FINAL
ENVIRONMENTAL ASSESSMENT

FOR

CHANNEL ISLANDS HARBOR
BREAKWATER AND JETTY REPAIR PROJECT
Ventura County, California

PREPARED BY

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

June, 2019

U.S. ARMY CORPS OF ENGINEERS
SOUTH PACIFIC DIVISION
LOS ANGELES DISTRICT
FINDING OF NO SIGNIFICANT IMPACT FOR THE CHANNEL ISLANDS HARBOR BREAKWATER AND JETTY REPAIR PROJECT

I have reviewed the attached Environmental Assessment (EA) prepared for the Channel Islands Harbor Breakwater and Jetty Repair project in Ventura County, California. The Los Angeles District of the U.S. Army Corps of Engineers (Corps) proposes to repair the Channel Islands Harbor facility, a structure consisting of two parallel entrance jetties and a protective offshore breakwater near the entrance to the harbor (Figure 2 in the EA). Repair work would consist of furnishing and placing approximately 30,000 tons of new armor stone having a median stone size of 15 tons, and resetting existing armor stone as needed. The work would repair and restore damaged areas to original design elevations and slopes. Repairs would be conducted by a barge-mounted crane, barges carrying rock, and other various support vessels. Transport of stone would likely be by sea but may occur on land using tractor trailer trucks or other heavy equipment vehicles.

The purpose of the proposed project is to repair the existing jetties and detached breakwater for the authorized purpose of maintaining navigability in the Federal channel at the Channel Islands Harbor. The jetties and detached breakwater serve as protection from waves and currents, reduce shoaling and therefore facilitate navigability from the Pacific Ocean into the harbor entrance channel. Maintenance repairs on the jetties and breakwater are needed to ensure navigational safety and to prevent further degradation of the structural integrity of harbor facilities.

Environmental resources and attributes addressed in the EA include oceanography and water quality, marine resources, air quality, noise, cultural resources, vessel transportation and safety, recreation uses, aesthetics, land/water uses, ground transportation, and cumulative impacts, and are not expected to result in significant impacts for the quality of the human environment.

The proposed project is in compliance with all applicable regulations, including Section 404 and 401 of the Clean Water Act. The proposed project involves in-kind repair of an existing authorized structure. Although damaged, the facility is considered currently serviceable. The structure performs its function to some degree and is not deteriorated to the point that the entire structure must be replaced. Repairs would not change the character, scope, or size of the originally constructed facility and is not subject to recapture. Accordingly, the discharges of fill material into waters of the United States is exempt under section 404 of the Clean Water Act; a 404(b)(1) analysis is not required. The Corps applied to the Regional Water Quality Control Board for a Clean Water Act Section 401 water quality certification on December 4, 2018. Because the Regional Water Quality Control Board did not respond within sixty days, pursuant to 33 C.F.R. 336.1(b), the Corps has deemed the requirement for certification waived. The total direct and indirect emissions from the federal action are below

applicability rates. Therefore, a conformity determination is not required. The proposed project meets the requirements of section 176(c) of the Clean Air Act. A Negative Determination was submitted to the California Coastal Commission (CCC) under section 307(c) of the Coastal Zone Management Act (CZMA) for concurrence. The CCC staff concurred with the Negative Determination by letter dated April 23, 2019, and this project is in compliance with CZMA. A copy of the CCC's concurrence letter is included in Appendix D of the EA. No federally-listed species or designated critical habitat would be affected by project implementation. Therefore, consultation under section 7 of the Endangered Species Act is not required. In accordance with the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act, an assessment of Essential Fish Habitat (EFH) has been conducted for the proposed project. The Corps has determined that the project would not result in substantial adverse impacts to EFH. The Corps received general concurrence from the National Marine Fisheries Service on May 23, 2019 to fulfill the EFH requirements. Consultation has been completed with the State Historic Preservation Officer (SHPO) in accordance with section 106 of the National Historic Preservation Act with a determination that there would be no historic properties affected. A copy of SHPO's concurrence letter is included in Appendix C of the EA. In the event that previously unknown cultural resources are discovered during project implementation, activities will cease until the Corps has met the requirements of 36 C.F.R. 800.13 regarding post-review discoveries.

Hence, I have considered the available information contained in this EA and determined that impacts resulting from implementation of the proposed project would not have a significant effect on the human environment; therefore preparation of an Environmental Impact Statement is not required.

_____ _____

DATE

Aaron C. Barta, PMP
Colonel, U.S. Army
Commander and District Engineer

U.S. ARMY CORPS OF ENGINEERS
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6/21/19

DATE

Aaron C. Barta, PMP
Colonel, U.S. Army
Commander and District Engineer

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SECTION 1 - INTRODUCTION

1.1 PROPOSED PROJECT

1.1.1 Location. The proposed project is located on the Channel Islands Harbor facility (Harbor), a structure consisting of two parallel entrance jetties and a protective offshore breakwater near the entrance to the Channel Islands Harbor. Channel Islands Harbor is located in the city of Oxnard (Figure 1), Ventura County, California. The project area would encompass approximately 60 acres of harbor channel, stone jetties and an offshore breakwater. Staging areas are proposed for Kiddie Beach and the Silver Strand Beach parking lot, and a portion of the beach adjacent to the parking lot would also be utilized for temporary storage of construction equipment and supplies (Figure 2).

1.1.2 Background and Project History. Harbor structural features consist of a 2,300-foot long offshore detached breakwater, two 1,300 foot-long 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 (Figures 2 & 4).

Channel Islands Harbor is an entirely manmade harbor that was mechanically excavated out of the shoreline to serve two demands. The first being Ventura County's desire for a small boat harbor, and the second to mitigate coastal beach erosion caused by the construction in 1942 of Port Hueneme, approximately one mile to the southeast. Construction on the harbor began in 1958, and expansion continued into the 1970s. The rubble-and-stone breakwater and jetties were originally constructed in 1958-1960 to protect the newly created harbor. Major maintenance, which consisted of repairs to the north jetty and a small section of the detached breakwater, was completed in 1996 to address damages from the 1982-1983 storm season and the 1994 Northridge earthquake.

1.1.3 Timing of Project. Construction could begin as early as summer of 2019, but may begin in Spring of 2020 or later due to funding and availability of armor stone. Construction is anticipated to last 6 months, but delays or schedule extensions may occur due to adverse weather conditions, mechanical failures or other unforeseen issues. The California coastline typically experiences high surf and energetic currents in addition to lunar tidal cycles during fall, winter, and spring months (October through May). Large offshore storm systems in the north-central Pacific Ocean and Gulf of Alaska typically generate the largest swells of the year during this time period. Materials for breakwater repair can't be placed during large swell events as large waves, and associated strong currents, makes safe navigation and construction work from a floating barge nearly impossible. However, between April and October the sea is most benign and would allow the barges, boats, and construction crew to safely work close to the harbor breakwater and jetties.

1.1.4 Staging Areas. The contractor would temporarily use one or more staging areas for the Channel Islands Harbor jetties and breakwater repair work. The areas are located at the Kiddie Beach parking lot, the Silver Strand Beach parking lot, and a portion of the beach adjacent to the parking lot (Figure 2). The eastern portion of the Entrance Basin at the north end of Kiddie

Beach would be used for temporary and emergency mooring of the barges and storage of other marine equipment outside of hours of operation and in the event of severe weather. These areas have been used in the past as staging areas for dredging and construction work, and are expected to be used in the future for the same purposes. Breakwater and jetty repair work only occurs on a temporary basis, usually after lengthy time intervals (i.e., the last repair work was in 1996). These areas are not currently fenced. The contractor would be responsible for setting up barriers to entry to the staging areas, and monitoring them to ensure public safety.

1.1.5 Construction Equipment. Repair of the detached breakwater and harbor jetties would be accomplished using one crane-equipped barge, one storage barge (for hauling stone), and two support vessels. While it is not anticipated, if an inland quarry is utilized, stone would be trucked from the quarry to a staging area using trucks. The capabilities and compliment of such equipment are as follows:

Crane-equipped Barge. Typically, a barge with an attached crane that uses a clamshell bucket to retrieve stones from the storage barge, and then place those stones on damaged sections of the breakwater and jetties. A boat operator in a skiff, and spotter on the breakwater, would direct the operation of the crane in order to pick and place the stones. The picked stone must be able to match the dimensions of the voids along the breakwater. If it is unacceptable (i.e. too large, or too round), the crane would rotate 180 degrees to place the picked stone back on the storage barge and an adjacent stone would be picked. The crane would then rotate back 180 degrees and attempt to secure another stone at the direction of the spotter. Given the reach of the crane and the proximity of the barge to the breakwater, it shouldn't be difficult for the crane to move the clamshell from one location to the next. The barge's crew compliment consists of a barge captain, crane operator, oiler, and spotter. Approximately 30 to 35 stones can be picked and placed per day using this vessel. Roughly three to four stones per hour on average.

Support Vessels. Self-propelled boats that serve as tenders, tugs, and spotting craft. The main purpose of a support vessel is to assist the crane operator as well as to ferry equipment and crew back and forth from the shore, breakwaters, staging areas, and the crane and support barges. The compliment of these vessels is usually just one operator unless ferrying other crew.

Storage Barge. Another floating barge would serve as the stockpile of stone for repair work. This barge is typically towed in from an offsite quarry location (likely Pebbly Beach Quarry on Santa Catalina Island), and is then anchored next to the crane-equipped barge. The compliment of this vessel is usually a spotter/oiler who works with the crane operator to select stones.

Trucks. Trucking material from an inland quarry, if used, would include transport of stone using tractor trailer trucks or other heavy equipment and placement at the staging area. It is estimated that approximately1875 haul trips would be necessary to transport rock to the project area. All stones will be placed onto a barge to be delivered to the work areas, this will most likely be done by a crane. There is a storage area on Silver Strand Beach where the additional stones may be stored for the land-based work on the south jetty.

After project completion, any stones not placed within the structure will become the property of the contractor and will be required to be removed from the site along with all other contractor equipment and materials.

1.2 ENVIRONMENTAL ASSESSMENT PROCESS

This Environmental Assessment (EA) addresses potential impacts associated with implementing the proposed project.

The Corps is the lead agency for this project. This EA complies with the National Environmental Policy Act (NEPA) of 1969, as amended, (42 U.S.C. 4321, *et seq.*), Council on Environmental Quality (CEQ) regulations implementing NEPA and Corps NEPA implementing regulations (33 C.F.R. Part 230) and guidance.

The EA process follows a series of prescribed steps. The Draft EA was distributed for a 15-day public review. No comments were received. The final step is preparing a Finding of No Significant Impact (FONSI); if it is determined the federal action will not have a significant effect on the human environment. This is a concise summary of the decision made by the Corps. If it is determined the federal action will have a significant effect on the human environment, an EIS must be prepared.

1.3 RELATIONSHIP TO ENVIRONMENTAL PROTECTION STATUTES, PLANS, AND OTHER REQUIREMENTS

The Corps is required to comply with all pertinent federal laws and regulations; compliance is summarized in Table 1.

Table 1
Summary of Environmental Compliance

Statute	Status of Compliance
National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. 4321, et seq., as amended Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the NEPA (40 CFR 1500-1508), and Corps NEPA Implementing Regulations (33 CFR Part 230) and guidance	The draft EA was completed and submitted for public review on December 10, 2018. No comments were received. Upon review of the Final EA, the District Engineer will either issue a FONSI or require preparation of an EIS.
Clean Air Act, 42 U.S.C. 7401, et seq.	A permit to construct shall be obtained by contractor, if necessary. The total direct and indirect emissions from the federal action are below applicability rates. Therefore, a conformity determination is not required.
Section 404 of the Clean Water Act, 33 U.S.C. 1344, Corps regulations at 33 CFR Part 336, and USEPA 404(b)(1) Guidelines at 40 CFR Part 230	The proposed project involves in-kind repair of an existing authorized facility. Although damaged, the facility is considered currently serviceable. The facility performs its function to some degree and is not deteriorated to the point that the entire facility must be replaced. Repairs would not change the character, scope, or size of the originally constructed facility and is not subject to recapture. Accordingly, the discharges of fill material into waters of the United States is exempt under section 404 of the Clean Water Act.
Section 401 of the Clean Water Act, 33 USC 1341	A request for section 401 Water Quality Certification was provided to the Los Angeles Regional Water Quality Control Board on December 4, 2018. Because there was no response within 60 days, per 33 CFR 336.1(b)(8)(iii), the Corps deemed a waiver of Water Quality Certification under section 401 of the Clean Water Act.
Section 10 of the Rivers and Harbors Act of 1899, 33 USC 403	Breakwater repair activities are not anticipated to have any effect on navigation into Channel Islands Harbor. The Harbor is a small boat harbor. Craft large enough to interfere with construction/repair work would not be using the waterway.
Coastal Zone Management Act of 1972, 16 U.S.C. 1451 et seq. National Oceanic and Atmospheric Administration Federal Consistency Regulation With Approved Coastal Management Program Regulations at 15 CFR Part 930	A Negative Determination was prepared by the Corps and provided to the California Coastal Commission on March 19, 2019 for review and concurrence. A letter from the Coastal Commission concurring with the Corps' Negative Determination was received on April 23, 2019.
Section 7 of the Endangered Species Act of 1973, 16 U.S.C. 1536 and implementing regulations at 50 CFR Part 402	The Corps has determined that there will be no effect to listed species or designated critical habitat; consultation pursuant to Section 7 of the Endangered Species Act is not required.
Migratory Bird Treaty Act, 16 U.S.C. 703-711	The Corps has determined that no species protected by the Migratory Bird Treaty Act will be impacted.
Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended, 33 U.S.C. 1413	Not applicable.
Marine Mammal Protection Act, 16 U.S.C. 1361 et seq	The Corps has determined that no species of marine mammal would be impacted.

Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1855(b) and implementing regulations at 50 CFR 600.905-930	The Corps has determined that this project would not result in a substantial, adverse impact to Essential Fish Habitat (EFH). NOAA's National Marine Fisheries Service (NMFS) reviewed the proposed action for impacts to EFH and concurred that the project fits within coverage under the 2003 EFH General Concurrence established with the U.S. Army Corps of Engineers Los Angeles District.
Section 106 of the National Historic Preservation Act, 54 U.S.C. 3000100 et seq and 36 CFR Part 800	On October 15, 2018, the Corps made a determination that the Channel Islands breakwater and jetties are not eligible for listing in the National Register of Historic Properties, and that *no historic properties affected* by the proposed repair activities. The State Historic Preservation Officer concurred on October 30, 2018.
Executive Order 11593: Protection and Enhancement of the Cultural Environment, May 13, 1971	Not applicable
Executive Order 12898, Environmental Justice in Minority and Low-Income Populations	The minority population in the project area is significantly smaller than the minority population in the County. Therefore, repair activities would not result in disproportionately high and adverse impacts to minority populations.

SECTION 2 – PROJECT PURPOSE AND NEED

2.1 PROJECT PURPOSE AND NEED

The purpose of the proposed project is to repair the existing jetties and detached breakwater for the authorized purpose of maintaining navigability in the Federal channel at the Channel Islands Harbor. The jetties and detached breakwater serve as protection from waves and currents, reduce shoaling and therefore facilitate navigability from the Pacific Ocean into the harbor entrance channel. Maintenance repairs on the jetties and breakwater are needed to ensure navigational safety and to prevent further degradation of the structural integrity of harbor facilities. Additionally, the detached breakwater serves to suspend littoral transport and create a sand trap up coast of the harbor entrance channel. This material is used to nourish the eroding shoreline downcoast from Port Hueneme harbor, and provides protection to private, public and Federal lands from further erosion.

SECTION 3 – PROJECT ALTERNATIVES

3.1 PROPOSED PROJECT CRITERIA REQUIREMENTS

Legislation authorizes maintenance and repair activities on existing harbor facilities to be conducted at Channel Islands Harbor to ensure continued safe navigability to and from the harbor.

3.2 ALTERNATIVES CONSIDERED

Congressional legislation directs that operations, maintenance, repair, replacement, and rehabilitation (OMRR&R) work associated with Channel Islands Harbor must occur specifically at Channel Islands Harbor, no other alternative sites for maintenance construction and repair of existing facilities are considered viable. Therefore, no other alternatives would be analyzed in detail other than the "No Action Alternative."

3.2.1 No Action Alternative

The No Action Alternative would allow the harbor jetties and breakwater to continue to deteriorate, eventually resulting in unsafe or impassable navigation conditions. Eventual harbor closures could result. This would result in a loss to recreational and commercial operations. There is also potential for danger to life and property if the harbor structures are not maintained, due to shoaling and wave conditions. Moreover, without barriers to littoral sediment transport that the harbor facilities provide, local beaches would continue to erode and deteriorate, but at an accelerated pace. This would eventually impact beach visitation, reducing the value of the recreational experience. Loss of use would result in serious economic losses to the local community, and would also result in an increased risk of storm damages as a result of narrowed beaches allowing storm waves to undermine and/or overtop coastal protection structures designed to function behind beaches. Eventual damage to private, public and Federal property would result, with significant economic impacts. Losses of downcoast beaches would also

adversely impact life history requirements for species such as the California grunion (*Leuresthes tenuis*), the western snowy plover (*Charadrinus nivosus nivosus*), and the California least tern (*Sternula antillarum browni*).

3.2.2 Alternatives Considered

Proposed Action. The proposed repair work, described more fully in Section 1.1, would consist of furnishing and placing approximately 30,000 tons of new armor stone having a median stone size of 15 tons, and resetting existing armor stone as needed. The work would repair and restore damaged areas to original design elevations and slopes. Repairs would be conducted by a barge-mounted crane, barges carrying rock, and other various support vessels. Transport of stone would likely be by sea but may occur on land using tractor trailer trucks or other heavy equipment vehicles. Staging/storage areas near the harbor for the proposed maintenance repair project would be utilized for construction equipment and supplies. Refer to Figures 3 and 4 for jetty and breakwater structural profiles, as well as locations identified for repair work.

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 project and no action alternative.

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 high water (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. The mean tidal range for the project site is 5.4 feet. The extreme range is about 9.5 feet.

Water quality is typically characterized by salinity, pH, temperature, clarity, and dissolved oxygen (DO). Table 2 characterizes the overall water quality parameters for the project site:

Table 2	
Water Quality Characteristics	
Parameters	**Project Site**
Salinity (ppt)	32.9 to 34.4
Surface Temperature (F)	55 to 66
pH	7.4 to 7.6
Clarity (ft.)	13 to 15
D.O. (mg/l)	8.9

4.1.2 Environmental Consequences.

Significance Criteria. An impact to Oceanography and Water Quality will be considered significant if the proposed project would:

- Cause substantial changes in topography or physical processes acting on the system
- Cause water quality conditions that have potential deleterious effects on human, fish, or plant life;
- Cause pollution, contamination, or nuisance.

Proposed Action.

Proposed action would not cause substantial chances to the local topography or physical processes since repair work is in kind and would not entail re-using any displaced rock that may have settled on the seabed adjacent to the breakwater or stone jetties. Some work will occur at or just below Mean Lower Low Water (MLLW). In the draft EA, repairs to the breakwater were described as occurring above -10 feet (MLLW). Although this is applicable for much of the damage areas, some repairs are expected to occur at roughly -30 feet MLLW for the detached breakwater and -15 feet MLLW for the jetties. Due to limited visibility, there would be no resetting or removal of existing stone below 0.0 feet MLLW therefore there would not be any stirring up of sediment caused by pulling up stones. Any repair work below the water would include only placement on top of existing. Additionally, placement requirements prevent the contractor from dropping individual armor stones into place. Stones will be carefully placed and interlocked with existing stones to maximize stability, the careful placement should minimize stirring up any sediment. Small amounts of soil adhering to the stone may become temporarily suspended in the water column, causing a slight increase in turbidity. Due to the small amounts of turbidity involved, the project will not cause water quality conditions to change. Impacts are expected to be less than significant in terms of topography or physical processes acting on the system or increased turbidity.

Temporary, minor impacts to water quality could occur during construction. Transportation of construction materials to the site may involve minor leakage of fuel and other fluids into the harbor. The construction contractor would be required to have a spill response plan in place for the proposed project should any leakages occur. Such pollution, therefore, would be negligible and short-term in nature. Accidents resulting in spills of fuel, lubricants, or hydraulic fluid from the equipment used during repair work 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). The proposed project includes an environmental commitment to have in place a Spill Prevention and

Cleanup Plan that includes measures to prevent spills and to cleanup any spills that could occur. In such cases, spills would be cleaned up immediately, limiting the potential to cause pollution, contamination or nuisance. A larger spill that could have significant impacts on water quality is not expected to occur, even under reasonable worst-case conditions. Impacts are therefore less than significant.

No Action Alternative. Impacts from breakwater and jetty repair activities would not occur. Instead, these protective structures would continue to degrade and deteriorate. This would result in disruption to Harbor operations as additional wind wave and infragravity wave energy is allowed into the entrance channel and inner harbor. The increased wave energy has the potential to damage ships passing in and out of the channel, damage ship moorings, and increase loading times due to ship movement at berth slowing operations and increasing costs.

4.2 Marine Resources

4.2.1 Affected Environment. Marine life in the breakwater and jetty repair areas is expected to be those species that inhabit sandy intertidal and subtidal environments.

Vegetation. Vegetation around the breakwater and jetty areas is expected to be minimal owing both to the sandy, unconsolidated nature of the sea bottom and the frequent dredging which takes place in these areas. Nearshore areas are expected to support a typical sand bottom community with little or no vegetation owing to the high energy currents present in the area and high turbidity owing to wave action stirring up and transporting bottom sediments.

Invertebrates. The invertebrate population in the proposed project areas is expected to be similar to adjacent open coast, shallow water habitat. Common invertebrate faunal species consist of the sand crab (*Emerita anloga*), clams (i.e. *Tellina modesta*), and polychaetes (i.e. *Nephtys cliforniensis*). The nearshore area 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 (*Platyrhinoides triseriata*), lizard fish (*Synodus lucioceps*), speckled sanddab (*Cithrichthys stigmaeus*), northern anchovy (*Engraulis mordax*), white croaker (*Genyonemus lineatus*), and walleye surfperch (*Hyperprosopon argenteum*). The breakwater and jetties support the following fishes: Garibaldi (*Hypsypops rubicundus*), sargo (*Anisotremus davidsonii*), opaleye (*Girella nigricans*), rock wrasse (*Halichoeres semicinctus*), senorita (*Oxyjulis californica*), half moon (*Medialuna californiensis*), and kelp bass (*Paralabrax clathratus*) use the interstitial spaces between rocks and rock cracks to breed, shelter, and forage for food.

Birds. The breakwater and jetties 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 breakwater and jetties for their respective life history requirements. Adjacent

shallow waters also provide foraging and loafing areas for many shorebird species including the long-billed curlew (*Nemenius americanus*), willet (*Catoptrophorous 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 (*Melanita* spp), and loons (*Gavia* spp).

Marine Mammals. California sea lions (*Zalophus caliornianus*) are commonly observed foraging in the entrance channel and harbor, as well as resting on the breakwater jetties and navigational buoys. Several other marine mammal species that use the area, and are observed offshore, 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. Four species protected under the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. § 1531 *et seq*.), have the potential to occur within or near the project area. These include the endangered California least tern (*Sternula antillarum browni*), the threatened Pacific coast population of western snowy plover (*Charadrinus nivosus nivosus*) and its designated critical habitat, endangered black abalone (*Haliotis cracherodii*), and endangered white abalone (*Haliotis sorenseni*).

Black Abalone: Black abalone are marine gastropods that occur in intertidal and shallow subtidal rocky habitat (to about 5 meters (18 feet). They typically occur in habitats with complex surfaces and deep crevices that provide shelter for juveniles and adults. Black abalone range from about Punta Arena, California to Central Baja California, and includes all of the offshore islands. . Rocky intertidal and subtidal habitats may be found from the high tide line to a depth of 4.8 meters (16.4 feet), usually near kelp beds. Black abalone populations have declined dramatically since the 1970s from overfishing and a bacterial disease known as withering syndrome. The project area is not within designated critical habitat for this species.

White abalone: White abalone are usually found on rocky substrates along sand channels, which tend to accumulate the algae they eat. They are usually found in water depths from 24 to over 61 meters (80 feet to over 200 feet); however, offshore from Santa Barbara County, individuals have been reported on rocky substrate in less than 6.1 meters (20 feet). Their historic range extended from Point Conception, California to Punta Abreojos, Baja California. Updated population data is not known; however, the species seems to be concentrated on Tanner and Cortez banks off southern California. It is unlikely that white abalone will occur within the Project area. Critical habitat for this species has not been designated.

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 breakwater and jetty repair areas. Nesting has also occurred on the beach adjacent to the north jetty (Hollywood Beach) and on the temporary beach

that occasionally forms in the sand trap provided by the jetty. 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). No designated critical habitat occurs within the project area.

Western snowy plover: 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 adjacent to the north jetty. In 2017, 11 nests were detected at Hollywood Beach, with 5 nests located on the temporary beach created in the sand trap (Barringer, Ventura Audubon Society, 2017). The estimated number of breeding adult plovers in 2017 on Hollywood Beach was 14 individuals. A total of 5 western snowy plover nests were detected in 2016 at Hollywood Beach, with all of the nests located in or adjacent to the temporary beach in the sand trap. In that year, the estimated number of breeding adult plovers on Hollywood Beach was 6 individuals (Barringer, Ventura Audubon Society, 2016). 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).

The temporary beach that forms within the sand trap adjacent to the north jetty is removed biennially 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. Dredging activities occurred during the 2018/2019 winter season (approximately from mid-November, 2018, to mid-February, 2019) which removed the beach area immediately adjacent to the north jetty prior to the beginning of the avian nesting season. However, nesting by endangered California least terns and threatened western snowy plover may still occur in upland and sand dune areas of Hollywood Beach.

Essential Fish Habitat (EFH). 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 breakwater and jetty repair work. The proposed 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 proposed project activities. Channel Islands Harbor and surrounding waters provide habitat for several of these species, including the northern anchovy (*Engraulis mordax*), Pacific sanddab (*Citharichthys sordidus*), and several species of rockfishes (*Sebastes* spp.) The harbor and adjacent habitats are not identified as important fish breeding or nursery areas. This section and Section 4.2.2 of this EA constitutes the Corps' EFH Assessment for the proposed federal action.

4.2.2 Environmental Consequences

Significance Criteria. An impact to Marine Resources will be considered significant if the proposed project would:

- Degrade habitat for, or reduce, the population size of a federally listed species;
- Cause a net loss in value of a sensitive biological habitat including a marine mammal haul out site or breeding area, seabird rookery
- Impede the movement or migration of fish;
- Cause 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. Direct impacts (habitat loss/degredation or reduction in population size) to marine resources would be extremely limited. Placement of rock on the jetties will smother and/or crush sessile organisms currently attached to the currently exposed rock. However, following their replacement, these rocks would be recolonized, making any impact temporary in nature. All construction activities would take place in areas of rocky substrate with low densities of fine sediment. As a result, construction activities are not expected to generate levels of turbidity that would be harmful to benthic invertebrates. Standard best management practices (BMPs) would be implemented to prevent the release of hazardous materials that could impact the health of marine resources. Marine vessel propeller wash from moving the barges and support vessels could temporarily increase turbidity and suspended solids in the water column, which may decrease the amount of dissolved oxygen near the repair site, thus affecting fish and other marine life within the area. However, this impact will not degrade the habitat or cause a substantial loss in population of any organisms, especially when compared to regular increases in turbidity and suspended solids from stochastic natural events such as waves, strong currents, and runoff from storms in the area.

The proposed project is not expected to impede the movement or migration of fish because motile species are expected to relocate out of the area temporarily until repair activities are finished. Therefore, potential impacts to marine resources would be minimal.

In regards to black and white abalone, much of the surrounding Channel Islands Harbor has sandy substrate that limits dispersal and forage availability, making it unsuitable for these species. The greatest depth the repair work will extend to is -14 ft MLLW, precluding the potential to encounter white abalone. Although unlikely at the Channel Islands site, black abalone may be present on the intertidal or subtidal portions of jetty rocky outcroppings (Guzman del Proo, 1992). Upon coordination with the National Marine Fisheries Service (NMFS) it has been deemed there is a low likelihood that black abalone are present on the Channel Islands breakwater and jetty for the following reasons; there is no natural rocky intertidal habitat nearby with black abalone populations to serve as a source of larvae and there is rarely kelp or other algae for abalone to eat near the structures.

Repair work on the north Channel Islands Harbor jetty (the area of the proposed project closest to Hollywood Beach) is not likely to be close enough to have an effect on avian nesting due to

temporary increases in noise and activity. Moreover, there are plenty of additional beach areas available to the California least tern and western snowy plover to nest on at Hollywood Beach. The disturbance from jetty repair work is not considered to have greater effects on these species than existing environmental baseline conditions which include daily disruptions caused by transiting beach-goers, periodic elevated surf and heavy shore breaks on the nearby beach, noise from street traffic and boats in the nearby harbor, harassment by unleashed pets from nearby residences (especially dogs and cats), as well as from scavenging predators such as rats, crows, hawks, and gulls that are attracted by garbage from nearby businesses. Designated critical habitat for the western snowy plover on the adjacent Hollywood Beach does not overlap with the proposed repair area at the Harbor's north jetty or proposed staging areas. The proposed project includes the following environmental commitments:

- The limits of the breakwater and jetty repair activities shall be clearly marked to prevent heavy equipment from entering areas beyond the smallest footprint needed to complete the project.
- Vehicles and all repair 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.

The proposed project is, therefore, anticipated to have no effect on listed species or designated critical habitat. Impacts are therefore considered less than significant.

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, crane operation and stone placement noise would be somewhat elevated and distinguishable from background noise levels in the immediate vicinity of the repair work. However, these activities would be temporary in nature and localized to one part of the structure at any one time. No repair work would occur at night. Startle reactions from sea lions or harbor seals that are in close proximity to the crane barge could occur as the result of start-up operations in the morning, or from loud noises resulting from the occasional dropped stone. However, neither species are known to frequent the Harbor breakwater or jetties as haul-out locations due to the height, large diameter and angularity of the stones, and steepness of the each structure's embankment walls. Physical morphology of both species is much more suitable to landforms and artificial structures that offer easier accessibility from the water, coupled with less gradient. Docks, buoys, and beaches in the area are thus far more likely host pinnipeds like harbor seals and sea lions. In regards to their foraging activity, marine mammals in this area are accustomed to daily noise from people, boat traffic, and marine operations. It is highly unlikely that barge presence and repair activities would affect pinniped foraging in the areas around the breakwater and jetties given the existing environmental baseline and harbor use. Therefore, impacts would be less than significant.

EFH assessment. Proposed breakwater and jetty repair activities would be short-term in duration. Potential impacts to EFH could result from proposed stone placement activities and movement of construction equipment (crane barge, storage barge, and tenders) from location to

location along the breakwater and jetties for construction/repair activities. Impacts may include direct removal/burial/crushing of organisms, temporary turbidity plumes and suspension of sediments from propeller wash, release of contaminants from equipment, entrainment, and noise. Direct removal/burial/crushing of organisms 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 repair activities would quickly subside as suspended sediments begin to settle after repair vessels have been moved. Displaced organisms from construction activities would also recolonize the impacted area. Given the extant high energy wave environment and dynamic coastal littoral processes, potential effects from stone placement operations are not considered significant.

The inner harbor area of the Channel Islands Harbor could be suitable habitat for *Caulerpa taxifolia*. Project activities could result in significant spread of *Caulerpa taxifolia*, if *Caulerpa* was present and proposed breakwater and jetty repair activities entailed moving or displacing material from the inner harbor basin. However, repair activities would not remove or displace any bottom material. Proposed repair/construction work only entails placing stones into voids on the Harbor breakwater and jetties created by wave action and weathering. The Approach Channel and Entrance Channel to the Channel Islands Harbor, where all proposed repair work would take place, are not suitable habitat for *Caulerpa taxifolia*. These areas are high energy wave environments with substantial sand movement that would preclude the establishment of *Caulerpa taxifolia*. As previously mentioned, potential sources of *Caulerpa taxifolia* are more likely to be located in slack water within the inner harbor, close to the turning basins. Therefore, the Corps would not conduct *Caulerpa* surveys as *Caulerpa taxifolia* is likely precluded from growing or becoming established in the areas subject to impacts from proposed project activities.

No action alternative. Impacts from breakwater and jetty repair activities would not occur. Deterioration and failure of the existing harbor structures would be another consequence.

4.3 Air Quality

4.3.1 Affected Environment. The project is located within the Ventura County portion of the South Central Coast Air Basin (SCCAB) under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). The quarry on Santa Catalina is located in the Los Angeles County portion of the South Coast Air Basin (SCAB) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). 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.

The Ventura County portion of the SCCAB is in attainment for all federal criteria pollutants except is in serious nonattainment for the federal 8-hour ozone standard, which has an applicability rate of 50 tons per year. The Los Angeles County portion of the SCAB is in extreme nonattainment for the federal 8-hour ozone, nonattainment for suspended particulate matter (PM) 2.5, and in maintenance for PM10, nitrogen oxides (NOx), and carbon monoxide (CO). Within the SCAB, a federal action would conform to the State Implementation Plan if its annual emissions remain below 100 tons of CO or PM2.5, 70 tons of PM10, or 10 tons of NOx or volatile organic compounds (VOC). Table 3 shows the attainment status for each air basin.

Table 3. Attainment Status

Pollutant	Air Basin	
	SCCAB	**SCAB**
Ozone - 8-hour	Serious Nonattainment	Extreme Nonattainment
Nitrogen Dioxide	Attainment	Maintenance
Carbon Monoxide	Attainment	Maintenance
Sulfur Dioxide	Attainment	Attainment
PM10	Attainment	Maintenance
PM2.5	Attainment	Nonattainment
Lead	Attainment	Attainment

Source: CARB 2018 and USEPA 2018

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). Currently, there are no Federal standards for GHG emissions and no Federal regulations have been set at this time.

4.3.2 Environmental Consequences

Significance Criterion. An impact to Air Quality will be considered significant if the proposed

project would exceed the applicability rates specified in 40 CFR 93.153.

Proposed Action. Emissions associated with the proposed breakwater and jetty repair activities would come mainly from the crane motor drive, and the motor drives from its two self-propelled attendant vessels.

Stone placement operations are expected to be conducted by a crane-equipped barge fitted with lifting tongs. Stones would be lifted, moved, and adjusted by the crane at the direction of a spotter on the breakwater/jetty or in a support skiff. Two attendant tug boats would be used to move the crane-equipped and storage barges as necessary along the breakwater and jetties to perform repair activities. These boats would be used to ferry crew out to repair areas, and for miscellaneous transport of personnel and equipment on an as-needed basis. Placement of stones on the breakwater and jetties would not produce dust since the material is composed entirely of solid rock. Rock would most likely be transported by tug and barge from Santa Catalina Island which is located in the South Coast Air Basin in Los Angeles County to the Channel Islands Harbor which is located in the South Central Coast Air Basin in Ventura County.

Air emissions calculations and assumptions are provided in Appendix B. Results are provided in Tables 4 and 5. The proposed project would not exceed the applicability rates for all relevant criteria pollutants. Therefore, impacts are less than significant.

Table 4. Total Project Construction Emissions- Ventura County

	Tons/Year	
Project Emissions	**ROG**	**NOx**
Crane-equipped Barge	0.04	0.30
Skiff	0.009	0.06
Support vessels (2 tugs)	0.98	17.8
Tug-Barge (rock transport)	0.019	0.224
Applicability Rate	**50**	**50**

Table 5. Total Project Construction Emissions – Los Angeles County

	Tons/Year				
Project Emissions	**ROG**	**CO**	**NOx**	**PM2.5**	**PM10**
Tug-Barge (rock transport)	0.0097	0.110	0.175	0.0046	0.0051
Applicability Rate	**10**	**100**	**10**	**100**	**70**

Air Quality Conformity Determination. The total direct and indirect emissions associated with the Federal action would not equal or exceed applicability rate as specified at 40 CFR 93.153(b) for 8-hour ozone in Ventura County or the applicability rates for 8-hour ozone, CO, PM 2.5, PM10, or NOx in Los Angeles County. Therefore, a general conformity determination is not required.

GHG emissions. Calculations of potential GHG emissions (CO2) from breakwater and jetty repair activities are disclosed in Table 6 (below). Calculations are provided in Appendix B.

Table 6. Total Project GHG Emissions

	Tons/Year
Crane-equipped Barge	54
Skiff	7.5
Support vessels (2 tugs)	1466
Tug-Barge (rock transport)	43

No Action Alternative. Breakwater and jetty repair emissions associated with the project would not occur. However, if further harbor structure deterioration occurs, frequent emergency operations to repair the breakwater and jetties may be undertaken to maintain navigable conditions. If emergency repair work were necessary, temporary increases in emissions from the construction equipment, ancillary vessels, and laborers' vehicles would be expected. This increase would be short term and less than significant.

4.4 Noise

Noise is defined as unwanted sound. Noise disrupts normal activities and diminishes the quality of the environment. There are two types of noise sources: stationary sources which are typically related to specific land uses, and transient sources which move through the environment. A locale's total acoustical environment is the blend of the background or ambient acoustics with unwanted noise. Human response to noise is diverse and varies with the type of noise, the time of day, and the sensitivity of the receptor. The decibel (dB) is the accepted standard unit for measuring the level of noise, which is generally adjusted to the A scale (dBA) to correspond to the range of normal human hearing.

Slight changes in loudness are difficult to detect. A 3-dBA change is considered a just perceivable difference. A change of at least 5-dBA is required before any noticeable change in community response would be expected. A 10-dBA change is subjectively heard as approximately a doubling in loudness. Exterior noise becomes increasingly noticeable at night and most people are very sensitive to nighttime noise intrusion.

4.4.1 Affected Environment.

Dominant noise sources include waves, beach recreation activities, and vehicle noise on adjacent roads. The sound of wave action will vary with factors including wave height, period, frequency, angle of attack, season, and wind conditions.

4.4.2 Environmental Consequences

Significance Criteria. Noise impacts would be considered significant if noise resulting from the proposed project results in an increase of 10-dBA above background during the day or a night-time increase of 5-dBA above background. This is a short-term project and a perceived daytime

doubling of noise levels is considered significant. A lower threshold is used for nighttime noise to reflect the increased sensitivity of people to nighttime sources of noise.

Proposed Action. Project noise sources are primarily limited to the operation of the crane-equipped barge, and the operation of the support vessels involved in the repair work. All vessels would only operate during daylight hours. The proposed project includes the following environmental commitments:

- Activities requiring use of heavy equipment would be limited to the hours of 7 AM to 7 PM;
- The construction contractor would be required to utilize engine shrouds to reduce noise; and
- A public awareness program would be implemented to educate and notify the public about the benefits and impacts of the proposed project.

Because of the temporary nature of the repair work and the offshore location of the operation, it is not expected to have a significant impact on the area. Refer to section 4.2.2 for a discussion on the potential for noise impacts to marine mammals.

Given the general background noise levels, including those from existing boat and vehicular traffic, project noise impacts are not expected to be discernible from background noise levels. Impacts, thus, are expected to be less than significant.

No action alternative. Noise impacts from breakwater and jetty repair activities associated with the project would not occur. However, if further harbor structure deterioration occurs, frequent emergency operations to repair the breakwater and jetties may be undertaken to maintain navigable conditions. If emergency repair work were necessary, temporary increases in noise from the construction equipment, ancillary vessels, and laborers' vehicles would be expected. This increase would be short term and less than significant.

4.5 Cultural Resources

4.5.1 Affected Environment. The Corps' area of potential effects is defined as the footprint of the breakwater (approximately 90 feet x 400 feet) and jetties (approximately 70feet x 1,250 feet each). Staging areas include the two existing paved public parking lots and a 150' x 300' area of the Silver Strand Beach adjacent to the parking lot. The vertical extent of the area of potential effects (APE) would not extend below the existing stone structures or the surface of the paved parking lots. If the beach area were used, disturbance would be limited to incidental disturbance and would not extend deeper than 12 inches from the ground surface. Access to the project area would be by existing paved public roads and by sea. The Corps consulted with SHPO and by letter dated July 30, 2018, SHPO agreed the APE was appropriately defined.

A records search was provided by the South Central Coastal Information Center (SCCIC) on July 13, 2018. The search examined the project area and a 1/4-mile radius. Three previous reports were noted within the project area, although none appeared to include field survey. No resources were reported within the project area. The only resources noted within the buffer area were two

records that indicated a total of four historic buildings located on the naval base at Port Hueneme. The breakwater and jetties were constructed more than 50 years ago, but their eligibility for the National Register of Historic Places (NRHP) has not been evaluated previously. The Corps enlisted the services of the Technical Center of Expertise for the Preservation of Historic Structures and Buildings (the TCX), which is a group of Corps experts located in Seattle who provide national direction to the agency on issues regarding the built environment. The TCX was hired to record and evaluate the navigation structures. Lauren McCroskey, Senior Architectural Historian, and Kara Kanaby, Historical Archaeologist, recorded and evaluated the structures.

Channel Islands Harbor is an entirely manmade harbor that was mechanically excavated out of the shoreline to mitigate erosion caused by the construction of Port Hueneme. Construction on the harbor began in 1958, and expansion continued into the 1970s. The rubble and stone breakwater and jetties were originally constructed in 1958-1960 to protect the newly created harbor. Major maintenance, which consisted of repairs to the north jetty and a small section of the detached breakwater, was completed in 1996 to address damages from the 1982-1983 storm season and the 1994 Northridge earthquake. There is no documentation of repairs prior to this event. The evaluation report finds that the period of significance for the harbor extends from 1958 until 1995, when the first repairs were made to the structures and the residential/ commercial area around the harbor was fully developed. The report concludes that although the structures are over 50 years old, they lack eligibility under any of the four criteria.

The harbor is one of, if not the most recent harbors constructed along the California coast. The harbor has played no role in any significant events or the life of any important individuals. Rubble mound construction is ubiquitous and does not represent any advancement in the design of navigation features. Finally, the structures do not possess any archaeological data that are not already known through design and construction drawings. Thus, the Corps agreed with the recommendations in the report and determined that the breakwater and jetties lack the significance to be eligible for listing on the NRHP.

The Corps also received a Sacred Lands File Search from the Native American Heritage Commission (NAHC) on May 23, 2018. No cultural resources were identified within the APE. The tribal contacts provided by the NAHC were invited to consult in a letter dated June 27, 2018. Mr. Patrick Tumamait of the Barbareno/Ventureno Band of Mission Indians contacted the Corps by telephone on July 10, 2018 to express concern about a site on McGrath Beach. The Corps provided the results of the SCCIC records search. Mr. Tumamait indicated in an email on July 25, 2018 that he was satisfied that the site at McGrath Beach is several miles from the proposed project and that the Corps had made an adequate effort to identify historic properties. Mr. Gabriel Altamirano of the Coastal Band of the Chumash Nation contacted the Corps by email on July 26, 2018 requesting to initiate consultation. The Corps asked for guidance on the nature of consultation desired. Mr. Altamirano provided a cell phone number and requested current project documents. The Corps provided the results of the SCCIC records search and the draft repair plan on August 17, 2018. To date, the Corps has followed up with three additional phone calls and left messages for Mr. Altamirano, as well as an additional email.

Considering that project activities would be confined to the constructed harbor structures, paved parking lots, and a highly disturbed area of beach that has been repeatedly covered with dredged material and that neither the SCCIC or NAHC records searches indicated the presence of known resources, the Corps has concluded that a pedestrian survey would not be productive in this instance.

4.5.2 Environmental Consequences

Significance Criterion. Cultural resource impacts would be considered significant if the proposed project results in a substantial, adverse effect on an historic property.

Proposed Action. The Corps consulted with SHPO regarding the proposed breakwater and jetty repair work, as well as the storage of project material at the proposed staging areas (Figure 2), in a letter dated October 4, 2018. In the letter, the Corps concluded that neither the Channel Islands Harbor breakwater, nor the jetties, are eligible for the NRHP. No other cultural resources are known to exist within the proposed project area. The project area has also been previously disturbed by the construction and maintenance of the breakwater and jetties. Thus, no historic properties would be affected by the proposed project. The SHPO concurred in a letter dated October 30, 2018, that no historic properties would be affected by the proposed harbor breakwater and jetty repair project (Appendix C).

The proposed project includes an environmental commitment that 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 NRHP 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.

4.6 Vessel Transportation and Safety

4.6.1 Affected Environment. Channel Island Harbor is a heavily used recreational and small commercial vessel water body. Boat traffic in the harbor, including commercial boats, fishing vessels, and recreational vessels, often traverse the proposed project site. Safe navigation is maintained by well-marked channels and the presence and activity of various law enforcement agencies (i.e. County Lifeguards, U.S. Coast Guard, California Department of Fish and Game). Beaches adjacent to the Channel Island Harbor, namely Silver Strand and Hollywood Beaches, experience consistent high surf conditions for much of the year coinciding with large storms that develop in the North Pacific Ocean during the late fall, winter, and early spring months. Ocean wave impacts, depending on amplitude, tide, and direction of attack, have degenerative effects on the structural integrity of breakwaters and jetties. These structures that help lessen wave impacts on boats within the Harbor. Over time, further deterioration of protective structures at

Entrance Channel and Approach Channel at the Channel Island Harbor would pose hazards to vessel traffic.

4.6.2 Environmental Consequences

Significance Criteria. A significant impact would occur if the proposed project:

- Results in a substantial reduction of current safety levels for vessels in the Harbor.
- Safety impacts would be considered significant if activities present a navigational hazard to boat traffic, or interfere with any emergency response or evacuation plans.

Proposed Action. Project impacts are not expected to significantly increase vessel traffic levels. All construction vessels would be marked and lighted in accordance with U.S. Coast Guard regulations, and notices would be published in Local Notice to Mariners warning boat users about times, durations, and locations of construction activities. Vessel traffic should be able to easily navigate around any short-term obstacles created by construction traffic. Vessels associated with breakwater and jetty repair activities would be moored at locations directly adjacent to the rock structures, with plenty of room left in the main navigation channels for other vessels to pass. Construction will not impede access to any channels or entrance ways. Therefore, impacts to vessel traffic are considered less than significant.

No action alternative. Additional vessel traffic associated with the project would not occur. Deterioration of protective Harbor structures would result in severe navigational hazards in the Channel Islands Harbor.

4.7 Recreational Uses

4.7.1 Affected Environment. The project area is a mix of public and private recreational boating and commercial uses. The coastal waters provide for recreational boating and fishing. Silver Strand and Hueneme Beaches are widely used year round with peak uses during the summer season. Beaches down coast of the harbors erode due to the interruption of sediment transport by Channel Islands and Port Hueneme Harbors. Under eroded conditions, recreational use is limited to the existing beach area.

4.7.2 Environmental Consequences

Significance Criterion. Impacts will be considered significant if the proposed project results in a permanent loss of existing recreational uses.

Proposed Action. Impacts to recreational boaters would be negligible (see Section 4.6 above). Long-term impacts will be beneficial. The repair work would maintain, sustain, and support recreational and commercial boating by keeping the approaches and entrance channels open and free of navigational hazards. Proposed repair would not result in any impediments to harbor use. Construction equipment storage would be temporarily located in the parking area immediately adjacent to Kiddie Beach, the Silver Strand Beach parking lot, and potentially a portion of the

beach adjacent to the parking lot. Trucking material from an inland quarry would include transport of stone and placement at the staging area. Trucks would deliver material to the staging area then depart. This may limit the amount of public parking available, and minimally limit a portion of the beach availability, but would not impact beachgoers otherwise. The portion of the beach utilized would be minimal compared to the overall recreational space available at Silver Strand Beach, and would be done in order to maintain some parking at the Silver Strand parking lot for beach access. Emergency mooring areas for the crane and storage barges would be adjacent to the rock groin between Kiddie and Hobie Beaches (Figure 2). This is consistent with the repairs performed in 1995-1996 and similar to the biennial dredging operations. This would not affect access to the beaches. Because the repair work and staging area use would not be an impediment to beach access or use, recreational impacts from the proposed project are considered less than significant.

No action alternative. Repairs to the breakwater and jetties protecting the Harbor would not occur. Continued deterioration of protective Harbor structures from large waves and winter storms would result in severe navigational hazards in the Channel Islands Harbor, which may require the closing of the harbor to recreational use over safety concerns.

4.8 Aesthetics

4.8.1 Affected Environment. The overall aesthetic character of the project area is composed of a mix of residential and water-oriented facilities. The beaches further add to the overall impression of a recreational-oriented visual setting. The area is well maintained. The natural resources in the area provide a visually attractive setting and relaxing atmosphere for residents and tourists.

4.8.2 Environmental Consequences

Significance Criteria. The project would significantly impact the aesthetics if a landscape is changed in a manner that permanently and significantly degrades an existing viewshed or alters the character of a viewshed by adding incompatible structures.

Proposed Action. The presence of construction equipment for breakwater and jetty repairs would result in mixed impacts depending on the opinion of the viewer. Many viewers will consider the presence of the construction equipment to be an adverse impact, interrupting viewpoints from local land points and from boats. Other viewers may consider the presence of construction equipment and construction activity to be beneficial impacts, providing an interesting feature to watch from a safe distance (construction activity of this type often attracts curious onlookers). Given that the crane-equipped barge and support vessels for the proposed repair activities would be present during the tourist season, but located in off-shore areas away from beaches, and construction activity would be a short-term impact, aesthetic impacts would be less than significant.

Equipment placed in the public parking area at Kiddie and Silver Strand Beach would likely result in short-term adverse impacts. Considering the summer timing of the proposed operations, the presence of construction equipment and temporary fencing necessary for public safety and

contractor security would likely be considered disruptive by users of Kiddie and Silver Strand Beach and adjacent residents. Short-term aesthetic impacts would be adverse, but because they would not permanently degrade or alter the viewshed by adding incompatible structures in the long term, these not impacts would be less than significant.

Long-term aesthetic impacts would be beneficial. The repaired breakwater and jetties would continue to function as designed, and would not have gaps or voids that may indicate neglect. Aesthetically, the viewshed would not change from the current baseline.

No action alternative. Impacts discussed above regarding deterioration of the breakwater and jetties would continue. Aesthetics of the area would change as high surf events and tidal action would degrade the harbor structures and erode adjacent beaches. The source of sand nourishment for Silver Strand and Hueneme Beaches would be lost as the north jetty sand trap loses functionality. Beach areas at Kiddie and Hobie Beaches would likely be lost to energetic wave action from high surf events.

4.9 Land/Water Uses

4.9.1 Affected Environment. Land use in Channel Islands Harbor is primarily characterized by the marina catering to recreational boaters and charter 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 adjacent beaches (Silver Strand Beach and Hollywood Beach) support restaurants, hotels, shopping, and sports fishing facilities in support of the beach recreational uses.

4.9.2 Environmental Consequences

Significance Criterion. Impacts would be considered significant if access to existing uses is substantially restricted or is eliminated.

Proposed Action. The presence of the crane-equipped barge and its supporting vessels would not restrict vessel traffic to the Channel Islands Harbor during construction and repair activities. Boat access would be maintained throughout all stages of construction. Timing requirements to ensure safe operation of construction equipment would result in the proposed project taking place during the part of the years that sees the highest amount of tourists in the area. However, construction and repair activities would not exclude public access to beaches, restaurants, or other recreational opportunities provided by the Harbor facilities. Impacts are therefore less than significant.

As described in 4.7.2, construction equipment storage would be temporarily located in the Kiddie Beach parking lot and a portion of the Silver Strand Beach parking lot. This may limit the amount of public parking available. However, limited parking at the nearby Silver Strand Beach would remain open and curbside in adjacent neighborhoods would not be affected. Emergency mooring areas for the crane and storage barges would be adjacent to the rock groin between

Kiddie and Hobie Beaches (Figure 2). This would not affect access to the beaches. Impacts are therefore less than significant.

No action alternative. Repairs to the breakwater and jetties protecting the Harbor would not occur. Continued deterioration of protective Harbor structures from large waves and winter storms would result in severe navigational hazards in the Channel Islands Harbor, which may require the closing of the harbor to public use over safety concerns.

4.10 Ground Transportation

4.10.1 Affected Environment. The Channel Islands Harbor and the adjacent beaches are accessed by several major routes. Seasonal variations can result in large differences in road use. Summer is the peak season and it is the basis for design of road capacity.

4.10.2 Environmental Consequences

Significance Criteria. A significant impact would occur if the proposed project results in:

- Inadequate parking facilities;
- An inadequate access or on-site circulation system; or
- The creation of hazardous traffic conditions.

Proposed Action. Construction would require the use of heavy equipment, trucks transporting stone, and support boats which requires manpower. A total construction crew of up to seven people is anticipated for the proposed project (1 captain, 1 crane operator, 2 boat operators, 1 oiler, 2 spotters/deckhands) per 12-hour shift, with only one shift per day. The proposed project would take place during the peak tourist season. The proposed project is, therefore, expected to have minor adverse impacts to ground transportation which are not considered significant. Parking at the Kiddie and Silver Strand Beach staging areas would be adversely impacted, albeit temporarily, by construction equipment storage in the parking areas. However, as discussed in section 4.9.2, alternative areas for parking exists close by at curbside locations between Kiddie and Silver Strand Parking lots, in adjacent residential neighborhoods, and within the portion of Silver Strand parking lot to remain open. The Proposed Action would not construct new roadways or alter existing roadways, and therefore would have no permanent impacts to vehicle transportation. Trucking material from an inland quarry would include transport of stone and placement at the staging area. Trucks would deliver material to the staging area then depart, since the trucks would not remain on-site after delivery, this method would not impact existing parking facilities or block access or any on-site circulation system beyond the limits of the temporary staging areas. There would be an increased volume of traffic due to the amount of trucks required to haul the quantity of stone but the arrival of the trucks would be intermittent due to the distance between the nearest quarry and the site and are not expected to create hazardous traffic conditions.

The proposed project is, therefore, expected to have minor, temporary adverse impacts to ground transportation which are not considered significant.

No action alternative. Construction activities associated with the project would not occur. Therefore, impacts to ground transportation would not occur.

4.11 Cumulative Impacts

Cumulative impacts are impacts on the environment that would result from the incremental effect of the proposed action when combined with other past, present, and reasonably foreseeable planned and proposed actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time. Geographic scope of this analysis is the Channel Islands Harbor and surrounding Hollywood and Silver Stand beaches.

Channel Islands Harbor receives sediments from upcoast beaches by the southerly littoral transport system. To maintain the harbor channel's authorized depths and widths, the Channel Islands Harbor has been dredged since its construction in 1960. During the last dredging contract (2012-2018) a total of about 4.6 million cubic yards of material was removed from Channel Islands Harbor with an average volume of 1.5 million cubic yards per dredging cycle. An average of 1.8 million cubic yards per dredging cycle between 2006 and 2012; 5.4 million cubic yards was removed biennially between 1999 and 2005. Major maintenance on Harbor facilities, which consisted of repairs to the north jetty and a small section of the detached breakwater, was completed in 1996 to address damages from the 1982-1983 storm season and the 1994 Northridge earthquake.

For the next six years, the Corps would dredge the entrance channel, sand traps, entrance basin, and inner basin as needed to maintain its authorized depths and widths. The Corps anticipates three dredging cycles to be implemented over the next six years. It is estimated that about 800,000 to 2.5 million cubic yards could be dredged during each dredge cycle.

Neither the currently proposed repair project nor future dredging projects are expected to result in significant impacts to marine resources. Motile species are expected to relocate out of the area until breakwater and jetty repair activities are finished. Some marine populations could be affected by repair activities (i.e. bivalves and mollusks that could be potentially displaced or crushed by rock placement on the existing structures), but are expected to recolonize the area once those activities have ceased. Recolonization of affected areas would also occur after each dredging cycle is completed. Furthermore, the bypassing of sand that accumulates at the harbors from littoral processes to down coast beaches are considered a benefit to oceanographic conditions, which would indirectly benefit biological resources that utilize sandy beaches and the marine environment. Measures would be implemented for both projects to avoid and minimize effects to Federally listed species. The currently proposed repair project, when analyzed in context with future dredging is not expected to result in cumulatively significant impacts.

Potential impacts to all other environmental resources including noise, cultural resources, vessel transportation and safety, recreational uses, aesthetics, land/water uses, and ground transportation would be minimal and less than significant. Potential impacts to these resources from the proposed project in the context of other past, present and future projects are not expected to result in significant cumulative impacts.

SECTION 5 - ENVIRONMENTAL COMPLIANCE AND COMMITMENTS

5.1 COMPLIANCE

5.1.1 National Environmental Policy Act (NEPA) of 1969 (42 USC 4321 et seq.,); Council on Environmental Quality Regulations for Implementing NEPA, 40 CFR Parts 1500 to 1508; Corps Regulations for Implementing NEPA, 33 CFR Part 230.

This EA has been prepared to address impacts associated with the proposed project. The Draft EA was circulated for public review. No comments were received. It is determined the project will not have a significant impact upon the quality of the human environment. Preparation of an environmental impact statement is not required.

5.1.2 Clean Water Act.

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 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 December 4, 2018. Since there was no response from the LARWQCB within 60 days, per 33 CFR 336.1(b)(8)(iii) the Corps assumes a waiver of water quality certification. The proposed project involves in-kind repair of an existing authorized structure. Although damaged, the facility is considered currently serviceable. The structure performs its function to some degree and is not deteriorated to the point that the entire structure must be replaced. Repairs would not change the character, scope, or size of the originally constructed facility and is not subject to recapture. Accordingly, the discharges of fill material into waters of the United States is exempt under section 404 of the Clean Water Act; a 404(b)(1) analysis is not required. The project is in compliance with the Act.

5.1.3 Endangered Species Act.

Under ESA Section 7(a)(2), each federal agency must ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of the species' designated critical habitat (16 U.S.C. § 1536(a)(2)). If an agency determines that its actions "may affect" a listed species or its critical habitat, the agency must conduct informal or formal consultation, as appropriate, with either the USFWS or the NMFS, depending on the species at issue (50 C.F.R. §§402.01, 402.14(a)–(b)). If, however, the action agency independently determines that the action would have "no effect" on listed species or critical habitat, the agency has no further obligations under the ESA.

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. The Corps has determined that

the proposed project would have “no effect” on the California least tern, and would have “no effect” on the western snowy plover. With respect to designated critical habitat for the western snowy plover, the Corps has determined the proposed project would have no effect on designated critical habitat. Therefore, consultation under section 7 of the ESA is not required with the USFWS.

The Corps has determined “no effect” to black and white abalone based on absence of suitable habitat from surrounding sandy area that limits dispersal and forage availability. The repair work will not reach depths that support white abalone. Furthermore, there is no natural rocky intertidal habitat nearby with black abalone populations to serve as a source of larvae and there is rarely kelp or other algae for abalone to eat near the structure. Therefore, consultation under section 7 of the ESA is not required with the NMFS.

5.1.4 Coastal Zone Management Act.

Section 307 of the CZMA states that federal activities within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs. The California Coastal Act is this state’s approved coastal management program applicable to the federal action. The Corps prepared a Negative Determination and obtained concurrence from the California Coastal Commission on April 24, 2019. The project is in compliance with the Act.

5.1.5 Clean Air Act.

The project is located within the Ventura County portion of the SCCAB under the jurisdiction of the VCAPCD. Santa Catalina Island is located within the Los Angeles County portion of the SCAB under the jurisdiction of the SCAQMD. 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 applicability rates specified in 40 CFR 93.153(b)(1). Ventura County is only in nonattainment (serious) for 8-hour ozone. The Los Angeles County portion of the SCAB is in extreme nonattainment for the federal 8-hour ozone, nonattainment for PM2.5, and in maintenance for PM10, NOx, and CO. As shown in Tables 4 and 5 above, the total direct and indirect emissions associated with the federal action are not expected to equal or exceed the applicability rates specified at 40 CFR 93.153(b). A general conformity determination is not required. Therefore, the project is consistent with the SIP and meets the requirements of Section 176(c) of the CAA.

5.1.6 National Historic Preservation Act.

Section 106 of the NHPA requires Federal agencies to take into account the effects of undertakings they carry out, assist, fund, or permit on historic properties and to provide the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. Federal agencies meet this requirement by completing the Section 106 process set

forth in the implementing regulations, "Protection of Historic Properties," 36 C.F.R. Part 800. The goal of the Section 106 process is to identify and to consider historic properties that might be affected by an undertaking and to attempt to resolve any adverse effects through consultation. The Corps consulted with SHPO on the determination of the APE and identification efforts and SHPO concurred with the Corps' determination that no historic properties would be affected by the proposed project. The project is in compliance with the Act.

5.1.7 Section 10 of the Rivers and Harbors Act.

Section 10 of the Rivers and Harbors Act approved March 3, 1899, (33 U.S.C. 403), prohibits the unauthorized obstruction or alteration of any navigable water of the United States. The construction of any structure in or over any navigable water of the United States, the excavating from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters is unlawful unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army. Breakwater repair activities are not anticipated to have any effect on navigation into Channel Islands Harbor. The Harbor is a small boat harbor. Craft large enough to interfere with construction/repair work would not be using the waterway.

5.1.8 Magnuson-Stevens Fishery Management and Conservation Act.

This EA assesses EFH as required by the Magnuson-Stevens Act. Although construction would occur within EFH, the USACE has determined that this project would not result in a substantial, adverse impact. Since the proposed project involves in-kind repair of an existing authorized structure, the Corps sought general concurrence that the project impacts would not be expected to have a substantial adverse impact on EFH or Federally managed fisheries in southern and central California waters on May 22, 2019. NMFS concurred on May 23, 2019 that the action qualifies for coverage under the 2003 EFH General Concurrence established with the U.S. Army Corps of Engineers Los Angeles District. The project is in compliance with the Act.

5.1.9 Executive Order 12898, Environmental Justice in Minority and Low-Income Populations

E.O. 12898 focuses Federal attention on the environment and human health conditions of minority and low-income communities and calls on agencies to achieve environmental justice as part of its mission. The order requires the USEPA and all other Federal agencies (as well as state agencies receiving Federal funds) to develop strategies to address this issue as part of the NEPA process. The agencies are required to identify and address, as appropriate, any disproportionately high and adverse human health or environmental impacts of their programs, policies, and activities on minority and low-income populations. The order makes clear that its provisions apply fully to programs involving Native Americans. The CEQ has oversight responsibility for the Federal government's compliance with E.O. 12898 and NEPA. The CEQ, in consultation with the USEPA and other agencies, has developed guidance to assist Federal agencies with their NEPA procedures so that environmental justice concerns are effectively identified and addressed. According to the CEQ's Environmental Justice Guidance Under the National Environmental Policy Act, agencies

should consider the composition of the affected area to determine whether minority populations or low-income populations are present in the area affected by the proposed action, and if so whether there may be disproportionately high and adverse human health or environmental impacts (CEQ 1997). The proposed project is in compliance. There would be no impacts resulting from the proposed project that would result in disproportionately high and adverse impacts to minority and low income communities.

5.1.10 Executive Order 11988, Floodplain Management

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 Harbor, which is located within the floodplain. The purpose of the proposed project is to provide a plan that allows for the repair and maintenance of the existing breakwater and two jetties, promoting navigation safety. Maintenance of the Harbor's structural components requires project activities within the floodplain. The action does not negatively affect the natural and beneficial values of the floodplain. The proposed action does not induce floodplain development or increase risks to public safety. The proposed project is in compliance with this Executive Order.

5.2 ENVIRONMENTAL COMMITMENTS

The proposed project includes the following environmental commitments that would be included in contract specifications:

1. It is the Contractor's responsibility to obtain all applicable air permits and comply with federal, state, and local air and noise regulations.

2. Dropping of armor stone is not permitted.

3. 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.

4. The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters.

5. The 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.

6. All construction and repair activities will remain within the boundaries specified in the plans. There will be no dumping of fill or material outside of the project area or within any adjacent aquatic community.

7. The Contractor shall keep construction activities under surveillance, management, and control to minimize interference with, disturbance to, and damage of fish and wildlife.

8. The Contractor shall mark their vessels, and all associated equipment, in accordance with U.S. Coast Guard regulations. The contractor must contact the U.S. Coast Guard two weeks prior to the commencement of construction and repair activities. The following information shall be provided: the size and type of equipment to be used; names and radio call signs for all working vessels; telephone number for on-site contact with the project engineer; the schedule for completing the project; and any hazards to navigation.

9. The contractor shall move equipment upon request by the U.S. Coast Guard and Harbor patrol law enforcement and rescue vessels.

10. Construction and repair activities requiring heavy equipment would be limited to the hours of 7 AM to 7 PM on the Harbor breakwater and jetties.

11. The following avoidance and minimization measures would be implemented to ameliorate potential impacts from construction and repair activities in the proposed action area:
    - The limits of construction and repair activities shall be clearly marked to prevent heavy equipment from entering areas beyond the smallest footprint needed to complete the project.
    - Vehicles and all construction-related 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.

SECTION 6 – REFERENCES

Barringer, Debra. 2017. Hollywood Beach Breeding Season Monitoring Report for the Western Snowy Plover and California Least Tern. Ventura Audubon Society.

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Guzman Del Proo, S. A. 1992. A review of the biology of abalone and its fishery in Mexico. Chapter 24. In: S. A. Shepherd, M. J. Tcgner, & S. A. Guzman de1Proo(eds.) Abalone of the world; Biology, fisheries and culture (pp. 341-360). Fishing News Books

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U.S. Fish & Wildlife Service (USFWS). 2012. Revised Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover, Final Rule. Federal Register. June.

SECTION 7 - ACRONYMS

ACHP.....Advisory Council on Historic Preservation
APE.....Area of Potential Effects
ARB .....Air Resources Board
ASBS.....Area of Special Biological Significance
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
FEA .....Final Environmental Assessment
FMP.....Fishery Management Plan
FONSI .....Finding of No Significant Impact
FWCA .....Fish and Wildlife Coordination Act
LAD .....Los Angeles District
MLLW .....Mean Lower Low Water
NEPA .....National Environmental Policy Act
NHPA.....National Historic Preservation Act
NMFS.....National Marine Fisheries Service
NO2.....Nitrogen dioxide
PL.....Public Law
SHPO .....State Historic Preservation Officer
SIP.....State Implementation Plan
USACE .....U.S. Army Corps of Engineers
USFWS .....U.S. Fish and Wildlife Service
VCAPCD .....Ventura County Air Pollution Control District

SECTION 8 - PREPARERS/REVIEWERS

8.1 Preparers

Zac Schakner	Corps, Biologist, Ecosystem Planning Section

8.2 Reviewers

Mark Cooke	Corps, Project Management
Travis Bone	Corps, Archeologist, Regional Planning Section
Chris Hayward	Corps, Coastal Engineering
Jodi Clifford	Corps, Chief, Environmental Resources Branch

FIGURES

Figure 1. Project Location

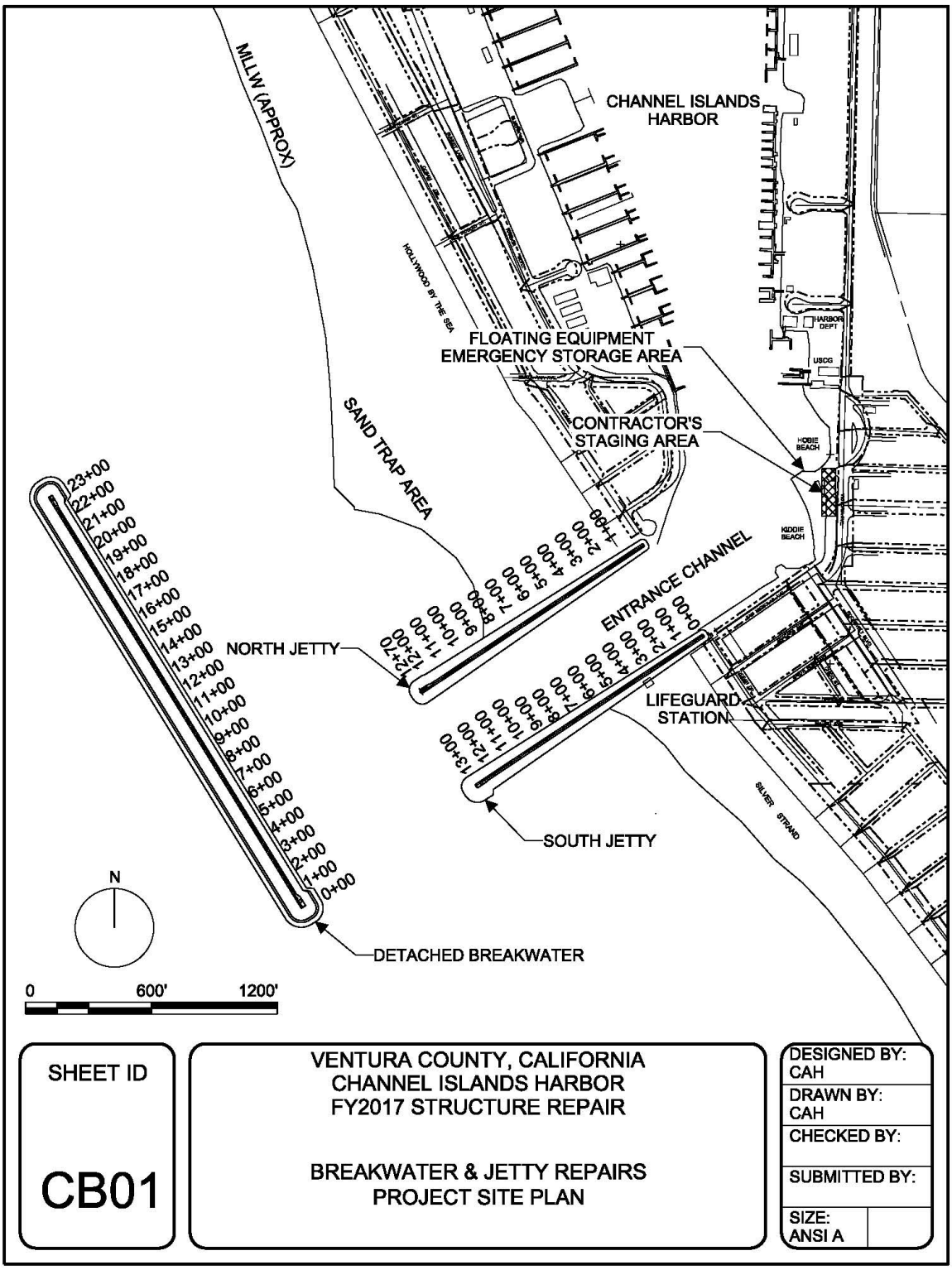

Figure 2. Channel Islands Harbor

Figure 3. Breakwater and Harbor Jetty Profiles

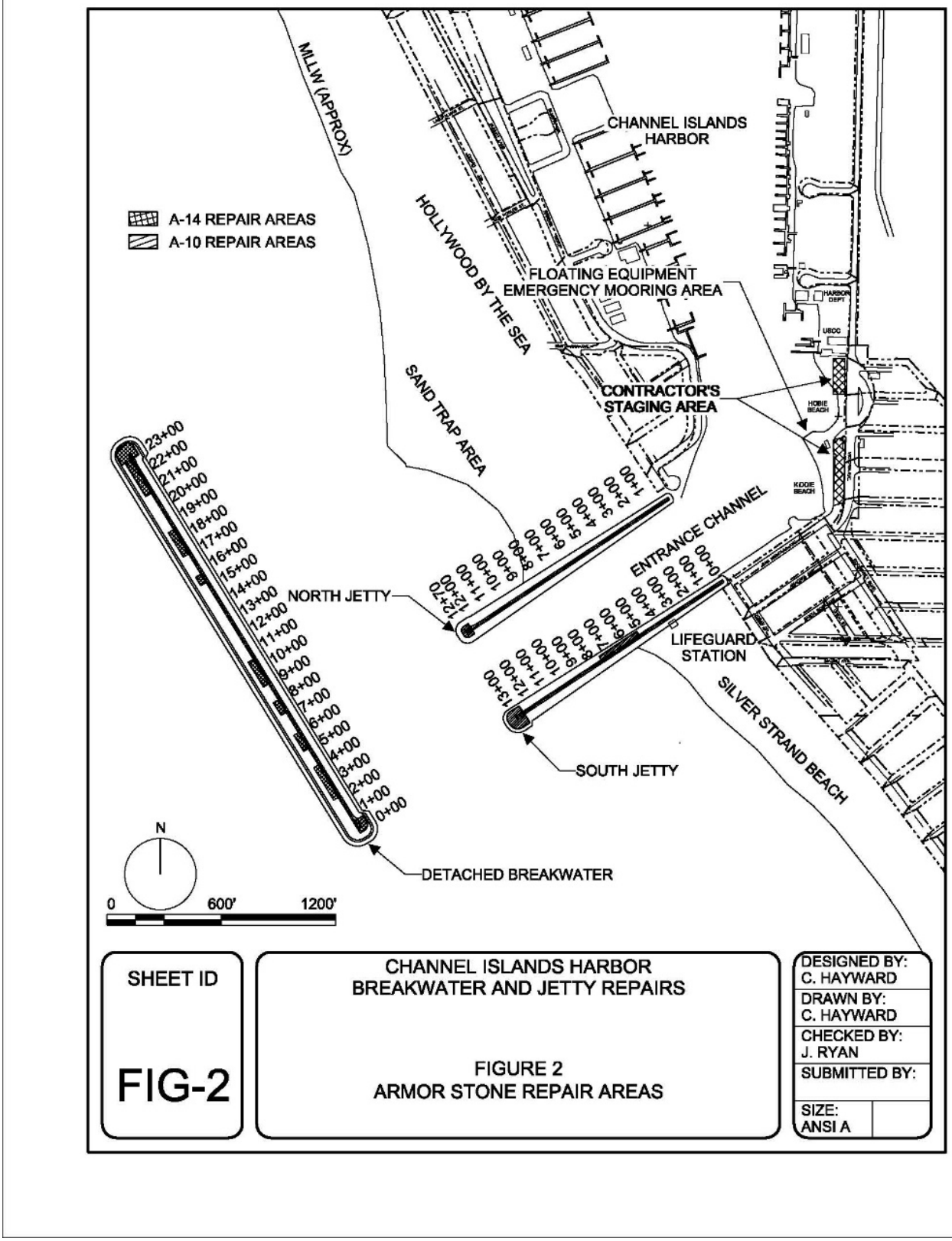

Figure 4. Repair Locations

APPENDIX A- MAILING LIST

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APPENDIX B – AIR QUALITY CALCULATIONS

Channel Islands Breakwater/Jetty Repair - AQ Calculations for Transport of Rock (Catalina Island to Channel Islands)

Tug boat engine data in kw (1)	Power Rating	Load Factor	# Active	Hourly Hp-Hrs	Fuel Use GPH	Hrs per Day (1)	Total Work Days (2)	Daily Total Hp-Hrs (1)
	1,790	0.68	1			1.1	7	1,339

Tug boat emission data ing/kw-hr (1)	ROG	CO	NOx	SOx	PM10	PM2.5	CO2
	0.44	5.00	7.94	0.01	0.23	0.21	652.00

Daily Emissions from Tugs transiting to/from Catalina Rock Quarry

	Pounds per day						
Construction Activity/Equipment Type	**ROG**	**CO**	**NOx**	**SOx**	**PM10**	**PM2.5**	**CO2**
South Coast Air Basin(5)	1.30	14.76	23.44	0.03	0.68	0.62	1924.59
South Central Coast Air Basin(6)	2.60	29.52	46.88	0.06	1.36	1.24	3849.18

TotalEmissions from Tugs transiting to/from Catalina Rock Quarry

	Tons per Year						
Construction Activity/Equipment Type	**ROG**	**CO**	**NOx**	**SOx**	**PM10**	**PM2.5**	**CO2**
South Coast Air Basin (3)	0.0097	0.1107	0.1758	0.0002	0.0051	0.0046	14.4344
South Central Coast Air Basin (4)	0.0195	0.2214	0.3516	0.0004	0.0102	0.0093	28.8689
Applicability Rate	**10**	**100**	**10**		**70**	**100**	

SCAB nonattainment for ozone (ROG and NOx), attainment (maintenance) for CO and PM10

SCCAB nonattainment for ozone (ROG and Nox)

GHG Emissions (Tons Per Year)	Total CO2	GHG (5)
	43	43.00

(1) Emissions factors for Dredging for tugboat and bulldozer taken from the Port of Los Angeles Channel Deepening Project Final Supplemental Environmental Impact Statement/Environmental Impact Report, September 2000.

(2) Speed of tug towing rock barge to/from Catalina rock quarry: 5 knots loaded, 6 knots light

Rock barge capacity 2,000 tons, 30,000 tons total needed, requiring 15 bargeloads total. One barge load per day spread out over the one month construction period

PM2.5 estimated for rock barge transit only for SCAB, which is nonattainment for PM2.5; SCCAB is attainment for PM2.5.

(3) Air emissions in SCAB limited to quarry out to 3 nm limit

(4) Air emissions in SSCAB limited to 3 nm limit to the project site, a distance of 6 nm

(5) https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

Channel Islands Breakwater/Jetty Repair - AQ Calculations for Construction

CRANE

			Emission Factors in lb/hr							Notes
	Total Days	hrs/day	**ROG**	**CO**	**NOx**	**SOx**	**PM10**	**PM2.5**	**CO2**	
	105	8	0.0954	0.3982	0.7236	0.0014	0.0286	0.0255	128.63	1, 2, 3
total emissions (tons/year)			**0.0401**	**0.1672**	**0.3039**	**0.0006**	**0.012**	**0.0107**	**54.024**	

TUG

power rating (kw)	1790									
load factor	0.68			**ROG**	**CO**	**NOx**	**SOx**	**PM10**	**PM2.5**	**CO2**
Qty.	2	**EF's in g/kw-hr**		0.44	5.00	7.94	0.01	0.23	0.21	652.00
hrs/day	8	**total emission (tons/year)**		**0.98973**	**11.2469**	**17.8601**	**0.02249**	**0.51736**	**0.47237**	**1466.6**
total days	105									
total kw-hr.	2044896									

SKIFF

			Emission Factors in lb/hr							Notes
	Total Days	hrs/day	**ROG**	**CO**	**NOx**	**SOx**	**PM10**	**PM2.5**	**CO2**	
	105	8	0.0228	0.0778	0.1428	0.0002	0.0067	0.006	17.631	1, 2, 3, 4
total emissions (tons/year)			**0.0096**	**0.0327**	**0.06**	**9E-05**	**0.0028**	**0.0025**	**7.4052**	

(1) SCAQMD Off Road Emission Factors using composite emissions for cranes for emission year 2019
(2) Values for PM 2.5 were calculated for off-road emissions by multiplying PM10 emissions by 0.89 per SCAQMD
(3) 6 months of construction ~ 105 work days.
(4) skiff motor ~ to 25 hp generator from SCAQMD Off Road Emission Factors

APPENDIX C – NHPA-RELATED CORRESPONDENCE

ROUTING AND TRANSMITTAL SLIP **DATE**

TO: *(Name, office symbol, room number, building, Agency/Post)*	Initials	Date
1 BONE		
2 CLIFFORD		10/2/18
3 SULZER		
4 DEMESA		10/9/18
5. GARRETT (scan/mail/file)		
6.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate	X	Signature
	Coordination		Justify		

REMARKS

SHPO/CA (J. Polanco)

Mailed 10/11/2018

PROJECT: Channel Islands Harbor Breakwater and Jetties, City of Oxnard, Ventura County, CA

SUBJECT: Section 106 of the National Historic Preservation Act consultation for the Channel Islands Harbor Breakwater and Jetties Repair

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: *(Name, organization symbol, Agency/Post)*	Room Number - Building 14th Floor
	Phone Number X3841
Mary Garrett, CESPL-PD	

AUTHORIZED FOR LOCAL REPRODUCTION 7540-00-935-5862 **OPTIONAL FORM 41** (REV. 3/2007)
Previous Edition is Usable

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
915 WILSHIRE BOULEVARD, SUITE 930
LOS ANGELES, CALIFORNIA 90017-3849

October 4, 2018

Planning Division

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, California 95816

SUBJECT: Section 106 of the National Historic Preservation Act consultation for the Channel Islands Harbor Breakwater and Jetties Repair

Dear Ms. Polanco:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) proposes to repair the Channel Islands Harbor breakwater and jetties, located near the City of Oxnard, Ventura County. We are consulting with you in accordance with Title 36 Code of Federal Regulation Part 800 (36 C.F.R. 800), implementing Section 106 of the National Historic Preservation Act. We are consulting on the adequacy of our identification effort. We are also seeking your review and agreement on our finding that the Channel Islands Harbor breakwater and jetties are not eligible for the National Register of Historic Places (NRHP) and that no historic properties would be affected by the proposed undertaking.

Description of the Undertaking

The proposed project would repair two parallel entrance channel jetties and an offshore breakwater at the entrance to the harbor from damage caused by heavy surf and wave action. The work would restore the structures to original design elevations and slopes in order to maintain safe passage for vessels entering and exiting the harbor.

Repair work would consist of resetting existing armor stone as needed and the placement of approximately 20,000 tons of new armor stone. The new stone would have a median stone size of 15-tons. Repairs would be conducted by a barge-mounted crane, barges carrying rock, tugboats, and other various small boats. Transport of stone would likely be by sea but may occur by land using dump trucks or other heavy equipment vehicles. The terrestrial (on shore) staging/storage area for construction equipment and supplies would be within the paved Kiddie Beach Park parking lot along South Victoria Avenue and within or adjacent to the Silver Strand Beach parking lot.

Area of Potential Effect

The Corps' area of potential effects (APE) would include both the area of actual repair work and any ancillary staging/storage areas. The repair work would be restricted to the footprint of the existing stone structures. The structures would be repaired to original condition, so work activities would not expand beyond the structure footprints. Staging would likely occur within the Kiddie Beach Park parking lot and either within the Silver Strand Beach paved parking lot or on an area of the active and highly disturbed Silver Strand Beach adjacent to the parking lot. Silver Strand Beach has been nourished with dredged material captured in the sand traps of the Channel Islands Harbor for decades, and this area was used as a staging area during the 1996 breakwater repair. The Corps' area of potential effects is defined as the

footprint of the breakwater (approximately 90' x 2,400') and jetties (approximately 70' x 1,250' each). Staging areas include the two existing paved public parking lots and a 150' x 300' area of the Silver Strand Beach adjacent to the parking lot. The vertical extent of the APE would not extend below the existing stone structures or the surface of the paved parking lots. If the beach area were used, disturbance would be limited to incidental disturbance and would not extend deeper than 12 inches from the ground surface. Access to the project area would be by existing paved public roads and by sea. Your office indicated that the APE is appropriately defined in a letter dated July 30, 2018 (COE_2018_0705_003).

Identification of Historic Properties

A records search was provided by the South Central Coastal Information Center (SCCIC) on July 13, 2018. The search examined the project area and a ¼-mile radius. Three previous reports were noted within the project area, although none appeared to include field survey. No resources were reported within the project area. The only resources noted within the buffer area were two records that indicated a total of four historic buildings located on the naval base at Port Hueneme.

The breakwater and jetties were constructed more than 50 years ago, but their eligibility for the National Register of Historic Places (NRHP) has not been evaluated previously. The Los Angeles District enlisted the services of the Technical Center of Expertise for the Preservation of Historic Structures and Buildings (the TCX), which is a group of Corps experts located in Seattle who provide national direction to the agency on issues regarding the built environment. The TCX was hired to record and evaluate the navigation structures. Lauren McCroskey, Senior Architectural Historian, and Kara Kanaby, Historical Archaeologist, recorded and evaluated the structures. A copy of the evaluation report is attached (enclosure).

Channel Islands Harbor is an entirely manmade harbor that was mechanically excavated out of the shoreline to mitigate erosion caused by the construction of Port Hueneme. Construction on the harbor began in 1958, and expansion continued into the 1970s. The rubble and stone breakwater and jetties were originally constructed in 1958-1960 to protect the newly created harbor. Major maintenance, which consisted of repairs to the north jetty and a small section of the detached breakwater, was completed in 1996 to address damages from the 1982-1983 storm season and the 1994 Northridge earthquake. There is no documentation of repairs prior to this event.

The evaluation report finds that the period of significance for the harbor extends from 1958 until 1995, when the first repairs were made to the structures and the residential/ commercial area around the harbor was fully developed. The report concludes that although the structures are over 50 years old, they lack eligibility under any of the four criteria.

The harbor is one of, if not the most recent harbors constructed along the California coast. The harbor has played no role in any significant events or the life of any important individuals. Rubble mound construction is ubiquitous and does not represent any advancement in the design of navigation features. Finally, the structures do not possess any archaeological data that are not already known through design and construction drawings. Thus, the Corps agrees with the recommendations in the report and determines that the breakwater and jetties lack the significance to eligible to the NRHP.

The Corps also received a Sacred Lands File Search from the Native American Heritage Commission (NAHC) on May 23, 2018. No cultural resources were identified within the APE. The tribal contacts provided by the NAHC were invited to consult in a letter dated June 27, 2018. Mr. Patrick Tumamait of the Barbareno/Ventureno Band of Mission Indians contacted the Corps by telephone on July 10, 2018 to express concern about a site on McGrath Beach. The Corps provided the results of the SCCIC records search. Mr. Tumamait indicated in an email on July 25, 2018 that he was satisfied that the site at

McGrath Beach is several miles from the proposed project and that the Corps had made an adequate effort to identify historic properties.

Mr. Gabriel Altamirano of the Coastal Band of the Chumash Nation contacted the Corps by email on July 26, 2018 requesting to initiate consultation. The Corps asked for guidance on the nature of consultation desired. Mr. Altamirano provided a cell phone number and requested current project documents. The Corps provided the results of the SCCIC records search and the draft repair plan on August 17, 2018. To date, the Corps has followed up with three additional phone calls and left messages for Mr. Altamirano, as well as an additional email. The Corps will inform the SHPO's office if Mr. Altamirano provides any meaningful comments in the future.

Considering that project activities will be confined to the constructed harbor structures, paved parking lots, and a highly disturbed area of beach that has been repeatedly covered with dredged material and that neither the SCCIC or NAHC records searches indicated the presence of known resources, the Corps has concluded that a pedestrian survey would not be productive in this instance.

Finding

The Corps concludes that the neither the Channel Islands Harbor breakwater nor the jetties are eligible for the NRHP. No other cultural resources are known to exist within the APE. The APE has been previously disturbed by the construction and maintenance of the breakwater and jetties. Thus, no historic properties would be affected by the proposed project.

At this time, the Corps is requesting your review of the evaluation report for the constructed features. We are also requesting your concurrence with our determination that the Channel Islands breakwater and jetties are not eligible for the NRHP and that no historic properties would be affected by the proposed project. We appreciate your consideration of our request. If you have specific questions or if we can provide any clarification about this request, please contact Mr. Travis Bone at (602) 230-6969 or via e-mail at Travis.S.Bone@usace.army.mil.

Sincerely,

Eduardo T. De Mesa
Chief, Planning Division

Enclosure

State of California • Natural Resources Agency
Edmund G. Brown Jr., *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

October 30, 2018

In reply refer to: COE_2018_0705_003

Mr. Eduardo T. De Mesa
Chief, Planning Division
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Boulevard, Suite 930
Los Angeles, CA 90017

Subject: Continuing Section 106 Consultation for the Channel Islands Harbor Breakwater and Jetties Repair Project, Ventura County, California

Dear Mr. De Mesa:

The California State Historic Preservation Officer (SHPO) received a letter from the U.S. Army Corps of Engineers (COE) on October 15, 2018 continuing consultation on the above referenced undertaking in order to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended) and its implementing regulations at 36 CFR Part 800. In addition to the letter, the COE provided the following document for review:

- *Channel Islands Harbor – Breakwater and Jetties, Oxnard, California Evaluation of National Register Eligibility* (COE August 2018).

The COE is proposing to repair the two parallel entrance channel jetties and offshore breakwater at the entrance to the Channel Island Harbor from damage caused by heavy surf and wave action. Repair work would include resetting the existing armor stone and placement of new armor stone to restore the structures to their original condition. The COE previously consulted on their Area of Potential Effects (APE), which includes the footprint of the breakwater and jetties as well as proposed staging areas. The SHPO commented that the APE appears to be appropriately defined in a letter dated July 30, 2018.

The COE's historic property identification efforts included a records search at the South Central Coastal Information Center, which indicated that no resources have been previously identified within the APE. The Channel Island Breakwater and Jetties were evaluated for their eligibility for listing on the National Register of Historic Places (NRHP), and the COE determined that they are not eligible. The COE also obtained a Sacred Lands File search from the Native American Heritage Commission (NAHC) and

sent letters to the contacts identified by the NAHC as having interest in the area. The COE received two requests for additional information, which they provided. No sacred lands or other resources were identified within the APE as a result.

Based on this information, the COE has determined that no historic properties would be affected by the proposed undertaking and have requested the SHPO's review and comment. The following comments are provided:

- Pursuant to 36 CFR 800.4(c)(2), the COE has determined that the Channel Islands Harbor breakwater and jetties are not eligible for listing on the NRHP. **I concur**.

- Pursuant to 36 CFR 800.4(d)(1), **I do not object** to a finding of *no historic properties affected* for this undertaking.

Be advised that under certain circumstances, such as unanticipated discovery or a change in project description, the COE may have additional future responsibilities for this undertaking under 36 CFR Part 800. For more information or if you have any questions, please contact Koren Tippett, Archaeologist, at (916) 445-7017 or koren.tippett@parks.ca.gov or Kathleen Forrest, Historian, at (915) 445-7022 or kathleen.forrest@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

APPENDIX D- NEGATIVE DETERMINATION AND CCC CONCURRENCE

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
915 WILSHIRE BOULEVARD, SUITE 930
LOS ANGELES, CALIFORNIA 90017

March 19, 2019

Office of the Chief
Planning Division

John Ainsworth
Executive Director
California Coastal Commission
45 Fremont, Suite 2000
Attention: Mr. Larry Simon
San Francisco, California 94105-2219

Dear Mr. Ainsworth:

Enclosed for your review and comment is a copy of the Draft Supplemental Environmental Assessment (Draft SEA) for the Channel Islands Harbor Breakwater and Jetty Repair project. The Los Angeles District of the U.S. Army Corps of Engineers (Corps) plans to conduct repairs to the Channel Islands Harbor facility (Harbor), a structure consisting of two parallel entrance jetties and a protective offshore breakwater near the entrance to the harbor. The project area would encompass approximately 60 acres of harbor channel, stone jetties and an offshore breakwater. Construction could begin as early as Summer of 2019, but may begin in Spring of 2020 or later due to funding and availability of armor stone.

This letter and the Draft EA constitute the Corps' Negative Determination for this project. The Corps has determined that the proposed project is consistent, to the maximum extent practicable with the Coastal Zone Management Act of 1976. No federally listed species will be affected nor will their continued existence be jeopardized by project implementation. Formal consultation with the U. S. Fish and Wildlife Service and/or National Marine Fisheries Service is not required. The Corps requests Commission staff concurrence with our Negative Determination.

The Corps is requesting your expedited concurrence on the ND by April 10, 2019

Eduardo T. De Mesa
Chief, Planning Division
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Boulevard, Suite 930
ATTN: Dr. Zachary Schakner (CESPL-PD-RQ)
Los Angeles, California 90017-3401

If you have any questions regarding the project, please contact Dr. Zachary Schakner, Project Environmental Coordinator, at (213) 452-3667.

Thank you for your attention to this document.

Sincerely,

Eduardo T. De Mesa
Chief, Planning Division

Enclosure

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY GAVIN NEWSOM, GOVERNOR

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904- 5200
FAX (415) 904-5400
TDD (415) 597-5885
WWW.COASTAL.CA.GOV

April 24, 2019

Eduardo T. De Mesa
Chief, Planning Division
Los Angeles District
U.S. Army Corps of Engineers
ATTN: Dr. Zachary Schakner
915 Wilshire Blvd., Suite 930
Los Angeles, CA 90017-3401

Subject: Negative Determination ND-0007-19 (Channel Islands Harbor Breakwater and Jetty Repairs, City of Oxnard, Ventura County)

Dear Mr. De Mesa:

The Coastal Commission staff has reviewed the above-referenced negative determination. The Corps of Engineers proposes to make repairs to the offshore breakwater and the parallel entrance jetties at Channel Islands Harbor. These harbor structures were constructed between 1958 and 1960, and were repaired in 1996 after they were damaged during the 1982-1983 winter storm season and the 1994 Northridge earthquake. The Executive Director concurred with ND-084-95 for the 1996 repair work. The purpose of the proposed project is to return the breakwater and jetties back to their design elevation, slope, and function after 23 years of wave attack, to prevent further degradation of the structures, and to ensure navigational safety in the federal channel at Channel Islands Harbor.

The project consists of placing approximately 30,000 tons of new armor stone at various locations on the three structures and resetting existing armor stone as needed. The stone would likely come from the Pebbly Beach Quarry on Santa Catalina Island and transported to Channel Islands Harbor by barge. Armor stone placement would occur using a barge-mounted crane and various support vessels. Some work will occur at or just below mean lower low water but no work at the toe of the structures is expected. As a result, the Corps does not anticipate that the nearshore environment or water quality will be affected by sediment disturbance. Repair work is expected to take six months to complete and would occur between April and October when calm sea conditions provide a safe working environment for vessels and construction crews. The Corps states that project construction could begin in 2019 but may be delayed one year due to the availability of funding and armor stone. Staging areas for project construction equipment would be temporarily located at parking areas adjacent to Kiddie Beach or Silver Strand Beach, or on a portion of the beach adjacent to Silver Strand Beach. The Corps will work with the City of Oxnard to ensure that temporary signage will be placed at any staging area that occupies public

parking to inform visitors of alternate nearby parking areas. The potential beach staging area is one that is routinely used by the Corps during biennial maintenance dredging operations, and staging here would not adversely affect beach access or recreation.

In conclusion, the proposed project constitutes in-kind repairs to the existing Corps of Engineers breakwater and jetties at Channel Islands Harbor. The Commission staff **agrees** that completion of repairs will not adversely affect coastal resources and will improve navigation safety at the harbor. We therefore **concur** with your negative determination made pursuant to 15 CFR §930.35 of the NOAA implementing regulations. Please contact Larry Simon at (415) 904-5288 should you have any questions regarding this matter.

Sincerely,

(for)

JOHN AINSWORTH
Executive Director

cc: CCC – South Central Coast District

APPENDIX E – CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION APPLICATION COVER LETTER

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
915 WILSHIRE BOULEVARD
LOS ANGELES, CALIFORNIA 90017

December 4, 2018

Planning Division

Mr. Jun Zhu
Senior Environmental Scientist
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, California 90013

The U.S. Army Corps of Engineers (Corps) requests a Clean Water Act Section 401 Water Quality Certification (WQC) for the proposed Channel Islands Harbor Breakwater and Jetties Repair Project in Oxnard, Ventura County, California. The purpose of the proposed project is to repair the existing jetties and detached breakwater for the authorized purpose of maintaining navigability in the Federal channel at the Channel Islands Harbor. The jetties and detached breakwater serve as protection from waves and currents, reduce shoaling and therefore facilitate navigability from the Pacific Ocean into the harbor entrance channel. Maintenance repairs on the jetties and breakwater are needed to ensure navigational safety and to prevent further degradation of the structural integrity of harbor facilities, potentially closing the harbor. Additionally, the detached breakwater serves to suspend littoral transport and create a sand trap upcoast of the harbor entrance channel. This material is used to nourish the eroding shoreline downcoast from Port Hueneme harbor, and provides protection to private, public and Federal lands from further erosion.

In compliance with 33 CFR §336.1(a)(1), a copy of the Section §401 WQC application form is enclosed for your review. The project is not expected to result in significant, adverse impacts to water quality. Also enclosed is a copy of the draft Environmental Assessment and Clean Water Act 404(b)(1) analysis for the Channel Islands Harbor Breakwater and Jetties Repair Project for your review and comment.

Your timely review and issuance of a 401 WQC is appreciated. If you have any questions, please contact me at (213) 452-3874.

Sincerely,

Ian Bordenave
Biological Sciences and Environmental Manager
Regional Planning Section

Enclosure(s)

APPENDIX F – EFH ASSESSMENT CORRESPONDENCE

From: Bryant Chesney - NOAA Federal
To: Schakner, Zachary A CIV USARMY CESPL (US)
Cc: Lovan, Hayley J CIV (US)
Subject: [Non-DoD Source] Re: Channel Islands Breakwater repair--General Concurrence (UNCLASSIFIED)
Date: Thursday, May 23, 2019 10:20:21 AM

Zac,
NOAA's National Marine Fisheries Service (NMFS) has reviewed the proposed action for impacts to essential fish habitat (EFH). NMFS believes the action qualifies for coverage under the 2003 EFH General Concurrence established with the U.S. Army Corps of Engineers Los Angeles District. Therefore, we have no additional comments to provide regarding impacts to EFH.

As a federal agency and pursuant to section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. § 1531 et. seq.), the U.S. Army Corps of Engineers (USACE) shall, in consultation with and with the assistance of NMFS, insure that any action it authorizes, funds, or carries out, does not jeopardize the continued existence of any species listed as threatened or endangered, or result in the destruction or adverse modification of designated critical habitat. The federally listed black abalone (Haliotis cracherodii) and white abalone (Haliotis sorenseni) have the potential to occur within the project area. Black abalone occur on intertidal and subtidal hard substrate (both natural and man-made) from Punta Arena, California to Central Baja California from the intertidal zone to approximately 6 meters in depth. White abalone occur on subtidal hard substrate (both natural and man-made) from Pt. Conception, California to Central Baja California from approximately 5 to 60 meters in depth. Black abalone have recently been observed on the Port San Luis Breakwater, and white abalone on the Ports of Los Angeles/Long Beach Breakwater.

NMFS recommends that the USACE consider the risks of potential injury, disturbance, and impacts to black and/or white abalone, and engage in section 7(a)2) consultation with the NMFS Protected Resources Division, if the USACE determines the proposed action may affect these abalone species. NMFS recommends that a pre-construction survey abalone survey be conducted within the project footprint. Upon request, NMFS staff can provide technical assistance on the design and conduct of the survey and subsequent effects determinations by the USACE. NMFS staff may also be able to assist in development of protective measures that minimize the potential for adverse effects to abalone. In the event that a living black and/or white abalone is observed within the project footprint area before or during construction, the USACE should contact Melissa Neuman (562-980-4115) or Susan Wang (562-980-4199).

Thank you for consulting with NMFS regarding the effects of the proposed action on EFH. Please let me know if you have any questions.
Regards,
Bryant

On Wed, May 22, 2019 at 2:23 PM Schakner, Zachary A CIV USARMY CESPL (US) <Zachary.A.Schakner@usace.army.mil <mailto:Zachary.A.Schakner@usace.army.mil> > wrote:

CLASSIFICATION: UNCLASSIFIED

Good afternoon Bryant

The Los Angeles District of the U. S. Army Corps of Engineers (LAD), as part of its Operations and Maintenance Program, is proposing to perform repairs to the existing jetties and detached breakwater for the authorized purpose of maintaining navigability in the Federal channel at the Channel Islands Harbor. Since the proposed project involves in-kind repair of an existing authorized structure, we are seeking general concurrence that the project impacts would not be expected to have a substantial adverse impact on EFH or Federally managed fisheries in southern and central California waters.

Proposed Project and location: Channel Islands Harbor facility (Harbor), a structure consisting of two parallel entrance jetties and a protective offshore breakwater near the entrance to the Channel Islands Harbor. Repair work

would consist of furnishing and placing approximately 30,000 tons of new armor stone having a median stone size of 15 tons, and resetting existing armor stone as needed. The work would repair and restore damaged areas to original design elevations and slopes.

Attached is a the Draft EA with more detailed explanation of our EFH analysis. If possible, we are requesting expedited (prior to the 10-day window if possible) concurrence so that we can begin construction on time.

Thanks much

Zac

Zac Schakner, Ph.D.
Biologist
Planning Division, Environmental Resources Branch, Ecosystem Planning Section
Los Angeles District, U.S. Army Corps of Engineers
O:(213) 452-3667 C:(213) 212-0058

CLASSIFICATION: UNCLASSIFIED

--

Bryant Chesney
Senior Marine Habitat Resource Specialist
NOAA National Marine Fisheries Service
West Coast Region
Protected Resources Division
501 W. Ocean Blvd, Suite 4200
Long Beach, CA 90802
w (562) 980-4037
f (562) 980-4092

Martinez-Takeshita, Natalie M CIV USARMY CESPL (USA)

From: Susan Wang - NOAA Federal <susan.wang@noaa.gov>
Sent: Monday, June 10, 2019 4:22 PM
To: Martinez-Takeshita, Natalie M CIV USARMY CESPL (USA)
Subject: [Non-DoD Source] Re: Channel Islands Jetty/Breakwater

Hi Natalie,

I reviewed the Draft EA for the Channel Islands Jetty/Breakwater repair project and also spoke with other abalone biologists in the area who are familiar with the breakwater/jetty. Overall, we think there is a low likelihood that black abalone are present on the Channel Islands breakwater/jetty for several reasons. First, there is no natural rocky intertidal habitat nearby with black abalone populations to serve as a source of larvae. Second, there is rarely kelp or other algae for abalone to eat near the structures. Third, the structures likely have deep, inaccessible crevices that would be very difficult to impossible to survey.

For this project, we don't think a survey for black abalone is needed. However, I have someone reviewing the Mission Bay project to evaluate the potential for black abalone there. There is the possibility that other abalone species were found in the area. I will let you know once I get a response.

Thank you for letting us know about this project and coordinating! If you have any questions, please let me know.

Susan

Susan Wang
NOAA Fisheries
West Coast Region
Phone: 562-980-4199
Blockedhttp://www.westcoast.fisheries.noaa.gov/

On Fri, Jun 7, 2019 at 11:46 AM Martinez-Takeshita, Natalie M CIV USARMY CESPL (USA) <Natalie.M.Martinez-Takeshita@usace.army.mil <mailto:Natalie.M.Martinez-Takeshita@usace.army.mil> > wrote:

> Hi Susan,
>
> You mentioned when we spoke this week there is a gentlemen that lives near Channel Islands that used to work for you guys and that maybe he would be able to come out and look at the project footprint and help me assess what surveys would be needed. Do you think that is an option in the next couple weeks?
>
> Natalie Martinez-Takeshita
> Biologist
> Ecosystems Planning Section, Planning Division
> Los Angeles District US Army Corps of Engineers
> Office: (213) 452-3306