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STAFF REPORT: REGULAR CALENDAR

Consistency Determination No.	**CD-0001-24**
Applicant:	United States Army Corps of Engineers
Location:	Channel Islands Harbor, Oxnard and Port Hueneme, Ventura County
Project Description:	Six-year maintenance dredging program for Channel Islands Habor and Port Hueneme Harbor, with 8.25 million cubic yards of dredging, and beach placement at Silver Strand Beach, Hueneme Beach, and a nearshore placement site offshore of Hueneme Beach.
Staff Recommendation:	Conditional Concurrence

SUMMARY OF STAFF RECOMMENDATION

The U.S. Army Corps of Engineers (USACE) has submitted a consistency determination (CD) for the six-year Maintenance Dredging Program for Channel Islands Harbor (CIH) and Port Hueneme Harbor (Port). The dredging is needed to maintain existing navigation channels in the two harbors. At CIH up to 2.5 million cubic yards would be

dredged biennially (every other year), including 500,000 cubic yards from the "sand trap" immediately upcoast of the CIH north jetty. Since sediment buildup at the Port is not as significant, the Port would be dredged less frequently, but up to 250,000 cubic yards of material could be dredged every other year. Both projects would use beach placement of the predominantly sandy material on Silver Strand and Hueneme Beaches. Total dredging would be up to 8.25 million cubic yards over the six-year period.

The Port was initially designed and constructed in 1940, which changed the littoral transport of sand along this section of the coast and resulted in significant erosion of downcoast beaches. CIH was later constructed in 1960 as a means to trap and retain the sand that was being lost. The project is similar to previous USACE dredging and beach placement projects at CIH and the Port. As in these past reviews, the major issue raised by this project is the need to assure the dredging and placement are accomplished in a manner minimizing adverse impacts to habitat resources and public access and recreation. In past reviews, habitat issues of concern were impacts to western snowy plover, California least terns, and grunion, and mitigation measures focused on primarily trying to avoid the March 15 – September 15 period (spanning the bird nesting and grunion run seasons) whenever possible.

More recently, Commission staff learned that although CIH and portions of the sand trap area have been dredged since their construction, a trend of partial dredging over the past couple decades and the resulting consistent accumulation and presence of sand within the landward portion of the sand trap has resulted in the emergence of southern foredune habitat in this area. Southern foredune habitat meets the definition of Environmentally Sensitive Habitat Area (ESHA) per Section 30107.5 of the Coastal Act because this natural community is listed has having a rarity ranking of G2 S2.1[1] by the California Natural Diversity Data Base and it is easily disturbed by human activities such as dredging, trampling, and beach grooming. Additionally, the California least tern and western snowy plover, federally endangered and threatened species respectively, are known to inhabit and nest within this dune complex.

Dredging operations as part of the proposed project could impact up to 5.88 acres of southern foredune habitat. USACE has explored several project alternatives to avoid or minimize impacts to this habitat while also accomplishing its objective of completing maintenance dredging of the sand trap and CIH channels. However, there are no feasible alternatives. As such, USACE proposes measures that would be integrated into the project to minimize adverse impacts as well as the implementation of a restoration plan to create new areas of southern foredune habitat in the immediate area as mitigation. To ensure that mitigation is consistent with the required ratio of 3:1 and to ensure that the mitigation will be successful, **Condition One** would also require USACE

[1] A rarity ranking of G2 S2.1 means that the natural community is imperiled with a high risk of extinction due to restricted range, a few populations or occurrences, very steep declines, very severe threats, or other factors.

to submit a final dune habitat mitigation and monitoring plan to the Executive Director within six months of the Commission's concurrence.

With this condition and the measures included and committed to by USACE in its consistency certification, staff recommends the Commission find the project consistent with all Coastal Act policies except 30240(a). The project is located within an ESHA but is not a "use dependent on the resources" as required under Section 30240(a). However, staff also recommends the Commission find that not allowing the project to proceed would be inconsistent with the coastal access and recreation policies of the Coastal Act because it would prevent benefits from accruing to coastal resources that are inherent in the project and mandated by the policies of the Coastal Act. Those benefits include maximization of existing and future public access. Specifically, the nearly three million cubic yards of sand dredged biennially from the sand traps and harbors and placed on downcoast beaches represent a major fraction of the total littoral sand transport along this stretch of coast. The on-going bypassing of sand, including from the sand trap adjacent to dune ESHA, is necessary for the long-term maintenance of the downdrift beaches and the access and recreation benefits they provide. It should also be noted that some of these beaches also benefit and support some of the same species and habitats within the sand trap area that would be adversely affected by its proposed dredging.

Commission staff therefore recommends the Commission find that the proposed project presents a conflict between the resource-dependent use and habitat protection elements of Section 30240(a) on the one hand, and the mandates of Sections 30210, 30211, 30213, and 30214 on the other. Staff further recommends the Commission resolve this conflict through the conflict resolution policy, Section 30007.5, and that, with the avoidance, minimization and mitigation measures included, authorization of this project represents a resolution of this conflict which is, "on balance, most protective of significant coastal resources."

The staff therefore recommends that the Commission conditionally concur with Consistency Determination CD-0001-24. The standard of review is Chapter 3 of the Coastal Act. The motion to conditionally concur is on **page 5**.

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EXHIBITS

I. FEDERAL AGENCY'S CONSISTENCY DETERMINATION

United States Army Corps of Engineers (USACE) has determined the project is consistent to the maximum extent practicable with the California Coastal Management Program (CCMP).

II. MOTION AND RESOLUTION

Motion:

*I move that the Commission **conditionally concur** with Consistency Determination CD-0001-24 on the grounds that the project described therein would be fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the CCMP.*

Staff recommends a **YES** vote on the forgoing motion. Passage of this motion will result in a concurrence with the determination of consistency, and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution:

*The Commission hereby **conditionally concurs** with Consistency Determination CD-0001-24 on the grounds that the project is fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the CCMP.*

III. CONDITION

1. **Revised Habitat Mitigation and Monitoring Plan.** WITHIN SIX MONTHS OF COMMISSION CONCURRENCE, USACE shall provide a revised final version of the Draft *Hollywood Beach Western Showy Plover Habitat Expansion and Enhancement Plan* (Plan) dated March 2024, for the review and approval of the Executive Director. The revised Plan shall include, but not be limited to the following:

   - A post-project quantification of the permanent adverse impacts to the coastal strand and southern foredune Environmentally Sensitive Habitat Areas (ESHA) as a result of each dredging event and confirmation that the mitigation acreage proposed in the Plan is sufficient to meet the required mitigation ratio for the adverse impacts to ESHA of at least 3:1.
   - A timeline for implementation of the Plan by the end of 2024 and information on how the mitigation ratio(s) could be modified to account for temporal lag in the event that project implementation is significantly delayed.
   - Revised dune expansion/creation and enhancement methods to include the following:
     - Dune recontouring shall only occur in dune areas highly invaded by European beach grass (*Ammophila arenaria*) and highway icelplant

(*Carpobrotus edulis*) such that they have attained abnormal heights. In these areas the focus shall be on achieving a back dune slope of 3:1 or less, as opposed to targeting a height of not more than six feet. Excess sand resulting from dune recontouring will be used in dune expansion.

- Provision of an Integrated Pest Management Plan that describes the steps and details required to eliminate and remove invasive plant species through hand and mechanical removal, horizon flipping in consultation with United States Fish and Wildlife Service, and, if necessary, pesticide (herbicide) application. For areas where hand and mechanical methods are not practical such as where the invasive European grass and highway iceplant are widespread and well established, chemical treatment methods using the appropriate glyphosate herbicide mix with surfactants considered to be the least toxic and persistent herbicides and adjuvants appropriate for the target species, constituting the least environmentally damaging alternative. A California licensed Pest Control Advisor (PCA) must provide written recommendations regarding the appropriate herbicides and adjuvants for the respective circumstances and species. The product registration number(s) should be provided along with a complete description of how they will be used, including criteria and limits for if/when/how (including frequency and total number of applications), precautions that would be taken for sensitive species (e.g., buffers) and potential runoff, and triggers for adaptive management or remedial actions. In no instance shall spray herbicide application occur if wind speeds on site are greater than 5 mph or 48 hours prior to predicted rain. In the event that rain does occur, herbicide application shall not resume again until 72 hours after rain. Herbicide applications during the rainy season shall be timed to avoid rainfall events. For all work involving chemical applications, a PCA or Qualified Licensed Applicator (QLA) must be on site.
- Dead invasive plant material that is not left to decompose in place (e.g. highway iceplant) must be transported to a land fill. No invasive plant material shall be buried in the beach below the waterline.
- Application of erosion control BMPs in areas where invasive species are removed until dune recontouring and planting with native species can take place.
- Dune expansion Plans including maps/exhibits of the proposed expansion area, methods for sand retention (e.g. sand fencing, sterile hay plugs, etc.), plant palette, source of plant material (seeds and seedlings), maintenance activities, signage, public access routes, etc.
- Monitoring program that includes the sampling design (schedule and type of qualitative and quantitative monitoring), a map depicting sampling design elements (e.g. permanent photo points and transects or quadrats), annual and final success criteria based on reference sites or the peer-reviewed literature, and statistical basis for judging success.

- In addition to the six-year final monitoring report, annual monitoring reports shall be submitted to United States Fish and Wildlife Services (USFWS) and the Executive Director for review. Annual monitoring reports shall include: an assessment of dune and western snowy plover habitat conditions and issues such as trash, erosion, invasive vegetation, or pests; a general description of the dune morphologic and vegetation conditions along with photos from permanent photo points strategically located and mapped on an exhibit in the final plan depicting the sampling design; a determination as to whether the dunes have met that annual success criteria; and whether the dunes are expected to meet Year six success criteria.
- Detailed criteria for development and implementation of any adaptive management strategies determined to be necessary if the habitat is not meeting performance standards. Implementation of any adaptive management strategies would require prior review and approval of the Executive Director.
- Removal of the discussion that the performance criteria in the Plan are not obligatory performance metrics.

IV. APPLICABLE LEGAL AUTHORITIES

A. STANDARD OF REVIEW

The standard of review for federal consistency determinations is the policies of Chapter 3 of the Coastal Act and not the Local Coastal Program (LCP) of the affected area. If the LCP has been certified by the Commission and incorporated into the CCMP, it can provide guidance in applying Chapter 3 policies in light of local circumstances. If the LCP has not been incorporated into the CCMP, it cannot be used to guide the Commission's decision, but it can be used as background information. The Port Hueneme LCP and the Port Hueneme Port Master Plan have been certified by the Commission and have been incorporated into the CCMP. The Oxnard and Ventura County LCPs have been certified by the Commission but have not been incorporated into the CCMP.

V. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

The proposed project consists of maintenance dredging of up to a maximum cumulative quantity of 8.25 million cubic yards from Channel Islands Harbor (CIH) and the Port of Hueneme (Port) over the six-year dredging cycle. The dredging is needed to maintain existing navigation channels in the two harbors. Without frequent dredging, sediment would eventually shoal the channels to such an extent that vessels would not be able to navigate safely. In addition, the presence of the harbors interrupts the natural littoral transport of sand, resulting in decreased nourishment and increased erosion of downcoast beaches. The dredging would allow this interrupted and trapped sand to be relocated and used for beneficial placement at adjacent and downcoast beaches.

Port Hueneme

The Port is located in the city of Port Hueneme and is approximately one mile southeast of CIH **(Exhibit 1).** The Port was initially designed and constructed in 1940 as an alternative way to transport the various agricultural products that were grown in the Oxnard Plain to commercial markets, as opposed to the existing network of rail and truck transport. In 1942 the federal government acquired the Port via eminent domain to make it into a Navy base and added military infrastructure. After the end of World War II, the Navy finalized a lease agreement with the Oxnard Harbor District to allow the District to purchase a portion of the Port and use that portion for commercial operations[2]. The Port currently provides critical Navy infrastructure for Naval Base Ventura County (NBVC) and also provides the only commercial industrial deep-water harbor between the Port of Los Angeles and port facilities within San Francisco Bay.

The Port includes two entrance jetties, an Approach Channel, Entrance Channel, Channel A, and a Turning Basin. Sediment buildup at the Port is not as significant as CIH and the Port would be dredged less frequently, with up to 250,000 cubic yards of material dredged every other year. The Approach Channel to the Port would be maintained at -44 feet mean lower low water (MLLW) and the Entrance Channel would be maintained at -40 feet MLLW. Only a portion of the Entrance Channel requires dredging and any additional dredging of the Entrance Channel would require additional sediment analysis to determine whether it would be suitable for placement at nearby deposition sites. Channel A and the Turning Basin would not be dredging as part of this project **(Exhibit 2)**. Maintenance dredging at the Port has occurred regularly since 1975.

Channel Islands Harbor

CIH is located in the city of Oxnard **(Exhibit 1)**. CIH was designed and constructed in 1960 with the detached breakwater and entrance jetties as a way to trap and retain sand being carried downcoast by littoral drift that was otherwise being diverted offshore and into Hueneme Canyon as a result of construction of the Port immediately downcoast. CIH consists of a 2,300-foot-long offshore detached breakwater, entrance jetties, and an entrance channel leading to the harbor interior. The Entrance Channel and Basin is 3,400-feet-long and varies in width from approximately 300 feet at the entrance to 600 feet within the harbor. Maintenance dredging at CIH has been conducted regularly by USACE since the 1960s. CIH is predominantly a recreational and light commercial harbor that also hosts a United States Coast Guard station.

At CIH, up to 2.5 million cubic yards would be dredged biennially (i.e. every other year) from the Entrance Channel, Sand Traps, and the Entrance Basin (Area E) **(Exhibit 2)**. The Entrance Channel (Area A) and Entrance Basin (Area E) would be dredged to a depth of -20 feet MLLW. Sand Traps B, C, and D would be dredged to a depth of -35 feet MLLW, and Sand Trap G (South Approach Channel) would be dredged to a depth of -25 feet MLLW. The inner basin of CIH, Area F, would not be dredged as part of this project.

[2] https://www.portofhueneme.org/about/port-history/#:~:text=The%20idea%20for%20building%20a,the%20channel%20free%20of%20silt.

Dredging Equipment
The proposed dredging would be accomplished by either a hydraulic pipeline dredge or a clamshell dredge.

Hydraulic pipeline dredging would consist of a floating dredge with an attached hydraulic cutterhead used to dredge the sand. The sand slurry would be pumped through a pipeline onto the receiver beach for beach placement. Following pipeline transport, the sand would be uniformly spread over the beach using conventional earth moving equipment. Approximately 10,000 to 40,000 cubic yards of sediment could be piped to the beach per day using a hydraulic dredge. Additional construction equipment typically required to support dredging activities include earth moving equipment and support vessels (i.e. an anchor tender, a pipe tender, tug vessels, and a crew boat).

Clamshell dredging would consist of a crane mounted on a barge outfitted with a clamshell bucket and a scow. Dredged materials are placed into a scow for transport to the Nearshore Placement Site. Approximately 4,000 to 10,000 cubic yards of sediment could be removed and transported to the Nearshore Placement Site per day using a clamshell dredge. Additional construction equipment typically required to support dredging activities include support vessels (i.e. tug vessels and a crew boat).

Deposition
Both projects would place the predominantly sandy dredged material on the beach at Silver Strand and either onshore or nearshore at Hueneme Beach. Dredging and deposition is scheduled to occur during the period of October through mid-March. Silver Strand Beach would receive up to 200,000 cubic yards of material per dredging cycle while Hueneme Beach and the Hueneme nearshore placement site would receive up to 2.5 million cubic yards.

Surface Warfare Engineering Facility (SWEF) Beach
SWEF Beach is located on NBVC adjacent to Silver Strand Beach and the entrance to the Port. Sand originating from Silver Strand Beach is continuously carried downcoast by wind and accumulates in a pile at the southeast end of Silver Strand Beach, adjacent to the perimeter fence of NBVC. During the entire six-year dredging cycle a cumulative total of up to 10,000 cubic yards of this sand could be used to help secure a portion of the dredging discharge pipeline placed along SWEF Beach.

Schedule
Construction and dredging activities (including equipment mobilization, dredging activities, or demobilization) would primarily try to avoid taking place within CIH, on Hollywood Beach, or Silver Strand Beach between March 1st and September 30. Project operations would take place seven days a week, 24 hours a day, but could vary depending on several factors including weather, equipment availability, equipment malfunction, and personnel availability.

B. Other Agency Approvals

United States Fish and Wildlife Service
USACE initiated formal consultation with the United States Fish and Wildlife Service (USFWS) in August 2022 and the USFWS responded with a Biological Opinion on December 12, 2022, in which it found that with implementation of the proposed restoration effort, the project is not likely to jeopardize the continued existence of the California least tern and the western snowy plover. The USFWS Biological Opinion is included in **Exhibit 7**.

National Marine Fisheries Service
In accordance with the 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act, USACE conducted an assessment of Essential Fish Habitat (EFH) for the proposed project. USACE concluded that the proposed project would not result in substantial or adverse impacts to EFH and The National Marine Fisheries Service (NMFS) concurred with USACE's determination on February 29, 2024.

Regional Water Quality Control Board
USACE submitted a request for water quality certification pursuant to Section 401 of the Clean Water Act to the Los Angeles Regional Water Quality Control Board (LARWQCB) on February 9, 2024, which is still processing the certification request.

Tribal Outreach and Consultation
USACE consulted with the State Historic Preservation Officer (SHPO) and on December 23, 2022, USACE received concurrence from the SHPO regarding a finding of no effect on historic properties and a continued "no objection" to the undertaking. Consultation was reinitiated on February 2, 2024, in order to include the cumulative removal of up to approximately 10,000 cubic yards of windblown sand deposits throughout the six-year period from a 30-ft tall pile along the Naval Base Ventura County Port Hueneme fence line that will be used to secure the dredge pipe along SWEF Beach. On March 5, 2024, USACE received concurrence from the SHPO regarding a finding of no effect on historic properties and a continued "no objection" to the undertaking.

USACE carried out Native American consultation with the Barbareño/Ventureño Band of Mission Indians, Coastal Band of the Chumash Nation, Fernandeño Tataviam Band of Mission Indians, Owl Clan Chumash, San Luis Obispo County Chumash Council, Santa Ynez Band of Chumash Mission Indians. USACE did not receive a request for formal consultation from any of the consulting tribes.

Commission staff also conducted outreach to the tribes identified on the Native American Heritage Commission (NAHC) Native American contact list. The tribes contacted include the Barbareno/Ventureno Band of Mission Indians, the Gabrielino/Tongva Nation, the Gabrielino-Tongva Tribe, Chumash Council of Bakersfield, Northern Chumash Tribal Council, Coastal and of the Chumash Nation, San Louis Obispo County Chumash Council, Santa Ynez Band of Chumash Indians, and the Gabrieleno/Tongva San Gabriel Band of Mission Indians. As of the date of this

staff report, Commission staff have not received any responses from the Tribes or requests for formal consultation.

C. Dredging and Marine Resources

Section 30230 of the Coastal Act 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.

Section 30231 of the Coastal Act 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.

Section 30233 of the Coastal Act 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:
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> …
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> (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
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> …
>
> (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems…

USACE proposes to dredge up to 8.25 million cubic yards of sandy material over a six-year period and place suitable material on nearby beaches, from 2024 through 2029. The proposed dredging in these two harbors is necessary to maintain and restore previously dredged navigation channels and also provide nourishment of downcoast beaches to prevent erosion. The use of the proposed sites for dredging and nourishment have previously been authorized by the Commission through the federal consistency process (see CD-4-89, CD-7-89, CD-80-86, CD-43-86, CD-53-84, CD-25-83, CD-12-85, CD-15-90 and CD-52-94).

Section 30233(a) of the Coastal Act imposes a three-part test on dredging and filling projects: (1) the allowable use test; (2) an alternatives test; and (3) a mitigation test. As the Commission found in reviewing the previous dredging cases, USACE maintenance dredging with beach placement of sandy material in these harbors complies with these tests because: (1) maintenance dredging of existing channels is an allowable use under Section 30233(a)(2); (2) when the material is suitable for beach placement, and when habitat and access issues have been adequately addressed there is no less damaging feasible alternative; and (3) with the avoidance, monitoring, and mitigation measures addressing environmentally sensitive habitat and sensitive species that USACE has committed to implement, all feasible mitigation measures have been provided to minimize adverse environmental impacts. The Commission therefore finds the project consistent with Section 30233(a) of the Coastal Act.

Suitability of Dredged Material for Beach Placement

Although suitable sediments from CIH and the Port federal channels have historically been placed in the onshore and nearshore areas of Silver Strand Beach and Hueneme Beach, in preparation for the proposed six-year dredging cycle, USACE prepared a sampling and analysis report in 2023 to collect and analyze samples from 28 locations. The process of collecting samples and the characteristics analyzed are described in the report as follows:

> Vibracore sampling was performed from the 35-foot vessel DW Hood from September 18 to September 22, 2023 to collect subsurface sediment samples at 28 locations throughout Channel Islands Harbor and five locations in Port Hueneme. Note that the project sampling and analysis plan (SAP) called for 11 locations to be sampled in Port Hueneme down to the project overdepth elevations. Insufficient shoaling resulted in only five Approach Channel locations and no Entrance Channel locations to be sampled. Subsamples from each location sampled were combined with like subsamples to form six composite samples in Channel Islands Harbor and one composite sample in Port Hueneme, representing one for each channel/sand trap area. These composite samples were analyzed for total and volatile solids, pH, total organic carbon, oil & grease, petroleum hydrocarbons, ammonia, metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc), butyltins, pyrethroid pesticides, chlorinated pesticides, PCB congeners, phenols, phthalates, and PAH compounds. In addition, samples for grain size analyses and archiving were collected from each individual core prior to compositing. These grain size and

archive samples represented the entire core length, from the top of the core to the 2-foot overdepth elevations. Additional grain size samples were collected from any distinct physical strata.

In addition, USACE sampled the onshore and nearshore areas of Silver Strand Beach and Hueneme Beach to compare receiver beach grain size gradation with data from the dredge footprint sampling cores to determine if dredged material would be compatible with the receiving area.

The results of those analyses concluded that the samples from within the Port Approach Channel and Channel Islands Harbor Areas A, B, C, D, and G are all within the appropriate grain size compatibility envelopes for Silver Strand Beach, Hueneme Beach, and the nearshore area off Hueneme Beach and thus physically suitable to be placed at any of the receiver sites. Portions of CIH Area E could be suitable for placement but would be re-evaluated depending on how much of Area E is ultimately required to be dredged. Chemical analysis of the composite sediment samples concluded that all potential contaminant concentrations were below detection limits or low compared to screening values and no analyte concentrations exceeded National Oceanic and Atmospheric Administration (NOAA) effects range-low (ERL) levels. Arsenic was detected in the composite samples at a concentration of 2.39 milligrams per kilogram (mg/kg) to 4.92 mg/kg in CIH and 2.98 in the Port, which is a slightly higher than the previous concentrations at Silver Strand Beach and Hueneme Beach of 2.14 milligrams per kilogram (mg/kg). The arsenic results were not significantly different than past testing results for maintenance dredging in this area and were generally below the estimated background arsenic concentration of 3.5 mg/kg for soils throughout California. As such, the material proposed to be dredged is physically and chemically suitable for placement at the designated deposition locations.

Alternatives

The majority of the proposed dredging involves work within areas that have historically been dredged for decades and have not been associated with adverse impacts to coastal resources. However, Area D located landward of the breakwater at CIH is directly adjacent to, and contains a portion of, coastal foredune habitat **(Exhibit 3)**. Area D accounts for approximately 500,000 cubic yards of the 2.5 million cubic yards dredged every other year at CIH. As discussed in more detail later in this report, coastal foredune habitat constitutes Environmentally Sensitive Habitat Area (ESHA) pursuant to Section 30107.5 of the Coastal Act. Dredging of the 500,000 cubic yard allotment within Area D would likely result in some amount of slope failure, destabilization and sloughing of coastal foredune habitat, which would result in permanent adverse impacts to the foredune ESHA.

In order to assess the feasibility of avoiding the dredging of 500,000 cubic yards within Area D, and thus avoiding potential adverse impacts to the coastal foredune habitat altogether, Commission staff analyzed the longshore transport of sand in this area of the coast and the function of Area D with regard to the design and function of CIH. Based on the annual volume of sand transport, biennial dredging of Area D is a

necessary component of the sand trap system at CIH and dredging of Area D is also necessary in order to allow the necessary volume of sand to continue downcoast and nourish beaches. Commission staff engineer Jeremy Smith, P.E., found that:

> Natural longshore transport of sand along the coast at this location has been estimated to be in the range of 1 to 1.25 million cubic yards per year with significant amounts of this sediment coming from the Santa Clara River (pers. Communication Joe Ryan, USACE Coastal Engineer). To minimize the disturbance of the harbor infrastructure (jetties, breakwater and navigation channels) from natural sediment flow downcoast, a bypassing program should dredge, and place downcoast, an equivalent amount of sand. The proposed 2.5 million cubic yards of dredging every two years is consistent with the amount of sand needed to keep pace with natural longshore transport at Channel Islands Harbor. This is further evidenced by the overall accretional trends observed upcoast of Channel Islands Harbor over the periods where dredging was less than 2.5 million cubic yards per episode and acute erosional signals observed downcoast when dredging was significantly less than 2 million cubic yards per episode.
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> When the harbor infrastructure was first designed, it included the multiple sand trap areas in the wave shadow of the breakwater and upcoast of the jetty where sand was expected to accumulate relatively quickly as a result of altering the wave environment (**Exhibit 2)**. These sand traps were designed to both facilitate a bypassing program and protect the navigational channels from the formation of dangerous sand bars. These sand traps also included design dredge depths that account for both the expected sand deposition rates and were sited with these depths to avoid impacting structures such as the breakwater and jetties from sloughing of sand. Sand Trap D has a design depth of -35 feet, MLLW along with Sand Trap C, which are both the first areas that sand significantly redeposits following dredge episodes. Because the sand traps were designed as a complete system, fully dredging Sand Trap D will be needed to meet the target bypassing volume of 2.5 million cubic yards.

As such, it is necessary for USACE to dredge the entirety of Area D as part of the biennial dredging program at CIH. However, since dredging of this area would still potentially result in adverse impacts to coastal foredune habitat, USACE analyzed several alternatives that could potentially avoid or minimize these adverse impacts.

The first alternative included increased dredging within the entrance channel and the basins or increased dredging of the other sand areas (Area B and Area C), or deeper dredging within Area D outside of a 200-foot buffer area around the dunes. Deeper dredging in these areas could allow USACE to reach the target volume of dredged material while avoiding adverse impacts to the dunes from dredging within Area D. However, since sand supply moves from north to south in this area and the CIH entrance, breakwaters and sand traps serve to block sand movement to downcoast beaches and areas, USACE determined that Area D contains the majority of sandy material. As such, there is not sufficient sandy material within the design depths in these

other areas to meet the dredge volume targeted to help address coastal erosion downcoast of the harbor entrance. Also, deeper dredging in these other areas has the potential to undermine and adversely impact the stability of the detached breakwater and jetties.

USACE also evaluated whether changing the frequency of dredging from biennially to either annually, or once every six years, would help to avoid or minimize adverse impacts to the dunes. Annual dredging would require dredging within the entire footprint of Area D in order to secure the necessary volume of sediment for nourishment of downcoast beaches. Thus, this more frequent dredging would not be able to avoid the potential adverse impacts to dunes. Dredging once every six years would result in unacceptable shoaling within CIH which would result in navigational hazards for vessels as well as significant erosion of downcoast beaches due to the prolonged lack of beach nourishment.

Lastly, USACE analyzed whether additional sandy material could be harvested from further upcoast at Hollywood Beach or from a borrow site located offshore of Port Hueneme. In the case of harvesting sand from Hollywood Beach, USACE found this alternative would be infeasible for two reasons. First, the detached breakwater at the mouth of CIH protects the dredging barge from ocean waves and weather. Harvesting sand from upcoast along Hollywood Beach outside of the protection provided by the breakwater would leave the barge exposed to potentially hazardous conditions from wind and waves. Second, borrowing sand from this location upcoast would narrow the sandy beach and lower the beach elevation which could expose homes along Hollywood Beach to coastal hazards and sea level rise. In the case of the offshore borrow site, USACE found that this option could help to make up any deficits in littoral sand, but it would mean that accumulated sand from Area D would still migrate into the CIH navigation channels, thus posing a threat to navigation.

As such, there is no feasible less environmentally damaging alternative to the proposed dredging, including dredging the entirety of Area D.

Adverse Impacts and Mitigation
In past reviews of six-year dredging programs, the primary marine and wildlife habitat issues of concern were the need to protect California least terns (*Sterna antillarum browni*), western snowy plover (*Charadrinus nivosus nivosus*), grunions (*Leuresthes tenuis*), essential fish habitat (EFH), and marine water quality.

Western Snowy Plover and California Least Tern
Western snowy plover is federally-listed as a threatened species under the Endangered Species Act (ESA) and California least tern are listed as endangered. Western snowy plover occupy open beach and foredune habitats for breeding, nesting and foraging for invertebrates, such as insects and crustaceans, on the sand, in stranded seaweed on the beach, and from low-growing plants. California least tern forage in aquatic habitats where small bait fish are abundant, including shallow estuaries, lagoons, coastal ponds, or nearshore waters. Threats to western snowy plover include habitat loss or

degradation from human disturbance and predation. For California least tern, major threats include habitat loss and degradation, urban development, and predation.

The 2022 Biological Opinion prepared by the United States Fish and Wildlife Service describes the area of the proposed dredging and its use by western snowy plover and California least tern as follows:

> Hollywood Beach is located in the city of Oxnard and is adjacent to Channel Islands Harbor. Harbor structural features consist of a detached breakwater, entrance jetties, and an entrance channel leading to the harbor interior. The offshore detached breakwater and entrance jetties form a sand trap. A series of sand dunes ranging from 2 to 7 feet tall are located on northeast border of the sand trap. The sand dunes, the harbor jetty, and the shoreline leave the sand trap area relatively isolated from human activity compared to the rest of the beach. This makes the sand trap area proposed for dredging an ideal breeding location for the California least tern and western snowy plover.
> …
> The action area is identified in the recovery plan, is designated breeding habitat, and [California least] terns have historically bred on Hollywood Beach. Nests were typically discovered next to or within the action area when Corps did not dredge in the previous winter, which is inclusive of the only preferred habitat on the beach…
> …
> The action area is in western snowy plover Recovery Unit 5 of the recovery plan and is designated breeding and over-wintering habitat. Western snowy plovers have attempted to breed on Hollywood Beach each year between 2003-2022 (Barringer 2021, p. 10, Hartley and Barringer 2022, p. 6). Nests are typically discovered next to or within the action area, which is inclusive of the only preferred habitat on the beach…
> …

Proposed dredging activities could result in western snowy plovers and least terns expending energy to move out away or take flight away from disturbances which would result in reduced foraging time and a depletion of energy reserves. Also, dredging activities have the potential to disrupt breeding. Finally, western snowy plovers and least terns could be injured or killed as a result of any heavy equipment that is used.

In order to avoid and minimize potential adverse impacts to western snowy plovers and least terns due to dredging activities, USACE would primarily try to avoid dredging during the shorebird nesting season (March 1 through September 30). If dredging must take place during the nesting season USACE would implement the following measures:

- Should dredging extend past March 1, USACE will coordinate with federal and state agencies concerning possible impacts to western snowy plover and California least tern;
- The limits of the dredging and placement activities shall be clearly marked to prevent heavy equipment from entering areas beyond the smallest footprint needed to complete the project;

- Vehicles and all dredging activities shall remain within the defined activity area and use only designated access points and staging areas;
- The work area shall be kept clean to avoid attracting shorebird predators. All food and trash shall be disposed of in closed containers and removed from the project site;
- No pets shall be allowed on the construction site;
- No dredging activities shall be conducted specifically within the sand trap area (adjacent to Hollywood Beach) during the shorebird/seabird nesting season (March 1 – September 30);
- Prior to vehicles and equipment entering Hollywood Beach, a qualified western snowy plover monitor will survey the area. At all times a qualified western snowy plover monitor will walk ahead of the vehicle(s) and equipment to assure that all western snowy plovers are out of harm's way before the vehicle(s) or equipment can proceed on Hollywood Beach. Vehicles and equipment access to Hollywood Beach will be limited to safety signage installation, repairs, and removal;
- Prior to vehicles and/or heavy equipment operation on Silver Strand Beach or Port Hueneme Naval Base SWEF Beach a qualified western snowy plover monitor will survey the beach, the monitor will remain on site while operations involving vehicles and/or heavy equipment is occurring to ensure impacts to western snowy plover are avoided, unless USACE biologist in coordination with the USFWS has determined there is no risk to western snowy plover. If western snowy plover are present USACE Biologist will walk in front of the vehicles and/or equipment, ensuring the path taken by vehicles/equipment is one that avoids impacts to the western snowy plover.
- If dredge material placement activities take place on Silver Strand and Hueneme Beaches during the nesting season (March 1 through September 30), measures described in the Biological Monitoring Contingency Plan would be implemented.

California Grunion

The California Grunion (*Leuresthes tenuis*) is a small fish in the silversides family and is extremely unusual among fish in its spawning behavior. The grunion spawn on the sandy beaches in the project vicinity immediately following high tides. The eggs are incubated in the sand until the following series of high tide conditions, approximately 10 to 15 days, when the eggs hatch and are washed into the sea. California grunion is a species of concern due to its unique spawning behavior. The project could adversely affect grunion by smothering adult fish during runs or by smothering the developing eggs of the fish by covering them with sand during deposition of sandy material. Also, heavy machinery has the potential to crush grunion and incubating eggs. To avoid adverse impacts to grunion, project activities would be scheduled to primarily avoid dredging between March 1st and August 31st, which would be outside of the grunion spawning season. Additionally, to avoid any potential adverse impacts to grunion that may be in the area outside of the spawning season, beach placement would be limited to a diked, single-point displacement site to minimize turbidity and grunion smothering.

Water Quality

Potential impacts of dredging on marine water quality include temporarily increased turbidity, reductions in dissolved oxygen (DO), and potential re-suspension, remobilization, and redistribution of any chemical contaminants present in the dredged sediments. While these impacts are not expected to occur as a result of the proposed dredging activities, in large part due to predominantly sandy dredged sediments, USACE has routinely monitored past dredging operations at this location and has not identified any significant or lingering water quality issues. As such, ambient water quality is expected to return to pre-dredge conditions shortly after each dredging episode.

To avoid potential water quality impacts associated with the proposed dredging and beach placement activities, the biological, chemical and physical characteristics of the sediments were previously evaluated through the sediment sample analyses described above and found to be suitable for placement at Silver Strand and Port Hueneme Beaches. Additionally, USACE would implement a water quality monitoring plan that would include weekly analysis of salinity, pH, temperature, DO, turbidity, and light transmissivity. Dredging would be modified as necessary to ensure that these water quality compliance thresholds are maintained.

The dredging project would require the use of heavy-duty equipment and vessels operating within the marine environment and on adjacent beaches. Accidental spills of fuel, lubricants, or hydraulic fluid from equipment and vessels being used could also occur and the release of these materials into the marine environment and beaches could lead to adverse impacts to water quality and potential mortality of marine organisms. In response USACE has included a list of mitigation measures that would minimize the potential for hazardous materials to make their way into the environment:

- The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters;
- The dredge contractor will be required to have in place a Spill Prevention and Cleanup Plan that includes measures to prevent spills and to cleanup any spills that could occur;

Coastal Strand and Southern Foredune ESHA

As discussed previously and in more detail in Section D below, a portion of Area D abuts a southern foredune system that includes coastal strand or incipient dunes which Commission staff have identified as ESHA **(Exhibit 3)**. According to USACE the maximum potential extent of adverse impacts to dunes could be up to 5.88 acres **(Exhibit 3)** and since there are no feasible alternatives to dredging within Area D the project would provide mitigation for the adverse impacts to the coastal foredunes. USACE has prepared a draft restoration plan that would provide up to 13.47 acres of dune habitat restoration in the immediate area of Hollywood Beach **(Exhibit 6)**. There are several outstanding questions about the design and operation of the restoration plan that have not been resolved as of the date of this staff report and this information is necessary in order for Commission staff to analyze whether the proposed restoration would be successful. **Condition One,** in part, would require USACE to provide a final version of the plan required that restoration achieves a ratio of at least 3:1. In addition,

Condition One would require the plan to include the necessary information and to submit it for the review and approval of the Executive Director within six months of the Commission's concurrence with the CD.

Conclusion
With these measures, the Commission concludes that the project is consistent with the marine resources policies of the Coastal Act because it: (1) is an allowable use under and otherwise complies with Section 30233(a); (2) there is no less damaging feasible alternative; and (3) contains monitoring and mitigation measures adequate to protect marine resources and ESHA. The Commission therefore finds the proposed project consistent with Sections 30230, 30231, and 30233 of the Coastal Act.

D. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

Section 30240 of the Coastal Act 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.

Section 30107.5 of the Coastal Act Defines Environmentally Sensitive areas as:

> "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.

Environmentally Sensitive Habitat Areas (ESHA) are areas 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. Coastal Act Section 30240 subdivision (a) states that ESHA shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Coastal Act Section 30240 subdivision (b) states that development in areas adjacent to ESHA and parks and recreation areas shall not degrade those areas or be incompatible with their continued presence.

USACE has conducted maintenance dredging of CIH and the Port since the 1960's. More recently, Commission staff learned that although CIH and portions of the sand trap area have been dredged since their construction, a trend of partial dredging over the past couple decades and the resulting consistent accumulation and presence of sand within the landward portion of the sand trap has resulted in the emergence of southern

foredune habitat in this area. The area of Hollywood Beach located immediately upcoast of CIH and the sand trap is described by USACE in the CD submittal as follows:

> The beach is generally relatively stable along its northern end with a predominantly southern littoral transport. In the lee of the breakwater, sand piles up due to loss of wave energy and creates a large protruding shoal that extends outward from the beach into a sand trap designed into the channel configuration to capture littoral sand, reducing the influx of sand into the entrance channel of the harbor.
>
> The sand trap is regularly dredged to remove the accumulated sand as part of the navigational channel maintenance operations and the sand is passed to the south beyond the entrance to Port Hueneme in order to allow sand to continue to migrate down the shoreline. This creates a temporary deficit of sand behind the breakwater resulting in beach and dune erosion in proximity to the dredge footprint until beach slopes stabilize. Once this occurs, erosion ceases and littoral transport from the north reverts the southern beach behind the breakwater to a zone of accretion, building back beach width and height. Within a short period of months, the northernmost portion of the sand trap fills and begins to develop a protruding shoal of sand, that blocks sand infill along the southern edge of the sand trap adjacent to the north jetty. At the upper portions of this newly developed sand spit, dunes begin to develop where there is beach debris or seedling plant establishment. The dunes on the upper margin of the active beach are generally sparse, low in elevation, and characterized by widely scattered plants.
>
> Beach rebuilding and dune development at the beach edge of the sand trap is a consistent and predictable process in response to sand transport and maintenance dredge cycles. However, the rate and extent of dune development is likely influenced by many factors that are less predictable. First, dunes generally begin to form against anchoring windbreaks. This often takes the form of woody debris derived most substantially from discharges from the Santa Clara River. The extent of debris discharge varies and thus the amount of dune generating windbreaks varies over time. The second highly variable factor influencing dune development in this area is the seedling establishment rate. This is influenced by the amount of seed produced, the seasonal rainfall conditions, and the extent of seed spread to the west of the existing dunes. A final unpredictable factor driving the rate of dune development is the extent of pedestrian and vehicle traffic within the beach area that disrupts early dune development.
> …
>
> The most variable dunes present on the beach are the foredunes that are intermittently lost to erosion from wave run-up that is facilitated by maintenance dredging. These dunes are therefore low in stature, sparsely vegetated, and intermixed with the more open beach environment. Where dunes are stable within the back of the dune complex, they are tall, ranging up to over 10 feet in height and are stabilized by predominantly invasive species including European beachgrass (*Ammophila arenaria*) and hottentot fig (*Carpobrotus edulis*).

> While the stable back dune habitat is not suited to supporting use by western snowy plover, it does reduce vehicular and pedestrian traffic seaward of the dune complex. This barrier effect allows for the development of foredune habitat that, when coupled with the beach, is suitable habitat for nesting, foraging, and roosting by western snowy plovers and California least tern.

The dunes within and adjacent to the Area D sand trap are considered ESHA by the Commission and include incipient dunes or coastal strand and southern foredunes that are named in the Holland natural community classification system by the California Department of Fish and Wildlife and are listed as “imperiled” with a rarity ranking of G2 S2.1 by the California Natural Diversity Data Base (CNNDB). Additionally, two federally listed species, California least tern and western snowy plover, are known to inhabit and nest within this dune complex.

These dunes are a remnant of a more widespread system that historically occurred along parts of the Ventura County coastline and elsewhere in Southern California. California dune ecosystems have suffered a disproportionately high amount of human impact because the coast is a highly desirable area for residential settlements, industry, tourism, and recreation. As such, undisturbed coastal dunes are becoming more rare in California. Statewide, coastal dunes have been reduced to less than 25% of the area they originally occupied. The dunes that remain tend to reflect development impacts including non-native species invasion, erosion due to off-road vehicles and trampling, pollution, and loss of natural morphology due to destruction of vegetation. In spite of these impacts, many remaining dune communities continue to support an array of native plants and animals uniquely adapted to this transition zone between land and sea. In addition to their habitat and aesthetic values, dune ecosystems are recognized for providing important protection during storm events. Dunes provide a physical barrier against storm waves, reducing the risk of flooding for the natural and anthropogenic features behind them. Dunes are a dynamic buffer; eroding or growing as they are shaped by the seasonal dynamics of storms, wind, and wave action. The southern foredune habitat within and adjacent to Area D meets the definition of ESHA pursuant to Section 30107.5.

Section 30240 Analysis

Section 30240 of the Coastal Act limits the types of uses allowed within designated ESHA to those that are dependent on ESHA to function. These include development such as habitat restoration or passive recreation, including trails. Unlike these two examples, maintenance dredging of a sand trap does not depend on ESHA to function.

The majority of the proposed dredging involves work within areas that have been dredged since the 1960s and have not been associated with adverse impacts to coastal resources in the Commission’s reviews of prior consistency determinations. However, over the past couple decades, there has been a trend of partial dredging and resulting consistent accumulation and presence of sand within the landward portion of the sand trap. In 2022 USACE submitted a negative determination (ND-0042-22) for

maintenance dredging of an area within the Area D of the sand trap that had not been dredged for many years pursuant to the previously approved six-year dredging cycles. That area is located landward of the breakwater at CIH and is directly adjacent to, and contains a portion of, coastal foredune habitat **(Exhibit 3)** that was able to establish, in part, due to the absence of consistent dredging in the most landward portions of the Area D sand trap. Area D accounts for approximately 500,000 cubic yards of the 2.5 million cubic yard, biennial dredging design volume at CIH. In 2022, dredging of the full 500,000 cubic yard allotment within Area D would have resulted in some amount of slope failure, destabilization and sloughing of coastal foredune habitat, which would have resulted in permanent adverse impacts to the foredune ESHA.

In order to avoid adverse impacts to the dunes within Area D as part of ND-0042-22, USACE included a setback between 150 and 160 feet from the coastal dunes based on an anticipated 3:1 slope failure and proposed 35-foot dredge depth and +10 foot beach elevation. In addition, USACE implemented measures including: dredging at the seaward end of Area D and only progressing landward as necessary until the target dredge material volume is reached; once dredging progressed within 200 feet of the dunes USACE began monitoring to ensure that dredging would not encroach into the buffer area; and USACE committed to ceasing dredging operations once the target volume was reached in order to avoid unnecessary slope failure.

USACE was able to effectively avoid adverse impacts to the dunes during the 2022 dredging event with implementation of these mitigation measures. However, since the proposed project in this CD is a request for a new six-year maintenance dredging cycle to include up to 8.25 million cubic yards, USACE has stated it is necessary to have authorization to dredge the entirety of the Area D sand trap. The CD submittal also discussed how the dredging of Area D and placement of suitable material on beaches would support coastal foredune habitat located downcoast. In particular, California least tern and western snowy plover are known to nest and brood at Ormond Beach[3], so the dredging and placement of material as part of this project would benefit those species at Ormond Beach.

In order to evaluate the feasibility of avoiding the dredging of 500,000 cubic yards within Area D, and thus avoiding adverse impacts to the coastal foredune habitat altogether, Commission staff analyzed the longshore transport of sand in this area of the coast and the function of Area D with regard to the design and function of CIH. As discussed more fully in Section C, above, based on the annual volume of sand transport, biennial dredging of Area D is necessary in order to allow the necessary volume of sand to continue downcoast and nourish beaches. Additionally, USACE analyzed multiple alternatives to dredging within Area D, none of which were determined to be feasible. As such, there are no environmentally superior alternatives to the proposed dredging, including dredging the entirety of Area D.

[3] https://documents.coastal.ca.gov/reports/2023/5/F13a/F13a-5-2023-report.pdf

As illustrated in **Exhibit 3,** the most landward portion of Area D of the dredging template at Channel Islands Harbor extends into a portion of the dune complex. Dredging within Area D would target a depth of -35 feet Mean Lower Low Water (MLLW). In addition to directly dredging within the footprint of the dunes, dredging to the target depth would create a scarp that would be susceptible to sloughing and erosion at a slope of approximately 3:1. Although dredging would only slightly encroach into the dune complex, USACE assumed a worst-case scenario when estimating that the entire dune complex of 5.88 acres would be adversely impacted. USACE calculated this area by applying a 200-foot buffer to the landward boundary of Area D and assumed that any dune habitat located within that 200-foot buffer would be adversely impacted. To mitigate for these adverse impacts, USACE has prepared a draft restoration plan **(Exhibit 6)** that would provide up to 13.47 acres of dune habitat creation in the nearby area of Hollywood Beach outside of the project limits. USACE confirmed that the funds for the restoration plan were included in their Fiscal Year 2025 budget, meaning the funding will be sent to USACE to begin implementation of the project as early as October 2024.

The Commission has historically required a mitigation ratio of 3:1 for adverse impacts to ESHA as a means of accounting for the temporal losses of ecosystem functions and because of the significant uncertainty of created or restored habitats providing the functions of undisturbed natural systems. Additionally, many mitigation projects never successfully mimic the natural systems they are intended to replace[4]. Considering this precedent, the ratio of 2.3:1 proposed by USACE would appear to be insufficient. However, it is likely that the 200-foot impact radius that is being applied by USACE is overly-conservative and that the actual impacts would be less than the worst-case estimate made by USACE. In that instance, less than 5.88 acres of dunes would be adversely impacted and the 13.47 acres of restoration being proposed by the USACE could be sufficient to meet the 3:1 ratio required by the Commission. To ensure that the final adverse impacts from the project are mitigated for at a ratio of at least 3:1, **Condition One** would require USACE to submit post-dredging reports to summarize the total amount of material dredged from within Area D and the resulting adverse impacts to dunes. To ensure that mitigation is consistent with the required ratio of 3:1 and to ensure that the mitigation will be successful, **Condition One** would also require USACE to submit a final restoration plan to the Executive Director within six months of the Commission's concurrence with the CD.

Avoidance, Minimization and Monitoring Measures

The second part of Section 30240 requires that development in areas adjacent to ESHA shall not degrade those areas or be incompatible with their continued presence. The coastal foredune ESHA and adjacent beaches at CIH are used or inhabited by several sensitive species including Western snowy plover and California least tern. USACE, through consultation with USFWS, has incorporated multiple mitigation measures to ensure that dredging activities avoid or minimize impacts to these sensitive species to

[4] Dixon, J. December 10, 2018. Rationale for mitigation ratios. From Dixon 12/10/2018 Mitigation for Wetland Impacts aling the Eureka-Arcata Highway 101 Corridor.

the maximum extent practicable. These measures include primarily trying to avoid dredging between March 1st and September 30th in order to avoid the nesting seasons for western snowy plover and California least tern. Should dredging need to extend beyond March 1st, USACE would coordinate with federal and state agencies to avoid and minimize possible impacts to sensitive species. Monitors would also be onsite during project activities to prevent vehicles and equipment from impacting sensitive species.

For future dredging events that would take place as part of this six-year cycle, USACE has stated that it may not dredge all of Area D depending on the availability of project funds and depending on when it reaches the target volume of 2.5 million cubic yards of material within CIH. Also, USACE committed to sequence the dredging at CIH to prioritize dredging within Area D last, so that once the target volume of dredged material is reached, dredging would cease. This project sequencing is intended to ensure that dredging within Area D and the resulting adverse impacts to dunes would be minimized to the extent possible.

Other measures include clearly demarcating the limits of dredging and monitoring vehicles and all dredging activities to ensure that the project does not expand beyond the approved dredging template, thereby avoiding additional possible impacts to adjacent ESHA. To prevent vehicles and other equipment from releasing oil, lubricants, or other hazardous substances from being released within, or migrating into, ESHA the contractor would be required to actively survey construction activities and implement a Spill Prevention and Cleanup Plan in the event that any spills occur.

Conclusion

The Commission agrees with USACE that the project has been designed in a manner rendering it the least environmentally damaging feasible alternative. With the above measures, the Commission finds that the project would, in the long-term, be compatible with the continuance of ESHA. Nevertheless, the project remains inconsistent with Section 30240, because it is not a “use dependent on” ESHA. Therefore, the only way the Commission could find that the project consistent with the enforceable policies of the CCMP and concur with this consistency determination would be if it applies the “conflict resolution” provision in Section 30007.5 and finds the project, on balance, is the most protective of significant coastal resources notwithstanding the project’s inconsistency with “use dependent” requirement in Section 30240.

As discussed in Section E of this report, not allowing the project to proceed would be inconsistent with the public access, recreation, commercial fishing, and recreational boating policies of the Coastal Act, because it would prevent benefits from accruing to coastal resources that are inherent in the project and mandated by the policies of the Coastal Act. Those benefits include the maximization of existing and future public coastal access, and protecting commercial fishing and recreational boating. Thus, the project creates a conflict between the allowable use test of the ESHA policy of the Coastal Act (Section 30240) on the one hand, and public access, recreation, commercial fishing, and recreational boating policies of the Coastal Act (Sections

30210, 30211, 30213, 30214, 30220, 30234, and 30234.5.) on the other. In the concluding section of this report (Section F), further analysis is provided concerning the resolution of these conflicts.

E. PUBLIC ACCESS, RECREATION AND FISHING

Coastal Act Section 30210 of the Coastal Act 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.

Section 30211 of the Coastal Act 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.

Section 30213 of the Coastal Act states (in relevant part):

> Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred…

Section 30214 of the Coastal Act 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…

Section 30220 of the Coastal Act states (in relevant part):

> Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30234 of the Coastal Act states (in relevant part):

> Facilities serving the commercial fishing and recreational boating industries shall be protected...

Section 30234.5 of the Coastal Act states:

> The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

Sections 30210, 30211, 30213, 30214, and 30220 of the Coastal Act provide for the maximization of public access and recreation opportunities and the protection of recreational (and other) boating facilities. Sections 30234 and 30234.5 of the Coastal Act require the protection of commercial fishing and recreational boating.

The federal navigation channels within the Harbor and the Port are subject to continual infill of sand from longitudinal littoral processes, which, on average, transport sand from northwest to southeast along the Ventura County coastline. Without dredging, sediment would continue to shoal the channels and decrease the depth of navigational waters such that the various vessels, including recreational boating and commercial fishing vessels, operating within the Harbor and the Port would be unable to safely navigate. As such, by maintaining safe navigation for vessels of all types, the proposed project would protect the water-oriented commercial fishing and recreational boating activities at both the Harbor and the Port.

As described previously, construction of the Port in 1940 formed nearly a complete barrier to littoral sand transport, which would typically deposit sand on Hueneme Beach and other downcoast beaches. In order to create a sand trap to collect sand for bypassing and placement on these beaches, CIH was constructed in 1960. However, construction of CIH also formed a barrier to littoral sand transport, which would typically deposit sand on Silver Strand Beach. As such, USACE began implementing the biennial Sand Bypassing Program and began dredging at CIH and the Port in order to reestablish the supply sand to Silver Strand and Hueneme Beaches and areas downcoast.

Silver Strand and Hueneme Beaches are both popular beaches in this section of the Ventura County coast and the volume and profile of both beaches relies heavily upon the deposition of sand from USACE dredging activities. USACE provided several aerial photographs of the area documenting beach conditions prior to, during, and following periods of reduced dredging and sand deposition. When smaller volumes of sand are bypassed, the beaches erode quickly. Pursuant to USACE's analysis, without dredging and deposition, Hueneme Beach could erode all the way to East Surfside Drive in a matter of two to four years. This dependency on deposition of sandy material is similarly reflected in Commission staff engineer Jeremy Smith's analysis in which he found that accretional trends upcoast of CIH were observed during periods when dredging was less than 2.5 million cubic yards per episode, and erosional signals were observed downcoast when dredging was significantly less than 2 million cubic yards per episode. As such, under the present, heavily-modified conditions along this stretch of coast, the proposed dredging and deposition of suitable beach material is necessary to maintain the beaches at Silver Strand and Hueneme Beaches and thus to sustain the access and recreation enjoyed by the public at these locations.

Finally, Sections 30210, 30211, and 30214 require new development to take into the account the need to regulate access. Access and recreation within the Harbor and at beaches is most popular during the summer months of June through August when children are out of school and the weather is typically best for recreating outside. Dredging activities require the use of heavy-duty equipment including a dredging barge as well as construction equipment to lay the pipes across the beach that will carry dredged material to the deposition sites. The presence and operation of this equipment is a potential safety hazard for beach goers. Additionally, the project would require the use of dredging barges and support vessels within and around the areas of the entrances to the Harbor and the Port. The presence and movement of these dredging barges has the potential to disrupt the movement of commercial and recreational vessels.

The project implementation would not impede recreational boating, fishing, or whale watching as public access to CIH would remain unaffected to the extent practicable. Navigational impacts would be minimized during dredging by issuing a Notice to Mariners and properly marking the immediate dredging area so that surfers, kayakers, and vessel operators would be able to safely avoid the immediate project area. Access at select locations within Silver Strand and Hueneme Beaches would be temporarily restricted while the contractor mobilizes and demobilizes and while placing the dredged material. These restrictions are necessary to ensure public safety. However, the restrictions would be temporary, would be limited to a small area of the total available beach and dredging operations would primarily avoid the busy summer months of June through August.

Therefore, while some temporary access and recreation impacts would occur, such as public use restrictions within the dredging area and the immediate sandy material placement area, and while the pipeline across the beaches would to a minor degree diminish recreation, these short-term recreational impacts have been minimized. Overall, the project would improve access and recreation opportunities.

The Commission therefore finds the project consistent with the public access and recreation policies (Sections 30210, 30211, 30213, 30214, 30220, 30234, 30234.5) of the Coastal Act.

F. Conflict Between Coastal Act Policies

As discussed in Section D above, the proposed project is inconsistent with the requirement of Section 30240(a) of the Coastal Act, which limits uses in ESHA to uses “dependent upon the resources.” Also as discussed in Section E above, to not authorize the project would conflict with several Coastal Act policies. In these types of situations, the Commission relies on the Legislative direction provided in Sections 30007.5 and 30200(b), which acknowledge that conflicts can occur between one or more Coastal Act policies, and if conflicts do occur, how they should be resolved. These policies provide:

Section 30200(b) of the Coastal Act states:

Where the commission or any local government in implementing the provisions of this division identifies a conflict between the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.

Section 30007.5 of the Coastal Act states:

The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner that on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.

The Commission has developed a seven-part test it uses as assistance in determining whether a conflict between policies has occurred, and if so, how it can be resolved "in a manner which on balance is the most protective of significant coastal resources." The Commission has summarized these seven steps as follows:

1) The project, as proposed, is inconsistent with at least one Chapter 3 policy;
2) The project, if denied or modified to eliminate the inconsistency, would affect some coastal resource(s) in a manner inconsistent with at least one other Chapter 3 policy that affirmatively requires protection or enhancement of that resource(s);
3) The project, if approved, would be fully consistent with the policy that affirmatively mandates resource protection or enhancement;
4) The project, if approved, would result in tangible resource enhancement over existing conditions;
5) The benefits of the project are not independently required by some other body of law;
6) The benefits of the project must result from the main purpose of the project, rather than from an ancillary component appended to the project to "create a conflict"; and,
7) There are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.

Each of the above steps is explained in greater detail below, followed by how each applies to the proposed project:

1) The project, as proposed, is inconsistent with at least one Chapter 3 policy:

For the Commission to apply Section 30007.5, a proposed project must be inconsistent with an applicable Chapter 3 policy. As discussed in Section D above, the proposed

maintenance dredging project would occur within and adjacent to an area of coastal foredune ESHA which is not a “resource-dependent” use of ESHA and is therefore inconsistent with Section 30240(a).

2) **The project, if denied or modified to eliminate the inconsistency, would affect coastal resources in a manner inconsistent with at least one other Chapter 3 policy that affirmatively requires protection or enhancement of those resources:**

A true conflict between Chapter 3 policies arises when a proposed project is inconsistent with one or more policies, but denial or modification of the project would also be inconsistent with at least one other Chapter 3 policy. Further, the inconsistency that would be caused by denial or modification must be with a policy that affirmatively mandates protection or enhancement of certain coastal resources.

A Commission objection to the proposed maintenance dredging would result in adverse coastal resource effects, including the loss of significant lower cost public coastal access and recreation opportunities. Silver Strand and Hueneme Beaches are both popular beaches in this section of the Ventura County coast and the volume and profile of both beaches rely heavily upon the deposition of material from USACE dredging activities. If the full maintenance dredging – including the Area D sand trap – were not allowed, these beaches would not receive the amount of sand nourishment from upcoast needed to maintain the beaches, and they would eventually lose significant amounts of sand as a result of the operation of the littoral cell in this section of the coast, and via losses to Hueneme Canyon. This loss of sand would adversely impact the public’s ability to access and recreate at these beaches. As such, implementation of the project would protect the recreational uses at Silver Strand and Hueneme Beaches.

Therefore, the Commission finds that the project cannot be modified to avoid the inconsistency, and that to object to the project would be inconsistent with the coastal access and recreation policies of the Coastal Act because it would prevent benefits from accruing to coastal resources that are inherent in the project purpose and mandated by the policies of the Coastal Act. Those benefits include the maximization of existing and future public access.

3) **The project, if approved, would be fully consistent with the policy that affirmatively mandates resource protection or enhancement:**

For denial of (or objection to) a project to be inconsistent with a Chapter 3 policy, the proposed project would have to protect or enhance the resource values for which the applicable Coastal Act policy includes an affirmative mandate. That is, if denial of (or objection to) a project would conflict with an affirmatively mandated Coastal Act policy, approval of the project would have to conform to that policy. If the Commission were to interpret this conflict resolution provision otherwise, then any proposal, no matter how inconsistent with Chapter 3, which offered a slight incremental improvement over existing conditions relevant to a single policy could result in a conflict that would allow

the use of Section 30007.5. The Commission concludes that the conflict resolution provisions were not intended to apply to such minor incremental improvements.

As discussed previously in Step 2 above, the proposed project would protect against significant adverse effects to recreational boating, fishing, public access, recreation that would occur without the project implementation, and is therefore fully consistent with Coastal Act Sections 30210, 30211, 30213, and 30214.

4) **The project, if approved, would result in tangible resource enhancement over existing conditions:**

This aspect of the conflict between policies may be looked at from two perspectives – either approval of (or concurrence with) the project would result in improved conditions for a coastal resource subject to an affirmative mandate, or denial or modification of the project would result in the degradation of that resource. As discussed in Step 2 above, authorization of the proposed maintenance dredging would protect public access and recreation through the necessary provision of sand to Silver Strand and Hueneme Beaches.

5) **The benefits of the project are not independently required by some other body of law:**

For benefits of a project to yield a conflict, those benefits that would cause objection to the project to be inconsistent with a Chapter 3 policy cannot be those that the project proponent is already being required to provide pursuant to another agency's directive or under another body of law. In other words, if the benefits would be provided regardless of the Commission's action on the proposed project, the project proponent cannot seek authorization of an otherwise un-authorizable project on the basis that the project would produce those benefits. In essence, the project proponent does not get credit for resource enhancements that it is already being compelled to provide. In this case, the benefits of the project would not be provided in the absence of the Commission's authorization of this project.

6) **The benefits of the project must result from the main purpose of the project, rather than from an ancillary component appended to the project to "create a conflict":**

A project's benefits to coastal resources must be integral to the project purpose. If a project is inconsistent with a Chapter 3 policy, and the main elements of the project do not result in the cessation of ongoing degradation of a resource the Commission is charged with enhancing, the project proponent cannot "create a conflict" by adding to the project an independent component to remedy the resource degradation. The benefits of a project must be inherent in the purpose of the project. If this provision were otherwise, project proponents could regularly append tangential elements to their otherwise "unauthorizable" projects to "create conflicts" and then request that the Commission use Section 30007.5 to approve the "unauthorizable" projects. The conflict

resolution provisions of the Coastal Act could not have been intended to foster such an artificial and easily manipulated process and were not designed to barter amenities in exchange for project approval.

The main purpose of the proposed project is for maintenance dredging of the Harbor and the Port, which would, as discussed above, maintain safe navigation channels for commercial fishing and recreational vessels and also protect public coastal access and recreation at nearby beaches through the provision of beach-compatible sand which would otherwise be lost from the littoral cell. The benefits of the project result directly from the main purpose, and not from any ancillary component. Thus, this factor is satisfied as well.

7) **There are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies:**

Finally, a project does not present a conflict among Chapter 3 policies if at least one feasible alternative would meet the project's objectives without violating any Chapter 3 policy. Thus, an alternatives analysis is a condition precedent to invocation of the conflict resolution approach. If there are alternatives available that are consistent with all of the relevant Chapter 3 policies, then the proposed project does not create a true conflict among those policies. As discussed in Section C, there are no feasible less damaging alternatives that would enable the maintenance dredging in a manner that would reduce or avoid adverse impacts to the coastal foredune ESHA.

Existence of a Conflict Between Chapter 3 Policies

Based on the above, the Commission finds that the proposed project presents a conflict between the resource-dependent use and habitat protection elements of Section 30240(a) on the one hand, and the mandates of Sections 30210, 30211, 30213, and 30214, a conflict that must be resolved through application of Section 30007.5, as described below.

Conflict Resolution

After establishing a conflict among Coastal Act policies, Section 30007.5 requires the Commission to resolve the conflict in a manner that is on balance most protective of coastal resources. In this case, the proposed project would result in a non-resource dependent use occurring within ESHA, thus making it inconsistent with Coastal Act Section 30240(a).

However, objecting to the project because of its inconsistency with the ESHA policy would result in significant adverse effects to public coastal access and recreation by curtailing the supply of bypassed sand necessary to nourish downcoast beaches. Objection to the project would thus be inconsistent with the affirmative policies of Sections 30210, 30211, 30213, and 30214 to protect and maintain public coastal access and recreation. The Commission finds that the impacts on coastal resources

from not carrying out the project would be more significant and adverse than impacts stemming from the project's location within ESHA, which would be addressed by the avoidance, minimization, and mitigation measures incorporated into the project. The project is the least environmentally damaging feasible alternative, adverse impacts to EHSA would be remedied through a restoration plan, and the non-resource dependent use that is proposed in ESHA is necessary in order to continue maintenance dredging and beach nourishment that has occurred in this area for over 60 years. The Commission therefore concludes that the project would, on balance, be most protective of significant coastal resources, consistent with Coastal Act Section 30007.5. As such, it is consistent with Chapter 3 as a whole, and the Commission staff therefore recommends that the Commission conditionally concur with the consistency determination.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

1. USACE Consistency Determination CD-0001-24, April 2024.

2. USACE Consistency Determinations CD-4-89, CD-7-89, CD-80-86, CD-43-86, CD-53-84, CD-25-83, CD-12-85, CD-15-90 and CD-52-94.