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STAFF REPORT CDP APPLICATION

Application Number: 3-22-0280
Applicant: Santa Cruz Port District
Project Location: Santa Cruz Small Craft Harbor in the City of Santa Cruz, Santa Cruz County
Project Description: Five-year minor improvements project, including pile repair and replacement, dock repair and replacement, drainage outfall repair, embankment repair, and other minor and routine activities needed for Harbor upkeep and operability.
Staff Recommendation: Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

The Santa Cruz Small Craft Harbor accommodates a number of coastal-related and coastal-dependent activities, including commercial fishing, recreational boating, and other maritime operations. The Santa Cruz Port District, the public entity that operates and manages the Harbor, requests authorization to undertake Harbor maintenance and repair activities associated with harbor structural components (such as pilings, docks, and embankments) on an “as-needed” basis. The project is located in the central western portion of Santa Cruz County, within the City of Santa Cruz, and lies entirely within the Coastal Commission’s original retained jurisdiction. The proposed project would allow the Harbor to undertake a series of improvements to basic Harbor infrastructure, including the repair and replacement of piles and docks, so as to maintain operational utility and keep the facility in a state of good repair. Due to normal wear and tear caused by daily use and natural phenomena (such as wind, waves, and storms), the Harbor requires regular upkeep to maintain its stability and function. To streamline these maintenance and repair activities, the Port District has proposed to compile all

these projects into one coastal development permit (CDP) application, thereby ensuring continued safe and efficient operation of harbor activities. The proposed project would authorize five years of routine maintenance activities in order to better streamline such activities in the project location.

Broadly, the Harbor is an extremely important facility that provides numerous coastal-dependent, coastal-related, and public recreational access endeavors, all of which are protected under the Coastal Act. A safe, working Harbor is paramount, and thus authorizing these types of normal maintenance, improvements, and repairs to keep the Harbor operational is a key Coastal Act objective. The proposed five-year minor improvements program will ensure the Santa Cruz Harbor's ability to provide recreational, commercial, and visitor-serving coastal activities in the Central Coast.

However, proposed development such as this in the marine environment and in an area of high public use presents some potential challenges, including in terms of construction impacts to coastal water quality and biological resources. Fortunately, these issues are readily addressed through a series of measures both proposed by the Port District and augmented by Commission staff, including the Commission's Staff Ecologist and pursuant to the measures employed in other similar harbor maintenance projects.¹ These measures are designed to minimize the potential for coastal resource impacts and disturbances to wildlife during construction (such as "soft startups" for pile driving work, pre-construction biological surveys, wildlife exclusion zones, the use of a "silt curtain" to minimize turbidity effects on water quality, environmental awareness training, etc.). Additionally, maintenance activities occurring through the authorization of this permit would be spread out across the five-year term; thus, projects would occur in smaller stages, thereby minimizing effects a more significant project may have on biological resources.

Staff has worked cooperatively with Port District staff on the parameters of this project, and believes that the end result of this collaboration is a project that will fulfill multiple Coastal Act objectives related to commercial/recreational boating, public access, water quality, and biological resources. Therefore, staff recommends **approval** of a CDP with conditions to authorize the project. The motion and resolution to effectuate this recommendation are found on **page 4** below.

¹¹ Including the Santa Cruz and Port San Luis harbors and wharves.

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- Exhibit 1 – Regional Vicinity Map
- Exhibit 2 – Harbor Aerial Image
- Exhibit 3 – Proposed Mitigation Measures and BMPs

1. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, **approve** a coastal development permit 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 3-22-0280 pursuant to the staff recommendation, and I recommend a **yes** vote.*

Resolution to Approve CDP: *The Commission hereby approves Coastal Development Permit Number 3-22-0280 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.*

2. 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 or 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.

3. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

- 1. Approved Project.** This CDP authorizes minor improvement activities at the Santa Cruz Small Craft Harbor as specified in the proposed project materials shown in Appendix A, as modified by the terms and conditions of this CDP.
- 2. CDP Duration.** This CDP shall be valid for five years from the date of Commission approval (i.e., until December 16, 2027), unless the Permittee requests that the Executive Director extend that expiration date before December 16, 2027. If such a request is made, it shall only be accepted by the Executive Director if it is accompanied by an assessment of the project's operations and their effect on coastal resources to date. Such assessment shall identify and describe each event undertaken under the CDP, and all steps taken to ensure that such events were consistent with the CDP and its terms and conditions. If the Executive Director determines that the approved project continues to operate in a manner that is consistent with the CDP's terms and conditions, including that it does not lead to any unforeseen and/or unaddressed adverse coastal resource impacts, then the Executive Director can extend the CDP's expiration date for an additional five years (i.e., until December 16, 2032). Subsequent Executive Director expiration extensions are also allowed under the same criteria, where the required assessment shall cover all years of program operation since the last assessment and shall provide past assessments as appendices.
- 3. Coastal Resources Protection Plan.** PRIOR TO ISSUANCE OF THE CDP, the Permittee shall submit, for review and written approval by the Executive Director, a Coastal Resources Protection Plan that lists all water quality and biological resources avoidance, minimization, and mitigation measures and best management practices (BMPs) to be implemented by the proposed project as identified in **Exhibit 3** and the additional measures as modified by this CDP pursuant to **Special Conditions 1-10**.
- 4. Piling Replacement Mitigation Measures.** The following mitigation measures shall be implemented during all pile replacement activities:
 - a. Authorized Construction Period.** Pile replacement program activities are solely authorized to occur between June 1 and November 30. No pile driving outside of the authorized work window shall occur unless the Commission's Executive Director concurs that an emergency exists and authorizes an Emergency CDP to explicitly allow for limited emergency piling repair/replacement work during this window subject to conditions to minimize and abate potential adverse coastal resource impacts.
 - b. Authorized Pile Replacement Materials.** New/replacement pile materials shall be limited to concrete, metal (steel), composite, high density polyethylene (HDPE), and/or reinforced plastic.

- c. Marine Wildlife Monitor.** One qualified marine wildlife monitor (MWM) approved by the Executive Director, or more if required to effectively observe the identified work stoppage zones, shall be present to conduct observations during all pile driving activities. The MWMs shall be qualified wildlife biologists with experience observing marine wildlife and differentiating normal behavior from signs of injury or distress. MWM duties shall be dedicated to observing and assessing marine wildlife only, and MWMs shall not be assigned other duties. MWMs shall have the appropriate safety and monitoring equipment (e.g., binoculars, etc.) adequate to conduct required monitoring activities and shall be located at an effective vantage point to observe all exclusion zones without obstruction.
 - d. Reporting.** The MWMs shall maintain a daily log of observed marine wildlife behavior that shall be of sufficient detail to determine whether the project causes observable effects to marine wildlife and shall submit annual monitoring reports to the Executive Director:

 - i. Daily Logs.** A copy of the MWM's logs shall be submitted to the Executive Director when mitigation measures (i.e., shut down or delay of pile driving activities) are implemented five or more times within a seven-day period. At a minimum, the daily log observations shall include: (1) the date and time that monitored pile driving activity begins and ends; (2) pile driving activities (e.g., the number and type of piles being driven and their location on the wharf, the type of hammer being used [i.e., impact or vibratory]) occurring during each observation period, etc.); (3) weather parameters (e.g., wind speed and direction, percent sky cover, visibility, precipitation, etc.); (4) ocean conditions (e.g., water level fluctuation, tide, etc.); (5) a map showing species, numbers, location, and, if possible, sex and age class of all observed marine wildlife; (6) a description of any observable marine wildlife behavior patterns, including those in response to pile driving activities, including their location and distance relative to the work site, direction of travel, and if possible, the correlation of behavior to sound pressure levels (SPLs); (7) a description of implementation of any required mitigation measures (e.g., shutdown or delay of piling driving activities, etc.); and (8) a description of other human activities in the area (e.g., fishing, diving, swimming, etc.).
 - ii. Annual Monitoring Reports.** Annual MWM monitoring reports shall be submitted to the Executive Director in the Post-Activity report (see **Special Condition 8**). Each Annual Monitoring Report shall include daily log observations from the MWMs, descriptions of any project delays or cessation of operations due to the presence in the project area of marine wildlife subject to exclusion zones (see Appendix A), and an evaluation of monitoring protocol effectiveness as determined by the MWMs.
- 5. Nesting Bird Surveys.** Nesting birds and their nests shall be protected during construction by use of the following measures:

- a. Pre-Construction Surveys.** For any work that would occur during the nesting/breeding season (between February 15th and August 31st), pre-construction surveys will be completed by a qualified biologist, approved by the Executive Director, with experience in observing seabird reproductive and nesting behavior, to identify displays of nesting behavior and/or active nests (i.e., as occupied by eggs or nestlings). The following shall apply:
- i. **Timing.** Surveys shall commence no more than 72 hours prior to the initiation of construction in any given area.
 - ii. **Coverage.** Surveys may be focused on specific work areas rather than necessarily covering all Harbor structures and they may be sequenced as needed to address specific work areas and schedules over the course of the breeding season. Surveys shall be performed extending 300 feet from the project work area to locate any active nests.
 - iii. **Survey Maps.** Maps identifying the location of any active nests detected shall be provided, showing the date of survey and nest stage (e.g., eggs, nestlings, etc.) and shall clearly delineate appropriate buffers (as defined in **Subsection (c)** below) to inform work plans for maintenance and repair activities.
- b. Construction Halts.** If under any circumstances either construction staff or the qualified biologist observes signs of nesting distress (e.g., parents flush from the nest and do not readily return as activities continue, anxious warning calls, etc.), then work shall be stopped immediately, and the qualified biologist shall consult with the Executive Director to determine necessary modifications to activities. Activities shall resume only after the biologist and the Executive Director are satisfied that the modifications are sufficient to avoid continued disturbance to the nests.
- c. Work Stoppage Radius.** The following stoppage zones will be applied to applicable nesting birds within the identified radius. If nesting birds are identified within the zones, then construction may not occur within the stoppage zones until the birds are fully fledged.
- i. **Large Raptors.** Large raptor species (i.e., Buteos) will have a work stoppage radius of 1000 feet.
 - ii. **Small Raptors.** Small raptor species (i.e., Accipters) will have a work stoppage radius of 500 feet.
 - iii. **Special-status Passerines.** Special-status passerines will have a work stoppage radius of 300 feet.
 - iv. **Other Migratory Bird Treaty Act-protected species.** Other MBTA-protected species will have a work stoppage radius of 300 feet.
- d. Adjustments to the Work Stoppage Radius.** Minor adjustments to the work stoppage radius may be allowed following consultation and approval by the

California Department of Fish and Wildlife and notification of such adjustments to the Executive Director. Such adjustments must allow at minimum a 250 feet work stoppage radius for raptors and a 100 feet work stoppage radius for passerines. Additionally, all sensitive receptor sites (i.e., nests) must be monitored, noise levels at the sites kept beneath 60dB, and appropriate visual screening measures implemented when adjustments are allowed to the stoppage zones.

- e. **Reporting.** Annual nesting survey reports shall be submitted to the Executive Director in the Post-Activity report (see **Special Condition 8**). The report shall include: the maps from each nest survey conducted that year; a brief narrative describing the survey methods and observations of the species' tolerances to noise, vibration, and visual disturbance cues; a record of maintenance and repair activities carried out during the nesting season, including their location relative to active nests; and a discussion of any incidents that have resulted in a need for further consultation with the qualified biologist and/or the Executive Director.

6. Nesting Bat Surveys. The following bat species and their nests shall be protected during construction by use of the following measures:

- a. **Pre-Construction Surveys.** For any pile driving work that would occur between June 1st and August 31st or between October 15th and November 30th, and within 100 feet of the Murray Street Bridge transportation corridor, pre-construction surveys within the Murray Street Bridge will be completed by a qualified biologist, approved by the Executive Director. Surveys shall commence no more than 72 hours prior to the initiation of construction. The qualified biologist will survey for Pallid bats, Townsend's big-eared bats, and the Hoary bat; additionally, the biologist will survey any swallow nests present in the bridge for evidence of use by bats. Maps identifying the location of any active nests detected shall be provided, showing the date of survey and shall clearly delineate appropriate buffers (as defined in **Subsection (b)** below) to inform work plans for maintenance and repair activities.

b. Work Stoppage Radius. The following work stoppage zones will apply to bat species residing within the Murray Street Bridge:

- i. **Pallid bat and Townsend's Big-eared bat.** The project will maintain the following stoppage zones between construction activities and any identified roosting bats or nests: 120 feet for construction trucks and heavy equipment; 90 feet for small vehicles; 150 feet for drilling, trenching, and small equipment; 400 feet for any light source without shielding; 65 feet for pedestrian traffic; and 250 feet for stationary diesel/gasoline exhaust sources.
- ii. **Other Species of bats.** The project will maintain the following stoppage zones between construction activities and any identified roosting bats or nests: 100 feet for construction trucks and heavy equipment; 65 feet for small vehicles; 150 feet for drilling, trenching, and small equipment; 300 feet for any light source without shielding; 65 feet for pedestrian traffic; and 250 feet for stationary diesel/gasoline exhaust sources.

- 7. Daylight Work Only.** All work shall take place during weekday daylight hours (i.e., from 8am to 6pm, Monday through Friday), except that the Executive Director may authorize non-pile-driving and non-in-water nighttime or weekend work due to demonstration of extenuating circumstances, and subject to all appropriate mitigation measures to minimize lighting of coastal water and beaches, and to avoid coastal resources impacts, as much as possible.
- 8. Annual Work Plan, Post-Activity Monitoring Reports, and As-Built Plans.** The Permittee shall submit, for review and written approval by the Executive Director, an Annual Work Plan that lists all anticipated routine minor improvements for the upcoming calendar year. The Permittee shall also submit, for Executive Director review, a Post-Activity Monitoring Report and accompanying As-Built Plans that describe all work completed during the previous calendar year as well as any issues encountered in terms of ensuring compliance with that year's Annual Work Plan. In addition, the Post-Activity Monitoring Report shall include all biological monitoring reports and maps (see **Special Condition 4**), any reports of complaints and the investigation of these complaints, any reports of work stoppages related to work crew biological monitoring, a visual inspection report of any pilings installed or any damage to piles and repairs needed or made, and As-Built Plans including color photographs (in hard copy and jpg format) that clearly show the as-built project and that are accompanied by a site plan that notes the location of each photographic viewpoint and the date and time of each photograph. The Annual Work Plan shall be submitted annually by January 31st beginning in 2023; the Post-Activity Monitoring Report and accompanying As-Built Plans shall be submitted within 90 days of completion of work for each calendar year.
- 9. U.S. Army Corps of Engineers (ACOE) Approval.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit a valid ACOE authorization for the approved project under this CDP. The Permittee shall inform the Executive Director of any changes to the project required by the ACOE authorization. Any such changes shall not be incorporated into the project until the Permittee obtains a Commission amendment to this CDP, unless the Executive Director determines that no amendment is legally required.
- 10. Minor Modifications.** Additional development beyond the minor improvement activities specified in this approval shall be submitted for a determination of CDP requirements (i.e., a separate CDP, a CDP amendment, a CDP waiver, a CDP exemption). Minor adjustments to the terms and conditions of this CDP may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; (2) do not adversely impact coastal resources; and (3) do not legally require a CDP amendment.

4. FINDINGS AND DECLARATIONS

A. Project Location, Background, and Description

1. Project Location

The City of Santa Cruz is located at the northern end of the Monterey Bay in Santa Cruz County (see **Exhibit 1** for regional location map). The proposed project is located within the City's Small Craft Harbor (Harbor), situated between the Seabright neighborhood of the City of Santa Cruz to the west and the Live Oak Beach Area of Santa Cruz County to the east. Arana Gulch Creek, located to the north of the Harbor, flows northeast to southwest, and drains into the Monterey Bay at the Harbor. The Harbor is located in a relatively urbanized area, confined by Harbor parking lots, which line the perimeter of and are a part of the Harbor itself; public access trails adjacent to the parking lots; the Murray Street Bridge transportation corridor, which traverses through/atop the Harbor; Arana Gulch and its network of trails located immediately landward of the Harbor²; 7th Avenue (another transportation corridor connecting the Live Oak area with the Live Oak Beach Area), and both Seabright and Twin Lakes State Beaches. The Walton Lighthouse³ is situated at the seaward-most extent of the Harbor's western jetty.

2. Project Background

The Harbor is a commercial fishing/small craft harbor in the City of Santa Cruz (see **Exhibit 2**); permanent jetties placed along the east and west sides of the Harbor's entrance channel provide year-round access to the Monterey Bay and Pacific Ocean. The jetties and the outer portion of the Harbor were constructed between April 1962 and January 1964, and the facility was ultimately expanded inland (into the upper portion of the former Woods Lagoon) into its current configuration in 1972. The Santa Cruz Port District (formed in 1950) manages the small craft harbor facilities and public services.

The Harbor now provides wet berths for approximately 1,200 boats and an additional 275 dry storage vessels, including dory ties and end-tie spaces (i.e., spaces where small boats can tie to the dock). In addition to these berthing facilities, the Harbor provides public amenities such as boat servicing operations, a public boat launch, restrooms and small craft docks, restaurants and shops, a public access trail that circumnavigates the Harbor, about three acres of sandy beach on the downcoast side of the jetties (i.e., Harbor Beach), and over 1,000 parking spaces that support Harbor-related uses. Overall, the Harbor facilitates ocean-related functions such as boat launching, berthing for commercial vessels and recreational boats, boat repair areas, marine-related retail/commercial businesses, sailing programs, a yacht club, and boat sales. The majority of boat use at the Harbor is for recreational purposes, as opposed to

² The Arana Gulch open space parcel was originally a cattle ranching farm and was turned into a city park in 1979. The area includes meadows, woodlands, and riparian corridors; trails for hikers and bicyclists circle the space (see CDP 3-11-074) and connect to the upper Santa Cruz Harbor.

³ The Walton Lighthouse, also known as the Santa Cruz Breakwater Lighthouse, was constructed in 2001 after fundraising efforts in the community.

commercial fishing, although a small commercial fishing community operates out of the Harbor.

3. Project Description

The proposed project is for authorization of a five-year minor improvement program to keep Harbor infrastructure in a state of good repair to facilitate safe, reliable, and continued use of the Harbor's facilities and functions. To expedite permitting/construction of typical maintenance needs and to help reduce costs, the Santa Cruz Port District has proposed to package minor improvement activities into one CDP application to allow for efficient implementation of activities required for safe operation and public use of the Harbor for an initial five-year period. Specifically, the proposed project generally includes the repair and/or replacement of Harbor structures separated into four groups: piles and pile guides, docks, drainage outfalls, and embankments. Current industry standard materials including concrete, metal (steel), composite, high-density polyethylene (HDPE), and reinforced plastic would be used for pile maintenance and pile replacement, and prefabricated plastic/composite decking materials would be used for deck maintenance/replacement. The proposed project would allow up to 75 piles and one dock to be replaced each year. The proposed project would also allow for the repair of dock components (such as dock and brow pier decking, damaged cleats, bumper striping, broken gussets, and gusset covers), which can degrade over time due to normal wear and tear. Finally, the proposed project would allow for the repair of up to one drainage outfall (consisting of reinforcing the outfall with rock or other erosion protection treatment limited to 100 square feet or less, or in-kind replacement of corroded culvert pipe sections) and one embankment repair (consisting of removal of debris and organics, placement of geotextile fabric, and placement of rock riprap) each year of the five-year project period spanning December 2022 through December 2027. All activities under the proposed project are designed to maintain existing Harbor configurations (i.e., would not change, expand, or modify in any way the existing Harbor footprint) and use similar or updated materials as to what currently exists.

Standard of Review

The proposed project site is located seaward of the mean high tide line within the Commission's retained CDP jurisdiction. The standard of review for development within the Commission's retained jurisdiction is Chapter 3 of the Coastal Act.

B. Coastal Act Use Priorities

Applicable Coastal Act Provisions

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. They state:

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.*

Analysis

Monterey Bay's incredible biological resources support numerous coastal-dependent and coastal-related activities that emanate from the Harbor, including commercial and recreational boating. Visitors to the Harbor are able use the Harbor's restaurants, fishing areas, gift shops, and other businesses, such as kayak and boat rentals.

Coastal-dependent and coastal-related developments are among the highest priority Coastal Act uses. As indicated, the Harbor provides an array of commercial and recreational boating, fishing, and coastal-related opportunities. Commercial fishing and related waterfront activities at the Harbor generate jobs, provide recreational opportunities, and draw tourists to its public spaces. The proposed program activities not only support coastal-dependent and coastal-related uses but are in fact integral to a continuation of such uses and therefore have a priority under the Coastal Act. Further, commercial and recreational boating and fishing are coastal-dependent priority uses that cannot function without safe harbors. Accordingly, the proposed minor improvement program is considered a high priority under the Coastal Act, including to keep this important coastal site functioning and operational.

Coastal Act Section 30234 calls for the protection of commercial fishing and recreational boating industries, as well as upgrading such facilities where feasible. Coastal Act Section 30234.5 recognizes the economic, commercial, and recreational importance of fishing activities. In an effort to decrease delays and cost, the Santa Cruz Port District has proposed to package its typical minor improvement activities into one permit application to allow for efficient implementation of such activities required for safe operation and public use of the port facilities. While the Coastal Act provides exemptions from CDP requirements for certain routine maintenance and minor improvements activities, such exemptions do not apply at the Harbor given its location in coastal waters. Thus, in order to provide needed CDP coverage for these routine minor improvements, the Commission has approved similar CDPs⁴ that essentially 'pre-authorize' this type of work, including incorporating necessary protocols to address water quality and biological resources concerns (as described subsequently). These CDPs have worked well in streamlining needed projects, and should do so here as well.

The program activities authorized by this permit are limited to the necessary maintenance and upkeep to specific degraded Harbor components to ensure their safe and reliable use. These activities will prevent unnecessary emergency repairs that have a greater risk for adverse environmental and coastal resource impacts. This CDP allows the Santa Cruz Port District to proceed with minor improvements that are essential to maintaining and operating the commercial fishing fleet, as well as recreational fishing and boating. Therefore, the Commission finds that this project implements, and is consistent with, Coastal Act Sections 30234 and 30234.5.

C. Marine and Biological Resources

1. Fill in Open Coastal Waters

Applicable Coastal Act Provisions

Coastal Act Section 30233 (in relevant part) addresses filling of open coastal waters, stating:

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:*

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities...

(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities...

⁴ Including at the Santa Cruz and Port San Luis harbors.

(7) Nature study, aquaculture, or other similar resource-dependent activities...

Analysis

The proposed project includes potential for “filling” of open coastal waters through the replacement of pilings, docks, and gangways. More precisely, these proposed activities involve re-filling of coastal waters when existing structures, such as pilings, in coastal waters are replaced within the existing footprint, as opposed to new fill per se. This CDP is not intended to cover significant repairs or improvements but is instead intended to provide for the structural repairs of the Harbor as needed.

Projects that include, or have the potential to include, fill of coastal waters must satisfy the three-pronged test contained in Coastal Act Section 30233(a). The first prong requires that the proposed activity fit into one of seven categories of uses enumerated in Coastal Act Section 30233(a). The Harbor provides for both coastal-dependent and coastal-related uses including recreational fishing, sporting equipment rental, and boat launch, and thus it qualifies as a public recreational pier that provides public access and recreational opportunities. The Harbor also supports nature study and other coastal-dependent uses including marine science research/education, i.e., another use enumerated under Section 30233(a)(3). Therefore, the first prong under Section 30233(a) is satisfied.

The second prong of the 30233 test requires there to be no feasible less environmentally damaging alternatives to the proposed project. The purpose of the proposed project is limited to the necessary in-kind structural repairs of the existing Harbor (to facilitate safe and reliable continued uses of its facilities). The “no project” alternative is not a feasible alternative because it would allow the Harbor to fall into a state of disrepair, likely causing eventual closure/loss of facilities/uses. In other words, the proposed project is necessary to adequately maintain existing facilities and ensure that the Harbor can continue to support public recreational uses, marine research/education, and commercial fishing operations. Secondly, the repairs would not expand existing facilities (i.e., all repair work would maintain existing configurations), and repairs would be completed with the best available materials (piles would be reinforced or replaced with concrete, metal (steel), composite, HDPE, and/or reinforced plastic and new/replacement docks would consist of prefabricated plastic/composite) based on the current best industry standards that limit pollution (and last longer) as opposed to treated wood. Additionally, because the proposed work involves minor improvements of existing infrastructure, there are no alternative locations for the project that could entirely avoid coastal waters (and indeed these are coastal-dependent facilities that require water to function). Based on the above considerations, the Commission therefore finds that there are no feasible less environmentally damaging alternatives to the proposed re-filling of coastal waters, and thus the project meets the second prong of the Coastal Act Section 30233 test.

The third and final prong of the Section 30233 test is that all feasible mitigation measures have been required to mitigate the impacts of the proposed fill. The primary impacts of the proposed fill are associated with disturbance of the benthic habitat and other potential impacts to the marine environment. The Port District proposes to

implement numerous mitigation measures to address water quality and biological resources, ensuring that minor improvement activities do not result in unnecessary disturbance to the benthic habitat and other coastal resources: pre-construction biological surveys for sensitive species; a limited work window for pile driving activities (i.e., no work from November 30 to June 1); environmental awareness training for all project personnel; work stoppage radius zones for marine mammals, birds, and bat species (e.g., 1,000 feet for large raptors and 120 feet for pallid bats); implementation of a “soft start” approach to serve as a warning mechanism to marine mammals during pile driving activities; deployment of a silt boom or curtain to minimize turbidity effects; and limiting maintenance and repair activities in coastal waters to that which will not expand existing development past its existing configuration and specifications (see **Exhibit 3**).

Moreover, Commission staff has worked closely with the Port District to implement additional mitigation measures to further minimize and mitigate potential adverse coastal resource impacts. For example, the Port District has agreed to include additional mitigation measures including pre-construction surveys (should work be conducted during breeding season) and increased buffer zones for sensitive species. These measures have been implemented in similar projects, including at the Santa Cruz Wharf and Capitola Pier,⁵ and are based on recommendations from the Commission’s Staff Ecologist, Dr. Lauren Garske-Garcia as is discussed in more detail in Biological Resources section below. Thus, the project as conditioned includes measures meant to augment and fill any potential gaps to the proposed project’s water quality and biological resources protection protocols (see **Special Conditions 4, 5, 6, and 7**) to protect both in-water and on-land species that may be impacted by routine minor improvement activities, thereby ensuring protection of biological resources consistent with the Coastal Act. Moreover, **Special Condition 3** (Coastal Resources Protection Plan) requires that all avoidance, minimization, and mitigation measures and best management practices as proposed by the Port District and as conditioned for via this CDP be included in one document including to allow for simple and effective implementation of the biological and water quality protection standards.

And in order to monitor the project and protect against unintended adverse coastal resource impacts, the proposed project is conditioned to be limited to an initial five-year term, to require re-evaluation of the permit should the Port District wish to extend the permit beyond the initial five-year term, and to require pre-activity and post-activity reports. Specifically, **Special Condition 2** would limit authorized activities to an initial five-year permit term limit. Additionally, **Special Condition 8** requires submittal of an annual work plans for Executive Director review and approval and post-activity reports and accompanying as-built plans including to ensure that the development is limited to the minor improvement activities explicitly authorized by this permit. The post-activity reports and accompanying as-built plans will describe all minor improvement activities completed and shall be submitted within 90 days after completion of work. Finally, **Special Condition 10** requires that any modifications to activities authorized by this CDP shall require a CDP amendment, unless the Executive Director determines that no

⁵ CDPs 3-18-1081 and 3-20-0431.

amendment is legally necessary. With these conditions in place, the Commission finds that this CDP and its special conditions satisfy the third prong of Coastal Act Section 30233(a) and that feasible mitigation measures have been provided to minimize adverse environmental effects.

For the reasons above, and as conditioned, the Commission has determined that the project has satisfied all three prongs of the Section 30233 test and is therefore consistent with Section 30233 of the Coastal Act.

2. Biological Resources and Water Quality

Applicable Coastal Act Provisions

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.*

Analysis

The Harbor is located at the northern end of Monterey Bay. 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. Annual seasonal upwelling brings nutrient rich, cold water up from the Monterey Bay Canyon, which causes the bay to teem with microscopic life and krill. In turn, this upwelling provides an abundance of nutrition for numerous species along the food chain and supports a wide range of marine life, including benthic communities, marine mammals, turtles, and fish. While the abundance of some of the whale species varies seasonally in the bay, many marine mammal species such as seals, sea lions, porpoises, dolphins, and sea otters are year-round residents of the bay.

The proposed project area is within a dredged estuarine habitat that serves as a working harbor, includes intertidal and subtidal habitat, and is surrounded by infill

development. Species of marine mammals, fish, marine birds, and planktonic organisms inhabit the water habitat within the Harbor. Commonly observed marine mammal species within the surrounding Monterey Bay include the harbor seal, California sea lion, Harbor porpoise, and the California sea otter. Predictions of marine mammal presence and density are typically based on average observations over many years and therefore may not reflect the actual behavior of all individuals within a species, or the variation in abundance or occurrence that may occur in a single year or season. Observed species of fish within the project area include steelhead, coho salmon, the tidewater goby, and green sturgeon. Marine bird species observed in the area of the Harbor include brown pelicans, double-crested cormorants, and western snowy plover. Both shorebirds and migratory birds may utilize the open space areas in and around the Harbor. Lastly, the intertidal and subtidal habitats support many diverse species, including invertebrates such as anemones, barnacles, mussels, snails, and starfish.

The Port District prepared a Biological Assessment (BA) of the proposed project to determine to what extent the minor improvement activities may affect aquatic or terrestrial species listed as threatened or endangered, or for species that are candidates for listing, along with any designated or proposed critical habitats, Essential Fish Habitat, and Habitat Areas of Particular Concern.⁶ This BA presents technical information about project actions and assesses potential effects to threatened, endangered, or proposed threatened or endangered aquatic or terrestrial species and their habitats. Endangered or sensitive species with the potential to occur within the proposed project area and action area⁷ include southern sea otter (*Enhydra lutris nereis*), Coho Salmon (*Oncorhynchus kisutch*), Central California Coast steelhead (*Oncorhynchus mykiss*), tidewater goby (*Eucyclogobius newberry*), North American green sturgeon (*Acipenser medirostris*), western snowy plover (*Charadrius nivosus nivosus*), tide water goby (*Eucyclogobius newberry*), and the Santa Cruz tarplant (*Holocarpha macradenia*). However, the BA concluded the proposed project only has the potential to affect steelhead, coho salmon, green sturgeon, and southern sea otter, as project activities will occur outside the habitats of tidewater goby, western snowy plover, and the Santa Cruz tarplant. Additionally, a memorandum prepared by the Port District (see pages 5-8 of **Exhibit 3**) identified additional bird and bat species that may be affected by the proposed project. These include the Pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and additional birds such as gulls (*Larus* spp.), double-crested cormorants (*Phalacrocorax auratus*), and brown pelicans (*Pelecanus occidentalis*).

The proposed project would allow for relatively minor improvement activities necessary to maintain and improve facilities for recreational boating and commercial fishing.

⁶ This Biological Assessment was prepared to support informal consultation with the National Marine Fisheries Service (NMFS) and U.S. Fish & Wildlife Service under Section 7 of the Federal Endangered Species Act (ESA), and with NMFS for Essential Fish Habitat under the Magnuson-Stevens Fishery Conservation and Management Act. See Appendix A.

⁷ The project area refers to locations where work activities could occur, while the action area is defined as a 300-foot buffer around the project area to account for temporary increases in construction-related noise (see Appendix A)

Proposed activities with the potential to adversely affect sensitive biological resources include piling operations, repair or replacement of structures in coastal waters, and the use and transporting of materials hazardous to marine resources, including concrete, fluids, and oils associated with mechanized equipment. Potential direct and indirect impacts to biological resources from operation and maintenance activities are anticipated to be similar to those associated with previously permitted activities and include effects from equipment operation (e.g., noise, disturbance), and the discharge of materials into the marine environment. Because the minor improvement activities, as proposed, have the potential to adversely impact marine resources, the BA and memorandum outlined BMPs that are incorporated into the project (see **Exhibit 3**) to avoid or minimize effects. Special conditions (as described below) are also required to codify the proposed minimization measures or provide additional protection and enhancement of coastal water quality, marine wildlife, and habitats consistent with the Coastal Act.

Piling Repair and Replacement

The proposed project includes the replacement and repair of existing wooden⁸, concrete, and/or steel piles located throughout the Harbor as needed (i.e., when a pile becomes damaged/destroyed). The proposed project would allow a maximum of 75 replacement piles per year and the repair (i.e., placement of custom fitted sleeves consisting of concrete, metal, composite, HDPE, or reinforced plastic) of any damaged piles.⁹ Additionally, the Port District proposed emergency work to replace up to 5 piles per year outside of the normal work window (i.e., from June 1st to November 30th); however, this time period is during the migration season of the federally-protected CCC steelhead and no additional BMPs were proposed to protect this species during construction activities. To protect CCC steelhead and to ensure that the regulatory requirements related to emergency CDPs to ensure broad protection of coastal resources are upheld, **Special Condition 4** eliminates the built-in allocation of 5 emergency piling replacements during steelhead migration season each year (between November 30th and June 1st) In the event emergency piling replacement is deemed necessary to protect life and/or property from an immediate threat during this window, the Port District can apply for an Emergency CDP for such work.

Structural damage to existing wooden, concrete, and/or steel piles commonly occur at the waterline due to tidal action, saltwater exposure, marine borers, storms, and general weathering factors which affect the lifecycle of piles. The majority of piles needing replacement will be replaced with small-diameter (between 14 and 16-inch diameter) piles, which would be installed using a small impact hammer (with cushion blocks to attenuate sound), vibratory hammer, or hydraulic jetting. All piles slated to

⁸ Existing wooden piles would be replaced with concrete, metal (steel), composite, HDPE, or reinforced plastic.

⁹ The numbers of pilings to be replaced per repair cycle will depend on the observed damage at the time. Thus, each specific cycle may be different than the estimated values presented, which are intended to present a maximum estimate.

be removed would be extracted using a mobile crane located landside or on a floating barge. The replacement piles would be composed of any of the following materials: concrete, metal (steel), composite, high density polyethylene (HDPE), and/or reinforced plastic; specifically, existing piles will not be replaced with wood. For damaged pilings that do not require a full replacement, the proposed project would allow the repair of such pilings by placing custom fitted sleeves around the damaged piles, consisting of concrete, metal, composite, HDPE or reinforced plastic. Additionally, repairs may be carried out by applying marine-grade grout, which would be applied using hand tools from a boat and/or dock.

Because pile driving activities would be carried out both above and within marine waters, the project has the potential to result in adverse impacts to both marine organisms and the marine environment (see also “Water Quality” discussion below). Specifically, the proposed pile driving would elevate levels of underwater sound in nearshore waters known to support a number of species of marine mammals, including harbor seals, California sea lions, and southern sea otters. These species are protected under the Marine Mammal Protection Act, and the southern sea otter, specifically, is listed as threatened under the Endangered Species Act. Additionally, waters near the project area support a number of marine fish species, including steelhead, Coho salmon, and green sturgeon. Steelhead and green sturgeon are listed as threatened under the Endangered Species Act, while Coho salmon is listed as endangered.

Marine mammals are known to be susceptible to disturbance and injury from high levels of human-generated underwater sound (see also below). Marine mammals rely on sound for communication and the ability to sense their environment for a variety of critical life functions (e.g., traveling, finding mates or young, foraging, etc.). Although an animal may communicate and sense its environment in many ways and with a variety of different sensory organs, light can only penetrate a few hundred feet underwater while sound can travel much farther. Because water is denser than air, sound travels faster and farther in the ocean. Its speed and distance depend on the density of the water (determined by its temperature, salinity, and depth) and the frequency of the sound, measured in hertz (Hz). For example, noise waves bend toward colder, denser water.¹⁰ Some sounds, particularly low-frequency ones, can cover vast distances, even across ocean basins. As a result, cetaceans and other marine mammals have evolved to rely primarily on sound to sense their environment, communicate, and avoid predators. Increased anthropogenic generated noise in the marine environment has been shown to interfere with these activities and in some cases to cause internal injury, stranding, and mortality. Similar adverse impacts exist for fish and invertebrates as they also use sound for basic life functions.

Sound pressure pulses as a function of time are referred to as a waveform. Peak waveform pressure underwater is typically expressed in decibels (dB) referenced to 1 microPascal (μPa). Sound levels are generally reported as peak levels (peak),

¹⁰ See, for example, <https://www.nrc.gov/docs/ML1225/ML12250A723.pdf>.

root-mean-square pressure (RMS) and sound exposure levels (SEL). In addition to the pressure pulse of the waveform, the frequency of the sound (in Hz) is also important to evaluating the potential for sound impacts. Low frequency sounds are typically capable of traveling over greater distances with less reduction in the pressure waveform than high frequency sounds.

The striking of a pile by a pile-driving hammer creates a pulse of sound that propagates through the pile and radiates out through the water column, seafloor, and air. Exposure of marine mammals or fish to low levels of sound for a relatively long period of time, or exposure to higher levels of sound for shorter periods of time, may result in auditory tissue damage (damage to the sensory hair cells of the ear) or temporary hearing loss referred to as a “temporary threshold shift” (TTS). Species may recover from TTS minutes to days following exposure. An additional possible effect on hearing from loud underwater sound is referred to in the literature as a permanent threshold shift (PTS). PTS is a permanent loss of hearing and is generally accompanied by death of the sensory hair cells of the ear. Several studies carried out in recent years suggest that instantaneous exposure to a peak sound pressure level (known as SPL) as well as from accumulated exposure to a lower sound level over a longer period of time (known as cumulative sound exposure level (SEL)) can affect hearing through auditory tissue damage.

Marine mammals have been divided into hearing sensitivity groups, referred to as functional groups, under the assumption that there will be differences in hearing sensitivity and dynamic hearing range between the various species. For example, it is assumed that there are only minor differences between the hearing systems of baleen whales, and thus all baleen whales are classified into the Low-Frequency cetaceans hearing group, while pinnipeds in the water are divided into phocid seals (earless) and otariids (eared seals) (NMFS 2018). NOAA (National Oceanic and Atmospheric Administration) Fisheries compiled and summarized the best available information on the effects of sound on marine mammals' hearing into the NMFS (National Marine Fisheries Service) “Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing.” This document provides technical guidance for assessing the effects of underwater man-made sound on the hearing of marine mammal species (i.e., onset of PTS and TTS) by identifying acoustic thresholds that may harass or injure marine wildlife. In addition, substantial progress has been made in quantifying marine mammal hearing and the effects of noise on hearing for a range of taxa in the past few years with updated acoustic thresholds being released annually over the past two years, with the most recent guidance published in 2019.¹¹ This most recent update reflects the latest science and generally indicates that animals are more sensitive than previously thought, and includes acoustic thresholds for amphibious species, such as the sea otter, and reclassified several function groups based on new scientific knowledge. Similarly, in 2008, an interagency working group comprised of representatives of state and federal resource management agencies from California, Oregon, and Washington developed recommendations of peak and accumulated sound levels to be used as

¹¹ Southall et al, 2019.

thresholds for injury to fish, which are used as the current standard.

Pile driving produces high sound pressure levels in both the surrounding air and underwater environment. Sound levels vary substantially and are specific to the materials and methods in use, such as the method of pile driving, the pile materials, and the diameter of the pile. The two basic pile driving methods are impact pile driving, where the pile is driven by strikes from a high-energy hammer, and vibratory pile driving, where the pile is effectively vibrated into the sediment. One advantage of using a vibratory hammer is it creates reduced ground vibrations and noise levels compared to impact pile driving, which produces a loud, impulsive sound during every strike. This makes vibratory hammers the preferred alternative.

To minimize the damaging effects of sound to marine mammals and fish during pile driving activities, the proposed project includes several noise minimization protective measures when driving piles with an impact hammer such as an implementation of the “soft start” technique and use of sound dampening devices. The “soft start” or ramp-up technique allows fish and mammals to vacate the area before regular pile driving activities commence. The “soft start” technique begins with a slow increase of impact hammer energy (i.e., an initial set of three strikes made by the hammer at 40 percent energy, followed by a one-minute waiting period, then two subsequent three-strike sets) before initiating continuous pile driving. These proposed noise minimization measures are specified in **Exhibit 3** and augmented by **Special Conditions 3** and **5** to be implemented during all pile driving activities.

To determine the distance from the active site of pile driving that may harass or injure marine wildlife (i.e., onset of PTS and TTS), referred to as an Exclusion Zone (EZ), the Port District completed a hydroacoustic testing assessment to establish baseline sound levels. Average noise levels within the Harbor ranged from 127 to 138 decibels (dB); therefore, it is expected that species inhabiting the area are habituated to these noise levels.¹² Based on the results of the hydroacoustic monitoring report and recommendations from Staff, the Port District is also proposing a sea otter EZ which includes any areas where sound is expected to reach above 160 db. Additionally, the Port District proposes work stoppage zones for marine mammals, raptors, passerines, other avian species, and bats (detailed in **Exhibit 3**). The Port District also proposes to conduct an Environmental Awareness Training program for all project personnel and to designate one project crew member as a point-of-contact for any encounters with protected species during the course of construction.¹³ All of these minimization and mitigation measures have been codified into **Special Condition 3**.

¹² The exclusion zone is defined as the radial distance between the work site and the locations at which the maximum recorded peak sound pressure level (SPL) or cumulative sound exposure level (SEL) falls below the temporary threshold shift (TTS) and permanent threshold shift (PTS) levels for marine mammals and fish.

¹³ The maintenance crew will be trained by a qualified biologist approved by USFWS and NMFS using an approved Environmental Awareness Training Program developed for the proposed project (see Exhibit 3).

With these measures in place, adverse impacts to marine mammals and fish species during pile driving activities will not degrade those resources and they will be maintained and the project can be found consistent with Coastal Act Sections 30230 and 30231.

Turbidity and Water Quality Impacts

The proposed project involves construction within or adjacent to coastal waters, which can cause water quality impairment from sediment disturbance and runoff, equipment leaks, and spill of construction materials with the potential to adversely affect water quality through the discharge of harmful materials and disturbance of contaminated sediments in coastal waters. Specifically, the project includes pile removal, pile driving, and embankment repairs, all of which have the potential to increase sediment load in the water column. In particular, hydraulic jetting has the potential to adversely impact sensitive benthic species because water jetting forces silt into the water column, which increases turbidity, reduces dissolved oxygen, and may smother and suffocate bottom-dwelling organisms, especially those that are suspension feeders. Project activities may result in a temporary disturbance of Harbor sediments, thereby increasing turbidity and total suspended sediment (TSS).

Piling replacement activities and associated turbidity and water quality impacts have the potential to adversely impact CCC Steelhead (*Oncorhynchus mykiss*), a federally protected species. Steelhead may use the project area as a migratory corridor; however, major project activities will fall outside of the steelhead migration season (see **Exhibit 3**, as codified via **Special Condition 4**).¹⁴ Additionally, any effects to turbidity will be temporary in scope and only occur within the vicinity of the work area. Lastly, the Port District has proposed Water Quality BMPs, such as the use of a turbidity curtain and general practices to reduce accidental spills (see **Exhibit 3**); these have been codified via **Special Condition 3**. Therefore, the proposed project is designed to maintain the biological productivity and quality of its surrounding waters, consistent with Coastal Act Sections 30230 and 30231, and potential adverse impacts to steelhead during piling replacement are appropriately addressed.

Lighting of the Marine Environment

The effects of artificial light on shallow marine species, including fish, amphipods, and sessile invertebrates have been documented in recent years, and include effects on physiology, navigation, reproductive behavior, predation success, community structure, and ecosystem services (i.e., the benefits people obtain from ecosystems, such as food and recreation).¹⁵ Artificial night lighting could potentially affect terrestrial and avian species associated with the shore (e.g., sleeping organisms become more susceptible to predation by nocturnal species). Sessile marine organisms could be affected by changes to diurnal cues for reproduction by being more visible to predators, or due to altered growth patterns (e.g., photosynthesizers). To minimize impacts from artificial lighting of the marine environment, project activities are proposed to occur between the

¹⁴ Steelhead migration occurs between December and June.

¹⁵ Garratt, M., et al. (2019). *Mapping the consequences of artificial light at night for intertidal ecosystems*. Science of the Total Environment, 691, 760-768.

hours of 8am and 6pm (see Appendix A). **Special Condition 7** requires all work to occur during daylight hours (i.e., from 8am to 6pm), except that the Executive Director may authorize non-pile-driving and non-in-water nighttime work if there is a demonstration of extenuating circumstances.

Nesting Birds and Bats

More than 180 different marine bird species visit or live in the Monterey Bay. Some seabird or shorebird species flock to the area to feed on the teeming numbers of fish that are present due to the upwelling of nutrient-rich coastal waters, while others may stop on their annual “Pacific flyway” migration between southern wintering grounds in Central and South America to northern breeding sites along the North Slope of Alaska.

A variety of bird species are known to use habitats within and around the Santa Cruz Small Craft Harbor. Bird species with the potential to be near the Harbor are afforded protection under the Migratory Bird Treaty Act. The project area includes suitable habitat for gulls (*Larus* spp.), double-crested cormorants (*Phalacrocorax auritus*), herons, and brown pelicans (*Pelecanus occidentalis*). The upper Harbor area is in close proximity to rookeries of great blue herons (*Ardea Herodias*) and great egrets (*Ardea alba*), located within a eucalyptus grove. Lastly, Western snowy plovers (*Charadrius alexandrinus nivosus*), a threatened species under the Endangered Species Act, are known to breed at Seabright State Beach, located immediately west of the proposed project (see **Exhibit 1**). Two bat species, the Pallid bat (*Antrozous pallidus*) and Townsend’s big-eared bat (*Corynorhinus townsendii*), in addition to other common bat species, can potentially roost within the Murray Street Bridge.¹⁶

In terms of potential construction noise disturbance to these coastal birds and bats, the potential impacts are not anticipated to be significant due to the temporary nature of construction activities and because undisturbed foraging and rest area not far from the Harbor will be available to birds for the duration of the construction window. However, construction equipment and noise generated from the proposed project have the potential to impact bird nesting and roosting habitat within the vicinity of the proposed project, which could affect nesting survivorship. Additionally, noise impacts may affect bat species which may nest underneath the Murray Street Bridge. However, the bridge is slated to undergo significant redevelopment in the near future, and such construction will likely overlap with the proposed project discussed here. The Murray Bridge project will be subject to its own biological conditions, including to ensure the protection and minimization of potential impacts to bat species utilizing the bridge.¹⁷

To minimize potential impacts to the nesting birds and bats, the Port District has proposed to conduct pre-construction nesting bird surveys during the nesting/breeding season (from February 15 through August 31). Surveys would be conducted within 72 hours prior to the start of construction activities and any species detected would halt construction within defined work stoppage zones (see **Exhibit 3**, as modified by **Special**

¹⁶ The Murray Street Bridge divides the Upper Harbor from the Lower Harbor.

¹⁷ See staff report for CDP 3-22-0165 also scheduled for the December 16, 2022 hearing.

Conditions 3, 5, and 6). Construction within the work stoppage zones will be prohibited until the detected species has fully fledged or the nest is no longer active. Additionally, the Applicant proposes further protections for the great blue heron and egret rookeries during the breeding season (January 1 through June 15), including an on-site biological monitor for construction activities during the breeding season, implementation of noise controls, and pre-construction surveys (see page 7 of **Exhibit 3**). To protect bat species, pile driving activities scheduled within 100 feet of the Murray Street Bridge during bat reproductive season (April 1 through August 31) and/or winter roost season (October 15 through February 15) will require pre-construction surveys of the bridge prior to the start of construction (see page 7 of **Exhibit 3**). If the Port District finds roosting bats nearby, activities within specified work stoppage zones (see **Special Condition 6**) will be delayed until the roosting bats have vacated and/or juvenile bats have fully fledged. Lastly, pile driving located closer than 300 feet to Seabright State Beach will be restricted to repair work outside of the western snowy plover breeding season, unless otherwise approved by CDFW¹⁸ (see page 1 of **Exhibit 3**). Additionally, it is worth noting that a natural bluff serves as a physical barrier to dampen noise from pile driving activities to Seabright State Beach.

All of the above-mentioned proposed BMPs and mitigation measures are codified via **Special Condition 3**. With these measures in place, special protections are afforded consistent with Coastal Act Sections 30230 and 30231, and adverse impacts to breeding birds are appropriately addressed.

Biological Resources and Water Quality Conclusion

The proposed project would allow the Port District to complete relatively minor improvements of its existing structural elements (i.e., what is deemed necessary to maintain existing recreational boating, commercial fishing, marine research/education, and other visitor-serving opportunities and operations). The proposed project includes appropriate BMPs to protect water quality and marine resources, including pre-construction surveys and mitigation measures for protected or sensitive species; maintaining good construction-site housekeeping controls and procedures; maintenance of equipment to prevent leaks of petroleum products; and environmental awareness training for construction workers. Additional measures to minimize noise impacts from pile driving on marine mammals and fish include: a “soft start” technique for pile driving with an impact hammer; work stoppage zones; and a limited work window during certain periods of the year. The BMPs and minimization measures described in **Exhibit 3**, as modified by **Special Conditions 3, 4, 5, 6, and 7**, are enforceable components of the project. Moreover, **Special Condition 3** requires submittal of a complete list of the Applicant’s avoidance and minimization measures and BMPs, in addition to modifications required by conditions in this report, in a single document including to allow simple and effective implementation of all required coastal resource protection requirements. To further protect marine wildlife, **Special Condition 7** prohibits nighttime lighting of coastal waters and restricts construction activity to daytime hours only during the week (between 8am and 6pm, Monday through Friday). As conditioned, the project

¹⁸ Western snowy plover breeding season typically occurs between March 1 and September 30.

is consistent with Coastal Act Sections 30230 and 30231 regarding protection of marine resources and offshore habitats.

D. Public Access and Recreation

Applicable Coastal Act Provisions

The following Coastal Act policies require that public recreational access opportunities within the coastal zone be maximized and specifically protect public recreational activities in coastal areas, such as the boating, fishing, and visitor-serving activities and opportunities found in the Santa Cruz Small Craft Harbor:

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 30213. *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred...*

Section 30220. *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

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 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.*

These overlapping Coastal Act policies protect public recreational access to and along the beach/shoreline and to offshore waters for public recreational access purposes, particularly free and low-cost access. Importantly, Coastal Act Section 30210's requirement to maximize access and recreational opportunities represents a different threshold than to simply provide or protect such access, and it is fundamentally different from other like provisions in this respect. Namely, 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 distinguishes the Coastal Act in certain respects, and it provides fundamental direction with respect to projects along the California coast that raise public access issues, like this one.

Analysis

The Harbor provides a plethora of public access and visitor-serving amenities such as restaurants, gift shops, kayak and paddleboard rentals, sport fishing, beach access, and access to hiking and biking trails. Additionally, the Arana Gulch Open Space borders the northern side of the upper Harbor, providing multi-use trail opportunities and connecting the Harbor to adjacent residential neighborhoods and the Soquel Avenue corridor. The beach and jetties within the Harbor area offer a visual vantage point to observe boats entering and exiting the channel and/or observe the near-shore waters of northern Monterey Bay. Many of these opportunities are provided free or at a low cost to the public, offering enhanced accessibility to the coast.¹⁹ Thus, the Harbor provides numerous public access and visitor-serving opportunities for the general public. These no and low-cost coastal access/recreation opportunities will be maintained during the proposed maintenance and repair project because the numerous sub-projects within the overall five-year plan will not be conducted all at once. Rather, they will be staggered across the Harbor area over the extended timeframe of the project. Work taking place on any particular area of the Harbor will necessarily restrict public access to that relatively small area for safety reasons, but access, including visual access, will remain available to the rest of the harbor. Even if multiple sub-projects are conducted simultaneously across several areas of the harbor, most of the harbor and its facilities will remain open to the public. The proposed project will have no effect on the Arana Gulch trails, as no project components will be located within the open space area. Facilitating structural repair and routine maintenance of this important facility will also ensure that the Harbor remains structurally sound and safe for public use. By contrast, deferring crucial maintenance actions would compromise the condition of some the Harbor's infrastructure, and compound the ever-present challenge of maintaining the structure and protecting it for public recreational access. Therefore, the project, taken as a whole, would maximize public access by repairing aging infrastructure that the public utilizes to enjoy the coast.

In conclusion, the Harbor provides an outstanding public gateway to the coast and a means of accessing marine recreational opportunities. The five-year project's total package of small sub-projects allows maintenance needs to be addressed timely in order to facilitate ongoing public use and enjoyment of the Harbor. Accordingly, the cumulative effect of the CDP is to maximize public access, protect recreational activities, and encourage boating use for fishing, recreation, and other visitor-serving activities, and is therefore consistent with the Coastal Act's public access and recreation policies.

E. Other

Other Agency Approvals

The Applicant currently has permits from the Central Coast Regional Water Quality Control Board (Section 401 Number 34421WQ12), USFWS (Number 08EVEN00-2021-

¹⁹ Pedestrians and bicyclists can access the Harbor facilities for free; however, parking in any of the Harbor public parking lots requires a fee.

I- 0328), and National Marine Fisheries Service (Number WCR-2021-00997), and is awaiting approval of the necessary US Army Corps of Engineers' (ACOE's) permit. To ensure the minor improvements program is authorized by all regulatory agencies, **Special Condition 9** requires the Applicant to submit evidence of a valid ACOE permit prior to issuance of this CDP.

Minor Modifications

Special Condition 10 allows modifications to the terms and conditions of the CDP to allow for operational flexibility, but does so in a manner pursuant to Commission oversight. The condition requires that any modifications to activities authorized by this CDP shall require a CDP amendment, unless the Executive Director determines that such modifications will not adversely impact coastal resources and that no amendment is legally necessary. In addition, **Special Condition 2** authorizes the Executive Director to extend the validity of the CDP for terms beyond the proposed 5-year authorization. Such extension is subject to a specified protocol, including evidence that the CDP is working in terms of coastal resource protection.

F. California Environmental Quality Act (CEQA)

CEQA Section 21080.5(d)(2)(a) prohibits a proposed development from being approved if there are feasible alternatives and/or feasible mitigation measures available that would substantially lessen any significant adverse effect that the development may have on the environment. The Santa Cruz Port District, acting as the CEQA lead agency, determined that the project was Categorical Exempt under Section 15301(d) "Existing Facilities".

The Commission's review, analysis, and decision-making process for CDPs and CDP amendments has been certified by the Secretary of the Natural Resources Agency as being the functional equivalent of the environmental review required by CEQA (CCR Section 15251(f)). Accordingly, in fulfilling that review, this report has analyzed the relevant coastal resource issues with the proposal and has identified appropriate and necessary modifications to address adverse impacts to such coastal resources. All above findings are incorporated herein in their entirety by reference.

Accordingly, the Commission finds that only as modified and conditioned herein will the proposed project avoid significant adverse effects on the environment within the meaning of CEQA. As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects that approval of the proposed project, as modified, would have on the environment within the meaning of CEQA. If so modified, 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).

5. APPENDICES

A. Appendix A – Substantive File Documents²⁰

- National Marine Fisheries Service (2018). Revisions to: *Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0): Underwater Thresholds for Onset of Permanent and Temporary Threshold Shifts*. U.S. Dept. of Commerce, NOAA. NOAA Technical Memorandum NMFS-OPR-59, 167 pp.
- Garratt, M. J., Jenkins, S. R., & Davies, T. W. (2019). *Mapping the consequences of artificial light at night for intertidal ecosystems*. *Science of the Total Environment*, 691: 760-768.
- Southall, B., et al. (2019). *Marine Mammal Noise Exposure Criteria: Updated Scientific Recommendations for Residual Hearing Effects*. *Aquatic Mammals* 45(2): 125-232.
- Horizon Water and Environment (2020). *Biological Assessment: Routine Maintenance Activities in the Santa Cruz Harbor*.
- CDP File 3-22-0280

B. Appendix B – Staff Contact with Agencies and Groups

- Santa Cruz Port District
- City of Santa Cruz
- Santa Cruz County
- Central Coast Regional Water Quality Control Board
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- National Marine Fisheries Service

²⁰ These documents are available for review in the Commission's Central Coast District office.