COASTAL ZONE MANAGEMENT ACT CONSISTENCY DETERMINATION

Submitted by the U.S. Army Corps of Engineers, Portland District, Civil Works

For Actions Related to the

North Jetty Critical Repairs
Near the Mouth of the Columbia River, Pacific County, Washington

February, 2015

1. Introduction and Project Description

The Coastal Zone Management Action of 1972 directs coastal states to identify key resources and develop policies to manage their coastal areas. Although 15 CFR 923.33 (a) of the implementing regulations specifically excludes lands owned or leased by the federal government from the coastal zone, part (b) of this section obligates federal agencies to "comply with consistency provisions of section 307 of the act when federal actions on these excluded lands have spillover impacts that affect any land or water use or natural resource of the coastal zone within the purview of a state's management program." The U.S. Army Corps of Engineers (Corps) has determined that the proposed North Jetty Critical Repairs Project (project) would have temporary "spillover" effects on adjacent land uses and permanent effects on waters of the U.S.

The North Jetty is located on the northern side of the mouth of the Columbia River at Cape Disappointment (Figure 1), which is federally owned land under the jurisdiction of the Corps. The proposed project would be implemented in a portion of Cape Disappointment State Park that is managed under a long-term lease by the Washington State Parks and Recreation Commission (WSPRC).

Figure 1. North Jetty Location Map

The Corps is proposing to restore the North Jetty in multiple phases, one of which is considered in this document. Phase 1 of Critical Repairs included mobilization after the completion of the North Jetty Lagoon Fill and Culvert Replacement Project. For this second phase, the seaward 1,400 ft of the jetty (STA 85+00 to 99+00) is in a highly vulnerable condition as referenced in the 2015 Joint Aquatics Resources Permit Application documentation as well as the Major Rehabilitation Report from 2008-2011. If left unchecked, a breach would eventually occur that would transport potentially large quantities of sediment into the navigation channel at the mouth of the Columbia

River. To avert an imminent jetty breach, arrest active jetty recession, and prevent associated impacts on MCR deep draft navigation, the seaward 1,400 ft of the North Jetty (STA 85+00 to 99+00) was separated from the Major Rehabilitation activity and elevated to a high-priority Critical Repair area. North Jetty Critical Repairs will be performed as a Major Maintenance action using operations and maintenance (O&M) funds, before initiation of major rehabilitation of the MCR jetty system. North Jetty Critical Repairs are considered to be a base condition activity, with respect to major rehabilitation of the MCR jetty system.

The North Jetty is located within waters of the U.S. other than wetland and is a navigation structure at the Mouth of the Columbia River in the Pacific Ocean. The project will focus on preserving the rubble-mound structure that comprises the North Jetty to assure the continued protection of the jetty trunk structure and terminus from wave attack from the Pacific Ocean and the Columbia River. The North Jetty is particularly critical in maintaining the existing location of the federal navigation channel and the Mouth of the River itself. Recession of the jetty head or terminus also is linked to recession and erosion of Benson Beach/Peacock Spit. By preserving the existing length of the jetty via Critical Repairs (and forthcoming Scheduled Repairs under the Major Rehabilitation program), it is anticipated that this may also arrest the loss of Benson Beach.

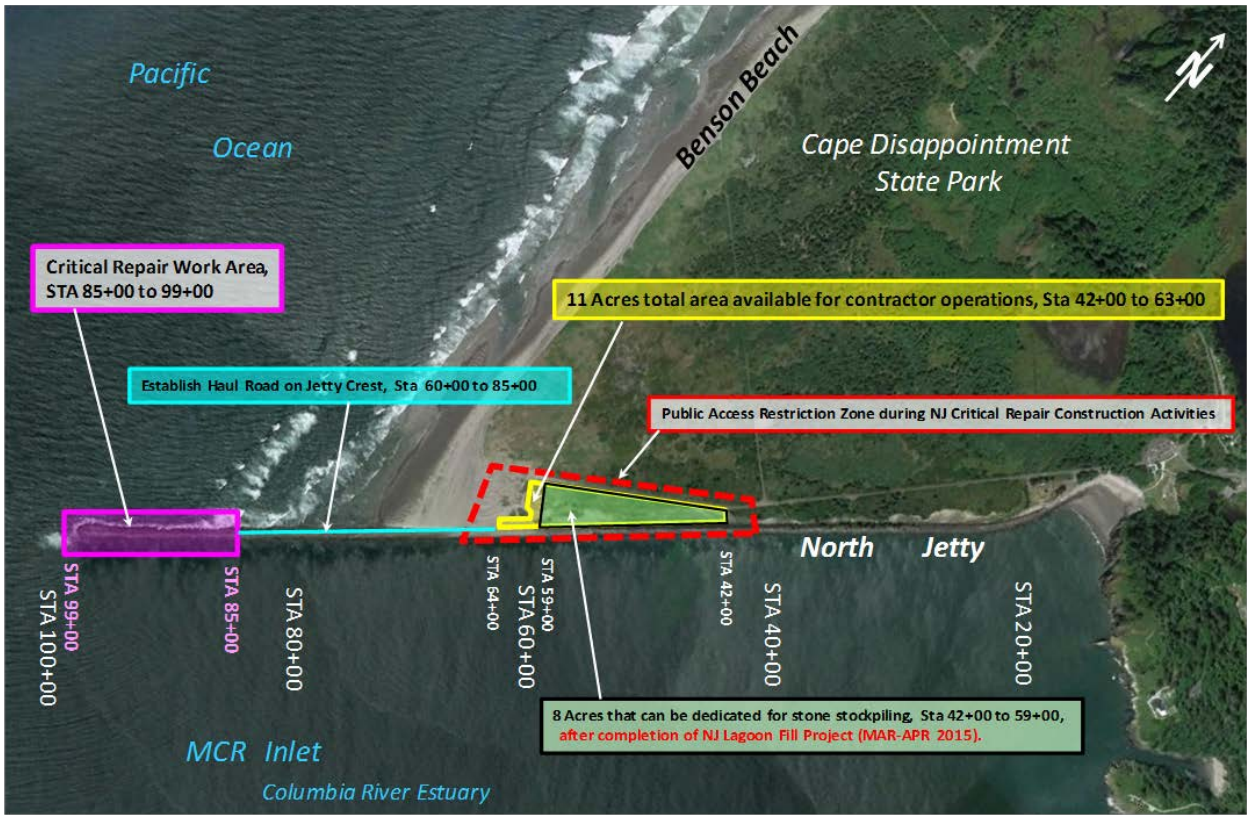

Figure 2. View of the North Jetty Critical Repairs Project Area

North Jetty Critical Repairs (NJCR) will use a design template based on a "scheduled repair" design and maintenance strategy (providing life-cycle performance) consistent with jetty rehabilitation activities. Spatially variable damage along the outer 1,400 ft of the north jetty will be repaired using up to 52,000 tons of armor stone. Repairs will be made to the upper area of the jetty cross-section (from – 5 ft to +25 ft MLLW) using armor stone having a size range of 5 -25 tons, each. Median armor stone size will be approximately 17 tons, and repairs will be made using land-based equipment. The critical repair template is expected to function for a 30-50 year period; or until the repair cross-section is degraded by more than

45%. The probability that the critical repair cross-section would be damaged by more than 45% within the first 30 years of its life-cycle is estimated to be 0.19.

Critical Repairs Mobilization – including clearing, staging, and stockpiling:
Areas requiring construction will be cleared and some surveys will be required. The contractor will be allocated an approximately 11-acre area for their onsite use during execution of NJCR operations, for which approximately 8 acres is available for stockpiling/storing jetty armor stone. Major elements of the NJCR work area include the: jetty repair area (STA 85+00 — 99+00); a jetty-crest haul road (30-ft wide along STA 64+00 — 85+00); a 30-40 ft wide access ramp (to be located on the landward side of the jetty within STA 55+00 – 64+00); an armor stone stockpile area; and an equipment staging area. See Figure 2.

The existing Jetty Road on the north side of the jetty will be used to access the ramp up to the jetty and points of entry to the staging area near the north face of the jetty. It is anticipated that trucks will be used to transport large jetty armor stone from nearby quarries. The jetty armor stone will be produced through quarrying operations and transported overland to the project site by truck. Individual armor stones (units) will weigh between 5-25 tons each (90% of the armor stone will be within the range of 12-25 tons with a median size of 17 tons).

The Contractor shall provide and install a temporary security fence along the perimeter of the stone storage area, as approved by the Government. Gates and fencing shall be installed during initial site work with signage posted. Signage around the work area will be the responsibility of the Contractor as well as any lighting. Security measures will also be required around the construction area to keep the public away.

Jetty Repairs:
The cross-section template will feature a 30-ft crest width at elevation of 25 ft MLLW. Side-slope aspect for the repair cross-section will be 1v:1.5h along STA 85+00 to 97+00, and 1v:2h along STA 97+00 to 99+00. The repair template will be aligned with the present jetty center line and armor stone placement is expected to extend downslope to an elevation of -5 ft MLLW. The seaward terminus for the repaired jetty (at STA 99+00) will feature a crest having a 15-ft radius at 25 ft MLLW with the slope breakpoint beginning at STA 99+15 and slope aspect of 1v:2h. The terminal point for the NJCR is intended (designed) to remain stable for 2-4 years, until the jetty head is fully stabilized through the Rehabilitation in 2018-2020.

The present damage trend along the Critical Repair area is highly variable; some reaches will require significant amount of new armor stone (>2000 tons/50-ft segment) to re-establish the jetty cross-section and some reaches will need minor repairs (<200 tons/50-ft segment). Because of the variable damage within the project area, some reaches may require considerable re-working of existing jetty stone to achieve requisite interfacing with new repair armor stone. It is anticipated that approximately 10,000 tons of existing jetty materials may need to be re-worked to accommodate Critical Repairs along STA 85+00 to 99+00.

To implement Critical Repairs from the jetty crest (25 ft MLLW), crane-type rock placement equipment will need to have a lateral reach capability of 80 ft distance from the jetty centerline in order to re-work existing jetty material and to place new armor stone at -5 ft MLLW. Rock placement rates (for armor stone placed on the jetty) are anticipated to be 600 to 1200 tons/day for crane and 1,000 tons/day for excavator, which would require 2.5 to 4.5 months to place depending on equipment type. It is noted that the most favorable construction season for jetty work in the PAC-NW is from June-September (4 months).

Given the limited quantity of stone required and the length of time required before placement for Critical Repairs of the MCR North Jetty, it is likely that stone produced will come from a location in either Oregon or Washington. It is conceivable, however, since other jetty repair contracts are likely to follow in the near future, that development of quarries located further away may take place, opening the potential for providing even more stone to fulfill those stone requirements. Several potential sources also exist in Canada, on or adjacent to Vancouver Island, and along the coast of British Columbia that have ready barge access. Smaller amounts of stone may also be supplied by any number of local sources in Oregon and Washington within 100 miles of the MCR North Jetty.

Critical Repairs will not require the construction of barge offloading facilities, but will require the installation of a haul road and up to two turn-outs on top of the existing jetty prism. This includes the placement of smaller stone materials in order to fill void spaces between the larger armor stones in order to create an appropriate road surface for construction equipment.

Site Restoration:
Upon completion of Critical Repairs, disturbed areas will be restored and stabilized, including those that will be transitioned into staging and storage areas for the future rehabilitation actions. This would involve native interdunal plantings.

The proposed project design and implementation plan was able to avoid and minimize temporary and permanent impacts to all wetlands on site.

Through the use of best management practices such as adequate construction buffers, silt fencing, and/or straw bales, it is not expected that any of the wetlands near the Jetty Road will be impacted. The Corps has intentionally designed Critical Repairs in concert with the previous Lagoon Fill project so that Critical Repairs would avoid wetland impacts, and preserved and created wetlands under Lagoon Fill would be protected and maintained during Critical Repairs.

All wetlands north of Jetty Road, the palustrine wetlands south of the road, and the four intertidal wetlands located along the stream channel downstream of the culvert outlet will remain undisturbed. Wetland buffers for these wetlands will not be impacted.

Storm Water and Erosion Control

A Stormwater Pollution Prevention Plan (SWPPP) has been prepared by USACE. The plan will be kept on-site and will be updated by the Contractor as needed. The Contractor must comply with all conditions of the Environmental Protection Agency's (EPA's) Construction General Permit (CGP). Areas of disturbance or stockpiling will be stabilized with erosion control devices to ensure that sediment from construction is prevented from entering wetlands or the Pacific Ocean.

Staging areas and work areas will incorporate appropriate Best Management Practices (BMPs) to minimize the potential for hydrocarbon or chemical contamination of site soils and water bodies. Some BMPs that are anticipated to be implemented are silt fencing to protect wetlands and oil absorbing pads beneath equipment during non-use and daily inspections of leakage from equipment. The contractor will add BMPs as necessary during construction to ensure our permit conditions are met. Sediment and erosion control measures will be maintained and be renewed until permanent vegetation and storm runoff control measures are effective.

A Notice of Termination (NOT) will be completed in compliance with the NPDES permit when site conditions are permanently restored and stabilized, estimated to occur 1 year after construction.

Placement of road material and large jetty armor stone are not anticipated to create turbidity, as armor stone will be large, clean rock. The Corps is requiring the use of equipment equivalent to Wiggins Fast-fuel systems which reduce the risk of a spill or leak when refueling stationary equipment on top of the jetty. The Corps will also require equipment on the jetty to use Environmentally Acceptable Lubricants (EAL), as appropriate. In addition, a Water Quality Protection and Monitoring Plan and a Stormwater Pollution Prevention Plan have been prepared for this project to reduce/avoid temporary impacts to the Columbia River. The Contractor will also be required to prepare and implement a Spill Prevention and Response Plan.

Best Management Practices that will be implemented include requiring equipment working on the jetty to convert to Environmentally Acceptable Lubricants, silt fences, appropriate staging and refueling areas and wetland buffers, and erosion and sediment control practices. The Corps will request use of the Construction General Permit from EPA and comply with the conditions therein. Vehicle staging, cleaning, maintenance, refueling, and fuel storage shall take place in a vehicle staging area placed 150 feet or more from any stream, wetland, and mean higher high water (MHHW). The fueling area will be double lined. Daily monitoring will occur to ensure there are no leaks. Oil absorbing pads, drip pans, or similar devices will be placed beneath the equipment when working in waters or staged overnight to catch any leakage. The Corps also will require the contractor develop and comply with a Spill Prevention and Response Plan, and will make the plan available to WADOE.

Site restoration
Following construction, the contractor will remove all equipment, trailers, and material from the site. The Contractor will be responsible for restoring in-kind or better in areas that are disturbed following construction activities. A preconstruction and post construction survey will be taken to document existing and final conditions. Disturbed areas will most likely include the park road, jetty road, and any staging areas. It is anticipated that the jetty road and the west parking lot will need patchwork. The staging areas will be scarified and replanted with native in-kind species. USACE will consider input from the Washington Parks Department regarding re-vegetation plan design.

Areas will be re-vegetated with in-kind native plant species, follow standard practices and be planted during the recommended planting season for each particular species. The replanting plan prepared by the Contractor will indicate 95% survivability rate after 1 year to be expected, along with a plant warranty. Areas that do not meet this rate will be replanted. No herbicide application will be allowed, although mechanical or other methods may be used to control weeds and unwanted vegetation. No surface application of fertilizer will occur within 50 feet of any wetland or ocean waters.

2. Jurisdiction and Consistency Requirements

The Coastal Zone Management Act (CZMA) is administered by the Washington Department of Ecology (WDOE). Under Washington's program, federal projects that would affect land use, water use or natural resources must demonstrate consistency with the policies of six laws:

- State Environmental Policy Act
- Shoreline Management Act (implemented as Pacific County's Shoreline Master Program)
- Clean Water Act
- Clean Air Act
- Ocean Resource Management Act
- Energy Facility Site Evaluation Council

Each is addressed below. The North Jetty Critical Repair project requires state concurrence with the findings the Corps prepared in this CZMA consistency determination.

2.1 State Environmental Policy Act

Washington's State Environmental Policy Act (SEPA) is intended to ensure that environmental values are considered when state and local agencies make decisions about a proposed project. Since SEPA was modeled after the National Environmental Policy Act (NEPA), the policies and intent of the two laws are very similar. The Corps prepared an Environmental Assessment (EA) that evaluated the effects of its actions under NEPA to determine the significance of proposed impacts to the human environment. The Corps completed this NEPA evaluation and made a determination of findings in 2012. This evaluation would be provided to WDOE for its consideration and reference; however, this project is expected to be exempt from SEPA.

2.2 Shoreline Management Act

The Washington Shoreline Management Act (Revised Code of Washington (RCW) 90.58) is the legal basis for managing the state's shorelines and waters, with jurisdiction that extends from 0 to 200 miles offshore. Shoreland jurisdiction extends landward for 200 feet as measured on a horizontal plane from the ordinary high water mark. It also includes floodways and contiguous floodplain areas landward 200 feet from such floodways, and all wetlands and river deltas associated with streams, lakes, and tidal waters subject to a master program. The provisions of Shoreline Master Programs (SMPs), which are developed and implemented by local governments, apply to all shorelines of the state as defined in RCW 90.58 and Washington Administrative Code (WAC) 173 and applicable chapters of RCW 36.70. In accordance with state standards for CZMA consistency, all federal actions must be consistent with state and local laws and regulations.

The Pacific County SMP (Resolution No. 2000-039, April 2000) has been approved by WDOE to implement the state Shoreline Management Act. The North Jetty is within a Conservancy designation and further designated as a Shoreline of Statewide Significance[1], generally managed by Pacific County to:

- Recognize and protect the state-wide interest over local interests;
- Preserve the natural character of the shoreline;
- Provide long-term over short-term benefit;
- Protect the resources and ecology of shorelines;
- Increase public access to publicly owned areas of shorelines; and
- Increase recreational opportunities for the public in shoreline areas.

Consistency with project implementation in a Conservancy Environment was assessed for two sections of the SMP: Section 15, Shoreline Works and Structures; and Section 16, Landfill and Dredging. Consistency was also assessed for Sections 3 and 23.

The North Jetty meets the SMP definition of a navigational structure: "installed to help maintain navigation channels, control erosion, or protect marinas and harbors by controlling water flow, wave action and sand movement. Jetties are the largest of all navigational structures; they are made of rock or concrete and are used to stabilize the channel and improve the scour at the mouth of the estuary. They must be able to withstand extreme wave conditions and may alter longshore sand transport for many miles along the coast" (Pacific County SMP 2000). The North Jetty was completed in 1917 and predates the existence of the Shoreline Master Program. Ongoing maintenance of the jetty has occurred since its construction, most recently in 2005.

[1] Defined in RCW 90.58.030(2)(e) as the area between the ordinary high water mark and the western boundary of the state from Cape Disappointment on the south to Cape Flattery on the north, including harbors, bays, estuaries, and inlets.

Pacific County's SMP identifies 42 policy areas under which proposed projects are evaluated. The following policy areas are applicable to the North Jetty Critical Repairs:

- General Shoreline Use (Section 3(B)(1))
- Economic Development (Section 3(B)(2))
- Public Access (Section 3(B)(5))
- Recreation (Section 3(B)(6))
- Wetlands (Section 3(B)(8)
- Beach Erosion (Section 3(B)(10))
- Aquatic Environment (Section 3(B)(17))
- Shoreline Modification (Section 3(B)(28))
- Ocean Dunes (Section 3(B)(33))
- Clearing and Grading (Section 3(B)(38))
- Saltwater Habitat (Section 3(B)(40))

In addition, the project would be implemented in an area designated by the County's SMP as the Columbia River Estuary Segment, which has unique use regulations overlaying those listed above (defined in Section 23 and Appendix 5 of the County's SMP). The Columbia River Segment is divided into eight environmental designations. The North Jetty is considered a Water Dependent Development Shoreland (WD-s), intended to manage shorelands in urban and jetty areas for water-dependent industrial, commercial and recreational use.

2.3 Clean Water Act

As stated above, the North Jetty project would be conducted within an area designated as a water of the U.S. Section 404 of the Clean Water Act (CWA) of 1977, as amended, which requires that all projects involving the discharge of dredged or fill material into waters of the U.S. be evaluated for water quality and other effects prior to making the discharge. All major rehabilitation activities at the Mouth of the Columbia River jetty system are undertaken by or at the direction of the Corps. Federal regulations, at 33 CFR 336.1, provide that a Section 404 permit would not be issued for such fill material by the Corps to itself; however, the Corps shall apply the Section 404(b) (1) guidelines to the project.

The Corps would obtain a CWA Section 401 Water Quality Certification prior to any in-water work. In addition, the Corps would comply with Section 402 of the CWA by seeking coverage under a National Pollutant Discharge Elimination System (NPDES) Construction General permit from the Environmental Protection Agency (EPA) before initiating work. This includes developing a Stormwater Pollution Protection Plan.

2.4 Clean Air Act

This Act established a comprehensive program for improving and maintaining air quality throughout the United States. Its goals are achieved by permitting stationary sources, restricting the emission of toxic substances from stationary and mobile sources, and establishing National Ambient Air Quality Standards. Title IV of the Clean Air Act includes provisions for complying with noise pollution standards. Section 118 (42 U.S.C. 7418) specifies that each department and agency of the Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge of air pollutants, shall be subject to, and comply with, all Federal, State, interstate, and local requirements respecting the control and abatement of air pollution in the same manner, and to the same extent as any non-governmental entity. Corps activities resulting in the discharge of air pollutants must conform to National Ambient Air Quality Standards (NAAQS) and State Implementation Plans (SIP), unless the activity is explicitly exempted by EPA regulations.

2.5 Ocean Resource Management Act

The Ocean Resources Management Act (ORMA) (RCW 43.143, and WAC 173-18, 20, 22, 26, and 27) establishes policies and guidelines for state and local management authority over Washington's coastal waters, seabed and shorelines. It supplements the Shoreline Management Act with jurisdiction that extends from the mean high tide line seaward for 200 miles in four Washington counties, including Pacific County. The ORMA directs the State and local government to develop plans to manage, conserve, use and develop natural resources in a manner that minimizes adverse environmental and social risks.

Pacific County will determine consistency with this provision as a component the Shoreline Management Act (see Section 3.2 below). Under the policies laid out in RCW 43.143.010 and criteria established in RCW 43.143.030, the County reviews proposed activities that may adversely affect marine life, recreation, navigation, air/water quality or other coastal uses to determine if the following eight criteria would be met or exceeded:

a) There is a demonstrated significant local, state or national need for the proposed activity or use;
b) There is no reasonable alternative to meet the public need for the proposed use or activity;
c) There will be no likely long-term significant adverse impacts to coastal or marine resources or uses;
d) All reasonable steps are taken to avoid and minimize adverse environmental impacts, with special protection provided for the marine life and resources of the Columbia River;
e) All reasonable steps are taken to avoid and minimize adverse social and economic impacts on aquaculture, recreation, tourism, navigation, air quality, and recreational, commercial, and tribal fishing;
f) Compensation is provided to mitigate adverse impacts to coastal resources or uses;
g) Plans and sufficient performance bonding are provided to ensure that the site will be rehabilitated after the use or activity is completed; and
h) The use or activity complies with all applicable local, state and federal laws and regulations.

2.6 Energy Facilities Site Evaluation Council

Before certain energy facilities can be sited, constructed, or operated in Washington, application must be made to the Energy Facility Site Evaluation Council (EFSEC). The EFSEC was created to provide a one-stop licensing agency for certain non-hydro energy projects. Its responsibilities derive from RCW 80.50, and include siting large natural gas and oil pipelines, thermal electric power plants that are 350 megawatts or greater and their dedicated transmission lines, new oil refineries or large expansions of existing facilities, and underground natural gas storage fields. Because the North Jetty project is not an energy production facility, this review will not be required.

3. Consistency Determination

3.1 State Environmental Policy Act

The Corps intends to provide its NEPA evaluation to the WDOE for their use and reference. A separate SEPA document will not be prepared for this project. The Corps' 2012 EA is comparable to a SEPA analysis. Therefore, through its compliance with the NEPA process, the Corps is consistent with the substance and intent of SEPA.

3.2 Shoreline Management Act: (RCW) 90.58

Pacific County's Shoreline Master Program identifies 42 policy areas with which proposed projects are evaluated. These are identified in Section 3(B) of that plan and those most relevant to the proposed North Jetty Critical Repairs are listed below and paired with a brief assessment of project consistency. The SMA also establishes use preferences for shorelines of state-wide significance.

3.2.1 Shorelines of Statewide Significance (1 (E))

1. Recognize and protect the state-wide interest over local interests: The Critical Repairs Project furthers the interests of Washington and recognizes the statewide, regional, and national interests in interstate commerce over local interests. The primary substantive requirement for a jetty is that it be designed to minimize adverse impacts on water currents, erosion, and accretion patterns. Given the accelerated rate of deterioration at the North Jetty, the repair of the jetty will reduce the hazard to human life and property and as described in the Environmental Assessment (EA). The affects to fish and water quality, as a result of the repair, will be minimal.

2. Preserve the natural character of the shoreline: The North Jetty contains badly deteriorated areas where degradation has accelerated in recent years due to increased storm activity and loss of sand shoal material, upon which the jetties are constructed. Breaching near the shoreline would allow sand to migrate into the Columbia River navigation channel, thereby disrupting deep draft navigation and increasing dredging requirements and causing severe damage to nearby beaches. The likelihood of a jetty breach will continue to increase with time.

3. Provide long-term over short-term benefit: The long term benefit to the local area and the region would be recognized by the repair of the North jetty. As stated above, if the jetty is not repaired and a breach occurred, the damage to Benson Beach and the federal navigation channel would be significant and repairs could be hindered if the breach occurred during the winter months.

4. Protect the resources and ecology of shorelines: The environmental impacts associated with the proposed action would be minor because the rehabilitation work is to an existing structure within a limited area within the original footprint and will not impact any significant benthic habitat. Some short-term temporary loss of microhabitat will occur during the construction period but will be replaced by the completion of the proposed action. The proposed activity is expected to have minimal effects on fish and wildlife species of the area. An increase in suspended sediments in the water column is expected during the construction period; however, this impact is expected to stay within acceptable levels for fish and wildlife species of concern. Avoidance of the area may occur throughout the construction period as a result of the increased activities and noise. This impact is highly localized and all species would be expected to return following project completion. No significant affects on any listed/candidate threatened or endangered species are anticipated.

5. Increase public access to publicly owned areas of shorelines: The North jetty repairs will temporarily limit access to Benson Beach via the parking lot. The limited access will last for approximately eight months. Upon completion of the project, the disturbed area will be restored to its previous condition. The Corps is not proposing any permanent changes to current public access.

6. Increase recreational opportunities for the public in shoreline areas: The Corps is not proposing any changes to the current recreational opportunities at the jetty. By repairing the North Jetty, long-term recreational opportunities on Benson Beach will be maintained. As stated above, a breach in the jetty would cause severe erosion of the beach and the material would be lost into the channel. Due to the dangerous and dynamic conditions at the jetties, the Corps currently prohibits public access or recreation

on top of the jetties and will continue to adhere to this public safety policy. For this reason, signage and road closures to the top of and on the jetty itself will be implemented to keep the public off of the jetties.

The Project is consistent with the criteria for activities within Shorelines of Statewide Significance as indicated.

3.2.2 General Shoreline Use (3(B) 1)

These policies seek to ensure that facilities are properly sited to maintain the safety and welfare of the public, retain or improve the quality of the environment, and minimize adverse impact during shoreline construction and use.

The North Jetty has been in this location and maintained by the Corps for over 100 years. The Corps leases the project area to the WSPRC, which operates Cape Disappointment State Park. Planning is ongoing with the state park to balance recreation use of Jetty Road with construction activities that would periodically delay or preclude public use of the road, a primary access route to southern portions of Benson Beach. Heavy equipment using park roads and parking lots would delay or inconvenience some water sport and beach recreationists, although they would be redirected to the McKenzie Head Road for ocean access. A number of restrictions would be in place near the construction zones at the jetty to protect park visitors during the implementation period. However, the majority of the park and beaches would remain open and accessible to the public. The temporary restrictions related to Critical Repairs would be of limited duration, for one construction season starting in approximately April and approximately ending in October. Traffic controls and restrictions would remain in place to protect the public during trucking and staging operations.

The Corps has avoided all wetland impacts and reduced potential impacts to waters of the U.S. through various proposed Best Management Practices (BMPs) and minimization of the proposed project footprint.

Finally, the purpose of the rehabilitating the larger jetty system is to maintain functional jetty structures. These navigation features are in place to sustain the federal navigation channel at the Mouth of the Columbia River, allowing safer passage of vessel traffic ranging from recreational to trans-oceanic commercial shipping that crosses the bar daily. Maintenance of the jetty system and stability of the navigation channel contribute to public commerce, safety and welfare.

Protection of recreational, environmental and navigational functions provided by the project site and made possible by the jetties is consistent with General Shoreline use policies.

3.2.3. Economic Development (3(B) 2)

These policies seek to protect current economic activity (shipping, etc.), to develop recreation assets that enhance public enjoyment, and to ensure that activities do not cause irreparable harm to the shoreline and adjacent uplands.

Rehabilitation of the jetty system would have a long-term, positive effect on navigation and vessel safety. The mouth of the Columbia River is the gateway to the Columbia-Snake River system, accommodating commercial navigation traffic with an approximate annual value of $19 billion dollars a year. Jetty restoration would contribute long-term, positive effects on this transportation link and the economies of the states of Oregon, Washington, Idaho and Montana. In the short term, some recreationists would be inconvenienced by truck traffic on Jetty Road for an approximately eight-month period. The Corps would allow access to the eastern parking lot and gravel parking lot north of Jetty Road, but traffic controls and restrictions would remain in place immediately adjacent to the western-most portion of the jetty and the control point past the north parking lot access. Beaches outside of the construction area adjacent to the jetty would remain open. Access to the jetty crest haul road ramp shall be blocked with a barricade and

secured from public vehicular access when the ramp is not in use by the contractor, and until the ramp is removed.

In the long term, protection of recreational and navigational functions made possible by the jetties is consistent with Economic Development policies.

3.2.4 Public Access (3(B) 5)

These policies seek to ensure that activities near the shoreline do not detract from public access to the water and also to ensure public safety.

As noted above, the Corps leases this land to WSPRC which operates the area as Cape Disappointment State Park, which is open to the public. The Corps is not proposing to modify this leasing arrangement.

Due to traffic controls, partial access to Benson Beach along Jetty Road would be disrupted periodically over the approximately 8-month-long Critical Repair project. Information about access disruptions would be available to the public on the WSPRC website for Cape Disappointment and posted at park kiosks. Also, park managers would be updated regularly on planned activities that may affect visitor use. Appropriate traffic controls will be implemented to ensure public safety. Public safety would be a primary concern for all on-site personnel. Other portions of the park allowing beach access and camping would not be directly affected. Beach access outside of the construction zone would remain open, and upon completion, public access would be fully restored and unaffected by the Critical Repair features.

The proposed project is consistent with Public Access policies ensuring shoreline access and public safety.

3.2. 5 Recreation (3(B)6)

This policy seeks to optimize shoreline recreation. Although this is not an objective of the North Jetty Critical Repairs Project, maintaining existing uses once the Critical Repair project is complete is fundamentally understood. The Corps would coordinate with Cape Disappointment State Park to avoid and minimize recreational effects to the extent feasible while still efficiently completing the project. Conservation measures to be implemented to protect marbled murrelets would reduce some of the temporary acoustic construction impacts experienced by park visitors. These include:

- Trucks would only be allowed to use the roads through Cape Disappointment State Park during daylight hours.
- Trucks would not unnecessarily stop along the roads through Cape Disappointment State Park.
- Trucks would be prohibited from using compression brakes (jake brakes) on park roads.

Additionally, sand accretion behind the North Jetty has contributed to the formation of Cape Disappointment State Park. By stabilizing the jetty, erosion of park shorelands is expected to be reduced. Due to the dangerous and dynamic conditions at the jetties, the Corps currently prohibits public access on top of the jetties and will continue to adhere to this public safety policy. For this reason, signage and road closures to the top of and on the jetty itself will be implemented to keep the public off of the jetties.

The proposed project would preserve existing recreational uses at the park and is consistent with the SMP Recreation policies.

3.2. 6 Historic, Cultural, Scientific, Educational (3(B) 7)

Based on the nature of the proposed actions within the area of potential effect (APE) for cultural and historical resources, and given that the areas where ground disturbance will take place is a recently

accreted landform, there are no known archeological sites within the APE, and there will be no long-term adverse effect to the jetties, the Corps has determined this action will have *No Adverse Effect* on historic properties. The Corps further will assure an inadvertent discovery plan is conveyed to the contractor for this project. The Corps has consulted with the Washington State Department of Archaeology and Historic Preservation and on May 12, 2013 received its concurrence with the Corps' determination of No Adverse Effect.

The proposed project will preserve and protect the historical sites located in the shorelands, and therefore is consistent the SMP policies.

3.2.7 Wetlands (3(B) 8)

The SMP wetland policies are intended to preserve and protect wetlands through identification, avoidance, buffering and, where effects cannot be prevented, mitigation. Numerous refinements occurred throughout the North Jetty planning and design phase to avoid the project's impacts to wetland habitats to the maximum extent practicable. Efforts were made to reduce the project footprint and to locate staging areas away from wetland and waters.

Through the use of best management practices such as adequate construction buffers, silt fencing, and/or straw bales, it is not expected that any of the wetlands near the Jetty Road will be impacted. The Corps has intentionally designed Critical Repairs in concert with the previous Lagoon Fill Project so that Critical Repairs would avoid wetland impacts, and preserved and created wetlands under the prior Lagoon Fill Project would be protected and maintained during Critical Repairs.

All wetlands north of Jetty Road, the palustrine wetlands south of the road, and the four intertidal wetlands located along the stream channel downstream of the culvert outlet will remain undisturbed. Wetland buffers for these wetlands will not be impacted.

As a result, the Corps will avoid all impacts to wetlands and their buffers and will implement appropriate stormwater controls per its compliance with the Clean Water Act Section 402 EPA Construction General Permit. The approach to avoid, minimize and mitigate effects is consistent with the Wetlands policies.

3.2. 8 Beach Erosion (3(B) 10)

Prevention and control of beach erosion through engineered solutions is encouraged by this policy. The Critical Repairs project will focus on preserving the rubble-mound structure that comprises the North Jetty to assure the continued protection of the jetty trunk structure and terminus from wave attack from the Pacific Ocean and the Columbia River. The North Jetty is particularly critical in maintaining the existing location of the federal navigation channel and the Mouth of the River itself. Recession of the jetty head or terminus also is linked to recession and erosion of Benson Beach/Peacock Spit. By preserving the existing length of the jetty via Critical Repairs (and forthcoming Scheduled Repairs under the Major Rehabilitation program), it is anticipated that this may also arrest the loss of Benson Beach. By stabilizing and repairing the trunk of the jetty along the existing jetty alignment from Station 84+50 to about Station 99+00 this will reduce the likelihood of the jetty breaching, which if occurred, could alter the federal navigation channel and depositional patterns at the Mouth of the Columbia River and at Benson Beach. Stabilizing this structure would help maintain the federal navigation channel and current depositional patterns at area beaches.

Erosion is expected to be reduced and the project would be consistent with this standard.

3.2.9 Conservancy Environment (3(B) 15)

The Corps is not proposing new development and will implement best management practices to protect natural resources as described in this Determination as well as in the Environmental Assessment and Biological Assessment. The Corps will also implement site restoration activities using native vegetation and in compliance with requirements in the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit. Repair of the North Jetty is compatible with the current use of the area, which is an existing navigation structure protecting the Mouth of the Columbia River. The Corps in not proposing changes to the current recreational use or public access at the site.

For all of these reasons, the proposed Critical Repairs to stabilize the jetty root are consistent with policies protecting the Conservancy Environment.

3.2. 10 Aquatic Environment (3(B) 17)

Under this policy, non-water dependent structures and uses that degrade the existing character of the area are prohibited, and development is to be compatible with the upland environment. Opportunities for public access to water bodies are to be compatible with the existing shoreline.

The jetty is located in the aquatic environment and is considered a water dependent structure under this policy. This environment would not be degraded by the proposed project because: the proposed action places rock on top of existing jetty rock; the majority of stone placement will be above Mean Lower Low Water; the Corps does not anticipate major excursion off the existing alignment or relic stone structure; and the Corps has proposed multiple BMPs that will protect water quality. The Corps' limitation to public access will be for short-term (1 season) construction purposes, and the area will remain a public State Park under the WSPRC's lease with the Corps. While the jetty restricts land based public access to the Columbia River, maintaining this important navigational structure sustains public access from the ocean, across the bar and into the river.

The proposed project would maintain a regionally important navigation structure and sustain public access into the Columbia River. While the structure does contrast with the upland environment, it is a critical feature in preventing erosion of the shoreland and upland. The structure is also historic in that it has been in existence since 1917. The proposed Critical Repairs to stabilize the jetty root are consistent with policies protecting the Aquatic Environment.

3.2. 11 Shoreline Modification (3(B) 28)

Under this policy, shoreline stabilization measures are to be considered for the purposes of preventing damage to existing development and protecting the health, safety and welfare of Pacific County residents.

The North Jetty has been a fixture in Pacific County for over 100 years and is considered by the federal government to be critical infrastructure for Columbia River navigation. By restoring the jetty root and trunk, a potential breach would be precluded and the subsequent effects on navigation, shoreline configuration and adjacent land uses would be avoided. Further, without Critical Repairs the jetty would continue to degrade, and Benson Beach would continue to erode landward as the jetty length is lost. The proposed Critical Repairs to stabilize the jetty root are consistent with Shoreline Modification policies.

3.2. 12 Ocean Dunes (3(B) 33)

Dunes are recognized under this policy for a number of beneficial purposes and values that they provide. Protecting dune areas is addressed in each policy component, from aesthetic and ecosystem values to access through dunes to state beaches. Dune accretion is noted to have increased county open space and when modifications are made, they should be minimized to protect views and property values.

The construction and existence of the North Jetty itself has facilitated the creation of the existing adjacent dunes. As noted in the project description, the Corps has limited its proposed construction footprint and will conduct post-project site restoration using an appropriate native plant palette. During construction the visual effects of dune alteration would be apparent only to travelers on Jetty Road, where instead of a Scot's Broom-covered dune, the setting would be restored with native interdunal vegetation. Once the vegetation matures, the setting would appear to be a natural dune and ocean beach landscape and would provide much greater habitat value than current conditions. While this action would temporarily alter a dune area, it would be done in compliance with federal and state laws, as stipulated in this policy.

In the short term, public access would be restricted in the active construction zone; however, long-term public access would be restored as would the site's native dunal vegetation, consistent with the Dune policy objective to maintain access.

3.2. 13 Clearing and Grading (3(B)38)

This policy states that clearing and grading are to be conducted in a manner that avoids negative effects to shorelands and plant community diversity.

A mosaic of vegetation, including a large community of non-native invasive Scot's broom and European beachgrass would be affected by this action. Dense Scot's Broom would be cleared before select grading is initiated. Additional grading would be performed to create truck access and a ramp to provide access up to the top of the jetty. About 11 acres of the area between the jetty and the Jetty Road would be converted to a storage and staging area for large jetty stone needed for placement during Critical Repairs. The contractor would clear and grub portions of the designated work area for stockpiling of materials. Scotch broom brush removal requires precautions to avoid infestation; and the Contractor will be required to prevent the on-site deposition of scotch broom seeds. The Contractor must inform the Government of the location of disposal landfill. All temporary erosion control measures must be in place prior to clearing and grubbing.

Permanently restored areas would be appropriately vegetated with native species, graded and stabilized to be consistent with policies that protect shorelands and native plant diversity.

3.2. 14 Saltwater Habitat (3(B) 40)

Saltwater habitat is to be protected for ecologically and economically important marine species and to prevent altering the substrate for these species.

The proposed Critical Repair actions will entail placement of new rock in top of existing jetty stone at the MCR. Therefore, as a water dependent structure, the project will interface with estuarine and ocean habitat, but will not be converting habitat. Furthermore, majority of the stone placement will occur above the MLLW elevation. In support of its effects determination, besides its Environmental Assessment, the Corps also completed a Biological Assessment and a Biological Opinion regarding the possible effects of the proposed action on listed species in the area, along with a determination under the Magnuson-Stevens Fishery Conservation and Management Act.

A Biological Assessment evaluating the MCR Jetty System was submitted to the National Marine Fisheries Service (NMFS) in 2010 and modified on February16, 2011. On March 18, 2011, NMFS issued a Biological Opinion (reference #2010/06104) concurring with the Corps' assessment that the proposed rehabilitation/repair project may affect, but is not likely to adversely affect the following species: Fin whale (*Balaenoptera physalus*); Southern Resident killer whale (*Orcinus orca*); Sperm whale (*Physeter macrocephalus*); Sei whale (*B. borealis*); Blue whale (*B. musculus)*; Leatherback sea turtle (*Dermochelys coriacea*); Lower Columbia River (LCR) Chinook salmon (*O. tshawytscha*); Upper Willamette River (UWR) Chinook salmon (*O. tshawytscha*); Upper Columbia River (UCR) spring-run Chinook salmon (*O.*

tshawytscha); Snake River (SR) spring/summer-run Chinook salmon (*O. tshawytscha*); SR fall-run Chinook salmon (*O. tshawytscha*); Columbia River (CR) chum salmon (*O. keta*); LCR coho salmon (*O. kisutch*); Oregon Coast coho salmon (*O. kisutch*); Southern Oregon/Northern California Coasts coho salmon (*O. kisutch*); SR sockeye salmon (*O. nerka*); LCR steelhead (*O. mykiss*); UWR steelhead (*O. mykiss*); Middle Columbia River steelhead (*O. mykiss*); UCR steelhead (*O. mykiss*); SR basin steelhead (*O. mykiss*); and Southern distinct population segment (DPS) green sturgeon (*Acipenser medirostris*).

The NMFS determined that the proposed action is not likely to jeopardize the continued existence of eulachon (*Thaleichthys pacificus*), Steller sea lions (*Eumetopias jubatus*), and humpback whales (*Megaptera novaeangliae*). For proposed critical habitat for eulachon, leatherback turtles and LCR coho salmon the Corps provided a conference report, and subsequent the BiOp, NMFS adopted the not likely to affect determination in the conference report when this habitat became designated. Lastly, during the January 15, 2015 webinar/conference call, NMFS stated that the North Jetty Critical Repairs and staging components would not require an Incidental Harassment Authorization.

The estuary and the Pacific Ocean off the MCR also are designated as Essential Fish Habitat (EFH) for various groundfish, coastal, pelagic, and salmon species. The North Jetty Critical Repair actions are unlikely to directly affect EFH for Chinook salmon, coho salmon, English sole, sand sole, and starry flounder, as there will be no permanent loss of sandy bottom habitat from project construction. An EFH assessment under the Magnuson-Stevens Act was provided as part of the Biological Assessment submitted to the NMFS for the proposed action. In the subsequent Biological Opinion, no additional Conservation Measures were proposed for the greater suite of rehabilitation and repair actions, which included repair actions for the North Jetty.

During the January 15, 2015 webinar/conference call, NMFS and the USFWS were updated about the North Jetty Critical repairs to confirm the project remains within the scope of effects evaluated in the two Biological Assessments, the Biological Opinion, and the Letter of Concurrence.

Placement of road material and large jetty armor stone are not anticipated to create turbidity, as armor stone will be large, clean rock. Further, BMPs that will be implemented include requiring equipment working on the jetty to convert to Environmentally Acceptable Lubricants, silt fences, appropriate staging and refueling areas and wetland buffers, and erosion and sediment control practices. The Corps is requiring the use of equipment equivalent to Wiggins Fast-fuel systems which reduce the risk of a spill or leak when refueling stationary equipment on top of the jetty. The Corps will request use of the Construction General Permit from EPA and comply with the conditions therein. In addition, a Water Quality Protection and Monitoring Plan and a Stormwater Pollution Prevention Plan have been prepared for this project to reduce/avoid temporary impacts to the Columbia River, its estuary, and the Pacific Ocean. Vehicle staging, cleaning, maintenance, refueling, and fuel storage shall take place in a vehicle staging area placed 150 feet or more from any stream, wetland, and mean higher high water (MHHW). The fueling area will be double lined. Daily monitoring will occur to ensure there are no leaks. Oil absorbing pads, drip pans, or similar devices will be placed beneath the equipment when working in waters or staged overnight to catch any leakage. The Corps also will require the contractor develop and comply with a Spill Prevention and Response Plan, and will make the plan available to WADOE.

No economically or ecologically important marine species or their habitat would be permanently affected. Because effects to marine species and their habitat would be temporary and discountable, and because changes in substrate would be negligible, the proposed action is consistent with Saltwater Habitat policies.

3.2.15 Shoreline Works and Structures (15 (B))

In a Conservancy Environment, shoreline structures are permitted if they do not substantially change the character of the environment and where they are a necessary part of a water dependent project. The North Jetty has been part of the Cape Disappointment setting for 100 years, serving an important navigational function that is critical to maintain. The North Jetty restoration would not alter the character of the setting and it is a highly water dependent structure; therefore, it would be consistent with actions allowed in the Conservancy Environment.

A proposed shoreline structure also is to conform to the standards identified in federal and state permits for such projects. Conformance is described in this document.

Potential adverse effects of a shoreline structure on fish and wildlife were assessed. The Corps thoroughly evaluated potential effects in an Environmental Assessment published in 2012 (USACE 2012). Additionally, the potential to affect ESA listed species was assessed by both the USFWS and the National Marine Fisheries Service (NMFS), as described above. The proposed project complies with federal and state laws, and would not change the character of the existing environment. Therefore, the proposed project is consistent with this section of the SMP.

3.2.16 Landfill and Dredging (16 (B))

In a Conservancy Environment, filling is prohibited in tidal wetlands. The Corps is not proposing fill in existing wetlands and will apply appropriate protective buffers. However, the Corps is proposing maintenance activities for an existing navigation structure where stone will be placed on top of the existing jetty prism. The Corps' proposed actions do not meet the definition of "fill" in the Pacific County Shoreline Management Plan because: they do not creat new shorelands; they do not raise the elevation of existing shoreland; and they are not adding to shoreland development. The Corps will be conducting work in waters below jurisdictional elevations classified as a Water of the United States, and the Corps is requesting a Clean Water Act Section 401 Water Quality Certification for regulatory compliance purposes.

Other requirements of this section of the SMP are that only clean materials should be used to prevent degrading water quality, and to use structures or vegetation to protect against erosion. All material would be placed on top of the North Jetty. During rock placement, water quality would be monitored as prescribed in the Corps' Water Quality Management Plan and in the Stormwater Pollution Prevention Plan. The Corps also received a no-test determination for proposed material from the Portland Sediment Evaluation Team (PSET), which issued a sediment testing exemption per the 2009 Sediment Evaluation Framework for the Pacific Northwest (SEF). Upon completion of this phase of jetty restoration, much of the site would be hydroseeded or replanted to rapidly establish cover on disturbed areas. For these reasons, the project would be consistent with SMP landfill guidelines.

3.2.17 Columbia River Estuary Segment (Section 23. D)

The project would be implemented in an area designated by the County's SMP as the Columbia River Estuary Segment, specifically in the Water Dependent Development Shoreline environment. In such locations, the SMP objective is to "manage shorelands in urban and jetty areas for water-dependent industrial, commercial and recreational use" (SMP Section 25 (B)(8)). Section 1.02.08 of Appendix 5 of the SMP summarizes conditions in the Cape Disappointment area. The North Jetty is identified and minor sloughs and wetlands are noted to be behind the jetty.

Maintaining the North Jetty is fully consistent with the objective to manage the shoreland for water dependent industrial use. The proposed project would maintain a regionally important navigation

structure and sustain public access into the Columbia River. This allows safer passage of vessel traffic ranging from recreational to trans-oceanic commercial shipping that crosses the Columbia Bar daily. Maintenance of the jetty system and stability of the navigation channel contribute to commercial and recreational use, fully consistent with the Columbia River Estuary Segment of the SMP.

The project is located in an area designated as a Conservancy Environment under the SMP and consistency is therefore assessed with two sections, (1) Shoreline Works and Structures and (2) Landfill and Dredging. Low intensity and water-dependent construction, structural shoreline stabilization, and fill (in conformance with Subsection 23.F.25) are all permitted activities under Table 1 - Conservation/Aquatic Areas. Table 2 – Conservation/Shorelands low intensity is permitted. The Corps will be in compliance with the Subsection 23.F.25 requirements because:

The Corps is proposing maintenance to an existing jetty navigation structure. The Corps is only proposing minimum rock volumes to repair the existing jetty template within its current footprint on top of relic stone mostly above Ordinary High Water, and is not proposing fill beyond the relic stone, or to existing wetlands. Further:

a) Rock volumes and footprint are the minimum necessary to repair the jetty and will remain on existing relic stone;
b) Temporary construction staging area has been minimized and a majority of the park and beach access will remain unaffected. All placement is related to the water-dependent use of the jetty. Public access will not be permanently reduced. Corps policy states that the jetties should not be climbed, played or fished upon. Warning signs are posted displaying the potential hazardous of climbing on the jetties and individuals do so at their own risk, therefore no additional access to the jetty will be provided.

(b. iv) Stone placement will be limited to navigation structures and improvements on top of the jetty prism for repairs and the associated access road; no additional aquatic areas will be filled, and all wetlands and their buffers will be avoided.

(b. vii) The public need for the jetty to maintain the navigational channel has been demonstrated elsewhere in this evaluation and in the referenced 2012 Environmental Assessment. In the event repairs cannot be made, there is an increased risk of a jetty breach. Therefore, repair of the jetty will be in the best interest of the public

(b. viii) Because of the nature of jetty repair work, placement of jetty stone cannot be accomplished using any upland site. Therefore, no upland site exists for placement of jetty stone because it is a water dependent activity.

(b. viii) Impacts due to placement material are minimal because the stone is clean, and several best management practices will be implemented to ensure that the project meets state water quality standards.

3.3 Clean Water Act

The proposed project would be consistent with three primary provisions of the Clean Water Act (CWA). The Corps prepared a Section 404 (b) (1) Evaluation to assess the potential water quality impacts of the selected implementation approach. It has prepared a Water Quality Certification request under Section 401, and would submit a NPDES permit application and Stormwater Pollution Prevention Plan (SWPPP) to EPA under Section 402. The Corps has identified several Best Management Practices (BMPs) in its proposed Water Quality Protection and Monitoring Plan and SWPPP. As summarized previously, the Corps has also demonstrated avoidance and minimization measures to avoid impacts to wetlands and reduce impacts to waters of the U.S.

The proposed action is compliant with the Clean Water Act and is consistent with the same pertinent policies of the SMA.

3.4 Clean Air Act

Repair and rehabilitation of the North Jetty is anticipated to remain in compliance with the Clean Air Act and the State Implementation Plan. This is not a transportation project, it does not qualify as a major stationary source of emissions of criteria pollutants, and the project does not appear to be located in a non-attainment area for limited air quality.

There would be periodic short-term reductions in air quality during North Jetty repairs due to emissions from construction equipment. Any emissions that occur during and after construction from motor vehicles are expected to be minimal and would be from activities of a similar scope as previous levee repairs. There also would be an intermittent short-term but unavoidable increase in noise levels from construction equipment.

The proposed action is consistent with the Clean Air Act and pertinent policies of the SMA.

3.5 Ocean Resource Management Act

Pacific County, through comment to Department of Ecology, will review the proposed activities to confirm that the eight criteria of this act would be met or exceeded. These criteria are identified in RCW 43.143.030(2), Sections (a) through (h). Each is listed below along with a statement of consistency.

3.5.1 Need for Proposed Project (Section a)

Structural degradation of the over 100-year-old North Jetty has accelerated in recent years because of increased storm activity and loss of sand shoal material upon which the jetty was constructed. As identified in the EA, the MCR North Jetty Major Maintenance Report (USACE 2011) and the MCR Jetty System Major Rehabilitation Evaluation Report (USACE 2012a), the ongoing deterioration of the jetty system is jeopardizing the integrity of the commercial deep-draft navigation channel from the Pacific Ocean into the Columbia River. Significant repairs are necessary to ensure the preservation of a reliable navigation channel where an average of 40 million tons of cargo is transported each year, with an estimated 2013 value of $19 billion. The purpose of the proposed project is to strengthen the North Jetty, extend its functional life, and maintain deep-draft navigation. Jetty Critical Repairs is an important component of jetty rehabilitation and is consistent with this section of the ORMA.

3.5.2 Reasonable Alternatives (Section b)

A range of alternatives for the MCR jetty system was considered in an Environmental Assessment published by the Corps in 2012 from the reactive fix-as-fails interim repairs of the No Action alternative, to more aggressive interim repairs, to increasingly higher levels of repair or rehabilitation to prevent cumulative jetty damage and impacts to project function. The alternatives in this EA evolved from previously proposed alternatives discussed in 2006 and 2010 draft EAs, the May 2011 EA, and the Revised 2012 EA. The Preferred Alternative for the North Jetty evolved through these analyses to avoid and minimize environmental impacts by reducing the final structure and construction footprints necessary to achieve a resilient jetty system. The major changes from the 2011 to the 2012 EA are additional alternatives that reduce the project footprint and the assumption that the jetty would be managed and maintained to prevent breaching.

Alternatives and design options were evaluated by comparing reliability of the system, average annual costs, potential environmental effects, and anticipated repair frequencies for each alternative. Repair and rehabilitation options comprise the general categories of alternatives considered and evaluated.

Multiple design and implementation approaches for these alternatives are discussed in greater detail in the 2012 Revised Final EA and related technical reports. These evaluations are fully consistent with this section of the ORMA.

3.5.3 Long-term Significant Adverse Effects (Section c)

The Corps completed an evaluation of project effects under NEPA (USACE 2012). This EA identified no likely long-term significant adverse impacts to coastal or marine resources or uses from North Jetty repairs. The Corps issued a Finding of No Significant Impact (FONSI) in July 2012. This determination results from the Corps evaluation in the EA that the project would not have significant impacts on the human environment, as defined under NEPA. Consequently, the project is consistent with the analysis anticipated under this section of the ORMA.

3.5.4 Adverse Environmental Effects Minimized (Section d)

All reasonable steps would be taken to avoid and minimize adverse environmental effects. Potential effects were analyzed in the NEPA EA (see Section 3.1) and are incorporated herein by reference. Additionally, the potential to affect ESA listed species was assessed by both the US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The USFWS concurred with the Corps' findings that the North Jetty repairs may affect but are unlikely to adversely affect bull trout (*Salvelinus confluentus*) and its critical habitat, marbled murrelet (*Brachyramphus marmoratus*), and western snowy plover (*Charadrius alexandrines nivosus*) (concurrence letter from USFWS, February 23, 2011). The Corps has made a no-effect determination for streaked horned lark (*Eremophila alpestris strigata*) and its designated critical habitat.

The NMFS issued a Biological Opinion on March 18, 2011 concluding that jetty repairs are unlikely to jeopardize the continued existence of eulachon (*Thaleichthys pacificus*), steller sea lions (*Eumetopias jubatus*) and humpback whales (*Megaptera novaeangliae*). Additionally, NMFS concluded that the proposed action may affect, but is not likely to adversely affect the following species:

- Fin whale (*Balaenoptera physalus*)
- Southern Resident killer whale (*Orcinus orca*)
- Sperm whale (*Physeter macrocephalus*)
- Sei whale (*B. borealis*)
- Blue whale (*B. musculus*)
- Leatherback sea turtle (*Dermochelys coriacea*)
- Lower Columbia River (LCR) Chinook salmon (*O. tshawytscha*)
- Upper Willamette River (UWR) Chinook salmon (*O. tshawytscha*)
- Upper Columbia River (UCR) spring-run Chinook salmon (*O. tshawytscha*)
- Snake River (SR) spring/summer-run Chinook salmon (*O. tshawytscha*)
- SR fall-run Chinook salmon (*O. tshawytscha*)
- Columbia River (CR) chum salmon (*O. keta*)
- LCR coho salmon (*O. kisutch*)
- Oregon Coast coho salmon (*O. kisutch*)
- Southern Oregon/Northern California Coasts coho salmon (*O. kisutch*)
- SR sockeye salmon (*O. nerka*)
- LCR steelhead (*O. mykiss*)
- UWR steelhead (*O. mykiss*)
- Middle Columbia River steelhead (*O. mykiss*)
- UCR steelhead (*O. mykiss*)
- SR basin steelhead (*O. mykiss*)
- Southern distinct population segment (DPS) green sturgeon (*Acipenser medirostris*)

NMFS also concluded that jetty repairs are not likely to adversely affect designated critical habitat for the above species or designated and proposed critical habitat for eulachon, leatherback turtles and LCR coho salmon, respectively.

The potential for effects, the BMPs, conservation measures and other avoidance and minimization measures described in this document and in the other relevant environmental compliance documents are incorporated by reference herein. These evaluations are fully consistent with this section of the ORMA.

3.5.5. Adverse Social and Economic Effects Minimized (Section e)

The Corps will work closely with the WSPRC to identify and implement all reasonable steps to minimize effects on visitors to Cape Disappointment State Park during the entire construction period with mobilization beginning sometime in April. In the long term, stabilizing the jetty would have a significant economic benefit to the region by helping to preserve the Benson Beach landform as well as the federal navigation routes through the Mouth of the Columbia River.

3.5.6 Adverse Effect Compensation (Section f)

Compensatory wetland mitigation is not proposed for the North Jetty Critical Repair work, as there will not be any temporary or permanent wetland impacts. The Corps has determined that through multiple avoidance and minimization measures protecting various resources, including wetlands and waters, these resources will be adequately protected from permanent impacts. .

3.5.7 Assurance of Site Rehabilitation (Section g)

The Corps of Engineers has a long-term interest in this site, having maintained the North Jetty for over 100 years. Maintaining navigational functionality and completing stabilization in a manner that would accommodate the long-term uses of the overlying state park provides assurance that the site would be appropriately rehabilitated. Specifically, the following rehabilitation steps would be taken:

- Construction access and staging would remove both native vegetation and invasive plant species within identified clearing limits in uplands. Appropriate site stabilization and erosion control measures would be put into place.
- The project is within Cape Disappointment State Park boundaries. Jetty Road is primarily used by park visitors to access the beach. The Corps will conduct a pre- and post-project survey, and any damage to park roads would be appropriately repaired.
- Public access to the North Jetty area would be temporarily and partially restricted during completion of the Critical Repairs construction. Portions of the road would be accessible as mobilization efforts and stone stockpiling commences. However, some level of traffic and site controls would remain in place until completion of critical repairs on the North Jetty.

3.5.8 Compliance with Regulations (Section h)

The Corps is in the process of complying with all applicable state and federal laws and regulations, as summarized below.

Table 1. Status of Compliance with Regulations.

Permit	Description	Date of Concurrence
NEPA	Environmental Assessment and Finding of No Significant Impact	July 2012
ESA	Biological Assessment for USFWS	Feb-2011
	Biological Opinion- USFWS	Feb-2011
	Biological Assessment for NMFS	Dec-2010

Permit	Description	Date of Concurrence
	Biological Opinion - NMFS	Mar-2011
	Adoption of Conference Opinion- NMFS	July-2013
	FWCA (Fish &Wildlife Coordination Act)	Jan-2011
CWA	Section 401 Water Quality Certification - WDOE	Certification requested by March
	Section 402 NPDES and SWPPP eNOI request to use Construction General Permit- EPA	Approval will be requested in March
NHPA	Section 106 Cultural Resources Clearance -Washington Dept of Archaeology and Historic Preservation	May 2014
CZMA	CZMA (Coastal Zone Mgt Act) Consistency Determination - WDOE	Concurrence requested by March

4. Statement of Consistency

The proposed North Jetty rehabilitation project and its potential effects have been evaluated in a NEPA Environmental Assessment, Biological Assessments submitted to the NMFS and USFWS, wetland delineation, and through coordination with the Department of Ecology and the Department of Archaeology and Historic Preservation, all of which are incorporated here by reference. The project has been designed to avoid and minimize environmental and cultural effects, and would seek to preserve recreational access to the greatest extent possible. Protecting the integrity of the North Jetty trunk and root would ensure jetty stability and avoid a breach that could affect the Columbia River Federal Navigation channel.

Based on the above consistency evaluation, the Corps concludes that the actions proposed for the Critical Repairs at the North Jetty are consistent with the enforceable policies of the approved coastal zone management programs of Washington, including the enforceable policies as specified in the local planning documents for Pacific County. The action is, therefore, consistent with the State of Washington's Coastal Zone Management Program to the maximum extent practicable.

5. Citations

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