

Final Environmental Assessment

Ediz Hook Beach Nourishment and Revetment Maintenance

**Clallam County, Washington
July 2002**



**US Army Corps
of Engineers®**
Seattle District

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Final Environmental Assessment

Responsible Agencies: The responsible agency for this maintenance work is the U.S. Army Corps of Engineers, Seattle District.

Abstract: This document evaluates the impacts of Corps maintenance of the Ediz Hook Beach Erosion Control Project. The purpose of the erosion control project is to protect the sand spit from erosion, thereby protecting Port Angeles Harbor and the small boat basin from direct wave action, and maintaining access to a U.S. Coast Guard station located at the tip of the spit.

During the summer of 2002, the Corps is planning to perform routine maintenance work, including beach nourishment and rock revetment repair. Approximately 50,000 tons of 1- to 12- inch rounded gravel and cobbles from an existing upland quarry will be placed onto two stockpile areas along Ediz Hook. In addition, readily accessible armor rocks that have fallen from the revetment onto the beach will be removed and re-keyed onto the revetment. An estimated 500 stones will be re-keyed along the 14,600-foot long structure.

Potential impacts of the proposed work are described in this document. Impacts will generally be highly localized in nature, short in duration, and minor scope. Impacts should not be significant either individually or cumulatively.

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1. INTRODUCTION

During the summer of 2002, the Corps is planning to perform routine maintenance work on the Ediz Hook Beach Erosion Control Project. The proposed work includes: (1) nourishing the spit's beach using gravels and cobbles obtained from an existing upland gravel pit, and (2) re-keying easily accessible revetment rocks that have fallen onto the beach. In accordance with the National Environmental Policy Act (NEPA), this Environmental Assessment (EA) evaluates the impacts of the proposed maintenance work.

1.1 Location

Ediz Hook is located on the northern shore of the Olympic Peninsula in Port Angeles, Clallam County, Washington (T30N, R06W, Sections 32, 33, and 34). The spit juts easterly approximately 3.5 miles into the Strait of Juan de Fuca, forming Port Angeles Harbor.

Ediz Hook provides storm protection to Port Angeles Harbor and its small boat basin, provides a land-link to the mainland for the U.S. Coast Guard (USCG) station located on the spit's eastern end, and provides day use recreation for local residents and tourists. The proposed beach nourishment areas and rock repair are located on the Strait side of the spit.

1.2 Project Purpose and Need

The purpose of the Ediz Hook Beach Erosion Control Project is to protect the sand spit from erosion, thereby maintaining protection of Port Angeles Harbor and the small boat basin from direct wave action, and preserving access to a U.S. Coast Guard station located at the tip of the spit. Erosion has resulted from a reduction in sand, gravel, and cobble materials carried to the spit via longshore currents as compared to historic conditions. This reduction has been attributed to shoreline armoring along the toe of feeder bluffs west of Ediz Hook, and two dams on the Elwha River.

1.3 Authority

Section 4 of the 1974 Water Resources Development Act (Public Law 93-251) authorized the Ediz Hook Beach Erosion Control Project. The authorization included construction and maintenance of rock protection, as well as initial and periodic beach nourishment. Planned maintenance of the project included a program of beach nourishment of approximately 100,000 cubic yards every five years.

A final Environmental Impact Statement (EIS) was filed for the project on 7 May 1973. Additionally, two previous EAs were completed in 1984 and 1997 to assess the impacts of proposed beach nourishment and revetment repair. These reports are incorporated by reference, and available for inspection at the Seattle District Office.

2. PROPOSED ACTION

Beach nourishment material will be placed along the face of the revetment at the two cross-hatched stockpile locations shown on the plan view in Figure 2. The nourishment material,

Figure 1. Location and Vicinity Map

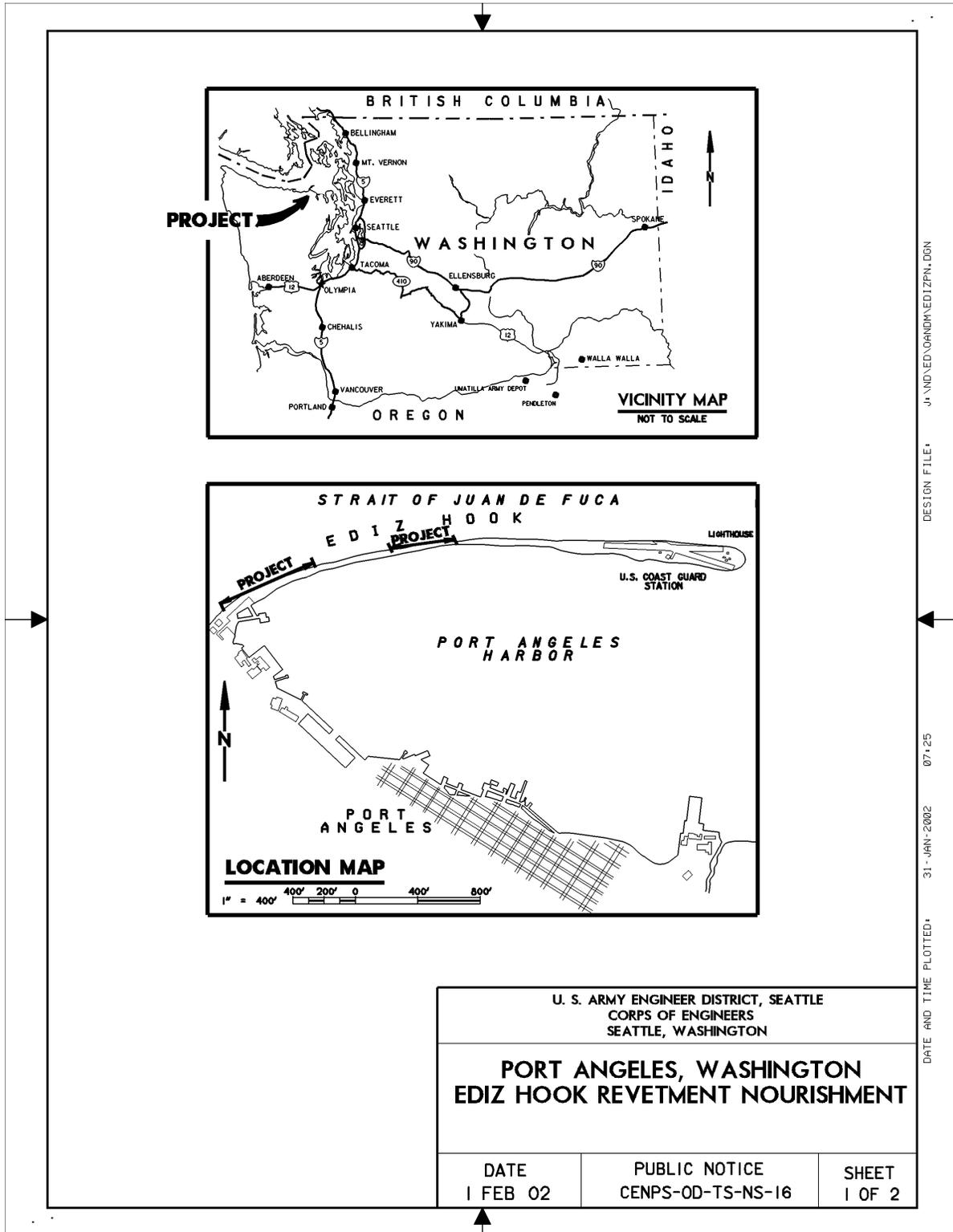
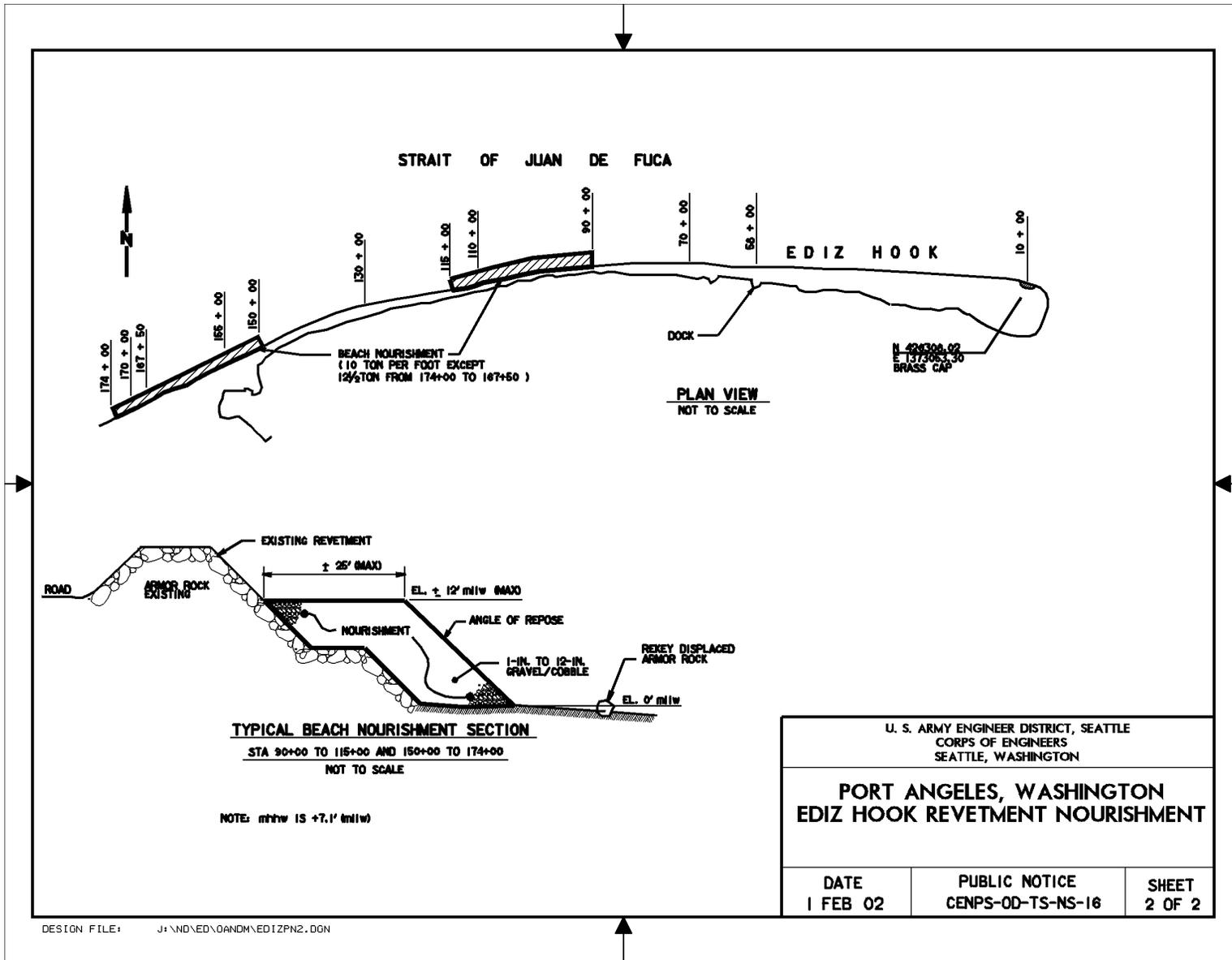


Figure 2. Plan and Section Views



consisting of about 50,000 tons (approximately 34,500 cubic yards) of 1- to 12- inch¹ rounded gravel and cobble from an existing upland gravel pit, will be brought to the stockpile areas by 20-cubic yard end-dump trucks. The trucks will dump their loads between the revetment and the mean lower low water depth contour, creating a series of berms extending approximately 50 feet seaward from the revetment face. Approximately 7 cubic yards of material will be placed per linear foot of beach. The waterward face of the stockpile will not be graded; instead, it will be allowed to reach a natural angle of repose, likely on the order of 1.5:1 or 2:1 (see the cross section in Figure 2). However, a small bulldozer may be used to spread material laterally along the top of stockpiles to allow for dump truck access.

Each of the two stockpiles will have a single access point, created by removal of revetment stones. These stones will be side cast landward of the revetment. These temporary breaches in the revetment will be restored before equipment demobilization. A small equipment staging area will be located on an existing concrete/gravel pad adjacent to the Daishowa mill.

A small end-effect erosion area at the waterward tip of the revetment and adjacent to the east end of the Coast Guard runway (near station 10+00) will also be nourished with 10- to 12- inch cobbles (see Figure 2). In this area, tidal and wave energy have created a large scour hole where the revetment abuts the unarmored beach.

In all, approximately 5 acres of cobble habitat between elevations 0' and +12' MLLW will be directly affected by the creation of the stockpiles. Once on the beach, the nourishment material is expected to disperse over the entire spit rapidly. During previous nourishment projects, the stockpiles began to erode immediately; material was washed away from the stockpiles during each tidal cycle such that the cross-section shown on Figure 2 was never achieved.

Along the main revetment, an estimated 500 armor rocks have been displaced from the revetment face and toe section. Those rocks that are readily accessible will be rekeyed into the existing armor section. This work will involve the use of a track-mounted backhoe working on the beach. Stones will be removed from approximately 13,300 feet of beach during low tides. No new rock will be placed on the revetment as part of the proposed action.

The proposed maintenance work will occur between July 16 and mid- to late-September, 2002. During the last maintenance project in 1997, it took contractors 27 working days (10 hours/day) to complete work of a similar scope.

3. ALTERNATIVES

The Corps evaluated two alternatives for maintenance of the Ediz Hook Erosion Control Project, the no action alternative and the proposed alternative. Under the no action alternative, the Corps would not maintain the erosion control project. The no-action alternative would result in continued erosion of the ocean side of the spit. Over time, the elevation of the fore beach would

¹ The contract specifications will require that the gravel and cobbles shall be washed, rounded to sub rounded, and well graded with at least 50% (by weight) greater than 3 inches, and not more than 5% passing the 1-inch mesh sieve, and not more than 10% passing the No. 200 mesh sieve (fine sand). The portion passing the No. 200 mesh sieve shall not contain clay materials.

be lowered, resulting in increases in wave height and greater damage to the revetment. If the neck of the Hook eroded to the extent that the spit breached, the Coast Guard station may need to be relocated. The proposed alternative was described in Section 2.

Under the no action alternative, direct impacts to benthic organisms in the stockpile footprints would be avoided. However, the conversion of the beach fronting the revetment from a high intertidal beach to a subtidal beach could adversely impact those same intertidal organisms. In addition, important shorebird and waterfowl habitats on the harbor side of the spit could be adversely impacted if the spit breached. Therefore, the no action alternative is not considered to be a less environmentally damaging alternative when compared to the proposed action. In addition, the no action alternative would not meet the authorized project objectives.

After consulting with the Washington Department of Fish and Wildlife (WDFW) regarding the proposed maintenance work, the Corps considered changing the gradation of the nourishment materials specified in the project operation and maintenance manual (Corps 1981). WDFW has encouraged the Corps to use a larger proportion of coarse sand and gravels less than one inch in diameter in the nourishment materials. This is because the proposed nourishment material grain size gradation is slightly coarser than that of the native material, particularly along the seaward tip of the spit where sediment sizes are somewhat smaller than those at the base. In addition, anecdotal information suggests that historical beaches along the Ediz Hook shoreline were composed of more sand than is present today (Shaffer, pers. comm.).

Upon consultation with the project coastal engineer, it was determined that such a change would not meet the project goals. Fine material tends to be unstable on the beach, moving rapidly offshore where it is distributed over broad areas, providing little or no functional use in beach erosion control or storm protection. When material consisting of a mixture of cobbles, gravel, coarse sand, fine sand, and silt is used as beach fill, natural sorting processes act upon it, redistributing the finer material offshore and developing a coarser grained residual on the beach face and in the surf zone (Corps 1976). The Corps' authority for this nourishment program is to protect the revetment structure from being undermined by storm waves. Larger sized material will be more resistant to erosion, thereby remaining in the littoral system longer and reducing replenishment frequency. Since the quantity of material placed will be measured by tonnage and is limited by available funding, any change in the contract specification which would result in a greater proportion of fines would result in a corresponding decrease in the larger material necessary to protect the structural integrity of the revetment.

4. EXISTING ENVIRONMENT

4.1 Geology

Ediz Hook is a 3.5-mile long spit with an average top elevation of +14' MLLW, and widths ranging from 90 feet to 750 feet. The spit was formed by the eastward movement of littoral sand, gravel, and cobbles from eroding sea cliffs immediately to the west, and from river borne sediments of the Elwha River. Shoreline armoring along feeder bluffs west of Ediz Hook and dams on the Elwha River have reduced the materials carried to the spit by longshore currents. In addition to contributing to erosion at Ediz Hook, this reduced sediment supply has caused the

eastern edge of the pre-dam Elwha delta to erode, and the barrier beach at Freshwater Bay to recede and steepen.

4.2 Water Quality

Port Angeles Harbor has been contaminated by decades of industrial activity, particularly pulp mills. Contaminants of concern include petroleum hydrocarbons, PCBs, lead, and dioxins/furans. Wood waste covers approximately 25 percent (500 acres) of the bottom of Port Angeles Harbor, primarily in nearshore log booming areas. The 75-acre Rayonier Mill was the largest pulp mill in the area. It operated for 67 years prior to closing in 1967. The pulp mills discharged wastewater directly into Port Angeles Harbor until the 1970s when primary and secondary treatment systems were established and discharges were routed through a deep-water outfall.

4.3 Vegetation

Upland vegetation along Ediz hook consists of terrestrial salt-tolerant grasses and shrubs. No trees are present on the spit, other than some shore pines (*Pinus contorta*) planted near the Coast Guard administrative buildings. Eelgrass (*Zostera marina*) is present in the sheltered waters of Port Angeles Harbor east of the spit, and kelp beds are present in Strait of Juan de Fuca waters west of the spit. The species composition of the kelp beds in the vicinity of Ediz Hook shift seasonally, and consist of an overstory of the annual brown kelp *Nereocystis luetkeana*, commonly known as bull kelp, and a varied understory of Laminariales and fleshy red algae (Shaffer 1998). *N. luetkeana* densities are highest in the summer and fall months, while fleshy red algae are seasonally present in the winter and spring months (Shaffer 2000). The perennial brown algae *Pterygophora californica* is the dominant understory component of *Nereocystis* beds in this area of Strait (Shaffer 2000).

4.4 Fish

Outmigrating juvenile salmonids utilize waters west and north of Ediz Hook. The peak migration period is between March 15 and June 15. Juvenile salmon inhabiting nearshore marine and estuarine waters feed on pelagic and epibenthic invertebrates. Forage fish such as Pacific herring, sand lance, and surf smelt are also present in the project area. A documented sand lance spawning beach is located on the inner side of Ediz Hook. Pacific halibut reside in Strait of Juan de Fuca waters near Ediz Hook. During summer months, adult halibut dwell in the shallower waters feeding on forage fish and crustaceans. In November, they migrate into deeper waters to spawn.

4.5 Wildlife

Ediz Hook and adjacent waters provide habitat for a variety of shorebirds and waterfowl. The protected waters of Port Angeles Harbor attract plovers, shimbrels, oyster catchers, geese, loons, ducks, turnstones and sanderlings. Auklets, puffin, and common murre are occasional visitors, and the project area is one of the Olympic Peninsula's best viewing areas for gull species.

4.6 Threatened and Endangered Species

Several species listed protected under the Endangered Species Act are potentially found in Ediz Hook (see Table 1.). In accordance with Section 7(a)(2) of the Endangered Species Act of 1973, as amended, federally funded, constructed, permitted, or licensed projects must take into consideration impacts to federally listed and proposed threatened or endangered species. The Corps prepared a Biological Evaluation (BE) to assess potential impacts of the proposed work on species protected under the Act. The BE was submitted to USFWS and NMFS on March 20, 2002, and is available on the Seattle District web site at: <<http://www.nws.usace.army.mil/ers/envirdocs.html>>.

Table 1. Protected Species Potentially Occurring in the Project Vicinity

| Species | Listing Status | Critical Habitat |
|--|----------------|------------------|
| Bald Eagle <i>Haliaeetus leucocephalus</i> | Threatened | — |
| Marbled Murrelet <i>Brachyramphus marmoratus</i> | Threatened | Designated |
| Coastal/Puget Sound Bull Trout <i>Salvelinus confluentus</i> | Threatened | — |
| Puget Sound Chinook Salmon <i>Oncorhynchus tshawytscha</i> | Threatened | Designated |
| Hood Canal Summer-Run Chum Salmon <i>Oncorhynchus keta</i> | Threatened | Designated |
| Steller Sea Lion <i>Eumetopias jubatus</i> | Threatened | Designated |
| Humpback Whale <i>Megaptera novaeangliae</i> | Endangered | — |
| Leatherback Sea Turtle <i>Dermochelys coriacea</i> | Endangered | Designated |
| Puget Sound/Strait of Georgia Coho Salmon <i>Oncorhynchus kisutch</i> | Candidate | — |

4.7 Cultural Resources

A professional cultural resources reconnaissance survey was conducted for the proposed project. The survey consisted of an examination of the archaeological and historic site records at the Washington State Office of Archaeology and Historic Preservation (OAHP) and a pedestrian survey of the project area. The records search indicated that no properties listed on the National Register of Historic Places (NRHP) are located within the proposed project area. The records search found that two archaeological sites have been previously recorded within or closely adjacent to the proposed project and that one of these sites was nominated to the NRHP as a district. The pedestrian survey did not find any evidence of prehistoric or historic-period cultural material within the proposed project area.

4.8 Land Use

Coast Guard Group Port Angeles

The U.S. Coast Guard air-sea rescue station that serves Washington's coastal and inland waters lies on the outer end of Ediz Hook. Established in 1935, Group Port Angeles is the nation's oldest U.S. Coast Guard station. There are approximately 200 men and women based at this station, including a helicopter rescue crew. The base has a 4,000-foot long runway used in the training of Coast Guard helicopter pilots and crew.

Daishowa America Co., Ltd.

Daishowa America Co., Ltd. owns and operates a paper mill at the base of Ediz Hook. More than 300 people are currently employed at the mill site. The mill manufactures telephone directory paper and wood chips. All of the raw materials for this operation have to be purchased, as Daishowa does not own any timberland.

4.9 Recreation

Two Port Angeles city parks and a portion of an 8 mile long waterfront trail are located on Ediz Hook. There are also a number of picnic areas and boat launches along the eastern side of the spit. Recreational fishing occurs in the harbor, from boats or the city pier. The large number of shorebirds, gulls, and waterfowl in the area make the spit a prime location for birdwatchers.

4.10 Air Quality and Noise

Clallam County meets EPA Ambient Air Quality standards, and those set by the State of Washington for suspended particulates and sulfur dioxide. Principal sources of sound along much of the project area are natural (i.e., wind and surf). Areas near the Coast Guard station and Daishowa mill would periodically have higher noise levels (e.g., helicopters).

4.11 Transportation

Port Angeles Harbor is the only deep-draft harbor on the northern shore of the Olympic Peninsula; it is easily accessible to the largest vessels due to its natural depths of up to 192 feet. Licensed pilots board almost all ships destined for Puget Sound ports in Port Angeles. Port Angeles Harbor also provides moorage for log ships, oil tankers, two commercial ferries, recreational fishers, crabbers and shrimpers.

4.12 Aesthetics

The rock revetment lies between the beach and the road to the end of the hook. Pleasing views of the Olympic Mountains, Strait of Juan de Fuca, the San Juan Islands, Canada, and the city of Port Angeles are visible from this road.

5. ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION

5.1 Geology

The revetment, along with the reduction in sediment available to naturally feed the beach, has resulted in a steepening of the beach profile along the western side of Ediz Hook. The proposed nourishment project would delay the conversion of the beach fronting the revetment from a high intertidal beach to a subtidal beach. Bathymetric surveys conducted prior to and after past nourishment activities showed a restored beach profile above -10' MLLW, with little change in the beach profile between -10' and -20' MLLW. Generally, no trace of the nourishment materials remains after two winter seasons. The deep water to the east of Ediz Hook has and will continue to intercept the littoral drift. Therefore, no change to beaches east of Ediz Hook will occur as a result of the project.

The nourishment material will be placed as high as possible in the intertidal zone, thereby mimicking natural sediment erosion and transport processes to the maximum extent possible. The beach nourishment material will be slightly coarser than that of the native material. The larger sized material will be more resistant to erosion, thereby remaining in the littoral system longer and reducing replenishment frequency.

5.2 Water Quality

Any increases in turbidity resulting from the proposed action would be minor considering the large grain sizes of the nourishment material. The nourishment materials will be washed at the quarry so that the percentage of fines will be quite low (less than 3% by weight). Any sediment plumes attributable to the project would be temporary, localized, and equivalent to those created by natural sediment transport processes. No chemical contamination will result from the beach nourishment project.

5.3 Vegetation

The proposed action is not expected to have a significant affect on the kelp bed offshore of the Ediz Hook revetment for two reasons. First, the nourishment material will be placed upon the beach adjacent to the kelp bed during mid-summer months. Algae are most vulnerable to sediment impacts during spring months, when increasing light levels trigger reproduction. Second, the nourishment materials will have a coarse grain size and therefore are not expected to remain suspended in the water column for very long. This reduces the chance for sub-threshold light levels that could affect macroalgae growth rates or reproductive cycles. No impacts to the terrestrial vegetation or eelgrass beds are anticipated.

5.4 Fish

The proposed nourishment project would delay the conversion of the beach fronting the revetment from a high intertidal beach to a subtidal beach. In addition to protecting the integrity of the revetment, maintenance of a higher, more gently graded beach profile would maintain the range of intertidal elevations necessary to support the epibenthic invertebrates which serve as prey for a wide variety of marine fishes. However, the proposed action will temporarily adversely affect epibenthic prey organisms, particularly gammarid amphipods, within and

adjacent to the 5 acre beach nourishment footprint. Amphipods are mobile epifauna that are adapted to heavy disturbance regimes, and are thus expected to recolonize the nourishment area quickly. The scale of mortality impacts which will result from the proposed project are not likely to affect amphipod population dynamics in the project area. Likewise, a shift in benthic assemblage composition due to the use of nourishment material slightly coarser than native material is not expected.

Forage fish such as herring, surf smelt, and sand lance, will not be directly impacted by the proposed action for two reasons. First, placement of the nourishment materials will occur above the waterline at low tides so as not to directly interfere with fish usage of beach habitat. Second, turbidity is not expected to increase substantially above ambient conditions due to the large grain size of the material. Indirect effects are also not anticipated since no documented spawning beaches occur in the project area. NOAA-sponsored studies have shown that the epibenthic fauna which will likely be impacted by material placement do not appear to constitute a significant fraction of these species' diet, as they tend to rely more on pelagic organisms (Simenstad et al. 1977).

The nourishment material will be placed along Ediz Hook soon after the end of the juvenile salmonid outmigration period. This schedule will allow for maximum recovery of the epibenthos prior to the 2003 salmonid outmigration period.

5.5 Wildlife

Noise associated with the project may have a temporary effect on bird populations in the vicinity of operating heavy machinery. The impacts of any sound disturbance would likely result in displacement of animals rather than injury. Disposal operations are not expected to result in a long-term reduction in the abundance and distribution of any prey items. No breeding or nesting areas will be directly impacted. Therefore, any impacts will be insignificant.

5.6 Threatened and Endangered Species

Construction will occur when Puget Sound chinook, Hood Canal chum, and bull trout are least likely to be present in the action area, and during a portion of the year when bald eagles are most tolerant of disturbance. The maintenance work will be scheduled to occur between July 16 and mid- to late-September. Effect determinations made in the project Biological Evaluation (BE) are listed in Table 2. The Corps has received letters from the National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service concurring with these determinations.

5.7 Cultural Resources

The project has provided continued protection from seaward side erosion to one archaeological site. The proposed work will add protection to a second archaeological site. The proposed nourishing of two areas along the spit's beach and re-keying boulder-sized revetment rocks that have fallen onto the beach should not disturb the underlying old spit material. Consequently, there does not appear to be any possibility of disturbing any previously unrecorded archaeological deposits during construction-related activities. One archaeological site inside the

Table 2. Determination Summary Table

| Species | Effect Determination | Critical Habitat Determination |
|------------------------|--------------------------------|---------------------------------------|
| Bald Eagle | Not likely to adversely affect | — |
| Marbled Murrelet | Not likely to adversely affect | No effect |
| Bull Trout | Not likely to adversely affect | — |
| Chinook | Not likely to adversely affect | Not likely to adversely affect |
| Chum | Not likely to adversely affect | Not likely to adversely affect |
| Steller Sea Lion | Not likely to adversely affect | No effect |
| Humpback Whale | No effect | — |
| Leatherback Sea Turtle | No effect | No effect |

project area may contain archaeological deposits that are eligible for listing on the National Register of Historic Places, so construction activities in this area will be monitored by a Corps archaeologist. The monitoring of construction work within the potentially eligible district will ensure that the proposed project will not disturb any intact archaeological deposits.

5.8 Land Use

The project will have no effects on land use. Construction vehicles may disrupt traffic for Coast Guard personnel, or those employed at the Daishowa paper mill. These impacts will be temporary and highly localized, and are therefore not expected to be significant.

5.9 Recreation

As stated above, construction vehicles may temporarily disrupt local and tourist traffic on and adjacent to Ediz Hook. Noise associated with the usage of heavy machinery may disturb recreational users of the parks on the spit. Use of the beach areas in and directly adjacent to the stockpile footprints will be precluded during construction for safety reasons. However, these impacts will be also be temporary and highly localized, so no significant impacts on recreation are anticipated.

5.10 Air Quality and Noise

The operation of heavy equipment associated with the project will temporarily increase air emissions and noise in the immediate project vicinity. These increases will be minor in scope, and are not expected to result in significant impacts.

5.11 Transportation

A primary purpose of the proposed project is to maintain Ediz Hook’s natural protection of Port Angeles Harbor. No impacts to commercial or recreational vessels is expected to result from the maintenance work.

5.12 Aesthetics

The stockpiles will not block views of the Strait of Juan de Fuca from the road. The stockpile areas are expected to be indistinguishable from adjacent areas shortly after project completion.

6. UNAVOIDABLE ADVERSE EFFECTS

Unavoidable adverse effects of the proposed project include: (1) noise disturbance to wildlife and recreational users in the vicinity of operating heavy machinery; (2) mortality of sessile and mobile epibenthic invertebrates within and directly adjacent to the stockpile footprints; and (3) disruption of local and tourist traffic in the project vicinity. Given the temporary, localized, and minor nature of these effects, the Corps has determined that the proposed maintenance work is not expected to result in significant adverse environmental impacts

7. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The proposed restoration program would not entail any significant irretrievable or irreversible commitments of resources. The work would require importing cobbles and gravels from an existing, licensed quarry. These materials would remain on the beach for a limited amount of time, and then be lost to deeper waters at the eastern end of the spit.

8. CUMULATIVE IMPACTS

As described in previous sections, erosion at Ediz Hook is thought to be symptomatic of a reduction in sand, gravel, and cobble materials carried to the spit via longshore currents. The reduction in sediment transport can be at least partially attributed to two factors: a municipal drinking water/industrial supply water line and associated shoreline armoring running along the toe of feeder bluffs west of Ediz Hook, and two dams on the Elwha River.

The proposed work is intended to counteract some of the adverse impacts associated with these past development projects. The placement of nourishment materials will mimic natural littoral processes, thereby reducing the symptoms of a chronic sediment shortage.

9. ENVIRONMENTAL COMPLIANCE

9.1 National Environmental Policy Act

This Environmental Assessment (EA) satisfies the documentation requirements of NEPA. Pursuant to U.S. Army Corps of Engineers Regulation 200-2-2, *Procedures for Implementing NEPA*, a 30-day public review period is not required for operation and maintenance activities involving the discharge of dredged or fill material requiring a public notice, as the notice indicates the availability of the EA and Finding of No Significant Impact (paragraph 11). Since a public notice was issued for the proposed maintenance work, this EA was not issued in draft form prior to being finalized. A FONSI has been prepared and will be signed by the Seattle District's Commanding Officer prior to initiation of the proposed work.

9.2 Endangered Species Act

In accordance with Section 7(a)(2) of the Endangered Species Act of 1973, as amended, federally funded, constructed, permitted, or licensed projects must take into consideration impacts to federally listed or proposed threatened or endangered species. A Biological Evaluation, which can be found in Appendix C, was submitted to USFWS and NMFS on March 20, 2002. The Corps received letters of concurrence with the determinations made in the Biological Evaluation on April 18, 2002 (NMFS) and May 20, 2002 (USFWS). These letters can be found in Appendix D.

9.3 Clean Water Act Compliance

9.3.1. Section 404

The Corps must demonstrate compliance with the substantive requirements of the Clean Water Act prior to discharging fill material into waters of the United States. The Corps has prepared a 404(b)(1) evaluation to document the Corps' findings regarding this project pursuant to Section 404 of the Act. This evaluation is provided in Appendix B of this document.

9.3.2. Section 401

The Corps received a Section 401 Water Quality Certification from the Washington Department of Ecology on June 14, 2002. A copy of that certification can be found in Appendix D. The Corps will abide by the conditions of the Water Quality Certification to ensure compliance with Washington water quality standards.

9.4 Coastal Zone Management Act

The Coastal Zone Management Act of 1972, as amended, requires Federal agencies to carry out their activities in a manner consistent, to the maximum extent practicable, with the enforceable policies of the approved state Coastal Zone Management Program.

Washington's Shoreline Management Permit and Enforcement Procedures are codified in section 173-27 of the Washington Administrative Code. Developments exempt from substantial development permit requirements include: "*Normal maintenance and repair of existing structures or developments, including damage by accident, fire or elements...Normal repair means to restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resources or environment...*" [WAC 173-27-040(b)]. This exemption has been adopted in Section 15.08.030 of the City of Port Angeles Municipal Code.

The purpose of the proposed project is to restore the Federal Ediz Hook erosion control project to a state comparable to its original condition before damage by the elements occurred. Work will not extend beyond the footprint of the original structure, and will not cause substantial adverse effects to shore resources or the environment. The proposed action is considered exempt from substantial development permit requirements, and therefore consistent to the maximum extent practicable with the State of Washington Shoreline Management Program.

On March 20, 2002, the Corps sent the Washington Department of Ecology (Ecology) a letter requesting their concurrence with this determination. The Corps has not received a response from Ecology. Pursuant to 15 CFR 930.41, *Federal Consistency with Approved Coastal Management Programs*, a Federal agency may presume State agency agreement with a consistency determination if a State agency fails to provide a response within 60 days from receipt of the Federal agency notification.

9.5 National Historic Preservation Act

The National Historic Preservation Act (16 USC 470) requires that the effects of proposed actions on sites, buildings, structures, or objects included or eligible for the National Register of Historic Places must be identified and evaluated.

To comply with the National Historic Preservation Act, a historic site records search was conducted at the Washington State OAHF and a pedestrian archaeological reconnaissance survey was conducted of the proposed project area. Construction monitoring by an archaeologist within a potentially eligible archaeological district is recommended. Monitoring of work within the potentially eligible district will ensure that the proposed project will have no adverse effect to the site or expose previously unrecorded cultural remains. Prior to the beginning of construction the State Historic Preservation Officer (SHPO) will be consulted concerning the proposed archaeological construction monitoring. A Memorandum of Agreement (MOA) will be developed between the CORPS and OAHF that covers the proposed monitoring and the subsequent reporting back to OAHF at the completion of the monitoring.

9.6 Executive Order 12898, Environmental Justice

Executive Order 12898 directs every federal agency to identify and address disproportionately high and adverse human health or environmental effects of agency programs and activities on minority and low-income populations.

The proposed maintenance work does not involve the siting of a facility that will discharge pollutants or contaminants, so no human health effects would occur. Beach nourishment and revetment maintenance would not negatively affect property values in the area, or socially stigmatize local residents or businesses in any way. No interference with Native American Nations' treaty rights would result from the proposed project.

Since no high and adverse effects are anticipated to result from the project, the Corps has determined that no disproportional impacts would occur.

10. CONCLUSION

Based on this assessment and on coordination with Federal and State agencies, the proposed project is not expected to result in significant adverse environmental impacts. The proposed project is not considered a major Federal action having a significant impact on the human environment. Therefore, the preparation of an environmental impact statement supplement is not required.

11. REFERENCES

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