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STAFF REPORT: REGULAR CALENDAR

Consistency Determination No.:	**CD-0002-21**
Federal Agency:	**U.S. Army Corps of Engineers**
Location:	Port San Luis Harbor Breakwater, adjacent to the town of Avila Beach, San Luis Obispo Co. (**Exhibit 1**)
Project Description:	Repair of the breakwater by resetting and replacing stone along approximately 1,420 feet of the existing structure.
Staff Recommendation:	Concurrence

SUMMARY OF STAFF RECOMMENDATION

The U.S. Army Corps of Engineers (Corps) has submitted a consistency determination to repair the Port San Luis breakwater located in Port San Luis Harbor, San Luis Obispo County, between April and November of this year. The Corps proposes to repair and improve approximately 1,420 feet of existing breakwater by resetting stones and raising the overall height of the repair area by 3 feet. To safely provide construction access, the Corps proposes to excavate up to 15,000 cubic yards of sandy sediment from known eelgrass habitat in order to create adequate depths for barges and other vessels to

access the breakwater. The Corps estimates that impacts to 1.8-4.39 acres of Pacific eelgrass may occur.

Repair of the breakwater is an allowable use under Coastal Act Section 30233(a)(1) because it involves the improvement of an existing harbor-related breakwater. There is no less environmentally damaging feasible alternative to access and repair the breakwater, which is required to maintain safe navigation and moorage within the harbor. In consultation with the National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife (CDFW), the Commission, and the Harbor District, the Corps has submitted a mitigation plan that is consistent with the California Eelgrass Mitigation Policy (CEMP); the plan will allow for the relocation of the excavated material (which has been surveyed and is clean sand suitable for eelgrass establishment) approximately 1,000 feet from the original location to create eelgrass mitigation sites (**Exhibit 3**). The approximate depth range for the mitigation sites is from -22 feet Mean Lower Low Water (MLLW) up to a crest elevation of -12 feet MLLW, consistent with the depth range presently occupied by Pacific eelgrass at Port San Luis. With these measures, the staff recommends the Commission find the project consistent with Coastal Act Sections 30233(a) and (b).

The proposed project would also result in temporary and permanent localized, minor adverse effects on marine resources and water quality from resuspension of sand during excavation and placement. Additionally, because marine mammals may be present within the project area, the Corps has requested an incidental harassment authorization from the National Marine Fisheries Service and will include Best Management Practices (BMPs) that would minimize potential impacts to such species present within the project area (**Exhibit 5**). Further, while this area is designated as critical habitat for black abalone, a Corps survey indicated that these animals were not present within the project area. Water quality impacts are expected to be temporary and minor as the proposed project and mitigation plan incorporate measures to reduce potential spillage, and disturbed sediment will resettle quickly in the water column. Thus, staff recommends the Commission find that the project is consistent with the marine resources and water quality policies of the Coastal Act (Sections 30230, 30231, and 30232).

The proposed project is also consistent with Section 30235 of the Coastal Act because it maintains and improves an existing breakwater that protects a harbor that is used for a variety of coastal-dependent uses commercial and recreational boating, mooring, fishing, kayaking, surfing and beach activities, and because the project will not change the effect from the existing breakwater on local sand supply.

Finally, the Corps has consulted with the Chumash Tribes to address the presence of sacred Morro Rocks currently in place on the breakwater. This consultation has resulted in the Corps committing to treat all existing stone in a respectful manner that minimizes breakage, and all stone material, both broken and whole, shall be retained on or adjacent to the breakwater. No other cultural or historic resources would be affected by

the proposed project, and the staff recommends the Commission find the project consistent with the cultural resource policy of the Coastal Act (Section 30244).

The staff therefore recommends the Commission **concur** with the Corps' consistency determination CD-0002-21. The motion and resolution are on **Page 5** of this report. The standard of review for this consistency determination is the enforceable policies of the California Coastal Management Program, consisting in relevant part of the Chapter 3 policies of the Coastal Act.

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EXHIBITS

I. FEDERAL AGENCY'S CONSISTENCY DETERMINATION

The Corps of Engineers has determined the project consistent with the California Coastal Management Program.

II. MOTION AND RESOLUTION

Motion:

> *I move that the Commission **concur** with consistency determination CD-0002-21 that the project described therein is fully consistent, and therefore consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program (CCMP).*

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

Resolution:

> *The Commission hereby **concurs** with consistency determination CD-0002-21 by the Corps of Engineers on the grounds that the project is fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program.*

III. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

Beginning in April 2021, the Corps proposes to perform repairs to the Port San Luis breakwater in Port San Luis Harbor, San Luis Obispo County, to maintain the breakwater's integrity and continue to provide safe navigation within the harbor. Over time, armor stone from the top of the breakwater has fallen primarily into the leeward side of the structure as a result of wave activity. The proposed project entails repairing the breakwater by resetting and replacing salvaged stone and placing new armor stone along the breakwater. Repair work would focus on the most heavily damaged 1,420 feet of the structure and would be conducted from the leeward side of the breakwater (**Exhibits 1 and 3)**. The footprint of the breakwater would not be changed, but the crest elevation would be raised from +13 feet MLLW to +16 feet MLLW to account for hydraulic stability, accommodate larger armor stones, meet design criteria, and account for sea level rise. The Corps estimates that approximately 29,000 tons of existing stone would need to be reset and 60,000 tons of new stone (individual stone size range is anticipated to be from 5 to 20 tons) would be placed to restore the most heavily damaged portion of the breakwater.

In order to access the breakwater repair area, the Corps proposes to excavate approximately 15,000 cubic yards of clean sand adjacent to the leeward side of the breakwater, which is necessary to create adequate depths for barges and other construction-related vessels. The excavated material will be relocated approximately 1,000 feet north of the breakwater to minimize additional impacts to the existing eelgrass bed in the lee of the breakwater. In one location where water depth is below that which supports growth of eelgrass, the excavated and relocated sediment will be used to create an engineered eelgrass mitigation site using a 1.2:1 ratio as recommended in the California Eelgrass Mitigation Policy (CEMP).

Project construction will be sea-based, conducted by one or more crane-equipped barges, barges carrying rock, possibly a scow, tugboats, and small craft support vessels. The first phase of construction will be the excavation of shoaled sediment adjacent to the breakwater to allow for access of the equipment required to repair the breakwater. The excavation of shoaled sediment will require a crane-equipped barge, possibly a scow, tugboats, and small craft support vessels. The second phase of construction will consist of the repair work to the breakwater structure. Crane barges will retrieve fallen stone from the water or from another barge that holds new armor stone. Repair work will consist of resetting of existing stone and placement of new stone on the breakwater structure. Dropping of armor stone is not permitted, although some stones may be accidentally dropped during placement. Stones would be carefully placed and interlocked with existing stones to maximize stability and minimize the intensity of sound due to stone placement.

B. Prior Breakwater Repairs Authorized by the Coastal Commission

The Coastal Commission and its Executive Director have concurred with two consistency determinations (CD-035-83, CD-085-91) and one negative determination (ND-050-04) submitted by the Corps for repair work on the Port San Luis breakwater. The two consistency determination concurrences were for activities that also included some loss of habitat in order for vessels (cranes and barges) to safely access the breakwater on the leeward side. In both cases, although there may have been a temporary loss of public access in the water and construction area as well as from the presence of shore based vehicles, the Commission agreed with the Corps that the benefits of repair were necessary to continue safe public access, moorage, and recreation in the harbor. The negative determination concurrence was for repairs to the outermost 250 feet of the breakwater that was damaged during a seismic event.

C. Other Agency Approvals and Consultations

National Marine Fisheries Service

The Corps has requested an incidental take authorization under section 101(a)(5) of the Marine Mammal Protection Act of 1972, as amended, for the take of marine mammals incidental to conducting repairs of the PSL breakwater. Because the Corps activities have the potential to cause Level B Take of marine mammals, the Corps has requested

an Incidental Harassment Authorization from the National Oceanic and Atmospheric Administration (NOAA) Fisheries Office of Protected Resources. The Corps anticipates completion of the IHA permitting process in May 2021.

The Corps will also be initiating consultation with the National Marine Fisheries Service due to adverse impacts on Essential Fish Habitat.

U.S. FISH AND WILDLIFE SERVICE

The Corps has conducted pre-consultation with the Service pursuant to Section 7 of the Endangered Species Act due to presence of federally listed marine mammals (sea otters) observed near the project area and has incorporated recommended measures into their draft EA. Corps will initiate additional consultation in April 2021 and provide any updated project guidance to CCC.

RESOURCE AGENCY COORDINATION

The Corps consulted with the Southern California Dredged Material Management Team (SC-DMMT), an interagency team consisting of federal and state agencies for coordinated review of dredging projects and policy issues within the Southern California Area. The CCC, EPA, and CDFW, Central Coast RWQCB provided comments on the proposed eelgrass mitigation plan and the Corps incorporated their comments into the final draft of the mitigation plan.

CALIFORNIA STATE HISTORIC PRESERVATION OFFICE (SHPO) AND TRIBAL CONSULTATION

The Corps consulted with the SHPO in 2018, which concurred that the breakwater is ineligible for listing in the National Register of Historic Places (NRHP). The Corps has been and will continue consulting with SHPO and Chumash Tribes on the proposed excavation/placement of excavated sediment and replanting of salvaged eelgrass in mitigation sites. The Commission staff has also conducted outreach to Chumash Tribal representatives, as discussed in Section F below.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

The Corps has applied for a Scientific Collection Permit to collect and transplant eelgrass from the excavation site to the proposed mitigation locations.

D. EXCAVATION AND PLACEMENT OF FILL IN COASTAL WATERS, SHORELINE STRUCTURES

Section 30233(a) of the Coastal Act states:

> *The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*

> *(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
>
> *(2) Maintaining existing, or restoring previously dredged depths on existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*

Section 30233(b) of the Coastal Act states:

> *Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.*

Section 30235 of the Coastal Act states:

> *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.*

The proposed project involves dredging and filling within coastal waters and therefore triggers the three-part test of Section 30233(a): (1) the project must be one of the seven enumerated allowable uses; (2) the project must be the least environmentally damaging feasible alternative; and (3) the project must include feasible mitigation measures to minimize adverse environmental impacts.

Regarding the first test, the recovery and replacement of stones and the dredging of Port San Luis Harbor for restoration of the breakwater is necessary to maintain and improve the breakwater, which serves coastal-dependent fishing and other commercial and industrial facilities. The project is thus an allowable use under Section 30233(a)(1) and (a)(2).

Regarding the second test, no less environmentally damaging feasible alternative to the proposed dredging and restoration of the Port San Luis Breakwater is available. Previous Corps analysis of accessing the breakwater for repairs determined that it is not safe to access the breakwater and conduct work from barges on the seaward side due to hazardous open ocean wave conditions. Thus, for this project, the Corps considered the alternative of “No Action,” which would leave the breakwater in its current condition. They have determined that not completing repairs on the breakwater would result in a loss of safe harbor and navigability for all user groups (i.e., recreational, and

commercial vessels moored in the harbor). Thus, the Corps concluded that access to the breakwater for repairs from the leeward side was the preferred and least environmentally damaging feasible alternative, and the impacts will be addressed through the proposed eelgrass mitigation measures. The Commission agrees and finds the project consistent with the alternatives test of Section 30233(a).

Regarding the third test of Section 30233(a), the proposed project includes feasible mitigation measures to minimize adverse environmental impacts. The Corps will follow all CEMP recommended measures (briefly summarized in Section E) to avoid and minimize impacts to known eelgrass habitat, and has also submitted a mitigation plan that addresses potential permanent direct impacts to 1.8-4.39 acres of existing Pacific eelgrass habitat. This mitigation plan provides for a 1.2:1 mitigation ratio for Pacific eelgrass as well as a pilot planting of Torrey's surfgrass, which are further described below. The Commission finds that with these measures, the project is consistent with the third (mitigation) test of Section 30233(a).

Although the proposed project would have effects on a particular area of marine habitat (eelgrass), the project includes measures that will minimize eelgrass and water quality impacts (included in Section E), and an eelgrass mitigation plan that moves clean, excavated sand to replanting sites, which will settle quickly in the water column. This mitigation plan, which has been reviewed by CCC, CDFW, the Harbor District, RWQB and SC-DMMT, is a multi-phased approach that retrieves existing eelgrass prior to excavation and relocates it to nearby sites (**Exhibit 3**) and includes five years of post-construction monitoring. Using sand in the littoral system and for eelgrass mitigation (as well as nearshore disposal) is consistent with Coastal Act guidance and has precedent beginning with CD-089-99 (US Navy dredged materials disposal). The Corps has designed the excavation area to be as small as possible to allow for barges and support vessels to access the area, and its project includes a spill response plan, equipment maintenance measures, and a qualified biological observer onsite throughout construction. Thus, the Commission finds that the project has been designed avoid significant disruption and thus is consistent with the "shall avoid significant disruption" test of Section 30233(b).

As discussed in the following sections of this report, conservation and mitigation measures are incorporated into the proposed project where necessary to protect coastal resources from adverse effects arising from excavation activities. With these measures, the Commission finds that the proposed dredging and filling to maintain the breakwater is consistent with the allowable use, alternatives, and mitigation tests contained in the dredge, fill, and sand supply policies of Coastal Act Sections 30233(a) and (b).

The project is also consistent with Section 30235 of the Coastal Act, which permits revetments and other structures that alter natural shoreline processes if they are required to serve coastal-dependent uses and are designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Here, the project is required to protect the coastal-dependent San Luis Harbor, with its piers and other coastal-dependent uses. The repair and improvement will not expand the breakwater beyond its existing

footprint, so will not alter sand dynamics or "alter… natural shoreline processes." The Commission therefore concludes that the project is consistent with all the tests of Section 30235 of the Coastal Act.

E. MARINE RESOURCES AND WATER QUALITY

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30232 of the Coastal Act states:

> *Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.*

The project area is located within federally designated Essential Fish Habitat (EFH), and contains habitat that is suitable for federally listed species and marine mammals such as southern sea otters, black abalone, stellar sea lions, harbor seals, and California sea lions.

<u>Eelgrass and Essential Fish Habitat</u>

The proposed project area is in designated Essential Fish Habitat (EFH) and within the historic range and designated critical habitat for federally endangered black abalone (*Haliotis cracherodii*). However, the Corps did not find any black abalone within the

Project area in 2018 and 2019 surveys. The Corps will verify this finding in an additional pre-construction survey and also through consultation with the National Marine Fisheries Service and will submit this information to the Commission staff.

Within this EFH, the project area contains eelgrass beds, which commonly serve as habitat for juvenile fish, and undoubtedly also supports managed species. In February 2019, Pacific Eelgrass (*Zostera pacifica*) was mapped as a continuous bed on the leeward (east facing) side of the breakwater. The bed extends approximately half a mile along shore and lee of the breakwater. Torrey's surfgrass (*Phyllospadix torreyi*) was found to occur extensively on the native bedrock in nearby Point San Luis and Whaler's Island, but to a much lesser extent along the leeward side of the breakwater. Giant kelp bed canopies occur in the greater project vicinity, but outside of the project area. A map of these habitats can be found in **Exhibit 2.**

The proposed excavation of eelgrass habitat within this EFH is expected to impact several managed fish species such as rockfish, flatfish, and coastal pelagics such as Pacific herring and anchovy. Eelgrass provides important foraging areas and shelter to young fish and invertebrates, food for migratory waterfowl and sea turtles, and spawning surfaces for invertebrates and fish such as the Pacific herring. Primarily, these temporary effects would include a loss of habitat, turbidity plumes, suspension of sediment from propeller wash, and also from the possible release of contaminants from equipment. Potential direct impacts may occur from direct removal, burial, and crushing from stone movement and placement.

To address temporary impacts, the Corps will follow the measures recommended in the CEMP (section II.C. and listed below) to avoid and minimize impacts to eelgrass. This includes such measures as conducting excavation as efficiently as possible, not allowing equipment to stay in place for more than 14 days to minimize shading impacts, and not anchoring outside of the dredged area to minimize the disturbance footprint. The Corps considered the use of turbidity curtains to minimize impacts associated with turbidity. However, particle grain size (i.e., 0.10 to 0.17 mm) in the project area is above the threshold for the recommended use of turbidity curtains. Guidance from the CEMP and NMFS advise silt curtain use when particles are fine (.0002 to 0.625 mm). Additionally, the consistent use of turbidity curtains may not be feasible due to wave action in the surrounding area and damage caused by a curtain breaking loose could outweigh the benefit of using the curtain.

The total Pacific eelgrass impact area is expected to range from 1.80 to 4.39 acres depending on effectiveness of mitigation measures implemented during construction and also uncontrollable factors (i.e., storms during construction). In order to mitigate the impact, a successful establishment of 2.16 to 5.27 acres of eelgrass would be required at a 1.2:1 mitigation ratio. The Corps' proposed mitigation area exceeds this amount:

Mitigation Sites	Acres	Timing
Unmodified Planting	2.84	Before Access Channel Work
Mooring Removals	0.20	Before Access Channel Work
Sediment BU Reuse	1.05	During Access Channel Work
Excavation Replanting	1.80	After Breakwater Work
Other APE Damage	<2.59	After Breakwater Work
Total Area	**5.89-8.48**	**Approx. 6-12 mo duration**

By spreading the restoration over time, implementing restoration in a variety of planting areas and using multiple methods, the Corps intends to control the risk of failure. Therefore, later phases can be used in an adaptive approach to execute restoration activities in a manner that builds on observed outcomes of early restoration efforts.

The Corps proposes to use four methodologies/types of planting areas in three phases of construction to address the potential loss of Pacific eelgrass (**Exhibit 3**).

- **Unmodified Planting Sites** – This includes two plots located adjacent to existing eelgrass beds and mostly towards the shallower margin of the present eelgrass. The elevation range of these sandy sediment locations is from approximately -7 to -14 feet MLLW and is bounded within that occupied by the existing eelgrass and centered on the bathymetric range exhibiting the highest frequency of eelgrass presently
- **Mooring Removal Replanting Sites** – Within the inner beach margins of the eelgrass beds there are a number of scars in the beds from single point moorings. Some mooring tackle remains on the bottom within some of these scars and will be removed. The Corps has confirmed with the Port San Luis Harbor District that the moorings are not part of the permitted moorings and are not those of the District. It is not believed there are any authorized private moorings in these areas.
- **Excavation Material Beneficial Reuse Eelgrass Mitigation Site** – The excavation material reuse site is an area identified along the deeper margin of the existing eelgrass bed where excavated sand from the construction access channel may be placed to raise the bay bottom upward to an elevation suitable to support eelgrass. The material to be excavated is sand supporting dense eelgrass beds. The material would be excavated and transported by scow to the deeper waters outside of existing eelgrass where it would be bottom dumped to raise the seafloor from a deeper margin at -22 feet MLLW up to a crest elevation of -12 feet MLLW, an elevation centered nearly precisely within the depth range presently occupied by Pacific eelgrass at Port San Luis. The fill is to be set back somewhat from the higher subtidal elevations occupied by eelgrass to avoid any direct impacts from placement and to accommodate any storm-driven migration of sand towards the existing beds in a manner that natural beds would not be threatened by sand overrun. The excavation and scow loading will be staged in such a manner that much of the eelgrass rhizome rich material will be placed in the upper sediment lifts of the site to facilitate mechanical excavating translocation of eelgrass.

- **Excavation Site Replanting –** The access channel for construction work is to be cut to a floor depth of -12 feet MLLW to accommodate equipment. As a result of the sloping bathymetry away from the breakwater, the channel would not end up being a trench, but rather a terrace daylighting into eelgrass along the northeastern margin of the cut. Controlling the depth of channel cut to -12 feet allows the channel to be planted with eelgrass after rock work is completed without further manipulating the channel depths by backfilling or deepening the channel to target eelgrass habitat suitability. The channel would be planted with bare root planting units after breakwater work is completed. For this last phase of planting, it will not be possible to use a salvage approach for donor material as would be the case for earlier planting. As a result, harvested eelgrass would be derived from donor beds outside of reference and restoration sites.
- **Other Area of Potential Impact (APE) Damage Replanting –** While not expected to be substantially impacted by the work, areas within the APE that are outside of the access channel excavation footprint may suffer some losses due to scour, shading, or cable drags. Areas supporting eelgrass that are damaged due to a transient impact are generally highly restorable by installation of planting units within the damaged areas. Often this takes the form of gap infilling around remaining eelgrass and thus it is necessary to define when gap infill will occur. Planting within the APE outside of the excavated site will occur when it is determined that the area has been damaged and eelgrass reduced from that occurring during the pre-construction surveys, when corrected for natural declines as determined using the natural reference sites. When an impact has been determined to have occurred, any gaps that have developed between the pre- and post-construction surveys that are greater than 1 meter across will be planted with bareroot planting units at 1 meter centers.

The Mitigation plan will take place in four stages:

1. **Prior to Access Channel Excavating:**
    - A pre-construction eelgrass survey will take place 60 days before construction and be reported to the commission and NMFS within 30 days of construction.
    - Salvage harvesting of eelgrass will be conducted at an unlimited harvest level from within the access channel excavating footprint.
    - Salvaged plant material will be used to plant two unmodified planting areas and six prior mooring scars that have remained unvegetated
    - The planting within these areas would be performed by preparation and planting of anchored bareroot planting units on 1-meter planting centers.
2. **Access Channel Excavating:**
    - The first construction action for breakwater repair is the excavation of the access channel.
    - Excavated sand will be placed into the reuse eelgrass mitigation site.
    - The excavation, hauling, and placement of material will be staged to favor viable rhizome-rich sediment being placed in the top layer of the fill.
3. **Overall Construction:**

- The minimization of avoidable secondary impacts to eelgrass is to be an important objective of the construction process. To achieve this, the following measures are required of the contractor:
  - Environmental training related to operations in and around the eelgrass habitat. This training is anticipated to be merged into the overall environmental training for the project.
  - Designated equipment staging and storage areas will be identified such that any equipment not being used in the construction access corridor will be required to be stored or staged outside of the beds in a storage area monumented by buoys.
  - Buoys are to be placed along the eelgrass margin near the sediment reuse site to aid in protection of eelgrass while scows are positioned for site construction.
  - Spudding, anchoring, or tugs used to position equipment will not be operated or placed on or over eelgrass habitat located outside of the designated APE.
  - The contractor shall be required to submit an anchoring and positioning plan demonstrating the maximum avoidance of eelgrass that can be achieved in a safe and cost effective manner to include consideration of equipment orientation to minimize anchor rode seafloor contact in eelgrass areas, use of cable floats as may be appropriate, or other means to avoid physical damage to eelgrass habitat. Should initial planned measures to protect eelgrass be determined to be ineffective, these will be adaptively revised as needed during construction.
  - To reduce the potential of shading losses of eelgrass, operations shall conducted in a manner that does not results in continuous daytime positioning of equipment over the same area of eelgrass for more than 14 consecutive days with an equivalent time period during which the equipment is not positioned over the eelgrass prior to returning to an area should additional work be required.
  - Tug boat propeller wash scour will be avoided by operational procedures and tug operators will be specifically instructed on the need to protect the eelgrass against damage by grounding of equipment or propeller wash.
  - Turbidity generation will be controlled throughout construction
- Construction biological monitoring with a pre-approved observer will be undertaken to ensure contractor compliance with environmental measures and to support completion of regulatory compliance obligations associated with the construction.

4. Post Construction:

- The effectiveness of construction period impact control will be evaluated by completion of pre- and post-construction eelgrass bed distribution and density surveys in accordance with the standards of the CEMP. The surveys will provide a determination of the final impact area and that which is required to be mitigated. While it is expected that this will reduce the mitigation need, it is not anticipated that it would alter the initial restoration effort scaling.

- Eelgrass is to be harvested from donor sites not including reference sites or transplant sites in order to support the replanting of the construction access channel.
- During the post-construction survey, prior eelgrass transplant sites that were planted prior to start of work (approximately 6 months prior) would be reviewed and any significant gaps in the transplant coverage would be identified. These areas, including gaps within the beneficial reuse site that were not colonized by eelgrass resprouting from the mechanical translocation, would be planted concurrently with the access channel.

The Corps has also identified a potential loss of .008 acres of Torrey's surfgrass. Surfgrass has not been historically restored on a project mitigation scale in coastal California, although small and short-term studies have been undertaken to translocate laboratory reared seedlings from a laboratory to field sites. Thus, mitigation measures for surfgrass are proposed to be through a pilot transplant of surfgrass on high density polyethylene grids that would be adhered with marine epoxy to breakwater rocks, which have shown success in short-term studies.

All mitigation actions for surfgrass and Pacific eelgrass will be monitored for 5 years after the completion of the breakwater repairs. Mitigation monitoring reports will be submitted annually to the Commission staff, NMFS and CDFW for review, and mitigation will be deemed successful if it has met the success criteria outlined in the CEMP. Criteria for determination of transplant success will be based upon a comparison of bed areal extent with reference sites (**Exhibit 3**), percent vegetated cover and density (turions per square meter) between the reference sites and the transplant sites. Specific performance metrics include the areal extent where eelgrass is present and where gaps in coverage are less than one meter between individual turion clusters. Density of turions (shoots) is identified as the number of turions per square meter, as measured from representative areas within the control or transplanted beds. Time-based success criteria are included as **Exhibit 4.** Areas that do not meet the success criteria may be revegetated and again monitored against the reference sites. Should replanting of the areas at the project site fail to meet the success criteria, reconstruction of portions of one or more transplant sites may be required to meet mitigation requirements.

Finally, to address the potential water quality-related impacts to eelgrass and essential fish habitat from construction activities, the Corps will incorporate the following items:

- A Water Quality Protection and Monitoring Plan will be implemented in accordance with the California Regional Water Quality Control Board requirements during the excavation of shoaled sediment.
- A spill prevention and response plan will also be developed and kept onsite with appropriate supplies.
- An Environmental Protection Plan will be developed and implemented prior to the commencement of any construction activities. The plan will identify biological resources within the project vicinity and outline avoidance and minimization measures and BMPs to be implemented throughout the project duration. The plan also identifies construction elements and recognizes spill sources at the site.

The plan outlines BMPs, response actions in the event of a spill or release, and notification and reporting procedures. The plan also outlines contractor management elements such as personnel responsibilities, project site security, site inspections, and training. A qualified monitor will be onsite as part of marine mammal mitigation measure.

- No petroleum products, chemicals, or other toxic or harmful materials will be allowed to enter surface waters.
- Equipment that enters surface waters will be maintained to prevent any visible sheen from petroleum products.
- No oil, fuels, or chemicals will be discharged to surface waters, or onto land where there is a potential for re-entry into surface waters to occur. Fuel hoses, oil drums, oil or fuel transfer valves, fittings, etc. will be checked regularly for leaks and will be maintained and stored properly to prevent spills.
- No cleaning solvents or chemicals used for tools or equipment cleaning will be discharged to ground or surface waters.

The water quality plans and monitoring results will be submitted to the Commission staff prior to finalization of the plans and when the results are available.

Marine Mammals

Breakwater repair activities will be limited to an area within 300 feet of the leeward side of the breakwater and the mitigation areas described in **Exhibit 1 and 3.** Although other mammals may be present on the ocean side of the breakwater or within the harbor itself, only three marine mammal species are likely to be present and have the greatest potential to be impacted by the proposed project: California Sea Lion (*Zalophus californianus*), Stellar Sea Lion (*Eumetopias jubatus*), and Harbor Seals (P*hoca vituline richardii*). These species are not federally listed.

The Corps conducted monthly marine mammal surveys in 2019 and observed mostly California sea lions (94% of the animals) and stellar sea lions (the remaining 6%) regularly hauled out on the breakwater. Note that due to the adverse wave and weather conditions, it is not possible for the Corps to complete repair work outside of the pupping season (May-August). However, no pups were observed nursing during the survey on the breakwater from May-August of the 2019 survey, suggesting that pups were born elsewhere and only use the breakwater after they are no longer nursing. The surveys estimated that the density of mammals that haul out on the breakwater were highest on the leeward side from June to November. Harbor Seals were not observed hauled out on the breakwater, but have been observed swimming in the vicinity of the breakwater, and hauled out nearby on Smith Island.

The Corps requested an Incidental Harassment, level B, Authorization for these three mammal species due to the possibility that they may be harassed due to the in-air noise levels associated with construction from the project.[1] Project-related construction

[1] Under the MMPA, level B harassment is defined as “Any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of

operations that have the potential to impact marine mammals are not anticipated to take place until late summer 2021 or later. Results of the IHA request with NMFS, including any additional mitigation measures will be reported to Commission staff and incorporated into the project.

Although not observed in the project area during surveys, Southern sea otters (*Enhydra lutris nereis*), a federally listed species, have the potential to occur due to presence of prey species such as crabs. One mile east of the project area within Port San Luis Bay, a raft(s) of Southern sea otters was consistently observed within the kelp beds during marine mammal surveys conducted by the Corps in 2018 and monthly throughout 2019. An on-site marine mammal monitor will implement a shutdown of work should any Southern sea otters be observed within an area that would pose risk to the animal (i.e., within 300 feet). Pursuant to Section 7 of the Endangered Species Act the Corps will initiate informal[2] consultation for the Southern sea otter with the US Fish and Wildlife, the agency responsible for managing Southern sea otters.

Additionally, the Corps will implement procedures such as soft starts, daily biological monitoring (including pre-and post- construction monitoring) by a qualified observer, training for construction crews, and reporting procedures to minimize impacts to marine mammals that may be in the project area. The full list of measures, for which NMFS oversees and maintains responsibility, is included as **Exhibit 5.** With these measures included, impacts to marine mammals will be minor and temporary

With the Corps' commitment to mitigate eelgrass impacts in accordance with the California Eelgrass Mitigation Policy, incorporation of water quality mitigation measures, and with the minimization of marine mammal impacts as discussed above, the Commission concludes the proposed project would be conducted in a manner that protects marine species and areas of special biological significance, and would minimize water quality impacts, and would, therefore, be consistent with the marine resources and water quality policies of the Coastal Act (Sections 30230, 30231, and 30232).

F. Public Access and Recreation

Section 30210 of the Coastal Act states:

> *In carrying out the requirements of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent*

behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering."

[2] Informal Consultation: Under Section 7, Federal agencies must consult with the U.S. Fish and Wildlife Service (Service) when any action the agency carries out, funds, or authorizes (such as through a permit) *may affect* a listed endangered or threatened species. Although Southern Sea otters may occur in the project area, their habitat is outside of the project area. Because of this, an informal consultation process is being initiated by the Corp.

> *with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30211 of the Coastal Act states:

> *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30220 of the Coastal Act states:

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

The proposed project and construction activities would affect only those water areas immediately adjacent to the breakwater. Public access to the structure itself is currently limited to the Corps, U.S. Coast Guard, and the Port San Luis Harbor District, and would remain so after repairs are completed. Construction-related parking would use existing spaces. Specifically, crew parking has been identified on Port San Luis Harbor District property, parking of construction crew vehicles and assembly of construction crew is authorized in the Port San Luis Harbor District's established paved parking lot. Ample parking would remain for public access of Avila Beach. No other access-related limitations would occur during or as a result of the proposed project. Upon completion of the proposed project, public access would return to pre-project conditions.

The Corps proposes to minimize navigational impacts during construction by issuing a notice to mariners and properly marking the construction area so that public would safely avoid the waters in the immediate breakwater project area. Port San Luis Harbor is a popular-use recreational and small commercial harbor with important uses that include boating, fishing, and beach activities in Port San Luis and on Avila Beach. Typical recreation includes beach activities, boating and water sports, golf, kayaking, sport fishing, pier fishing, and surfing. The area adjacent to the breakwater is not heavily used for recreational activities. Therefore, construction activities would not likely affect recreational boating near the breakwater or affect access to the Harbor. Since the repairs would occur in the original breakwater design footprints of the breakwater, no new impacts to recreational surfing would occur. The proposed repairs would improve navigational safety and enhance overall recreational values. Upon project completion, recreation would return to pre-project conditions.

For these reasons, public access to and recreational activities in Port San Luis Harbor will not be adversely affected by the proposed breakwater repair. As such, the Commission finds that the project-related impacts to public access and recreation will be temporary and less than significant and the proposed activities are consistent with the public access and recreation policies of the Coastal Act (Sections 30210, 30211, and 30220).

G. CULTURAL RESOURCES

Section 30244 of the Coastal Act states:

> *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

Cultural resources are places or objects that possess cultural, archaeological, or paleontological significance and include sites, structures, or objects significantly associated with, or representative of, earlier people, cultures, and human activities. Project-related activities have the potential to disturb or damage Native American resources of potential cultural resources value. Some of the original breakwater stone was quarried from Morro Rock, considered sacred to members of the Chumash Tribes. Through consultation with the Tribe, the Corps has agreed to treat all existing stone in a respectful manner that minimizes breakage, and all stone material, both broken and whole, shall be retained on or adjacent to the breakwater.

The Port San Luis Breakwater was evaluated as part of the National Historic Preservation Act Section 106 process for the proposed project. The Corps has determined the breakwater is ineligible for listing in the National Register of Historic Places (NRHP), and the California State Historic Preservation Officer (SHPO) concurred with that determination in a letter dated February 20, 2018. Additionally, the Corps has consulted with SHPO and tribal entities on the excavation/placement of excavated sediment and replanting of salvaged eelgrass in mitigation sites.

The Commission staff reached out to known interested Tribal representatives, who have not provided any further comments as of the date of this report. Any further Tribal comments will be included in an addendum.

In conclusion, the Commission agrees with the Corps that the proposed project is unlikely to adversely affect archaeological and cultural resources and finds the project consistent with the cultural resource policy of the Coastal Act (Section 30244).

SUBSTANTIVE FILE DOCUMENTS

U.S. Army Corps of Engineers, Los Angeles District. Consistency Determination, Operations and Maintenace, Port San Luis Breakwater Repair Project. San Luis Obispo County, California. February 2021.

Eelgrass Mitigation and Monitoring Plan in Support of the Port San Luis Breakwater Repairs. Port San Luis, San Luis Obispo County, California. Prepared by Merkel and Associates. March 2021

California Eelgrass Mitigation Policy and Implementing Guidelines. NOAA Fisheries, West Coast Region. October 2014.

Incidental Harassment Authorization Application for Operations and Maintenance (O&M), Port San Luis Harbor Breakwater Repairs. San Luis Obispo County, California. February 2021.