed lease is consistent with the common law Public Trust Doctrine and does not alienate the State's fee simple interest or permanently impair public rights. The proposed lease requires the lessee to keep and maintain the bank protection in good order and repair and indemnify the State for any liability incurred from the lessee's activities.

CLIMATE CHANGE:

Climate change impacts, including sea level rise, more frequent and intense storm events, and increased flooding and erosion, affect both open coastal areas and inland waterways in California. The existing protective structure lease area is located on Fourteen Mile Slough (draining into the San Joaquin River), which is a tidally influenced site vulnerable to flooding at current sea levels. This area is very flat and will experience significant impacts associated with sea level rise and climate change.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea level rise projections and rates. Commission staff evaluated the "high emissions," "medium-high risk aversion" scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. The San Francisco tide gauge was used for the projected sea level rise scenario for the region as listed in Table 1.

Table 1. Projected Sea Level Rise for	r San Francisco
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Year	Projection (feet)
2030	0.8
2040	1.3
2050	1.9
2100	6.9

Source: Table 13, <u>State of California Sea-Level Rise Guidance: 2018 Update</u> Note: Projections are with respect to a 1991 to 2009 baseline.

This effect could increase Fourteen Mile Slough's inundation levels within the lease area. According to the Delta Stewardship Council's 2021 climate change vulnerability analysis, <u>Delta Adapts: Creating a Climate Resilient Future</u>, the southern Delta, where this levee is located, will be the most susceptible to an increase in tidal range from one foot of sea level rise. The daily tidal range conditions in this part of the Delta will increase by 20 percent for one foot of sea level rise. In addition, as stated in the <u>Safeguarding California Plan: 2018 Update</u> (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms (especially when coupled with sea level rise). In rivers, creeks, and tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris as well as decreased bank stability and structure. The Delta Stewardship Council's vulnerability assessment estimates the inflows of 100-year flood events may increase 44 percent by mid-century and 77 percent by the end of the century, and may be

higher for areas near the San Joaquin River where the lease is located. These events are projected to become increasingly concentrated in winter months, notably January and February, when king tides typically occur. Since the lease area is influenced by tides and riverine flows, the Delta Stewardship Council report identified the area as being especially susceptible to flooding from a combination of sea level rise and increases in riverine flows, particularly during king tide events. By 2050, 100-year flood events near the San Joaquin River are projected to flood 236 square miles, up from the present-day estimate of 75 square miles.

Conversely, climate change induced droughts could decrease river levels and flow for extended periods of time. Climate change and sea level rise will further influence riverine areas by changing erosion and sedimentation rates. Flooding and storm flow, as well as runoff, will likely increase scour and decrease bank stability at a faster rate.

The combination of these projected conditions during the 25-year lease term could increase the likelihood of damage to the protective structure along Fourteen Mile Slough. The rocks used as protective structure on the bank may need reinforcement to withstand higher levels of flood exposure and more frequent storm events. Reinforcement of improvements would require additional Commission approval and may require environmental analysis and permitting.

Vegetation on some portions of the bank and above the bank provides additional stability and reduces the amount of erosion and scour pressure experienced during storm events because of the vegetation's underground root system; but remains at risk of accelerated deterioration from currents and floods.

Regular monitoring and maintenance, as referenced in the lease, may reduce the likelihood of severe structural degradation or dislodgement. Pursuant to the proposed lease, the Applicant acknowledges that the lease premises and adjacent upland are in an area that may be subject to the effects of climate change, including sea level rise.

CONCLUSION:

For all the reasons above, staff believes 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 foreseeable term of the proposed lease; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

- 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 has no right to a new lease or a renewal of any previous lease.
- 2. This action is consistent with the "Leading Climate Activism" and "Meeting Evolving Public Trust Needs" Strategic Focus Areas of the <u>Commission's 2021-</u> <u>2025 Strategic Plan</u>.
- 3. Staff recommends that the Commission find that this activity is exempt from the requirements of the California Environmental Quality Act (CEQA) as a categorically exempt project. The project is exempt under Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

Authority: Public Resources Code section 21084 and California Code of Regulations, title 14, section 15300 and California Code of Regulations, title 2, section 2905.

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that the activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, title 14, section 15061 as a categorically exempt project, Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that issuance of 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 foreseeable 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 April 1, 2023, for a term of 25 years, for the use and maintenance of bank

protection; 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 interests.