

STATEMENT OF FINDINGS
AND
FINDING OF NO SIGNIFICANT IMPACT
CHANNEL ISLANDS HARBOR AND PORT HUENEME HARBOR
OPERATIONS AND MAINTENACE PROJECT MODIFICATION
VENTURA COUNTY, CALIFORNIA

In 2018, the U.S. Army Corps of Engineers, Los Angeles District (Corps) finalized an Environmental Assessment (FEA) for Channel Islands Harbor and Port Hueneme Harbor Operations and Maintenance Project, Ventura County, California. The FEA evaluated the potential impacts associated with dredging Channel Islands Harbor and Port Hueneme Harbor over a six-year period, beginning in 2018.

The Corps has conducted a supplemental environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The Final Supplemental Environmental Assessment (Final SEA) dated January 2023, for the proposed Modifications to the Channel Islands Harbor and Port Hueneme Harbor Operations and Maintenance Project, incorporated herein by reference, evaluated two alternatives: the No Action Alternative and Proposed Action. Under the No Action Alternative, the dredge template would be dredged to the maximum 2.2 million cubic yards (cy) as originally described in the 2018 FEA. The Proposed Action Alternative proposes to dredge up to 300,000 cy more of sediment from the existing dredge template.

The Proposed Action Alternative is the recommended plan and includes:

- The Corps proposes to dredge an additional 300,000 cy of sediment to bring the project total up to 2.5 million cy of sediment from Channel Islands Harbor per biennial dredging cycle. This is the final dredging cycle of a six-year biennial dredging program.
- At Channel Islands Harbor, material will be dredged from the approach channel, entrance channel, sand traps, entrance basin, and inner basin. Project depth is -20 feet Mean Lower Low Water (MLLW) at the channels and basins and -35 feet MLLW at the sand traps, plus a two-foot over depth.
- The existing dredge template includes a dredge boundary to avoid impacts to coastal dunes and a 200-foot buffer area around Area D.
- Dredged materials would be discharged at the previously authorized placement areas: Silver Strand Beach and Hueneme Beach. A hydraulic suction dredge would be used for the proposed project. A hydraulic suction dredge, and a dredge pipeline, would discharge dredged material onto Silver Strand and Hueneme Beach.

For both alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the Proposed Action are listed in Table S-1:

Table S-1: Summary of Potential Effects of the Proposed Modification

	Insignificant effects	Insignificant effects as a result of mitigation	Resource unaffected by action
Oceanography and Water Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marine Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cultural Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Land/Water Use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the Proposed Modification. Environmental commitments listed in Section 6 of the Final SEA will be implemented to minimize impacts.

A public notice for preparation of the Final SEA and a 404(b)(1) evaluation under the Clean Water Act for discharge of dredged or fill material to waters of the United States (U.S.) was posted on September 23, 2022. No comments were submitted during the public review period.

Pursuant to section 7 of the Endangered Species Act of 1973, as amended, the Corps determined that the Proposed Modification may potentially result in adverse modification of western snowy plover critical habitat. Formal consultation with the U.S. Fish and Wildlife Service was completed with receipt of a Biological Opinion (BO), dated December 15, 2022. The BO and Biological Assessment can be found in Appendix B.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the Corps has determined that historic properties would not be adversely affected by the Proposed Modification. On December 23, 2022, the State Historic Preservation Officer did not object to the Corps determination.

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material into waters of the U.S. associated with the Proposed Modification has been found to be compliant with the section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act section 404(b)(1) evaluation can be found in Appendix G of the Final SEA.

A waiver from the state water quality certification requirements of Section 401 of the Clean Water Act in accordance with 33 CFR 336.1(b)(8)(iii) was presumed on December 28, 2022. A copy of the notice to the Los Angeles Regional Water Quality Control Board and U.S. Environmental Protection Agency can be found in Appendix H of the Final SEA. A draft 401 permit was received on November 14, 2022. All conditions of the draft water quality certification will be implemented in order to minimize adverse impacts to water quality.

Pursuant to Section 307(c) of the California Coastal Zone Management Act of 1972, the California Coastal Commission concurred with the Corps Negative Determination (ND-0042-22) for modification to the Channel Islands and Port Hueneme Dredging Project. A copy of the Negative Determination, dated December 2, 2022, can be found in Appendix I.

The Corps has determined that a general conformity determination is not required for the Proposed Action. The Proposed Action complies with the requirements of Section 176(c) of the Clean Air Act.

Pursuant to 50 CFR 600.920(1) of the Magnuson-Stevens Fishery Conservation and Management Act, as amended, the Corps initiated supplemental essential fish habitat consultation with the National Marine Fisheries Service (NMFS) regarding the effects of the Proposed Action. The Corps received general concurrence from the NMFS on September 14, 2022, a copy of which can be found in Appendix B of the Final SEA.

Pursuant to Executive Order 12898, Environmental Justice in Minority and Low-Income Populations, and Executive Order 14008, the Proposed Action would not result in disproportionately high and adverse impacts to minority and low-income populations.

All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives and coordination with appropriate agencies have been completed. Based on the Final SEA, the reviews by other Federal, State and local agencies, and the review by my staff, it is my determination that the Proposed Action would not have a significant effect on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

5-Jan-2023

Date

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Julie A. Balten
Colonel, U.S. Army
Commanding

**FINAL SUPPLEMENTAL
ENVIRONMENTAL ASSESSMENT**

FOR

**CHANNEL ISLANDS/PORT HUENEME HARBORS
MAINTENANCE DREDGING PROJECT MODIFICATION- INCREASED
DREDGE QUANTITY
Ventura County, California**

**PREPARED BY
U.S. ARMY CORPS OF ENGINEERS
SOUTH PACIFIC DIVISION
LOS ANGELES DISTRICT**



January 2023

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SECTION 1 - INTRODUCTION

In 2018, the United States Army Corps of Engineers (Corps) prepared a Final Environmental Assessment (FEA; USACE 2018) to evaluate the potential impacts associated with dredging Channel Islands Harbor and Port Hueneme Harbor in Ventura County, California over a six-year period, beginning in 2018. This document addressed biennial dredging and downcoast beach disposal of up to 2.2 million cubic yards (cy) of material from the federal dredge template. Subsequent to the last dredge cycle in 2020, and finalization of the 2018 FEA, the Corps determined with a bathymetric survey that up to 300,000 cy of sediment may need to be dredged within the federally authorized dredge footprint during the final 2022-2023 dredge cycle. This Supplemental Environmental Assessment (SEA) evaluates the potential environmental impacts associated with the increased dredge and disposal quantity during this dredge cycle. The potential effects associated with other aspects of the dredging and beach disposal are covered in the 2018 FEA and are not further addressed in this SEA.

This document was prepared in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code (USC) 4321, et seq.); Council on Environmental Quality (CEQ) regulations implementing the procedural provisions of NEPA (40 Code of Federal Regulations (CFR) parts 1500-1508); and the Corps procedures for implementing NEPA (33 CFR Part 230).

PROJECT PURPOSE AND NEED

Need: Federal navigation channels within Channel Islands and Port Hueneme Harbors are subject to continual infill of sand from littoral processes. Without frequent dredging, sediment would eventually change the bathymetry to such an extent that vessels would not be able to navigate safely. In addition, the presence of the harbor interrupts the natural transport of sand, resulting in decreased nourishment and increased erosion of downcoast beaches.

Purpose: The project would serve the following purposes: (1) maintain the Federal navigation channels and sand traps at authorized depths and widths which are subject to continual filling by littoral transport processes; (2) assure the continued safe navigation for maritime traffic within the harbors by minimizing the risk of hazardous shoaling conditions; and (3) provide beach nourishment material for downcoast beaches (Silver Strand and Hueneme) severely eroded by the littoral processes and by the harbor disruption of the longshore transport of sand.

SECTION 2 - PROPOSED ACTION

2.1 Project Background

Channel Islands Harbor receives sediments from upcoast beaches by the southerly littoral transport system. Previous maintenance dredging has been conducted routinely at Channel Islands Harbor. An average of 1.2 million cubic yards was removed biennially between 1996 and 2016. During the last dredging contract (2012- 2018) a total of 4.6 million cubic yards was removed from Channel Islands Harbor with an average volume of 1.5 million cubic yards removed per dredging cycle.

2.2 Project Location

The proposed project is located in Ventura County (Figure 1) and consists of the final cycle in a six-year program for maintenance dredging at the Channel Islands and Port Hueneme Harbors. Channel Islands Harbor is located in the city of Oxnard. Placement of dredged materials would occur on Hueneme Beach and/or Silver Strand Beach. The proposed project modification consists of maintenance dredging an additional 300,000 cy for this final cycle.

2.3 Project Description

The Corps, as part of its operations and maintenance (O&M) program, is proposing an increase in dredge quantity. The Corps proposes to dredge an additional 300,000 cy of sediment from the existing dredge template, which includes a dredge boundary to avoid impacts to coastal dunes and 200 ft buffer area around Area D. The Proposed Placement Area is in the nearshore waters located Hueneme Beach and/or Silver Strand Beach.

Harbor structural features consist of a 2,300-foot-long offshore detached breakwater, entrance jetties, and an entrance channel leading to the harbor interior. The entrance channel is 3,200 feet long and varies in width from 300 feet at the entrance to 600 feet within the harbor. Authorized depth of the entrance channel is -20 feet Mean Low Water (MLLW). The entrance channel comprises “Area A” of the Channel Islands Harbor dredge area (Figure 1).

The offshore detached breakwater and entrance jetties form a sand trap which was designed to trap sand. Sand which is carried downcoast by littoral drift is trapped in the sand trap to minimize shoaling in the entrance channel. The sand trap is divided into three parcels (Figure 1); Areas B, C, & D. Area B is 775 feet in length and 450 feet in width. Area C is 1,650 feet in length and 1,150 feet in width. Area D is 1,650 feet in length and 460 feet in width. The traps were designed to be maintained at a depth of -35 feet MLLW.

The Entrance Basin (Area E) and Inner Basin (Area F) may be dredged during this six-year cycle if needed (Figure 1). Authorized depth of the entrance basin is -20 feet MLLW. Authorized depth of the inner basin is -10 feet MLLW.

Biennial dredging and beach placement is scheduled to occur between October 1 and March 15 to accommodate sensitive environmental windows (western snowy plover – March 1 to August 31; California grunion – March 16 to September 1), low intensity tourist use (October through April), and nonpeak beach use (Labor Day through Memorial Day). Work windows and timelines are variable due to weather patterns and other factors such as equipment availability, working performance of the equipment, contractual commitments, and availability of funds.

2.4 Construction Equipment

Beach placement of dredged material would be via pipeline (Figure 2) from a hydraulic dredge. Near shore placement would be via pipeline from a hydraulic dredge with a disposal barge.

Hydraulic Pipeline Dredge. Typically, a floating dredge with an attached hydraulic cutterhead is used to dredge the sand. Then, the sand slurry is pumped through a pipeline onto the receiver beach or into the nearshore area. Following pipeline transport, the sand is uniformly spread over the beach

using conventional earth moving equipment (typically two bulldozers).

Approximately 10,000 to 40,000 cubic yards of sediment can be piped to the beach per day using a hydraulic dredge. The contractor is limited to 120 days (plus weather days) to complete each dredging cycle.

Additional construction equipment typically required to support dredging activities are: three support boats (an anchor tender, a pipe tender, and a crew boat).

2.5 Scope and Content of the SEA

The potential impacts associated with the Proposed Action and no action alternatives were assessed and only the resources that would potentially be affected by the proposed increase in dredge/disposal quantity are analyzed. These resources evaluated in the SEA (Section 4 – Affected Environment and Environmental Consequences) are:

- Oceanography and Water Quality
- Marine Resources
- Cultural Resources
- Air Quality
- Land/Water Uses

2.6 Nepa Scope of Analysis

As part of the NEPA process, the Corps is responsible for establishing the NEPA scope of analysis pursuant to 33 CFR Part 230. The Corps NEPA scope of analysis encompasses approximately 132 acres, which includes the project area within the Channel Islands and Port Hueneme Harbors, the downcoast receiving beaches, and surrounding nearshore waters. For purposes of this EA, the scope is collectively referred to as the “project area”.

2.7 Agency And Public Input

A public notice informing interested parties of the Corps intent to prepare a Supplemental EA to address the additional dredge quantity was posted on the Corps website and was available for review and comment for a period of 30 days, beginning September 23, 2022, through October 21, 2022. No comments were submitted to the Corps during the 30-day public notice review and comment period. In addition, this proposed project modification was coordinated with regulatory agencies including U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Coastal Commission, and the California Regional Water Quality Control Board.

2.8 Relationship to Environmental Protection Statutes, Plans, and Other Requirements

The Corps is required to comply with all pertinent federal laws and regulations, project compliance is summarized in Section 6.1.

2.9 Authorization

Maintenance dredging of Channel Islands and Port Hueneme Harbors is authorized by the River and Harbor Act approved March 2, 1945. A modification to the Act (P.L. 91-611, Sec 114) dated December 31, 1970, provided that dredging and maintenance of Channel Islands and Port Hueneme Harbors would be the responsibility of the United States (U.S.) Federal government.

SECTION 3 – PROJECT ALTERNATIVES

3.1 ALTERNATIVES CONSIDERED

3.1.1 No Action Alternative

Under this alternative, the dredge template would be dredged to the maximum 2.2 million cy as originally described in the 2018 FEA (USACE 2018). The original design would limit the quantity of sediment to be dredged from the harbor.

3.1.2 Proposed Project Modifications (Proposed Action)

The Proposed Action, as described more fully in Section 2.1, consists of dredging up to 300,000 cy more of sediment from the existing dredge template. The dredge footprint would not change. The dredge depth would not change. Environmental commitments incorporated in the project description to avoid or minimize adverse impacts are listed in Section 6.

3.2 ALTERNATIVES REJECTED FROM CONSIDERATION

3.2.1 Alternative Dredge and Placement Site

Potential alternative timing, dredge footprints and dredged material placement areas were considered but were determined to be infeasible as they would either not fully meet purpose and need statement or would not be technically or logistically feasible. For instance, dredging less area within the Federally authorized navigation channels would potentially leave areas in an unnavigable or unsafe condition as the channels shoal in quickly. Congressional legislation directs that operations, maintenance, repair, replacement, and rehabilitation work associated with Channel Islands and Port Hueneme Harbors must occur specifically within those Harbors, no other alternative sites for maintenance dredging are considered viable. Disposing of material in upcoast areas would result in additional shoaling as the material moves back into the harbors through littoral transport, and also would leave downcoast beaches in an eroded state. Disposing of material further downcoast or offshore would not address the erosion issues immediately downcoast of the harbor and would also result in substantial increased costs and additional environmental impacts due to increased emissions, reduced recreational opportunities on downcoast beaches, increased timeframe for dredging and disposal and expanded footprint. Therefore, no other action alternatives are carried forward in this analysis.

SECTION 4 – AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section provides a discussion of the affected environment and assessment of potential impacts associated with the Proposed Action and No Action Alternatives. Only the resources that would potentially be affected by the proposed project modification are analyzed. These resources include Oceanography and Water Quality, Marine Resources, Cultural Resources, Air Quality, and Land/Water use.

4.1 OCEANOGRAPHY AND WATER QUALITY

4.1.1 Affected Environment

The tides in southern California are mixed, semi-diurnal tides with two unequal high tides and low tides roughly per day. Tidal variations are caused by the passage of two harmonic tidal waves; one with a period of 12.5 hours and one with a period of 25 hours. This causes a difference in height between successive high and low waters. The result is two high waters and two low waters each day, consisting of a higher high water and a lower high water, and a higher low water and a lower low water; respectively referred to as higher highwater (HHW), lower high water (LHW), higher low water (HLW), and lower low water (LLW).

A greater than average range between HHW and LLW occurs when the moon, sun, and earth are aligned with each other to create a large gravitational effect. This spring tide corresponds to the phenomenon of a new or full moon. Neap tides, which occur during the first and third quarters of the moon, have a narrower range between HHW and LLW. In this situation, the moon, sun, and earth are perpendicular to each other, thereby reducing the gravitational effects on water levels.

Water quality is typically characterized by salinity, pH, temperature, clarity, and dissolved oxygen (DO). Section 303(d) of the 1972 CWA requires states to identify water bodies that do not meet water quality objectives and are not supporting their beneficial uses. Each state must submit an updated list, called the 303(d) list, to the United States Environmental Protection Agency (USEPA) every two years. In addition to identifying the water bodies that are not supporting beneficial uses, the list also identifies the pollutant or stressor causing impairment and establishes a priority for developing a control plan to address the impairment. The EPA has not listed impairments for the most recent 2016 Waterbody Report for Pacific Ocean at Channel Islands Harbor.

4.1.2 Environmental Consequences

Significance Criteria. An impact to Oceanography and Water Quality will be considered significant if an alternative would:

- Cause substantial changes in topography or physical processes acting on the system;
- Cause substantial, long-term alteration of chemical properties and turbidity within the water column outside of a 500' buffer area around the Proposed Dredging and Placement Areas;
- Cause release of toxic substances that would be deleterious to human, mammal, fish, or plant life.

Increasing the dredge and disposal quantity by an additional 300,000 cy of material would not substantially change the project's effects on oceanography and water quality that were described in the 2018 SEA. The type, grain size and compatibility of the additional material is the same as previously described for the base quantity, and the dredge and disposal footprints are also the same. These effects are summarized as follows:

Proposed Action.

In this section, direct impacts are defined as adverse changes to oceanography or water quality that would occur within the dredge or disposal footprints and caused by those activities, while indirect effects would potentially be caused by plumes of suspended sediment or changes in water quality or topography that extend beyond the direct dredge template.

Dredging. Dredging provides a beneficial impact to local oceanographic conditions. This is achieved by picking up sand deposited in the sand trap at Channel Islands Harbor and in the channels of both Channel Islands Harbor and Port Hueneme and depositing it down coast of the harbors. This activity allows the dredged sands to re-enter the littoral transport regime and prevent impacts to down coast beaches. Dredging with beach placement, therefore, artificially maintains natural littoral transport.

Water quality would be temporarily affected during the dredging process. Decreases in DO, increases in nutrients, suspended and dissolved contaminants, and turbidity can all occur during dredging activity. Turbidity from dredging has the potential to decrease DO in the immediate vicinity (within about 300 feet) of the dredge. Since the dredging would occur in open waters (in the sand trap at Channel Islands Harbor and the outer portion of the entrance channel at Port Hueneme) or in waters immediately adjacent to open waters (the entrance channels at Channel Islands Harbor and the inner portion of the entrance channel to Port Hueneme) where DO levels are normally above 5.0, the potential for decreasing below that level are negligible.

Based on past testing conducted during previous dredging cycles, dredged sediments at these harbors consist of clean sand, ranging from 96 to 100% sand ranging in size between 0.25mm and 1.00 mm. There have been no recent documented contaminant spills in the area. Sand in these particle size ranges is generally larger and coarser than grain sizes where pollutants are generally found. Additionally, the Channel Islands Harbor was last dredged in 2020/2021 and is dredged biennially, limiting the ability of contaminants to accumulate. Port Hueneme Harbor was last dredged in 2021. The sands are moved into the sites via littoral transport which constantly moves and re-suspends the sands as it moves down coast. Therefore, organic detritus and chemical contaminants are not expected to occur in these materials. Increases in nutrients and/or suspended and dissolved contaminants are not expected to occur because of dredging.

Sediments were assessed in accordance with the Inland Testing Manual (USEPA & USACE, 1998) and coordinated with the Southern California Dredged Material Management Team on September 27, 2017 (SC-DMMT). Sediments would be reassessed should any major event that cause a change in environmental baseline conditions (i.e., oil spill). A Tier I assessment was conducted and the materials were found to comply with the 40 CFR 227.13(b) exclusion criteria from further testing. Sandy sediments from both harbors are considered suitable for use as beach replenishment at Silver Stand and Hueneme Beaches, or for placement within the nearshore environment for future dredge cycles.

This determination was made in coordination with the U. S. Environmental Protection Agency (USEPA) and the SC-DMMT.

Tier II assessment of the sediment within the proposed Channel Islands Harbor dredged areas was completed in April 2018 in preparation of the first dredging cycle of the current 6-year program. Results showed that the proposed dredged material in areas A, B, C, D, and G was overall below detection or small compared to effects based on screening values (Corps 2018). Of the list of contaminants concentrations detected, DDT was the only contaminant detected above a NOAA ERL (Effects Range-Low) value in three of the five composite areas (Areas A, C, and E), with Area E having the highest value; however, values were about five times lower than the ERM (Effects Range-Median) value of 46.1 µg/kg.

As reported in the May 2018, Sampling and Analysis Plan Reports for the Channel Islands Harbor Geotechnical and Environmental Investigation Project (USACE 2018), all contaminants detected in the Channel Islands Harbor sediments were well below the RSLs (Regional Screening Levels) and CHHSLs (California Human Health Screening Levels) for residential soils developed for human protection except for arsenic. Elevated arsenic concentrations occur commonly in Southern California dredge sediments and soils, and the concentrations of arsenic in the Channel Islands Harbor samples were less than the background concentration (3.5 mg/kg) of soils throughout California (Bradford et al., 1996).

Sulfide content from Areas A and E were somewhat elevated, which could result in the production of smells and odors during placement activities. However, the report findings conclude that there are very little or no soluble sulfides suggesting the volatilization of hydrogen sulfide should be minor.

The Corps initiated coordination with the SC-DMMT, which includes USEPA, California Coastal Commission (CCC), and the Regional Water Quality Control Board (RWQCB), in September 2017, for proposed dredged material suitability determination for beach placement. Results of the sampling and analysis were submitted to the SC-DMMT for review and consideration in April 2018.

Placement. Water quality would be temporarily affected during the placement process. Decreases in DO; increases in nutrients, suspended and dissolved contaminants, and turbidity could occur. It is expected that any impacts to water quality will not be significantly greater than those caused by natural surf zone processes. The dredged material would redistribute and settle as a result of normal surf and littoral transport processes. Impacts would be temporary and less than significant. Accidents resulting in spills of fuel, lubricants, or hydraulic fluid from the equipment used during dredging and placement could occur during the project and adversely affect water quality. Impacts would depend on the amount and type of material spilled as well as specific conditions (i.e., currents, wind, temperature, waves, tidal stage, and vessel activity). In such cases, spills would be cleaned up immediately, causing less than significant impacts. A larger spill that could have significant impacts on water quality is not expected to occur, even under reasonable worst-case conditions. 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.

A Water Quality Monitoring Plan will be implemented to monitor water quality to ensure that significant adverse impacts to water quality do not occur during dredging and beach/nearshore

placement. Weekly monitoring will be done for salinity, pH, temperature, dissolved oxygen, and light transmissivity. Monthly water samples will be taken and analyzed for total dissolved solids. Dredging will be controlled to keep water quality impacts to acceptable levels. Controls include modifying the dredging operation and the use of silt curtains (if warranted). Turbidity will be limited to a 40% decrease in light transmittance, and dissolved oxygen will be maintained at a minimum of 5 mg/l.

The proposed project modification would not cause substantial changes in topography or physical processes, would not cause substantial, long-term alteration of chemical properties and turbidity within the water column outside of a 500' buffer area around the Proposed Dredging and Placement Areas, and would not cause release of toxic substances that would be deleterious to human, mammal, fish, or plant life. The proposed project modification, therefore, would not significantly affect oceanography or water quality.

Because oceanographic and water quality impacts are considered less than significant, mitigation measures are not required.

No Action Alternative. Impacts associated with the increased dredge quantity would not occur. However, dredging would still occur to the extent possible as detailed in the 2018 FEA. Less than significant impacts to Oceanography and Water Quality would still occur as discussed in the 2018 FEA.

4.2 MARINE RESOURCES

The affected area within the project area remains largely unchanged since 2018 (see Section 4.2 of the 2018 EA incorporated herein by reference) and is briefly summarized and updated as appropriate in 4.2.1 below.

4.2.1 Affected Environment

Marine Ecosystem

Vegetation. Vegetation in the dredged sites is expected to be minimal owing both to the sandy, unconsolidated nature of the bottom and the frequent dredging which takes place in these areas. Nearshore areas and sandy beaches where disposal of the 2.2 million cy is occurring and where the additional 300,000 cy of the dredged material would be deposited supports a typical sand bottom community with little or no vegetation owing to the high energy currents present in the area and high turbidity caused by wave action stirring up and transporting bottom sediments. A pre-construction survey for eelgrass was conducted prior to commencement of the current dredge cycle. The survey covered the authorized dredge template and revealed a negative result for eelgrass.

Invertebrates. The invertebrate population in the dredge areas is expected to be similar to adjacent open coast, shallow water habitat. Common infaunal species consist of the sand crab (*Emerita anloga*), clams (i.e., *Tellina modesta*), and polychaetes (i.e., *Nephtys californiensis*). The nearshore areas and sandy beaches, where disposal of the 2.2 million cy is occurring and where the additional 300,000 cy of dredged material would be placed, is a rigorous environment typical of open coast sandy beaches. Characteristic sandy beach organisms typically consist of sand crabs (*Emerita anloga*),

bloodworms (*Euzonus mucronata*), beach hoppers (*Orchestoidea sp.*), and the Pismo clam (*Tivela stultorum*). Pismo clams are considered a sensitive species by the state of California.

Fishes. Common fish species in the shallow offshore environments and in the harbors include thornback rays (*Platyrrhinoides triseriata*), lizard fish (*Synodus lucioceps*), speckled sanddab (*Cithrichthys stigmaeus*), northern anchovy (*Engraulis mordax*), white croaker (*Genyonemus lineatus*), and walleye surfperch (*Hyperprosopon argenteum*). Grunions (*Leuresthes tenuis*) use the beaches at Silver Strand and may use the beaches at Hueneme Beach for spawning between March and September. Peak grunion spawning activity occurs between April and June. Grunion is considered a sensitive species by the state of California. Breakwaters and jetties support the following fishes: Garibaldi (*Hypsypops rubicundus*), sargo (*Anisotremus davidsonii*), opaleye (*Girella nigricans*), rock wrasse (*Halichoeres semicinctus*), seniorita (*Oxyjulis californica*), half-moon (*Medialuna californiensis*), and kelp bass (*Paralabrax clathratus*).

Birds. The project area and surrounding jetties and breakwaters provide loafing, foraging, and roosting areas for a variety of shorebirds and waterfowl. Brown pelicans (*Pelecanus occidentalis californicus*), gulls (*Larus spp*), double-crested cormorants (*Phalacrocorax auritus*), and elegant terns (*Thalasseus elegans*), use the breakwaters and jetties for loafing.

A variety of seabirds are expected to use the sandy beaches where disposal of the 2.2 million cy is occurring and where the additional 300,000 cy of dredged material would be deposited. This type of habitat along with the adjacent shallow waters also provide foraging and loafing areas for many shorebird species including the long-billed curlew (*Neminius americanus*), willet (*Catoptrophorus semipalmatus*), black-bellied plover (*Pluvialis dominica*), sanderling (*Calidris alba*), marbled godwit (*Limosa fedoa*), and whimbrel (*Numenius phaeopus*). Seabirds observed foraging in nearshore waters include western grebes (*Aechmophorus occidentalis*), scoters (*Melanitta spp*), and loons (*Gavia spp*).

Fish and Essential Fish Habitat

In accordance with the 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act, an assessment of Essential Fish Habitat (EFH) has been conducted for the proposed project modification. The project is located within an area designated as EFH for two Fishery Management Plans (FMPs): Coastal Pelagics Plan and Pacific Groundfish Management Plan. Many of the 86 species federally managed under these plans are known to occur in the area and could be affected by the proposed project modification.

Marine Mammals

California sea lions (*Zalophus californianus*) are commonly observed in the dredging area, foraging in the harbor and resting on the breakwater jetties and navigational buoys. Several other marine mammal species that use the area, are observed offshore, and occasionally found stranded on the beach include harbor seals (*Phoca vitulina*), and whales and porpoises including pilot whale, *Globicephala macrorhynchus*; harbor porpoise, *Phocena phocena*; common dolphin, *Delphinus delphis*; Pacific white-sided dolphin, *Lagenorhynchus obliquidens*; and the bottlenose dolphin,

Tursiops truncatus. Marine mammals are protected by the Marine Mammal Protection Act (MMPA).

Threatened and Endangered Species

Federally listed threatened and endangered species which occur at the project site include the federally endangered California least tern (*Sternula antillarum browni*), and the federally threatened Pacific coast population of western snowy plover (*Charadrius nivosus nivosus*).

California least tern: The California least tern is present in numbers that vary year to year from April to August, using area beaches for breeding. The California least tern forage primarily on surface fishes such as topsmelt and anchovies. A historical nesting colony is located at Ormond Beach two to three miles down coast from the dredging areas, two miles from Silver Strand Beach, and less than one mile from Hueneme Beach. No designated critical habitat occurs within the project area. Nesting has also occurred on the beach adjacent to the sand trap (Hollywood Beach) and on the temporary beach that occasionally forms in the sand trap (Area D). The last known nesting at or adjacent to the sand trap was in 2015 where 24 nests were initiated over two separate “waves” of nesting activity (Barringer, Ventura Audubon Society, 2015). That year, 14 terns were estimated to have been breeding adults on the beach and as many as 60 least terns were observed flying over Hollywood Beach. However, there was no fledging success from any of the recorded nesting sites, and no nesting was detected during the 2016 and 2017 breeding seasons (Barringer, Ventura Audubon Society 2017).

Western snowy plover and critical habitat: Snowy plovers forage on invertebrates in the wet sand and cast-off kelp found in the intertidal zone, in dry sandy areas above high tide, on salt pans, and along the edges of salt marshes and salt ponds. This species nests near dunes of Ventura County beaches, with breeding activities beginning in March and sometimes fledging young as late as September. Plovers are known to nest on the established Hollywood Beach, as well as on the temporary beach that occasionally forms in the sand trap. There were 14 western snowy plover (WSP) nesting attempts recorded on Hollywood Beach in 2021. Of the 34 eggs laid, 16 hatched successfully (47% hatch rate; the lowest recorded on this beach in 11 years). Breeding adult WSP number was estimated to be 10, with likely a second or more nest attempts made by some pairs. There were 10 western snowy plover (WSP) nesting attempt on Hollywood Beach in 2020, likely increased over the 5 nests of the past 2 years by the presence of nesting California least terns (CLTs) this year. It is estimated that a minimum of 3 WSP chicks survived until fledging after 26 of 30 eggs hatched successfully (87% hatch rate), but could not be verified.

The main beach area (Hollywood Beach) adjacent to the sand trap is a part of the revised critical habitat designated for the western snowy plover by the U.S. Fish and Wildlife Service (USFWS, 2012). Examination of the designation shows a small portion of critical habitat is adjacent to the sand trap in Area D (approximately 1.6 acres) (Figure 1). Critical habitat is also designated at Hueneme Beach and southward to Ormond Beach (Figure 1).

4.2.2 Environmental Consequences

Significance Criteria. An impact to Marine Resources will be considered significant if an alternative would:

- Degrade habitat for, or reduce, the population size of a federally threatened or endangered species, such that the local population size or capacity is permanently reduced, or its designated critical habitat is permanently adversely modified.
- Result in a net loss in value of a sensitive biological habitat including a marine mammal haul out site or breeding area, seabird rookery, or Area of Special Biological Significance (ASBS);
- Impede the movement or migration of fish; and/or
- Result in a substantial loss in the population or habitat of any native fish, wildlife, or vegetation (a substantial loss is defined as any change in a population which is detectable over natural variability for a period of 5 years or longer).

Proposed Action.

Marine Ecosystem, Fish, and Essential Fish Habitat Assessment

In this section, direct impacts are defined or described as injury or mortality to fish or invertebrates from direct entrainment or burial, or changes to habitat that would occur as a result of dredging, disposal or pipeline movement and maintenance. Indirect impacts would potentially be caused by plumes of suspended sediment or changes in water quality that could occur as a result of dredging or disposal activities and that may extend beyond the direct dredge prism.

Dredge impacts. As with the base quantity dredging of 2.2 million cy, dredging of an additional 300,000 cy would result in a temporary increase in turbidity. Dredging the increased quantity could extend the project duration by 1 to 2 weeks, and thereby extend the duration of water quality impacts. Temporary increase in turbidity and suspended solids may decrease the amount of dissolved oxygen near the dredge site, thus affecting fish and other marine life within the area. Motile species are expected to relocate out of the area until dredging activities are finished. Some marine populations will be destroyed by dredging, but are expected to recolonize the area once dredging has ceased.

The temporary beach that forms within the sand trap is removed by dredging. This beach accretes slowly over time and is not present following each dredge cycle. Presence of the beach is cyclical with extent determined by the number and severity of winter storms that move sand into the sand trap. Some years the beach forms during the winter following dredging, other years it may not form at all. However, since most of southern California's beaches are dynamic areas, constantly gaining and losing area, this impact is not considered significant.

Channel Islands Harbor was created in 1960 and dredging in the sand trap areas and entrance channels has been conducted approximately every other year since that date. This continuous dredging limits the ability of the benthos to recover in between dredging cycles. However, the sand trap was designed to intercept sand to prevent the closure of Channel Islands Harbor and Port Hueneme. The benefits, in terms of serving the public interest, in keeping these harbors open and in bypassing sand around them was determined (in 1960) to outweigh the continuous impacts to the relatively small sand trap areas and entrance channel at Channel Islands Harbor. In addition, down coast beaches benefit from the continuous supply of sand supplied by the dredging projects. This includes public interest as well as wildlife benefits (in particular to California grunion, California least tern, and the western snowy plover).

Port Hueneme is dredged far less frequently, on the order of once every five years. This time interval is sufficient for the benthos to recover in between dredging events. Public interest and down coast beach benefits are the same as for Channel Islands Harbor although on a smaller scale.

Overall, dredging will be of short duration; therefore, no significant environmental impacts are expected on marine life in the dredge area.

Placement sites. The proposed project would result in minor impacts. Some disturbances to macrobenthic fauna may occur at the placement sites, but these are expected to be short-term with re-colonization occurring rapidly once placement operations are completed.

Dredging and beach replenishment are scheduled to be completed by March 1 for each dredging cycle, well in advance of the California grunion spawning and California least tern nesting seasons. Therefore, impacts at the placement site are expected to have no adverse effects on the California grunion. Placement in the near shore area, if necessary, would be restricted to water depths greater than -10 feet MLLW. This restriction would avoid impacts to the Pismo clam, if it is present, in the intertidal and subtidal areas where it may be located adjacent to Hueneme Beach. Restoration of the eroded beach at Hueneme Beach would have beneficial effects on the California grunion by providing a beach on which to spawn. Eroded beaches, with little or no sand are not usable sites for California grunion spawning. Likewise, beach restoration would provide beach invertebrate populations (i.e. Pismo clam) enhanced habitat. The freshly nourished area may then attract more birds to the area to forage for food. Potential impacts to marine resources from placement activities are not considered significant.

EFH

The Corps has determined that the proposed project modification may adversely affect EFH, but would not result in a substantial, adverse impact to any species on the Fishery Management Plan or to their habitat. The following is a discussion of potential affects to EFH.

Proposed dredging activities would be short-term in duration. Potential impacts to EFH could result from proposed dredging and placement activities and include direct removal/burial of organisms, turbidity, suspension of sediments, release of contaminants from equipment, entrainment, and noise. Direct removal/burial of organism and water quality impacts would also be considered potential adverse impacts to EFH. Other impacts are not likely to occur or not likely to have adverse effects. Turbidity caused by dredging and placement activities would subside as suspended sediments begin to settle following dredging and placement activities. Displaced organisms would also recolonize the impacted area. Given the extant high energy wave environment and dynamic coastal littoral processes, potential effects from dredging and placement operations are not considered significant. Sand dredged from these harbors provides sand into a littoral cell that extends down coast to Point Mugu. Dredging and placement activity therefore helps to maintain coastal environs down coast.

Marine Mammals

In this section, direct impacts (if they occurred) would be defined or described as injury or mortality to mammals from direct collisions that would occur as a result of dredging, disposal or pipeline movement and maintenance. Indirect impacts would potentially be caused by changes in resting, breeding or foraging habitat or other environmental conditions that could occur as a result of dredging or disposal activities and that may extend beyond the direct dredge prism.

The MMPA prohibits the taking of marine mammals without prior approval from the National Marine Fisheries Service (NMFS). The regulatory definition of take includes harassing or attempting to harass any marine mammal. Harassment may occur as the result of noise associated with dredging. However, the likelihood of this is considered to be very low. The type of dredge that would be used generates an Leq of 71.5 dBA at 50 feet (Parsons Engineering Science, Inc. 1996). Ambient noise levels in harbors have been measured at between Leq 56.5 and 75.5 dBA depending on the time of day and day of the week. During daylight hours, particularly on the weekend, dredge noise would be indistinguishable from background noise levels. During night time operations dredge noises would be discernible. However, hydraulic dredges tend to make a uniform noise that would not elicit startle reactions from sea lions or harbor seals. Dredging is scheduled to take place 24 hours per day, so start up noises are not expected.

Marine mammals in this area are accustomed to daily noise from people, boat traffic, and marine operations. The proposed project modification activities, therefore, are not likely to result in a taking, as defined in the MMPA. Further coordination and/or authorization for taking is not required for this project.

Threatened and Endangered Species

In this section, direct impacts (if they occurred) would be defined or described as injury or mortality to federally listed threatened or endangered species from direct collisions or burial that would occur as a result of dredging, disposal or pipeline movement and maintenance. The increased quantity from 2.2 million cubic yards to 2.5 million cubic yards will be dredged from the same dredge prism and authorized depths, and will not result in direct impacts. Indirect impacts would potentially be caused by changes in nesting or foraging habitat or other environmental conditions that could occur as a result of dredging or disposal activities and that may extend beyond the direct dredge prism. While exact numbers of individuals of threatened and endangered species indirectly impacted cannot be quantified due to the increased quantity, some effects are anticipated. Section 7(a)(1) formal consultation under the Endangered Species Act was conducted with USFWS to assess these indirect impacts. The analysis of indirect impacts undertaken by the USACE is discussed below.

Western snowy plover. The proposed dredging project, in most years, is expected to be completed prior to the beginning of the western snowy plover nesting season (March 1 through September 30). Thus, direct effects to nesting snowy plovers would be avoided during the species' nesting season. Ventura Audubon Society documented 14 Western snowy plover nesting attempts in 2021 and 10 nesting attempts in 2020 on the temporary beach that forms in the sand trap from coastal littoral processes. Although the proposed dredging operations would avoid direct effects to nests and nesting snowy plovers, the increased dredge quantity would remove more temporary beach on which some of

those nests were detected. This is considered an indirect impact as WSP can utilize adjacent beach. Western Snowy Plover demonstrate high site fidelity and generally do not prefer adjacent beach to the northwest of the project area.

Conditions at the beach placement site on Hueneme Beach preclude the use of this beach by foraging snowy plovers. This beach, at the start of placement operations, is eroded back to the rock revetment, so that no dry beach exists.

Sand Accumulation: At the end of each two-year cycle, sand has built up in the sand trap extending the existing beach, sand buildup has narrowed the channel into Channel Islands Harbor, and the down coast beaches have lost sand. The northern end of Hueneme Beach erodes completely back to the revetment fronting city property. The dredging cycle is maintained at two years to provide the maximum benefit with minimum environmental impacts. The dredging cycle is also conducted during winter months specifically to avoid impacts to nesting California least terns, western snowy plovers, and to spawning California grunion (*Leuresthes tenuis*). Currently, Hueneme Beach is starved of sand and the Channel Islands navigation channel is severely restricted in width (emergency dredging was conducted during the summer of 2006 by the county of Ventura). The temporary beach that forms within the sand trap north of the entrance channel is removed by dredging. Presence of this ephemeral beach is cyclical, with extent determined by the number and severity of winter storms that move sand into the sand trap. Some years the beach forms during the winter following dredging, other years it may not form at all. Moreover, most of southern California's beaches are dynamic areas, constantly gaining and losing area, this minor loss is not considered significant.

Listed species that use the temporary beach also utilize the down coast beaches that are replaced and nourished during each dredging cycle. Sand dredged from the sand trap area, and placed at Hueneme Beach, provides sand into a littoral cell that extends down coast to Point Mugu. These down coast beaches, particularly Ormond Beach, are used as nesting sites by the western snowy plover. These down coast beaches are also used for spawning by California grunion.

Removal of the temporary beach in the sand trap, adjacent to Hollywood Beach, must occur for the harbors to stay open and for the down coast beaches to receive sand.

Critical Habitat: The proposed dredging operations would result in the removal of the accumulated sand that creates the temporary beach within the sand trap, which is outside the designated critical habitat. However, dredging at Channel Islands Harbor has been continuous since 1960. This removal of the temporary beach during maintenance dredging operations would not be a new occurrence in this area. Sand is expected to continue to accumulate following dredging cycles, potentially providing additional habitat for nesting snowy plovers during non-dredging years. It is reasonable to expect that the species would continue to use this area when sufficient beach is present in the sand trap. As discussed above, the biennial dredging cycle is considered preferable to the life history needs of the Western snowy plover when compared to alternatives that utilize annual dredging to fulfill project objectives.

The USACE initiated Section 7(a)(1) formal consultation under the Endangered Species Act regarding impacts to WSP for the increased dredge quantity. The USACE found that no direct impacts resulted from the additional dredge quantity. However, indirect effects such as more loss of beachfront,

potential impact to foredune habitat and access to surf cast kelp wrack as a result of increased dredge quantity could affect WSP and associated critical habitat. As part of the consultation process, the USACE submitted a Biological Assessment (BA) to USFWS communicating these analyses in August 2022, along with a proposal for dune restoration to ameliorate these indirect effects. The draft restoration plan includes 13.47 acres of proposed dune restoration at a 1:1 mitigation ratio (see Figure 1). While the details of the restoration plan are in development, the USACE stated the restoration plan would be finalized with USFWS's approval within a year of construction completion.

USFWS responded with a Biological Opinion (BO) in December 2022, concurring with USACE's findings. USFWS agreed with restoration plan tenets, and issued an Incidental Take Statement for impacts to WSP and associated critical habitat along with Reasonable and Prudent Measures (RPMs) and Terms and Conditions. The RPMs and Terms and Conditions of the BO reiterated the restoration development plans stated above. The full Biological Assessment and Biological Opinions are attached as Appendix B.

Critical habitat is also designated at Hueneme Beach, including the western end where a beach exists only temporarily when the Corps places sand as part of the Channel Islands/Port Hueneme Harbors Maintenance Dredging Program. Although the proposed dredge material placement site is adjacent to designated critical habitat, the site does not contain primary constituent elements (PCE) essential to the conservation of the western snowy plover as identified in the species' listing rule. The listing rule identifies "Sandy beaches, dune systems immediately inland of an active beach face, salt marshes, mud flats, seasonally exposed gravel bars, artificial salt ponds and adjoining levees, and dredge spoil sites, with: (1) areas that are below heavily vegetated areas or developed areas and above the daily high tides; (2) shoreline habitat areas for feeding, with no or very sparse vegetation, that are between the annual low tide or low-water flow, subject to inundation but not constantly under water, that supports small invertebrates, such as crabs, worms, flies, beetles, spiders, sand hoppers, clams, and ostracods, that are essential food sources; (3) surf- or water-deposited organic debris, such as seaweed (including kelp and eelgrass) or driftwood located on open substrates that supports and attracts small invertebrates described in PCE 2 for food, and provides cover or shelter from predators and weather, and assists in avoidance of detection (crypsis) for nests, chicks, and incubating adults; and (4) minimal disturbance from the presence of humans, pets, vehicles, or human-attracted predators, which provide relatively undisturbed areas for individual and population growth and for normal behavior." (USFWS 2012).

The proposed placement site is partially submerged and has limited beach/habitat for the snowy plovers to nest on. As mentioned above, the beach is only present at the western end when sand is placed/disposed as part the Corps channel maintenance program. Therefore, items 2 and 3 of the PCE description are not present, and only potentially present after the beach is created by the Corps channel maintenance operations. This would result in a beneficial effect as additional beach would be created for western snowy plovers to use. Hueneme Beach is also heavily used by the public for recreation, especially during the summer season when temperatures are warmer. This does not support item 4 in the PCE description. The Corps therefore concludes the proposed project modification would not result in adverse modification of western snowy plover critical habitat.

Effects from dredging and placement activities in nearshore waters should be taken into consideration if extenuating circumstances (high surf events, storms, equipment maintenance, etc.)

arise. The result may be an extension of maintenance dredging activities into the snowy plover nesting season. To avoid potential direct impacts on nesting snowy plover in the sand trap area adjacent to Hollywood Beach, no dredging activity shall be conducted in the sand trap during the nesting season (March 1 through September 30).

California least tern. The proposed dredging project, in most years, is expected to be completed prior to the beginning of the California least tern nesting season (April 15 through September 30). However, effects from dredging and placement activities in nearshore waters should be taken into consideration if extenuating circumstances (high surf events, storms, equipment maintenance, etc.) arise. The result may be an extension of maintenance dredging activities into the tern nesting season. According to the 2016 study “*California Least Tern Foraging Ecology in Southern California, A Review of Foraging Behavior Relative to Proposed Dredging Locations*” by Keane and Smith, dredging and dredged material placement activity, even during the nesting season, is not expected to adversely affect the California least tern. Because dredged material placement activities do not substantially alter California least tern feeding, foraging, or nesting behavior (Keane and Smith, 2016), seasonal restrictions on dredging and placement activity in the vicinity of active California least tern nesting sites provide no protections to the species and are not warranted. Nonetheless, to avoid potential direct impacts on nesting terns in the sand trap area adjacent to Hollywood Beach, no dredging activity shall be conducted in the sand trap during the nesting season (March 1 through September 30).

Removal of the temporary beach in the sand trap, adjacent to Hollywood Beach, must occur for the harbors to stay open and for the down coast beaches to receive sand. The Corps does not consider this ephemeral beach to be essential nesting habitat for the California least tern. Moreover, the Corps considers the years when sufficient beach is available for nesting to be a benefit of the practice of biennial dredging versus annual dredging. An annual dredging cycle, which would also meet project purposes, would ensure that the temporary beach does not form. However, due to historic nesting by the California least tern in the Channel Islands sand trap, the Corps does accede that removal the ephemeral beach during the non-breeding season for the tern, October 1 to April 15, could have minor effects (harm) on the availability of nesting areas for the species from year to year.

Avoidance and Minimization Measures: The following measures would be implemented to further avoid and minimize potential effects on the 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 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 in the sand trap area (adjacent to Hollywood Beach) during the shorebird/seabird nesting season (March 1 – September 30).
- At all times a qualified snowy plover monitor will walk ahead of the vehicle(s) and equipment to assure that all snowy plovers are out of harm's way before the vehicle(s) or equipment can proceed. Qualified monitors will be those individuals who attend the on-site plover training that will be provided by the Ventura Port District and the Corps.

- 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 (Appendix B) will be implemented.

No Action Alternative. Direct impacts associated with the increased dredge quantity would not occur. However, dredging would still occur to the extent possible as detailed in the 2018 FEA. Less than significant impacts to Marine Resources would still occur as discussed in the 2018 FEA.

4.3 CULTURAL RESOURCES

4.3.1 Affected Environment

The proposed project modification would renew a program of routine maintenance dredging and disposal of sediments in the same locations as with the previous two six-year dredging cycles. Routine maintenance dredging in the Channel Islands Harbor has occurred every two years since 1969 and every four years in Port Hueneme Harbor beginning in 1975. Dredged materials have always been used to nourish Hueneme and Silver Strand Beaches, both of which are active beaches that have been subject to repeated episodes of erosion. Two nearshore disposal areas off Hueneme Beach were analyzed and added in 1994. Some sediments may be deposited in either of these two locations, where wave action will naturally move the sand onto Hueneme Beach.

4.3.2 Environmental Consequences

Significance Criteria. An impact to Cultural Resources will be considered significant if an alternative would result in:

A substantial adverse effect to a historic property such that the implementation of the alternative would result in the destruction of a historic property or the loss of a property's listing in or eligibility for listing in the National Register of Historic Places.

Proposed Action. As described previously, the proposed maintenance dredging project would remove accumulated sand from two manmade harbors and place it on two actively eroding beaches or in two nearshore disposal areas where the sand will eventually accumulate on Hueneme Beach. No intact soils would be disturbed, and the same placement sites would continue to be used. The Corps has consulted with the State Historic Preservation Officer (SHPO) regarding the proposed maintenance dredging of the harbors and placement of the material to restore Hueneme and Silver Strand Beaches on three previous occasions. Most recently, the SHPO concurred in a letter dated December 21, 2022, that no historic properties would be affected by the maintenance dredging program.

Environmental Commitments. In the event that previously unknown cultural resources are discovered during the project, all ground disturbing activities shall immediately cease within 200 feet of the discovery until the Corps has met the requirement of 36 CFR 800.13 regarding post-review discoveries. The Corps shall evaluate the eligibility of such resources for listing on the National Register of Historic Places and propose actions to resolve any anticipated adverse effects. Work shall not resume in the area surrounding the potential historic property until the Corps re-authorizes project construction.

No Action Alternative. There would be no ground disturbing activities as a result of the “no action” alternative, so no historic properties would be affected.

4.4 AIR QUALITY

4.4.1 Affected Environment

The proposed project modification is located in the South Central Coast Air Basin. The climate in the project area is characterized by moderate summer temperatures, mild winters, frequent morning coastal stratus clouds, infrequent rainfall confined mainly from late fall to early spring, and moderate onshore breezes. Overall, ambient air quality is considered good in the project area.

National air quality standards (National Ambient Air Quality Standards (NAAQS)) and state air quality standards (California Ambient Air Quality Standards (CAAQS)) are listed in Appendix E. The Ventura County Air Pollution Control District (VCAPCD) shows occasional violations of the ozone and total suspended particulate standards, but no violations for carbon monoxide (CO) or nitrogen dioxide (NO₂) at the El Rio monitoring station. A summary of air quality status within the South Central Coast Air Basin, which VCAPCD is a part of, is provided Appendix E. Table 4.1 below lists the attainment status of different pollutants for the CAAQS and NAAQS.

General Conformity Rule. Established under the Clean Air Act (section 176 (c)(4)), federal agencies must conform to air quality plans established by applicable state implementation plans. A conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a Federal action would equal or exceed any of the rates specified in 40 CFR 93.153(b)(1). Total of direct and indirect emissions means the sum of direct and indirect emissions increases and decreases caused by the Federal action; i.e., the “net” emissions considering all direct and indirect emissions. The portion of emissions which are exempt or presumed to conform under § 93.153 (c), (d), (e), or (f) are not included in the “total of direct and indirect emissions.” The “total of direct and indirect emissions” includes emissions of criteria pollutants and emissions of precursors of criteria pollutants.

Direct emissions include construction emissions. Indirect emissions means those emissions of a criteria pollutant or its precursors:

1. That are caused or initiated by the Federal action and originate in the same nonattainment or maintenance area but occur at a different time or place as the action;
2. That are reasonably foreseeable;
3. That the agency can practically control; and
4. For which the agency has continuing program responsibility.

This analysis is limited to the Proposed Action emissions. For the South Central Coast Air Basin, the project is in attainment for the pollutants regulated under the NAAQS. The basin is in attainment; therefore, the general conformity rule does not apply. Therefore, for purposes of the Proposed Action, the anticipated emissions are disclosed without expressing a judgement as to their significance.

Greenhouse Gases (GHG). Gases that trap heat in the atmosphere are often called greenhouse gases (GHG). GHGs are emitted by natural processes and human activities. Examples of GHGs that are produced both by natural processes and industry include carbon dioxide (CO₂), methane (CH₄), and

nitrous oxide (N₂O). There are currently no Federal GHG emission thresholds. Therefore, the Corps will not propose a new GHG threshold or make a NEPA significance impact determination for GHG emissions anticipated to result from the Proposed Action. Rather, in compliance with NEPA implementing regulations, the anticipated emissions are disclosed without expressing a judgment as to their significance.

4.4.2 Environmental Consequences

Significance Criterion. An impact to Air Quality will be considered significant if an alternative would:

- Equal or exceed the General Conformity applicability rates specified in 40 CFR 93.153.

Proposed Action. Air quality impacts related to dredging and disposal activities are considered direct effects associated with emissions generated from temporary operation of the dredge, equipment used to lay and remove pipe, and other associated equipment. No indirect or permanent effects would occur.

Emissions associated with the proposed increase in dredge quantity will come mainly from the dredge motor drive. This operation will cause some minor air quality impacts. Because of the temporary nature of the emissions and the offshore location of the dredge operation, it is not expected to have a significant impact on air quality in the area. Dredging operations are expected to be conducted by a hydraulic dredge.

Material dredged by the hydraulic dredge would be pumped through pipelines to the receiver sites on Hueneme Beach, and limited quantities on Silver Strand Beach. Construction equipment (bulldozer or excavator) will be used to grade the newly placed, additional quantity of sand. A work boat would be used to move the hydraulic dredge as necessary within the dredge footprint. A crew boat would be used to ferry crew out to the dredge, and for miscellaneous transport of personnel and equipment on an as-needed basis. Beach placement of dredged material would not produce dust since the material is primarily wet sand. Near shore placement of dredged material would not produce dust since both of these operations are aquatic placement with sediments being placed into the water. There may be some odor from the freshly dredged material placed on the beach, but it would be minor, short-term, and not significant to affect air quality in the area. If a hopper dredge is used, the self-propelled vessel would transport the material to a nearshore site, off of Hueneme Beach. If a clamshell dredge is used, material would be placed onto barges and transported by tugboat to the nearshore site for placement. A crew boat would be used to ferry crew out to the derrick barge and for miscellaneous transport of personnel and equipment on an as-needed basis.

Air emissions calculations for the proposed additional dredge quantity are provided in Appendix E. Only one dredge type will be used. The hydraulic estimated emissions would exceed the NO_x threshold level. However, it would not exceed the General Conformity de minimis thresholds for all criteria pollutants.

The contractor would be required to obtain all necessary air quality permits and comply with the Ventura County Air Pollution Control District (VCAPCD) guidelines. Construction equipment would be properly maintained to reduce emissions. Emissions associated with the proposed dredging

activities derive almost exclusively from the dredge’s motor drive and pumping operations. Compared to the hundreds of tons of pollutants emitted in the County each day, the limited levels of dredge drive exhaust pollutants are small, but still adverse. These impacts, however, would be temporary and would be further reduced by the following measures required by the Corps:

- Retarding injection timing of diesel-powered equipment for nitrogen oxide (NOX) control;
- Using reformulated diesel fuel to reduce ROG and SO₂.

Impacts from air emissions for the combined maintenance dredging operations would be adverse, but temporary, and are therefore considered less than significant. As stated above, project emissions are not expected to exceed “de minimis” levels established as a criteria for a finding of conformity. Therefore, the project is consistent with the SIP and meets the requirements of Section 176(c) of the CAA.

Emissions at the beach placement site will come from construction equipment used to grade the newly placed sand. Because of the intermittent and short-term nature of expected emissions, it is not expected to have a significant impact on air quality in the area. The placement of dredged material will not produce dust since the material is primarily wet sand with small amounts of organic material. There may be some odor from the freshly dredged material, but it will be minor, short-term, and not affect air quality in the area. Emission calculations at the placement site are included in Appendix E, and results included in Table 4.1.

Table 4.1. Increased Dredge Quantity Construction Emissions (tons per year)

Total Project Emissions - Yearly	ROG	CO	NO_x	SO_x	PM₁₀
Hydraulic Dredge*	0.87	3.79	12.18	0.36	0.38
On-Road Vehicles	0.00	0.03	0.00	0.00	0.00
de minimis Thresholds	10	100	100	100	70

Total Project GHG Emissions -	Tons Per Year
Project Emissions	CO₂
Hydraulic Dredge	1064.22
On-Road Vehicles	32.74

Sources: South Coast Air Basin Fleet Average Emission Factors (Diesel) Highest (Most Conservative) EMFAC2007 (version 2.3), Emission Factors for On-Road Passenger Vehicles & Delivery Trucks, and Heavy-Heavy-Duty Diesel Trucks; SCAQMD. SCAQMD 2022.

The proposed project modification would not cause substantial changes or long-term alteration of air quality in the Proposed Dredging and Placement Areas and air basin. The proposed project modification, therefore, would not significantly affect air quality.

No Action Alternative. Impacts associated with the increased dredge quantity would not occur. However, dredging would still occur to the extent possible as detailed in the 2018 FEA. Less than significant impacts to Air Quality would still occur as discussed in the 2018 FEA.

4.5 LAND/WATER USES

4.5.1 Affected Environment

The Affected Environment as it relates to the project area in Channel Islands Harbor is primarily characterized by the marina catering to recreational boaters and sports fishing operations. Boat rentals, a public launch ramp, and a U.S. Coast Guard Station are located along the eastern edge of the harbor.

The two beaches (Silver Strand Beach and Hueneme Beach) support restaurants, hotels, shopping, and sports fishing facilities in support of the beach recreational uses.

4.5.2 Environmental Consequences

Significance Criteria. An impact to Sea Vessel Traffic and Safety will be considered significant if an alternative would:

- Cause a navigational hazard to boat traffic or interfere with any emergency response or evacuation plans.
- Substantially change sea vessel traffic or patterns.

Proposed Action. Direct effects to land use and recreation would be those related to or caused by the increased amount of time the physical presence of the dredge, disposal pipeline, associated equipment and sand placement during construction, as well as bathymetric changes to the channels related to dredging. Indirect effects and benefits would be those related to post-construction topographic changes to the beach profile resulting from dredging and sand placement.

The presence of the dredge and its supporting vessels will restrict vessel traffic to both harbors during dredging. However, boat access will be maintained throughout all stages of construction. Timing requirements to avoid impacts to sensitive species will result in the proposed project modification taking place during the off-tourist season. Boat traffic will, therefore, be at a minimum during all construction activities. Therefore, the proposed project modification is expected to result in adverse, but insignificant impacts to existing uses.

Earth-moving equipment will be required to grade the beach. Activities will restrict use of sections of the beach. However, dredging and placement activities would take place during the fall and winter months, when beach use is at its lowest point. Nearby beaches shall remain open and will be unrestricted. Beach nourishment, over the long term, will result in wider beaches, yielding increased recreational opportunities on the nourished beaches. Project benefits provide for long-term beach stabilization.

Because impacts caused by a navigational hazard to boat traffic or interfere with any emergency response or substantially changes sea vessel traffic or patterns to land and water uses are considered less than significant due to the increased time frame of dredging, mitigation measures are not proposed.

No Action Alternative. Beneficial impacts discussed above would not be attained. Over time, continued accumulation of sediment at the harbors and erosion at the beaches would result in the loss

of commercial and recreational use of those areas. Additionally, the project's beneficial effects to the ecosystem would be lost.

SECTION 5 – GROWTH INDUCEMENT AND CUMULATIVE IMPACTS

5.1 Growth Inducement

The Proposed Project modification is located in Channel Islands Harbor in Ventura County. The biennial dredging is a routine maintenance O&M dredging program of federal channels for continued safe navigation in the harbor. Placement activities of dredged material is a beneficial use for beach nourishment. The Proposed Project modification is not in support of planned infrastructure improvements that would result in additional growth. The Proposed Action would not require additional employees other than temporary contractor employees to perform the annual O&M dredging and placement activities. The Proposed Action would not induce growth within the project area.

5.2 Cumulative Impacts

The scope of the cumulative effects analysis includes past, present and reasonably foreseeable future actions within and approximately 2,000 feet (minimum) beyond the direct footprint of dredging and disposal activities to account for potential indirect effects primarily related to turbidity.

Other Past and Recurring Actions in the scope of analysis

In 1996, the U.S. Federal Government started biennially dredging and maintenance of Channel Islands and Port Hueneme Harbor. The Corps has conducted maintenance dredging and beach placement activities since 1996 within the same project area. The Corps has performed maintenance dredging of the Federal channels in Ventura County, averaging approximately 1.2-1.5 million cy per year of dredging and disposal from 1996 through 2021.

Reasonably Foreseeable Future Actions

As confirmed with Corps Regulatory Division in December 2022, no permit actions have been initiated for other projects or activities within the Federal Navigation Channel or dredge material placement sites.

Cumulative Impact Assessment

While the Proposed Action is a recurring activity, effects to most biological resources, air quality, water quality, recreation, and other aspects of the environment are temporary and short-term. As no future development is planned or reasonably foreseeable to occur, this analysis focuses on potential cumulative effects from past dredging activities conducted by the Corps.

Oceanography and Water Quality: Water quality effects from the Proposed Action and all other past and recurring dredging activities (i.e., increase in turbidity; potential dissolved oxygen (DO) reduction) are temporary and localized. LaSalle (1991) reported that dredging-related turbidity impacts are expected to be limited to within 500 meters (1640 ft.) of the area excavated, with the maximum concentrations generally restricted to the lower water column and would decrease rapidly with distance due to settling and dilution. Field observations of hydraulic dredging activities in

southern California indicate that turbidity increases above background levels may be considerably more limited than those reported by LaSalle (1991) and are typically confined to within 70 to 170 meters of the activities (Corps 1994b, 1998). Water quality effects (i.e., increase in turbidity, DO reduction) would occur from material discharged from a cutterhead hydraulic dredge with a pipeline or from a scow with pipeline into the surfzone, or during nearshore placement activities. Impacts are expected to be limited to within approximately 70 to 170 meters of the activities. Water quality parameters would return to baseline levels upon completion of the dredging and placement activities. Therefore, the incremental impact of the Proposed Action when added to other past and recurring actions would result in less than significant cumulative impacts.

Marine Resources:

Biological Resources: There is a potential for longer-term effects to common benthic resources within the immediate dredge footprint as some benthic organism populations within the Federal channels may not be able to fully recover in-between dredge episodes. The benthic species that occur within the dredge and disposal footprint are common to nearshore environments and widespread throughout the harbor and adjacent coastline. All other effects to biological resources are short-term and insignificant. Therefore, the incremental impact of the Proposed Action when added to other past and recurring actions would result in less than significant cumulative impacts.

Threatened and Endangered Species: The only aspect of the Proposed Action with the potential to adversely affect Federally listed species is the additional dredge quantity itself. No other activity is known to occur in the project vicinity.

Cultural Resources: No historic properties have been identified within the Area of Potential Effect. Therefore, the incremental impact of the Proposed Action when added to other past and recurring actions would result in less than significant cumulative impacts.

Air Quality: Channel Island Harbor is in attainment for criteria pollutants. Emissions from City and Corps dredge and disposal activities, even if they occurred simultaneously, would not result in significant adverse impacts. Therefore, the incremental impact of the Proposed Action when added to other past and recurring actions would result in less than significant cumulative impacts.

Land/Water Use:

Land Use: Effects including impacts and benefits to land use from past dredging and placement activities were short-term. Therefore, the incremental impact of the Proposed Action when added to other past and recurring actions would result in less than significant cumulative impacts.

Water Use: The Proposed Action as well as past and continuing dredging in the harbor and discharge of material in the dredged material placement area(s) avoids to the extent practicable interruption of the vessel operations in the harbor and provides a benefit to recreational and commercial uses of the harbor. Therefore, the incremental impact of the Proposed Action when added to other past and recurring actions would result in less than significant cumulative impacts.

SECTION 6 – ENVIRONMENTAL COMPLIANCE AND COMMITMENTS

6.1 COMPLIANCE

National Environmental Compliance Act of 1969 (Public Law (PL) 91-190); National Environmental Policy Act (NEPA) of 1969 (42USC4321 et seq., PL 91-190); Council on Environmental Quality Regulations for Implementing NEPA, 40 CFR Parts 1500 to 1508; USACE Regulations for Implementing NEPA, 33 CFR Part 220.

The National Environmental Compliance Act includes the improvement and coordination of Federal plans to attain the widest range of beneficial uses of the environment and to achieve a balance between population and resource use permitting high standards of living and a wide sharing of life's amenities.

The NEPA was established to ensure that environmental consequences of federal actions are incorporated into Agency decision making processes. It establishes a process whereby parties most affected by impacts of a proposed action are identified and opinions solicited. The proposed action and several alternatives are evaluated in relation to their environmental impacts, and a tentative selection of the most appropriate alternative is made.

This SEA has been prepared to address impacts associated with the proposed project modification. A Public Notice was circulated for public review and to appropriate resource agencies, environmental groups and other interested parties. No comments received. The Proposed Action will be in compliance with this Act upon completion of the NEPA process.

Clean Water Act of 1972 (33 USC 1251 et seq.)

The Clean Water Act (CWA) was passed to restore and maintain chemical, physical, and biological integrity of the Nation's waters. Specific sections of the CWA control the discharge of pollutants and wastes into aquatic and marine environments. The major section of the CWA that applies to the proposed project modification is Section 401, which requires certification that the permitted project complies with the State Water Quality Standards for actions within state waters, and Section 404(b)(1), which establishes guidelines for discharge of dredged or fill materials into an aquatic ecosystem.

The Corps applied for a Section 401 Water Quality Certification from the Los Angeles Regional Water Quality Control Board (LARWQCB) on September 9, 2022. No response was forthcoming from the LARWQCB within 60 days per 33 CFR 336.1(b)(8)(iii). A draft 401 Water Quality Certification was sent to the Corps on November 14, 2022. A Final Water Quality Certification was not provided within the reasonable period identified for this project.

Therefore, the USACE sent a letter (Appendix H) assuming a waiver of water quality certification to the LARWQCB on December 28, 2022. The Corps does not permit itself under Section 404 of the Act and has prepared a 404(b)(1) analysis (see Appendix G) to demonstrate substantive compliance with Section 404. The project is in compliance with the Act.

Endangered Species Act of 1973 (16 USC 1531 et seq.)

The Endangered Species Act (ESA) protects threatened and endangered species by prohibiting federal actions that would jeopardize continued existence of such species or result in destruction or adverse modification of any critical habitat of such species. Section 7 of the Act requires consultation regarding protection of such species be conducted with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) prior to project implementation. During the planning process, the USFWS and the NMFS evaluate potential impacts of all aspects of the project on threatened or endangered species. Their findings are contained in letters that provide an opinion on whether a project will jeopardize the continued existence of endangered species or modify critical habitat. If a jeopardy opinion is issued, the resource agency will provide reasonable and prudent alternatives, if any, that will avoid jeopardy. A non-jeopardy opinion may be accompanied by reasonable and prudent measures to minimize incidental take caused by the project.

Formal consultation with the USFWS to address potential indirect impacts to WSP and associated critical habitat was initiated by the Corps in August 2022. The Corps conducted analysis of potential indirect impacts and reported these to USFWS in a Biological Assessment (BA). Among these findings of indirect impacts due to the increased dredge quantity were potential for increased beachfront loss and wrack as forage unavailability. USFWS responded with a Biological Opinion in December 2022 affirming the Corps findings and issuing Reasonable and Prudent Measures (RPMs) and Terms and Conditions validating the Corps restoration plan currently in development. Section 4.2 of this EA provides an evaluation of potential effects of the action on the endangered California least tern and the threatened western snowy plover.

Additional avoidance and minimization measures are also outlined in this document.

Coastal Zone Management Act of 1976 (PL 92-583; 16 USC 1456 et seq.)

Under the Coastal Zone Management Act (CZMA), any federal agency conducting or supporting activities directly affecting the coastal zone must demonstrate the activity is, and proceed in a manner, consistent with approved State's Coastal Zone Management Program, to the maximum extent practicable. As no federal agency activities are categorically exempt from this requirement, the Corps will obtain concurrence from the California Coastal Commission (CCC) with a Negative Determination (ND). Federal consistency regulations allow a Negative Determination to be submitted for an activity "which is the same as or similar to activities for which consistency determinations have been prepared in the past." The Corps has determined that an ND is appropriate for the proposed project modification, and received concurrence from the CCC on December 2, 2022 for dredging additional quantity during the 2022-2023 dredging cycle. The project is in compliance with the Act.

Clean Air Act of 1969 (42USC7401 et seq.); CAA Amendments of 1990 (PL101-549)

Air quality regulations were first promulgated with the Clean Air Act (CAA). The CAA is intended to protect the Nation's air quality by regulating emissions of air pollutants. Section 118 of the CAA requires that all Federal agencies engaged in activities that may result in the discharge of air pollutants

comply with state and local air pollution control requirements. Section 176 of the CAA prohibits federal agencies from engaging in any activity that does not conform to an approved State Implementation Plan.

The CAA established the NAAQS and delegated enforcement of air pollution control to the states. In California, the Air Resources Board (ARB) has been designated as the state agency responsible for regulating air pollution sources at the state level. The ARB, in turn, has delegated the responsibility of regulating stationary emission sources to local air pollution control or management districts which, for the proposed project modification, is the Ventura County Air Pollution Control District (VCAPCD).

Project emissions related to the proposed increase in dredge quantity are not expected to exceed “de minimis” levels established as a criteria for a finding of conformity. Therefore, the project is consistent with the SIP and meets the requirements of Section 176(c). The project is in compliance with the Act.

National Historic Preservation Act of 1966 (16 USC 470 et seq.)

Section 106 of the Act requires Federal agencies to take into account the effects of their undertaking on historic properties. Previous consultation with the SHPO has resulted in a determination, and concurrence, that no historic properties would be affected by the proposed project modification. Consultation was reinitiated with SHPO on September 27, 2022 and SHPO concurred on December 23, 2022.

If previously unknown cultural resources are identified during project implementation, all activity will cease until requirements of 36 CFR 800.13, *Post-review discoveries*, are met. The project is in compliance with the Act.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) requires the USACE to coordinate with the U.S. Fish and Wildlife Service whenever the waters of any stream or other body of water are proposed to be impounded, diverted, or otherwise modified. This proposed project modification has been coordinated with the USFWS. A Coordination Act is not required because the Proposed Action will not result in impoundment, diversion or modification to a body of water. The Proposed Action is in full compliance with this Act.

Magnuson-Stevens Fishery Management and Conservation Act, as amended.

This SEA is subject to an EFH Assessment as required by the Magnuson-Stevens Act. Although dredging activities will occur within Essential Fish Habitat, The USACE has determined that the proposed project modification may adversely affect EFH, but would not result in a significant, adverse impact. In compliance with the coordination and consultation requirements of the Act, a meeting with Corps and NMFS staff was conducted in September 2022. The response received from the NMFS was transmitted via email on September 14, 2022. According to NMFS, “...reasonable to conclude that re-initiation is not necessary...”. The project is in compliance with the Act.

Executive Order 12898, Environmental Justice in Minority and Low-Income Populations and Executive Order 14008, Tackling the Climate Crisis at Home and Abroad

President Clinton signed Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority and Low-Income Populations,” on February 11, 1994. It requires, to the greatest extent practicable, each Federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” Additionally, Executive Order 14008 regarding environmental justice applies as well.

The proposed modification of dredging and disposal activities would not result in disproportionate impacts to minority populations. The proposed project modification is in compliance with both Executive Orders.

Demographic data from the USEPA’s EJSCREEN (USEPA, 2022), an online environmental justice screening and mapping tool, served as the source data (Table 6.1) for evaluation. Maps and data from EJSCREEN are found in Appendix F. EJSCREEN incorporates demographic data from the U.S. Census Bureau. An analysis of demographic data was conducted to derive information on the approximate locations of low-income and minority populations in the community of concern. Since the analysis considers disproportionate impacts, two areas must be defined to facilitate comparison between the area actually affected and a larger regional area that serves as a basis for comparison and includes the area actually affected. The larger regional area is defined as the smallest political unit that includes the affected area and is called the community of comparison. For purposes of this analysis, the affected area is an area that surrounds the project area (under 0.5 miles) and EPA Region 9 is the community of comparison.

Table 6.1. Environmental Justice Study Area Demographics

Demographic Indicators	Affected Area	State of California	EPA Region 9
Minority Population	22%	63%	60%
Low-Income Population	15%	31%	31%

As summarized in Table 6.1, the aggregate minority population in the affected area is 22% and 15% of individuals in the affected area are considered low-income. The aggregate minority and low-income population percentages in the affected area do not exceed 50%. In addition, the affected area minority population and low-income percentages are not greater than the minority and low-income population percentages in the state of California as a whole. The affected minority and low-income population percentages are not meaningfully greater than the EPA Region 9. Therefore, the affected area does not constitute an EJ community and there would be no impacts resulting from the Proposed Action that would result in disproportionately high and adverse impacts to minority and low-income communities.

Executive Order 11988, Floodplain Management, May 24, 1977

Signed May 24, 1977, this order requires that government agencies, in carrying out their responsibilities, provide leadership and take action to restore and preserve the natural and beneficial values served by floodplains. Before proposing, conducting, supporting or allowing an action in the floodplain, each agency is to determine if planned activities will affect the floodplain and evaluate the potential effects of the intended action on its functions. In addition, agencies shall avoid locating development in a floodplain to avoid adverse effects in the floodplains. The eight-step process outlined in ER 1165-2-26, para. 8, General Procedures was followed.

The Corps is responsible for maintaining the Federally authorized channel design at the Channel Islands and Port Hueneme Harbors, which is located within the floodplain. The purpose of the proposed project modification is to provide a plan that allows for the maintenance dredging of the existing harbors and the sand trap at Channel Islands Harbor at their authorized depths and widths, promoting navigation safety. The proposed project modification also provides beach replenishment material for down coast (Silver Strand and Hueneme) beaches eroded because of altered littoral drift conditions associated with Channel Islands and Port Hueneme Harbors. Maintenance of the harbor's navigation channels and sand trap as well as replenishment of the beaches requires project activities within the floodplain. The proposed action complies with state and local flood plain protection standards. The action does not negatively affect the natural and beneficial values of the flood plain. The proposed action does not induce floodplain development or increase risks to public safety. The proposed project modification is in compliance with this Executive Order.

SECTION 7 - ENVIRONMENTAL COMMITMENTS

Environmental commitments previously described for the Channel Islands and Port Hueneme Harbors O&M Maintenance dredging project remain unchanged and can be referenced in Section 5.0 of the 2018 Final EA (USACE 2018).

The following additional environmental commitments are included as part of the Proposed Modification:

1. To offset potential impacts to WSP designated critical habitat from the Proposed Action and future dredging of Area D, the Corps proposes to restore 13.47 acres (1:1 impact-restoration ratio) of WSP habitat within 10 miles of the project area or other area and/or measures as agreed to with USFWS. The Corps will commit to manage this area for a period of 5 years. Management activities would include strategic fencing or other measures intended to protect any nesting or foraging activities that may occur in this area without significantly impacting authorized recreational beach use, as well as installation and maintenance of native dune vegetation.
 - The Corps will present a draft site selection and habitat restoration plan to the Service within 1 year of the project start date. Within 1 year of the Service's acceptance and signature on the final plan, the Corps will complete the restoration of the selected area.
2. During restoration implementation: If vehicles are required to drive on Hollywood beach, a biological monitor will be present to clear the path of any vehicles by walking ahead and

verifying no birds are present. If birds are present monitor will signal and stop vehicles. If birds do not move out of vehicle traffic path, the biological monitor will attempt to guide vehicles on an alternate path to avoid grounding birds, walking ahead of vehicle to ensure the path is cleared, maintaining a minimum 50-yard buffer.

3. While the Corps has assumed a waiver of Section 401 Certification requirements because a Final Water Quality Certification was not provided within the reasonable period identified for this project, the Corps has agreed to comply with the water quality and water resources protection measures that were identified the draft Water Quality Certification No. 22-074 provided by the Los Angeles Water Quality Control Board (Board) on November 14, 2022 (see Appendix H). These measures include:
 - Completion of an eelgrass survey prior to dredging (completed September, 2022).
 - Accidental Discharges of Hazardous Materials.
 - Water Quality Monitoring (see pages 9 -11 in draft Water Quality Certification, Appendix H).
4. To help ensure slope failure and sloughing of the coastal foredune habitat near Sand Trap D does not occur due to the proposed modification, USACE is proposing to:
 - Establish and adhere to a setback of between 150 and 160 feet from the coastal dunes for this dredge cycle only.
 - Dredge beginning at the seaward end of Sand Trap D and only progress landward towards the setback as necessary until the target dredge material volume is reached in order to minimize approaching the area of the setback to the extent feasible.
 - If the dredging progresses within 200 feet of the coastal dunes (40 to 50 feet seaward of the setback line) USACE would begin monitoring dredging operations. One observer would be aboard the dredge vessel actively tracking the dredge head location both visually and with global positioning system (GPS) software to ensure it does not encroach into the setback area. A second observer would also be positioned on the beach at the nearest safe point along the boundary at the seaward side of the coastal foredune habitat.
 - In the event that either monitor detects slope failure or sloughing affecting or approaching coastal foredune habitat, USACE would direct the dredging operator to cease dredging and would notify the Executive Director of the Commission to discuss if and how dredging operations should proceed.
 - USACE has committed to cease dredging operations in Area D as soon as the target volume of dredge material is reached. This would help ensure that the setback area is only approached if necessary and that any unnecessary slope failure or sloughing and possible encroachment into the setback is avoided.

SECTION 8 - REFERENCES

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SECTION 9 - ACRONYMS

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
ARB	Air Resources Board
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CO	Carbon monoxide
CWA	Clean Water Act
DO	Dissolved oxygen
EA	Environmental Assessment
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FMP	Fishery Management Plan
FONSI	Finding of No Significant Impact
MLLW	Mean Lower Low Water
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO2	Nitrogen dioxide
SEA	Supplemental Environmental Assessment
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
USFWS	U.S. Fish and Wildlife Service
VCAPCD	Ventura County Air Pollution Control District

SECTION 10 - PREPARERS/REVIEWERS

Preparers

Gabrielle Dodson	USACE, Physical Scientist, Ecosystem Planning Section
Kym Lyons	USACE, Biologist, Ecosystem Planning Section
Natalie Martinez-Takeshita	USACE, Biologist, Ecosystem Planning Section
John Hale	USACE, Archeologist, Regional Planning Section

Reviewers

Hayley Lovan	USACE, Section Chief, Environmental Resources Branch
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SECTION 11 – FIGURES



Figure 1: Dredge Template and Buffer Area

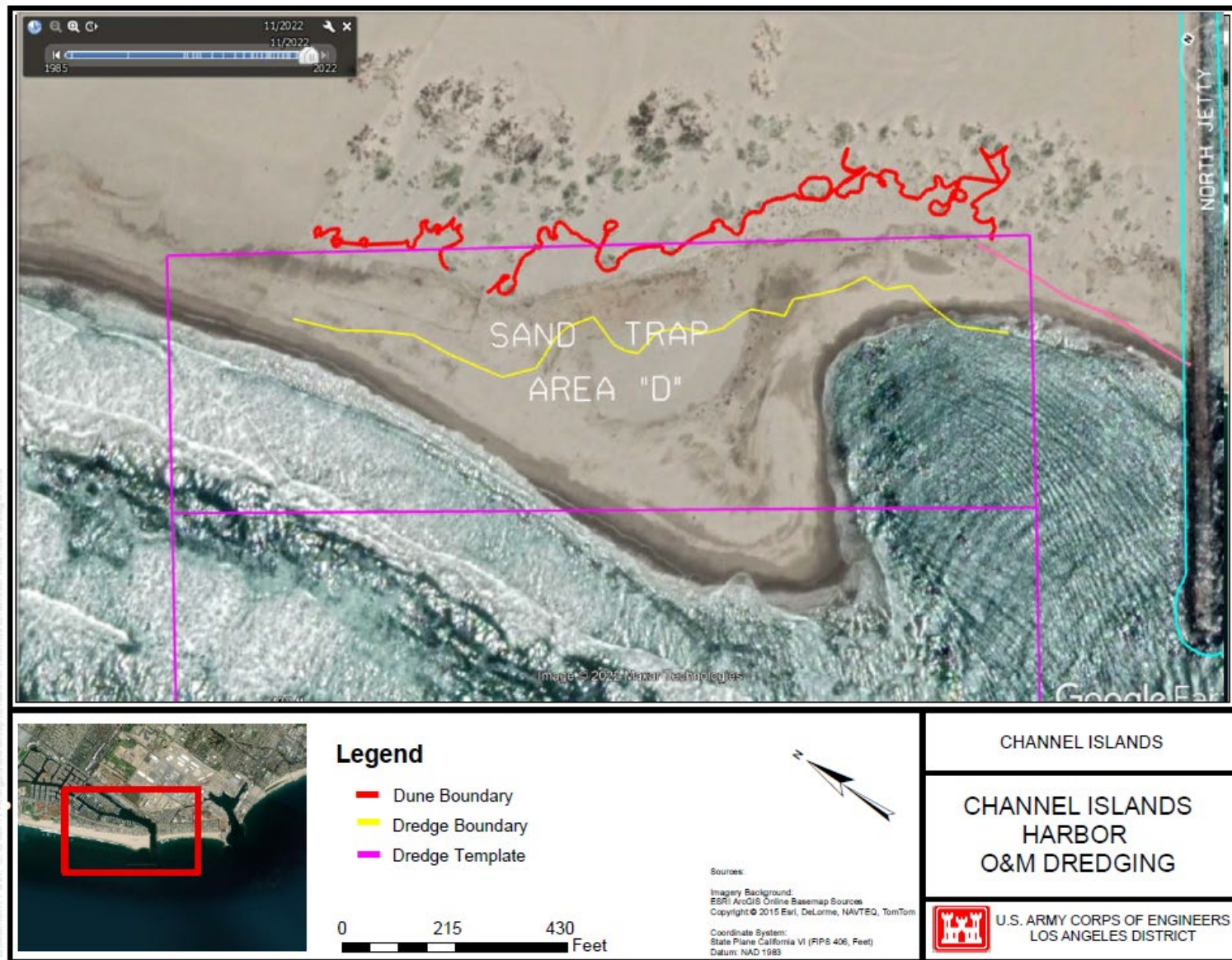


Figure 2: Dredge Template, Dune Boundary and Dredge Boundary