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| Staff: | Brian O'Neill - SC |
| Staff Report: | 1/18/2019 |
| Hearing Date: | 2/6/2019 |

# STAFF REPORT: CDP HEARING

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| **Application Number:** | 3-16-0325 |
| **Applicant:** | Moss Landing Harbor District |
| **Project Location:** | Moss Landing Harbor, Moss Landing, Monterey County. |
| **Project Description:** | Dredge up to 550,000 cubic yards over the next ten years to restore navigable depths in berths and channels in Moss Landing Harbor. Uncontaminated dredged materials to be disposed of at two designated offshore unconfined aquatic discharge sites in the Monterey Bay and/or at three beach replenishment sites located north and south of the harbor entrance. |
| **Staff Recommendation:** | Approval with Conditions. |

## SUMMARY OF STAFF RECOMMENDATION

The Moss Landing Harbor District (MLHD) has requested approval of a ten-year coastal development permit (CDP) to dredge and dispose of sediments to restore navigable depths in berths in the Moss Landing Harbor. Moss Landing Harbor is one of only six harbors located along the Central Coast area, and is the largest fishing port between San Francisco and Los Angeles. The Harbor is highly valued for the commercial fishing, recreational boating, and educational opportunities this location provides. The Harbor receives a majority of its sediment deposits from upland areas of the Salinas Valley and Elkhorn Slough watersheds. Dredging is therefore required to maintain depths necessary for navigation, and has been ongoing in some form since the harbor was created in 1947. MLHD is now seeking approval for a ten-year

dredging program for the berthing areas of the southern harbor and northern harbor, as well as the north harbor channel.

The Commission postponed taking an action on this CDP at its December 12, 2018 hearing due to questions raised by the Monterey Chapter of the Surfrider Foundation concerning the adequacy and timing of the proposed sediment testing program, as well as potential impacts to surf breaks from beach replenishment. Staff has researched these issues further and concluded that testing dredge material for contaminants immediately prior to or concurrently during dredging episodes is infeasible because federally-mandated sediment testing procedures require a minimum of 90-180 days to complete. Additionally, because the potential contaminants that might be found in harbor sediments would be due to the historical use of agricultural pesticides that have been banned from use for decades, the risk of new contaminants entering the harbor during a 180-day timeframe is considered extremely low. Thus, a proposed condition requiring sediment testing a maximum of 180 days prior to dredging (and closer to dredging if possible) is appropriate and adequate to protect public health and water quality and is consistent with testing protocol timelines for dredging projects statewide. With respect to potential surf impacts, staff continues to believe that the relatively small amount of potential sandy material that would be placed above the mean high tide line within the dynamic beach environment at Moss Landing would not significantly impact the surf break at this location.

This permit would authorize dredging and disposal of up to 550,000 cubic yards of material over the ten-year life of the permit, with no more than 80,000 cubic yards in any given year. Disposal of fine-grained (i.e., not sandy, less than or equal to 80% sand)) material would occur at one or both of two federally-designated dredge discharge sites located approximately 1,100 feet and 1.3 miles offshore, respectively (and known as SF-12 and SF-14). From prior testing of the to-be dredged materials, the District estimates that the vast majority of the materials (nearly 90% or up to about 500,000 cubic yards) would be *fine-grained and non-sandy*, and thus disposed of offshore at SF-12 or SF-14. The smaller quantity of remaining *sandy* materials (estimated at up to about 58,000 cubic yards total) that are suitable for beach replenishment would be placed at one or more of the three identified beach replenishment sites located directly adjacent to the harbor. In all cases, sandy and non-sandy, this approval would require *all* materials proposed for dredging to be tested according to the requirements of the U.S. Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (ACOE) and the Central Coast Regional Water Quality Control Board (RWQCB), and analyzed to ensure the material is safe and suitable for aquatic disposal and/or beach replenishment. Dredging within areas that are found to contain materials that are *not* suitable for aquatic disposal and/or beach replenishment would be prohibited until a plan for safely dredging and disposing of such materials is identified, with disposal required to be at an appropriate inland disposal facility outside of the coastal zone. In other words, only sediments that test ‘clean’ would be allowed at SF-12 or SF-14 (if non-sandy materials) or on the beach (if sandy materials).

The Coastal Act allows for the dredging of harbor waters in order to maintain depths necessary for navigation where there is no feasible less environmentally damaging alternative and where feasible mitigation measures have been provided to minimize adverse environmental effects. Due to the significant sediment that is deposited within the harbor from upland watersheds, MLHD has found no other feasible options for maintaining the present uses within the Harbor without

requiring dredging. However, a variety of conditions have been identified to ensure that the environmental impacts of dredging are less than significant. The conditions of approval require the submission of a dredging operations plan prior to each dredging episode that includes prohibitions of dredging outside of the proposed areas, requires pre-dredging biological surveys and biological monitors, provides buffers to avoid impacts to sensitive species, and protects public access. Moreover, the proposed dredging activities will support coastal-dependent boating uses and will return dredge material back into the littoral system or to be used for beach replenishment, which are high-priority outcomes under the Coastal Act. The conditions further require MLHD to submit verification of all necessary approvals from other regulatory agencies including ACOE, EPA, RWQCB, and the Monterey Bay National Marine Sanctuary.

Therefore, as conditioned, the project is consistent with the Coastal Act, and staff recommends **approval** of the CDP. The motion is found on page 4 below.

# TABLE OF CONTENTS

# I. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, **approve** a CDP for the proposed development. To implement this recommendation, staff recommends a **YES** vote on the following motion. Passage of this motion will result in approval of the CDP as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

***Motion:*** *I move that the Commission* ***approve*** *Coastal Development Permit Number 3-16-0325 pursuant to the staff recommendation, and I recommend a* ***yes*** *vote.*

***Resolution to Approve CDP:*** *The Commission hereby approves Coastal Development Permit Number 3-16-0325 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.*

# II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

## III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Approved Project Parameters.** This CDP shall be valid for ten years (i.e., from February 6, 2019 through February 6, 2029). Dredging and disposal events shall only be allowed to occur during daylight hours (i.e., from one-hour before sunrise to one-hour after sunset), between October 1 and March 31 inclusive, and on weekdays other than State holidays. Dredging shall not exceed 550,000 cubic yards of materials over the life of the CDP, with no more than 80,000 cubic yards of dredging allowed in any one dredging season (i.e., October 1 to March 31).

   Sandy (i.e., greater than 80% sand) and clean (i.e., meeting U.S. Environmental Protection Agency (EPA), Army Corps of Engineers (ACOE), and Regional Water Quality Control Board (RWQCB) Clean Water Act, Porter-Cologne Water Quality Control Act, and Marine Protection, Research and Sanctuaries Act standards for dredging, ocean disposal and/or beach replenishment; see also **Special Condition 2**) material suitable for beach replenishment shall be placed at one or more of the three identified beach replenishment sites (see **Exhibit 3,** and see also **Special Condition 3(b)**). All other clean dredge materials shall be deposited at one or both the two offshore disposal locations identified by the Harbor District (SF-12 and/or SF-14; see **Exhibit 3**) and/or may be properly disposed of at an inland (out of the coastal zone) location (see also **Special Condition 3(c)**). Materials that are not deemed clean shall be disposed of at an inland (out of the coastal zone) location (see also **Special Condition 3(d)**).

   Unless the Executive Director determines an amendment is legally required, minor adjustments to the above parameters may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.

2. **Pre-Dredge Sampling and Analysis Plan**. PRIOR TO THE COMMENCEMENT OF ANY DREDGING EPISODE AND PRIOR TO SEDIMENT SAMPLING ASSOCIATED WITH SAME, the Permittee shall submit to the Executive Director for review and approval two copies of a Sediment Sampling and Analysis Plan. Such Plan shall clearly describe and delineate sediment sampling locations and all applicable sediment testing protocols, which shall be consistent with all current sediment sampling, analysis, and testing requirements of the EPA, ACOE, and RWQCB for health and safety for both dredging and disposal under the Clean Water Act, Porter-Cologne Water Quality Control Act, and Marine Protection, Research and Sanctuaries Act. The Plan shall ensure that representative sample locations applicable to authorized dredging areas and the area to be dredged are sampled and tested as near to the day of commencement of any dredging and associated disposal event (whether it be disposal onshore, offshore, and/or inland disposal) as possible, consistent with controlling legal requirements, and at least within 180 days of the day of commencement. All requirements above and all requirements of any approved Sediment Sampling and Analysis Plan shall be enforceable components of this CDP. The Permittee shall undertake development in accordance with this condition and the approved Sediment Sampling and Analysis Plan.

**3. Dredge Operations Plan**. PRIOR TO THE COMMENCEMENT OF ANY DREDGING EPISODE, the Permittee shall submit to the Executive Director for review and approval two copies of a detailed Dredge Operations Plan (DOP) that clearly identifies all dredge operations (including, at a minimum, identification of areas to be dredged, dredging depths, over-dredge depths, quantity of materials to be dredged, specific location of dredge spoils disposal, all timing (including dredge start and stop days, hours of operation, etc.), all pipeline locations, all measures to be taken to define and delineate dredge activity areas, equipment to be used, etc.). Dredging operations shall not occur outside of the identified and approved dredge and disposal locations as shown in **Exhibit 2**. Each DOP shall be submitted with evidence of EPA, ACOE, and RWQCB approval. All such DOPs shall, at a minimum, incorporate the following provisions:

**(a) Biological Monitoring**. Prior to the commencement of dredging activities each work day and continuing during all dredging activities, a qualified biological monitor shall be present to inspect the work area for southern sea otters and/or marine mammal pupping areas. The biological monitor shall prohibit the start of work and/or stop work already commenced if sea otters or marine mammal pupping areas occur within 50 meters of the dredging operations until the animals leave the area of their own accord. Prior to proceeding with dredging operations, all areas that must be avoided (i.e., areas within 50 meters of southern sea otters or marine mammal pupping areas, or areas with sediment that does not meet dredge disposal standards (see **Special Condition 3(d)**), shall be clearly demarcated with floatable buoys, or other devices that are clearly visible on surface waters but that do not adversely impact sea otters or marine mammal pupping areas, so as to allow dredge equipment operators to easily identify dredge prohibition areas.

**(b) "Clean" Sandy Sediment Material Dredging and Disposal – Beach Nourishment.** If any sediment testing results, as required by **Special Condition 2** above, meet EPA, ACOES, and RWQCB Clean Water Act, Porter-Cologne Water Quality Control Act, and Marine Protection, Research and Sanctuaries Act dredge and disposal standards and consist of sandy sediment that meets standards for beneficial reuse (i.e., greater than 80% sand), then such sandy sediment materials shall be disposed of at one or more of the three beach replenishment sites (see **Exhibit 3**). The Permittee shall submit a beach replenishment plan to the Executive Director for review and approval prior to any such disposal. At a minimum, the beach replenishment plan shall include the following:

1. **Sand Placement Parameters.** The plan shall describe the volume of sandy material, its origin within the harbor, and its general properties (grain size and toxicity test results); the beach locations where the material will be placed, including the expected footprint of its placement (i.e., depth and extent); methods for material delivery and distribution; and a timeline for all associated beach replenishment activities. The plan shall clearly demonstrate that all beach replenishment activities shall: avoid sediment compaction; time operations to minimize biotic impacts; include interspersion of replenished beach sections with unaffected areas; and create beach profiles that match original beach conditions as closely as possible. All such materials shall be placed as high on the sandy beach as possible.

2. **Snowy Plover Protections.** Beach replenishment activities shall not take place during plover nesting season (i.e., March 1 through September 30 inclusive). Outside of nesting season, pre-construction surveys for wintering plovers by a qualified biological monitor are required prior to any beach replenishment activities. If wintering plovers are identified in such surveys, replenishment activities shall be delayed and/or relocated as needed to avoid impacts to such wintering plovers, and shall require consultation with the U.S. Fish and Wildlife Service (USFWS) and the Executive Director to determine whether the work can continue without adverse impacts to plovers. Following completion of the consultation and upon subsequent approval from the Executive Director, beach replenishment activities may resume.

3. **Monterey Spineflower Protections.** Pre-construction surveys for Monterey spineflower by a qualified biological monitor are required prior to any beach replenishment activities. Existing records of the species shall be combined with any new observations to delineate the maximum convex polygon of occurrence and to estimate the seed bank to be avoided, and a buffer of 100 feet shall be applied except where reaching beyond the dune strand and into the vegetated dunes.

4. **Tidewater Goby Protections.** A qualified biological monitor must be present during dredging activities to monitor for the presence of gobies. Any live gobies found must be captured and relocated to suitable upstream habitat outside of the dredging area. The Permittee shall also coordinate with ACOE, USFWS, and Dynegy Moss Landing LLC to survey upstream tidewater goby populations consistent with USFWS's "Biological Opinion for Moss Landing Harbor District Maintenance Dredging Project" (see **Exhibit 5**). The Permittee shall submit to the Executive Director for review and approval the results of the surveys or annual progress reports as part of each dredge season's report (see below). Depending on the results of the surveys and in coordination with USFWS, the Executive Director may require additional surveys, habitat restoration, and/or (re)introduction of tidewater gobies into suitable but unoccupied habitat, for which the Executive Director may determine a CDP amendment or a new CDP is required.

5. **Dune Habitat Protections.** Beach replenishment activities shall be limited to areas of sandy beach and shall be prohibited in all vegetated dune areas. Prior to replenishment activities, a qualified biological monitor shall install temporary exclusionary fencing to clearly demarcate all such dune areas.

6. **Public Access Protections.** Beach replenishment activities shall be conducted in such a manner to avoid, to the greatest extent possible, interference with public recreational access, and all measures to be implemented to avoid public recreational access shall be identified. Such measures may include, but are not limited to, uncoupling segments to allow unimpaired pedestrian movement, small-scale sand ramps over pipelines, avoiding times of peak beach use, etc.. Any beach areas and all beach access points impacted by beach replenishment activities shall be restored to their pre-replenishment condition or better within three days of completion of beach replenishment activities.

7. **Property Owner Authorization.** The Permittee shall submit written evidence from the Monterey Bay Aquarium Research Institute (MBARI) and/or California State Parks (as applicable) that beach replenishment activities are authorized on MBARI and/or State Parks' property.

**(c) "Clean" Fine-Grained (Non-Sandy) Material Dredging and Disposal – Offshore.** If any sediment testing results, as required by **Special Condition 2** above, meet EPA, ACOES, and RWQCB Clean Water Act, Porter-Cologne Water Quality Control Act, and Marine Protection, Research and Sanctuaries Act dredge and disposal standards and consist of fine-grained sediment that does not meet standards for beneficial reuse (i.e., less than or equal to 80% sand), then such fine-grained sediment materials shall be disposed of at one or both of the two designated offshore unconfined disposal sites (SF-12 or SF-14; see **Exhibit 3**), and/or may be properly disposed of at an inland (out of the coastal zone) location.

**(d) "Not Clean" Material Dredging and Disposal -- Inland.** If any sediment testing results, as required by **Special Condition 2** above, indicate that the materials do not meet EPA, ACOES, and RWQCB Clean Water Act, Porter-Cologne Water Quality Control Act, and Marine Protection, Research and Sanctuaries Act dredge and disposal standards, then such materials shall not be dredged until a unsuitable material dredge and disposal plan is submitted to the Executive Director for review and approval. Such plan shall identify all precautions required for public health and safety to address disposal of such materials, and shall identify an inland location outside of the coastal zone (i.e., landfill or equivalent) for disposal. If such materials must be temporarily stockpiled for dewatering prior to disposal at an identified inland location, stockpiling shall not take place on any beach or vegetated area, materials shall be stored beyond the reach of tidal waters, and the materials shall be stored in a way that minimizes impacts to public access and recreation areas. Any runoff and/or ocean water from any such stockpile shall be contained, filtered, and treated prior to discharge, where discharge shall only be allowed if it meets RWQCB standards for point source discharge. Erosion and sediment controls (e.g., tarps, fiber rolls, sediment basins, etc.) shall be installed to contain runoff, ocean waters, and/or sediments at the stockpile site and to prevent runoff from entering beach or vegetated areas or state waters.

**(e) Equipment Parameters.** All dredging equipment (e.g., the dredge itself and associated pipelines, pumps, etc.) shall be maintained and inspected by the Permittee on a regular basis to ensure proper operation and to eliminate any potential for spills. The dredging equipment shall be stored and use in a manner that limits waterway and/or beach access conflicts.

**(f) Reporting.** Monitoring reports covering each dredge season, identifying all dredge and disposal activities (including in terms of ultimate dredge and disposal amounts), and including evaluation of compliance with all aspects of the approved DOP for that season and the terms and conditions of this CDP, shall be submitted to the Executive Director for review and approval by June 1st of each year.

All requirements above and all requirements of any approved Dredge Operations Plan shall be enforceable components of this CDP. The Permittee shall undertake development in accordance with this condition and the approved Dredge Operations Plans.

4. **Other Agency Approvals.** PRIOR TO THE COMMENCEMENT OF ANY DREDGING EPISODE, the Permittee shall submit to the Executive Director for review a copy of a valid permit, letter of permission, or other such authorization, or evidence that no authorization is necessary for the project authorized by this CDP from the following agencies: EPA, ACOE, RWQCB, and the Monterey Bay National Marine Sanctuary.

5. **Assumption of Risk, Waiver of Liability, and Indemnity.** By acceptance of this CDP, the Permittee acknowledges and agrees, on behalf of itself and all successors and assigns: (a) that the project area is subject to extreme coastal hazards, including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, tidal scour, storms, tsunami, coastal flooding, landslide, earth movement, and the interaction of all of these, many of which will worsen with future sea level rise; (b) to assume the risks to the Permittee and the properties that are the subject of this CDP of injury and damage from such hazards in connection with this permitted development; (c) to unconditionally waive any claim of damage or liability against the Coastal Commission, its officers, employees, agents, successors and assigns for injury or damage from such hazards; (d) to indemnify and hold harmless the Commission, its officers, employees, agents, successors and assigns with respect to the Commission's approval of the CDP against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards; and (e) that any adverse effects to property caused by the permitted project shall be fully the responsibility of the Permittee.

6. **Liability for Costs and Attorneys' Fees.** The Permittee shall reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys' fees (including but not limited to such costs/fees that are: (1) charged by the Office of the Attorney General; and/or (2) required by a court) that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this Coastal Development Permit. The Permittee shall reimburse the Coastal Commission within 60 days of being informed by the Executive Director of the amount of such costs/fees. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission, its officers, employees, agents, successors and/or assigns.

# IV. FINDINGS AND DECLARATIONS

## A. PROJECT LOCATION, BACKGROUND, AND DESCRIPTION

### Project Location

Moss Landing is a coastal community located within unincorporated northern Monterey County and situated near the middle of Monterey Bay between two river systems: the Pajaro River (approximately 1.5 miles to the north) and the Salinas River (approximately 4 miles to the south). Moss Landing Harbor lies just west of Highway 1 between the mouth of Elkhorn Slough and the Monterey Bay. Lands to the west of the Harbor are made up of sand flats and sand dunes that are perched atop the sand spits of the Old Salinas River. See **Exhibit 1** for project location maps.

Moss Landing Harbor was created in 1947 when the U.S. Army Corps of Engineers (ACOE) first dredged the mouth of Elkhorn Slough near the northern extent of the Old Salinas River mouth. The harbor occupies a portion of the Old Salinas River channel that parallels the coast and is separated from the ocean by sand spits and dunes. Permanent jetties placed along the north and south sides of the harbor's entrance provide year-round access to the Pacific Ocean. Tide gates along the north and south ends of the harbor allow for muted tidal activity within Bennett Slough to the north, as well as in the Moro Cojo Slough and the Old Salinas River channel to the south. The 4,000-acre Elkhorn Slough watershed lies east of Highway One and is hydrologically linked with the harbor, through which daily tides flow.

As a result of its proximity to both deep-water marine environments immediately offshore and estuarine environments and tidal sloughs inland, the harbor is highly valued for the commercial fishing, recreational boating, and educational opportunities this location provides. Moss Landing Harbor is one of only six harbors located along the Central Coast area, and is the largest fishing port between San Francisco and Los Angeles.

The harbor entrance divides the Moss Landing Harbor into two parts, referred to as the North Harbor and the South Harbor. The North Harbor is home to approximately 155 recreational motor and sail boats, the Elkhorn Yacht Club, and a commercial kayaking center. The South Harbor is home to approximately 455 commercial and recreational boats, including most of the commercial fishing and oceanographic research vessels. The area has also become a day-trip destination for small boating enthusiasts and kayakers, with put-ins both in Moss Landing Harbor and Elkhorn Slough.

Because of its location at the bottom of two major watersheds, Moss Landing Harbor is a depositional sink for fine-grained sediments, especially following major storms that carry large volumes of sediment from the Salinas Valley watershed. Similarly, fine-grained sediments eroded from the Elkhorn Slough watershed ultimately end up in the harbor. Sand-sized material transported by longshore currents also gets trapped in the entrance channel, forming shoals, and onshore winds transport beach and dune sands into the North Harbor, forming sand bars that extend east into the North Harbor navigation channel. Excessive sediment deposition in the harbor can impede navigation in berthing areas, navigation channels, turning basins, and boat

ramp areas, which in turn restricts movement of commercial fishing, recreational, and marine research vessels and the activities they support.

**Project Background**

*Past Dredging*

The ACOE and the Moss Landing Harbor District (MLHD) have conducted maintenance dredging of Moss Landing Harbor since 1947, when the harbor was first constructed. The ACOE, in accordance with its mandate for maintaining navigable harbors and inland waterways, has authority over the Federal Channel between the entrance jetties, which provides access to the main more inland harbor areas. MLHD is responsible for dredging all berthing areas within the harbor and the North Harbor Channel. MLHD can also seek authorization to dredge within the Federal Channel on an as-needed basis (to dredge areas left un-dredged or deferred by the ACOE), which would require the MLDH to obtain separate ACOE and CDP approval.

MLHD has historically dealt with shoaling[1] through both maintenance dredging programs and emergency dredging events. Past dredging activities authorized by the Commission include CDP 3-96-020 (dredging and disposal of 31,000 cubic yards (cy) of material from the South Harbor channel and dock areas); emergency CDP (ECDP) 3-98-032-G (emergency dredging and disposal of approximately 22,000 cy of material from South Harbor locations); CDP 3-99-011 (dredging and disposal of up to 30,000 cy of material from in front of the Dynegy Moss Landing LLC Power Plant intakes); and CDP 3-01-049 (annual dredging of up to 100,000 cy of material throughout the entire harbor for a period of five years).

As with other dredging locations statewide, all dredged sediments are evaluated by an interagency group (including Commission staff) and must meet all U.S. Environmental Protection Agency (EPA), ACOE, and Regional Water Quality Control Board (RWQCB) Clean Water Act, Porter-Cologne Water Quality Control Act, and Marine Protection, Research and Sanctuaries Act standards for ocean disposal and/or beach replenishment. The interagency group considers chemical and biological testing results, as well as physical grain size analyses, in relation to these rigorous federal and state standards. As a result, *only* sediments that are determined to be "clean" (consistent with federal and state requirements) and that consist of more than 80% sand are allowed to be placed on a beach. This is not an atypical standard and in fact is the protocol that has been applied by the Commission and its dredge-related agency partners for decades in California. Materials that are "not clean" are directed to inland locations (e.g., landfills), and materials that are "clean" but not predominantly sand (i.e., that are less or equal to 80% sand), are typically directed to offshore disposal sites and/or inland locations.

At Moss Landing Harbor, dredge materials deemed safe and clean and suitable for aquatic disposal have been disposed of at either of two EPA-designated discharge sites, known as SF-12 and SF-14, located approximately 1,100 feet and 1.3 miles offshore, respectively (see **Exhibit 3**), and dredge materials deemed clean and suitable for beach replenishment have been deposited at any one of three beach replenishment sites located on sandy beaches directly adjacent to the harbor (again, see **Exhibit 3**). Most clean dredge materials removed from within the berthing areas has consisted of finer-grain sediment (i.e., less than or equal to 80% sand) that has been

[1] Shoaling occurs when the bottom of the harbor's channels and/or berthing areas become shallow due to the deposition of sediment, which creates a hazard to navigation.

disposed of offshore at SF-12 through an existing permanent transport pipe. Clean coarse sand (i.e., greater than 80% sand) dredged from within the Federal Channel has generally been disposed of at any one of three beach replenishment sites located directly adjacent to the channel.

In the 1990s, some dredge materials were found to be unsuitable for disposal due to contamination from DDT and other heavy metals. The North Harbor Interim Re-handling Site was used for processing unsuitable dredge material (under CDP 3-99-011). However, this site has been closed and restored as required by Monterey County and no alternate upland re-handling and disposal facility has yet been identified or approved for contaminated dredge materials. DDT concentrations have continued to decline over the past 25 years and no contaminated materials were found in sediment samples taken prior to dredging episodes conducted between 2002 and 2007 under CDP 3-01-049.

*Biological Opinion*

In 2016, MLHD applied to the ACOE for dredging permits (under Clean Water Act Section 404 and Rivers and Harbors Act Section 10). Based upon potential impacts of dredging to species that are federally protected under the Endangered Species Act (ESA), the ACOE requested a consultation with the U.S. Fish and Wildlife Service (USFWS) to seek its biological opinion on whether the proposed dredging project would adversely affect any species listed under the ESA or any designated critical habitat for listed species. Specifically, the ACOE requested USFWS's opinion with regard to project impacts on southern sea otters, western snowy plovers, Monterey spineflower, tidewater goby, and associated critical habitat. On October 5, 2018, USFWS finalized their biological opinion with regard to these species (see **Exhibit 5**).

In the biological opinion, USFWS determined that the project would not adversely affect southern sea otters, western snowy plovers, Monterey spineflower, or associated critical habitat as long as certain protective measures are implemented. These measures, explained in more detail below, included a 50-meter setback from otters, avoidance of snowy plover nesting season and wintering snowy plover individuals, and avoidance of all spineflower dune habitat areas, all of which have been incorporated into the proposed project. USFWS determined that the project may have an adverse effect on tidewater goby and recommended several mitigation measures to minimize potential impacts. These mitigation measures include the use biological monitors to capture and relocate any goby individuals, and implementation of an upstream tidewater goby habitat study.

**Project Description**

The harbor has recently experienced shoaling and sand accumulation, resulting in reduced water depths and unsafe navigational conditions (see **Exhibit 4** for depth survey results). To maintain safe conditions, MLHD proposes to maintain depths of 12 to 14 feet below mean lower low water (MLLW) in the South Harbor docks and channel; 10 feet below MLLW in the North Harbor docks and channel; and 22 feet below MLLW at the power plant intake area. Dredging outside of the proposed dredge areas, including within the federal channel, would require separate CDP approval.

MLHD estimates that a maximum of approximately 80,000 cubic yards of material may need to be removed in any given year to maintain the proposed harbor depths, although the maximum amount would likely not be reached every year. MLHD estimates that approximately 550,000

cubic yards would be removed over the life of the ten-year permit. From prior testing of to be dredged materials, the District estimates that the vast majority of the materials (nearly 90% or up to about 500,000 cubic yards) would be fine-grained and non-sandy, and thus disposed of offshore at SF-12 or SF-14. The smaller quantity of remaining sandy materials (estimated at up to about 58,000 cubic yards total) that are suitable for beneficial reuse would be placed at one or more of three identified beach replenishment sites located directly adjacent to the harbor. In all cases, sandy and non-sandy, all materials proposed for dredging would be tested and analyzed according to the EPA, ACOE, and RWQCB standards described above to ensure the material is suitable for aquatic disposal and/or beneficial reuse. Dredging within areas that are found to contain materials that are *not* suitable for aquatic disposal or beneficial reuse would be disposed of at an upland disposal facility. In other words, only sediments that test 'clean' would be deposited at SF-12 or SF-14 (if non-sandy materials) or on the beach (if sandy materials).

MLHD therefore proposes to: (1) seasonally dredge a maximum of 80,000 cy of sediment between October 1st and March 31st from within the Moss Landing Harbor; and (2) annually deposit a maximum of up to 80,000 cubic yards of suitable dredge material at one or both of two designated unconfined aquatic discharge sites in the Monterey Bay (most likely through their existing permanent transport pipe to SF-12) or at one or more of the three beach replenishment sites above the mean high tide line adjacent to the harbor (see **Exhibit 2** for a map of the proposed dredging areas and **Exhibit 3** for a map of the proposed disposal and beach replenishment sites). MLHD will utilize a hydraulic cutter dredge that will be inserted into the sandy substrate before activation to limit impacts to aquatic organisms and reduce turbidity.

## B. STANDARD OF REVIEW

The dredging area is located within State tidelands and thus is located within the Commission's retained CDP jurisdiction. The standard of review for development within the Commission's retained jurisdiction is the Coastal Act.

## C. LAND USE PRIORITIES

### Applicable Policies

Moss Landing Harbor accommodates a number of coastal-related and coastal-dependent activities including commercial fishing and recreational boating. The proposed project includes maintenance dredging to remove accumulated sediment from the boat berthing areas and navigational channels. Coastal-dependent and coastal-related developments are among the highest priority Coastal Act uses.

The Coastal Act defines coastal-dependent and coastal-related as follows:

> ***Section 30101:*** *"Coastal-dependent development or use" means any development or use which requires a site on, or adjacent to, the sea to be able to function at all.*
>
> ***Section 30101.3:*** *"Coastal-related development" means any use that is dependent on a coastal-dependent development or use.*

Coastal Act Section 30001.5 states, in relevant part:

> ***Section 30001.5:*** *The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:*
>
> *(a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources….*
>
> *(c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.*
>
> *(d) Assure priority for coastal-dependent and coastal-related development over other development on the coast…*

Coastal Act Sections 30234 and 30234.5 also provide specific protections for boating harbors and commercial fishing, including:

> ***Section 30234:*** *Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.*
>
> ***Section 30234.5:*** *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

**Consistency Analysis**

Moss Landing Harbor is one of only six harbors located along the Central Coast, and is the primary commercial fishing port in the Monterey Bay area. Moss Landing Harbor is used by commercial fishing, and recreational boaters, and is also home to the largest number of research vessels berthed within the Central Coast area, supporting the Monterey Bay Aquarium Research Institute (MBARI), the California State University Moss Landing Marine Laboratories, and the Elkhorn Slough National Estuarine Research Reserve.

Section 30001.5 of the Coastal Act prioritizes coastal-dependent development, which includes boating facilities and harbors, over other development along the coast. Section 30234 of the Coastal Act provides that facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Section 30234.5 states that the economic, commercial, and recreational importance of fishing activities shall be recognized and protected. Commercial and recreational boating and fishing are coastal-dependent priority uses that cannot function without sufficient harbor depths. Hence, the maintenance of adequate berthing and navigational depths in the harbor is essential, and must be considered a high priority under the Coastal Act. The California Fish and Game Commission has recently explicitly asked the Commission to support California's coastal fishing communities through projects like this when they are being considered by the Commission, stating (see **Exhibit 6**):

> *It is critical to uphold the protections offered coastal fishing communities by both the California Coastal Act and the Coastal Commission's policies. Prioritizing fishing communities when making management decisions on coastal development will help to ensure California maritime heritage is sustained in the long term [and the California Fish and Game Commission] urges the Coastal Commission to support California's coastal fishing communities by taking their infrastructure and economic needs into consideration when approving coastal development projects.*

As indicated, Moss Landing Harbor is one of only six harbors located along the Central Coast area, and is the largest fishing port between San Francisco and Los Angeles. Although it also provide significant research and recreational support, it is a critical port for the Central Coast fishing fleet, and navigable waterways are critical to meeting their needs. The proposed dredging and discharge activities not only support coastal-dependent uses but are integral to such uses and therefore have a priority under the Coastal Act. Accordingly, the Commission finds that the proposed development is a high-priority coastal-dependent use that is consistent with the land use priorities of Coastal Act Sections 30001.5, 30234, and 30234.5.

## D. MARINE AND BIOLOGICAL RESOURCES

**Consistency Analysis**

*Appropriateness of Dredging*

Coastal Act Section 30233(a) allows for the dredging of harbor waters in order to maintain depths necessary for navigation where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. Stating in applicable part:

> ***Section 30233(a):*** *The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: … (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps …*

Proposed dredging areas in the harbor include areas where maintenance dredging has commonly occurred over time. Sediment deposition in and around navigational channels and berthing areas can affect the ability to maneuver safely in and out of these areas. Continued sediment deposition can be anticipated due the geographic location of the harbor, its function as a 'sink' of sorts for sediment that drains from the watershed, and the erosive nature of much of the sediment in the watershed. Even with a comprehensive management plan in place to minimize erosion in the watershed, continued dredging would be required and no feasible alternatives to the proposed dredging have been identified which would ensure the safe functionality of the navigational channels and berthing areas. The proposed project represents a comprehensive program of operations and maintenance activities designed to maintain and improve navigation channels and berthing areas for recreational boating and commercial fishing and is therefore an allowable use under Coastal Act Section 30233(a)(2). Additionally, and as described in more detail below, the

environmental impacts of the dredging program as conditioned are expected to be temporary and generally less than significant.

The calculations that MLHD used to arrive at the 80,000-cubic-yard estimate per dredge season were intended to be a very rough estimate and to provide an upper annual limit that would provide some operational flexibility. The estimate assumes that a combined 80,000 cubic yards of sediment could be removed from the North and South Harbor areas in any particular dredge season, although MLHD does not anticipate removing this maximum amount of cubic yards every year. Based on dredging totals from prior permits and current depths, MLHD anticipates dredging up to a total of 550,000 cubic yards over the life of the permit with no more than 80,000 cubic yards dredged in any one year. However, the proposed volumes are estimates and a single storm event could lead to significant sediment deposits over the estimated volumes. Accordingly, **Special Condition 1** limits dredging to the estimated annual volume and total volume over the 10-year life of the CDP, and allows the Executive Director to provide for minor adjustments to those volumes if the adjustments are deemed reasonable and necessary and do not adversely impact coastal resources.

*Biological Resources*

Coastal Act Sections 30230 and 30231 protect marine and inland watercourse biological resources, stating:

> **Section *30230:*** *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:*** *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.*

Moss Landing Harbor is located between the Elkhorn Slough watershed and the Monterey Bay National Marine Sanctuary (Sanctuary), which both contain virtually all of the types of valuable marine resources found within the Central Coast area. Monterey Bay supports a diverse complex of marine and marine-related habitats including open ocean, kelp forests, rocky seashore, nearshore intertidal, sandy beaches, coastal streams, estuarine systems, and wetlands. The Sanctuary supports a variety of marine life including fish, seabirds, marine mammals, algae, and one of the world's most diverse invertebrate populations. The Elkhorn Slough watershed is an incredibly rich biological area, with hundreds of resident and migratory bird species, and freshwater ponds and riparian wetland areas that support many sensitive species, including three rare amphibians, the California red-legged frog, Santa Cruz long-toed salamander and the

California tiger salamander. The watershed is surrounded by coastal dunes and upland ridges that both support numerous rare plant species. Moss Landing Harbor provides the vital link between the tidal waters of Monterey Bay and Elkhorn Slough. Marine mammals, fish, and seabirds make use of both the aquatic and terrestrial environments provided within the Harbor. Seals, sea lions, and sea otters have been observed hauling out on the North Harbor sandbar. The tidal marsh and mudflats that fringe the North Harbor also serve as resting and foraging grounds for various shorebirds.

Impacts to biological resources from dredging and disposal are anticipated to be similar to those associated with previously permitted dredging activities. The primary impact to biological resources resulting from dredging occurs through the disturbance, transport, and destruction of benthic organisms on and in the material to be dredged. However, re-colonization by these organisms would occur over time. While, dredged material disposal may induce turbidity and cause lower dissolved oxygen levels, which may cause stress on planktonic larvae and filter feeder organisms (e.g., worms and shellfish), such stress would be temporary and its effects not long lasting.

The removal of sediment from dredge areas could have short-term, adverse impacts on fish and fish habitats by temporarily increasing the total suspended sediments in the water column and possibly decreasing dissolved oxygen levels during dredge operations. However, as proposed, dredging will be conducted using a hydraulic dredge, which removes and transports dredged material as liquid slurry, thereby minimizing disturbance and re-suspension of sediments at the dredge site.

With respect to actual operation of the dredge, the proposed dredging areas are limited to the active working harbor and do not encroach into any of the adjacent estuarine, wetland, or Sanctuary habitats (see **Exhibit 2** for location of dredge areas). As mentioned above, MLHD proposes to utilize a hydraulic cutter dredge that will be inserted into the sandy substrate before activation to limit impacts to aquatic organisms and to reduce turbidity to protect water quality. **Special Condition 2** requires testing as described above to ensure that all sediments to be dredged are safe and clean and suitable for dredging and disposal pursuant to all applicable state and federal EPA, ACOE, and RWQCB Clean Water Act, Porter-Cologne Water Quality Control Act, and Marine Protection, Research and Sanctuaries Act standards and requirements. This will ensure that the materials themselves do not cause inappropriate biological harm. And **Special Condition 3** requires the submission of a Dredge Operations Plan prior to each dredging episode that identifies the dredge and disposal areas and all equipment and methods to be utilized in order to ensure that dredging and disposal only occur within the approved dredge and disposal areas.

The dredge operations do have the potential to impact marine mammals, particularly sea otters and seal pups that frequent the North Harbor area. To ensure that sea otters and seal pups are not disturbed by dredging activities, **Special Condition 3(a)** requires a qualified biological monitor to inspect the dredging area prior to the start of each work day and during all dredge operations. The biological monitor is required to stop work and/or prohibit the start of work if southern sea otters or seal pupping areas are found within 50 meters of the dredge equipment. To ensure that dredge operators do not encroach within the 50-meter buffer, **Special Condition 3(a)** requires that the buffer area must be demarcated with floating buoys or another clearly visible device.

These requirements for a biological monitor and delineation of buffer areas are consistent with the terms of the USFWS Biological Opinion with respect to sea otters (see **Exhibit 5**).[2]

Although tidewater gobies, a federally endangered species, are not known to breed or inhabit the active harbor area due to high salinity and colder water temperatures than that of identified habitat areas in the slough waters upstream, individual juvenile gobies have been found near the intake pipe of the Dynegy Power Plant just inland of the Harbor. At this time it is unknown whether these juvenile goby individuals are able to survive and migrate upstream toward more suitable habitat to rejoin the main populations or whether these individuals are flushed out of the harbor mouth with the tides. Thus, there is not enough information to determine whether the proposed dredging project will have an impact on goby populations as a whole or will only impact individual gobies that would not naturally survive in the area. Regardless, dredging operations could have an impact on individual gobies. To help minimize goby impacts, **Special Condition 3** requires a qualified biological monitor to monitor for the presence of gobies during dredging and disposal operations and requires that any identified live goby individuals be captured and relocated to suitable upstream habitat. Additionally, **Special Condition 3** requires MLHD to conduct upstream goby surveys consistent with the USFWS Biological Opinion (see **Exhibit 5**), in conjunction with ACOE, USFWS, and Dynegy Moss Landing LLC, to help determine whether the dredging activities are having any adverse impacts on upstream goby populations. Depending on the results of such survey, MLHD may be required to perform additional surveys, provide for upstream habitat restoration, or participate in reintroduction efforts to mitigate for any observed impacts.

With the above conditions limiting the area of dredging and providing protections for sensitive species, the dredge sediment testing and operation plans, as proposed to be conditioned, adequately protect marine resources and can be found consistent with Coastal Act Sections 30230 and 30231 regarding protection of species of special importance and the maintenance of biological productivity of coastal waters.

*Water Quality*

Coastal Act Section 30232 requires that development protect against the spillage of hazardous substances:

> ***Section 30232:*** *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.*

Although recent sediment sampling and testing conducted in Moss Landing Harbor has not detected contaminated materials, historically bottom sediments in certain areas of the harbor have contained heavy metals (including arsenic, copper, nickel, cadmium, chromium and

[2] Seals and sea lions are under the jurisdiction of National Oceanic and Atmospheric Administration (NOAA) and the Marine Mammal Protection Act. The USFWS biological opinion therefore does not include an analysis of project impacts to seals and sea lions. The 50-meter buffer was recommended by the Commission's Staff Ecologist, Dr. Lauren Garske-Garcia, which she determined to be sufficient to mitigate adverse project impacts to other marine mammals commonly found within the harbor.

mercury), pesticides (including DDT, chlordane, dieldrin, endrin) and PCBs (aroclor) and tributiltin at levels that exceed environmentally safe limits. DDT, toxaphene, dieldrin, endrin, aldrin, and endosulfan are major persistent pesticides that have historically been used for agricultural operations throughout the Salinas Valley. With the exception of endosulfan, these chemicals have now been banned for use in California. Studies undertaken to examine water quality in 1992 suggest that though previously banned, these persistent organochlorine pesticides are still present in agricultural fields and can adhere to finer-grained sediments leaving the fields, thereby finding their way as suspended sediments in surface water bodies.[3] Sediment inputs to the harbor include non-point source runoff from the Salinas River, the Old Salinas River Channel, Tembladero Slough, Elkhorn Slough, sloughing of harbor banks, littoral sands entering the harbor mouth, and from by-products of boating and industrial uses in and adjacent to the harbor. In any case, although there was historically a legacy of such toxins, concentrations of contaminants in the harbor have consistently declined over the past 25 years and no contaminants were found in sediment samples taken prior to dredging episodes between 2002 and 2007 under the Harbor District's most recent dredging permit (CDP 3-01-049) (see also the Harbor District's December 11, 2018 letter on this point in **Exhibit 7**).

To date, prior to each dredge episode, the suitability of the proposed dredged material for disposal in any of the proposed aquatic locations has been evaluated by an interagency group consisting of representatives from ACOE, EPA, RWQCB, the Commission, and the Sanctuary. Advisory to this interagency group are USFWS, the National Marine Fisheries Service (NMFS), and the California Department of Fish and Wildlife (CDFW). The group considers chemical and biological testing results, as well as physical grain size analyses, in relation to standards established by the EPA, ACOE, and the RWQCB, as described above.[4] After reviewing test results, the group then works to reach a consensus opinion as to whether or not the proposed dredged material is suitable for aquatic and/or beach replenishment disposal.

The proposed sampling plan is consistent with the standardized methods utilized by ACOE, EPA, and RWQCB for dredging projects throughout the state, and is typical of Commission protocols applied to dredging CDPs statewide, taking into account the aforementioned standardized methods. The number of sample sites was determined based on a formula that takes into account total dredge area and historical presence of contaminants. The final plan was developed in consultation with Commission staff, ACOE, EPA, RWQCB, USFWS, the Sanctuary, and NMFS. Consistent with standardized sampling procedures, the sample cores will be tested in the three layers that could potentially be disturbed by the dredging operations; the first layer is the level to navigable depth, the second is the level of allowed overdredge depth (i.e., additional dredging below the navigable depth, which is done to reduce the frequency of re-dredging), and the third is the level below the overdredge depth that could become the new exposed sea floor. The Surfrider Foundation requests that the sample cores be tested every six inches (see **Exhibit 7**), but this request is unnecessary. Any contaminants found within a six-inch depth would already be detected within the three layers already proposed for testing. Contaminants are measured based upon units found within a uniform quantity (e.g., parts-per-

[3] *Lower Salinas River Near Coastal Waters Initiative Project*, Association of Monterey Bay Area Governments/ Kleinfelder, Inc., 1992.

[4] EPA and ACOE testing standards are outlined in the 1998 publication "Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual" (also known as the Inland Testing Manual or ITM).

million in a gram of water) and would not be diluted or otherwise missed based on the relative size of the core.

The Surfrider Foundation also requests that sampling and testing be done closer to dredge and disposal operations, including preferably contemporaneously with actual dredge and disposal episodes and activities, but this is simply infeasible. Here, sampling is proposed to take place a maximum of 180 days prior to any dredging event, which is also consistent with the standardized methods utilized for dredging projects throughout the state. The sampling process includes multiple steps to ensure testing accuracy and allow the interagency group time to evaluate the results and determine the best course of action for dredging and disposal. In order for testing results to be considered valid and meet the requirements of Section 404(b)(1) of the Clean Water Act, the sampling process must meet the guidelines found in the Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual (ITM). First, sample cores are taken from within the dredging areas, as well as control samples from the disposal sites. Each sample must be documented, mapped, photographed, stored, handled properly, and shipped to a chemical analysis laboratory that follows ACOE and EPA testing guidelines, a process that takes between 1 and 3 weeks depending on the size of the dredge area and equipment availability. The samples must then be sent to a testing laboratory that follows ITM guidelines for chemistry analysis, toxicity analysis, and a bioaccumulation assessment. Bioaccumulation assessment is a particularly lengthy process, as test organism tissues must be exposed to the samples for 28 days and the tissues must then be tested for concentrations of potential contaminants. Thus the testing process takes a minimum of four weeks. Data must then be compiled, analyzed, and a sample testing report must be drafted and disseminated for agency review, which may take another 2 or 3 weeks. Thus a minimum of 7 to 8 weeks is needed just to obtain sample testing results that are considered scientifically valid and consistent with ITM standards.

After the testing report is released, a Dredge Operation Plan (DOP) must be developed and approved before any dredging or disposal event can occur. The interagency team must coordinate to review the results, come to a consensus on the best course of action for dredging and disposal, and a DOP must be drafted and approved before dredging can begin. This interagency process can take anywhere from 4 to 12 weeks depending on the testing results, size and complexity of the project, and general availability of the agency representatives.

Testing immediately prior to or during dredging is therefore infeasible because the sample testing and DOP approval process must be completed well in advance of a dredging episode. In total, the absolute best case scenario for the length of time from sampling to an approved DOP and dredging is approximately 90 days. However, the proposed 180 day maximum between testing and dredging takes into account inevitable slowdowns in the testing process, from potentially tainted samples where cores or testing must be redone, to backups in the availability of approved testing laboratories, to partial federal government shutdowns that make the interagency group unavailable. Moreover, as explained above, the main potential contaminants that might be encountered at the harbor are agricultural pesticides that have been banned from use for decades. Because there is no on-going source of contaminants of concern located near the harbor, the risk of new contaminants is considered minimal. The ITM actually allows sediment testing and results to be applied for up to three years, unless conditions change. This approval is conditioned for such sampling and testing to be done as close as possible to the date that dredging and disposal commence, consistent with applicable legal requirements, but no further

out than 180 days as a maximum in light of the above limitations in the process (see **Special Condition 2**).

Additionally, with respect to utilizing sandy dredge material for beach nourishment, sediment science is clear that predominantly sandy material is inert and incapable of exhibiting elevated contaminant concentrations, particularly in areas of high current such as the North Harbor (i.e., chemical contaminants are much more likely to adhere to finer-grain sediments). In fact, EPA and ACOE typically do not require any sediment testing for material that consists predominantly of sand and is suitable for beneficial reuse.[5] Thus additional testing immediately prior to a nourishment event is not only infeasible, but is also unnecessary as predominantly sandy material is understood to be essentially incapable of absorbing or exhibiting elevated contaminant concentrations. However, out of an abundance of caution, the MLHD has agreed to conduct the full suite of chemical analysis of all sediment, not just finer-grained materials, and to conduct the testing a maximum of 180 days prior to dredging to guarantee public safety and to protect water quality (see **Special Condition 2**).

In sum, the sediment testing as proposed is consistent with the methods utilized in *all* dredging projects statewide, is adequate to ensure the protection of public safety, water quality, and coastal habitats, and there is not a coastal resource need to alter these sediment testing parameters further. The sampling and dredge operation plan process described is also required under this CDP pursuant to **Special Conditions 2 and 3**.

Because the toxins that have historically been found at Moss Landing adsorb strongly to finer-grained sediment, desorption into the water from offshore disposal is unlikely, but such materials still must be disposed of properly. If contaminated materials are found, **Special Condition 3** prohibits dredging within the contaminated areas until a contaminated material disposal plan is submitted that identifies a suitable inland disposal facility, such as a landfill, that will accept the dredge materials. This condition also prohibits the disposal of contaminated materials offshore or on any beaches. Temporary stockpiling of dredge spoils is sometimes necessary in order to dewater the sediment prior to ultimate disposal. This condition further prohibits temporary stockpiling of dredge materials on any beach or vegetated area or within the reach of tidal waters, and requires such materials to be stockpiled in a location that minimizes impacts to public access and recreation. Any runoff and/or ocean water from any such stockpile shall be contained, filtered, and treated prior to discharge, where discharge shall only be allowed if it meets RWQCB standards for point source discharge. Erosion and sediment controls (e.g., tarps, fiber rolls, sediment basins, etc.) shall be installed to contain runoff, ocean waters, and/or sediments at the stockpile site and to prevent runoff from entering beach or vegetated areas or state waters. Finally, to ensure that the dredge equipment itself does not degrade water quality, **Special Condition 3** requires such equipment to be maintained and inspected by MLHD staff on a regular schedule.

In addition, **Special Condition 3** also requires that the submission of specific dredge operation plans for each dredging episode be accompanied with evidence of approval by the EPA, ACOE, and RWQCB, and **Special Condition 4** requires evidence of these agencies and the Sanctuary's

[5] *See* 40 Code of Federal Regulations Section 230.60(a).

approval of all activities under this CDP, or conversely that no such approval is required by these agencies.

Some water quality impacts are expected from dredging and disposal, however these are not related to hazardous substances. Specifically, additional total suspended solids in the water column are expected to increase turbidity near the dredging and disposal sites. Increased turbidity in turn decreases dissolved oxygen levels in the water column, which could impact sea life (see "Biological Resources" section above). The pre-dredge ambient water quality condition is expected to return shortly after each dredging episode, however. Thus the proposed project will be in conformance with Section 30232 of the Coastal Act.

*Beach Replenishment*

Coastal Act Section 30233(b) specifies that dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems, and requires that dredge spoils be disposed of in a manner that avoids significant disruption to habitats and water circulation:

> ***30233(b):*** *Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.…*

With respect to the disposal of uncontaminated materials, MLHD has identified two designated unconfined offshore disposal sites (SF-12 and SF-14) and three potential beach replenishment sites (see **Exhibit 3**). Almost all of the material to be dredged (90% or nearly up to 500,000 cy over 10 years as described above) is expected to consist of finer-grained sediments (i.e., less than or equal to 80% sand) from the inland watershed that won't be appropriate for beach replenishment. However, there is a possibility of the presence of sandy material (estimated at about up to 58,000 cy over 10 years) that is best utilized for beach replenishment purposes.

For 'clean' finer-grained sediment that is suitable for aquatic disposal, MLHD will use one or both of two offshore sites (SF-12 and SF-14) that have been federally designated for such purposes. There is an existing transport pipe from the Harbor to SF-12, which is located 1,100 feet offshore just at the head of the Monterey Canyon. SF-14 is located approximately 1.3 miles offshore and would be reached by barge. Dredged materials disposed of at SF-12 or SF-14 may be redistributed by upwelling currents (from February through July), the California Current (from July to November) and Davidson currents (California countercurrent, from November to February); therefore, the resident times for sediments discharged at these locations may vary from 3 to 13 days and is thus highly dispersive. By placing only clean dredge material on the nearshore shelf during winter months, the natural process of sediment transport from the watershed to the littoral system is reconnected. **Special Condition 3** ensures that all suitable fine-grained materials are deposited at one or both of the two designated offshore sites in order to ensure that such material stays within the littoral system, as encouraged by Coastal Act Section 30233(b).

For coarse-grained 'clean' sediment that is suitable for beneficial reuse (i.e., greater than 80% sand), MLHD has identified three beach replenishment sites where such material could be placed

(see **Exhibit 3**). Two of the replenishment sites are the sandy beaches immediately adjacent to the harbor mouth on MBARI property, while the third beach is approximately half a mile north at Moss Landing State Beach adjacent to Bennett Slough. Past harbor dredging projects (e.g., CDPs P-77-0737; 3-83-186; and 3-99-011) have included beach replenishment near the north and south jetties to reduce the impacts of shoreline erosion in those areas. Shoreline erosion has also occurred between the south jetty and the former location of Sandholdt Pier due to the blocking of littoral sediments by the harbor entrance jetties, and the high wave energies that attack the shore. Beach replenishment also provides additional material to stabilize the width of the beach, enhance public access, and protect the narrow zone of sand dune habitat that exists in the back beach area. To ensure that the project is consistent with Coastal Act Section 30233(b), which encourages beneficial reuse of dredged materials, **Special Condition 3** requires sandy sediment to be utilized for beach replenishment purposes. **Special Condition 3** requires submission of a plan that provides sand replenishment parameters. **Special Condition 3** requires property owner authorization by MBARI and/or State Parks for any beach replenishment activities.

However, beach replenishment operations, particularly the placement of pipelines and use of grooming equipment, have the potential to disturb sensitive dune habitats that lie between the harbor and the replenishment sites. The replenishment sites are also known to provide habitat for the endangered western snowy plover. To ensure that sensitive dune areas are protected, **Special Condition 3** requires submission of a beach replenishment plan that prohibits beach replenishment activities within vegetated dune areas. Additionally, the plan requires a qualified biologist to install temporary exclusionary fencing to demarcate the dune areas prior to replenishment. **Special Condition 3** requires pre-construction surveys for Monterey spineflower prior to beach replenishment activities. To protect snowy plovers, **Special Condition 3** prohibits beach replenishment during nesting season (March 1 through September 30) and also requires a pre-construction survey for wintering plovers during the rest of the year. If wintering plovers are identified, beach replenishment activities must be relocated or delayed to avoid impacts to wintering snowy plover individuals.

With the above conditions, the project is consistent with Coastal Act Section 30233(b) with respect to beach replenishment.

**Marine and Biological Resources Conclusion**

In summary, the proposed project represents a multi-year program for dredging activities that are necessary to maintain and improve navigation channels and berthing areas for recreational boating and commercial fishing. As conditioned to require plans that limit the areas of dredging to the active harbor areas; sample and test the sediments to be dredged; dispose of dredge spoils in an appropriate manner; and protect sensitive habitat and species, the Commission finds that: (1) the proposed project is a type of development that may be permitted consistent with Coastal Act Section 30233; (2) there is no feasible less environmentally damaging alternative; (3) feasible mitigation measures have been provided to minimize adverse environmental effects; and (4) no significant disruption of environmentally sensitive habitats will result. As such, the project can be found consistent with the Coastal Act.

## E. PUBLIC RECREATIONAL ACCESS

### Applicable Policies

Coastal Act Section 30604(c) requires that every coastal development permit issued for new development between the nearest public road and the sea "shall include a specific finding that the development is in conformity with the public access and recreation policies of [Coastal Act] Chapter 3." The proposed project is located seaward of the first through public road. Coastal Act Sections 30210 through 30214, as well as Sections 30221 and 30224, specifically protect public recreational access opportunities. In particular:

> ***Section 30210:*** *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*
>
> ***Section 30211:*** *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 30212(a):*** *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects….*
>
> ***Section 30213:*** *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred…*
>
> ***Section 30214(a):*** *The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case….*
>
> ***Section 30221:*** *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*
>
> ***Section 30222:*** *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*
>
> ***Section 30223:*** *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*
>
> ***Section 30224:*** *Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and*

> *preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.*

In addition, Coastal Act Section 30240(b) requires that development not interfere with recreational areas:

> **Section *30240(b):*** *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

These overlapping Coastal Act policies clearly protect public recreational access, including within the Harbor area and Elkhorn Slough, as well as the beaches and offshore recreational areas, particularly free and low cost forms of public recreational access. Section 30210 of the Coastal Act requires the Commission to provide the general public maximum access and recreational opportunities, while respecting the rights of private property owners. Section 30211 prohibits development from interfering with the public's right of access to the sea. In approving new development, Section 30212(a) requires new development to provide access from the nearest public roadway to the shoreline and along the coast, save certain limited exceptions, including existing adequate nearby access. Section 30213 protects lower cost forms of access, such as the free access available in and around the Harbor area. Section 30220 protects coastal areas suited for ocean-oriented activities, such as the beach and offshore access available here, for such purposes. Sections 30221 and 30223 protect oceanfront and upland areas for public recreational uses, and Section 30222 prioritizes visitor-serving amenities providing for public recreational use. Section 30240(b) protects park facilities, such as the beach and related inland areas here, from degradation.

Finally, the Coastal Act Section 30210 direction to maximize access represents a different threshold than to simply provide or protect such access – it is not enough to simply provide access to and along the coast, and not enough to simply protect access; rather such access must also be maximized. This terminology provides fundamental direction with respect to projects along the California coast that raise public access issues, like this one. In addition, the mean high tide line will move landward over time depending on the beach profile, seasonal tidal activity and continued sea level rise. The Moss Landing area is a prime visitor destination heavily used by the public, including in and around the Harbor, and it provides significant coastal access and recreational opportunities for residents and visitors alike. Therefore, it is also critically important that the Commission assess whether the project, which stands to be authorized until 2029, would impact public access and recreation over this period, and if so, provide measures to avoid or appropriately mitigate such impacts.

**Consistency Analysis**

As indicated, the Coastal Act requires public recreational access opportunities to be maximized, including lower-cost visitor facilities and water-oriented activities (like recreational boating), and protects areas near and at the shoreline for this purpose. Moss Landing Harbor provides public access and recreational opportunities of regional and statewide significance. These include boat launching, berthing for commercial vessels and recreational boats, marine-related

retail/commercial businesses, kayaking, whale watching, safety and enforcement, and diving. The proposed dredging project will strongly benefit public access and recreation by restoring and maintaining adequate water depths in the Harbor's navigation channels and by directing suitable sandy dredge spoils onto nearby beach areas for beach replenishment or back into the littoral system through offshore disposal.

Adverse impacts to public access from the dredge operations are possible (e.g., displacement of activities in dredge and disposal areas, presence of dredge pipes impacting access, stockpiling of unsuitable dredge materials, etc.). For example, the pipelines used to transport suitable dredge spoils to designated beach replenishment sites can create an impediment to navigation and pedestrian access to the beach in certain circumstances. Furthermore, sandy entrance channel dredged material that is disposed of directly on the dry beach can also create temporary impacts to beachgoers. These sediments are pumped from the pipeline as a liquid mixture of water and insoluble sand material, creating a zone of slurry on the beach that can render these areas temporarily unusable by the public. Fortunately, these types of impacts can be minimized in this case through dredge operation design. Specifically, the pipelines utilized can be small enough to be traversed by persons walking across the beach and the placement of ramps can be used to allow access for less nimble beach visitors. Similarly, the area to be taken up by the replenishment activities is generally fairly small and would be located in areas that will not significantly reduce the availability for normal public beach recreational pursuits (see **Exhibit 3**). Replenishment activities will be limited to weekdays during the off-peak fall and winter months and typically are only temporary, further limiting impacts to public access. In addition, although dredge disposal of sandy material onto the beach may cause a temporary disturbance to swimmers or surfers, again these impacts are temporary (i.e., since the dredging takes place in the fall and winter months, high energy ocean conditions are expected to fairly quickly disperse the sediments). And finally, the expected amount of potential beach replenishment over the course of 10 years is relatively small, a total of some 58,000 cy, and that too will help to limit all such potential impacts accordingly.

Even so, the Monterey Chapter of the Surfrider Foundation has requested that beach replenishment be prohibited due to concerns that it will affect offshore surfing breaks (see **Exhibit 7**). On this point several things should be noted. First, it is only expected that about 10% of the dredged materials might be suitable for beach replenishment (estimated by the Harbor District at roughly 58,000 cubic yards over the 10-year term of the CDP). As a result, the amount of beach replenishment is expected to be relatively small and orders of magnitude different than the projects cited by Surfrider, which were both specifically beach replenishment projects.[6] Additionally, Coastal Act Section 30233(b) indicates that suitable dredge spoils should be used for such purposes. As acknowledged in Surfrider's letter, the proposed beach replenishment sites are popular recreational beaches that are facing impacts due to the effects of coastal erosion and sea level rise. Beach replenishment is oftentimes an effective strategy to help maintain recreational beach space in such circumstances, and is strongly encouraged by Coastal Act Section 30233(b). Provided the replenishment material is appropriate, and any potential coastal resource issues can be adequately addressed, the Coastal Act directs that such materials be used

[6] The San Diego County Regional Beach Sand Project II was for up to 2.3 million cubic yards of beach replenishment (CDP 6-11-018) and the San Elijo Lagoon Restoration project covered 850,000 cubic yards (CDP 6-16-0275).

for beach replenishment, particularly in light of ongoing shoreline erosion exacerbated by sea level rise that is affecting such beaches and associated beach utility here in Moss Landing and statewide.

Second, the areas identified for beach replenishment are all above high tide on the upper beach area, and none of the materials would be directly deposited into the surf or the ocean. In addition, the potential beach replenishment areas are fairly spaced out. Because of this, materials that might eventually migrate to the sea would be expected to be significantly less than the amount placed on the beach in the first place, and any that do migrate would do so over a fairly wide area and over a gradual period of time. In addition, any such materials would be placed on the beach during the winter season, which is typically a much more dynamic shoreline time (including in terms of swells, waves, and general ocean dynamics), and would be expected to be rapidly dispersed when such materials eventually find their way into the offshore littoral system. Further, Moss Landing is at the head of the Monterey Bay Submarine Canyon, which extends to a depth of almost two miles, and which is a sediment sink for littoral cells in the area (which cells deliver sandy sediment from both north and south meeting in Moss Landing at the Canyon). Thus, any such materials that would find their way offshore from beach replenishment episodes would be expected to be fairly minimal, to migrate fairly gradually, and to not result in significant offshore changes, including because winter waves would help to dissipate any such materials naturally and materials would otherwise be expected to go into the Canyon.

Third, potential surf impacts from beach replenishment have in the past been considered an issue when sand placement is located in close proximity to a reef break due to concerns that the sand may cover the reef (and wash out the break and/or turn it into a less consistent beach break), and both examples cited by Surfrider for which surf monitoring was required involved sand placement adjacent to a reef break. Here, the surfing areas near the harbor are beach breaks, formed by constantly shifting sand bars, and there is nothing to indicate that adding the sand back into this system will adversely impact the natural processes,[7] if at all, given the expected relatively small amount of material and the areas where it will be placed. In addition, past beach replenishment episodes at these beaches in 1993, 1996, and 2002 have not resulted in any identified adverse impacts to surfing.

And fourth, **Special Condition 3** requires the District to submit a beach replenishment plan prior to any replenishment episode that describes the volume, location, footprint, timing, and method of sand placement, as well as a requirement to protect public access and recreation. If beach replenishment does take place in the future, the beach replenishment plan will enable the Executive Director to determine at that time whether the proposed replenishment activities have the potential to impact surfing activities despite this prior evaluation and determination that they will not, and can require modifications to the plan accordingly. Thus, there is not a coastal resource need to alter beach replenishment parameters due to the potential for surfing impacts in

[7] Note in the case of Santa Cruz Harbor, where sandy material (albeit significantly more material than expected at Moss Landing) is deposited directly offshore into the surf environment at another beach break, the result is actually an *enhanced* surf break. While the two use different delivery systems (i.e., on the beach at Moss Landing versus into the surf zone at Santa Cruz Harbor) and volumes (i.e., Santa Cruz Harbor dredges roughly 300,000 cubic yards of nearly all sandy material per year that is all applied to Twin Lakes State Beach for beach replenishment), the experience at Santa Cruz Harbor demonstrates how nature tends to smooth out any potential issues regarding effects on surf breaks.

this case, and the terms and conditions of the CDP adequately protect against potential problems of this sort.

With respect to disposal of materials found to be unsuitable for reuse, often these materials must be stockpiled to allow the material to dry before the materials can be disposed of off-site. Stockpiling of such materials can occupy areas that are normally used for public access, such as public parking areas, but these impacts can be minimized by utilizing private paved areas for stockpiling, hauling materials offsite prior to stockpiling, or staggering dredging of unsuitable materials to minimize the size of the stockpiles. Thus, public beach recreational activities should not be significantly adversely affected by the proposed project. To ensure this is the case, **Special Condition 3** requires that dredging operations be conducted in such a manner as to avoid, to the greatest extent possible, interference with public recreational access in the Moss Landing Harbor area and on the adjacent beaches. With respect to dredge pipelines specifically, such measures may include, but are not limited to, uncoupling segments to allow unimpaired pedestrian movement, building small-scale sand ramps over pipelines, and pipeline removal during times of peak beach use. In addition, any stockpiling would require all precautions required for public health and safety to address such materials, and would identify an inland location outside of the coastal zone (i.e., landfill or equivalent) for disposal. If such materials must be temporarily stockpiled for dewatering prior to disposal at an identified inland location, stockpiling would not take place on any beach or vegetated area, materials would be stored beyond the reach of tidal waters, and the materials would be stored in a way that minimizes impacts to public access and recreation areas. Any runoff and/or ocean water from any such stockpile would be contained, filtered, and treated prior to discharge, where discharge would only be allowed if it meets RWQCB standards for point source discharge. Erosion and sediment controls (e.g., tarps, fiber rolls, sediment basins, etc.) would be installed to contain runoff, ocean waters, and/or sediments at the stockpile site and to prevent runoff from entering beach or vegetated areas or state waters. These measures will appropriately protect public recreational access if such problematic materials area encountered (see **Special Condition 3**).

In conclusion, the dredge program by its very nature is necessary to protect public access and recreational opportunities provided by the Moss Landing Harbor and adjacent beaches. Although the disposal of dredge materials may temporarily impact public access, as designed and as conditioned these impacts will be minimized and are not expected to result in significant adverse public recreational access impacts, but rather are expected to help promote beaches for such public recreational access use through replenishment. Therefore the project, as conditioned, is consistent with the above-cited public access and recreational policies of the Coastal Act .

## F. OTHER

### Coastal Hazard Risk

In terms of recognizing and assuming the hazard risks for shoreline development, the Commission's experience in evaluating proposed developments in areas subject to hazards has been that development has continued to occur despite periodic episodes of heavy storm damage and other such occurrences. Development in such dynamic environments is susceptible to

damage due to both long-term and episodic processes. Past occurrences statewide have resulted in public costs (through low interest loans, grants, subsidies, direct assistance, etc.) amounting to tens of millions of dollars. As a means of allowing continued development in areas subject to these hazards while also avoiding placing the economic burden for possible future damages onto the people of the State of California, applicants are regularly required to acknowledge site hazards and agree to waive any claims of liability on the part of the Commission for allowing the development to proceed. Accordingly, this approval is conditioned for the Applicant to assume all risks for developing at this location (see **Special Condition 5**).

**Indemnification**

Coastal Act Section 30620(c)(1) authorizes the Commission to require Applicants to reimburse the Commission for expenses incurred in processing CDP applications.[8] Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its action on the pending CDP application in the event that the Commission's action is challenged by a party other than the Applicant. Therefore, consistent with Section 30620(c), the Commission imposes **Special Condition 6** requiring reimbursement for any costs and attorneys' fees that the Commission incurs in connection with the defense of any action brought by a party other than the Applicant challenging the approval or issuance of this permit.

## G. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096(a) of Title 14 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The Harbor District determined that the project is categorically exempt from the requirements of CEQA under the CEQA Guidelines, 14 CCR Section 15304(g) for maintenance dredging where the dredge material is deposited in an area authorized by all applicable state and federal regulatory agencies. The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of the Natural Resources Agency as being the functional equivalent of environmental review under CEQA. The preceding CDP consistency findings discuss the relevant coastal resource issues with the proposal related to land use priorities, the protection of marine and biological resources, and public recreational access; and the CDP conditions identify appropriate modifications to avoid and/or lessen any potential for adverse impacts to said resources. The Commission incorporates these findings as set forth here in full. Further, all public comments received to date have been addressed in the findings, which are incorporated herein in their entirety by reference.

As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the proposed project, as conditioned, would have on the environment within the meaning of

[8] See also California Code of Regulations Title 14 Section 13055(g).

CEQA. Thus, if so conditioned, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).

## APPENDIX A – SUBSTANTIVE FILE DOCUMENTS[9]

- *Master Sampling and Analysis Plan Moss Landing Harbor District Dredged Material Evaluations 2006-2018,* Moss Landing Harbor District, March, 2006.
- *Biological Resources Assessment Maintenance Dredging at Moss Landing Harbor*, Caravel LLC, September 23, 2016.
- *Lower Salinas River Near Coastal Waters Initiative Project*, Association of Monterey Bay Area Governments/Kleinfelder, Inc., 1992.

## APPENDIX B – STAFF CONTACT WITH AGENCIES AND GROUPS

- Moss Landing Harbor District
- Monterey County Resource Management Agency
- United States Army Corps of Engineers
- United States Environmental Protection Agency
- United States Fish and Wildlife Service
- Monterey Bay National Marine Sanctuary
- National Oceanic and Atmospheric Administration
- National Marine Fisheries Service
- Central Coast Regional Water Quality Control Board
- Surfrider Foundation

[9] These documents are available for review in the Coastal Commission's Central Coast District office.