Meeting Date: 06/05/23 Lease Number: 4551 Staff: K. Connor

Staff Report 70

APPLICANT:

United States Army Corps of Engineers

PROPOSED ACTION:

Issuance of a General Lease – Public Agency Use

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the Pacific Ocean, near Surfside – Sunset, Huntington, and Newport Beaches, Orange County (as shown in Figure 1).

Figure 1. Location



AUTHORIZED USE:

Dredging of approximately 1,750,000 cubic yards of sand from the Pacific Ocean from an offshore borrow site; placement of compatible dredged beach fill along a 4,500-foot-long stretch of shoreline in the City of Seal Beach; excavation of 100,000 cubic yards of sand from a borrow site on Newport Beach and placement down shore, under the Surfside – Sunset Beach Nourishment Project (as shown in 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:

49 years, beginning June 5, 2023.

CONSIDERATION:

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:

- Prior to each beach nourishment event, Lessee shall provide Lessor a mean high tide line survey of the receiver site for Lessor's staff review.
- Prior to the start of a beach replenishment event as described within the lease, Lessee shall provide Lessor with the name, address, telephone number, and license number(s) of the contractor(s) selected to implement the beach nourishment program.
- In performing the dredging, the Lessee will abide by Best Management Practices and the requirements of other permitting agencies to control turbidity to protect marine resources and habitats from excessive siltation in the general vicinity of the project.

BACKGROUND:

Before onshore development between the San Gabriel River outlet and Newport Bay, local beaches received sand from flood runoff of the Los Angeles, San Gabriel, and Santa Ana Rivers. However, the construction of the Los Angeles/Long Beach breakwater system and the Anaheim Bay jetties has altered the local sediment transport processes. Waves reflected off the Anaheim Bay East Jetty, combined with incident waves, cause strong localized currents near the jetty. These currents have induced downcoast erosion. Additionally, the installation of floodcontrol structures on the Los Angeles, San Gabriel, and Santa Ana Rivers has reduced the total amount of sand that naturally passes through the system from river runoff. Together, these activities have significantly affected the local natural shoreline, and since the 1940s, local beaches have continuously been eroding.

On October 23, 1962, the United States Congress authorized Public Law 87-874, which approved, among other activities, periodic beach nourishment from Surfside to Newport Beach. On September 13, 1963, the United States Army Corps of Engineers (USACE or Applicant) modified the activities to include relocating the proposed breakwater near the mouth of the Santa Ana River, extending the south jetty at the Santa Ana River, constructing groins and placing fill between the Santa Ana River and Newport Pier, and increasing sand allotments at Surfside – Sunset from 3,000,000 cubic yards (cy) to 4,000,000 cy.

As a result, the USACE, the State, Orange County, and local cities established the Orange County Beach Erosion Control Project, also known as the Surfside – Sunset

Beach Nourishment Project (Project), in 1964 to perform periodic beach nourishment. Thus, beach nourishment activities have been conducted over time to mimic natural processes in an effort to sustain beach recreation opportunities and provide additional shoreline protection from continuous coastal storm damage. The USACE has performed these beach nourishment activities in multiple stages. To date, there have been 12 stages of beach nourishment and approximately 27,100,000 cy of sand placed at Surfside – Sunset and Newport Beaches since the 1960s. The USACE is now proposing Stage 13 of the Project.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6303, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

On November 19, 1970, the Commission authorized the issuance of a 49-year Public Agency Permit to the USACE for the implementation of a federal beach erosion control project involving the placement of 1,500,000 cy of beach fill in the Pacific Ocean adjacent to Surfside – Sunset Beach in Orange County (Item C27, November 19, 1970). The USACE's ongoing Project mitigates the impacts of local sediment transport processes from the construction of flood control structures, such as the Los Angeles/Long Beach breakwater and the Anaheim Bay jetties. The permit authorized the USACE to perform beach replenishment on sovereign lands as necessary but did not authorize the USACE to continually dredge from sovereign lands. Previous beach nourishment activities used compatible material from the nearby Naval Weapons Station outside of Commission jurisdiction.

The USACE performed periodic beach nourishment at Surfside – Sunset Beach and Newport Beach under the 49-year permit. On February 27, 1998, the Commission authorized an amendment of the permit for additional dredging on sovereign lands and placement of 1,750,000 cy of sediment for beach nourishment (<u>Item C70,</u> <u>February 27, 1998</u>). On April 24, 2001, the Commission authorized an amendment of the permit for the dredging and placement of another 1,750,000 cy of sediment for beach nourishment (<u>Item C73, April 24, 2001</u>). On October 16, 2008, the Commission authorized an amendment of the permit for additional dredging and placement of 1,750,000 cy of sediment for beach nourishment (<u>Item C33, October 16, 2008</u>). That lease expired on November 18, 2019. The Applicant is now applying for a new General Lease – Public Agency Use. The Applicant's Project activities under the proposed lease are similar to the previously authorized beach nourishment activities at Surfside – Sunset and Newport Beaches. The Applicant conducts beach nourishment in multiple events known as stages. Each stage requires federal funding and environmental review. As a form of remediation for beach erosion damage due to the previously built flood control construction, Congress authorized the Project to last as long as necessary.¹ While Congress's approval is indefinite, the budgeting and the need for beach nourishment activities varies from stage to stage. The Applicant is now applying for Stage 13 of beach nourishment for the Surfside-Sunset Beach area.

The proposed Project includes two beach nourishment locations: the Surfside – Sunset Beach area, as previously authorized, and the Newport Beach area, which was not previously authorized. The entire Surfside – Sunset Beach area is within the Commission's leasing jurisdiction. However, during the current Project application review, staff determined the proposed sand dredging and placement activities in the Newport Beach area would occur partly on sovereign lands and partly within lands legislatively granted to the City of Newport Beach pursuant to Chapter 74, Statutes of 1978. Day-to-day management of the granted lands resides with the City of Newport Beach.

The Surfside – Sunset Beach Project area, including both the borrow and receiver sites, is offshore of the City of Seal Beach and along the northern coastline of Orange County between the Anaheim Bay jetties and Newport Pier. This coastal area is primarily sandy beaches, broken by low coastal cliffs in the Huntington Beach area. The specific location for the Surfside – Sunset Beach Project area starts on the beach immediately down the coast of the Anaheim Bay East Jetty and extends along the shoreline for approximately one mile. The proposed borrow site is located approximately 7,000 feet offshore of Sunset Beach. The Newport Beach area of the Project, including both the borrow and receiver site, is located adjacent to the Santa Ana River and extends down and along the Newport Beach shoreline.

The Applicant has designed the beach nourishment activities to increase and enhance recreational opportunities for residents and visitors by extending the width of beaches. The Applicant is seeking authorization from the Commission for its Project to extend the width of the local beaches to between 350 and 900 feet in width. Under Stage 13 of the Project, the Surfside – Sunset Beach area will receive approximately 1,750,000 cy of dredged sand, and the Newport Beach area will receive approximately 100,000 cy of excavated sand, with the Applicant

¹ The currently proposed and previous periodic beach nourishment activities from Surfside to Newport Beach, were authorized by act of Congress, <u>Public Law 87-874</u>, 87th Congress, 2nd session, approved on October 23, 1962 are in accordance with House Document 602, 87th Congress.

determining future renourishment stages on an as-needed basis. The duration of the dredging and sand placement at Surfside – Sunset Beach is estimated to take between five and six months, and the duration of the Newport Beach sand nourishment activities is estimated to take approximately 30 days.

Surfside – Sunset Beach Project Area

The dredged material for the Surfside – Sunset Beach area will come from an offshore borrow site approximately 7,000 feet offshore of Sunset Beach and in approximately 45 to 55 feet of water. The borrow site refers to a large location that USACE has investigated for the Project in terms of sediment characteristics, marine resources, seabed elevation, etc. The borrow site is approximately 200 acres in size. The dredging of the borrow site would consist of the removal of the top 10 feet of material from the ocean floor. The overall dredging depth would be at approximately 65 feet in the water column.

The beach nourishment operations will include the use of either a cutterhead suction dredge or a hopper dredge to excavate the sand from the borrow site and mix it with ocean water to create a sand slurry and then pumped through a pipeline onto the receiver beach. Because the hopper dredge does not have the ability to pump out its contents, its use is considered unlikely. The pipeline will be partially floated on the surface and anchored on the seafloor. This will allow for continuous use of the navigational channel during the construction period. Once the Applicant pumps the sand slurry mixture to the receiver site, conventional earth-moving equipment, such as a bulldozer, will uniformly spread it over the site. To minimize nearshore turbidity, the Applicant will limit the initial beach sand placement to a diked, single-point placement site. Additional construction equipment will be required to support the cutterhead suction dredging activities and include three support boats: an anchor tender, a pipe tender, and a crew boat.

The staging activities for beach nourishment will occur in the Seal Beach Naval Weapons Station, in an area known as W-8, and outside of Commission jurisdiction. The site would be used for placement of construction materials, parking for support vehicles, and assembly of construction crews. The Applicant's equipment will be stored and moved outside of Commission jurisdiction, south of the Pacific Coast Highway Bridge and northwest of the Surfside Colony neighborhood. The site has been previously used for USACE projects and is currently a vacant area. Access from the staging area to the onshore Project area is obtained from a naval access road from Seal Beach Naval Weapons Station.

Ocean dredging and beach nourishment activities will occur on a 24-hour, 7-days a week basis over the course of six months, between March 15 and September 1.

The daily production rate will be 12,000 cy. Construction activity on the beach will be restricted to the hours of 7 AM to 7 PM, Monday through Friday, and 8 AM to 6 PM on Saturdays. The Applicant is not conducting beach work on Sundays. However, this timing restriction does not apply to dredging activities or the pumping of sand onto the beach.

The Applicant will carry out construction in a way that will only impact public access at the point of discharge and along the beach during the spreading of the dredged materials. The Applicant will establish fencing and signage around the point of discharge for public safety. Additionally, while there will be intermittent restrictions on public access for the area of sand deposition, the proposed Project will not restrict public access to neighboring lands, and water uses near the proposed staging and construction areas. The public can still access the Surfside – Sunset Beach area through Warner Street and Pacific Coast Highway from the south, and Broadway Street and Anderson from the north. Overall, the time of possible limited public access will be five to six months.

Newport Beach Project Area

The borrowed sand for the Newport Beach area of the Project will come from an onshore area of Newport Beach. The proposed borrow site is located below the Santa Ana River and extends approximately 3,800 feet along the shore to the east, from 71st Street to 56th Street. The borrow site will be a 10-foot-thick cut of sand from the top of an existing slope and will include approximately 16 acres.

The beach nourishment activities will consist of conventional earth-moving equipment, including bulldozers and scrapers. The contractor will establish a hauling route along the oceanside of the beach to maximize the distance between the work and the upland residences. The proposed receiver site will be about 2,000 feet long between 32nd Street and 44th Street. The fill will be 40 feet wide and placed to match the existing topography of the beach.

The staging activities for beach nourishment will occur at a site owned by the City of Newport Beach adjacent to the Santa Ana River. The site's size is suitable for equipment mobilization and has suitable ingress and egress points. The Applicant will fence off the staging area from the public and use it to store equipment overnight. The site has been used extensively for previous projects.

Beach nourishment activities will be limited to the hours of 7 AM to 6:30 PM, Monday through Friday, and 8 AM to 6 PM on Saturdays. The Applicant is not conducting beach work on Sundays or holidays. The Applicant plans to move approximately 5,000 cy of sand per day. The Newport Beach nourishment activities will likely be concurrent with the Surfside – Sunset Beach activities. The Applicant will carry out the beach work to only impact public access for a short period and only at the point of excavation and placement. The Project requires fencing and signage to be placed for the Applicant to protect the public from construction work. The established fencing will help control public access around the work site, while the City of Newport Beach lifeguards will continuously monitor access points through the site.

The proposed 49-year lease term is the maximum the Commission's regulations allow. Staff often recommend shorter lease terms to allow the Commission to reassess best management practices and a proposed use's environmental context and impacts considering sea level rise and climate change. In this case, the proposed Project only includes work under Stage 13; additional dredging and beach nourishment activities would require additional environmental review and an amendment of the lease. The 49-year lease term allows the Applicant flexibility should funding not be available for future stages when needed. Therefore, staff recommends a 49-year lease term.

As detailed in the USACE Supplemental Environmental Assessment (SEA) and Finding of No Significant Impact (FONSI), Stage 13 of the Project is not expected to have any significant environmental impacts. And, as discussed in the Climate Change section, while increased sea level rise may impact the efficacy of the Project, the Project would not exacerbate sea level rise or other climate change impacts. Conversely, the Project's objective is to lessen those sea level rise and previously constructed flood control measures' impacts on California's public beaches and improve public access to California's beaches.

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 lease area is located in the Pacific Ocean in a tidally influenced site vulnerable to flooding at current sea levels and at a higher risk of flood exposure given projected scenarios of sea level rise.

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 Los Angeles tide gauge was used for the projected sea level rise scenario for the lease area as listed in Table 1.

Year	Projection (feet)
2030	0.7
2040	1.1
2050	1.8
2100	6.6

Table 1. Projected Sea Level Rise for Los Angeles

Source: Table 28, <u>State of California Sea-Level Rise Guidance: 2018 Update</u> Note: Projections are with respect to a 1991 to 2009 baseline.

As stated in <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, drought, and storms (especially when coupled with sea level rise). The combination of these conditions will likely result in increased wave run up, storm surge, and flooding in coastal and near coastal areas. In tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris. Climate change and sea level rise will further influence coastal and riverine areas by changing erosion and sedimentation rates. Beaches, coastal landscapes, and near-coastal riverine areas will be exposed to increased wave force and run up, potentially resulting in greater beach or bank erosion than previously experienced.

Construction of the Los Angeles/Long Beach breakwater system and the Anaheim Bay jetties has altered the local sediment transport processes. Waves reflecting off the Anaheim Bay East Jetty create currents that have induced downcoast erosion. The installation of flood-control structures on the Los Angeles, San Gabriel, and Santa Ana rivers has reduced the total amount of sand that naturally passed through the system from river runoff. The proposed project is required in order to renourish locally sand-starved beaches, which will allow natural sediment transport processes to move sand downcoast while providing adequate protection to shoreline facilities from storm damage. Sand will be dredged from the offshore borrow site and placed on Surfside-Sunset Beach to nourish the beach and act as a feeder for downcoast beaches.

The increase in sea level combined with more frequent and stronger storm events will likely expose the lease area to the effects of climate change. Pursuant to the proposed lease, the Applicant acknowledges that the lease premises and adjacent upland are located in an area that may be subject to the effects of climate change, including sea level rise.

CONCLUSION:

For the reasons stated above, staff believe the issuance of the proposed lease will not substantially impair the public rights to navigation, fishing, or other 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.

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.
- 2. This action is consistent with the "Leading Climate Activism" and "Meeting Evolving Public Trust Needs" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.
- 3. A SEA and a FONSI were prepared and circulated for this project by the United States Army Corps of Engineers. These documents were circulated for public review as broadly as state and local law may require and notice was given, meeting the standards in title 14, California Code of Regulations, section 15072(a). Therefore, pursuant to title 14, California Code of Regulations, sections 15221 and 15225, the staff recommends the use of the federal SEA/FONSI in place of a Negative Declaration.
- 4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon staff's consultation with the persons nominating such lands and through the California Environmental Quality Act (CEQA) review process under title 14, California Code of Regulations, sections 15221 and 15225, it is staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

United States Fish and Wildlife California Coastal Commission Santa Ana Regional Water Quality Control Board

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that the SEA and FONSI, prepared and adopted for this project by the United States Army Corps of Engineers, meet the requirements of CEQA. Therefore, pursuant to title 14, California Code of Regulations, sections 15221 and 15225, adopt such federal documents in place of a negative declaration.

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.

SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

AUTHORIZATION:

Authorize issuance of a General Lease – Public Agency Use to the Applicant beginning June 5, 2023, for a term of 49 years, for the dredging of approximately 1,750,000 cubic yards of sand from the Pacific Ocean from an offshore borrow site; placement of compatible dredged beach fill along a 4,500-foot-long stretch of shoreline in the City of Seal Beach; excavation of 100,000 cubic yards of sand from a borrow site on Newport Beach and placement down shore, under the Surfside – Sunset Beach Nourishment Project; consideration is 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.