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Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.:	**1-08-047**
APPLICANT:	**Crescent City Harbor District**
AGENT OF PROCESS:	Stover Engineering
PROJECT DESCRIPTION:	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 ±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 b 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.

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) *Section 404 Nationwide Permit* Nos. 3 – *Maintenance* and 13 – *Bank Stabilization*; and (2) NOAA Fisheries Endangered Species Act and Essential Fish Habitat Consultation *Letter of Concurrence*.
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 ½- 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. Timing of Construction

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. Construction Responsibilities

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

l. 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 & 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. Assumption of Risk

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. Background.

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 mile-per-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. Project Setting and Description.

1. 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.

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 ½- 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. Project Description

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 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. 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 ½-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 ½- to two-ton rock would be applied to rehabilitate the erosion damaged portions of the breakwater. In addition, six-ton 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. Protection of Coastal Waters & Water Quality.

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 30231of 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) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

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

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

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

(4) 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. Consistency Analysis

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 720-foot-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 inter-locking 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 not 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. Protection of Commercial Fishing & Recreational Boating Facilities.

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, new protected water areas, 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. Consistency Analysis

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. <u>Applicable Coastal Act Policies and Standards</u>:

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

> *The scenic and visual qua1ities 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 qua1ity in visually degraded areas. New development in highly scenic areas…shall be subordinate to the character of its setting.

2. Consistency Analysis:

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. Geologic Hazards & Shoreline Structures.

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. Consistency Analysis

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. Public Trust Lands.

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 21-day 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 prior to commencement of any development. 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.

J. 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.*

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. California Environmental Quality Act (CEQA).

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. EXHIBITS

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*

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

APPENDIX A

STANDARD CONDITIONS

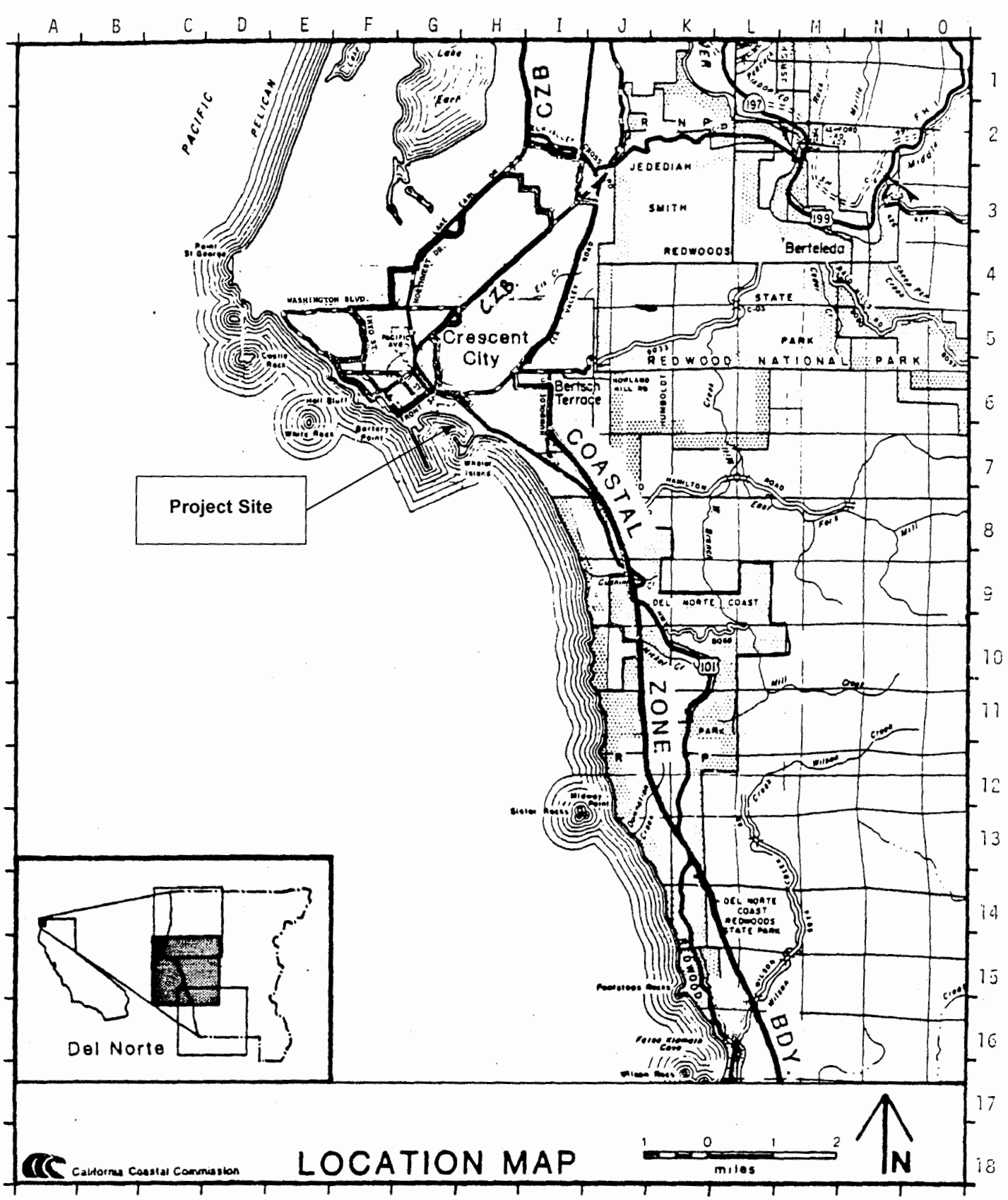
1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

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

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

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

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



County of Del Norte

EXHIBIT NO. 1

APPLICATION NO.

1-08-047

CRESCENT CITY HARBOR DISTRICT

REGIONAL LOCATION MAP

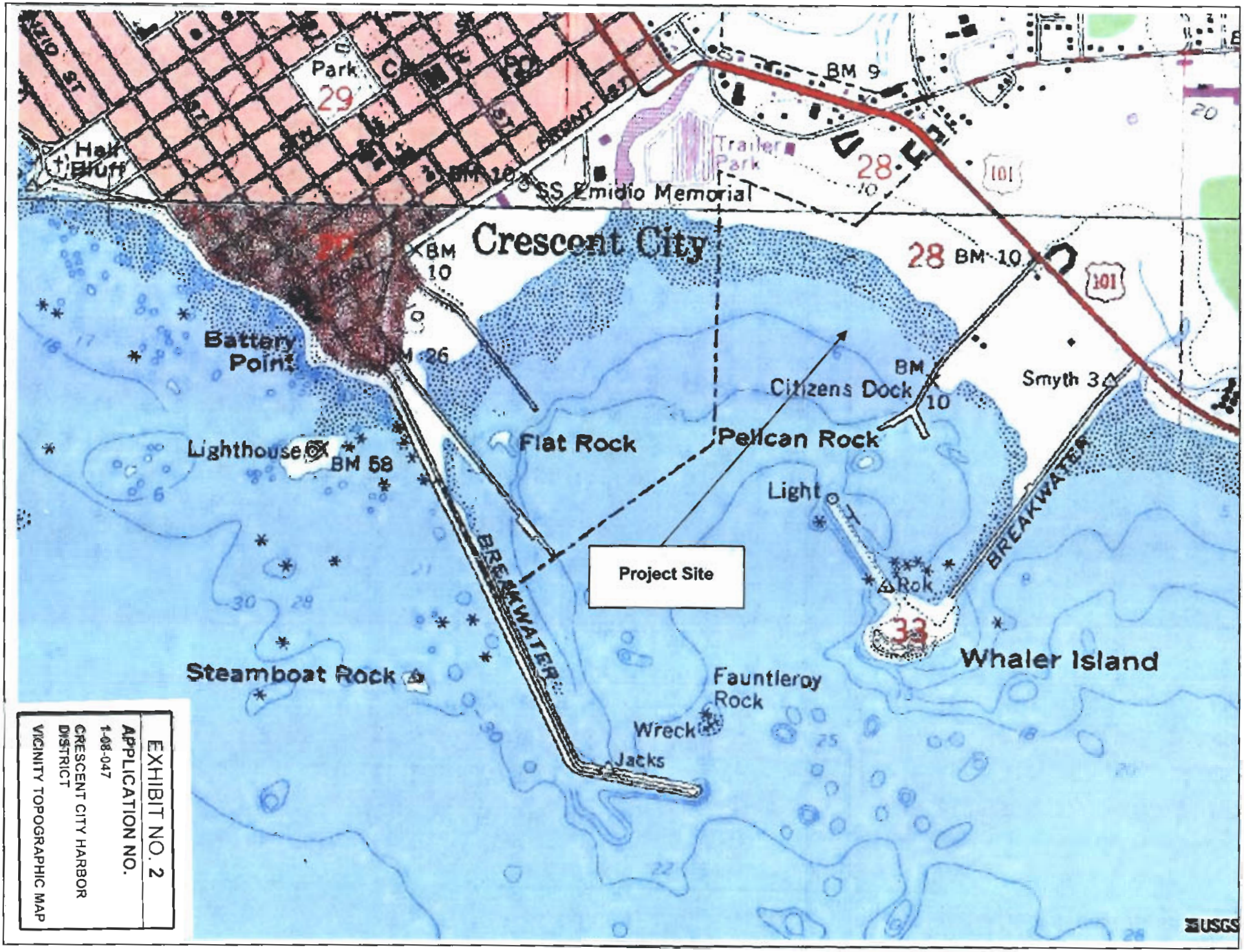


EXHIBIT NO. 2

APPLICATION NO.
1-08-047

CRESCENT CITY HARBOR DISTRICT

VICINITY TOPOGRAPHIC MAP

EXHIBIT NO. 3

APPLICATION NO.

1-08-047

CRESCENT CITY HARBOR DISTRICT

SITE PLAN AERIAL PHOTO

EXHIBIT NO. 4

APPLICATION NO.

1-08-047

CRESCENT CITY HARBOR DISTRICT

OBLIQUE AERIAL PHOTO

EXHIBIT NO. **5**

APPLICATION NO.

1-08-047

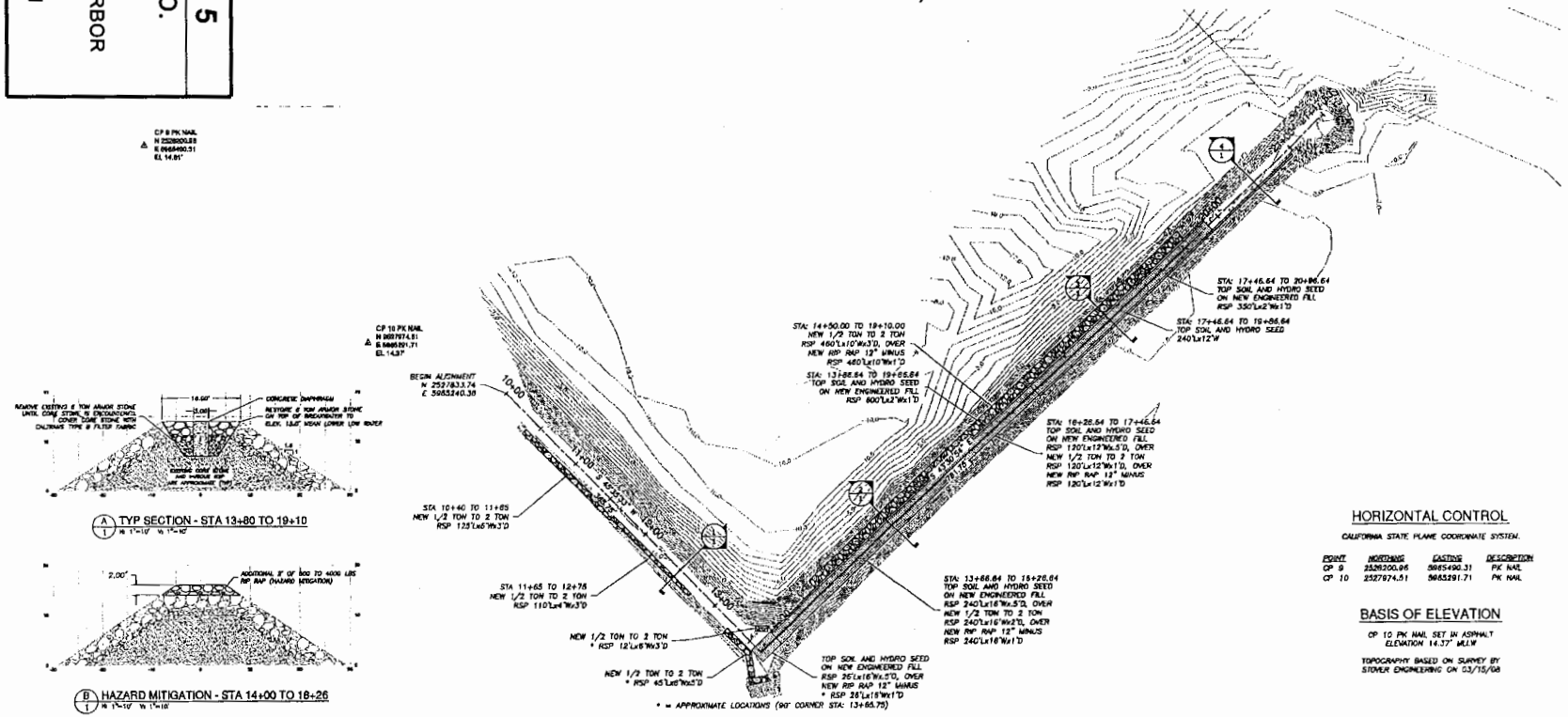
CRESCENT CITY HARBOR DISTRICT

PROJECT SITE PLAN

CRESCENT CITY HARBOR

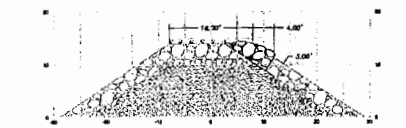
INNER BOAT BASIN - BREAKWATER REPAIR

CRESCENT CITY, CA

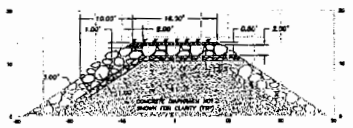


A 1 TYP SECTION - STA 13+80 TO 19+10
H: 1"=10' V: 1"=10'

B 1 HAZARD MITIGATION - STA 14+00 TO 18+26



1 1 1/2 TON TO 2 TON REPAIR



2 1 STORM DAMAGE REPAIR
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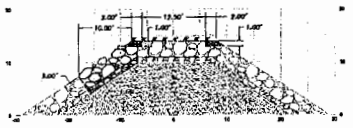

3 1 PARTIAL STORM DAMAGE REPAIR
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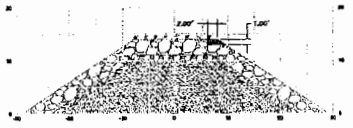

4 1 MINOR STORM DAMAGE REPAIR
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HORIZONTAL CONTROL

CALIFORNIA STATE PLANE COORDINATE SYSTEM.

POINT	NORTHING	EASTING	DESCRIPTION
CP 9	2526200.95	6965490.31	PK NAIL
CP 10	2527974.51	6965291.71	PK NAIL

BASIS OF ELEVATION

CP 10 PK NAIL SET IN ASPHALT
ELEVATION 14.37' MLLW

TOPOGRAPHY BASED ON SURVEY BY STOVER ENGINEERING ON 03/15/08

PRELIMINARY

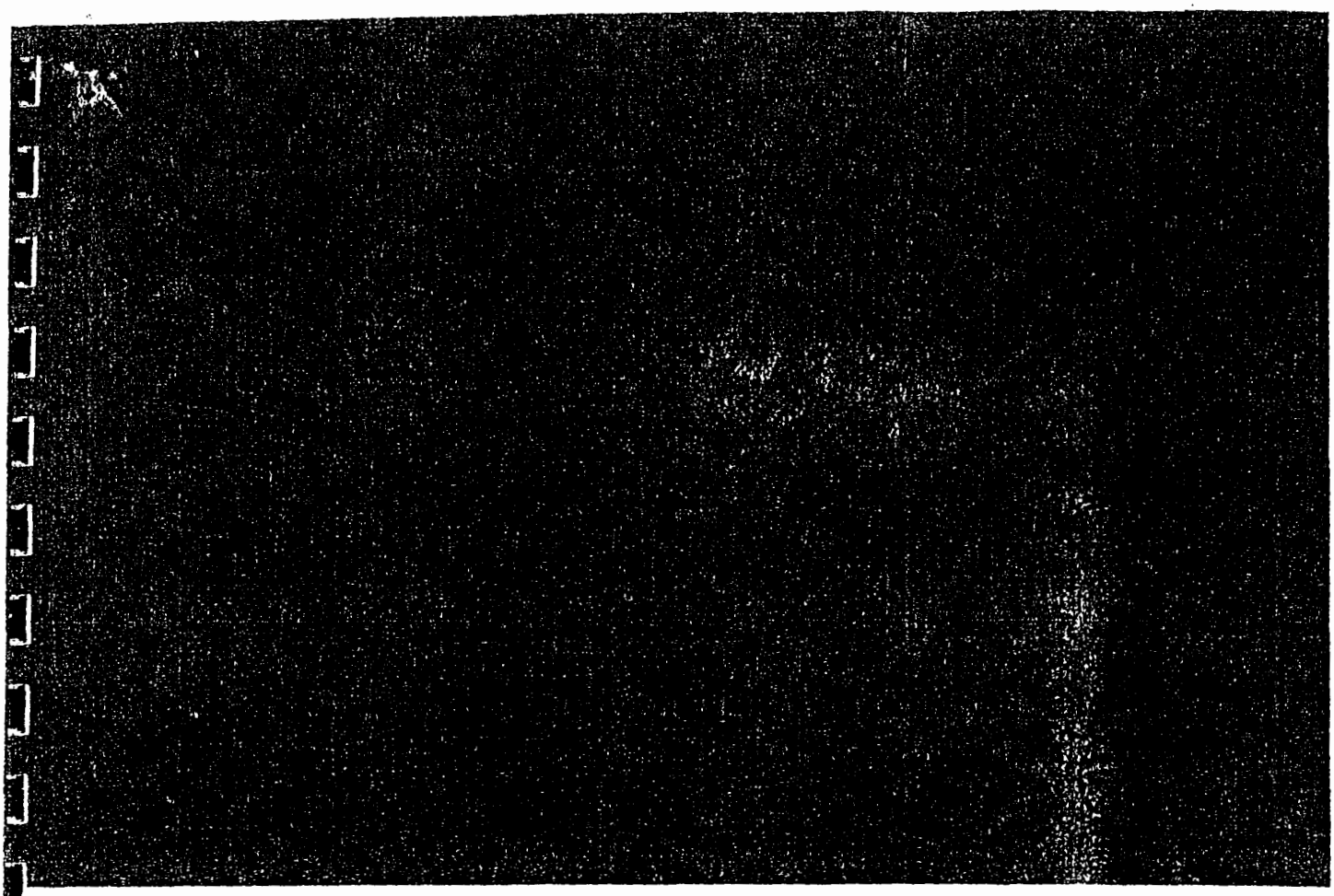
STOVER ENGINEERING
Civil Engineers and Consultants
PO BOX 783 - 711 H STREET
CRESCENT CITY, CA 95531 - 707-465-6742

CRESCENT CITY HARBOR DISTRICT
BREAKWATER REPAIRS
CRESCENT CITY, CA

PROPOSED SITE PLAN

JOB NO. 3891
SCALE: 1"=50'
DATE: 08/25/09
SHEET 1 OF 1

S:\3879 CC Harbor Dist - Inner Harbor Reconstruction\dwg\BREAKWATER SECTIONS 20090714.dwg, 8/25/2009 3:38:16 PM



Final Biological Assessment for NMFS

Inner Basin Sea Wall Repair Project

Crescent City Harbor District

FEMA-1628-DR-CA, PW #1387

April 2007

FEMA

U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, California 94607

The Crescent City Harbor District (District), through the Governor's Office of Emergency Services (OES), has requested Federal Emergency Management Agency's (FEMA) Public Assistance (PA) Program funding to repair and stabilize the Harbor District's inner basin sea wall.

This Biological Assessment (BA) documents potential adverse effects to species listed as endangered, threatened, and proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) that are regulated by the National Marine Fisheries Service (NMFS).

The proposed action is located due west of Crescent City in Del Norte County, California (Figure 1). The action area includes the inner basin sea wall as well a 0.5–mile (mi) radius buffer around the project site (Figure 2).

The proposed action 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.

As a result of the field reconnaissance and background review, it was determined that the action area provides habitat suitable to support two federally listed species under NMFS jurisdiction: the Southern Oregon/Northern California coasts (SONCC) coho salmon (*Oncorhynchus kisutch*) and the Steller sea lion (*Eumetopias jubatus*).

After a literature review, site reconnaissance, communication with individuals knowledgeable about this species, and consideration of the proposed activities, FEMA has determined that the proposed action may affect the SONCC coho salmon, is not likely to adversely affect the Steller sea lion, and will not destroy and/or adversely modify critical habitat for either the SONCC coho salmon Evolutionary Significant Unit (ESU) or the Steller sea lion. Measures are proposed in this document that will avoid or minimize the potential for habitat degradation and other potential adverse effects on both species.

The Crescent City Harbor District (District) through the Governor's Office of Emergency Services (OES), has requested Federal Emergency Management Agency's (FEMA) Public Assistance (PA) Program funding to repair and reinforce the Crescent City Harbor District's inner basin sea wall.

This report is organized into seven sections. The remaining portion of Section 1 describes the purpose and need for the proposed action. Section 2 describes the action area and proposed action. Section 3 describes the affected environment, including the study methods, habitat description, and the species listed and proposed to be listed that are relevant to the proposed action. Section 4 evaluates the potential effects on the Southern Oregon/Northern California coasts (SONCC) coho salmon Evolutionary Significant Unit (ESU) and Steller sea lion and presents measures to avoid and minimize potential adverse effects on these species. Potential cumulative effects are presented in Section 5. An analysis of effects to Essential Fish Habitat (EFH) is provided in Section 6. References are provided in Section 7, and the list of preparers for this report is provided in Section 8.

FEMA has prepared this BA to evaluate potential effects of the proposed action on species that are listed or proposed to be listed under the Endangered Species Act (ESA) that are regulated by National Marine Fisheries Service (NMFS). Potential effects on federal listed species are evaluated in accordance with the legal requirements set forth under Section 7 of the ESA (16 U.S.C. 1536). Criteria used to determine which species were considered for this BA and potential adverse effects to those species from project activities are presented. In addition, this report proposes measures to avoid and/or minimize take or disturbance to potentially affected species.

1.1 PURPOSE AND NEED

Under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended and Title 44 CFR, the PA Program provides supplemental aid to states and communities to help them recover from major disasters as quickly as possible. Specifically, the program provides assistance for the removal of debris, the implementation of emergency protective measures, and the permanent restoration of public infrastructure. The program also encourages protection from future damage by providing assistance for mitigation measures during the recovery process. Therefore, the purpose of this proposed action is to provide funding to the Harbor District to repair and strengthen the inner basin sea wall to reduce the risk of damage from future storm events.

During the winter storm period of December 31, 2005 through January 3, 2006, high tides, 2- to 3-ft storm surges and 90 miles per hour (mph) winds caused overtopping and damage to the L-shaped sea wall that protects the inner harbor. The inside, outside, and top of the wall were damaged to the extent that wall integrity is jeopardized, putting at risk inner harbor residents, watercraft and docks should another severe storm occur. Approximately 500 to 4,000 pound (lb) riprap rocks were eroded from the sea wall. The top of the sea wall lost approximately 1 to 3 ft in height, which was originally comprised of small to medium rock and a covering of rock-sand-clay and grass over an area measuring 16 ft wide by 400 linear feet (lf) (6,400 square feet [ft^2]). Large holes and gaps, several measuring larger than 2 ft in diameter, were formed at four locations over a distance of 985 lf. Some of the holes penetrate all the way through the sea wall from the inner basin to the harbor. The District has determined that to provide needed protection, the damaged sea walls need to be restored (repaired) to pre-disaster conditions.

2.1 ACTION AREA

The action area includes the area of the sea wall that would be repaired as well as a 0.5-mi radius buffer extending from the sea wall in order to assess impacts associated with construction noise and potential water quality (mixing zone) impacts associated with the proposed action (Figure 1).

The action area is located in the community of Crescent City, California, within Del Norte County and approximately 0.25 mile (mi) west of Highway 101 in Township 16 North, Range 1 West, Sections 28 and 33 (Figure 2).

2.2 PROPOSED ACTION

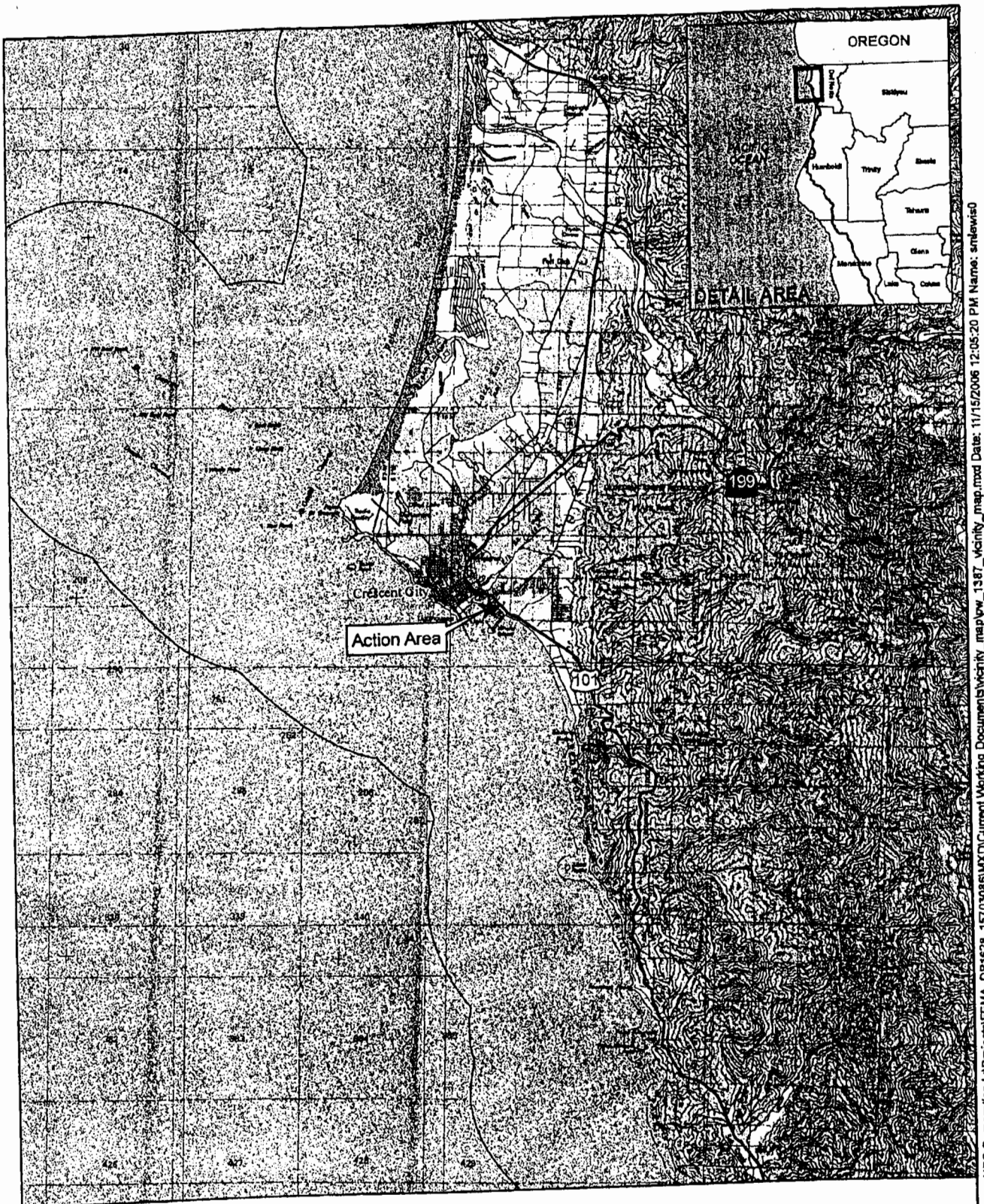
The proposed action would restore the damaged portion of the sea wall to pre-disaster conditions as well as raise a portion of the sea wall to reduce the potential for failure in future disaster events.

Specifically, approximately 181 cubic yards (yd^3) of engineered fill, 326 yd^3 of 12-in rock, and 922 yd^3 of riprap would be replaced on the existing structure in 21 locations over a 986-ft length of the sea wall. The total length of the L-shaped sea wall is approximately 1,200 lf. As some of the damage is located near the base of the sea wall, some riprap or other fill material would be placed directly into the water. Large breakwater stones would be trucked in on existing roadways and dumped on the top of the seawall. Riprap at four areas along the sea wall would be excavated, realigned and the stones would be reset to fill large gaps left by the storm.

Hazard mitigation would include placement of an additional 895 tons of large rip rap (individual rocks sized from 500 to 4,000 lbs each) over a distance of 386 lf at the corner of the seawall to raise the height in this area by 2 ft to prevent future overtopping of the sea wall. The mitigation scope affords for an additional 20 ft of rock on either end to tie the new placement into the existing elevation. Thus, the total area affected by the mitigation would be 426 lf.

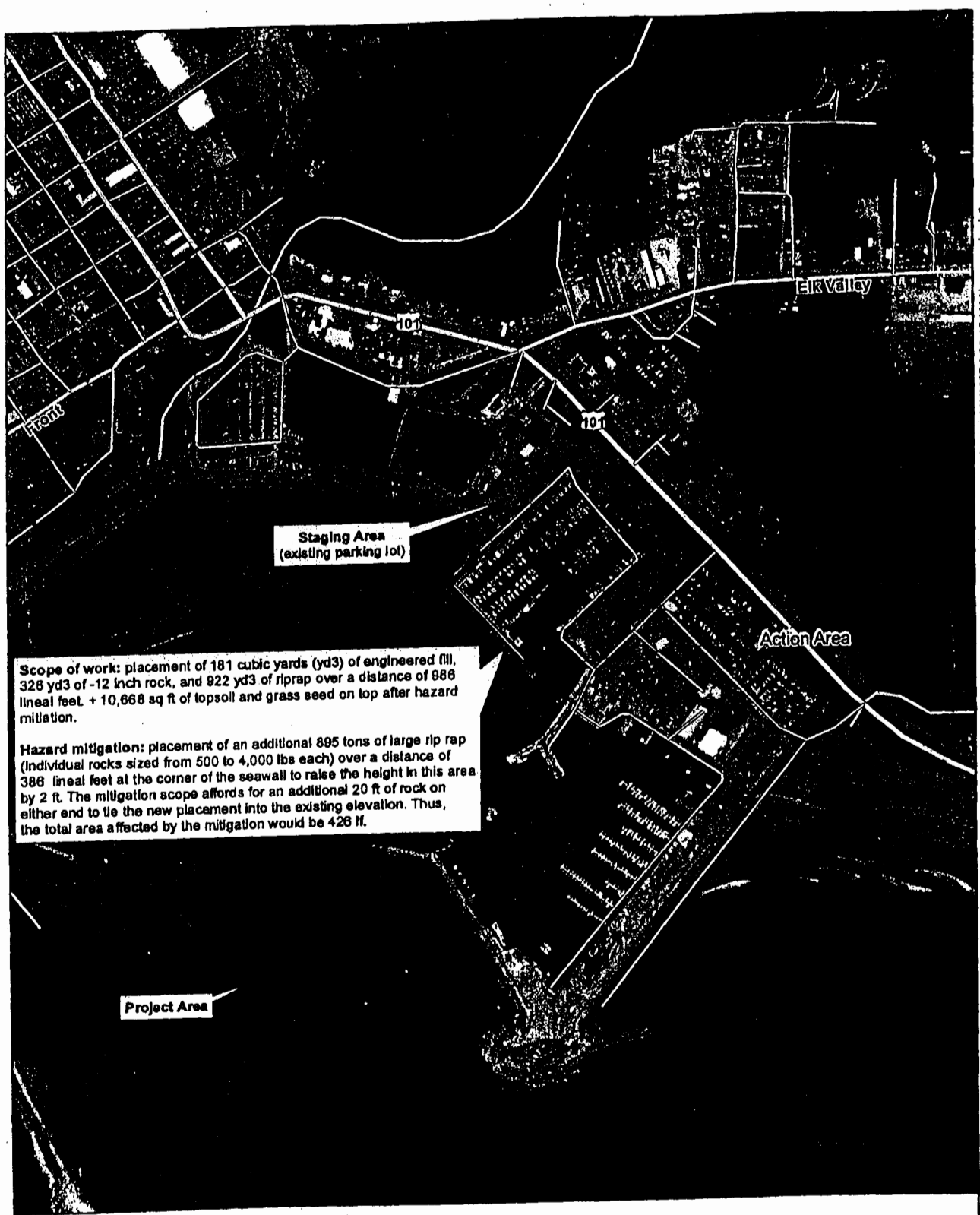
During the final phase of the proposed action, approximately 10,668 ft^2 of topsoil and native grass seed would be hydroseeded onto the top of the sea wall. The proposed action would raise the height of the affected area by approximately 2 ft to prevent future overtopping during storm events.

All staging and access would utilize existing roadways and/or other paved or previously disturbed areas.



URS Corporation L:\Projects\FEMA_DR1628_15703086\MXD\Current Working Documents\vicinity_map\pw_1387_vicinity_map.mxd Date: 11/15/2006 12:05:20 PM Name: smlewis0

15708016	FEMA DR-1628 PW #1387 Inner Basin Sea Wall Repair Project	Vicinity Map	Figure 1


Elk Valley
101
101
Front
Staging Area
(existing parking lot)
Action Area
Project Area
Scope of work: placement of 181 cubic yards (yd3) of engineered fill, 328 yd3 of -12 inch rock, and 922 yd3 of riprap over a distance of 986 lineal feet. + 10,668 sq ft of topsoil and grass seed on top after hazard mitiation.
Hazard mitigation: placement of an additional 895 tons of large rip rap (individual rocks sized from 500 to 4,000 lbs each) over a distance of 386 lineal feet at the corner of the seawall to raise the height in this area by 2 ft. The mitigation scope affords for an additional 20 ft of rock on either end to tie the new placement into the existing elevation. Thus, the total area affected by the mitigation would be 426 lf.
N
W
E
S
0
800
1,600
1 Inch = 800 Feet
15708016
FEMA DR-1628
PW#1387
Inner Basin Sea Wall Repair Project
Action Area
Figure 2
URS Corporation L:\Projects\FEMA_DR1628_15703086\MXD\Current Working Documents\action_area_map\pw_1387_action_area.mxd Date: 3/1/2007 8:06:45 AM Name: smlewis0

3.1 VEGETATION COMMUNITIES

The action area is located in a developed harbor that contains little or no vegetation. The little vegetation that is present is dominated by non-native weedy species. A 2005 botanical report prepared by Gedik BioLOGICAL Consultants identified the following exotic species: wild oats (*Avena fatua*), sea rocket (*Cakile maritima*), hairy cat's-ear (*Hypochaeris radicata*), perennial ryegrass (*Lolium perenne*), hottentot fig (*Carpobrotus edulis*), and white sweetclover (*Melilotus alba*). Native dunegrass (*Leymus mollis*) was also identified as occurring sporadically (Gedik BioLOGICAL 2005).

3.2 STUDY METHODS

FEMA obtained a list of species that are listed as endangered, threatened, or proposed for listing as endangered or threatened under the ESA that may occur in the action area from the following sources:

- The California Department of Fish and Game (CDFG) Natural Diversity Database (CNDDB) records within the following six USGS 7.5-minute quadrangles that include the action area and vicinity: Crescent City, Sister Rocks, Childs Hill, Hiouchi, Smith River, and High Divide, California (CDFG 2006).
- A species list for Del Norte County from the Arcata Field Office USFWS website (USFWS 2006).

The two listed fish species, four listed sea turtles, and five listed marine mammal species identified by these sources as having potential to occur in the vicinity of the proposed action that are regulated by NMFS under the ESA are listed in Appendix A, Table A-1. Bridget Canty of NISTAC, FEMA's consultant, conducted a site reconnaissance survey of the action area on September 25, 2006, to ascertain the potential presence of these species. General habitat characteristics of the action area were evaluated during the reconnaissance survey. Qualitative assessments of each habitat were used to determine whether each of the species identified in Appendix A, Table A-1, is likely to occur in the action area. NISTAC also reviewed available literature to identify the habitat requirements and distribution of the species included in Table A-1. FEMA is consulting with USFWS for threatened, endangered, and proposed species that are under the jurisdiction of the USFWS.

As a result of the field and background review, FEMA determined that the action area provides habitat suitable to support two federally listed species regulated by NMFS under the ESA:

- Southern Oregon / Northern California Coasts (SONCC) coho salmon (*Oncorhynchus kisutch)*
- Steller sea lion (*Eumetopias jubatus*)

3.3 SPECIAL STATUS SPECIES

3.3.1 Southern Oregon/Northern California Coasts Coho Salmon ESU

This ESU was initially listed as threatened on May 6, 1997 (59 Fed. Reg. 33038) and this status was reconfirmed on June 28, 2005 (NOAA Fisheries 2005a) (70 Fed. Reg. 37160). This ESU includes all naturally-spawned populations of coho salmon in streams between Cape Blanco, Oregon and Punta Gorda, California. The three major river systems supporting coho in the SONCC ESU are the Rogue, Klamath, and Eel rivers.

Coho salmon occur in three habitats: marine, estuarine, and freshwater (riverine). Table 1 summarizes the freshwater habitat elements for each life stage of the coho.

Table 1
Freshwater habitats of the different life stages of coho salmon

Freshwater Habitat	Coho Salmon Life Stage
Flat water riffle	Fry, juveniles, spawning adults
Flat water	Juveniles, spawning adults
Gravel streambed	Eggs, alevins, young fry, spawning adults
Pool	Fry, juveniles, migrating adults
Side-channel	Fry, juveniles
Stream bank	Fry, juveniles
Submerged veg and large woody debris	Juveniles

Source: CDFG 2004

Adult coho salmon return to their natal streams to spawn from September through January. In coastal California streams, this migration generally begins anytime from mid-November to mid-January (Baker and Reynolds 1986). In contrast to the life history patterns of other anadromous salmonids, coho salmon generally exhibit a relatively short and fixed 3-year life cycle (NMFS 2003). Coho typically spend two growing seasons in the ocean before returning to their natal streams to spawn as 3-year olds. A small percentage of males return to freshwater after 2 years to spawn (Committee on Endangered and Threatened Fishes in the Klamath River Basin 2004).

The proposed action occurs within the Smith River Hydrologic Unit (HU) for this ESU (CDFG 2004). The Smith River is one of California's largest coastal rivers. This waterway enters the Pacific Ocean just 4 mi south of the Oregon border and 13 mi north of the action area. The Smith River historically provided habitat for abundant numbers of coho and steelhead; today, runs of coho are found throughout the HU in small numbers (CDFG 2004). The Smith River HU continues to provide important rearing habitat for juvenile salmonids. The Smith River Plain Hydrologic Sub-area (HSA) has been altered by introduction of agricultural pesticides (Smith River Project 2006, Regional Water Quality Control Board) as well as diking of wetlands in the HSA. This HSA overlaps with the action area and includes Elk Creek, which flows into the Harbor approximately 0.5 mi north of the action area (Figure 1) (CDFG 2004).

Critical habitat was designated for this ESU on May 5, 1999 (64 Fed. Reg. 24049-24062). Critical habitat for the SONCC coho salmon ESU encompasses accessible reaches (including estuarine areas and tributaries) between the Mattole River in Humboldt County, California and

the Elk River in Oregon. Critical habitat for this ESU includes all "waterways, substrate, and adjacent riparian zones below longstanding, naturally impassable barriers (i.e., natural waterfalls in existence for at least several hundred years)" (NMFS 2006a). The nearest designated critical habitat for SONCC coho salmon is located in the Harbor at the confluence of Elk Creek and the Pacific Ocean. Primary constituent elements (PCEs) have not been defined for this ESU as the critical habitat was designated before the advent of PCEs.

3.3.2 Steller Sea Lion

On November 26, 1990, the Steller sea lion was listed as threatened under the ESA of 1973 (55 Fed. Reg. 49,204). In 1997, the species was split into two separate Distinct Population Segments (DPS's) at 144° W longitude (Cape Suckling, just east of Prince William Sound, Alaska) on the basis of demographic and genetic dissimilarities; the status of the Western DPS (west of 144° longitude) was changed to endangered, and the status of the eastern DPS (east of 144° longitude) was left unchanged (Bickham et al. 1996; Loughlin 1997) (62 Fed. Reg. 30,772, 30,773). Hence, the Steller sea lions, which use habitat in California, continue to be classified as threatened under the ESA. The Steller sea lion is also protected under the Marine Mammal Protection Act.

The Steller sea lion is the largest of the eared seals, which includes sea lions and fur seals. This species occurs along the rim of the northern Pacific Ocean (Pitcher and Calkins 1981, Gisiner 1985). Steller sea lions occurring near Crescent City are part of the eastern DPS (62 Fed. Reg. 30,772 – 30,773), which extends from southeastern Alaska to northern California.

Steller sea lions are not known to migrate, but they do disperse widely outside of the breeding season with males typically dispersing away from their breeding rookeries (NMFS 1992).

Steller sea lions occupy breeding territories (or rookeries) from late May through early July, with females arriving about three days before the pup is born (Pitcher and Calkins 1981, Gisiner 1985). Rookeries occur in a wide variety of areas, but most locations have specific characteristics including slightly sloped topography, protection from the wind, and isolation from humans and other mammalian predators. Females generally exhibit site fidelity, and rookery locations change little from year to year (Pitcher and Calkins 1981, Gisiner 1985).

Haulout sites are locations used by breeding, non-breeding, and subadult sea lions during the non-breeding season, and are generally associated with jetties, offshore rocks and islands, logbooms, marina docks, and navigation buoys (Pitcher and Calkins 1981, Gisiner 1985).

Many researchers have described behavioral reactions of marine mammals to human presence, boats, and aircraft (Richardson et al. 1995). Although most of the data are anecdotal, they provide useful information about situations in which some species react strongly, react weakly, or inconsistently, or do not react at all. No specific data on received sound levels are available for most of these incidents (Richardson et al. 1995). Steller sea lions on haulouts exhibit variable reactions to aircraft (Calkins 1979). Approaching aircraft usually frighten some or all animals into the water. Juveniles and pregnant females are more likely to enter the water than are territorial males and females with small pups. Sea lions in the water tolerate close and frequent approaches by vessels, and sometimes congregate around fishing vessels (Richardson et al. 1995). Sea lions hauled out on land are more responsive (Peterson and Bartholomew 1967), but rarely react unless a boat approaches within 100 to 200 meters (m) (Bowles and Stewart 1980). Apparently, visual cues are also involved.

Steller sea lions are found along the coast from Monterey Bay north and are known to breed at Año Nuevo Island, the Farallon Islands, and St. George Reef (NMFS 1997). The nearest documented occurrence of the Steller sea lion is approximately 4 mi northwest of the action area on rocks associated with the St. George Reef (CDFG 2006), particularly the St. George Lighthouse (NOAA Fisheries 2005b). In 1927, the population at St. George Reef was estimated at 1,500 individuals (NMFS 1992). More recent counts from 1990 to 1995, ranged from 400 to 700 animals, with just over 100 pups born per year (ODFW unpubl. data cited in NMFS 1997).

Critical habitat has been designated for Steller sea lions (58 Fed. Reg. 45,269 – 45,285). Rookeries and haulouts are designated as critical habitat in Alaska, whereas in California, major rookeries and associated air and aquatic zones are designated as critical habitat. There are three Steller sea lion rookeries located in California, all three of which are designated as critical habitat. The nearest of these is located at Sugarloaf Island/Cape Mendocino, which is approximately 150 miles south of the action area. This haul-out site and the associated 3,000-ft vertical (above sea level) air zone and the aquatic zone that extends 3,000 ft seaward from the base of the site, represents the nearest designated critical habitat for this species. There is no critical habitat for the Steller sea lion within the action area or the surrounding vicinity.

4.1 POTENTIAL ADVERSE IMPACTS

4.1.1 Southern Oregon/Northern California Coasts Coho Salmon ESU

SONCC coho salmon are documented to occur in Elk Creek (CDFG 2004), which flows into the Pacific Ocean near the action area. Potential adverse effects to coho are discussed in this section.

Take and Disturbance

Coho could potentially be killed, injured, or temporarily displaced during placement of rock, especially rock placed at or below mean higher high water (MHHW). Typically to protect anadromous fish species, construction would take place during the in-water work period of June 15 through October 15 when both juveniles and adults are unlikely to be present (Dan Free pers. comm. December 22, 2006). However, because of the potential effects to Steller sea lions, this in-water work window would be reduced to July 1 through October 15. Therefore, the potential for mortality, injury, or displacement of coho salmon would be significantly decreased or avoided.

Water Quality – Erosion, sedimentation, turbidity

Potential effects to coho salmon from unintentional introduction of sediment into the water and increased turbidity caused by construction activities could affect feeding rates and growth, increase mortality, cause behavioral avoidance, and reduce macroinvertebrate prey populations. Temporary beneficial effects could include reduced predation by piscivorous fish and birds and enhanced cover for fish. Avoidance and minimization measures (Section 4.2) would be used to contain erosion or sediment associated with construction and in-water work would be restricted to July 1 through October 15. Therefore, effects to coho from erosion, sedimentation, or increased turbidity are anticipated to be insignificant and discountable.

Water Quality – Petrochemical spills

Potential effects to coho salmon from unintentional introduction of petrochemicals associated with construction equipment could injure or kill coho and/or their macroinvertebrate prey populations. Avoidance and minimization measures (Section 4.2) would be used to minimize the potential for petrochemical spills and in-water work would be restricted to July 1 through October 15 when both juveniles and adults are unlikely to be present. Therefore, potential effects to coho from petrochemical spills would be significantly decreased or avoided.

Critical Habitat

No effects are anticipated to fundamental habitat elements for SONCC coho salmon as the effects of the proposed action would be localized and, due to the use of avoidance and minimization measures, would not be expected to travel to the estuarine habitat at the mouth of Elk Creek to the north of the action area; therefore, no effects are anticipated to designated critical habitat for this ESU.

Summary of Potential Adverse Effects to the Coho Salmon

The proposed action may affect the SONCC coho salmon ESU, but will have no effect on critical habitat for this ESU. Implementation of avoidance and minimization measures is recommended in this document to protect their habitat.

4.1.2 Steller Sea Lion

Sea lions regularly occur in Crescent City Harbor, however, most of these are believed to be northern sea lions and the nearest documented occurrence of the federally listed Steller sea lion is approximately 4 mi northwest of the action area. Potential adverse effects to Steller sea lions are discussed in this section.

Noise

Potential effects to Steller sea lions from construction-related noise could disturb and/or temporarily displace Steller sea lions. However, this effect would be temporary and would only occur if Steller sea lions were present during construction, which is unlikely. Construction would be limited to the July 1 through October 15 in-water work period to protect anadromous fish and Steller sea lions. Steller sea lions are known to breed from late May to early July. Therefore, to reduce any effects to Steller sea lions from noise, the in-water work period would be from July 1 through October 15, making the noise impacts insignificant and discountable.

Water Quality – Erosion, sedimentation, turbidity

Potential effects to Steller sea lions from unintentional introduction of sediment into the water and increased turbidity caused by construction activities could affect feeding opportunities by temporarily reducing aquatic prey populations. Avoidance and minimization measures (Section 4.2) would be used to contain erosion or sediment associated with construction and in-water work would be restricted to July 1 through October 15. Therefore, effects to Steller sea lions from erosion, sedimentation, or increased turbidity are anticipated to be insignificant and discountable.

Water Quality – Petrochemical spills

Potential effects to Steller sea lions from unintentional introduction of petrochemicals associated with construction equipment could injure or kill Steller sea lions or their aquatic prey populations. However, this effect would only occur if Steller sea lions were present within close proximity to the action area and if a spill were to occur. Avoidance and minimization measures (Section 4.2) would be used to minimize the potential for petrochemical spills and in-water work would be restricted to July 1 through October 15. Therefore, effects to Steller sea lions from petrochemical spills are anticipated to be insignificant and discountable.

Critical Habitat

There is no designated critical habitat for the Steller sea lion within 150 miles of the action area. Therefore, no effects are anticipated to this species from the proposed action.

Summary of Potential Adverse Effects to the Steller Sea Lion

The proposed action is not likely to adversely affect the Steller sea lion and will have no effect on designated critical habitat for this species. Implementation of avoidance and minimization measures is recommended in this document to protect their habitat.

4.2 AVOIDANCE AND MINIMIZATION MEASURES FOR LISTED SPECIES

The District would implement the following measures to avoid and minimize potential adverse effects to listed coho salmon and Steller sea lions and their associated habitats.

1. Since habitat for federal listed anadromous fish species are identified as on or adjacent to the project work site and to protect breeding Steller sea lions, all construction and activities in or adjacent to an active stream channel will be performed only between July 1 through October 15.
2. Disturbance to existing grades and vegetation will be limited to the actual site of the proposed action and necessary access routes. Placement of all roads, staging areas, and other facilities shall avoid and limit disturbance to coastal habitat as much as possible. When possible, existing ingress or egress points shall be used and/or work performed from the top of the sea wall.
3. Erosion control and sediment detention devices (e.g., well anchored sandbag cofferdams, straw bales, or silt fences) shall be incorporated into the project design and implemented at the time of construction. These devices shall be in place during construction activities, and after if necessary, for the purposes of minimizing fine sediment and sediment/water slurry input to flowing water, and of detaining sediment laden water on-site. These devices will be placed at all locations where the likelihood of sediment input exists. A supply of erosion control materials would be kept on hand to cover small sites that may become bare and to respond to sediment emergencies.
4. Sediment will be removed from sediment controls once the sediment has reached 1/3 of the exposed height of the control. Sediment collected in these devices shall be disposed of away from the collection site at approved disposal sites.
5. All disturbed soils at the site will undergo erosion control treatment during construction and after construction is terminated. Treatment includes temporary seeding and sterile straw mulch. Any disturbed soils on a gradient of over 30 percent will have erosion control blankets installed.
6. Any stockpiles of soil used for fill material during construction will be covered with a tarp or erosion control blanket and silt fences shall be installed appropriately to contain soils from moving into area waterways. If the local weather forecast indicates greater than 50 percent change for rain, the action area shall be "rain-proofed" with erosion control measures so that no sediment or turbidity enters the water.
7. All debris, sediment, rubbish, vegetation or other material removed from the sea wall shall be disposed of at an approved disposal site. All petroleum products chemicals, silt, fine soils, and any substance or material deleterious to listed species shall not be allowed to pass into, or be placed where it can pass into the water. There will be no sidecasting of material into any waterway.

8. All materials placed in streams, rivers, lakes, reservoirs, bays, or coastal waters, such as pilings and bulkheads, shall be nontoxic.
9. No petroleum products such as asphalt may be used.
10. If anchoring and stabilizing fabrics (geotextiles, armorflex, etc.,) are used, they shall be slit in appropriate locations to allow for plant root growth.
11. No fill material other than clean, silt-free gravel or river rock shall be allowed to enter the water.
12. The subgrantee shall exercise every reasonable precaution to protect streams, lakes, reservoirs, bays, and coastal waters from pollution with fuels, oils, bitumens, calcium chloride and other harmful materials.
13. A plan for the emergency clean up of any spills of fuel or other material must be available.
14. Equipment shall be refueled and serviced at designated construction staging areas. All construction material and fill will be stored and contained in a designated area that is located away from channel areas to prevent transport of materials into adjacent streams. A silt fence will be installed to collect any discharge, and adequate materials for spill cleanup will be maintained on site.
15. Construction vehicles and equipment shall be maintained to prevent contamination of soil or water (from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease).
16. Good housekeeping practices, use of safer alternative products, such as biodegradable hydraulic fluids, where feasible, and implementation of employee training programs shall be utilized. Employees shall be trained to prevent or reduce the discharge of pollutants from construction activities to waters and of the appropriate measures to take should a spill occur.
17. In the event of a spill, work would stop immediately and NMFS will be notified.

Cumulative effects include the effects of future state, tribal, local, or private actions that are reasonably certain to occur in the action area. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA. Past and present impacts of non-federal actions are part of the environmental baseline. Cumulative effects to special status species addressed in this report would likely occur in association with other projects near Crescent City Harbor that could affect habitat for listed species in the Harbor.

Currently, two projects are planned to occur in the vicinity of the action area. In addition, four general activities are identified (NMFS 2001). The following projects have been proposed or are reasonably likely to occur in the vicinity of the action area that could affect the coho salmon:

- The Harbor Trail Concept Plan. The Coastal Trail will provide bicycle and pedestrian access from city limits-to-city limits along the coast. It is divided into three connecting segments: Pebble Beach Trail, Lighthouse Trail and Harbor Trail. This proposal is part of the last of the segment to be developed. The concept herein involves the Crescent City Harbor Trail North Segment. The Harbor Trail connects to the existing Cultural Center trailhead at Front and K Streets, proceeds south across Elk Creek to Highway 101 and Elk Valley Road, and eventually proceeds to the south beach areas. This project is scheduled for construction in the summer of 2006.
- Crescent City Harbor Master Plan. Improvements to the harbor would include new restrooms, pedestrian and vehicular access improvements, realignment of the outer boat basin, improved parking and landscaping in addition to the following developments: a 60-room hotel, a lighthouse museum, new restaurants, and retail and mixed-use spaces. A promenade would provide pedestrian access and connect all the new developments to beach access at the eastern and western extents and eventually connect to the Crescent City Harbor Trail. There is no schedule for implementation of the Master Plan.

The short-term potential for reduced water quality as a result of the proposed action could, combined with other projects in the area, create minimal cumulative adverse effects to listed coho salmon and Steller sea lions. However, the proposed action is not expected to have a substantial cumulative impact on coho salmon or Steller sea lions through reduced water quality due to the use of avoidance and conservation measures (Section 4.2). Therefore, the proposed action would not cumulatively affect water quality in the Harbor.

The Crescent City Harbor provides habitat for the Southern Oregon/Northern California coasts coho salmon, and is identified as EFH under the Magnuson-Stevens Fisheries Conservation and Management Act (MSFCMA). The MSFCMA, also known as the Sustainable Fisheries Act (Public Law 104-297), requires all federal agencies to consult with the Secretary of Commerce on activities or proposed activities authorized, funded, or undertaken by that agency that may adversely affect EFH of commercially managed marine and anadromous fish species. The EFH provisions of the Sustainable Fisheries Act are designed to protect fisheries habitat from being lost due to disturbance and degradation.

The Act requires implementation of measures to conserve and enhance EFH. Guidelines from the MSFCMA direct NMFS to use a coordinated process to evaluate projects that may affect EFH under Section 305(b) of the MSFCMA, with required Section 7 consultation process under the Endangered Species Act (ESA). Under existing guidelines (NMFS 2001) if NMFS determines that a proposed project is not likely to adversely affect species listed under ESA that are also managed under the MSFCMA, and an informal consultation process is pursued, no EFH conservation recommendations are necessary in most cases. The proposed action already incorporates several measures that would avoid and/or minimize impacts to EFH, and therefore, additional and specific EFH conservation recommendations would not be necessary.

Table A-1
Species Federally Listed and Proposed Under NMFS Jurisdiction With Potential To Occur in the Vicinity of Crescent City Harbor

Scientific Name	Common Name	Federal Status	Preferred Habitat	Likelihood of Occurring in the Action Area
Fish				
Oncorhynchus kisutch	Southern Oregon/ Northern California coho salmon	T*	Marine, estuarine, and freshwater habitats.	May occur. Assume presence on Elk Creek and two unnamed tributaries to Pacific Ocean due to lack of physical barriers.
O. tshawytscha	California coastal Chinook salmon	T*	Pacific Ocean, spawns in coastal streams and rivers, over gravel beds. Pool depth, volume, amount of cover, and proximity to gravel for spawning play key roles.	Not likely; northernmost extent of ESU is at Redwood Creek in Humboldt County (NMFS 1999) and approximately 37 miles south of the action area. Areas with coastal Chinook north of this are part of the unlisted Southern Oregon/Northern California ESU.
Reptiles				
Caretta caretta	Loggerhead turtle	T	Offshore areas for migrating and foraging, neritic (nearshore) habitat for foraging, sandy beaches for nesting	Not likely; no foraging or nesting sites documented north of Baja California.
Chelonia mydas	Green turtle	T	Offshore areas for migrating and foraging, neritic (nearshore) habitat for foraging, sandy beaches for nesting	Not likely; no foraging or nesting sites documented north of Baja California
Dermochelys coriacea	Leatherback turtle	E*	Offshore areas for migrating and foraging, neritic (nearshore) habitat for foraging, sandy beaches for nesting	Not likely; no foraging or nesting sites documented north of Baja California
Lepidochelys olivacea	Olive Ridley sea turtle	T	Offshore areas for migrating and foraging, neritic (nearshore) habitat for foraging, sandy beaches for nesting	Not likely; no foraging or nesting sites documented north of Baja California

Table A-1
Species Federally Listed and Proposed Under NMFS Jurisdiction With Potential To Occur in the Vicinity of Crescent City Harbor

Scientific Name	Common Name	Federal Status	Preferred Habitat	Likelihood of Occurring in the Action Area
Mammals				
Eumetopias jubatus	Steller sea lion	T*	Rocky coastlines; remote coastal islands	May occur in small numbers with the more common California sea lion, which is frequently observed in the action area. Nearby Castle Rock is a documented haul-out site.
Balaenoptera borealis	Sei whale	E	Open water near continental shelf margins	Not likely; suitable habitat located well offshore and away from the project area
B. physalus	Fin whale	E	Open water near continental shelf margins	Not likely; suitable habitat located well offshore and away from the project area
Megaptera novaengliae	Humpback whale	E	Open water; usually found in waters averaging 200 meters deep (Calambokidis et al. 2004)	Not likely; suitable habitat located well offshore and away from the project area
Physeter macrocephalus	Sperm whale	E	Open water; uncommon in waters less than 300 meters deep (NMFS 2006b)	Not likely; suitable habitat located well offshore and away from the project area

Federal Endangered Species Act

E - Endangered

T- Threatened

* Indicates Critical Habitat has been proposed or designated

Source: USFWS species list for Del Norte County and CNDDB search for six quadrangles surrounding the action area.

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

APR 14 2010

EXHIBIT NO. 7
APPLICATION NO.
1-08-047 - CRESCENT CITY HARBOR DISTRICT
U.S. ARMY CORPS OF ENGINEERS – *NATIONWIDE PERMIT NOS. 3 & 13* (1 of 15)

Regulatory Division

SUBJECT: File No. 2009-00072N

Mr. Richard Young
Crescent City Harbor District
101 Citizen's Dock Road
Crescent City, California 95531

RECEIVED
APR 16 2010
CRESCENT CITY HARBOR DISTRICT

Dear Mr. Young:

This letter responds to your submittal of February 6, 2010, concerning Department of the Army authorization to repair the Crescent City Harbor District's damaged sea wall and reinforce the sea wall against future storm events by increasing the height of the wall by 2-feet over a 386-feet distance. The existing sea wall is "L" shaped and about 800-feet long by 50-feet wide on the landward side. The height of the sea wall averages about 15-feet above Mean Lower Low Water.

Damage is located near the base of the sea wall; therefore, riprap and other fill material would be installed directly into the water and large breakwater stones would be trucked in on existing roadways and dumped on the top of the seawall. Total fill volume is about 1,429 cubic yards of fill over a distance of 986-feet. Additional, rock would be installed to raise the sea wall height. Construction would last about 3-months.

The site is located about 0.25 miles west of Highway 101 at the Crescent City Harbor District's inner basin sea wall, Crescent City, Del Norte County, California. Project construction work will be performed in general accordance with the plans and drawings entitled: "Inner Basin Sea Wall Repair Project (Figure 1)" and "Inner Basin Sea Wall Repair Project (Figure 2)," dated March 9, 2010.

Based on a review of the information you submitted and an inspection of the project site conducted by Corps personnel, your project qualifies for authorization under Department of the Army Nationwide Permit (NWP) 3 for *Maintenance* and NWP 13 for *Bank Stabilization* (72 Fed. Reg. 11092, Mar. 12, 2007), pursuant to Section 404 of the Clean Water Act (33 U.S.C. § 1344). Section 404 generally regulates the discharge of dredged and fill material below the plane of ordinary high water in non-tidal waters of the United States, below the high tide line in tidal waters of the United States, and within the lateral extent of wetlands adjacent to these waters.

The project must be in compliance with the Terms and General Conditions of the NWPs cited in Enclosure 1, any Special Conditions specified in this letter, and measures in the NMFS's concurrence letter (September 26, 2008), for the NWP authorization to remain valid. Non-compliance with any Term or Condition could result in the revocation of the NWP authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps of

Engineers (Corps). Upon completion of the project and all associated mitigation and monitoring requirements, you shall sign and return the statement cited in Enclosure 2, certifying all work complies with the Terms and Conditions of the NWPs. Project authorization under the NWPs does not obviate any requirement to obtain other Federal, State, or local approvals necessitated by law.

Project authorization will remain valid for a period of two (2) years from the date of this letter, unless the NWPs are modified, suspended, or revoked. If the project has commenced or is under contract to commence construction prior to any modification, suspension, or revocation of the NWPs and the project could not comply with any newly issued NWP, you shall have twelve (12) months from that expiration date to complete the project under the present Terms and Conditions of this NWP authorization.

Project authorization will not be effective until you have obtained Section 401 water quality certification from the Regional Water Quality Control Board (RWQCB), North Coast Region and a coastal zone consistency concurrence from the California Coastal Commission (CCC). You shall submit a copy of the certification and consistency concurrence to the Corps prior to the commencement of work. You shall comply with any condition of certification and consistency concurrence required by RWQCB and CCC, and you shall consider such conditions to be an integral part of the NWP authorization for your project. If the RWQCB fails to act on a valid request for certification within two (2) months after receipt of a complete application, the Corps may a waiver of water quality certification has been obtained. If the CCC fails to act on a valid request for a consistency concurrence within six (6) months after receipt of a complete application, the Corps may presume a consistency concurrence has been obtained.

To ensure compliance with the NWP authorization and to further minimize adverse impacts to water quality and other aquatic resources, the project is subject to the following Special Conditions:

1. All minimization measures identified in the Biological Assessment dated November 24, 2008, shall be implemented.

2. Best Management Practices will be implemented to minimize turbidity and downstream sedimentation.

You may refer any questions on this matter to Carol Heidsiek of our Regulatory staff by telephone at 707-443-0855. All correspondence should be addressed to the Regulatory Division, Eureka Field Office, 601 Startare Drive, Box14, Eureka, California 95501, referencing the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available online at our website: http://www.per2.nwp.usace.army.mil/survey.html.

Sincerely,

Laurie Monarres
for

Jane M. Hicks
Chief, Regulatory Division

Enclosures

Copies Furnished (w/o encls):

US NMFS, Arcata, CA
CA CC, Eureka, CA
CA DFG, Eureka, CA
CA RWQCB, Santa Rosa, CA

Nationwide Permit 13 - *Bank Stabilization*

Bank stabilization activities necessary for erosion prevention, provided the activity meets all of the following criteria: (a) No material is placed in excess of the minimum needed for erosion protection; (b) The activity is no more than 500 feet in length along the bank, unless this criterion is waived in writing by the district engineer; (c) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark or the high tide line, unless this criterion is waived in writing by the district engineer; (d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless this criterion is waived in writing by the district engineer; (e) No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any water of the United States; (f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and, (g) The activity is not a stream channelization activity. *Notification:* The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: (1) Involves discharges into special aquatic sites; (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot along the bank below the plane of the ordinary high water mark or the high tide line. (See general condition 27.) (Sections 10 and 404)

Federal Register / Vol. 72, No. 47 / Monday, March 12, 2007 / Notices **11191**

Nationwide Permit 3 - *Maintenance*

(a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris in the vicinity of and within existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and the placement of new or additional riprap to protect the structure. The removal of sediment is limited to the minimum necessary to restore the waterway in the immediate vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend further than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an upland area unless otherwise specifically approved by the district engineer under separate authorization. The placement of riprap must be the minimum necessary to protect the structure or to ensure the safety of the structure. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the district engineer.

(c) This NWP also authorizes temporary structures, fills, and work necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate. (d) This NWP does not authorize maintenance dredging for the primary purpose of navigation or beach restoration. This NWP does not authorize new stream channelization or stream relocation projects. *Notification:* For activities authorized by paragraph (b) of this NWP, the permittee must submit a preconstruction notification to the district engineer prior to commencing the activity (see general condition 27). Where maintenance dredging is proposed, the pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Sections 10 and 404)

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/ or Coastal Zone Management Act consistency for an NWP.

1. *Navigation.* (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. *Aquatic Life Movements.* No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. *Spawning Areas.* Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. *Migratory Bird Breeding Areas.* Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. *Shellfish Beds.* No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.

6. *Suitable Material.* No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. *Water Supply Intakes.* No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. *Adverse Effects From Impoundments.* If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. *Management of Water Flows.* To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. *Fills Within 100-Year Floodplains.* The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. *Equipment.* Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. *Soil Erosion and Sediment Controls.* Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. *Removal of Temporary Fills.* Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. *Proper Maintenance.* Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. *Wild and Scenic Rivers.* No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and
Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. *Tribal Rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. *Endangered Species.* (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species specific regional endangered species conditions to the NWPs. (e) Authorization of an activity by a
NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at *http://www.fws.gov/* and *http://www.noaa.gov/fisheries.html* respectively.

18. *Historic Properties.* (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow

their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed. (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete preconstruction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h–2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. *Designated Critical Resource Waters.* Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment. (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. *Mitigation.* The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require preconstruction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood

of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment. (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs. (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan. (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. *Water Quality.* Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. *Coastal Zone Management.* In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. *Regional and Case-By-Case Conditions.* The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. *Use of Multiple Nationwide Permits.* The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. *Transfer of Nationwide Permit Verifications.* If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)_____
(Date) _____

26. *Compliance Certification.* Each permittee who received a NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include: (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.

27. *Pre-Construction Notification.* (a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either: (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or (2) Forty-five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2). (b) *Contents of Pre-Construction Notification:* The PCN must be in writing and include the following information: (1) Name, address and telephone numbers of the prospective permittee; (2) Location of the proposed project; (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.); (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate; (5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the

location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act. (c) *Form of Pre-Construction Notification:* The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used. (d) *Agency Coordination:* (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. (2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring preconstruction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each preconstruction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination. (5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS. (e) *District Engineer's Decision:* In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. *Single and Complete Project*. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

Enclosure 2

Permittee: Mr. Young, CCHD

File Number: 2009-00072N

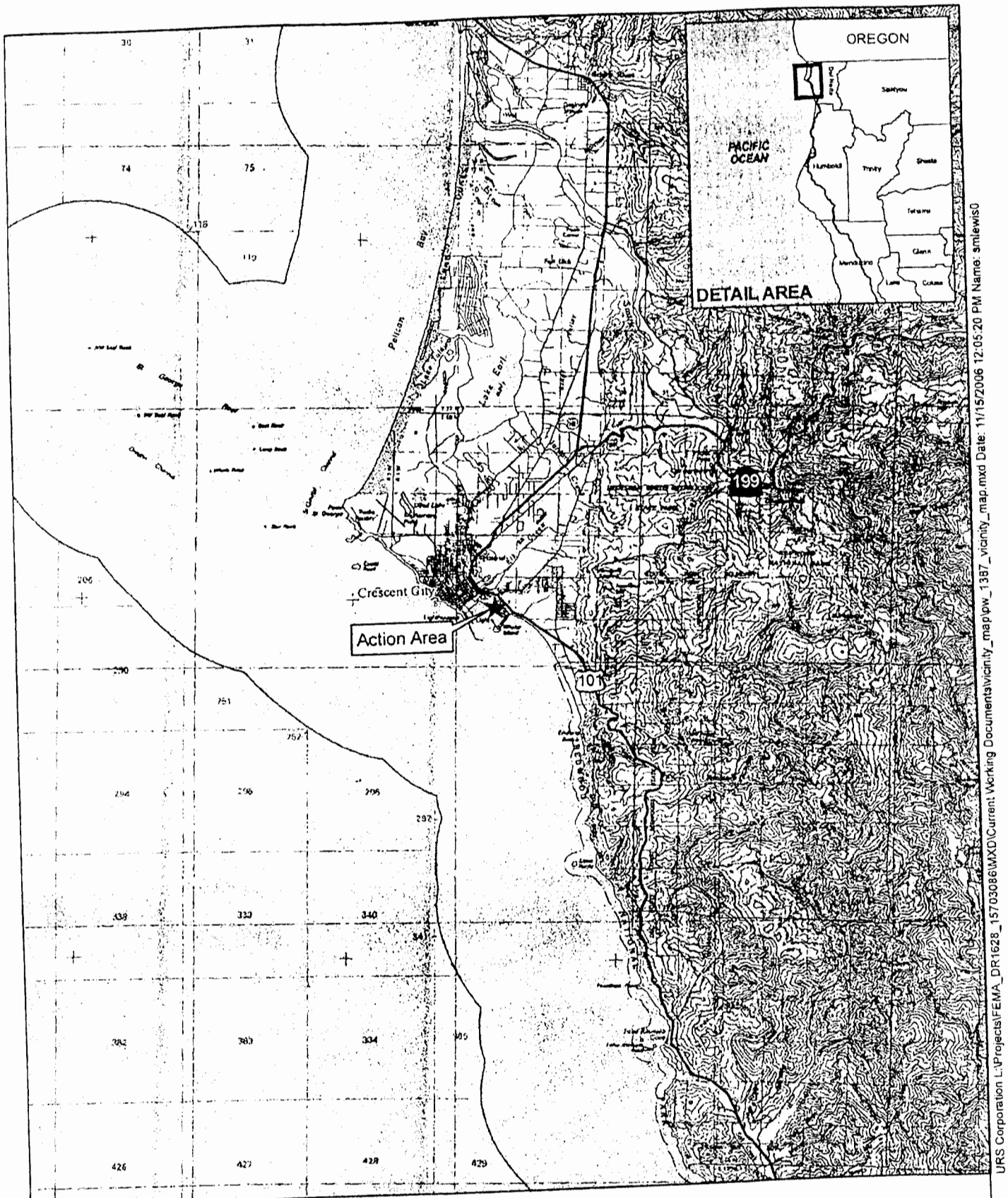
Certification of Compliance
for
Nationwide Permit

"I hereby certify that the work authorized by the above referenced File Number and all required mitigation have been completed in accordance with the terms and conditions of this Nationwide Permit authorization."

PERMITTEE _____ DATE _____

Return to:

Carol Heidsiek
Eureka Field Office
U.S. Army Corps of Engineers
601 Startare Drive Box 14
Eureka, CA 95501



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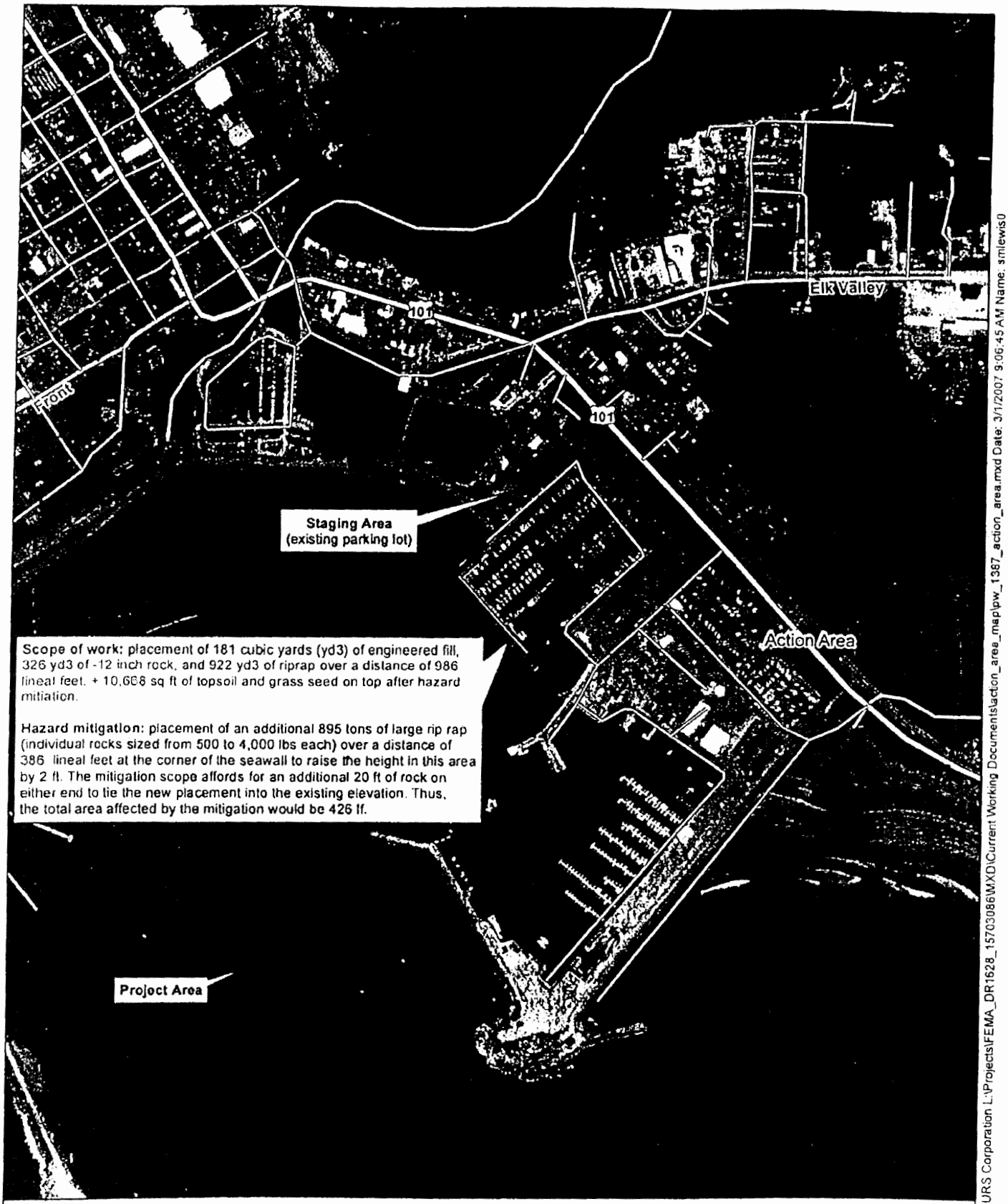
1 inch = 3 miles

15708016	FEMA DR-1628 PW #1387 Inner Basin Sea Wall Repair Project	Vicinity Map	Figure 1



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15708016	FEMA DR-1628 PW #1387 Inner Basin Sea Wall Repair Project	Action Area	Figure 2

STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
Relay Service From TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

Contact Phone: **(916) 574-1900**
Contact FAX: **(916) 574-145**

Stover Engineering

APR 04 2008

RECEIVED

MAR 28 2008

File Ref: SD 2008-02-14.3

Jon Olson, EIT Staff Engineer
Stover Engineering
PO Box 783
Crescent City, CA 95531

Dear Mr. Olson:

SUBJECT: Crescent City Inner Basin Sea Wall Repair

This letter is in response to your request for a determination by the California State Lands Commission (CSLC) as to whether it asserts a sovereign title interest within the Crescent City Inner Basin at the Sea Wall.

The seawall is located waterward of Boundary Line Agreement 135 (Crescent City Harbor District Boundary Agreement) and involves sovereign lands legislatively granted to the Crescent City Harbor District, pursuant to Chapter 1510, Statutes of 1963 with minerals reserved to the State. Therefore, a lease from CSLC is required only if dredging is needed for this project. The City should, however, apply to all other agencies having approval authority over this project.

This letter is without prejudice to any future assertion of state ownership or public rights, should circumstances change, or should additional information come to our attention.

If you have any questions, please contact Grace Kato, Public Land Management Specialist, at (916) 574-1227. Thank you.

Sincerely,

Barbara Dugal, Chief
Land Management Division

cc: Grace Kato

EXHIBIT NO. 8
APPLICATION NO.
1-08-047
CRESCENT CITY HARBOR DISTRICT
AGENCY REVIEW CORRESPONDENCE (1 of 14)

California Regional Water Quality Control Board
North Coast Region
Bob Anderson, Chairman

Linda S. Adams
Secretary for
Environmental Protection

www.waterboards.ca.gov/northcoast
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

Arnold
Schwarzenegger
Governor

July 14, 2009

Stover Engineering
JUL 17 2009
RECEIVED

Mr. Richard Young
101 Citizens Dock Road
Crescent City, CA 95531

Dear Mr. Young:

Subject: Section 401 Water Quality Certification Application

File: Crescent City Harbor District – Riprap/Breakwater Repair at Various Locations (WDID No. 1A09009WNDN)

We have reviewed your request for Water Quality Certification under Federal Clean Water Act section 401 for activities associated with repairing rock slope protection along the storm damaged breakwater and other locations around the Crescent City Harbor. Regional Water Board staff have determined that your application is complete.

On July 14, 2009, we posted a public notice for your project on our web site. Regional Water Board staff will review and address any comments received following a 21-day public notice period. You may view the notice at http://www.waterboards.ca.gov/northcoast/public_notices/water_quality_certification/.

Please call me at (707) 576-2801 if you have any questions.

Sincerely,

Dean Prat, P.G.
Engineering Geologist

071409_DLP_cchd_brkwtrrepair_pubnottrans.doc

Enclosure: Public Notice

cc: Mr. Ryan C. Young, Stover Engineering, P.O. Box 783, Crescent City, CA 95531

July 14, 2009

Public Notice for Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill Projects)

Crescent City Harbor District – Riprap/Breakwater Repair at Various Locations
WDID No. 1A09009WNDN

Del Norte County

On January 28, 2009, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the Crescent City Harbor District (Applicant), requesting Federal Clean Water Act, section 401, Water Quality Certification for activities associated with repairing a breakwater and damaged rock slope protection (RSP) at several locations around the Crescent City Harbor. The proposed project will cause disturbances to waters of the United States associated with Pacific Ocean in the Smith River Plain Hydrologic Subarea No. 103.11.

The proposed project involves repairing and reinforcing RSP on the inner boat basin breakwater and other locations within the harbor that were damaged during the severe December 2005 and January 2006 storm event. High tides, storm surges, and high winds caused overtopping and damage to the L-shaped breakwater that protects the inner harbor from wave action. The inside, outside, and top of the breakwater were damaged to the extent that the breakwater's integrity was jeopardized, putting harbor residents, watercraft, and docks at risk from potential future storms. RSP consisting of 500 to 4,000 pound rocks were eroded from the breakwater and the top portion of the breakwater lost up to 3 feet in height. Large holes and gaps, several measuring larger than 2 feet in diameter, were formed at four locations along the breakwater. The damaged breakwater will be repaired by removing existing RSP to expose the core of the breakwater and to allow for installation of a concrete diaphragm in the breakwater's core for a length of 770 feet. Holes in the breakwater will be repaired with heavy RSP and engineered fill. The existing RSP that was removed for construction of the diaphragm will be replaced and additional rock and engineered fill will be placed on both sides of the breakwater to restore the slopes and top.

The proposed project also involves similar RSP repair activities on the harbor side of Whaler Island and areas across from the breakwater on the south side of the entrance to the inner boat basin (Citizen's Dock). Repairs near Whaler Island include installation of a concrete key between the edge of the pavement and RSP, and placement of 1-ton and 2-ton RSP along the damaged shoreline slope. Repairs to the damaged RSP areas on the south side of the entrance to the inner boat basin involve placement of aggregate base, 1-ton RSP, and concrete slope protection.

The proposed RSP and breakwater repair project will result in a total of 1,646 linear feet of permanent impacts to waters of the United States. Permanent impacts are associated with repairing eroded areas to restore the footprint of existing structures. The proposed project will not result in any temporary impacts to waters of the United States. Compensatory mitigation is not required for the proposed project.

Noncompensatory mitigation includes implementation of Best Management Practices for erosion control. The proposed project is expected to take one year to complete.

The Applicant has applied for authorization from the United States Army Corps of Engineers to perform the project under Nationwide Permit, pursuant to Clean Water Act, section 404. The Applicant has also applied for a Coastal Development Permit. A Lake or Streambed Alteration Agreement from the California Department of Fish and Game is not required. Regional Water Board staff have determined that this project is categorically exempt from CEQA review (Class 1, Section 15301 – existing facilities) and anticipate filing a Notice of Exemption for this project. The proposed project is scheduled for construction beginning in 2009 and is expected to take one year to complete.

The information contained in this public notice is only a summary of the Applicant's proposed activities. The application for Water Quality Certification in the Regional Water Board's file contains additional details about the proposed project including maps and design drawings. The application and Regional Water Board file are available for public review.

Regional Water Board staff are proposing to regulate this project pursuant to Section 401 of the Clean Water Act (33 USC 1341) and/or Porter-Cologne Water Quality Control Act authority. In addition, staff will consider all comments submitted in writing and received at this office by mail during a 21-day comment period that begins on the first date of issuance of this letter and ends at 5:00 p.m. on the last day of the comment period. If you have any questions, please contact staff member Dean Prat at (707) 576-2801 within 21 days of the posting of this notice.

071409_DLP_cchd_brkwtrrepair_pubnot.doc

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

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.

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 µPa-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 µPa-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 short- and 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,

for 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.*

3. 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;

11. 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 one-third (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

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;

13. 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 petroleum-based products such as asphalt will be used as a stabilizing material (*i.e.*, riprap).

Proposed Conservation Measures (from PBA Appendix C)

Western Snowy Plover

1. 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;
3. 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;
2. Disturbance at night roosts will be avoided by working during daylight hours - avoiding night time and low light conditions; and
3. Project access will avoid night roosts and day roosts to the extent practicable. Over-flights of roosts will be avoided completely.