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STAFF REPORT: PERMIT AMENDMENT

APPLICATION NO.:	1-08-047-A1
APPLICANT:	Crescent City Harbor District
AGENT:	Stover Engineering
LOCATION:	Along the approximately 1,150-foot-long Inner Boat Basin breakwater within Crescent City Harbor, 101 Citizens Dock Road, Crescent City (Del Norte County). APN 117-020-16.
DESCRIPTION OF PROJECT	
PREVIOUSLY APPROVED:	Rehabilitate the Crescent City Harbor Inner Boat Basin breakwater by: (1) installing a concrete diaphragm longitudinally down the middle of a wave-impact prone 585-foot-long segment of the outer arm length of the breakwater; (2) returning a $\pm 1,000$ -foot length of the eroded breakwater to its original +14 feet above mean seas level (msl) elevation; (3) raising the height of a 426-foot- length of the end of the breakwater from +14 feet msl to +16 feet msl by applying ½- to 2-ton rock atop the structure; (4) replacement of armor stone with larger class armor stone in various erosion- prone locations along the breakwater; (5) augmenting a 720-foot-long by 10-foot-wide area along the inboard breakwater face with 6-ton rock; and (6) placing topsoil fill and revegetating the top of the reconstructed breakwater.

DESCRIPTION OF PROPOSED	
AMENDMENT REQUEST:	Modify permit granted for rehabilitation of the Harbor's Inner Boat Basin breakwater to authorize additional repairs to the southerly 240 feet of the breakwater damaged as a result of the March 11, 2011 tsunami including: (a) extending the concrete diaphragm longitudinally down the middle and to the end of the breakwater in a manner that raises the height of this section of breakwater to an elevation of 14 feet above mean sea level (msl); and (b) placing topsoil fill and revegetating the top of the reconstructed breakwater.
STAFF RECOMMENDATION:	Approval with Conditions.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends **approval** with conditions of the coastal development permit amendment application on the basis that, as conditioned by the Commission, the project is consistent with the Chapter 3 policies of the Coastal Act.

The permit amendment request would modify Coastal Development Permit (CDP) No. 1-08-047 to authorize as permanent development improvements to the southerly 240 lineal feet of the Inner Boat Basin breakwater that were authorized on a temporary basis by Emergency Permit No. 1-11-032-G.

The original permit to be amended authorized various improvements to all but the most southerly 240 feet of the breakwater. The primary component of the original project involved installing a continuous concrete diaphragm down the middle of a 585-lineal-foot length of the breakwater and backfilling along the sides of the diaphragm with six-ton quarry rock. Prior to the commencement of construction of the original project, the Crescent City Harbor experienced extensive damage from the March 11, 2011 tsunami generated by the 9.0 magnitude Tohoku Earthquake off the coast of Japan. Virtually all of the docks in the Inner Boat Basin were destroyed and many vessels sank, leaving the Inner Boat Basin non-functional. The tsunami damaged the entire breakwater, including the southerly 240 feet of the breakwater not addressed in the originally approved permit.

The Harbor District applied for and received Emergency Permit No 1-11-032-G (See Exhibit No. 9) on October 3, 2011 to perform needed tsunami damage repairs to the Inner Boat Basin including rehabilitating the southerly 240 feet of the Breakwater. The Harbor District completed the breakwater rehabilitation project by mid-November, 2011. The proposed breakwater improvements that the permit amendment would make permanent

include extending the three-foot-wide by seven-foot-deep, steel-bar reinforced, pouredin-place concrete diaphragm through the end of the breakwater, backfilling six-ton quarry rock along both sides and on top of the diaphragm, and adding additional rock and earthen materials on top of the end of the breakwater to raise its height by two feet.

The proposed improvements involve wetland fill as the development replaces portions of the existing breakwater that are touched by high tides. Staff believes the proposed improvements are consistent with Section 30233 of the Coastal Act as the fill is for an allowable commercial fishing and recreational boating uses, the development is the least environmentally damaging feasible alternative in part because the footprint of the breakwater was not expanded to cover any additional harbor bottom area, and the development incorporates feasible mitigation measures. During project construction, the applicant implemented various best management practices to avoid significant adverse water quality impacts that had been proposed by the applicant and required to be implemented by Emergency Permit No 1-11-032-G. To ensure consistency with Section 30253 of the Coastal Act, staff recommends Special Condition No. 9 which requires the applicant to assume the risks of extraordinary erosion and flood hazards of the breakwater area and waive any claim of liability on the part of the Commission.

With inclusion of Special Condition No. 9, staff recommends that the Commission approve coastal development permit amendment request No. 1-11-007. The recommended motion and resolution are shown on page 5.

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APPENDICES

<u>Appendix A – Standard Permit Conditions</u> <u>Appendix B –Substantive File Documents</u>

EXHIBITS

- Exhibit 1—Regional Location Map
- Exhibit 2—Vicinity Topographic Map
- Exhibit 3—Site Plan Aerial Photo
- Exhibit 4—Oblique Aerial Photo
- Exhibit 5—Original Project Site Plan
- Exhibit 6—Amended Project Plans
- Exhibit 7—Amended Project Description
- Exhibit 8—Emergency Permit No. 1-11-032-G
- Exhibit 9—NOAA Fisheries Consultation
- Exhibit 10—Original Permit Findings

I. MOTION AND RESOLUTION:

Motion:

I move that the Commission approve Coastal Development Permit Amendment No. 1-08-047-A1 pursuant to the staff recommendation.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in approval of the amendment as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves the coastal development permit amendment and adopts the findings set forth below on grounds that the development as with the proposed amendment, as conditioned, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit amendment complies with the California Environmental Quality Act because feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment.

II. STANDARD CONDITIONS:

See <u>Appendix A</u>.

III. SPECIAL CONDITIONS:

<u>Note</u>: The original permit (CDP No. 1-08-047) contains 8 special conditions, all of which are reimposed as conditions of CDP Amendment No. 1-08-047-A1 without any changes and remain in full force and effect. Special Condition No. 9 is a new special condition attached to CDP Amendment No. 1-08-047-A1. For comparison, the text of the original permit conditions is included in Exhibit No. 10.

9. Assumption of Risk for CDP Amendment No. 1-08-047-A1

By acceptance of this permit amendment, the applicant acknowledges and agrees: (i) that the site may be subject to hazards from waves, tidal inundation, and other hazards; (ii) to assume the risks to the applicant and the property that is the subject of this permit of

injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project 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.

IV. FINDINGS AND DECLARATIONS FOR APPROVAL

The Commission hereby finds and declares:

A. Amendment Request Accepted

Section 13166 of the California Code of Regulations states that the Executive Director shall reject an amendment request if: (a) it lessens or avoids the intent of the approved permit; unless (b) the applicant presents newly discovered material information, which he or she could not, with reasonable diligence, have discovered and produced before the permit was granted.

The Executive Director determined that the proposed amendment <u>would not</u> lessen or avoid the intent of the conditionally approved permit. On June 9, 2010, the Commission granted Coastal Development Permit No. 1-09-047 to the Crescent City Harbor District to rehabilitate most of the Crescent City Harbor Inner Boat Basin Breakwater, strengthening the breakwater against the effects of storm surge. The primary component of the project involved installing a continuous concrete diaphragm down the middle of a 585-lineal-foot length of the breakwater and backfilling along the sides of the diaphragm with six-ton quarry rock. The permit was approved with eight special conditions, most of which imposed requirements for the use of best management practices to control sedimentation, the spillage of hazardous construction materials, and other potential project related pollutants of harbor waters.

The current amendment request seeks to modify the permit granted for the existing residence to add authorization to rehabilitate the southerly 240 feet of the breakwater and The primary component of the amendment is to extend the concrete the concrete diaphragm approved under the original permit down the remainder of the middle of the breakwater and the development similarly involves backfilling large quarry rock along the sides of the new diaphragm. The proposed amendment would also raise the height of the end of the breakwater by two feet. The purpose of the proposed amendment is the same as that of the original permit, to improve the breakwater's capacity to protect the Inner Harbor Basin from storm surge and wave attack. The amendment simply extends the proposed rehabilitation to include the southerly 240 feet of the breakwater, a portion of the breakwater not addressed by the original permit. The amendment does not propose to eliminate or modify any of the conditions imposed by the Commission in the original permit. Therefore, the Executive Director determined that the proposed amendment

would not result in a lessening or avoidance of the intent of the originally approved permit and accepted the amendment request for processing.

B. Jurisdiction and Standard of Review

The site of the proposed project is within and adjacent to the semi-confined waters of the Crescent City Harbor, an embayment of the Pacific Ocean. The project is located in areas subject to the public trust within the Coastal Commission's area of original or retained jurisdiction. Therefore, the standard of review that the Commission must apply to the development is the Chapter 3 policies of the Coastal Act.

C. Scope

The Commission's findings address only the coastal resource issues affected by the proposed permit amendment and the special conditions imposed to reduce and mitigate significant impacts to coastal resources caused by the development as amended in order to achieve consistency with Chapter 3 of the Coastal Act. All other analyses, findings, and conditions related to the originally permitted development, except as specifically affected by the current permit amendment request and addressed herein, remain as stated within the original permit approval adopted by the Commission on June 9, 2010 (Exhibit No. 10).

D. Background.

The Commission granted Coastal Development Permit No. 1-08-047 to the Crescent City Harbor District on June 9, 2010, for the Crescent City Harbor Inner Boat Basin Breakwater Rehabilitation Project. The project had been proposed to rehabilitate and reinforce the breakwater which had been damaged by severe storms in the winter of 2005-2006. The specific development authorized in Coastal Development Permit No. 1-08-047 included: (1) installing a concrete diaphragm longitudinally down the middle of a wave-impact prone 585-foot-long segment of the outer arm length of the breakwater; (2) returning a $\pm 1,000$ -foot length of the eroded breakwater to its original +14 feet above mean seas level (msl) elevation; (3) raising the height of a 426-foot-length of the northern end of the breakwater from +14 feet msl to +16 feet msl by applying $\frac{1}{2}$ to 2-ton rock atop the structure; (4) replacement of armor stone with larger class armor stone in various erosion-prone locations along the breakwater; (5) augmenting a 720-foot-long by 10-foot-wide area along the inboard breakwater face with 6-ton rock; and (6) placing topsoil fill and revegetating the top of the reconstructed breakwater. A complete description of the approved development is included in Finding B on pages 12-14 of the Findings approved for Coastal Development Permit No. 1-08-047, attached as Exhibit No. 10.

After awarding a contract to perform the breakwater rehabilitation work authorized by Coastal Development Permit No. 1-08-047 but prior to the commencement of construction, the Crescent City Harbor experienced extensive damage from the March 11,

2011 tsunami generated by the 9.0 magnitude Tohoku Earthquake off the coast of Japan. Virtually all of the docks in the Inner Boat Basin were destroyed and many vessels sank, leaving the Inner Boat Basin non-functional. The tsunami damaged the entire breakwater, including the remaining 240 feet of the breakwater (southerly end) not addressed in the originally approved permit.

In the immediate aftermath of the disaster, Commission staff met with the Harbor District staff at the harbor and determined that the initial clean-up work to remove sunken vessels and tsunami debris was exempt from coastal development permit requirements pursuant to Section 30600(e)(1) of the Coastal Act¹. The Harbor District later applied for an emergency permit to perform other needed repairs to the Inner Boat Basin from damage caused by the tsunami damage, including (a) dredging approximately 140,000 cubic vards of tsunami-deposited sediment materials impeding safe vessel navigation within the Inner Basin, (b) excavating and replacing approximately 56,000 cubic yards of engineered rock slope protection along the shoreline embankments of the inner harbor: water; (c) removing damaged dock piles, (d) installing approximately 150 new replacement piles, (e) installing and subsequently removing 1,500 lineal feet of temporary floating docks to allow resumed use of the Inner Boat Basin by commercial fishing vessels during the high-demand fall-winter crabbing season, and (c) rehabilitating the damaged outer 240-lineal feet of the Inner Boat Basin Breakwater. On October 3, 2011, the Executive Director issued Emergency Permit No 1-11-032-G (See Exhibit No. 9) for the proposed work finding that given the critical nature of the harbor in terms of serving as both a home and transient port to commercial fishing vessels and as a harborof-refuge to all mariners, immediate and expedited action was needed to construct repairs to restore, repair, or maintain public service facilities.

The Harbor District amended the contract previously awarded for the breakwater rehabilitation work authorized under Coastal Development Permit No. 1-08-047 to include the repairs to the damaged outer 240-lineal feet of the Inner Boat Basin Breakwater authorized by the emergency permit. The Harbor District completed the breakwater rehabilitation project by mid-November, 2011.

The current permit amendment request would modify existing Coastal Development Permit No. 1-08-047 to authorize as permanent development the repairs to the outer 240lineal feet of the Inner Boat Basin breakwater Inner Boat Basin breakwater authorized on a temporary basis by Emergency Permit No. 1-11-032-G. Work authorized under an emergency permit is considered to be temporary work done in an emergency situation. If

¹ Section 30600(e)(1) of the Coastal Act exempts immediate emergency work necessary to protect life or property or immediate emergency repairs to public service facilities necessary to maintain service as a result of a disaster in a disaster-stricken area in which a state of emergency has been proclaimed by the Governor. Staff determined that the vessel and debris removal activities proposed by the Harbor District constituted immediate emergency work to a public service facility necessary to protect life and property from pollution form spilled vessel fuels and oils in a County for which Governor Brown declared a state of emergency on March 11, 2011.

a property owner wishes to have the emergency work become a permanent development, a regular coastal development permit or permit amendment must be obtained².

E. Project Setting

Crescent City Harbor is located approximately 20 miles south of the California-Oregon border in west-central Del Norte County (see Exhibit Nos.1-4). The harbor lies on the seaward edge of the broad coastal plain that extends from South Beach to the south to the lower Smith River floodplain to the north. The harbor lies within a crescent-shaped bay, with Battery Point as the upcoast (western) limit and the rocky causeway connecting the former offshore Whaler Island, approximately one mile to the southeast, as the downcoast (eastern) limit. A significant anadromous fish-bearing watercourse, Elk Creek, enters the harbor on its northeastern shoreline.

The relative location of this south-facing cove, situated between the Ports of Humboldt Bay and Brookings (Oregon), makes it an important "harbor of refuge" from the predominantly northwesterly winds and seas in the area. In addition, the constructed outer breakwaters provide supplemental protection against westerly and southerly storms. Facilities within the bounds of the harbor include a boat basin, launch areas, a repair and fabrication boatyard, associated marina fueling, lift hoist, drayage, stevedore, waste disposal services, a recreational vehicle park, and other ancillary visitor accommodations and harbor-related services.

A principal feature of the Crescent City Harbor is the Inner Boat Basin, which is located northwest of Citizen's Dock Road and comprises an approximately 17.5-acre rectangular area of water area partially enclosed by revetment covered shoreline embankment on most of three sides and the Inner Boat Basin Breakwater along its seaward side. The Inner Boat Basin is the main berthing area for commercial fishing boats and recreational vessels at the harbor.

The surfaces of the Inner Boat Basin breakwater support habitat for a diversity of marine algal, invertebrate, and fish species. Species diversity tends to be higher along the outer, seaward side of the inner boat basin compared to the inward side. According to a 2007 biological assessment completed by the funding agency, the seaward-side community is

² The development authorized by Emergency Permit No. 1-11-032-G that the applicant proposes to be made permanent under CDP Amendment No. 1-08-047-A1 is limited to the breakwater repairs authorized under the emergency permit. The applicant has separately applied for and received Commission approval on April 11, 2012 of an amendment to CDP No. 1-10-035 for authorization to make permanent the excavation and replacement of approximately 56,000 cubic yards of engineered rock slope protection along the shoreline embankments of the inner harbor. The applicant never installed the 150 replacement piles authorized under the emergency permit, utilizing instead the existing damaged piles within the Inner Boat Basin to support the temporary floating dock assemblies also authorized under the emergency permit. The other development authorized under the emergency permit did not involve development that the applicant wants to be made permanent, including the 140,000 cubic yards of dredging and the installation and removal of the temporary dock assemblies.

similar to assemblages found at nearby natural outer-coast, moderately exposed sites. Biodiversity on the inward side is believed to be decreased due to sand accumulation and scour. Organisms on the inward side of the inner boat basin are characteristic of protected high intertidal areas. No species of concern were located during the inventory. However, the harbor, in general, provides habitat to a variety of sensitive fish and wildlife species, including coho salmon and Steller sea lion. Although eelgrass (Zostera marina) beds have recently been discovered by staff of the Department of Fish & Game in certain locations within the Outer Harbor Basin and near the Administrative Dock location since the tsunami, no eelgrass has been observed in and around Inner Boat Basin breakwater.

F. Permit Amendment Description

The permit amendment request would modify the existing Coastal Development Permit No. 1-08-047 granted for rehabilitation of Harbor's Inner Boat Basin breakwater to authorize additional repairs to the southerly 240 feet of the breakwater damaged as a result of the March 11, 2011 tsunami. The additional rehabilitation work has already been completed and was authorized on a temporary basis pursuant to Emergency Permit No. 1-11-032-G granted by the Executive Director in October of 2011. The amendment request seeks to make this work performed under the emergency permit permanent development.

The original permit authorized the construction of a steel-bar reinforced concrete diaphragm down the longitudinal middle of a large portion of the breakwater to strengthen the structure against wave strikes coming into the harbor past the outer jetties. The amended development involves extending the diaphragm through the southerly 240foot segment of the breakwater.

As proposed, installation of the extended diaphragm first involves excavating the key for the diaphragm and placing Type 2 rock slope protection geo-fabric as a liner within the trench. Next, the three-foot-wide by seven-foot-deep, steel-bar reinforced, poured-in-place concrete diaphragm is then installed. The excavated six-ton rock is then placed as back fill along both sides and on top of the diaphragm. The rock fill protracts the 1.5:1 sides of the breakwater upward and inward, thereby raising the structure's height by two feet to an elevation of 14 feet above mean sea level (msl). The additional height affords greater protection against storm surge hazards. Finally, as proposed, the amended development includes pacing topsoil fill over the reconstructed top of the revetment and revegetating the soil with grasses.

Work on the breakwater was conducted during low tides for accessibility purposes. Equipment needed for the project included a loader, excavator, and possibly a crane. Portions of the adjoining parking lot area on the north side of the boat basin were used as a staging area for construction equipment and materials.

G. Protection of Coastal Waters & Water Quality.

Section 30230 of the Coastal Act states the following:

Marine resources shall be maintained, enhanced, and where feasible, restored. <u>Special protection shall be given to areas and species of special</u> <u>biological or economic significance</u>. 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. [Emphasis added.]

Section 302310f the Coastal Act states the following (emphasis added):

<u>The biological productivity and the quality of coastal waters, streams,</u> <u>wetlands, estuaries, and lakes appropriate to maintain optimum</u> <u>populations of marine organisms and for the protection of human health</u> <u>shall be maintained and, where feasible, restored through, among other</u> <u>means, minimizing adverse effects of waste water discharges and</u> <u>entrainment, controlling runoff</u>, 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. . [Emphasis added.]

Section 30232 of the Coastal Act states the following:

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 containments and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30233 of the Coastal Act states, in applicable part:

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

(1) <u>New or expanded port</u>, energy, and coastal-dependent industrial *facilities*, *including commercial fishing facilities*.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

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

(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(5) *Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*

(6) *Restoration purposes.*

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

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary...[Emphasis added.]

As discussed above, the amended development involves rebuilding the longitudinal middle of the 240-foot-long southern end of the Inner Boat Basin breakwater to strengthen the structure against wave strikes coming into the harbor past the outer jetties. As portions of this segment of the existing breakwater that are proposed to be excavated and rebuilt as part of the amended development are touched by higher stages of the tide, much of the rock and concrete material to be placed on the breakwater as part of the proposed reconstruction project constitutes wetland fill.

The amended development involves adding a concrete diaphragm to the breakwater and increasing its height. Therefore, the amended development involves an addition to and enlargement of the breakwater and the Commission must evaluate the project as a "new" development rather than as purely a repair and maintenance project. For analysis purposes, the Commission must find that the proposed fill is allowable under the limitations imposed by Coastal Act Sections 30230, 30231, and 30233.

When read together as a suite of policy directives, Sections 30230, 30231, and 30233 of the Coastal Act set forth a number of different limitations on what types of projects may be allowed in coastal wetlands and waters. For analysis purposes, the limitations applicable to the subject project can be grouped into four general categories or tests. These tests require that projects that entail the dredging, diking, or filling of wetlands and waters demonstrate that:

- The purpose of the filling, diking, or dredging is for one of the seven uses allowed under Section 30233;
- The project has no feasible less environmentally damaging alternative;

- Feasible mitigation measures have been provided to minimize adverse environmental effects; and
- The biological productivity and functional capacity of the habitat shall be maintained and enhanced, where feasible.

Each category is discussed separately below.

Permissible Use for Dredging and Filling in Coastal Waters

The first test set forth above is that any proposed filling, diking, or dredging in coastal waters and wetlands must be for an allowable purpose as specified under Section 30233 of the Coastal Act. The allowable categories of uses listed under Section 30233(a) that relate to the proposed breakwater rehabilitation improvements are subsection (1) involving new or expanded port facilities, including commercial fishing facilities, and subsection (3) in open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities that provide public access and recreational opportunities.

As discussed previously, the breakwater is an integral part of the Crescent City Harbor Inner Boat Basin which was constructed to create a harbor for commercial fishing and recreational boaters to moor, launch, and retrieve their boats. Without the project, the breakwater's deteriorated condition, would allow storm surges, especially those corresponding with high tides, to overtop the breakwater to strike the docking facilities within the boat basin. The proposed rehabilitation of the breakwater lessens the exposure of persons and property to potentially injury and damage from wave attack will be lessened.

As the applicant proposes these improvements to the breakwater for the purpose of improving the safety and longevity of commercial fishing and recreational boat mooring, loading and launching operations, the Commission concludes that the proposed fill is permissible under Section 30233(a) subsection (1) for new or expanded port facilities, including commercial fishing facilities, and subsection (3) for new or expanded boating facilities in open coastal waters, other than wetlands, including streams, estuaries, and lakes, that provide public access and recreational opportunities.

Least Environmentally Damaging Feasible Alternative

The second test set forth by the Commission's dredging and fill policies is that the proposed fill project must have no feasible less environmentally damaging alternative. Coastal Act Section 30108 defines "feasible" as follows:

"Feasible" means capable of being accomplished in a successful manner within a reasonable time, taking into account economic, environmental, social, and technological factors.

Alternatives to the proposed amended development that were examined include (1) the "no-project" alternative; and (2) alternative designs to provide greater protection from storm surge impacts and strengthening the structural integrity of the end of the breakwater's inner face. As explained below, the alternatives analyzed are infeasible and/or do not result in an amended development that is less environmentally damaging than the proposed project as conditioned:

"No-Project" Alternative

The "no project" alternative would mean that no upgrade to the height and competency of the southern end of the breakwater would be authorized. With no such improvements, the relatively minor impacts to visual resources associated with the incremental raising of the height of a portion of the outer breakwater and the less than significant impacts to intertidal wetlands habitat from the proposed rock fill would be avoided. However, without the proposed upgrades, the boat basin would remain vulnerable to damage from wave strike and eventually damaged to the point that it no longer could be used for commercial fishing vessels or recreational boating. The boat basin would likely be forced to close, and the mariners who currently use the site would be displaced. As discussed above, Crescent City Harbor has been used for commercial and recreational fishing for decades, and it provides the only harbor of refuge from the common northwesterly winds and seas between Brookings in southern Oregon and Trinidad Bay in Humboldt County. As discussed previously, commercial fishing and recreational boating are given high priority under the Coastal Act, and the Coastal Act policies call for the protection of these uses and the facilities needed to continue these uses. Therefore, the Commission finds that the no project alternative is not a feasible less environmentally damaging alternative to the proposed amended development, as conditioned.

Alternative Breakwater Enhancement Designs

Another alternative to fortifying the southern end of the breakwater with the proposed concrete diaphragm and associated rock fill would involve replacing this portion or more of the breakwater with a solid seawall by excavating the existing rock breakwater and driving inter-locking sheetpile in place of the existing rock mound breakwater. However, the excavation of the existing end of the breakwater or additional portion of the breakwater and the subsequent installation of materials to convert the breakwater into a seawall would require far more intensive over-water construction activities, would necessitate closing portions of the boat basin. Similarly, in addition to requiring closure of the boat basin, installation of sheet pile and any associated impact driving or "jetting" of the piles would have greater potential impacts to sensitive biological resources such as coho salmon, from underwater noise and sedimentation. Therefore, the Commission finds that the alternative of converting all or just the southern end portion of the existing rubble-mounded breakwater into a unified seawall to strengthen it against wave assault is <u>not</u> a feasible less environmentally damaging alternative to the proposed amended development, as conditioned.

Conclusion

For all of the reasons discussed above, the Commission finds that as required by Section 30233(a), there is no less environmentally damaging feasible alternative to the amended development, as conditioned.

Feasible Mitigation Measures

The third test set forth by Section 30233 is whether feasible mitigation measures have been provided to minimize adverse environmental impacts. The proposed amended development would be located within and around coastal waters and wetlands. Breakwater rehabilitation development within and around coastal waters and wetlands could have significant adverse impacts that may include: (1) displacement of benthic and intertidal habitat, (2) effects on sensitive fish and wildlife species; and (3) water quality impacts from the placement of sediment containing materials in and/or undertaking construction involving the use of hazardous materials in close proximity to coastal waters. The potential impacts and their mitigation are discussed below.

Displacement of Benthic and Intertidal Habitat

The amended development includes the excavation and subsequent replacement of large amounts of quarry rock from the southern end of the existing breakwater. The placement of any rock on the silty-sandy substrate of the harbor that adjoins the breakwater could displace habitat for a variety of worms, mollusks, and other benthic organisms. As proposed, however, the amended development does not include the placement of rock or other fill materials on the adjoining harbor bottom adjoining the breakwater. All of the excavation and subsequent placement of rock is proposed near the top of the breakwater in a manner that would not expand the footprint of the breakwater.

Surfaces of some of the existing breakwater rock proposed to be excavated provide hard intertidal substrate habitat that is beneficial for other kinds of sessile marine invertebrates such as barnacles and mussels. This hard intertidal substrate habitat will be partially disrupted by the proposed amended development. However, as the proposed breakwater rehabilitation includes replacing the excavated quarry rock to be removed in the same location with other quarry rock once the concrete diaphragm has been installed in the longitudinal center of the breakwater, the hard intertidal substrate habitat affected by the amended development will be restored. It is anticipated that the habitat will be relatively quickly colonized by barnacles, mussels, and other marine invertebrates.

Effects on Sensitive Fish and Wildlife Species

The National Marine Fisheries Service ("NMFS" or "NOAA Fisheries") has not reviewed the amended development involving the rehabilitation of the southerly 240 feet of the breakwater. However, NOAA Fisheries completed an informal consultation for the originally approved project (File No. 2008/04540:MLD), which outlined the project's potential effects on marine species listed under the federal Endangered Species Act and

"Essential Fish Habitat" (EFH) under the Magnuson-Stevens Fishery and Conservation Act. As discussed above, the amended development involves extending through the southerly 240 feet of the breakwater the concrete diaphragm that was authorized to be installed within most of the rest of the breakwater under the original project. As the additional development is similar in nature to the development originally approved and reviewed by NOAA Fisheries, the conclusions of the informal consultation for the originally approved project are pertinent to the amended development. The consultation addressed potential impacts to various threatened and endangered species evaluated in the biological assessment provided by the funding agency, including coho salmon (Oncorhynchus kisutch), Steller Sea lions (Eumetopias jubatus), Western Snowy Plover (Charadrius alexandrinus nivosus), Marbled Murrelet (Brachyramphus marmoratus), and California Brown Pelican (Pelecanus occidentalis), and EFH for salmon species (see Exhibit No. 8).

The NOAA Fisheries consultation concluded in a concurrence letter responding to the funding agency's biological assessment that the project may affect, but is not likely to adversely affect, listed salmonids, Steller sea lions, western snowy plovers, marbled murrelets, and California brown pelicans (see Exhibit No. 8). The consultation and concurrence letter included numerous conservation measures which, if incorporated into the project design alongside the self-imposed construction season limitations, water quality protective measures, and other performance standards, would render these potential effects to insignificant levels. Imposition of these conservation measures were incorporated into the Nationwide Permits issued for the project by the U.S. Army Corps of Engineers (see Exhibit No. 7).

In granting additional Nationwide Permits for the subject amended development, the Army Corps of Engineers reimposed these conservation measures. In addition, the conditions of approval of Emergency Permit No. 1-11-032 granted by the Executive Director for the authorization of the rehabilitation of the southerly 240 feet of the breakwater on a temporary basis incorporated these requirements. Therefore, the breakwater rehabilitation work that is the subject of amended development was required to be performed in a manner that would protect sensitive fish and wildlife species.

Water Quality Impacts

The proposed breakwater rehabilitation project could adversely affect water quality. The breakwater rehabilitation work involves placing rock within and adjacent to coastal waters with the use of heavy equipment. The use of construction equipment and materials within sensitive marine and beach habitats could lead to habitat contamination and impacts through the discharge of debris, trash, and contaminants such as leaky gas and other fluids and sediment- and other pollutant-laden runoff. Allowing such debris or pollutants to enter the ocean could adversely affect water quality and marine organisms inconsistent with Coastal Act Sections 30230, 30231, and 30232. Similarly, the proposed installation of the cast-in-place concrete diaphragm also involved the use of hazardous

materials in close proximity to coastal waters, namely the pouring of caustic wet concrete.

As summarized above, Coastal Act Section 30231 protects the quality of coastal waters, streams, and wetlands through, among other means, controlling runoff. Sediment-laden runoff from a project work site, upon entering coastal waters, increases turbidity and adversely affects fish and other sensitive aquatic species. Sediment is considered a pollutant that affects visibility through the water and affects plant productivity, animal behavior (such as foraging) and reproduction, and the ability of animals to obtain adequate oxygen from the water. Sediment is also the medium by which many other pollutants are delivered to aquatic environments, as many pollutants are chemically or physically associated with the sediment particles. In addition, Coastal Act Section 30232 requires protection against the spillage of crude oil, gas, petroleum products and hazardous substances and requires that effective containments and cleanup procedures be provided for accidental spills that do occur.

The applicant proposed certain best management practices to address water quality concerns in the emergency permit application submitted to the Executive Director for emergency authorization of the rehabilitation of the southerly 240 feet of the breakwater on a temporary basis. The emergency permit subsequently granted by the Executive Director required performance of the work consistent with the proposed best management practices and also required adherence to special conditions imposed by the Army Corps in the Army Corps's Nationwide Permits granted for the rehabilitation of the southerly 240 feet of the breakwater. Some of the special conditions of the Army Corps Nationwide permit also require the use of certain best management practices to protect water quality. Therefore, the breakwater rehabilitation work that is the subject of amended development was required to be performed in a manner that would protect the quality of coastal waters and protection against the spillage of hazardous substances.

Conclusion

The Commission finds that as conditioned, feasible mitigation measures have been provided to minimize adverse environmental effects consistent with Section 30233(a) of the Coastal Act. In addition, The Commission finds that as conditioned, the proposed amended development is consistent with Coastal Act Sections 30230, 30231, and 30232.

Maintenance & Enhancement of Biological Productivity & Functional Capacity

The fourth general limitation set by Sections 30230, 30231, and 30233 is that any proposed dredging or filling in coastal wetlands must maintain and enhance the biological productivity and functional capacity of the habitat, where feasible.

As discussed above, the amended development will not have significant adverse impacts on the water quality of any of the coastal waters in the project area and will ensure that the project construction will not adversely affect the biological productivity and functional capacity coastal waters or wetlands. Therefore, the Commission finds that the amended development, as conditioned, will maintain the biological productivity and functional capacity of the habitat consistent with the requirements of Sections 30230, 30231, and 30233 of the Coastal Act.

H. Protection of Commercial Fishing & Recreational Boating Facilities

Section 30224 of the Coastal Act states:

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, <u>providing</u> <u>harbors of refuge, and by providing for</u> new boating facilities in natural harbors, <u>new protected water areas</u>, and in areas dredged from dry land. [Emphases added.]

Section 30234 of the Coastal Act states, in applicable part:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded... [Emphasis added.]

Crescent City Harbor has long been used as a launch site for commercial and recreational fishermen, and provides the only harbor of refuge from the common northwesterly winds and seas between Brookings Oregon and Trinidad Bay in Humboldt County, as discussed above. As discussed above, the Crescent City Harbor Boat Basin, which has been managed by the applicant since the early 1970s, includes a marina access road, boat slips, parking and work areas, utilities, and the inner boat basin itself. Prior to the Harbor District's involvement, the boat mooring and launch area had been used by local commercial and sport fishermen and maintained on an ad hoc informal basis by a consortium of commercial fishing interests and other community members. In addition to Citizen's Dock, several other wooden piers were originally in place along the northern side of the harbor.

The Inner Boat Basin breakwater's capability to shelter watercraft from wave attack has been reduced due to damage from severe storms and tsunami events. In addition, the Inner Boat Basin breakwater in its damaged condition is vulnerable to further damage that would likely lead to its eventual closure if the marina is not rehabilitated. The proposed amended development involves rehabilitation of the southerly 240 feet of the breakwater that will restore and enhance the breakwater's capability to shelter watercraft from wave attack. Therefore, the Commission concludes that the amended development as conditioned protects and improves the safety of boat mooring facilities that serve commercial fisheries and recreational boating, consistent with Coastal Act Sections 30224 and 30234.

I. Protection of Visual Resources

Section 30251 of the Coastal Act states, in applicable part, the following:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas...shall be subordinate to the character of its setting.

The project area is not located within a designated highly scenic area. Additionally, the amended development will not result in the alteration of natural landforms and will require only a minimal amount of grading. Similarly, the proposed repairs and modifications to the breakwater would be compatible with the character of the surroundings in that they would approximate the size, bulk, and outward appearance of the rest of the breakwater and the other revetment structures throughout the harbor. However, the proposed amended development does include raising the crest elevation of a portion of the breakwater's formerly approved elevation from approximately +12 feet msl to +14 feet msl. This action would incrementally increase the amount of blockage of views of the ocean from certain publically accessible vantage points landward of the breakwater.

To allow a reasonable fortification of the southerly end of the breakwater to both increase its resiliency to storm surge waves and to provide a greater level of protection to the boat basin, the proposed amended development includes raising the elevation of a segment of the outer breakwater most exposed to direct wave strikes by two feet from roughly 12 feet above mean sea level to 14 feet. This action slightly reduces vistas of open sky, ocean, and offshore rocky areas, such as Whaler Island. However, the Commission finds that with this relatively minor increase in breakwater height, the adverse impact on views is not significant and numerous opportunities to view the ocean and scenic areas will remain open to the public at locations situated laterally to either side of the breakwater.

Therefore, the Commission finds that as conditioned, the amended development is consistent with the visual resource policies of Section 30251 of the Coastal Act, as the amended development is compatible with the visual character of the surrounding area,

will not result in the alteration of natural landforms, and will not result in significant additional blockage of views to and along the coast.

J. Geologic Hazards

Coastal Act Section 30253 states in applicable part:

New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The portion of the Inner Boat Basin breakwater affected by this permit amendment is located in an area of high geologic and flood hazard from waves and tidal action. The proposed breakwater rehabilitation work is necessary to repair previous damage from these hazards and strengthen the breakwater against further damage from such hazards. In developing the design for the breakwater repairs and upgrades, the applicant's consulting engineer and the project funding agency utilized established contemporary (2006 edition) construction standards and material specifications for slope protection structures and concrete paying as set forth by the California Department of Transportation. Nonetheless, due to the uncertain nature and inherent risk associated with the construction of improvements in high energy coastal environments, the Commission attaches Special Condition No. 9. Special Condition No. 9 requires the applicant to assume the risks of extraordinary erosion and flood hazards of the breakwater area and waive any claim of liability on the part of the Commission. Given that the applicant has chosen to implement the project despite these risks, the applicant must assume the risks. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for the development. The condition also requires the applicant to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand hazards.

Therefore, the Commission finds that as conditioned, the project will minimize risks to life and property from geologic and flood hazards, will assure stability and structural integrity, and will neither create nor contribute significantly to erosion, geologic instability, or erosion of the site or surrounding area consistent with the requirements of Section 30253 of the Coastal Act.

K. Public Recreation and Access

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 and 30220 through 30224 specifically protect public access and recreation. In particular:

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. [PRC §30210]

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. [PRC §30211]

Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects... [PRC §30212(a)]

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

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... [PRC §30214 (a)]

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. [PRC § 30221]

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, [...] 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. [PRC §30224] Likewise, Coastal Act Section 30240 (b) also requires that development not interfere with recreational areas and states:

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.

According to Harbor District staff, use of the top of the Inner Boat Basin Breakwater for public access purposes has not historically been encouraged or formally allowed because of safety concerns. However, no gates or barriers blocking access to the breakwater exist or are proposed as part of the proposed amended development.

In the broader context, Crescent City Harbor provides public access and recreational opportunities of regional and statewide significance. These opportunities include boat launching, berthing for commercial vessels and recreational boats, boat repair areas, marine-related retail/commercial businesses, sailing programs, yacht club and boat sales, and passive recreational pursuits, such as shoreline walking, beachcombing, and bird-watching. The amended development benefits public access and recreation by restoring and providing enhanced protection from coastal flooding and storm surge to the harbor's berthing areas and adjoining walkways.

Therefore, the Commission finds that, as conditioned, the amended development preserves public access and recreational opportunities and, is consistent with Coastal Act Sections 30210, 30213, 30220, 30224, 30234 and 30234.5.

L. California Environmental Quality Act (CEQA)

The Crescent City Harbor District served as the lead agency for the original project for CEQA purposes. The District found the subject inner boat basin breakwater repairs and upgrades qualified for "Class 1" and "2" categorical exemptions to environmental review, pursuant to Sections 15301 and 15302 of the CEQA Guidelines (14 CCR §§15000) as repair, maintenance, replacement, and/or reconstruction of existing structures.

In response to the March 11, 2011 tsunami, the Governor of California declared a state of emergency for Del Norte and other affected coastal counties. The District found the additional repairs and actions needed to respond to the devastation caused by the March 11, 2011 tsunami qualified for categorical exemptions to environmental review, pursuant to Section 15269 of the CEQA Guidelines (14 CCR §§15000) as "Emergency Projects."

Section 13906 of the California Code of Regulation requires Coastal Commission approval of a coastal development permit application to be supported by findings showing that the application, as modified by any conditions of approval, is consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Public Resources Code 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 significantly lessen any significant effect that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed amended development has been conditioned to be consistent with the policies of Chapter 3 of the Coastal Act. The findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As specifically discussed in these above findings, which are hereby incorporated by reference, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the Commission finds that the proposed amended development, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A: STANDARD CONDITIONS

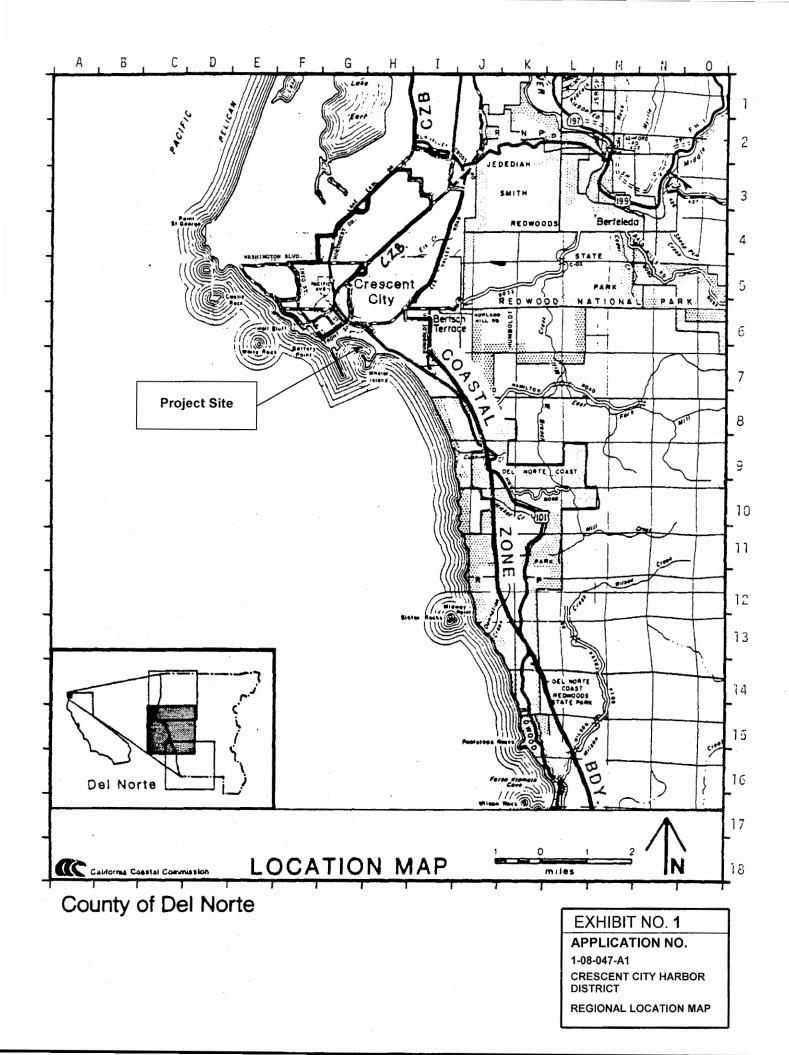
- 1. <u>Notice of Receipt and Acknowledgment</u>. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. <u>Expiration</u>. 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. <u>Interpretation</u>. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. <u>Assignment</u>. 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. <u>Terms and Conditions Run with the Land</u>. 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.

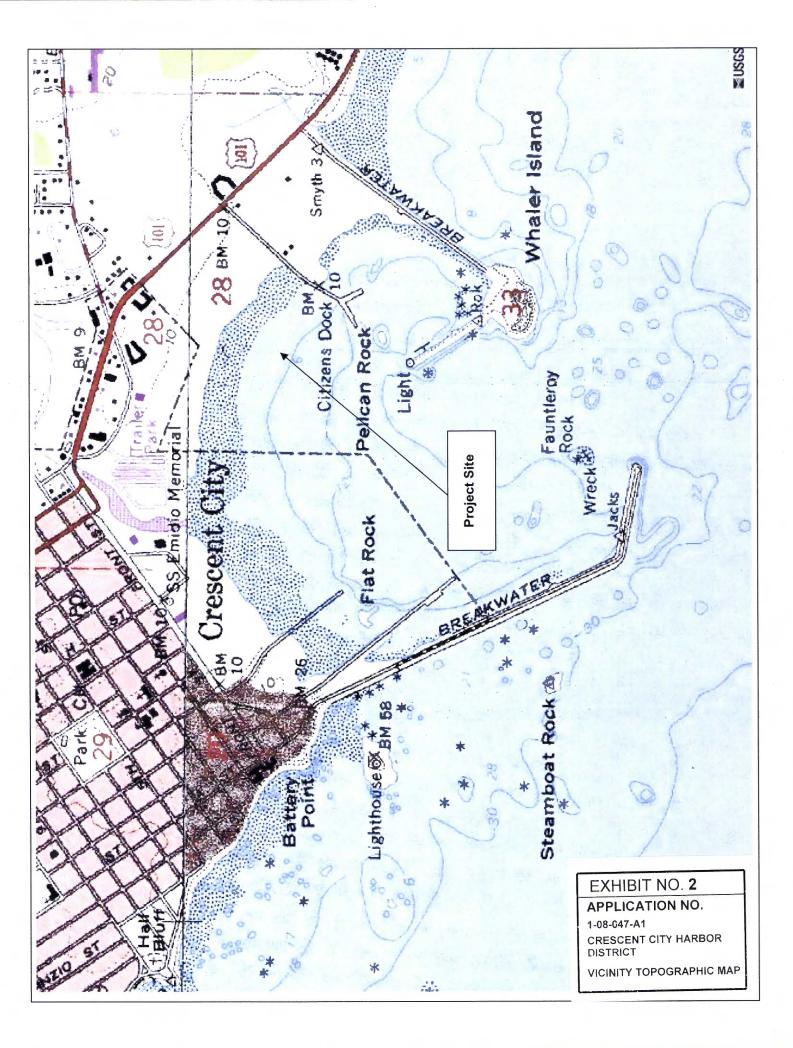
APPENDIX B: SUBSTANTIVE FILE DOCUMENTS

Del Norte County Local Coastal Program

Emergency Permit No. 1-11-032-G

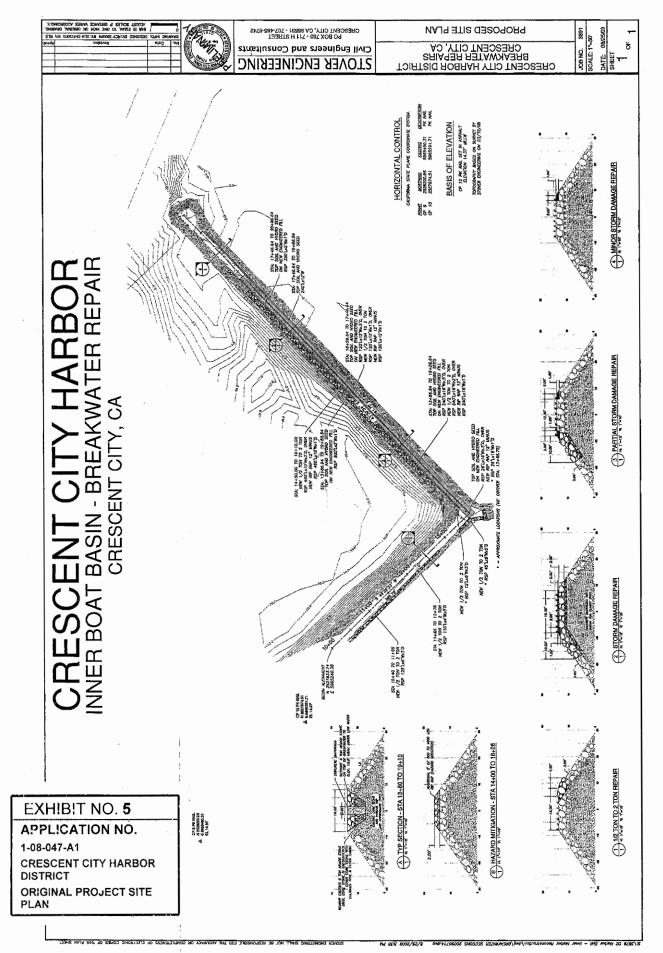
Coastal Development Permit No. 1-08-047



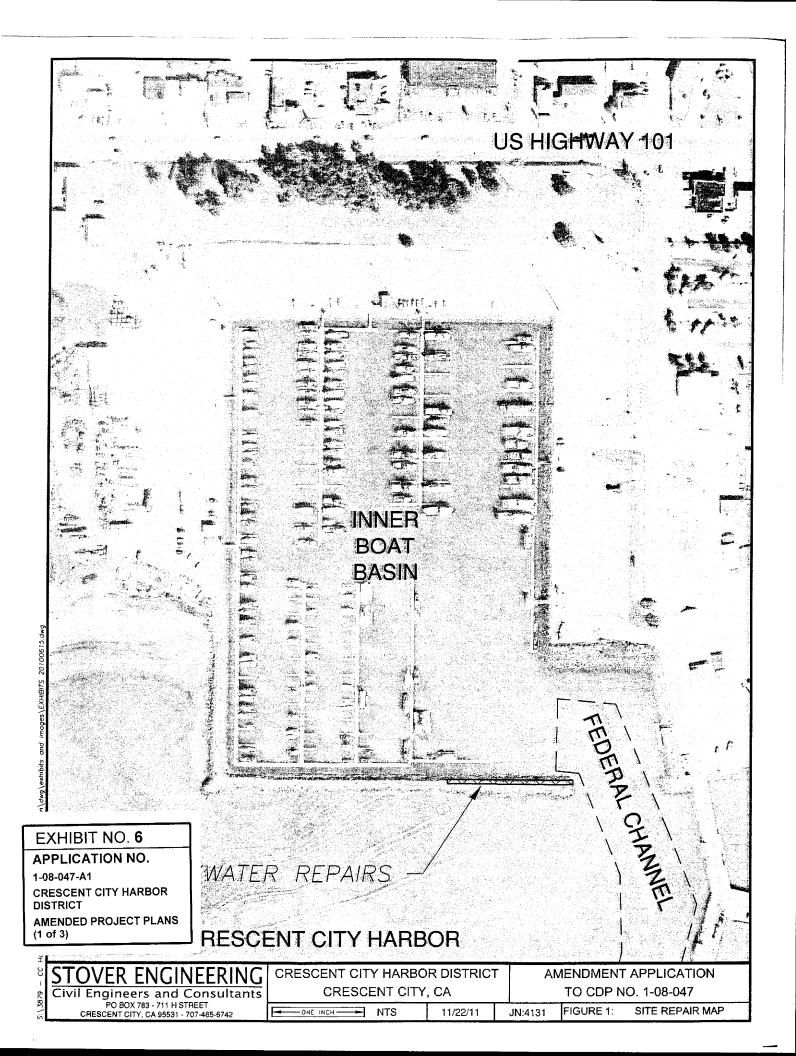


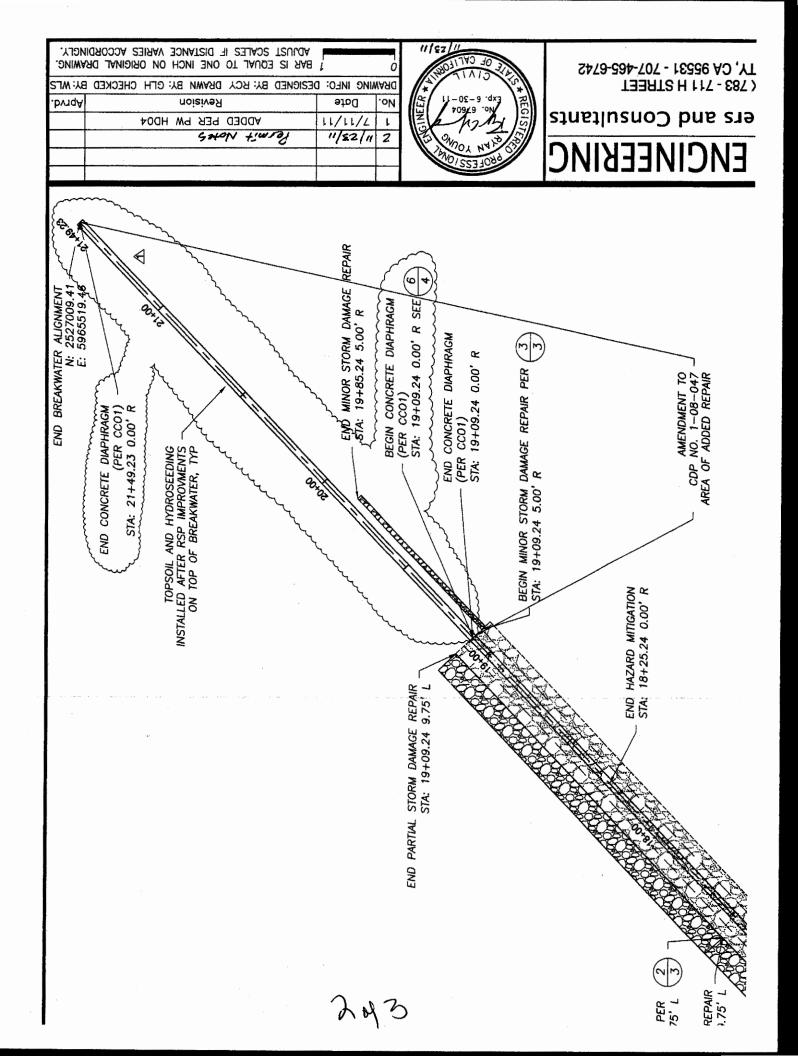


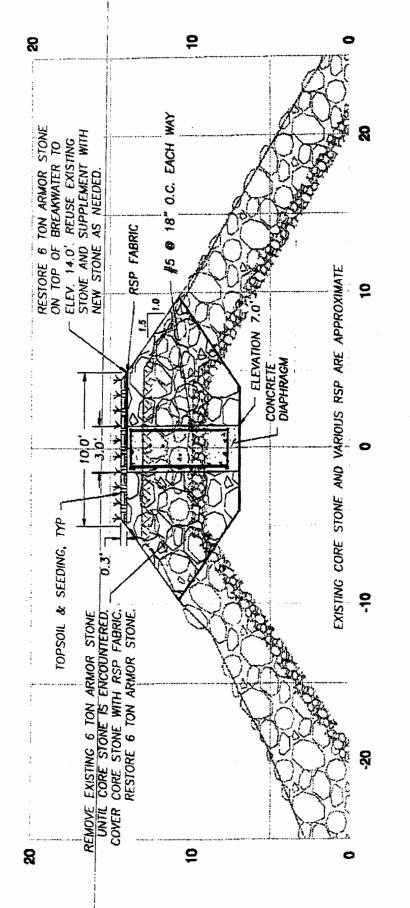




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Figure 4. Typical Repair Section for Breakwater

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STOVER ENGINEERING

Application for Amendment to Coastal Development Permit

CDP No. 1-08-047

EXHIBIT NO. 7 APPLICATION NO. 1-08-047-A1 CRESCENT CITY HARBOR DISTRICT AMENDED PROJECT DESCRIPTION (1 of 3)

Description of Proposed Amendment:

The Crescent City Harbor District received permit approval (CDP No. 1-08-047) from the Coastal Commission on June 9, 2010, to rehabilitate the Inner Basin Breakwater at the Crescent City Harbor. The project description included in the permit granted by the Commission included (1) installing a concrete diaphragm longitudinally down the middle of a wave-impact prone 585 foot long segment of the outer arm length of the breakwater; (2) returning the eroded breakwater to its original height of +14 feet above mean sea level (msl) elevation; (3) raising the height of a 426 foot length of the end of the breakwater from +14 feet msl to +16 feet msl by applying ½ to 2 ton rock atop the structure; (4) replacement of armor stone with larger class armor stone in various erosion prone locations along the breakwater: (5) augmenting a 720 feet long by 10 feet wide area along the inboard breakwater face with 6 ton rock; and (6) placing topsoil fill and revegetating the top of the reconstructed breakwater.

The work described above was response to damage inflicted by severe winter storms occurring in 2006. On March 11, 2011, prior to commencing actual construction as permitted in CDP No. 1-08-047, the Crescent City Harbor experienced severe damage to the Harbor as a result of the Tsunami generated by the Tohoku Earthquake (9.0). On March18, 2011, the Governor of California responded to the extensive tsunami damage by declaring a state of emergency for Del Norte County and other affected coastal counties. On April 13, 2011, the President declared a Federal Disaster.

The March 2011 Tsunami damaged the entire breakwater including the remaining 240 feet of the breakwater (southerly end) not addressed in the 2006 storm damage repair CDP. An emergency permit was requested from and granted by the Coastal Commission (Emergency Permit No. 1-11-032-G) in order to undertake timely restoration of the inner boat basin breakwater prior to the onset of winter storms.

The Harbor District awarded a contract to repair the damage inflicted by the 2006 storms to the breakwater and amended that contract to complete the repairs to the additional 240 feet of damage caused by the 2011 Tsunami. Coastal staff approved the plans and specifications for the 2006 repair and these same plans and specifications as well as terms of operation and compliance with environmental conditions were then applied to the section of the breakwater damaged by the 2011 Tsunami. Approvals by the Army Corps of Engineers and the North Coast Regional Water Quality Control Board for the 2006 project were also amended to include the damage repair for the 2011 tsunami (copies attached).

Both projects of the Inner Basin Breakwater as of November 21, 2011, are essentially completed with final inspections yet to be conducted. Additional information is available from the Emergency Permit Application submitted on June 23, 2011, to Mr. Peter Douglas, Executive Director of the California Coastal Commission through the North Coast District Office.

Environmental Review:

The repairs authorized under the existing Coastal Development Permit were determined to be classified as "Class I" and "Class 2" categorical exemptions pursuant to Section 15301 and 15302 of the California Environmental Quality Act (CEQA) Guidelines (14 CCR Section `15000) as repair, maintenance, replacement, and/or reconstruction of existing structures.

In response to the March 11, 2011, tsunami, on March18, 2011, the Governor of California responded to the extensive tsunami damage by declaring a state of emergency for Del Norte County and other affected coastal counties. CEQA provides in Section 15269 "Emergency Projects" that projects to maintain, repair, restore, demolish, or replace property or facilities damaged or destroyed as a result of a disaster in a disaster stricken area in which a state of emergency has been proclaimed by the Governor are exempt from the requirements of CEQA. The Crescent City Harbor District filed a Notice of Exemption with the State Clearinghouse and the County Clerk of the County of Del Norte on March 16, 2011 for the steps necessary to respond to the devastation caused by the events of the March 11, 2011 tsunami.

Other Permits:

The California Regional Water Quality Control Board, North Coast Region, provided a letter to the Harbor District amending its Section 401 Water Quality Certification for the Crescent City Harbor District Riprap/Breakwater Repair Project to include the additional damage caused by the March 11, 2011 tsunami. The letter is dated July 22, 2011 and a copy is attached.

The Army Corps of Engineer (ACOE) provided a letter to the Harbor District dated July 21, 2011, in which the ACOE amended its previous its permit (File No. 2009-00072N) issued for the repair of the inner breakwater for the 2006 damage to include the damage and repair for the events of the March 2011 tsunami. A copy of the subject letter is attached.

The Community Development Department of the County of Del Norte provided a letter on June 23, 2011, in which the letter states that no local approval is required. A copy of the letter is attached.

Additional Material Attached:

Regional vicinity map by Stover Engineering labeled as Amendment Application to CDP No. 1-08-047.

Project site map; photo map by Stover Engineering labeled as Amendment Application to CDP No. 1-08-047

An amended sheet 2 of 8 of the originally submitted plans delineating the proposed amendment area.

An enlargement of sheet 2 of 8, for the added area.

Sheet 4 of 8 of the original plans showing the typical cross section repair for the added area.



A memo from Stover Engineering stating that the construction for the added area was done in compliance with the original design, specifications, and permit conditions applicable to the original permitted work.

Action by the Harbor Commission approving the set of plans.

A list of all property owners and residents (none) within 100 feet of the breakwater repair.

Stamped addressed envelopes for notification of those on the above list.

Declaration of Posting.

Copy of the Notice of Pending Permit - The notice was posted at November 28, 2011

EDMUND G. BROWN JR, GOVERNOR

CALIFORNIA COASTAL COMMISSION NORTH COAST DISTRICT OFFICE 710 E STREET • SUITE 200 EUREKA, CA 95501 VOICE (707) 445-7833 FACSIMILE (707) 445-7877



EMERGENCY PERMIT

Richard Young, CEO/Harbormaster Crescent City Harbor District 101 Citizen's Dock Road Crescent City, CA 95531 Date: <u>C</u> Emergency Permit No.:

October 03, 2011

LOCATION OF EMERGENCY WORK:

At numerous locations within and along the Inner Boast Basin and its breakwater, and Synchro-lift areas within the Crescent City Harbor, Del Norte County (APNs 117-020-16 and 117-170-11).

WORK PROPOSED:

Repair damage to portions of the Crescent City Harbor caused by the March 11, 2011 Tohoku Tsunami entailing: (a) excavation of the approximately 140,000 cubic yards (yd³) of tsunami-deposited sediment materials from within the Inner Boat Basin and Synchro-lift areas; (b) excavation and replacement of approximately 56,000 yd³ of engineered rock slope protection along the faces of the inner harbor, within their existing fill prism; (c) rehabilitation of the damaged outer 280-lineal feet of the Inner Boat Basin Breakwater; and (d) extrication of damaged dock piles and installation of approximately 150 new replacement piles and 1,500 lineal feet of temporary floating dock assemblies, as more fully described in detail within the *Application for Emergency Permit*, dated June 23, 2011, as subsequently revised August 19, 2011.

PERMIT RATIONALE:

This letter constitutes approval for continuation of the emergency work you or your representative has requested to be done at the locations listed above. I understand from your information and our site inspection that an unexpected occurrence in the form of tsunami inundation has resulted in extensive damage to the harbor's boat basin facilities including the deposition of a significant quantity of sediment within the Inner Boat Basin and synchro-lift areas. I also understand that the timely restoration of the inner boat basin facilities must occur before the high-demand fall-winter crabbing season to avoid significant impacts to the commercial fishing sector. Therefore, given the critical nature of the harbor in terms of serving as both a home and transient port to commercial fishing vessels and as a harbor-of-refuge to all mariners, immediate and expedited action is needed to conduct repairs to restore, repair, or maintain public service facilities.

Pursuant to Title 14 of the California Code of Regulations, Section 13009, the Executive Director of the Coastal Commission hereby finds that:

- (a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of this permit, and
- (b) Public comment on the proposed emergency action has been reviewed as time allows; and
- (c) As conditioned, the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the attached page.

If you have any questions about the provisions of this Emergency Permit, please contact the Commission's North Coast District Office.

Sincerely,

CHARLES LESTER Executive-Directø

By: Robert S. Merrill North Coast District Manager

CL:RSM:JRB/jb/lt

CONDITIONS OF APPROVAL:

- 1. The enclosed Emergency Permit Acceptance form must be signed by the APPLICANT and returned within 15 days.
- 2. Only work specifically described in this permit and for the specific property listed above is authorized. The project shall be undertaken in accordance with the plans and other information submitted to the Coastal Commission. Any additional work requires separate authorization from the Executive Director.
- 3. To avoid impacts to adjoining coastal waters and environmentally sensitive habitat areas, the emergency work shall be performed consistent with: (a) the Best Management Practices identified within the emergency permit application transmitted on behalf of Crescent City Harbor District by Stover Engineering, dated June 2, 2011, June 3, 2011, and June 16, 2011; (b) the special conditions attached to the U.S. Army Corps of Engineers' authorization letter for Nationwide Permit Nos. NWP3 and NWP11, File No. 2011-00203N, dated August 3, 2011; and (c) the conditions attached to the U.S. Environmental Protection Agency's *Post-Tsunami Dredging Suitability Determination and Concurrence for Ocean Disposal*, dated August 17, 2011, with respect to performance standards for dredging of the sediment deposits and their transport through state waters to the Humboldt Open Ocean Disposal Site (HOODS).
- 4. A report describing the actual repairs performed shall be submitted to the Executive Director within 30 days of the completion of the emergency work and no later than December 31, 2011.
- 5. In exercising this permit, the applicant agrees to hold the California Coastal Commission harmless of any liabilities for damage to public or private properties or personal injury that may result from the project.
- 6. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies, including the U.S. Army Corps of Engineers, the California Department of Fish and Game, the County of Del Norte, or the City of Crescent City.

The emergency work is considered to be TEMPORARY work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a Coastal Development Permit or amendments to previously issued Coastal Development Permits must be obtained. A regular permit or permit amendment would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly. These conditions may include provisions for public access (such as an offer to dedicate an easement) and/or a requirement that a deed restriction be placed on the property assuming liability for damages incurred from storm waves.

If you have any questions about the provisions of this emergency permit, please call the Commission's North Coast District Office at the address and telephone number list on the first page.

- Cc: County of Del Norte Community Development Services Dept., 981 H Street, Suite 110, Crescent City, CA 95521 City of Crescent City Planning Department, 377 J Street, Crescent City, CA 95531
- Encl: Emergency Permit Acceptance Form, Regular Permit Application Form

2012



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southwest Region

501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

SEP 26 2008

In Response Refer to: 2008/04540:MLD

Alessandro Amaglio Environmental Officer U.S. Department of Homeland Security FEMA 1111 Broadway, Suite 1200 Oakland, California 94607-4052

2008 OCT - 1 PM 12: RECEIVEL Ψ

Dear Mr. Amaglio:

This letter responds to Federal Emergency Management Service's (FEMA) letter, received in our office on September 2, 2008, requesting concurrence on FEMA's determination on potential impacts to marine mammals from the proposed Inner Basin Sea Wall Repair Project in Crescent City Harbor District (FEMA-1628-DR-CA, PW #1387).

FEMA initiated formal consultation with NOAA's National Marine Fisheries Service (NMFS) on April 13, 2007, and submitted a Biological Assessment (BA) for review on the proposed action. On April 25, 2007, NMFS submitted a letter to FEMA requesting additional information than what was provided in the BA and FEMA responded on October 18, 2007. On July 1, 2008, Monica DeAngelis, from the NMFS Southwest Regional Office, contacted FEMA's contractor, Lorena Solorzano-Vincent, to request additional information on the proposed action and the September 2, 2008 letter is also a response to the July 1, 2008 request. NMFS recommends that the information provided in the July 21, 2008, letter, regarding the Steller sea lion, be replaced with the information provided in this letter.

Crescent City Harbor District has applied, through the State of California Governor's Office of Emergency Services, to FEMA for funding under the Public Assistance Program to repair and stabilize the Harbor District's inner basin sea wall in Crescent City, Del Norte County, California. The action area is located approximately 0.25 miles west of Highway 101 in Township 16 North, Range 1 West, Sections 28 and 33. The proposed repair work consists of repairing the damaged sea wall as well as reinforcing the sea wall against future storm events by increasing the height by approximately 2 feet (ft) over a distance of 386 ft. The existing sea wall is L-shaped and measures approximately 800 ft long by 50 ft wide on the long side (along the outer harbor) and 400 ft long by 50 ft wide on the short side (attached to land). The height of the sea wall averages 15 ft above Mean Lower Low Water. Some of the damage is located near the base of the sea wall, thus some riprap or other fill material would be placed directly in the water and large breakwater stones would be trucked in on existing roadways and dumped on the top of the seawall. Construction is expected to take three months.

> EXHIBIT NO. 9 APPLICATION NO. 1-08-047-A1 CRESCENT CITY HARBOR DISTRICT NOAA FISHERIES CONSULTATION (1 of 10)



As stated in the September 2, 2008 letter, the eastern stock of Steller sea lion (*Eumetopias jubatus*) is the only marine mammal species, listed as Threatened under the Endangered Species Act, that may be impacted by this proposed project. The nearest documented haul out site for this species is approximately one mile northwest of the action area on Castle Rock, though breeding has not been documented there. The nearest breeding area is located approximately four miles northwest of the action area on the rocks associated with St. George Reef. Steller sea lions breed from May through early July, although some pregnant females could arrive to the rookeries in late April. Pups typically remain on the rookery, while females typically take trips to feed once the pup is approximately a week old. Sea lions occur in Crescent City Harbor, however, the majority of these animals are California sea lions (*Zalophus californianus*) and the few Steller sea lions that are observed, are likely transiting through the area.

Noise

Potential effects to Steller sea lions from construction-related noise could disturb and/or temporarily displace Steller sea lions. However, this would only occur if Steller sea lions were present during construction, which is limited to July 15 through October 15, when the majority of the Steller sea lions will be at the rookeries or out at sea foraging for food. The potential effects from the unintentional introduction of sediment into the water could affect foraging opportunities by reducing aquatic prey populations. However, it is likely that Steller sea lions would not forage within harbor waters and would be observed foraging farther offshore, therefore reducing the likelihood of exposure to construction-related impacts.

As one of the potential stressors to marine mammal populations, noise and acoustic influences may seriously disrupt marine mammal communication, navigational ability, and social patterns. Many marine mammals use sound to communicate, navigate, locate prey, and sense their environment. Both anthropogenic and natural sounds may cause interference with these functions. Steller sea lions are regularly exposed to several sources of natural and anthropogenic sounds. The applicant could not determine the exact noise levels in decibels for construction-related activities, however no blasting is anticipated as part of the proposed action. Construction activities would also occur only during daylight hours and would operate 5 days a week. The construction crew would use muffled equipment and the project engineer does not anticipate that noise associated with the proposed project would extend beyond the boat basin. In the September 2, 2008, letter, there was a reference to an earlier letter from NMFS, dated July 21, 2008, regarding the Steller sea lion and ambient noise level from surf diluting construction-related noise and the acclimatization of Steller sea lions to human presence for a project at the Klamath River.

Most observations of behavioral responses of marine mammals to the sounds produced have been limited to short-term behavioral responses, which included the cessation of feeding, resting, or social interactions. Carretta *et al.* (2001) and Jasny *et al.* (2005) identified increasing levels of anthropogenic noise as a habitat concern for marine mammals because of its potential effect in their ability to communicate. Steller sea lion reaction to occasional disturbances ranges from no reaction at all to complete and immediate departure from the haul out area. The type of reaction appears to depend on a variety of factors. When Steller sea lions are frightened off rookeries during the breeding season and pupping season, pups may be trampled or even abandoned. After repeated disturbances, Steller sea lions have temporarily abandoned areas (Thorsteinson and Lensink 1962), but in other situations have continued using areas after repeated and severe harassment. The consequences of such disturbances are difficult to measure.

Hearing

In-air territorial male Steller sea lion sounds are usually low-frequency roars, while females vocalize less and at a higher frequency (Schusterman *et al.* 1970; Loughlin *et al.* 1987). Campbell *et al.* (2002) determined that females have distinctive acoustic signatures. These calls range in frequency from 30 to 30,000 Hz with peak frequencies from 150 to 1,000 Hz; typical duration is 1,000 to 1,500 milliseconds (Campbell *et al.* 2002). Pups produce bleating sounds. The underwater hearing sensitivity of two Steller sea lions was recently tested; with hearing thresholds of the male significantly higher than those of the female (Kastelein *et al.* 2005). The range of best hearing for the male was from 1 to 16 kHz, with maximum sensitivity (77 dB re 1 μ Pa-m) at 1 kHz. The range of best hearing for the female was from 16 to above 25 kHz, with maximum sensitivity (73 dB re 1 μ Pa-m) occurred at 25 kHz. It is not known whether the differences in hearing sensitivities are due to individual differences in sensitivity or due to sexual dimorphism in hearing (Kastelein *et al.* 2005).

Human Presence

Animals respond to disturbance from humans in the same way as they respond to the risk of predation, by avoiding areas of high risk, either completely or by using them for limited periods (Gill *et al.* 1996). Generally, human disturbance to hauled out pinnipeds may be categorized by purpose: scientific investigation, ecotourism, and recreation. Of the three types of human disturbances, ecotourists and recreators are not likely to be aware of the negative impacts that their presence may have on wildlife. Scientists often need to closely monitor demographic parameters and their work often present the most intense kinds of disturbance: entering rookeries or haulouts and capturing and handling animals. However, most scientists are aware of the potential harmful effects of their work, and any scientific research permit issued, takes into account any potential impacts the research could have on individual animals and the population.

Disturbances resulting from human activity and other causes can impact pinniped haul out behavior (Renouf et al. 1981; Schneider and Payne 1983; Terhune and Almon 1983; Allen et al. 1984; Stewart 1984; Suryan and Harvey 1999; Mortenson et al. 2000; Kucey and Trites 2006), both in the shortand long-term. The apparent skittishness of both harbor seals (Phoca vitulina richardii) and Steller sea lions raises concerns regarding behavioral and physiological impacts to individuals and populations experiencing high levels of human disturbance. It is well known that human activity can flush harbor seals off haul out sites (Allen et al. 1984; Calambokidis et al. 1991; Suryan and Harvey 1999; Mortenson et al. 2000). Researchers have also observed that human disturbances in the form of boat and aircraft traffic and people walking on the beach, can flush seals into the water from haul out sites and impact seal haulout numbers (Renouf et al. 1981; Schneider and Payne 1983; Terhune and Almon 1983). Lelli and Harris (2001) found that the level of boat traffic (including motor and paddle boats) in Gun Point Cove, Maine, was, by far, the single strongest predictor of harbor seal haul out numbers. Of the 85 incidents in which harbor seals were flushed, 93% were caused by boats. Abandoned and unused sites were more likely to have human disturbance than currently used sites. Human disturbance appeared to cause Steller sea lions to desert a breeding area at Northeast Point on St. Paul Island, Alaska (Kenyon 1962).

The September, 2, 2008 letter determined that due to the similar conditions between the Crescent City Harbor and the Klamath River, that Steller sea lions were acclimated to the high level of surf noise and the presence of humans and therefore would not be impacted by construction-related noise.

As discussed previously, acclimation to humans is not typical behavior for Steller sea lions and the animals would likely leave an area of human presence. Although in certain instances, the high level of surf could dilute underwater noise associated with construction activities, to a certain extent, it should not be the only method used to reduce the impact of construction-related noise to marine mammals (should construction-related noise be at the threshold to cause a "take" of a marine mammal). However, NMFS has evaluated the information provided and has determined that there will be limited noise introduced into the underwater and in-air environments from this proposed project and any noise would likely be at current ambient noise levels.

Based on the project description, location, and proposed schedule, NMFS concurs with your determination that the project may affect, but will not likely adversely affect the Steller sea lion. Should project plans change, or if additional information becomes available, this determination may be reconsidered.

Marine Mammal Protection Act Comments

Although the eastern stock of Steller sea lion, is listed as federally threatened under the Endangered Species Act of 1973 (16 U.S.C. 1531 *et. seq.*), the Marine Mammal Protection Act of 1972 (MMPA) is the principal Federal legislation that guides marine mammal species protection and conservation. Under the MMPA, "take" of a marine mammal is permitted by NMFS under an Incidental Harassment Authorization (IHA) when the specified activity is incidental, but not intentional, of a small number of marine mammals. "Take" is defined as harassing, hunting, capturing, or killing, or attempting to harass, hunt, capture, or kill any marine mammal. "Harassment" is defined as any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal in the wild, or has the potential to disturb a marine mammal in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering. Based on the information provided, the applicant may need to apply for a permit under the MMPA for potential project impacts to California sea lions.

NMFS appreciates the FEMA's efforts to comply with federal regulations and to conserve protected species. Please contact Monica DeAngelis at 562-980-3232 or Monica DeAngelis@noaa.gov, if you have any questions concerning this letter or if you require additional information.

Sincerely,

Rodney R. McInnis Regional Administrator

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Conservation Measures

General Conservation Measures (from PBA Appendix B)

- 1. To determine the likelihood that a federally-listed species may be present in the areas that may be directly or indirectly affected by project activities, a qualified biologist will conduct a thorough review of all existing data regarding federally-listed species and their habitats prior to the implementation of any project. This review will include not only a review of the California Department of Fish and Game's California Natural Diversity Database (CNDDB), but all other sources of information and data available within the public domain including, but not limited to, reports submitted to the USFWS, California Department of Fish and Game, or other public agencies; peer-reviewed publications in scientific journals, internet resources such as California Native Plant Society website, books or other published literature, and all other sources as appropriate. FEMA will consider that a federally-listed species is likely to occur on a project site if (a) it is within the dispersal distance of a documented sighting of the species, and (b) suitable habitat is present in the area.
- 2. To determine whether suitable habitat is present, and to further inform determinations of the likelihood that a federally-listed species occurs in areas that may be directly or indirectly affected by project activities, a qualified, USFWS-approved biologist will conduct pre-activity surveys for federally-listed species and habitats prior to the implementation of any project, unless a species has already been assumed to be present, then no surveys are necessary. Surveys will follow the most recently available USFWS-approved guidance and they will be conducted during the most appropriate times of the year to identify a species' presence. For example, plant surveys will be conducted during the flowering period following the most recently available, USFWS-approved survey guidance; reptile and amphibian surveys will be conducted during the animal's active periods following the most recently available, USFWS-approved survey guidance, not during their aestivation periods, *etc.*
- Project proponents will ensure that, in addition to the general conservation measures proposed herein, that all species-specific conservation measures outlined in Appendix C are implemented for each federally-listed species and their habitats at each project site, as appropriate;
- 4. A qualified, USFWS-approved biological monitor will be present on site during all activities related to the project. The biological monitor will provide guidance to the project proponents and crew about federally-listed species and their habitats. The biological monitor will monitor all activities to ensure that no federally-listed species is harassed, killed, or injured and to ensure that the project otherwise conforms to the conservation measures outlined throughout this document and the subsequent programmatic consultation documents. The biological monitor will have the authority to stop any aspect of the project that will result in unauthorized take of federally-listed species;
- 5. Project proponents will ensure that all work will be conducted in an area, from a location, or in such a manner that it will not directly or indirectly kill or injure a listed species, will not intentional or negligently harass a listed species to such an extent as to significantly disrupt normal behavioral patterns, or will not adversely modify listed species habitats. Project planning must consider not only the effects of the action itself, but also all ancillary activities associated with the actions, such as equipment staging and refueling areas, topsoil or spoils stockpiling areas, material storage areas, disposal sites, routes of ingress and egress to the project site, and all other related activities necessary to complete the project;
- 6. Disturbance to existing grades and vegetation will be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities shall avoid and

limit disturbance to federally-listed species and their habitats to the maximum extent practicable. When possible, existing ingress or egress points will be used and the contours of the project site will be returned to pre-construction condition or better;

- 7. Projects proponents will, to the maximum extent practicable, reduce the amount of disturbance at a site to the absolute minimum necessary to accomplish the project. Wherever practicable, existing vegetation will be salvaged from the proposed project area and stored for replanting after earthmoving activities are completed. Topsoil will be removed, stockpiled, covered, and encircled with silt fencing to prevent loss or movement of the soil into federally-listed species habitats. All disturbed soils will undergo erosion control treatment prior to the rainy season and after construction is terminated. Treatment typically includes temporary seeding with native species and sterile straw mulch. All topsoil will be replaced in a manner to as closely as possible represent pre-disturbance conditions. This is especially necessary for listed plants to preserve the integrity of the seed contained within the topsoil;
- 8. Project proponents will ensure that project sites are re-vegetated with locally-acquired sources of native seeds and plants in a manner that is not likely to adversely affect listed species and will return the site to at least its pre-existing condition or better. Plantings will be done during the optimal season for the species being planted and, if necessary, an irrigation system will be installed to ensure establishment of vegetation. An 80% or more survival rate over a period of 3-5 years for new plantings will be the target. Invasive exotic plant species will be controlled to the maximum extent practicable to accomplish the re-vegetation effort. Chemical control of invasive exotic plant species will be conducted by a certified pesticide applicator per labeled directions and all other federal, state, and local laws and regulations;
- 9. Projects being implemented within habitat known to support plant species or species that use underground retreat, escape, hibernacula, and/or aestivation areas (e.g., snakes and amphibians, small mammals, burrowing owls, etc.) will require that vehicles and equipment be operated in a manner that does not result in the death or injury of an individual plant or animal and in a manner that does not unduly compact or disturb the soil. For example, temporarily removing topsoil in an area just large enough to allow heavy equipment access to a site (e.g., a levee repair site) after the flowering and seed set period, then returning the topsoil to the area once the equipment work is completed;
- 10. For projects conducted in areas where species are known to use underground burrows as escape habitat, hibernacula, aestivation areas, or other purposes of retreat, project proponents will completely encircle the project area with exclusionary fencing fitted with one-way exit holes and buried a few inches below ground level. This fencing will allow species to passively leave the project site while at the same time preventing them from re-entering the work zone. Exclusionary fencing will be installed at least six weeks prior to the implementation of the project and it will be checked frequently to ensure the fencing is intact and functioning properly. The fencing will be maintained, in place, throughout the duration of the project, to prevent species from re-entering the project site until all work activities have ceased;
- All standardized Best Management Practices (e.g., per Regional Water Quality Control Boards, the California Stormwater Best Management Practice Handbooks, etc.) will be implemented for all projects, as appropriate to each project site;
- 12. Project proponents will ensure that sediment-control devices are installed and maintained correctly. For example, sediment will be removed from sediment controls once the sediment has reached onethird (1/3) of the exposed height of the control. The devices will be inspected frequently (*e.g.*, daily) to ensure they are functioning properly; controls will be immediately repaired or replaced or

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Conservation Measures Page 3

additional controls will be installed as necessary. Sediment that is captured in these controls may be disposed of on site in an appropriate, safe, approved area, or off site at an approved disposal site;

- Project proponents will consider design factors and other recommendations detailed in the most recently available publications (e.g., NMFS stream crossing criteria, California Salmonid Stream Habitat Restoration Manual, etc.) when undertaking projects such as bridge or culvert replacement, for example, on fish-bearing streams (particularly anadromous fish);
- 14. Project proponents shall exercise every reasonable precaution to protect federally-listed species and their habitats from pollution due to fuels, oils, lubricants, and other harmful materials. Vehicles and equipment that are used during the course of a project will be fueled and serviced in a "safe" area (*i.e.*, outside of sensitive habitats) in a manner that will not affect federally-listed species or their habitats. Spills, leaks, and other problems of a similar nature will be resolved immediately to prevent unnecessary effects to listed species and their habitats. A plan for the emergency clean up of any spills of fuel or other material will be available on site and adequate materials for spill cleanup will be maintained on site;
- 15. Project proponents shall exercise every reasonable precaution to protect federally-listed species and their habitats from construction by-products and pollutants such as construction chemicals, fresh cement, saw-water, or other deleterious materials. Water containing mud, silt, concrete, *etc.* from construction activities shall be treated by filtration, retention in a settling pond, *etc.* Fresh cement or concrete shall not be allowed to enter flowing water of streams. Construction pollutants will be collected and transported to an authorized disposal area, as appropriate, and per all federal, state, and local laws and regulations;
- 16. All hazardous material will be stored in properly designated containers in a storage area with an impermeable membrane between the ground and the hazardous material. The storage area will be encircled by a berm to prevent the discharge of pollutants to ground water or runoff into federally-listed species habitats. A plan for the emergency clean up of any hazardous material will be available on site and adequate materials for spill cleanup will be maintained on site;
- 17. All construction material, wastes, debris, sediment, rubbish, vegetation, trash, fencing, *etc.* will be removed from the site once the project is completed and transported to an authorized disposal area, as appropriate, and per all federal, state, and local laws and regulations; and
- 18. All concrete or other similar rubble shall be free of trash and reinforcement steel. No petroleumbased products such as asphalt will be used as a stabilizing material (*i.e.*, riprap).

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Conservation Measures Page 4

Proposed Conservation Measures (from PBA Appendix C)

Western Snowy Plover

- Consult an USFWS-approved biologist with expertise and/or permits specific to western snowy plover.
- 2. If a project occurs from October 1 through February 15, daily surveys will be conducted each morning prior to starting work. The area surveyed will include the work area and an additional 100 yard zone around the work area. If a wintering flock of five (5) or more adult plovers are present within the survey area, then no work can be conducted.
- 3. If a project occurs in occupied habitat between February 15 and September 21, daily surveys will be conducted each morning prior to starting work. The area surveyed will include the work area and an additional 100 yard zone around the work area. If a plover [adult, juvenile (fledged young of that year), or chick (flightless usually less than 28 days old)], nest, or scrape is located within the surveyed area, then no work will occur. If chicks are present on the beach segment, no work will be conducted regardless of the survey results. If no nests are located by August 21, daily morning surveys will be discontinued provided there are no chicks on the beach segment.
- 4. Vehicle use in suitable habitat will be minimized to the maximum extent practicable. Vehicles will remain on the wet sand and speeds will be limited to 5 mph. There will be no night driving or driving during periods of diminished visibility. Areas of the wrack will be avoided. An USFWS-approved, on-site biological monitor will be present if vehicle are traveling near plovers to prevent accidental injury or mortality.
- 5. All trash will be stored in predator-proof containers and transported off-site at the end of each work day.

Marbled Murrelet

- 1. Consult an USFWS-approved biologist with expertise and/or permits specific to marbled murrelet;
- 2. Avoid activities from March 24 through September 15 within the period two hours after sunrise and two hours before sunset;
- Avoid removing or intentionally damaging any trees with potential nesting platforms or removing any nest platforms;
- 4. Avoid removing trees around potential nest trees and potential nesting platforms;
- 5. A qualified biologist will verify that trees to be removed are not suitable for nesting or screen trees;
- 6. Avoid all habitat modification from March 24 through September 15; and
- 7. All trash will be stored in predator-proof containers and transported off-site at the end of each work day.

California Brown Pelican

- 1. Consult an USFWS-approved biologist with expertise and/or permits specific to California brown pelican;
- Disturbance at night roosts will be avoided by working during daylight hours avoiding night time and low light conditions; and
- Project access will avoid night roosts and day roosts to the extent practicable. Over-flights of roosts will be avoided completely.

CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE 710 E STREET • SUITE 200 EUREKA, CA 95501 VOICE (707) 445-7833 FACSIMILE (707) 445-7877



W16a

Filed:49th Day:180th Day:Staff:Staff Report:Hearing Date:Commission Action:

September 24, 2009 November 12, 2009 March 23, 2010 James R. Baskin AICP May 27, 2010 June 9, 2010

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO .:

APPLICANT:

AGENT OF PROCESS:

PROJECT DESCRIPTION:

EXHIBIT NO. 10
APPLICATION NO.
1-08-047-A1
CRESCENT CITY HARBOR DISTRICT
ORIGINAL PERMIT FINDINGS (1 of 32)

1-08-047

Crescent City Harbor District

Stover Engineering

Rehabilitate the Crescent City Harbor Inner Breakwater by: (1) installing a concrete diaphragm longitudinally down the middle of a wave-impact prone 585-foot-long segment of the outer arm length of the breakwater; (2) returning a $\pm 1,000$ foot length of the eroded breakwater to its original +14 feet above mean seas level (msl) elevation; (3) raising the height of a 426-foot-length of the end of the breakwater from +14 feet msl to +16 feet msl by applying $\frac{1}{2}$ - to 2-ton rock atop the structure; (4) replacement of armor stone with larger class armor stone in various erosion-prone locations along the breakwater; (5) augmenting a 720-foot-long b 10foot-wide area along the inboard breakwater face with 6-ton rock; and (6) placing topsoil fill and revegetating of the reconstructed the top breakwater.

PROJECT LOCATION:	At various locations along an approximately 1,110- foot reach of the approximately 1,150-foot-long inner boat basin breakwater within Crescent City Harbor, 101 Citizens Dock Road, Crescent City (Del Norte County). APN 117-020-16.
LOCAL APPROVALS RECEIVED:	None required.
OTHER APPROVALS RECEIVED:	(1) U.S. Army Corps of Engineers Federal Clean Water Act (FCWA) <i>Section 404 Nationwide Permit</i> Nos. 3 – <i>Maintenance</i> and 13 – <i>Bank Stabilization</i> ; and (2) NOAA Fisheries Endangered Species Act and Essential Fish Habitat Consultation <i>Letter of Concurrence</i> .
OTHER APPROVALS REQUIRED:	(1) Regional Water Quality Control Board FCWA §401 Water Quality Certification.
SUBSTANTIVE FILE DOCUMENTS:	(1) Final Biological Assessment for NMFS Inner Basin Sea Wall Repair Project Crescent City Harbor District (URS Group, Inc., and Dewberry & Davis LLC, April 2007); and (2) County of Del Norte LCP.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends approval with special conditions of the proposed Crescent City Harbor Inner Boat Basin Breakwater Repair Project. The proposed project involves five primary components: (1) keyway excavation and installation of a continuous 3-foot x 7-foot concrete diaphragm down the middle of a 585-lineal-foot length of the breakwater and backfilling with six-ton rip rap along its full length; (2) returning the eroded sections of the breakwater to their original +14 feet msl elevation; (3) placing two-ton capping riprap to raise the overall height of a 426-foot length of the outer breakwater prone to direct wave attack by two feet; (4) replacement of dislodged rockslope protection materials at various wash-out locations with 12-inch-minimum diameter, and ¹/₂- to two-ton riprap and upgrading a segment of the eroded inner breakwater face with six-ton rock; (5) augmenting a 720-foot-long by 10-foot-wide area along the inner breakwater face with six-ton rock; and (6) dressing the top of the reconstructed breakwater with topsoil fill and revegetating the area with a weed-free, grass seed mixture. Although portions of the breakwater will be increased in height, all of the proposed upgrades and repairs would be conducted within the footprint of the existing breakwater, and maintain its 1.5:1 side slopes.

The purpose of the existing breakwater is to create safe harborage for commercial fishing vessels and recreational boaters to moor, launch, and retrieve their watercraft. The breakwater is oriented to protect the harbor from both northwestern and southwestern swells that have not been otherwise refracted or attenuated by the harbor's outer breakwaters. The existing inner breakwater consists of locally quarried sea stack boulders and "riprap" concrete construction debris. During the winter storm period of December 31, 2005 through January 3, 2006, high tides, two- to three-ft storm surges and 90 mile-per-hour winds caused overtopping and damage to the L-shaped inner harbor breakwater. The leeward, outboard, and top sides of the breakwater were damaged to the extent that its integrity has been compromised, putting at risk inner harbor boat residents, watercraft and docks should another severe storm occur.

The proposed repair and upgrade project would rehabilitate in-place the existing breakwater to restore its effectiveness and to strengthen its resiliency to wave attack. The project would repair the breakwater in its current horizontal configuration, without expanding its historic fill prism within harbor waters. The project would raise the height along the most wave-exposed portions of the breakwater by two feet vertically to prevent over-topping by storm surge and to reduce the potential for failure in future disaster events. The breakwater improvements would be built out incrementally. Specifically, after completing the installation of the interior concrete diaphragm, the surrounding revetment excavated materials would be reused to fill in around the diaphragm. This work would be followed by repairs to the damaged inner and outer faces of the breakwater, involving the placement of rock slope protection materials of varying sizes at problem locations. Similarly sized hazard mitigation riprap materials would then be installed along portions of the top of the breakwater to return the breakwater to its original 14-foot- above-mean-sea-level height. Finally the top of the reconstructed breakwater would be dressed with a layer of topsoil and revegetated with a weed-free grass seed mixture. Detailed project plans are included as Exhibit No. 5.

To avoid impacts to various sensitive fish and wildlife species, the breakwater repairs and upgrade construction would be undertaken between July 15 and October 15. The actual work on the breakwater is estimated to take two months. The work on the faces of the breakwater would be conducted during low tides for accessibility purposes and to minimize impacts to water quality. Equipment needed for the project includes a loader, excavator, and possibly a crane.

As portions of the breakwater will be increased in height and portions of the inboard side of the breakwater will be expanded in width with additional rock, the Commission must evaluate the project as a "new" development rather than as purely a repair and maintenance project. Therefore, for analysis purposes, the Commission must find that the proposed fill is allowable under the limitations imposed by Coastal Act Sections 30230, 30231, and 30233. Staff believes that the proposed fill is permissible under Section 30233, sub-sections (a)(1) and (a)(3) of the Coastal Act because its purpose is to

protect for "New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities," and "In open coastal waters, other than wetlands, ... new or expanded boating facilities ... that provide public access and recreational opportunities." Furthermore, staff believes that there is no less environmentally damaging feasible alternative to the development as conditioned, as required by Section 30233(a). Moreover, staff believes that with the requirements of recommended Special Condition Nos. 1 through 5 to avoid the significant adverse impacts on sensitive fish and wildlife species, water quality, and intertidal biological communities associated with work within the intertidal reach and general human activity in proximity to open and estuarine waters, the development will provide feasible mitigation measures to minimize adverse environmental effects as also required by Section 30233(a). Special Condition Nos. 1 through 5 require: (a) submittal and approval of final construction plans; (b) seasonal and temporal limitations on performing the construction activities to avoid impacts to sensitive species; (c) adherence to various construction responsibilities to protect coastal resources; (d) submittal of a final sedimentation and runoff control plan; and (e) submittal of a hazardous materials management plan. Staff believes that with the inclusion of these special conditions, the proposed rehabilitation work is consistent with Coastal Act Sections 30230, 30231, 30232, and 30233. In addition, staff believes that the proposed breakwater repairs and upgrades, as conditioned, are consistent with Section 30233(c) of the Coastal Act, which directs that fill of existing estuaries and wetlands maintain or enhance the functional capacity of the wetland or estuary.

In conclusion, staff believes that the proposed project, as conditioned, is consistent with all applicable Chapter 3 policies of the Coastal Act. The Motion to adopt the Staff Recommendation of Approval with Conditions is found below on page 5.

STAFF NOTES:

1. Jurisdiction and Standard of Review

The site of the proposed boat mooring area revetment repair and upgrade project is within and adjacent to the semi-confined waters of the Crescent City Harbor, an embayment of the Pacific Ocean. The project is located in areas subject to the public trust within the Coastal Commission's area of original or retained jurisdiction. Therefore, the standard of review that the Commission must apply to the development is the Chapter 3 policies of the Coastal Act.

I. MOTION, STAFF RECOMMENDATION AND RESOLUTION:

The staff recommends that the Commission adopt the following resolution:

MOTION:

I move that the Commission approve Coastal Development Permit No. 1-08-047 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development 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 feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment.

II. STANDARD CONDITIONS: See Appendix A.

III. SPECIAL CONDITIONS:

1. Revised Design and Construction Plans

A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-08-047**, the applicant shall submit to the Executive Director for review and written approval final design and construction plans for the project which are consistent with the approved project narrative and preliminary site plans titled "Crescent City Harbor Inner Boat Basin – Breakwater Repair," dated August 25, 2009, as prepared by Stover Engineering Civil Engineers and Consultants, attached as Exhibit No. 5, including site plans, foundation plans, structural plans, and material specifications, consistent with: (1) all impact minimizing mitigation measures identified in the final biological assessment and NOAA Fisheries concurrence letter of September 26, 2008, issued after completion of informal consultation with the U.S. Army Corps of Engineers or effects of the project on marine species and essential fish habitat;, and (2) and all special conditions of Coastal Development Permit No. 1-08-047, including Special Condition Nos. 3, 4, 5, 7, and 8.

B. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final site plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

2. <u>Timing of Construction</u>

- a. Construction activities authorized by this permit, shall be conducted during the period of July 15 through October 15, or for such additional time that the Executive Director may permit for good cause and in consultation with all relevant resource protection agencies, to minimize conflicts with commercial and recreational fisheries and to protect sensitive fish species; and
- b. All construction activities within coastal waters authorized under this coastal development permit shall be conducted during periods of low-tides only and from above the water surface to the maximum extent feasible to minimize the generation of suspended sediment and potential water quality impacts.

3. <u>Construction Responsibilities</u>

The permittee shall comply with the following construction-related requirements:

- a. The breakwater rehabilitation construction shall proceed as proposed from land and shall be built out incrementally, with construction equipment working from the crest of the newly restored breakwater. No access path, whether temporary or permanent, shall be created along the inner or outer side of the breakwater for construction purposes;
- b. No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to wave, wind, or rain erosion and dispersion. Construction materials shall be stored only in approved designated staging and stockpiling areas;
- c. Public roadway surfaces adjacent to the construction site entrances shall be swept at the end of each day to remove sediment and/or other construction materials deposited due to construction activities and prevent such sediment and/or

materials from contaminating coastal waters or other environmentally sensitive habitat areas;

- d. Any and all debris resulting from construction activities shall be removed from the breakwater and adjacent beach areas on a daily basis and disposed of at an appropriate location(s);
- e. Any fueling and maintenance of construction equipment shall occur within upland areas outside of environmentally sensitive habitat areas or within designated staging areas. Mobile fueling of construction equipment and vehicles on and around the breakwater construction site shall be prohibited. Mechanized heavy equipment and other vehicles used during the construction process shall not be stored or re-fueled within 50 feet of drainage courses and other coastal waters;
- f. Temporary staging and storage of construction machinery, equipment, debris, and other materials during the construction period shall occur at property owned by the Crescent City Harbor District adjacent to the inner boat basin, and may not occur on the breakwater or adjacent beaches;
- g. Machinery and construction materials not essential for project improvements are prohibited at all times in the subtidal or intertidal zones;
- h. Construction vehicles shall be maintained and washed in confined areas specifically designed to control runoff and located more than 100 feet away from the mean high tide line;
- i. Floating booms shall be used to contain debris discharged into coastal waters, and any debris discharged shall be removed as soon as possible but no later than the end of the each day;
- j. During construction, all trash shall be properly contained, removed from the work site, and disposed of on a regular basis to avoid contamination of habitat during breakwater rehabilitation activities. Following construction, all trash and construction debris shall be removed from work areas and disposed of properly;
- k. Fuels, lubricants, and solvents shall not be allowed to enter the coastal waters. Hazardous materials management equipment including oil containment booms and absorbent pads shall be available immediately on-hand at the project site, and a registered first-response, professional hazardous materials clean-up/remediation service shall be locally available on call; and
- 1. At the end of the construction period, the permittee shall inspect the project area and ensure that no debris, trash, or construction materials remain on the beach,

breakwater, or in the water, and that the project has not created any hazard to navigation.

4. Final Sedimentation & Stormwater Runoff Control Plan

- A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-08-047**, the applicant shall submit, for the review and written approval of the Executive Director, a final detailed Sedimentation & Stormwater Runoff Control Plan that addresses all phases of development and construction activities authorized under this coastal development permit.
 - (1) The Sedimentation and Run-off Control Plan shall be consistent with the requirements of Special Condition No. 3 and the other conditions of this permit, and demonstrate that:
 - (a) Run-off from the project site shall not increase sedimentation in coastal waters;
 - (b) Run-off from the project site shall not result in pollutants entering coastal waters;
 - (c) Best Management Practices (BMPs) shall be used to prevent the entry of polluted stormwater runoff into coastal waters during the construction of the authorized structures, including, but not limited to, the use of relevant best management practices (BMPs) as detailed in the "California Storm Water Best Management Practice Handbooks (Construction and Industrial/ Commercial), developed by Camp, Dresser, & McKee et al. for the Storm Water Quality Task Force (e.g., BMP Nos. EC-1-Scheduling, SE-1-Silt Fence &/or SE-9-Straw Bale Barrier, NS-9-Vehicle & Equipment Fueling, NS-10–Vehicle & Equipment Maintenance & Repair; NS-14-Material Over Water, NS-15-Demolition Adjacent to Water, WM-1–*Material* Delivery å Storage, WM-3–Stockpile Management, WM-Spill Prevention & Control, WM-6-Hazardous Waste Management, WM-9-Concrete Waste Management, SC-11-Spill Prevention, Control, & Cleanup, and others, as appropriate; see www.cabmphandbooks.com).
 - (2) The Sedimentation and Run-off Control Plan shall include, at a minimum, the following components:
 - (a) A schedule for the installation and maintenance of appropriate construction source control best management practices (BMPs) to prevent entry of stormwater run-off into the construction site and

the entrainment of excavated materials into run-off leaving the construction site; and

- (b) A schedule for installation, use and maintenance of appropriate BMPs to prevent the entry of polluted stormwater run-off from the completed development into coastal waters.
- B. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

5. <u>Hazardous Materials Management Plan</u>

- A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-08-047**, the applicant shall submit, for the review and written approval of the Executive Director, a plan to reduce impacts to water quality from the use and management of hazardous materials on the site. The plan shall be prepared by a licensed engineer with experience in hazardous materials management. The plan shall address all phases of development and construction activities authorized under this coastal development permit and shall be consistent with the requirements of Special Condition No. 3 and the other conditions of this permit. The plan, at a minimum, shall provide for the following:
 - (1) Equipment fueling shall occur only during daylight hours in designated fueling areas;
 - (2) Oil absorbent booms and/or pads shall be on site at all times during project construction. All equipment used during construction shall be free of oil and fuel leaks at all times;
 - (3) Provisions for the handling, cleanup, and disposal of any hazardous or non-hazardous materials used during the construction project including, but not limited to, paint, asphalt, cement, equipment fuel and oil, and contaminated sediments;
 - (4) A schedule for maintenance of containment measures on a regular basis throughout the duration of the project;
 - (5) Provisions for the containment of rinsate from the cleaning of equipment and methods and locations for disposal off-site. Containment and handling shall be in upland areas and otherwise outside of any environmentally sensitive habitat areas;

- (6) A site map detailing the location(s) for hazardous materials storage, equipment fueling and maintenance, and any concrete wash-out facilities; and
- (7) Reporting protocols to the appropriate public and emergency services agencies in the event of a spill.
- (B) The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

6. <u>Assumption of Risk</u>

By acceptance of this permit, the applicant acknowledges and agrees: (i) that the site may be subject to hazards from waves, tidal inundation, and other hazards; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project 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.

7. Regional Water Quality Control Board Approval

PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-08-047, the applicant shall provide to the Executive Director a copy of a Water Quality Certification or other approval issued by the North Coast Regional Water Quality Control Board, or evidence that no approval is required. The applicant shall inform the Executive Director of any changes to the project required by the Regional Board. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

8. U.S. Army Corps of Engineers Approval

PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-08-047, the permittee shall provide to the Executive Director a copy of a letter of modification or other approval issued by the

Army Corps of Engineers reflecting final design modifications, or evidence that no letter of modification or other approval is required. The applicant shall inform the Executive Director of any changes to the project required by the Corps. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

IV. FINDINGS & DECLARATIONS

The Commission hereby finds and declares as follows:

A. <u>Background</u>.

On July 13, 1963, by Senate Bill No. 1383, the State of California transferred all rights, title, and interest to portions of the submerged and tidelands within Crescent City Harbor and surrounding ocean waters to the Crescent City Harbor District. In granting these ownership rights, the State Lands Commission (SLC) has retained authority over these former sovereign lands through both exempted and reserved rights to all deposits of minerals, and its public trust responsibilities under the state Constitution (see Exhibit No. 6).

The applicant harbor district has been involved in the management of the Crescent City Inner Boat Basin facility since the early 1970s when it was originally constructed. The facility comprises approximately 500 30- to 70-foot-long rental boat slips, transient and working boat landings, perimeter access roadways, working and parking areas, utility hook-up stanchions, and the breakwater proper. Prior to the construction of the inner boat basin, harbor facilities for local commercial and sport fishermen and recreational boaters was limited to the adjoining Citizen's Dock and several other smaller dock and pier structures along the northern side of the harbor. Many of these structures were either completely destroyed or seriously damaged in the 1964 "Good Friday" tsunami generated by the Anchorage Alaska Great Earthquake. Of these preceding facilities, only the "B" Street Pier and Citizen's Dock were replaced.

The Commission has issued numerous permits or permit waivers *de minimis* since the mid- 1970s, to the applicant harbor district, primarily for repair and maintenance of the boat mooring facilities, construction or renovations to upland support facilities, harbor related visitor-serving facilities, and maintenance dredging and related sediment disposal/beach replenishment activities.

The purpose of the existing breakwater is to create a still water harbor area for commercial and sports fishermen, and recreational boaters to moor, launch and retrieve their watercraft. The breakwater is oriented to protect the harbor from both northwest and south swells. The existing breakwater consists of local quarry stone and concrete

construction debris. Over the roughly thirty-five-year life of the breakwater, most of the larger class revetment materials have remained in place, although some minor settling has occurred. Smaller class materials used in the original breakwater construction have incrementally become displaced as a result of wave action.

However, during the winter storm period of December 31, 2005 through January 3, 2006, two- to three-foot storm surges in excess of typical high tide heights, driven by 90 mileper-hour winds, overtopped and significantly damaged the inner harbor breakwater. Portions of the 500- to 4,000-pound riprap armor rock comprising the breakwater became dislodged and tumbled from various locations along the leeward, outboard, and top sides of the wall compromising its structural integrity. As a result of this direct wave attack and related undermining of underlying revetment materials, the top of the breakwater lost approximately two feet of its height, which was originally comprised of small to medium rock materials and a covering of soil and grass. Large holes and gaps, several measuring larger than two feet in diameter, were formed at four locations over a distance of 985 lineal feet. Some of the holes penetrate all the way through the structure from the inner basin to the harbor. This damage and the loss of revetment height inevitably contributed to the extensive damage to the docks situated immediately behind the breakwater by the tsunami wave from the Kuril Islands Great Earthquake of November 15, 2006.

B. <u>Project Setting and Description</u>.

1. <u>Project Setting</u>

Crescent City Harbor is located approximately 20 miles south of the California-Oregon border in west-central Del Norte County (see Exhibit Nos. 1-4). The harbor lies on the seaward edge of the broad coastal plain that extends from South Beach to the south to the lower Smith River floodplain to the north. The harbor lies within a crescent-shaped bay, with Battery Point as the upcoast (western) limit and the rocky causeway connecting the former offshore Whaler Island, approximately one mile to the southeast as the downcoast (eastern) limit. A significant anadromous fish-bearing watercourse, Elk Creek, enters the harbor on its northeastern shoreline.

The relative location of this south-facing cove, situated between the Ports of Humboldt Bay and Brookings (Oregon), makes it an important "harbor of refuge" from the predominantly northwesterly winds and seas in the area. In addition, the constructed outer breakwaters provide supplemental protection against westerly and southerly storms. Facilities within the bounds of the harbor include a boat basin, launch areas, a repair and fabrication boatyard, associated marina fueling, lift hoist, drayage, stevedore, waste disposal services, a recreational vehicle park, and other ancillary visitor accommodations and harbor-related services.

The inner boat basin breakwater project site comprises an approximately 1,150-foot-long L-shaped rubble-mounded shoreline and in-water projecting revetment structure,

comprised of $\frac{1}{2}$ - to two-ton quarried stone and concrete construction debris "riprap." This trapezoidal structure sits at an elevation of mean sea level (msl) with a base width of about sixty feet, and tapering at a 1.5 (vertical) to 1 (horizontal) slope to a top width of roughly 16 feet at a height of +12 feet msl.

The surfaces of the breakwater materials supports habitat for a diversity of marine algal, invertebrate, and fish species. Species diversity tends to be higher along the outer, harbor side of the breakwater compared to the inward side. According to a 2007 biological assessment completed by the funding agency, the seaward-side community is similar to assemblages found at nearby natural outer-coast, moderately exposed sites. Biodiversity on the inward side is believed to be decreased due to sand accumulation and scour. Organisms on the inward side of the breakwater were characteristic of protected high intertidal areas. No species of concern were located during the inventory. However, the harbor, in general, provides habitat to a variety of sensitive fish and wildlife species, including coho salmon and Steller sea lion.

2. <u>Project Description</u>

As a result of the 2005-06 storm damage, the inner harbor boat residents, watercraft and docks are now exposed to further risks of further damage and injury should another severe storm occur. The proposed project is to rehabilitate, in-place, the existing breakwater to restore its effectiveness as a harborage revetment. The project would repair the breakwater in essentially its current structural footprint, to provide a similar level of protection, and protected area as it did originally, prior to its current condition. Only the height of a portion of the breakwater that is most directly exposed to wave strike would be increased by two-feet to provide greater protection to the boat basin during high swell periods. Detailed project plans are included as Exhibit No. 5.

The restored breakwater would be built out incrementally. The first phase would involve excavation for and placement of a continuous three-foot-wide by seven-foot-deep steelbar reinforced concrete diaphragm down the middle of a 585-foot segment of the outer arm of the breakwater to laterally strengthen the structure against wave strikes coming into the harbor past the outer jetties. After excavating the key for the diaphragm, Type 2 rock slope protection geo-fabric would be placed as a liner within the trench. The diaphragm would then be installed, either as pre-fabricated panels, or poured-in-place. The diaphragm wall would then be back-filled along both its outer and inboard sides with the excavated six-ton rock.

Following completion of the diaphragm installation, the overall height of the most exposed 426-foot length of the outer breakwater would be raised by the application of $\frac{1}{2}$ -to two-ton rock atop of the structure, protracting the 1.5:1 sides of the breakwater upward and inward, thereby raising the structure's height by two feet as mitigation to coastal erosion and storm surge hazards.

Concurrent with the raising the structural height, additional ¹/₂- to two-ton rock would be applied to rehabilitate the erosion damaged portions of the breakwater. In addition, sixton rock would be placed within a 720-lineal-foot by 10-foot area along the inboard breakwater face to bolster that side of the structure's resiliency to overtopping wave strikes. These materials would be obtained from one or more permitted sources, most likely local inland quarries because of the cost advantage of shorter transportation distances. Some of the rock that has sloughed off the breakwater would be retrieved and reused in the breakwater repair if possible. The total amount of imported rock is estimated at approximately 4,313 tons.

To minimize risks to environmentally sensitive fish species, the construction season would be limited to the period between July 15 and October 15. Work on the breakwater would be conducted during low tides for accessibility purposes. Equipment needed for the project includes a loader, excavator, and possibly a crane.

The applicant proposes to use a portion of the adjoining parking lot area on the north side of the boat basin as a staging area for construction equipment and materials (see Exhibit No. 5). The proposed staging area, owned by the Crescent City Harbor District, consists of an unpaved graded gravel surfaced area.

C. <u>Protection of Coastal Waters & Water Quality.</u>

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1. Applicable Coastal Act Policies and Standards

Section 30230 of the Coastal Act states the following:

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. [Emphasis added.]

Section 30231 of the Coastal Act states the following (emphasis added):

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. . [Emphasis added.]

Section 30232 of the Coastal Act states the following:

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 containments and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30233 of the Coastal Act states, in applicable part:

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

- (1) <u>New or expanded port</u>, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- (3) <u>In open coastal waters, other than wetlands,</u> including streams, estuaries, and lakes, <u>new or expanded boating facilities</u> and the placement of structural pilings for public recreational piers <u>that provide public access and recreational opportunities</u>.
- (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- (6) Restoration purposes.
- (7) Nature study, aquaculture, or similar resource dependent activities...

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary...[Emphasis added.]

2. <u>Consistency Analysis</u>

Coastal Act Sections 30230 and 30231 require, in part, that marine resources and coastal waters and wetlands be maintained and enhanced. These policies also call for restoration

of marine resources, coastal waters, streams, wetlands, and estuaries where feasible. Additionally, Section 30230 calls for special protection to be given to areas and species of special biological significance. Coastal Act Section 30232 requires protection against the spillage of crude oil, gas, petroleum products and hazardous substances and requires that effective containments and cleanup procedures be provided for accidental spills that do occur.

As mentioned above in Findings Section IV.B.1 Project Setting above, the waters of Crescent City Harbor together with those of the interconnecting Elk Creek drainage are biologically significant as they provide spawning and feeding habitat to a variety of salmonid species, including coho salmon, steelhead, and coastal cutthroat trout. Moreover, the proposed breakwater repairs and upgrades will involve the use of mechanized equipment and sediment containing building materials in close proximity to open coastal waters. As discussed in the preceding findings section, the proposed project involves four primary components: (1) excavation for and placement of a continuous three-foot-wide by seven-foot-deep steel-bar reinforced concrete diaphragm down the middle of a 585-foot segment of the outer arm of the breakwater to laterally strengthen the structure against wave strikes coming into the harbor past the outer jetties.; (2) the rehabilitation of the existing breakwater to replace dislodged and other wise lost revetment materials in their original configuration and class size; (3) augmentation to the height of certain erosion prone portions of the breakwater; and (4) augmenting a 720foot-long by 10-foot wide portion of the inboard side of the breakwater with revetment materials of a larger size class. The Commission evaluates the project components as a "new" development rather than as purely a repair and maintenance project. Therefore, for analysis purposes, the Commission must find that the proposed fill within the intertidal zone is allowable under the limitations imposed by Coastal Act Sections 30230, 30231, and 30233.

The project proposes to supplement the resiliency and protective capabilities of the existing breakwater by adding new rock slope protection to the structure to raise portions of its height and upgrading the size of the revetment materials from two-ton to six-ton quarry stone along a 720-foot segment of the inner face. The latter improvement would necessitate the placement of solid materials at and below the elevation of the mean high tide. Therefore, the Commission finds that the proposed project entails new development involving the filling within coastal waters.

When read together as a suite of policy directives, Sections 30230, 30231, and 30233 of the Coastal Act set forth a number of different limitations on what types of projects may be allowed in coastal wetlands and waters. For analysis purposes, the limitations applicable to the subject project can be grouped into four general categories or tests. These tests require that projects that entail the dredging, diking, or filling of wetlands and waters demonstrate that:

- The purpose of the filling, diking, or dredging is for one of the seven uses allowed under Section 30233;
- The project has no feasible less environmentally damaging alternative;
- Feasible mitigation measures have been provided to minimize adverse environmental effects; and
- The biological productivity and functional capacity of the habitat shall be maintained and enhanced, where feasible.

Each category is discussed separately below.

Permissible Use for Dredging and Filling in Coastal Waters

The first test set forth above is that any proposed filling, diking, or dredging in coastal waters and wetlands must be for an allowable purpose as specified under Section 30233 of the Coastal Act. The relevant categories of uses listed under Section 30233(a) that relates to the proposed revetment improvements are subsection (1) involving new or expanded port facilities, including commercial fishing facilities, and subsection (3) in open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities that provide public access and recreational opportunities.

As discussed previously, boating facilities at Crescent City include, among other things, the breakwater, which was constructed to create a harbor for boaters to moor, launch, and retrieve their boats. Due to the breakwater's current deteriorated condition, storm surges, especially those corresponding with high tides, can now overtop the breakwater to strike the docking facilities within the boat basin. Once the breakwater is rehabilitated back to its original configuration and augmented along select erosion prone reaches as proposed, exposure of persons and property to potentially injury and damage from wave attack will be lessened.

As the applicant proposes to undertake these improvements to the breakwater for the purpose of improving the safety and longevity of commercial fishing and recreational boat mooring, loading and launching operations, the Commission concludes that the proposed fill is permissible under Section 30233(a) subsection (1) for new or expanded port facilities, including commercial fishing facilities, and subsection (3) for new or expanded boating facilities in open coastal waters, other than wetlands, including streams, estuaries, and lakes, that provide public access and recreational opportunities.

Least Environmentally Damaging Feasible Alternative

The second test set forth by the Commission's dredging and fill policies is that the proposed fill project must have no feasible less environmentally damaging alternative. Coastal Act Section 30108 defines "feasible" as follows:

"Feasible" means capable of being accomplished in a successful manner within a reasonable time, taking into account economic, environmental, social, and technological factors.

Alternatives to the proposed project that were examined include (1) the "no-project" alternative; and (2) alternative designs to provide greater protection from storm surge impacts and strengthening the structural integrity of the breakwater's inner faces. As explained below, the alternatives analyzed are infeasible and/or do not result in a project that is less environmentally damaging than the proposed project as conditioned:

"No-Project" Alternative

The "no project" alternative would mean that no upgrade to the height and competency of the breakwater be undertaken. With no such improvements, the relatively minor impacts to visual resources associated with the incremental raising of the height of a portion of the outer breakwater and the less than significant impacts to intertidal wetlands habitat from the proposed rock fill would be avoided. However, without the proposed upgrades, the boat basin would remain vulnerable to damage from wave strike and eventually damaged to the point that it no longer could be used for commercial fishing vessels or recreational boating. The boat basin would likely be forced to close, and the mariners who currently use the site would be displaced. As discussed above, Crescent City Harbor has been used for commercial and recreational fishing for decades, and it provides the only harbor of refuge from the common northwesterly winds and seas between Brookings in southern Oregon and Trinidad Bay in Humboldt County. As discussed previously, commercial fishing and recreational boating are given high priority under the Coastal Act, and the Coastal Act policies call for the protection of these uses and the facilities needed to continue these uses. Therefore, the Commission finds that the no project alternative is not a feasible less environmentally damaging alternative to the proposed project, as conditioned.

Alternative Breakwater Enhancement Designs

Another alternative to fortifying the breakwater inner face would involve replacing the boat basin facing side of the breakwater with a solid seawall, either through installing pre-fabricated caisson panels over the riprap surface, paving the structure with "shotcrete," Gunite® or other similar affixing aggregate materials, or driving interlocking sheetpile along the breakwater's interior. However, the installation of materials to convert the breakwater into a seawall would require far more intensive over-water construction activities, including the use of caustic concreting materials in even closer proximity to open ocean waters (than would the proposed diaphragm construction), for which the use of coffer damming and/or barge operations would necessitate closing portions of the boat basin. Similarly, in addition to requiring closure of the boat basin, installation of sheet pile, and any associated demolition of all or part of the breakwater, especially the impact driving or "jetting" of the piles, would have greater potential impacts to sensitive biological resources such as coho salmon, from underwater noise and

sedimentation. Therefore, the Commission finds that the alternative of converting all or portions of the existing rubble-mounded breakwater into a unified seawall to strengthen it against wave assault is <u>not</u> a feasible less environmentally damaging alternative to the proposed project, as conditioned.

Conclusion

For all of the reasons discussed above the Commission finds that there is no less environmentally damaging feasible alternative to the development as conditioned, as required by Section 30233(a).

Feasible Mitigation Measures

The third test set forth by Section 30233 is whether feasible mitigation measures have been provided to minimize adverse environmental impacts. The proposed development would be located within and around coastal waters and wetlands. Depending on the manner in which the proposed filling is conducted, the significant adverse impacts of the project may include: (1) effects on sensitive fish and wildlife species; and (2) water quality impacts from the placement of sediment containing materials in and/or undertaking construction involving the use of hazardous materials in close proximity to coastal waters. The potential impacts and their mitigation are discussed below.

Effects on Sensitive Fish and Wildlife Species

The National Marine Fisheries Service ("NMFS" or "NOAA Fisheries") completed an informal consultation for the project (File No. 2008/04540:MLD), which outlined the project's potential effects on marine species listed under the federal Endangered Species Act and "Essential Fish Habitat" (EFH) under the Magnuson-Stevens Fishery and Conservation Act. The consultation addressed potential impacts to various threatened and endangered species evaluated in the biological assessment provided by the funding agency, including coho salmon (*Oncorhynchus kisutch*), Steller Sea lions (*Eumetopias jubatus*), Western Snowy Plover (Charadrius alexandrinus nivosus), Marbled Murrelet (*Brachyramphus marmoratus*), and California Brown Pelican (*Pelecanus occidentalis*), and EFH for salmon species (see Exhibit No. 8).

The NOAA Fisheries consultation concludes in a concurrence letter responding to the funding agency's biological assessment that the project may affect, but is not likely to adversely affect, listed salmonids, Steller sea lions, western snowy plovers, marbled murrelets, and California brown pelicans (see Exhibit No. 8). The consultation and concurrence letter included numerous conservation measures which, if incorporated into the project design alongside the self-imposed construction season limitations, water quality protective measures, and other performance standards, would render these potential effects to insignificant levels. Imposition of these conservation measures were incorporated into the Nationwide Permits issued for the project by the U.S. Army Corps

of Engineers (see Exhibit No. 7).

To ensure that the proposed breakwater repairs and enhancements are carried out in a manner that will not cause significant adverse impacts to sensitive fish species or habitat, as concluded by NOAA Fisheries staff, the Commission attaches **Special Condition Nos. 1, 2, and 3**. These conditions require that final revised plans for the development incorporate all impact minimizing mitigation measures identified in the final biological assessment, and that the construction activities be conducted only during the period of July 15 through October 15, in order to protect sensitive fish species. Furthermore, the conditions require that all project work be conducted during periods of low-tides only, above the water surface to minimize suspended sediment and potential water quality impacts that could affect sensitive fish and wildlife species.

Water Quality Impacts

The proposed breakwater rehabilitation project could adversely affect water quality. The breakwater rehabilitation work involves placing rock within and adjacent to coastal waters with the use of heavy equipment. The use of construction equipment and materials within sensitive marine and beach habitats could lead to habitat contamination and impacts through the discharge of debris, trash, and contaminants such as leaky gas and other fluids and sediment- and other pollutant-laden runoff. Allowing such debris or pollutants to enter the ocean could adversely affect water quality and marine organisms inconsistent with Coastal Act Sections 30230, 30231, and 30232. Similarly, the proposed installation of the concrete diaphragm, if cast-in-place, also will involve the use of hazardous materials in close proximity to coastal waters, namely the pouring of caustic wet concrete.

As summarized above, Coastal Act Section 30231 protects the quality of coastal waters, streams, and wetlands through, among other means, controlling runoff. Sediment-laden runoff from a project work site, upon entering coastal waters, increases turbidity and adversely affects fish and other sensitive aquatic species. Sediment is considered a pollutant that affects visibility through the water and affects plant productivity, animal behavior (such as foraging) and reproduction, and the ability of animals to obtain adequate oxygen from the water. In addition, sediment is the medium by which many other pollutants are delivered to aquatic environments, as many pollutants are chemically or physically associated with the sediment particles.

In addition, as discussed above, Coastal Act Section 30232 requires protection against the spillage of crude oil, gas, petroleum products and hazardous substances and requires that effective containments and cleanup procedures be provided for accidental spills that do occur. The applicant has proposed to prepare a hazardous materials management plan to address the transport, handling, and storage of fuels and other equipment fluids, with emphasis on preventing releases to the ocean or beach, and to address spill prevention, cleanup, and disposal. To date, however, no such plan has been prepared.

Given that the proposed construction methods and activities: (1) will be located within and adjacent to coastal waters and beaches and thus could cause an increase in sediment and other pollutants entering coastal waters and other sensitive habitats through either the release of polluted runoff from the project site and/or leaky equipment contaminating coastal waters and beaches; and (2) are located within a area of special biological significance, which warrants "special protection" under Coastal Act Section 30230, the Commission finds it necessary to attach Special Condition Nos. 2 through 5, as described below.

- Special Condition No. 2 in part requires that all construction activities within coastal waters authorized under the permit shall be conducted during periods of low-tides only to minimize suspended sediment and potential water quality impacts.
- Special Condition No. 3 requires adherence to various construction responsibilities including, but not limited to, the following: (a) construction methods shall conform to those described in Findings Section IV.B.2 Project Description, specifically, the breakwater rehabilitation shall be conducted from land and shall be built out incrementally, with construction equipment working from the crest of the newly restored breakwater (which will allow marine organisms inhabiting the existing breakwater to continue to have habitat available in areas of the breakwater not being worked on); (b) no construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to wave, wind, or rain erosion and dispersion; (c) public roadway surfaces adjacent to the construction entrances shall be swept at the end of each day to remove sediment and/or other construction materials deposited due to construction activities, to prevent such sediment and/or materials from contaminating coastal waters or other environmentally sensitive habitat areas; (d) any and all debris resulting from construction activities shall be removed from the breakwater and adjacent beach areas on a daily basis and disposed of at an appropriate location(s); (e) any fueling and maintenance of construction equipment shall occur within upland areas outside of environmentally sensitive habitat areas or within designated staging areas, mobile fueling of construction equipment and vehicles on and around the breakwater construction site shall be prohibited, and mechanized heavy equipment and other vehicles used during the construction process shall not be stored or re-fueled within 50 feet of drainage courses and other coastal waters; (f) construction vehicles shall be maintained and washed in confined areas specifically designed to control runoff and located more than 100 feet away from the mean high tide line; (g) floating booms shall be used to contain debris discharged into coastal waters, and any debris discharged shall be removed as soon as possible but no later than the end of the each day; (h) during construction, all trash shall be properly contained, removed from the work site, and disposed of on a regular basis to avoid contamination of habitat during restoration activities; (i) hazardous materials management equipment including oil

containment booms and absorbent pads shall be available immediately on-hand at the project site, and a registered first-response, professional hazardous materials clean-up/remediation service shall be locally available on call; and (j) at the end of the construction period, the permittee shall inspect the project area and ensure that no debris, trash, or construction material remain on the beach, breakwater, or in the water.

- **Special Condition No. 4** requires submittal of a final Sedimentation and Runoff Control Plan, which shall demonstrate that: (a) run-off from the project site shall not increase sedimentation in coastal waters; (b) run-off from the project site shall not result in pollutants entering coastal waters; and (c) Best Management Practices (BMPs) shall be used to prevent the entry of polluted stormwater runoff into coastal waters during the construction of the authorized structures.
- **Special Condition No. 5** requires submittal of a final Hazardous Materials Management Plan, which, at a minimum, shall provide for the following (a) equipment fueling shall occur only during daylight hours in designated fueling areas; (b) oil absorbent booms and/or pads shall be on site at all times during project construction, and all equipment used during construction shall be free of oil and fuel leaks at all times; (c) provisions for the handling, cleanup, and disposal of any hazardous or non-hazardous materials used during the construction project including, but not limited to, paint, asphalt, cement, equipment fuel and oil, and contaminated sediments; (d) a schedule for maintenance of containment measures on a regular basis throughout the duration of the project; (e) provisions for the containment of rinsate from the cleaning of equipment and methods and locations for disposal off-site; (f) a site map detailing the location(s) for hazardous materials storage, equipment fueling and maintenance, and any concrete wash-out facilities; and (g) reporting protocols to the appropriate public and emergency services agencies in the event of a spill.

Conclusion

The Commission finds that as conditioned, feasible mitigation measures have been provided to minimize adverse environmental effects consistent with Section 30233(a) of the Coastal Act. In addition, The Commission finds that as conditioned to require: (1) adherence to various construction responsibilities to protect coastal resources; and (2) submittal of a final sedimentation and runoff control plan, hazardous materials management plan, and debris disposal plan, the proposed development is consistent with Coastal Act Sections 30230, 30231, and 30232.

Maintenance & Enhancement of Biological Productivity & Functional Capacity

The fourth general limitation set by Sections 30230, 30231, and 30233 is that any proposed dredging or filling in coastal wetlands must maintain and enhance the biological productivity and functional capacity of the habitat, where feasible.

As discussed above, the conditions of the permit will ensure that the project will not have significant adverse impacts on the water quality of any of the coastal waters in the project area and will ensure that the project construction will not adversely affect the biological productivity and functional capacity coastal waters or wetlands. Therefore, the Commission finds that the project, as conditioned, will maintain the biological productivity and functional capacity of the habitat consistent with the requirements of Sections 30230, 30231, and 30233 of the Coastal Act.

D. <u>Protection of Commercial Fishing & Recreational Boating Facilities.</u>

1. Applicable Coastal Act Policies and Standards

Section 30224 of the Coastal Act states:

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, <u>new protected water areas</u>, and in areas dredged from dry land. [Emphases added.]

Section 30234 of the Coastal Act states, in applicable part:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded... [Emphasis added.]

2. <u>Consistency Analysis</u>

Crescent City Harbor has long been used as a launch site for commercial and recreational fishermen, and provides the only harbor of refuge from the common northwesterly winds and seas between Brookings Oregon and Trinidad Bay in Humboldt County, as discussed above. As discussed above in Findings Section IV.A, the Crescent City Harbor Boat Basin, which has been managed by the applicant since the early 1970s, includes a marina access road, boat slips, parking and work areas, utilities, and the breakwater itself. Prior to the Harbor District's involvement, the boat mooring and launch area had been used by

local commercial and sport fishermen and maintained on an ad hoc informal basis by a consortium of commercial fishing interests and other community members. In addition to Citizen's Dock, several other wooden piers were originally in place along the northern side of the harbor.

The inner boat basin breakwater's effectiveness at protecting the boat mooring facility has been reduced over time due to the settling of rocks and loss of materials associated with significant storms. As a result, the breakwater in its eroded condition is currently subject to being overtopped by waves and has, in places, been laterally breached.

To minimize conflicts with biological resources, the proposed construction activities would occur between July 15 and October 15. Commercial and sports fishing is most common during late spring through mid-fall, and again in late fall through winter during the crab season. Although the project work would overlap with the boating season, little if any interference with access to the boat basin would occur during the construction season, as most of the work activities would be limited to the breakwater itself and a portion of the northern parking area slated for use as a staging area. Given the reduced level of commercial and sports fishing activity within the harbor as compared to the past, there are numerous alterative parking and work areas in proximity to the boat basin that can be used during the breakwater construction period without interfering with commercial and sports fishing activities. Thus, the Commission finds that this impact is short-term and temporary, and the rehabilitation of the breakwater will improve boating access and safety over the long-term. As previously discussed, the Commission attaches Special Condition No. 2 to ensure that the timing of construction does not significantly impact boating use of the area by restricting the construction window to the late fall, winter, and early spring months. Furthermore, Special Condition No. 3 requires that at the end of the construction period, the permittee shall inspect the project area and ensure, in part, that the project has not created any hazard to navigation.

Therefore, the Commission finds that the project as conditioned will protect and improve the existing boat launching facility that serves commercial fisheries and recreational boating, consistent with Coastal Act Sections 30224 and 30234.

E. <u>Protection of Visual Resources</u>.

1. Applicable Coastal Act Policies and Standards:

Section 30251 of the Coastal Act states, in applicable part, the following:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas...shall be subordinate to the character of its setting.

2. <u>Consistency Analysis</u>:

Section 30251 of the Coastal Act requires that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance, and requires in applicable part that permitted development be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, and to be visually compatible with the character of surrounding areas. Furthermore, Section 30240(b) of the Coastal Act states that development in areas adjacent to 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 recreation areas.

The project area is not located within a designated highly scenic area. Additionally, the project will not result in the alteration of natural landforms and will require only a minimal amount of grading. Similarly, the proposed repairs and modifications to the breakwater would be compatible with the character of the surroundings in that they would approximate the size, bulk, and outward appearance of other revetment structures throughout the harbor. However, the proposed development does include raising the crest elevation of a 426-foot portion of the breakwater's formerly approved elevation from approximately +12 feet msl to +14 feet msl. This action would incrementally increase the amount of blockage of views of the ocean from certain publically accessible vantage points landward of the breakwater.

To allow a reasonable fortification of the breakwater to both increase its resiliency to storm surge waves and to provide a greater level of protection to the boat basin, the proposed project includes raising the elevation of the segment of the outer breakwater most exposed to direct wave strikes by two feet from roughly 12 feet above mean sea level to 14 feet. This action would slightly reduce vistas of open sky, ocean, and offshore rocky areas, such as Whaler Island. However, the Commission finds that with this relatively minor increase in breakwater height, the adverse impact on views would not be significant and numerous opportunities to view the ocean and scenic areas would remain open to the public at locations situated laterally to either side of the 426-foot-long portion of the breakwater that would be raised in height and from the top of the breakwater itself once completed.

Therefore, the Commission finds that as conditioned, the proposed project is consistent with the visual resource policies of Section 30251 of the Coastal Act, as the project is compatible with the visual character of the surrounding area, will not result in the alteration of natural landforms, and will not result in significant additional blockage of views to and along the coast.

F. <u>Geologic Hazards & Shoreline Structures</u>.

1. Applicable Coastal Act Policies and Standards:

Section 30253 of the Coastal Act states, in applicable part:

New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs...
- 2. <u>Consistency Analysis</u>

In developing the design for the breakwater repairs and upgrades, the applicant's consulting engineer and the project funding agency utilized established contemporary (2006 edition) construction standards and material specifications for slope protection structures and concrete paving as set forth by the California Department of Transportation. These professional engineer and construction industry vetted standards and specifications are required to be utilized in all state-contracted work, including shoreline and roadway revetments such as those found within Crescent City Harbor.

Nonetheless, due to the uncertain nature and inherent risk associated with the construction of improvements in high energy coastal environments, the Commission attaches Special Condition No. 6. **Special Condition No. 6** requires the applicant to assume the risks of extraordinary erosion and flood hazards of the breakwater area and waive any claim of liability on the part of the Commission. Given that the applicant has chosen to implement the project despite these risks, the applicant must assume the risks. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for the development. The condition also requires the applicant to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand hazards.

Therefore, the Commission finds that as conditioned, the project will minimize risks to life and property from geologic and flood hazards, will assure stability and structural integrity, and will neither create nor contribute significantly to erosion, geologic instability, or erosion of the site or surrounding area consistent with the requirements of Section 30253 of the Coastal Act.

G. <u>Public Trust Lands</u>.

The project site is located in an area that was formerly State-owned waters, but remains otherwise subject to the public trust. On July 13, 1963, by Senate Bill No. 1383, the State of California transferred all rights, title, and interest to portions of the submerged and tidelands within Crescent City Harbor and surrounding ocean waters to the District. In granting these ownership rights, the State Lands Commission (SLC) has retained authority over these former sovereign lands through both exempted and reserved rights to all deposits of minerals, and its public trust responsibilities under the state Constitution. Granted lands are monitored by the SLC to ensure compliance with the terms of the issued statutory grant. These grants encourage development of tidelands consistent with the public trust, while requiring grantees to re-invest revenues produced from the lands back into the lands where they are generated. In a letter dated March 28, 2008, States Land Commission staff indicate that no further perfection of use rights is necessary unless dredging is needed as part of the project (see Exhibit No. 8). As the project does not involve dredging, no additional approval from SLC is necessary for the proposed development.

H. North Coast Regional Water Quality Control Board Approval.

The project falls under the regulatory authority of the North Coast Regional Water Quality Control Board pursuant to Section 401 of the Clean Water Act (33 USC 1341) and/or the Porter-Cologne Water Quality Control Act. The Regional Board posted a 21day public notice for Water Quality Certification and/or Waste Discharge Requirements (WDID No. 1A09009WNDN) for the project on July 14, 2009 (see Exhibit No. 8).

To ensure that the project ultimately approved by the Regional Board is the same as the project authorized herein, the Commission attaches **Special Condition No. 7**, which requires the applicant to submit to the Executive Director evidence of the Regional Board's certification of water quality for the project prior to permit issuance. The condition requires that any project changes resulting from this other agency approval not be incorporated into the project until the applicant obtains any necessary amendments to this coastal development permit.

I. U.S. Army Corps of Engineers Approval.

The project requires review and authorization by the U.S. Army Corps of Engineers ("USACE" or "Corps"). Pursuant to the Federal Coastal Zone Management Act, any permit issued by a federal agency for activities that affect the coastal zone must be consistent with the coastal zone management program for that state. Under agreements between the Coastal Commission and the U.S. Army Corps of Engineers, the Corps will not issue a permit until the Coastal Commission approves a federal consistency certification for the project or approves a permit.

Pursuant to the Section 404 of the federal Clean Water Act, the Corps has issued Nationwide Permits for the repairs and upgrades to the breakwater based upon an initially submitted design (see Exhibit No. 7). A determination on the final design of the breakwater improvements is pending before the California Emergency Management Agency ("CalEMA"). Once the determination is issued, any revisions to the project would be subject to review by the Corps, wherein a "letter of modification" would likely be issued to reflect the final design modifications, if any. To ensure that the project ultimately approved by the Corps is the same as the project authorized herein, the Commission attaches **Special Condition No. 8**, which requires the applicant to submit to the Executive Director evidence of the Corps' approval of any design changes to the project changes resulting from this other agency approval not be incorporated into the project until the applicant obtains any necessary amendments to this coastal development permit.

J. <u>Public Recreation and Access</u>.

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 and 30220 through 30224 specifically protect public access and recreation. In particular:

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. [PRC §30210]

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. [PRC §30211]

Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects... [PRC §30212(a)]

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. [PRC §30213] 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... [PRC §30214 (a)]

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. [PRC § 30221]

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, [...] 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. [PRC §30224]

Likewise, Coastal Act Section 30240 (b) also requires that development not interfere with recreational areas and states:

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.

Crescent City Harbor provides public access and recreational opportunities of regional and statewide significance. These opportunities include boat launching, berthing for commercial vessels and recreational boats, boat repair areas, marine-related retail/commercial businesses, sailing programs, yacht club and boat sales. The District's breakwater repair, maintenance, and upgrade project would strongly benefit public access and recreation, in two ways: (1) by restoring and providing enhanced protection from coastal flooding and erosion storm surge to the harbor's berthing areas; and (2) by including resurfacing improvements to the top of the breakwater that will increase the safety and utility of the area for public use.

Thus, the Commission concludes that the project as conditioned would protect public harbor access, and boating and beach recreational opportunities consistent with Coastal Act Sections 30210, 30213, 30220, 30224, 30234 and 30234.5. Therefore, the Commission finds that, as conditioned, the proposed project is consistent with the public access and recreational policies of the Coastal Act.

K. <u>California Environmental Quality Act (CEQA)</u>.

The County of Del Norte served as the lead agency for the project for CEQA purposes. The County found the subject breakwater repairs and upgrades qualified for "Class 1" and "2" categorical exemptions to environmental review, pursuant to Sections 15301 and 15302 of the CEQA Guidelines (14 CCR §§15000) as repair, maintenance, replacement, and/or reconstruction of existing structures.

Section 13906 of the California Code of Regulation requires Coastal Commission approval of a coastal development permit application to be supported by findings showing that the application, as modified by any conditions of approval, is consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Public Resources Code 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 significantly lessen any significant effect that the activity may have on the environment.

The Commission incorporates its findings on conformity with Coastal Act policies at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed herein in the findings addressing the consistency of the proposed project with the Coastal Act, the proposed project has been conditioned in order to be found consistent with the policies of the Coastal Act. As specifically discussed in these above findings which are hereby incorporated by reference, mitigation measures which will minimize all adverse environmental impact have been required. These required mitigation measures include requirements that limit construction activities to avoid environmentally sensitive habitat areas and/or periods of time when migratory fish and waterfowl, and marine mammals could lead be significantly impacted. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

V. <u>EXHIBITS</u>

- 1. Regional Location Map
- 2. Vicinity Topographic Map
- 3. Site Plan Aerial Photo
- 4. Oblique Aerial Photo
- 5. Project Site Plan
- 6. Excerpts, *Biological Assessment*

- U.S. Army Corps of Engineers *Nationwide Permit Nos. 3 and 13* Agency Review Correspondence 7.
- 8.

APPENDIX A

STANDARD CONDITIONS

- 1. <u>Notice of Receipt and Acknowledgment</u>. 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. <u>Expiration</u>. 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. <u>Interpretation</u>. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. <u>Assignment</u>. 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. <u>Terms and Conditions Run with the Land</u>. 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.