

Final Environmental Assessment

South Jetty Breach Fill Maintenance

**Westport, Grays Harbor County, Washington
February 2004**

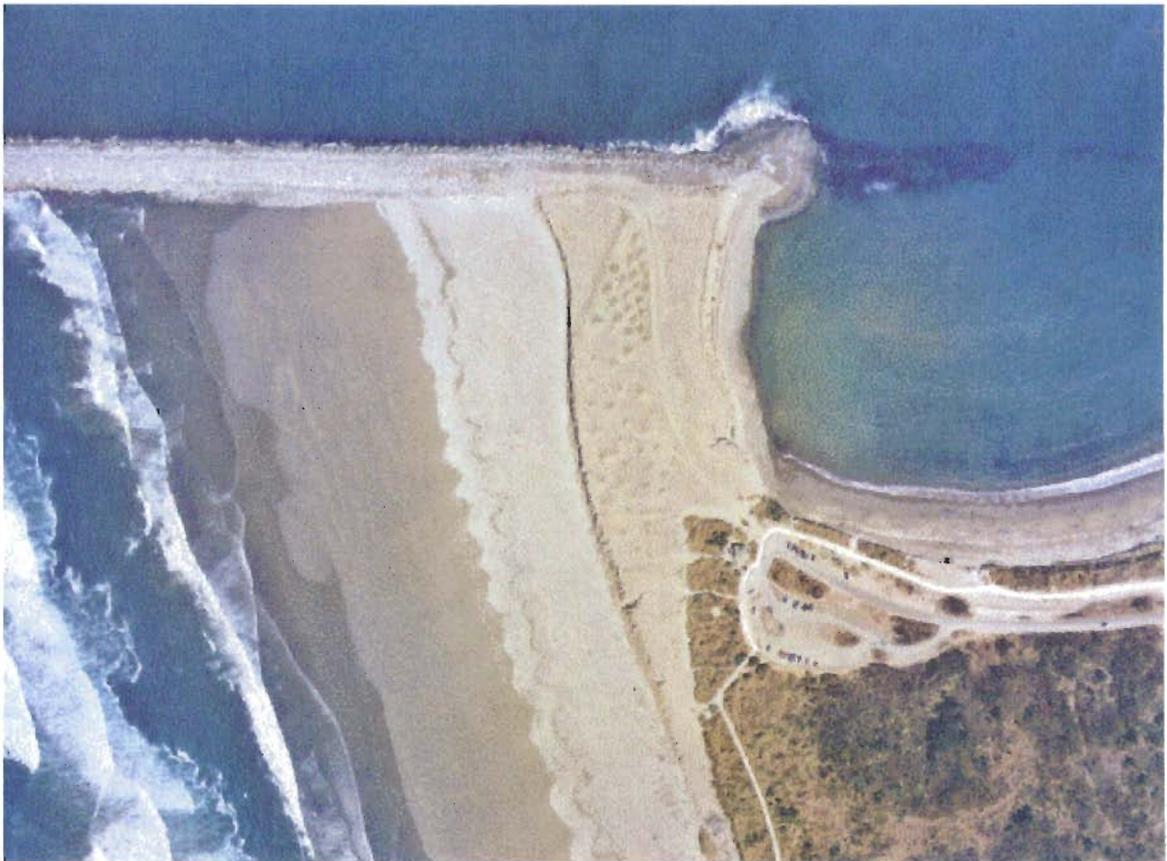


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**US Army Corps
of Engineers®**
Seattle District

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

Abstract: This document evaluates the impacts of Corps placement of approximately 25,000 cubic yards of sand on the south jetty breach fill constructed in 1994 and re-nourished in 2002, and along a rapidly eroding sandy shoreline in the southwest corner of Half Moon Bay. This placement of sand would occur prior to February 15, 2004 or after July 14, 2004. Additional placements will likely be required over the next three to five years. The proposed placements are an interim measure intended to extend the life of the breach fill, thereby reducing risk to the south jetty until a long-term management solution can be formulated and implemented.

Seattle District has determined that the proposed action is not a major Federal action significantly affecting the quality of the human or natural environment, and therefore does not require preparation of an environmental impact statement.

Comments on the proposed action and the draft environmental assessment were accepted between December 24, 2003 and January 23, 2004.

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1. INTRODUCTION

Pursuant to the National Environmental Policy Act (NEPA), this environmental assessment (EA) evaluates the impacts of the proposed placement of sand within the footprint of the Grays Harbor south jetty breach fill constructed in 1994 and re-nourished in 2002. The purpose of this project is to reduce the risk of another breach until a long-term management strategy for the south jetty and Grays Harbor entrance can be formulated and implemented. The first placement of sand is expected to occur prior to February 15, 2004.

1.1 Background

The shoreline to the west and south of Point Chehalis has undergone major changes since the north and south jetties were constructed between 1898 and 1917 by the Corps of Engineers, Seattle District (Corps) to provide a navigation channel through the Grays Harbor entrance. The jetty is a barrier to northerly long shore drift, and by 1904 South Beach had advanced 3,000-feet to the west. During much of the 20th century, the shoreline advanced or retreated depending on the condition of the jetty structure. However, since the 1960's a long-term trend of erosion along the South Beach shoreline has been apparent. Since 1967, South Beach has seen recession rates ranging from 2 to 62 feet per year.

Erosion of the shoreline and overtopping by storm waves at the landward end of the south jetty resulted in the formation of a breach between the jetty and the adjacent South Beach shoreline during a winter storm in December 1993. The breach widened rapidly, exposing the landward end of the jetty and eroding portions of Westhaven State Park. Within six weeks, the breach was approximately 500 feet wide. Local officials, alarmed by the formation of the breach, expressed concern about further erosion at the breach site and impacts to City of Westport public facilities, including a wastewater treatment plant, municipal well, and sewer outfall. The breach was also determined to be a threat to the stability of the south jetty, and there was concern that the breach could cause adverse impacts to the maintenance of the navigation channel (Corps 1995).

In March 1994, the Department of the Army directed Seattle District to fill the breach between the south jetty and the adjacent South Beach shoreline. In late fall 1994, at a cost of \$4 million, the breach was filled with approximately 600,000 cubic yards of material dredged from the Grays Harbor and Chehalis River navigation channel. The breach fill was an interim measure to help protect the south jetty, the navigation channel and local beaches until an acceptable long-term solution could be implemented. At the time of placement, the breach fill was expected to have a life of five to ten years.

In 1997, the Corps released a study which evaluated various alternatives and selected a long-term plan to protect against another breach. The *Long Term Maintenance of the South jetty at Grays Harbor, Washington* report confirmed that continued erosion of the shoreline adjacent to the south jetty, if left unchecked, would result in the formation of a permanent breach between the sand the adjacent South Beach. The selected alternative consisted of an extension of the south jetty to meet the existing Point Chehalis revetment, combined with periodic beach nourishment with sand in Half Moon Bay. This plan was to be constructed in two phases: (1) a buried 1,900-foot southward extension of the existing Point Chehalis revetment; and (2) a 2,500-foot eastward extension of the south jetty across Half Moon Bay. The Point Chehalis revetment extension was constructed between November 1998 and March 1999. In accordance with the

inter-agency mitigation agreement for the extension project, the entire revetment was buried under 2 to 3 feet of sand and a beach nourishment stockpile was created so that sand eroded by winter storms is replaced and the toe of the structure remains buried. Material dredged during navigation channel maintenance is periodically used to replenish the stockpile of sacrificial material.

By 1999, State of Washington resource agencies, City of Westport, and other public interests had serious concerns related to environmental and recreational impacts associated with the proposed south jetty extension. In addition, surveys indicated that the breach fill material was eroding more slowly than originally anticipated. Therefore, the jetty extension project was deferred and a modified plan to extend the life of the breach fill was developed. The new plan consisted of three elements: (1) construction of a wave diffraction mound intended to maximize wave refraction-diffraction, thereby reducing wave-induced erosion of the shore in the western portion of Half Moon Bay adjacent to the jetty; (2) a gravel/cobble transition beach designed to slow erosion of the beach directly adjacent to the south side of the jetty, and to eliminate the dangerous 8-foot high scarp that had formed in that location; and (3) major repair work on the inner (landward) end of the jetty structure so that it is better able to withstand the undermining effects of any future breaches and to help reduce wave-caused erosion of the unprotected portion of Half Moon Bay. As mitigation for this work, the Corps removed armor stone from a 250-foot long remnant of the south jetty east of the diffraction mound. The crest elevation was lowered from +8 feet MLLW to +2 feet MLLW.

Between December 1999 and February 2000, the remnant jetty crest was lowered, the wave diffraction mound was constructed and 11,600 cubic yards of 12-inch minus rounded cobbles and gravels were placed on the adjacent beach. The south jetty rehabilitation work occurred in late 2001 and early 2002. Severe storms during November and December of 2001 caused overtopping of the south jetty breach fill. The temporary construction haul road used to transport armor rock as part of the south jetty repair project was breached by severe end cutting erosion and storm wave overtopping and three large rainwater runoff gullies, each about 5 feet deep, cut through the narrow strip of land remaining. In January 2002, it was necessary to make urgent repairs to relocate the haul road. At this time, an additional 16,100 cubic yards of 12-inch minus cobbles and gravels were placed along the western shore of Half Moon Bay to slow erosion of the south jetty breach fill and maintain access to the jetty via this haul road.

Between 1996 and 2001, an estimated 70,000 cubic yards of fill material eroded from the upper elevations of the breach fill site. In 2002, the Corps placed an additional 135,000 cubic yards of sandy dredged material at the breach site and planted about 60,000 sprigs of native dune grass (*Elymus mollis*) at the site to reduce wind erosion of the fill. The foredune and a portion of the haul road running adjacent to the Park access road that was used for this effort has since been eroded away; the Park access road is now the best available route for access to the breach fill or jetty for maintenance activities.

The finding of no significant impact (FONSI) and *Half Moon Bay Transition Gravel and Cobble Placement Final Environmental Assessment* issued on November 21, 2003 was rescinded on December 15, 2003.

1.2 Project Purpose and Need

End-cutting at the termination of the gravel and cobble transition beach, erosion on the ocean side of the breach fill, loss of sand through aeolian (wind) transport, and the formation of rainwater runoff gullies have been identified as the major threats which could result in a failure of the breach fill. The Corps has undertaken a number of measures to extend the life of the existing breach fill, including placement of 135,000 cy of sand in spring 2002, placement of additional transition beach material in winter 2002, and planting of dune grass to reduce wind loss. These efforts may be compromised if erosion is allowed to initiate a “weak point” as occurred in late 2001. At that time a combination of factors—including a low fill elevation on the South Beach side, reduced fill width due to storm runoff drainage channels, and severe end-cutting at the transition beach termination—would likely have caused another breach if additional fill had not been placed. If the southwest shoreline of Half Moon Bay continues to retreat at the present rate, the southern portion of the breach fill will be narrowed to less than 250 feet within three years.

The purpose of the proposed work is to extend the life of the breach fill by nourishing the area adjacent to the south jetty and partially nourishing the area adjacent to the previous gravel placement, which has severely eroded. These actions will protect the south jetty and navigation channel from damage, which could be caused in the event of another breach similar to what happened in 2002.

Preventative maintenance of the breach fill is a much more cost-effective strategy than after-the-fact emergency repairs, and requires a relatively small quantity of material to restore the height of the fill area. Action now could prevent more costly repairs in the future.

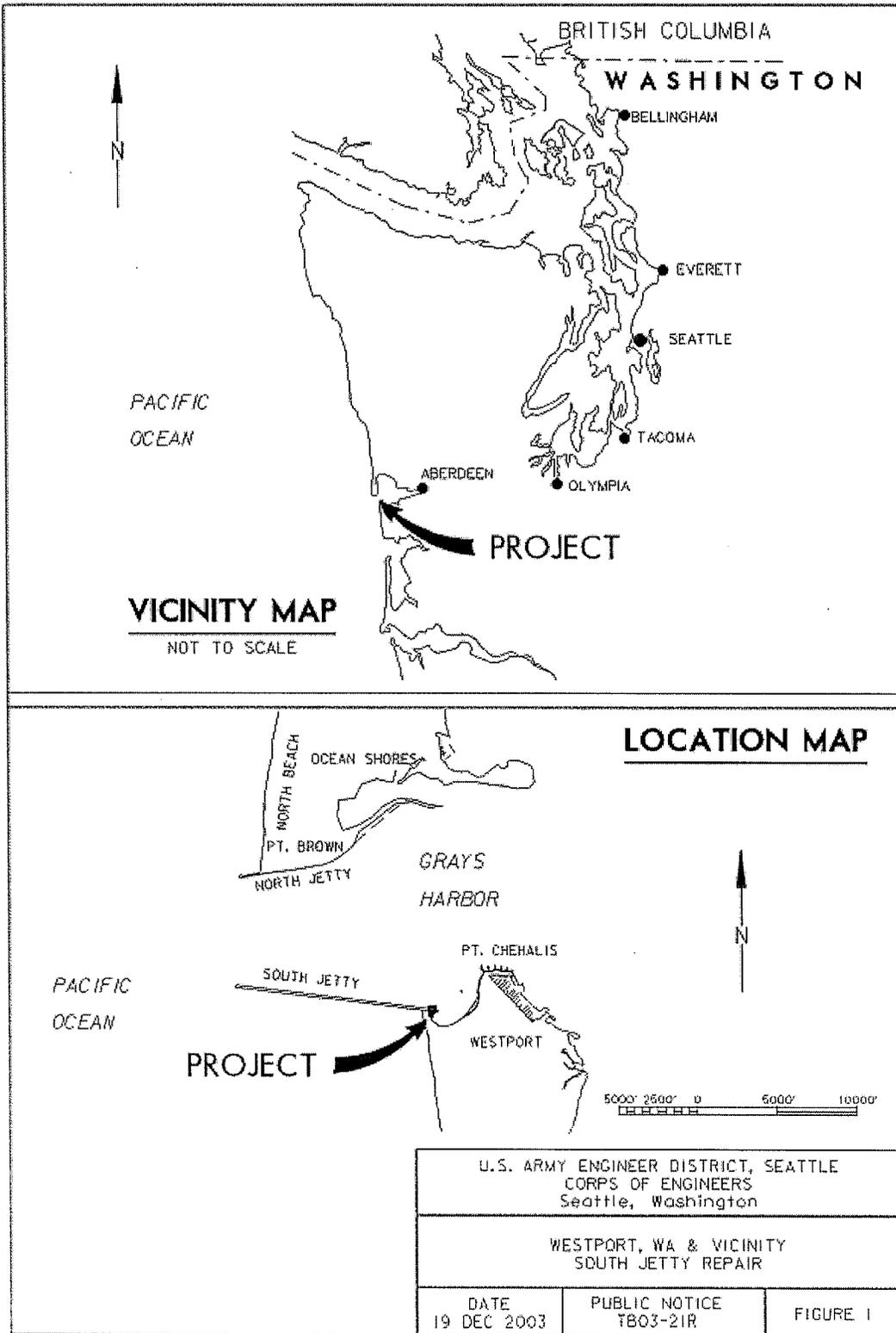
1.3 Location

The project area is located in Westhaven State Park, Westport, Grays Harbor County, Washington (T16N, R12W, Section 1). The location of the proposed work is shown on the vicinity and location map in Figure 1.

1.4 Authority

The Grays Harbor and Chehalis River Project, including maintenance of the Federal navigation channel and the south jetty, is authorized by the River and Harbor Act of August 30, 1935 (House Document 53, 73rd Congress, 2nd Session) and the Water Resources Development Act of November 17, 1986 (Public Law 99-662). The proposed work is within the Grays Harbor and Chehalis River Project operations and maintenance (O&M) authority because its intent is to protect navigation features, including the south jetty and navigation channel. This is a proper use of O&M funds because of the reasonable relationship between the project and its purpose for protecting a Congressionally authorized navigation project, including features (i.e., south jetty and Federal Channel), from a possible breach landward of the south jetty.

Figure 1. Location and Vicinity Map



The Corps has obtained a Right of Entry Permit (Number DACW67-9-01-39) from the Washington State Parks and Recreation Commission for access to Westhaven State Park for the deposit of materials associated with rehabilitation of the south jetty. The original Right of Entry has been extended twice and is currently valid through March 1, 2006.

1.5 Previous documents

Additional information on the history of Grays Harbor and Chehalis River Navigation Project engineering structures, erosion in the project area, and the natural resources of Grays Harbor can be found in previous Corps documents. The following documents are incorporated here by reference, and are available for inspection at the Seattle District office. Complete bibliographic information for these documents can be found in the reference section of this assessment.

- South jetty Sediment Processes Study, Grays Harbor Washington: Evaluation of Engineering Structures and Maintenance Measures, ERDC/CHL TR-03-4 (April 2003)
- Half Moon Bay Transition Gravel and Cobble Placement Final Environmental Assessment (November 2003), rescinded December 15, 2003
- Design Analysis (Revised), Grays Harbor, Washington FY 1999 South jetty Repair (September 1999)
- Long Term Maintenance of the South jetty at Grays Harbor, Washington, Evaluation Report (June 1997)
- Point Chehalis Revetment Extension Project, Westport, Washington, Interagency Mitigation Agreement (October 1998)
- Review of Long-Term Maintenance Plans for the South jetty, Grays Harbor, Washington; Report by a Special Subcommittee of the Committee on Tidal Hydraulics and Coastal Engineering Research Board (1995)
- South jetty Breach Fill Final Environmental Assessment (April 2002)
- South jetty Repair Final Environmental Assessment (July 1999)
- Final Environmental Assessment: Fiscal Years 2001-2006 Maintenance Dredging and Disposal, Grays Harbor and Chehalis River Navigation Project, Grays Harbor County, Washington (April 2001)
- Programmatic Biological Evaluation: Fiscal Years 2001-2006 Maintenance Dredging and Disposal, Grays Harbor and Chehalis River Navigation Project, Grays Harbor County, Washington (December 2000)
- North Jetty Performance and Entrance Navigation Channel Maintenance, Grays Harbor, Washington, ERDC/CHL TR-03-12 (September 2003)

2. ALTERNATIVES CONSIDERED

In March 2003, the Corps met with several government agency and public interest group representatives to discuss erosion issues affecting the South jetty breach fill from both Half Moon Bay and South Beach. Many potential solutions were raised, but most would require engineering feasibility analyses and extensive coordination with a variety of affected parties so they are not immediately able to be implemented. Since there is a need for short-term action to minimize damage to the breach fill prior to implementation of any long-term strategy for the south jetty and Grays Harbor entrance, the alternatives presented below address possible interim actions only. Further study and coordination is necessary to determine the most appropriate long-term strategy. Long-term strategies will be evaluated in future feasibility study and NEPA documents. We are committed to leading an improved participatory, collaborative process with federal and state agencies and other stakeholders to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement. This process could be initiated as early as next summer, with collaborative training for the agencies and stakeholders prior to collaborative meetings. It is expected that a long-term strategy could not be implemented before 2007, at the earliest.

Under all of these alternatives presented below, the Corps would continue to place sandy material dredged from the Grays Harbor navigation channel at nearshore and direct beach disposal sites in Half Moon Bay and off of South Beach to replace some of the material lost through erosion. Plans for management of dredged material will also be evaluated and coordinated as part of the long-term planning effort.

2.1 No Action

Under the no action alternative, the Corps would not take any actions to prevent further loss of breach fill material and recession of the shoreline along the southwest corner of Half Moon Bay. As a result, significant damage to the breach fill could occur prior to the implementation of a long-term strategy for the south jetty and Grays Harbor entrance. The possibility of a breach similar to the 1993 event occurring this year is unlikely. However, continued erosion of the shoreline adjacent to the south jetty, if left unchecked, would eventually result in the formation of a breach between the south jetty and adjacent South Beach.

The 1994 breach fill material eroded more slowly than originally anticipated, but in November of 2002, erosion of the fill on both the ocean and Half Moon Bay shorelines resulted in overtopping of the fill, and concerns that the breach could reform in a relatively short time frame. Emergency measures were undertaken to place additional dredged material on the fill and additional gravel on the Half Moon Bay transition beach. These measures prevented a breach from reforming during the winter of 2002-03, but shoreline retreat along the entire southern portion of Half Moon Bay continues at an alarming rate of over 60-feet-per-year. The erosion scarp has advanced into the fore dunes of + 26 ft MLLW top elevation, located immediately east of the proposed sand placement site. Much of the Half Moon Bay shoreline has been eroded back to the location where it had been prior to the previous breach. At this point the fill could become vulnerable to overtopping in this area. In addition, although the South Beach shoreline has been retreating at a relatively slow rate of 5 feet per year (2000 – 2003), a return to historical erosion rates of 30 to 50-feet-per-year should be considered to be a very real possibility. A South Beach

recession rate of 50-feet-per year, combined with the current rate of erosion in Half Moon Bay, could significantly increase the potential for a breach to reform within the next 5 years. Proactively addressing the areas of localized erosion of the fill, including the southwestern portion of Half Moon Bay, is a reasonable and prudent method to extend the life of the breach fill.

A rapid rate of erosion along either the ocean side or the Half Moon Bay side of the breach fill increases the likelihood of another breach. Should a breach occur, the consequences on the Federal project could be serious. Studies to evaluate the short and long-term effects of a breach and to re-evaluate and implement the long-term maintenance strategy for the south jetty and entrance channel probably will take 3 to 5 years to complete. If action is not taken to slow ongoing erosion in Half Moon Bay, the effects of this erosion may constrain the array of suitable design options available for long-term maintenance of the south jetty. The more damage that occurs, the risk of another breach forming increases and the more costly it becomes to re-nourish the breach fill. The Corps and the Port of Grays Harbor are not willing to accept this risk because of the threat to federal navigation project features, so the no action alternative was eliminated from further consideration.

2.2 Placement of Additional Transition Cobble / Gravel Material

This alternative involves the placement of up to 40,000 tons (27,000 cubic yards) of 12-inch minus gravel and cobble material along approximately 1,000 linear feet of beach in the southwest corner of Half Moon Bay. Barring an increase in the frequency of severe winter storms, this interim measure would be expected to provide adequate erosion protection for the next 5 years without a need for placement of additional material.

The material placed under this alternative would all be less than 12 inches in diameter, with between 50-85% by weight less than 3 inches. This is the same material gradation used for the two previous placement efforts. Past experience at the site has shown that this material size has significantly reduced the erosion rate of the shoreline in the area where it was placed. However, previous premature termination of the transition beach led to severe end-cutting of the down-drift sand. This is because the wave approach angle at the terminus of the existing transition beach creates strong longshore currents that readily erode and transport sand along the shoreline to the east. At the location of a previously proposed transition beach termination, the wave approach angle is nearly perpendicular to the shoreline so the longshore transport potential is reduced and much less end-cutting would be expected.

Because of a lack of sufficient data on the two previous placements of gravel and cobble in Half Moon Bay or from similar projects elsewhere, there is uncertainty regarding the significance of biological effects associated with placement of cobbles on a sandy beach. As a result, the 12-inch minus cobble/gravel alternative has been eliminated from this project. Its potential for future consideration as a viable alternative will depend on detailed evaluation of the data obtained from quantitative studies that will assess ecological impacts of previous placements.

2.3 Placement of Sand

The placement of sand has been selected as the preferred alternative. This alternative involves the placement of approximately 25,000 cubic yards of sand in three areas during February 2004.

The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999.¹ The excavation site has an average existing top elevation of approximately +25 feet MLLW. Approximately 5,000 cubic yards will be placed in two vulnerable areas on the breach fill; both of these areas are located well above the mean higher high water depth contour.²

The remaining 20,000 cubic yards will be placed in the southwest corner of Half Moon Bay. More detailed information on this placement can be found in Section 3 below, and in Figures 2 and 3. This area was selected as needing nourishment material because a comparison plot of Half Moon Bay bathymetry from 1999-2003 shows that there is scour erosion immediately south of the lowered South jetty remnant and diffraction mound. The recent deepening of this area is on the order of 20 feet in the last 4 years. This deepening is allowing higher wave energy in Half Moon Bay, causing severe localized erosion in the southeast corner of the breach fill.

Based upon the results of post-placement monitoring, and dependant on funding availability, the Corps may place additional sand as needed in future (estimated at approximately 15,000 cubic yards annually) until the time when a long-term strategy for the south jetty and Grays Harbor entrance has been implemented. Any future in-water placements would occur during established in-water work windows (July 15-February 14) and would require Public Notice(s) issued pursuant to the Clean Water Act.

3. DESCRIPTION OF THE PROPOSED ACTION

The proposed action consists of the placement of approximately 25,000 cubic yards of sand on the south jetty breach fill and in the southwest corner of Half Moon Bay (see Figure 2) in February 2004. Construction duration will be approximately 2 to 3 weeks. If in-water work cannot be completed prior to the closure of the “fish window,” the beach fill portion of the project would not occur until after July 14, 2004.

The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above and fronting the Point Chehalis revetment extension constructed in 1999 (see Figure 3). Material will be excavated in a uniform layer over the western portion of the stockpile, where the coarsest sand is present. It is expected that the excavation work would lower the elevation in this portion of the stockpile by approximately 3 feet. The material will be placed into trucks and moved to the breach fill site via the Westhaven State Park access road. The borrow site is located approximately 2000 feet

¹ Although the stockpile is located waterward of the revetment, all excavation work will occur landward and well above the active littoral zone. The elevation of the revetment toe is approximately +7' MLLW and the proposed excavation work removes only a small portion of the material that lies between the revetment toe and the existing beach. As shown in Section A-A on Figure 3, approximately 17 feet of stockpiled sand will remain over the toe of the revetment and approximately 200 feet of sand will remain waterward of the revetment.

² Since these two areas, as well as the stockpile borrow area, are located well above the mean higher high water (MHHW) depth contour, work at these sites is not dependent on the fish closure period (February 15 – July 14). Since placement at the shoreline site involves work below MHHW, work will be completed before February 15 or after July 14.

east of the placement site. Flagmen would be present at both the stockpile site and main parking area to ensure park visitors are safely routed around construction activities. No crushed rock would be used to facilitate truck access to the borrow or fill sites.

Approximately 2,500 cubic yards of sand will be placed on the large rainwater runoff gullies that have formed along the southeast corner of the breach fill. Approximately 2,500 cubic yards of sand will be placed directly adjacent to the jetty in the northwest corner (ocean side) of the breach fill; this portion of the breach fill is approximately 3-5 feet lower in elevation than the rest of the breach fill.

Approximately 20,000 cubic yards of sand will be placed in the southwest corner of Half Moon Bay. Rather than individual loads (~10 cubic yards in size) being end-dumped directly onto the beach, larger quantities of sand would be temporarily stockpiled on upland areas adjacent to the shoreline. The sand would then be pushed off the erosion scarp during low tides when water is not present on the placement area. By placing material uniformly over a larger area all at once, erosion of newly placed material may be minimized (i.e., no creation of small headlands to receive focused wave energy) and none of the material would be placed when water was over the project footprint. Approximately half of the 20,000 cubic yards will be left on top of the boardwalk and the parking area northeast of the park access road to form a sacrificial dune approximately 10 feet high. This is comparable to the height of the foredune lost to erosion this past winter and to the top elevation of +25 ft observed on a foredune immediately east of the sand placement site based on an aerial photo based topographic survey information dated September 2003. This material will likely be moved into the erosion scarp, following storms, by mechanical means.

The Corps takes annual aerial photographs which are used to produce detailed topographic maps of the breach fill and shorelines of South Beach and Half Moon Bay. The aerial survey data, combined with annual pre-and post-dredging bathymetric surveys, are used to monitor the status of the breach fill and Half Moon Bay, to create dredge disposal plans for nearshore placement in Half Moon Bay, and to produce excavation and placement plans for repairing the breach fill. In addition, every March and September surveys are conducted along ten Half Moon Bay transects and 3 South Beach transects. The Corps will continue to monitor the breach fill and Half Moon Bay and if notable erosion of the project occurs, we will replace sandy material as needed.

4. EXISTING ENVIRONMENT

Extensive information on the existing environment of Grays Harbor has been provided in previous technical studies, as well as environmental and biological evaluations (see Section 1.5 for a list of available documents). Only summary information specific to the Westhaven/Half Moon Bay area and this project is provided in this brief assessment.

4.1 Geology

The shoreline at Point Chehalis just east of the south jetty receded during construction and after completion of the south jetty. However, the shoreline recovered during the years that the top elevation of the jetty was relatively low and the structure was in a deteriorated condition. After repairs to the south jetty were completed in 1939, erosion again occurred, initiating the formation of Half Moon Bay in 1946 and construction of the Point Chehalis revetment and groins in the 1950s. The revetment stabilized Point Chehalis, but the shoreline between the revetment and the south jetty has continued to recede. Between 1957 and 1993, the shoreline of Half Moon Bay receded at an average annual rate between 5 and 10 feet/year, destroying several U.S. Coast Guard structures and endangering the City of Westport's sewer outfall, wastewater treatment plant, and well fields, as well as the access road to Westhaven State Park.

The formation of crenulate-shaped bays like Half Moon Bay at artificial headlands on the open coast is a commonly observed phenomenon. Several researchers have worked to establish relationships between this shoreline shape and wave direction. By evaluating physical model data and field data from crenulate bays known to be at equilibrium, one group of researchers has developed parabolic-equation curves which can be used to predict equilibrium shoreline position. Coastal engineers at the Corps' Coastal and Hydraulics Laboratory have used this technique to estimate the equilibrium shoreline shape for Half Moon Bay. Results are presented in the *South jetty Sediment Processes Study* (April 2003). The computed equilibrium shoreline is near the existing bay shoreline. However, this does not mean that additional erosion will not occur. Based on historical observations, the accreted land at the base of the south jetty and Half Moon Bay shoreline, is dynamic and subject to considerable erosive forces. It is therefore expected that the shoreline will respond to changes in water level and incident wave conditions. Storms characterized by prolonged elevated water levels will result in increased erosion. The purpose of the previously placed gravel was to decrease risk of shoreline recession during these periods of high water level.

Field observations and shoreline positions interpreted from aerial photographs reveal that the transition gravel placed in 2000 and 2001 was successful in reducing erosion along the shoreline in the locations where it was placed. However, aerial mapping shows that, during the winter of 2001-2002, the sandy shoreline at the terminus of the gravel receded as much as 50-feet landward. And the height of the unstable erosion scarp also increased. An evaluation of beach transect profiles can be found in the *South jetty Sediment Processes Study* (April 2003).

Shoreline conditions along the western Half Moon Bay shoreline are disturbed, due to extensive erosion as well as several construction projects over the past 10 years. The foredune has eroded away, leaving a steep cliff or scarp indicative of the high wave energy. A tall, steep erosion scarp is also present on the shoreline along the ocean side of the breach fill. A portion of the haul road running adjacent to the Park access road that was used by the Corps during past

construction efforts has eroded away; the Park access road is now the best available route for access to the breach fill or jetty for maintenance activities. In areas that were not planted by the Corps, vegetation is primarily non-native invasive species (see Section 4.2 below).

In October 2003, after storm conditions resulted in a sudden retreat of the shoreline in the project area, the City of Westport placed concrete ecology blocks at the toe of the erosion scarp and sand on top of the scarp as an emergency measure to protect a trail, parking area, and the park access road. The City obtained a Hydraulic Project Approval (HPA) from the Washington Department of Fish and Wildlife (WDFW). The HPA required the City to remove the ecology blocks from the shoreline prior to February 15, when outmigrating juvenile salmon begin to appear in the project area. The City removed the ecology blocks in late January, 2004.

The eastern shoreline of Half Moon Bay has also been subject to disturbance from erosion and construction activity. In 2000, the Corps constructed a 1900-foot long extension of the Point Chehalis revetment. A large stockpile of sandy dredged material is present between the revetment and the beach. A portion of the stockpile is used for public parking that facilitates handicap access, viewing the harbor entrance and recreational activities. Its surface is largely unvegetated.

The beach along Half Moon Bay is generally sandy, but in areas where transition fill material has been placed in the past the beach is composed of cobbles. Wave energy has sorted the transition material so that larger cobbles are generally present in upper intertidal areas and smaller gravels are found along the lower portion of the beach profile. In addition, adjacent sandy areas do have patches of gravels present due to down drift transport of the transition material from previous placement activities by waves and currents. Scattered chunks of asphalt and angular rock debris are also present as a result of the previous erosion loss of the Washington States Parks facilities in 1987 prior to the 1993 breach and subsequent end cutting erosion breach of the south jetty maintenance haul road in 2001.

4.2 Vegetation

Two of the three placement sites and the excavation site are largely unvegetated. The remaining placement site (directly south of the jetty), as well as much of the breach fill, was planted with the native dune wild rye (*Elymus mollis*) in 2002. After 2002, this planting was considered a success, with over 80% plant survival. Adjacent dune areas are dominated by the invasive non-native European beach grass (*Ammophila arenaria*). Other non-native invasive plants such as Scot's broom (*Cytisus scoparius*) and Himalayan blackberry (*Rubus discolor*) are present to the east along the back side of what remains of the Half Moon Bay foredune and a haul road used during previous construction projects.

An extensive large deflation plain wetland is present along the entire south side of the Park access road. Vegetation in the wetland is dominated by shore pine (*Pinus contorta*), Hooker's willow (*Salix hookerana*), California wax myrtle (*Myrica californica*), slough sedge (*Carex obnupta*), common rush (*Juncus effusus*), and silverweed (*Potentilla anserina*). Typical of this type of dunal feature, small upland hummock areas are scattered through the wetland complex.

4.3 Fish and Wildlife

Half Moon Bay provides habitat for a variety of fish species, including smelt, Pacific herring, starry flounder, shiner perch, sand lance, northern anchovy, Pacific sanddab, lingcod, redbelt surfperch, sand sole, threespine stickleback, and Pacific staghorn sculpin (R2 Resource Consultants, 1999). Salmonids, including chinook, coho, and chum salmon are also known to utilize Half Moon Bay and Grays Harbor.

R2 Resource Consultants (1999) conducted weekly beach seine surveys at two sites in Half Moon Bay between April 9 and May 21, 1999. The purpose of this effort was to document the presence of migrating juvenile salmon. Smelt, chum salmon, coho salmon, Pacific sanddab, starry flounder and shiner perch were the species most frequently captured. No other salmonid species were caught during this sampling effort. Smelt dominated the total catch, representing greater than 89 percent of the 3,032 fish captured at both sites during the study period. More juvenile coho and chum were captured at Site 1 (located in the western portion of the bay which is protected by the submerged jetty) than at Site 2 (located in the more exposed eastern portion of the bay). Since these data were obtained, the elevation of the submerged jetty was lowered from +8 feet MLLW to +2 feet MLLW as a mitigation requirement.

Relative to benthic invertebrates, commercially important Dungeness crab are found in Half Moon Bay. Their numbers are monitored by the Corps in conjunction with nearshore disposal of dredged material in Half Moon Bay. Other benthic invertebrates known to be present in the project area include mole crabs (*Emerita analoga*), small polychaetes (several species), and heart cockles (*Clinocardium nuttallii*) (Corps of Engineers, 2004).³

Terrestrial mammals which may occur in the project vicinity include black-tailed deer, voles, raccoon, striped skunk, and bobcat. Marine mammals found in Grays Harbor include the harbor seal, Pacific harbor porpoise, gray whale, as well as California and Steller sea lions. A wide variety of migratory waterfowl, shorebirds, and seabirds frequent the project area. The western sandpiper and over wintering dunlins are particularly numerous species.

Grays Harbor is a major shorebird staging area, and a critical part of the Pacific Coast shorebird migration in the spring. Herman and Bulger (1981) identified the types of habitats in Grays Harbor that are of primary importance to shorebirds and the extent to which different substrates are used by various species. Small sandpipers, dowitchers, and knots forage on mudflats with a high silt content, while plovers generally prefer sandier substrates. Turnstones usually forage among cobble and rock, a substrate type that occurs only locally in Grays Harbor.

4.4 Threatened and Endangered Species

Sixteen species listed as either threatened or endangered are potentially found in Grays Harbor. Listed species under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS) include: the bald eagle (*Haliaeetus leucocephalus*), brown pelican (*Pelecanus occidentalis*), Western snowy

³ The benthic community structure and species composition of the project placement area is currently being determined via sampling and laboratory studies being conducted under contract to the Corps. In January 2004, 210 benthic samples in the intertidal project area were collected and are being analyzed. Results will be utilized for future impact assessments.

plover (*Charadrius alexandrius nivosus*), marbled murrelet (*Brachyramphus marmoratus*), bull trout (*Salvelinus confluentus*), and Oregon silverspot butterfly (*Speyeria zerene hippolyta*). Listed species under the jurisdiction of the National Marine Fisheries Service (NMFS) include: the Steller sea lion (*Eumetopias jubatus*), humpback whale (*Megaptera novaeangliae*), blue whale (*Balaenoptera musculus*), fin whale (*Balaenoptera physalus*), Sei whale (*Balaenoptera borealis*), sperm whale (*Physeter macrocephalus*), green sea turtle (*Chelonia mydas*), olive ridley sea turtle (*Lepidochelys olivacea*), leatherback sea turtle (*Dermochelys coriacea*), and loggerhead sea turtle (*Caretta caretta*).

Information on these species' life histories and usage of Grays Harbor, as well as impacts of maintenance of the Federal navigation project on these species, is provided in the 2001 *Programmatic Biological Evaluation: Fiscal Years 2001-2006 Maintenance Dredging and Disposal, Grays Harbor and Chehalis River Navigation Project, Grays Harbor County, Washington*, which is available online at <<http://www.nws.usace.army.mil/ers/envirdocs.html>>.

4.5 Water Quality, Air Quality, and Noise

Waters in the project vicinity are rated as class AA (extraordinary) by the Washington Department of Ecology. Grays Harbor County meets U.S. Environmental Protection Agency (EPA) Ambient Air Quality Standards, and those set by Washington State for suspended particulates and sulfur dioxide. Air quality is very good in the Westport area. The project site is not located in a Clean Air Act non-attainment area. At the project site, natural sources such as wind and surf are the principal source of sound.

4.6 Recreation

Westhaven State Park is located south of the jetty and adjacent to Half Moon Bay in an area which accreted after construction of the jetty. This park is composed of almost 80 acres and has 1,215 feet of ocean frontage. Westhaven State Park is a day-use facility with a parking area, picnic tables and ADA unisex restrooms. Recreation occurring in the project area includes wave riding (standup surfing, knee boarding, body boarding, body surfing), kayaking, windsurfing, scuba diving, surf fishing, crabbing, beach combing, strolling, kite flying, picnicking, and associated activities. There are two primary public access routes from the top of the breach fill to the South Beach. Neither of these access routes would be affected by the proposed sand placement. The existing, unimproved access road to top of the south jetty Breach Fill is a popular recreational access to view the ocean, beach and entrance to the harbor. The +35 ft MLLW top elevation facilitates daily observations by the staff based at the Westport Coast Guard Station.

Recreational use of Half Moon Bay occurs year-round. The shoreline is in close proximity to the ocean coast, yet is sheltered from the most severe elements. Public access to the beach is by walking from either the Westhaven State Park parking area or a parking lot at the northeast end of Half Moon Bay. Parking also occurs on a portion of the Corps' mitigation stockpile between the U.S. Coast Guard Rear Range and the U.S. Coast Guard Tower.

Wave riding/surfing is a popular activity in the Westhaven State Park/Half Moon Bay area. The three prime surfing locations include South Beach near the south jetty (The Jetty), Half Moon Bay (The Cove), and the groin area of the Point Chehalis revetment (The Groins). Surfers report

that one of the three spots is usually producing a ride-able wave, making this an all-season surfing locale on the Washington coast. Half Moon Bay is sheltered from wind and direct swell conditions, unlike open ocean beaches. Deeper water in the harbor entrance allows swells to gain momentum before shoaling up offshore to produce smoothly breaking waves which are sought by surfers.

In December of 1987, winter storms washed away restrooms, 2 picnic sites, and much of a paved parking area. The Washington Parks and Recreation Commission subsequently installed restrooms designed to be portable, and salvageable for removal and alternate installation, in the event of future erosion events threatened them. Similarly, State Parks is prepared to remove any road asphalt and to re-locate road and parking lot facilities if necessary to assure harmful materials don't enter the water and that public access and facilities are provided in secure locations (please reference the January 20, 2004 letter from the State Parks in Appendix D).

The City of Westport has incorporated ADA access provisions in the trail and the asphalt paved portion at the west end of the mitigation, sand stockpile is an excellent overlook for the disabled and elderly. The seasonal variation in erosion scarp is comparable to existing conditions; therefore, our proposed placement is not significant to indicate it will exacerbate public access with this interim action. The increase in top elevation is on the order of 3-5 feet and will not adversely affect the existing recreational access points. The foredune in front of the park parking area precluded views of the ocean as does the sand pile to reduce wave overtopping into the parking area. Previous Corps actions (the 1994 breach fill and the 2002 breach fill maintenance) have dramatically increased the elevation of the breach area making the drop between the artificial dune and beach below much higher (over 15 feet in some areas). Wave action and associated erosion has made the scarp/cliff separating these two features very steep. This has limited the number of places where park visitors can access the beach from the parking area/dune; made access for elderly or disabled visitors difficult at best; and reduced views of the ocean from the parking area. The cliffs could also pose a safety hazard.

The City of Westport has stockpiled sand above the ecology blocks placed in October 2003 to mimic the foredune that had provided some protection from storm wave overtopping. Much of this sand covers the parking area nearest the bay, and further limits the number of access points to the beach below.

5. ENVIRONMENTAL EFFECTS

5.1 Geology

Implementation of the preferred alternative would replace some of the breach fill material lost through erosion. Maintaining the height of the breach fill will reduce the risk of overtopping, and therefore the risk of a catastrophic breach, but will likely not slow erosion rates appreciably. Future renourishment will likely be required to maintain the height and width of the breach fill and/or shoreline position.

Approximately 2.27 acres of upland and 0.5 acre of intertidal habitat will be directly impacted by the 2004 placement of sand. Smaller areas would be affected by subsequent placements. The

existing beach substrate is predominately sandy, so the nourishment material will be of a very similar grain size to the native material. A substantial portion of any sand placed directly along the shoreline will be redistributed along the beach and down to lower elevations by waves and currents, further extending the footprint affected by the placement action. Sand from Half Moon Bay is transported by cross and longshore currents to deeper waters in the outer bay and the Grays Harbor inlet, where tidal flushing contributes to permanent loss of sediment offshore.

The removal of material from the Point Chehalis revetment extension mitigation stockpile is not expected to affect Corps compliance with the inter-agency mitigation agreement for the Point Chehalis revetment extension project. Based on a comparison of the 2001 - 2002 survey data, the erosion rate in the vicinity of the mitigation stockpile is approximately 5,000 to 10,000 cubic yards per year (cy/yr). At this time the stockpile contains approximately 180,000 cy of sand, of which about 125,000 cy is actually located in an area that would be subject to erosion. For the proposed project, 25,000 cy will be borrowed from the mitigation site this winter, and additional sand (estimated at 15,000 cy annually) may be borrowed each subsequent year. Assuming that the erosion rate is 10,000 cy/yr, the combined loss of material from the mitigation site due to combined erosion and borrow activities would be 35,000 cy this year and 25,000 cy/yr in subsequent years. Under these assumptions, the presently available stockpile volume of 125,000 cy could provide material for both the mitigation requirements and for the proposed breach fill maintenance for at least three years without re-nourishing the stockpile with maintenance dredged material.

5.2 Vegetation

Large trucks will enter the project site via the park access road. The mitigation stockpile and access ramp from the park road are unvegetated, so there will be no vegetation impacts associated with the excavation and transport of sand. Very little, if any, vegetation will be disturbed as part of the placement along the shoreline because the dune waterward of the road has eroded away. Since no crushed rock will be placed to facilitate access, large trucks will not be able to traverse the sandy breach fill. Trucks with off-road capabilities or tracked front-end loaders will likely be used to place the 5000 cubic yards of sand on top of the breach fill. The contractor will be instructed to use, where possible, the unvegetated vehicle access way in order to reduce damage to the dune grass planted in November 2002. As described in Section 8, the Corps will replant areas on the breach fill affected by construction in the spring or fall after any placement occurs.

5.3 Fish and Wildlife

Fish and crabs will not be directly impacted by the shoreline portion of proposed action because sand placement will occur above the waterline at low tides so as to not directly interfere with their usage of mid and upper intertidal habitats. In addition, the placement will occur during a time of the year when particularly sensitive life history stages (e.g., out-migrating juvenile salmon, settling larval crabs) are not present at the project vicinity. Turbidity is not expected to increase substantially above ambient conditions due to the predominately sandy nature of the dredged material and the large quantity of suspended sand currently transported via longshore drift in the project area.

Placement of sand in areas closest to the source will physically disturb, cover and eliminate infauna and small, slower moving epifauna in the area of direct placement. Mobile epifaunal species may be able to escape the material depending on their rate of motility and depth of material. Benthic communities in areas of thin, or slowly accreting fill will be able to survive the placement.

Because benthic organisms in the Half Moon Bay intertidal zone have adapted to a highly energetic, eroding beach face regime, the fact that material of like composition (grain size) is being placed, and due to the methods of placement described above, it is expected that a new benthic assemblage similar in species composition to that existing will become established in a relatively short time frame, perhaps within six months. This expectation is supported by numerous studies that focus on recovery rates of benthic communities following various physical events including beach nourishment and erosion control projects. Recovery of the impact area at Half Moon Bay will occur as larval and adult forms of infauna and epifauna are recruited from adjacent (primarily from the east) sandy beaches. Mobile epifauna will move into the area and infaunal larvae will quickly begin to colonize the area also. Time for establishment of an equivalent assemblage to what exists prior to placement will be dependent on weather conditions and tidal actions. The degree of sand movement down beach from the stockpiled area could be gradual throughout the winter or could occur in larger pulses, the latter of which could delay full establishment of the community until the following spring or summer. However, based on our literature review, Half Moon Bay intertidal assemblages should recover within 6-12 months following sand placement.

The benthic invertebrate community in Half Moon Bay will experience seasonal fluctuations in production and biomass commonly seen in Pacific Northwest intertidal beaches. The benthic community is expected to be considerably less productive during the winter months compared to summer months. Based on our best professional judgment, sand placement in February will be less impacting to the existing invertebrate community than placement during the late spring or summer.

A documented surf smelt spawning area is located along the Pacific Ocean southwest of the project and herring spawning occurs in the Elk River estuary and South Bay to the southeast, but no forage fish spawning is known to occur in Half Moon Bay. Given the high wave energies and steep bathymetry of Half Moon Bay, no marine vegetation is present so no herring spawning occurs in the bay. The preferred substrate for surf smelt spawning is coarse sand and pea gravel. Substrate on the Half Moon Bay shoreline is either of a small grain size, or much larger grain size in the case of previously placed transition gravel/cobble, so it is not suitable for surf smelt spawning. Washington Department of Fish and Wildlife (WDFW) has surveyed the Half Moon Bay shoreline for evidence of sand lance spawning, but has not found any eggs (Robert Burkle, WDFW, pers. comm., 12/18/03). Burkle (2003 pers. comm.) suspects wave energy is likely too high in this area to support sand lance reproduction.

Wildlife in the vicinity of construction activities may be disturbed by the noise associated with operation of heavy machinery. They will likely avoid the immediate construction zone and shift foraging activities to adjacent areas. This effect will be temporary, and end once construction is complete. Since the proposed discharge would not result in major changes in physical habitat

characteristics, the discharge is not expected to have long-term effects on the suitability of the site for shorebird or marine mammal foraging.

5.4 Threatened and Endangered Species

Based on the evaluations submitted to USFWS and NOAA-Fisheries in August, the Corps has determined that the project will have **no effect** on the marine mammal and sea turtle species under the jurisdiction of NOAA Fisheries, and may affect, but is **not likely to adversely affect** species under the jurisdiction of USFWS. A letter from USFWS concurring with this determination was received on January 16, 2004.

5.5 Water Quality, Air Quality, and Noise

Only minor, temporary impacts to water quality would be expected to result from the proposed project. Turbidity is not expected to increase substantially above ambient conditions due to the predominately sandy nature of the dredged material, and the large quantities of suspended sand currently transported via longshore drift in the project area.

There will be a temporary and localized reduction in air quality due to the emissions of equipment operating during the excavation, transport, and placement of the sand. The impact of this increase will be temporary, highly localized, and will not result in violation of applicable air quality standards. Ambient noise levels will also increase during operation of equipment at the project site. The noise type will shift somewhat from natural sources to the noise of heavy machinery. This shift will also be highly localized and temporary as the excavation and placement sites are greater than 500 feet from residences.

5.6 Recreation

Over the 2-3 week-long construction period, parking and pedestrian access to the stockpile and the western Half Moon Bay shoreline would be restricted or closed. The northeastern portion of the main parking area and the City of Westport boardwalk would be closed both during construction and until the sacrificial dune erodes into the bay (possibly as long as fall 2004). Other parking areas would not be affected by the project.

Assuming 10 to 25 cubic yards per load, between 1000 and 2500 truck trips may be needed to move 25,000 cubic yards of sand. Flagmen would be present at both the stockpile site and main parking area to insure park visitors are safely routed around construction activities. Park visitors would be inconvenienced by the construction activity. Visitors may be delayed in entering and exiting the park, and prevented from accessing some areas of the Half Moon Bay shoreline. These impacts would be worse if placement were delayed until after July 14, 2004, since visitation is much higher during the summer months. However, these disruptions will be temporary and localized.

As described in Section 4.6, previous Corps actions have limited the number of places where park visitors can access the beach from the parking area/dune; made access for elderly or disabled visitors more difficult; reduced views of the ocean from the parking area; and could pose a safety hazard. These conditions would remain if no action were taken. The proposed action would exacerbate the current condition by extending the affected area. The Half Moon Bay beach will still be accessible to pedestrian traffic at multiple locations east of the Westhaven

State Park parking lot and near the Corps mitigation stockpile. Public access to the Pacific Ocean beach, directly west of the Westhaven State Park parking lot, will be unaffected by the project, except during construction when access may be temporarily interrupted. The elevation of an additional 720 feet of Half Moon Bay shoreline and 250 feet of ocean shoreline would be affected by the proposed work. Views from parking areas and vicinity will be adversely affected by the project due to the high elevation of placed sands.

Excavation at the stockpile site in eastern Half Moon Bay is not expected to have long-term impacts on recreational use of that site. Material will be excavated from the western portion of the site, reducing the elevation by approximately 3 feet. Some minor ponding may occur as a result. As described in Section 5.1., this excavation will not affect Corps compliance with the inter-agency mitigation agreement for the Point Chehalis revetment extension project. It is concluded that the project will exacerbate already adverse conditions for accessing project area beaches. Therefore, all activities currently carried out there, including surfing, beach-combing, kayaking, etc. will be further adversely affected.

6. INDIRECT EFFECTS

Indirect effects are not a direct result of an action, but are still reasonably foreseeable. Indirect effects usually occur later in time or farther removed in distance as compared to direct effects. It is not the intent of this action to promote development in the project vicinity; however, development may become more attractive because of the Corps attempts to slow erosion along the South jetty breach fill reach of the Half Moon Bay shoreline.

Any Corps project that resulted in a “stabilized” shoreline or otherwise protected the park access road would also appear to offer some level of protection for any development relying on that road for access. For this reason, the impacts of potential development(s) must be included in the evaluation of any Corps projects in this area which could directly or indirectly protect the park access road. The parcels located directly south of the Park access road are owned by the Port of Grays Harbor and zoned “Tourist Commercial” so future development proposal(s) are reasonably foreseeable.

A review of permit applications submitted to Seattle District Regulatory Branch indicates that there is at least one reasonably foreseeable future action currently planned for the immediate project area. There is an application on file for development of a destination hotel, conference center, “Scottish Links” style golf course, ocean-front condominiums, and supporting commercial development adjacent to the Westhaven State Park access road (Reference Application Number 200301009). This development, commonly known as Links at Half Moon Bay, would occupy 243 acres south and east of Half Moon Bay.

One part of the Links at Half Moon Bay proposal, the construction of 200 condominiums in eight 5-story buildings directly south of the park access road, would be particularly at risk if erosion along the southern shoreline of Half Moon Bay continued unabated. The park access road is currently depicted as the only means of accessing the condominiums. The project would require either a separate access road or additional protection of the existing road from erosion.

The Corps provided comments on the Draft EIS and Final EIS for the Links at Half Moon Bay development. In the comment letters, the Corps made clear that there is a long-term potential for shoreline erosion and associated storm-induced backshore flooding in the area proposed for the Links development, and that the Corps has no existing authority to maintain the South Beach or Half Moon Bay shorelines except to the extent of nourishing the South jetty breach fill.

Since the condominium development may be dependant on the park access road, it is reasonable to assume that at some point in the future there may be a need to stabilize the Half Moon Bay shoreline in order to protect the road. In fact, some efforts have already occurred. During October 2003, the City of Westport requested a permit from the Corps to address bank erosion in Half Moon Bay (Reference Application Number 200301101). The City of Westport, Port of Grays Harbor, or the Links at Half Moon Bay developer may pursue longer-term shoreline erosion control. The Corps may or may not be requested to use one of its authorities to assist in this effort. However, the Corps does not have authority to directly assist private property owners with shoreline erosion.

The sand placement actions proposed in this document will only temporarily forestall shoreline retreat—not prevent further retreat—so these proposed placements of sand cannot be considered an erosion control action. At this time, the Corps is not committing to continue to place sand as needed to protect the park access road. The focus of this effort is maintaining the South jetty breach fill, and future efforts to protect the breach fill may focus more on other vulnerable areas (e.g., the ocean side). This action will not protect the road or in any other way facilitate development, so growth-inducing effects are unlikely and thus the indirect effects are insignificant.

7. CUMULATIVE EFFECTS

NEPA requires the evaluation of cumulative impacts to assess the overall effect of a proposed action on resources, ecosystems, or human communities in light of past, present, and reasonably foreseeable future projects. The cumulative impact analysis includes actions that are federal, non-federal, and by private entities.

The Corps reviewed the history of actions within all of Grays Harbor for a watershed-scale perspective of cumulative impacts (see Appendix B). The time period considered in this analysis was 1852, prior to construction of the south jetty, to present. Since it was apparent that actions associated with the south jetty had the most profound historic effects in the project vicinity (Half Moon Bay, South Beach, Westhaven Park, Point Chehalis, and the City of Westport), the analysis focused on this area for assessing cumulative impacts.

The analysis presented in Appendix B shows that the major activities which have contributed to, and continue to contribute to, potential cumulative impacts to the area are the construction of structures associated with the navigation projects and human occupation of the coastal strand and sand dune communities. Over the past decade, numerous construction actions have occurred in the vicinity of Half Moon Bay (see Table 1 and Figure 3). Some of these actions have modified structures associated with the navigation project, and may have contributed to cumulative degradation of biological function and recreational use of Half Moon Bay.

In addition, several dredged material disposal sites are located in and near Half Moon Bay. Over the past decade, millions of cubic yards of dredged material have been placed in these sites (see Table 2). The two sites located in and directly adjacent to Half Moon Bay have received over 2.3 million cubic yards of sand dredged from the outer Harbor. Despite all of this material being placed into the bay, it continues to deepen. The effects of the navigation structures overwhelm the impact of the placement activities; sand does not accumulate but rather is transported to deeper waters in the outer bay and Grays Harbor inlet, where tidal flushing results in permanent loss of sediment offshore.

Considering the small volume proposed here, relative to the amount of dredged material placed annually and the volume of material moved by waves and currents, this action would contribute to the temporary loss of benthic habitat but this contribution would not be considered significant. The proposed placement consists of less than 1% of the total volume of material placed in Half Moon Bay over the past 10 years. In the context of all that has occurred in the past, the placement of 25,000 cubic yards of sand along the Half Moon Bay shoreline and on the breach fill will cause only a tiny increment more harm to biological function. The same would be true for future annual placements of sand. The impacts would likely be so small as to be immeasurable. The project will not change the characteristics of the function or extent of the existing navigation project, so it will not affect other shoreline processes. The project will also not result in any changes to the human occupancy of the project area. The Corps concludes that there will not be a significant cumulative effect associated with this action.

Table 1. Construction Activities in the Vicinity of Half Moon Bay since 1994

1993	Breach occurs between south jetty and adjacent shore
1994	Placement of 600,000 cubic yards (cy) of dredged material to close breach.
1995	Placement of 82,000 cy of sand along eastern Half Moon Bay (HMB) shoreline by City of Westport to protect sewer outfall line
1995	Placement of 300,000 cy of dredged material along eastern Half Moon Bay shoreline (Section 111 project)
1995	Relocation of 150,000 cy of breach fill material from Half Moon Bay to ocean side of fill
1997	Placement of 5000 cy sand berm at Section 111 project
1997	Placement of 10,000 cy sand berm at Section 111 project
1998-1999	Extension of Point Chehalis revetment by 1900 feet
1999-2000	South jetty Repair Project: (1) construction of wave diffraction mound at landward end of south jetty, (2) removal of eastern 250' of the south jetty to elevation +2' MLLW, and (3) placement of 11,600 cy of 12-inch minus transition material adjacent to diffraction mound.
1999-2002	South jetty Rehabilitation Project: (1) structure rehabilitation, sta. 87+00 to 120+00, and (2) placement of 16,100 cy of 12-inch minus cobble/gravel material to extend transition beach and protect construction access road
2002	Relocation of 135,000 cy of dredged material from HMB mitigation stockpile to breach fill

Table 2. Grays Harbor Dredged Material Disposal Site Usage, 1994-2003

Disposal Site	Volume Placed (cubic yards)	Number of Placements 1994 - 2003
Half Moon Bay - Nearshore	2,086,875	7
Half Moon Bay - Direct	229,669	2
South Beach	541,794	4
South jetty Breach Fill	735,000	2
Point Chehalis	7,549,859	10
South jetty	8,565,560	10
3.9 Mile	541,794	4
TOTAL	20,250,551	

8. MITIGATION

In order to address unavoidable impacts associated with the proposed action, the Corps will plant approximately 20,000 sprigs of native dune grass (*Elymus mollis*) on the breach fill during the spring of 2004. This effort will concentrate on areas that were disturbed as part of construction activities, and areas not densely planted as part of the 2002 revegetation effort. The dune grass will reduce wind erosion of the breach fill.

9. ENVIRONMENTAL COMPLIANCE

9.1 National Environmental Policy Act

This Environmental Assessment (EA) satisfies the documentation requirements of NEPA. The Finding of No Significant Impact (FONSI) can be found in Appendix A.

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.

In August 2003, the Corps prepared a biological evaluation (BE) for the proposed placement of gravel and cobble material (Alternative 2) along the Half Moon Bay shoreline. In the BE, determinations were made that the project would have “no effect” on species under the jurisdiction of the NOAA Fisheries and may affect, but is “not likely to adversely affect” species under the jurisdiction of USFWS. Letters concurring with the determinations made in the BE were received on November 10, 2003 (NOAA-Fisheries) and November 7, 2003 (USFWS). A subsequent concurrence letter was received from NOAA-Fisheries dated February 2, 2004.

Since the biological impacts of this proposed sand placement would be less severe than those of the previously recommended gravel/cobble placement, the Corps re-consulted with USFWS and NOAA-Fisheries regarding the modified proposal rather than initiating a new consultation. The effect determinations made in the August 2003 BE did not change. The USFWS concurred with this determination in a letter dated January 21, 2004. A letter from NOAA-Fisheries was not required since a “no effect” determination was made for species under that agency’s jurisdiction.

9.3 Clean Water Act

9.3.1. Section 404

The Corps has issued a revised public notice for the proposed project (CENWS-OD-TS-NS-21R) dated December 24, 2003, concurrent with the issuance of this draft EA. A copy of the public notice can be found in Appendix C. Comments received during the comment period can be found in Appendix D, and Corps responses can be found in Appendix E.

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

revised 404(b)(1) evaluation to document the Corps' findings regarding this project pursuant to Section 404 of the Act.

9.3.2. Section 401

On October 31, 2003, the Corps received a Section 401 Water Quality Certification for the proposed placement of gravel and cobble material from the Washington Department of Ecology (Ecology). Attached to the Corps' revised public notice CENWS-OD-TS-NS-21R, dated December 24, 2003 was a notice of application for water quality certification and for certification of consistency with the Washington State Coastal Zone Management program. The Corps requested an amendment to that Certification in a December 29, 2003 letter to Ecology. The Corps received an amended 401 Certification from Ecology on January 29, 2004, and will abide by the conditions of that certification to ensure compliance with State water quality standards. A copy of the Water Quality Certification ORDER 04SEASR-5992/Coastal Zone Consistency Determination can be found in Appendix F of this EA.

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 which is consistent to the maximum extent practicable with the enforceable policies of the approved state Coastal Zone Management Program.

The Corps prepared a Coastal Zone Management Act Consistency Determination for the previously proposed placement of gravel and cobble material to ensure that the proposed work complies with the policies, general conditions, and general activities specified in the City of Westport Shoreline Management Master Plan and the State of Washington Shoreline Management Program. A letter concurring with this determination was received from the Department of Ecology on October 31, 2003. In a December 29, 2003 letter to Ecology, the Corps explained the revised proposal and maintained that the proposed discharge was also consistent with local and state management plans. Ecology concurred with this determination of consistency in a letter dated January 29, 2004.

9.5 National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966 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. The project area is composed of fill material and recently deposited sand deposits which precludes the possibility of prehistoric or early historic-period archeological deposits being present. A professional pedestrian archeological survey of the project area conducted by the Corps did not produce evidence of possible shipwreck remains. Background research indicates that there are no reported shipwrecks within the project area. The Corps sent a letter report to the Washington State Historic Preservation Officer (SHPO) stating the negative results of the archeological survey and background research and recommending a determination of no historic properties affected for the project. A letter concurring with this determination was received from the SHPO on September 30, 2003.

9.6 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act requires Federal agencies to consult with the NOAA-Fisheries regarding actions that may affect Essential Fish Habitat (EFH) for Pacific coast ground fish, coastal pelagic species, and Pacific salmon. The Act defined EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." Descriptions of EFH are provided in Fishery Management Plans produced by the Pacific Fisheries Management Council.

An EFH analysis was included in the August 2003 biological evaluation for the previously proposed gravel/cobble alternative submitted to NOAA-Fisheries. The Corps received a letter from NOAA-Fisheries making conservation recommendations on November 10, 2003. By modifying the proposed project, the Corps is implementing two of the conservation recommendations suggested by NOAA-Fisheries. Recommendation 3 suggested placing smaller transition material on the beach, which we have done. The modified proposal reduces the project footprint (recommendation 2), which we have also done. Only 0.5 acre of intertidal habitat would be directly affected by the sand placement; the remainder of the total 2.77 acre project footprint would be located at higher elevations. Most of the original 2 acre project footprint would have been in intertidal areas.

10. CONCLUSION

Based on the preceding environmental assessment, Seattle District has determined that the proposed action is not a major Federal action significantly affecting the quality of the human or natural environment, and therefore does not require preparation of a Federal environmental impact statement.

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Appendix A
Finding of No Significant Impact



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

CENWS-PM-PL-ER

**SOUTH JETTY BREACH FILL MAINTENANCE
WESTPORT, GRAYS HARBOR COUNTY, WASHINGTON**

FINDING OF NO SIGNIFICANT IMPACT

1. Background. After winter storms breached the sand spit adjacent to the Grays Harbor south jetty in December, 1993, there were concerns about the stability of the south jetty structure and potential damages to the navigation channel. In response, the Corps placed about 600,000 cubic yards of sand to close the breach. The Corps has undertaken a number of measures to extend the life of the existing breach fill. However, the integrity of the breach fill may be compromised by erosion during storms.

2. Purpose and Need. The purpose of the proposed work is to extend the life of the south jetty breach fill. This will protect the south jetty and navigation channel from damage which could be caused in the event of another breach. Preventative maintenance of the breach fill is required to insure the integrity of the breach fill, south jetty and entrance channel until a long-term strategy for the south jetty and Grays Harbor entrance is implemented. This action is a much more cost-effective strategy than after-the-fact emergency repairs, and requires a relatively small quantity of material to restore the height and width of the fill area. The proposed project will also partially nourish the area which has been eroded adjacent to previous gravel placements.

3. Proposed Action. The proposed action consists of the placement of up to 25,000 cubic yards of sand on the south jetty breach fill and in the southeast corner of the breach fill by February 14, 2004 or after July 14, 2004. The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999. Approximately 2,500 cubic yards of sand will be placed on the large rainwater runoff gullies that have formed along the southeast corner of the breach fill. Approximately 2,500 cubic yards of sand will be placed directly adjacent to the jetty in the northwest corner of the breach fill. Approximately 20,000 cubic yards of sand will be placed in the southwest corner of the bay, adjacent to the Westhaven State Park access road and parking lot where severe end-cutting erosion is threatening the breach fill. Of that 20,000 cubic yards, approximately 10,000 cubic yards will be placed in upland areas along the shoreline.

Based upon the results of post-placement monitoring, and dependant on funding availability, the Corps may make additional placements of sand (estimated at approximately 15,000 cubic yards annually) until the time when a long-term management strategy has been implemented. The source of this sand would also be the direct beach nourishment disposal site. Other placement

techniques and/or proposals for larger quantities of sand may be investigated if the current action is not found to be successful. Any such actions would be evaluated in future NEPA documents.

3. Summary of Impacts. Fish and crabs will not be directly impacted by the proposed action because sand placement will occur above the waterline at low tides so as to not directly interfere with their usage of mid and upper intertidal habitats. Benthic organisms in and adjacent to the project footprint would be directly impacted by implementation of the project, but the impacts are expected to be temporary in nature and limited in extent. The temporary reduction in benthic invertebrate abundance may indirectly affect fish, birds, and other species which prey on these organisms. However, this impact is expected to be temporary because any invertebrates which have colonized this high-energy, rapidly eroding area are highly mobile and adapted to heavy disturbance regimes, and are thus expected to recolonize the nourishment area relatively quickly. Since there will not be a major change in substrate size distribution as a result of the fill placement, no major shifts in the composition of benthic invertebrate community structure are anticipated over time. This project incorporates the conservation recommendations of NOAA Fisheries and the U.S. Fish and Wildlife Service, which include placement of a smaller material (sand as opposed to larger cobbles and gravel), construction during a time when listed species are least likely to be present in the area, and development of a long-term strategy at Grays Harbor.

The proposed placement will occur in a day-use state park. Over the 2- to 3-week long construction period, park visitors will be inconvenienced by the construction activity. Parking and pedestrian access to the stockpile and the western Half Moon Bay shoreline would be restricted or closed during construction. The northeastern portion of the main parking area and City of Westport boardwalk would be closed both during construction and until the sacrificial dune erodes into the bay. Primary access routes from the breach fill top to South Beach will not be affected by the sand placement. However, the placement of sand will increase the height of the breach fill, making the elevation drop between the shoreline and the beach below higher. Some adverse impacts will result. Pedestrian access to the Pacific Ocean beach will be unaffected by the project, except during construction. Pedestrian access to the Half Moon Bay shoreline will be more restricted by the steep bank formed by the fill. Beach access will continue to be limited along approximately 720 linear feet of bay shoreline. Visitors will be able to access the beach, with some difficulty, by descending the remnants of the eroding foredune east of the project site.

Based on our cumulative effects analysis, the Corps has concluded that there will not be significant adverse cumulative effects on area environmental resources resulting from the proposed action.

4. Finding. Based on the evaluation provided in the attached EA, and summarized here, Seattle District has determined that this project is not a major Federal action significantly affecting the quality of the human or natural environment, and therefore does not require preparation of an environmental impact statement.

4 Feb 04

Date

Debra M. Lewis

Debra M. Lewis
Colonel, Corps of Engineers
District Engineer

Appendix B
Detailed Cumulative Effects Analysis

South jetty Breach Fill Maintenance Cumulative Effects Analysis

NEPA requires the evaluation of cumulative impacts to assess the overall effect of a proposed action on resources, ecosystems, or human communities in light of past, present, and reasonably foreseeable future projects. The cumulative impact analysis includes actions that are federal, non-federal, and by private entities. The Corps reviewed the history of actions within all of Grays Harbor for a watershed scale perspective of cumulative impacts. For further details, see COE 2001.

During the course of this review, it was apparent that actions associated with the South jetty had the most profound historic effects in the project vicinity (Half Moon Bay, South Beach, Westhaven Park, Point Chehalis, and the City of Westport). Accordingly, the Corps cumulative impact analysis focused on this area for assessing cumulative impacts. For a complete historic analysis of past impacts, refer to COE 2003.

The major kind of activities that have contributed to, and continue to contribute to, potential cumulative impacts to the area are the construction of structures associated with the navigation projects and human occupation of the coastal strand and sand dune communities. The Corps determined the potential primary impact for each activity then the functional changes and consequences of the changes. This assessment does not represent a compilation of every potential impact or change possible, but it does address the notable impacts, changes, and consequences in these watersheds.

Historic Landscape Conditions.

The earliest mapping of Grays Harbor from 1852 shows a relatively narrow channel between Point Chehalis and Point Brown with Eld Island just south of Point Brown. Maps from 1862 through 1891 show that Eld Island eroded completely and Point Brown receded in a northeasterly direction about 4,300 feet. During the same time period, Point Chehalis accreted about 4,300 feet in a northwesterly direction (Phipps and Smith 1978). During the same time, European-American settlement on the Grays Harbor side of Point Chehalis resulted in the development of the community of Westport. By 1914, Westport was an incorporated town and a small center for fishing, shellfish harvesting, seafood processing and tourism.

The engineering history at Grays Harbor started with the construction of the south jetty to prevent shoaling of the navigation bar channel. South jetty construction began in 1898 and was completed in 1902 at a total length of 13,734 feet, of which 11,950 feet extended seaward of the high water line at that time. The construction of a second jetty north of the harbor entrance began in 1907. The north jetty was completed in 1913 to a length of 17,000 feet. Once the north jetty was reconstructed, the existing channel adjacent to the south jetty shoaled and a new wider and deeper channel developed north of the older channel. Westhaven Cove formed naturally at Point Chehalis after construction of the south jetty, and the Port of Grays Harbor constructed a harbor there in 1929.

The south jetty was reconstructed between 1935 and 1939. The first shoreline trace of Half Moon Bay appeared after 1940, following the completion of the south jetty rehabilitation. Surveys show that Point Chehalis continued to build to the north, west, and east until the reconstruction of the jetty. The sand that built Point Chehalis apparently came from the south

and passed over or through the south jetty. The reconstructed jetty prevented the passage of material over and through the jetty, cutting off the longshore supply of sediment. The result was continued erosion of Point Chehalis. Considerable deterioration of the south jetty continued after its completion in 1937. By 1953, surveys showed that nearly 6,000 feet of the jetty had experienced subsidence.

In August 1950, the Corps initiated a study with the purpose of developing a comprehensive plan for the protection of Point Chehalis (and the City of Westport), the City's harbor, and the south jetty from erosion. The study concluded that erosion at Point Chehalis would eventually threaten the community infrastructure at Westport. Four groins were under construction at Point Chehalis before the initiation of the study. The study recommended that three additional groins also be constructed. The additional groins were constructed in 1951 and 1952. In 1952, the Corps intentionally breached the westernmost groin to permit the passage of sand to the west. Between 1953 and 1956, the Corps constructed a 2,880-foot-long rock revetment as an additional erosion protection measure. In 1966, the Corps rehabilitated 4,000 feet of the south jetty. The outer 6,000 feet was left in its degraded condition (COE 1965).

The ocean beach just south of the south jetty receded at an average rate of 15 to 20 feet/year between 1967 and 1986. Sometime during this same period, the State of Washington began to do some development of a State park facility (Westhaven State Park) on the accreted lands south of the south jetty. This consisted of a parking lot and restroom facility. By 1986, the rate of shoreline recession increased to about 60 feet/year, which resulted in the abandonment of the original park facilities. The State later constructed new, less permanent facilities (self-contained port-o-let restrooms) that could be more easily moved if erosion later threatened the structures.

The landward side of the spit at Half Moon Bay was also eroding. In May 1992, the Corps constructed a submerged berm in Half Moon Bay to help slow erosion. About the time the berm was constructed, the Corps conducted a review of historical data to determine trends in erosion and accretion that occurred since the construction of the jetties. The report (Burch and Sherwood 1992) found that South Beach erosion was part of a much more significant, long-term loss of sediment from the entire inlet system. The report concluded, "although the long-term erosion may be related to long-term changes in sediment supply, it is most likely part of the slow adjustment to construction of the entrance jetties" (Burch and Sherwood 1992).

During a storm on 10 December 1993, a breach formed between the jetty and the adjacent South Beach (north of the State park facilities, but within park boundaries). The storm lasted from 8 December until 15 December. The breach widened rapidly, exposing the landward end of the jetty. Much of the material that was washed out of the breach was deposited in Half Moon Bay. The breach was filled in the fall of 1994 with 600,000 cubic yards of sand dredged from the bar channel.

In May 1994, the Corps placed an additional 146,000 cubic yards of dredged sand in the Half Moon Bay berm. The erosion along Point Chehalis (and the now eastern shoreline of Half Moon Bay) continued so that by 1995 the City of Westport placed approximately 82,000 cubic yards of sand along the eroded area of Half Moon Bay. They were concerned about threats to public infrastructure by erosion (existing sewer lines). In the fall of 1995, the Corps placed and additional 300,000 cubic yards of dredged material in the same area. Most of the material from both actions eroded away. The Corps eventually constructed a revetment extension with

additional fill in the area of concern to the City. This was completed in March 1999. The Corps also constructed a wave diffraction mound as a protection measure for the 1994 breach fill, which was completed in February 2000 and rehabilitated the emergent portion of the south jetty (completed in 2001).

During the winter of 2001-2002, a series of storms resulted in exacerbated erosion to the shoreline south of the jetty (South Beach), the Half Moon Bay shoreline, and erosion of the breach fill and revetment fill areas. In May 2002, the Corps placed approximately 135,000 cubic yards of dredged material over approximately 8 acres in the breach-fill area. This fill was planted with a native species of dune grass (*Elymus mollus*) in November 2002 to reduce wind erosion of the dune.

Regional Sediment Transport

The major source of sediment to the Washington shelf and the beaches of the southwest Washington coast is the Columbia River. Studies by Ballard (1964) showed that sand is moved northward from the Columbia by seasonally reversing longshore currents. The regional regime of longshore movement is locally altered by wave refraction, which may produce deviations from the general trend of movement. The historical northward flow of sand is evidenced by diagnostic mineralogy studies that have traced Columbia River sands as far north as Ocean Shores and by the northward movement of the mouth of Willapa Bay and the mouth of Grays Harbor before jetty construction.

Sediment supply

The Columbia River is the primary sediment source for the continental shelf and littoral zones of the southwest Washington coast. Sternberg (1986) suggests that 84 percent of the annual Columbia River sediment discharge has accumulated on the shelf or in the deep sea. The remainder accumulates in the estuaries and on the beaches. Gelfenbaum et al (1999) estimated the accumulation rate available for beach nourishment since 1878 is about 400,000 cubic yards/year.

The construction of dams on the Columbia River during the past 75 years has decreased the sediment discharge of the system and reduced the sediment budget of Washington's beaches. Gelfenbaum et al (1999) estimated that the dams have reduced the sand supply to the estuary by 67 percent. In 1978, concern over the possibility of a diminished sand supply to the southwest Washington beaches was a major factor in initiating a coastal accretion and erosion study. One of the conclusions of the study was that any reduced discharge by the Columbia River had not yet affected the sand supply to the beaches (see also Phipps and Smith 1978).

Subsequent study indicated that a probable source of sand for Washington beach accretion was Peacock Spit, created by sand jetted out of the Columbia after construction of the jetties. The shoal injected sand into the longshore system over the years but by the 1990s was essentially no longer a source (Phipps 1990). More recently, sediment has slowly been removed from the outer bar of the Columbia and, as the system approaches equilibrium, changes are occurring more slowly. Therefore, perhaps more important than the reduction in sediment supply from the river is the erosion of the sand sources at the mouth of the Columbia. Burch and Sherwood (1992) conclude, "a reasonable hypothesis is that sediment supply from the Columbia River entrance region has decreased, and that decrease in supply has affected the Grays Harbor entrance

sediment budget....” The Grays Harbor entrance area has itself also seen a decrease in sediment supply with the deflation of the ebb shoal following the structuring of that inlet.

The shoreline sand accretion rates from the early part of the 1900s are much greater than rates from before this time and greater than recent accretion rates. Gelfenbaum et al (1999) concluded that the timing of the rapid accretion and the longshore variation in the accretion suggest the changes in the ebb-tidal deltas after jetty construction are the primary cause for much of the beach accretion. The current deflated state of the Columbia River and Grays Harbor deltas signals an end of this once vast source of sediment, eventually reducing the sediment supply at Grays Harbor. The area around Grays Harbor is likely evolving because of a reduction in sediment supply from both internal (ebb-tidal deltas) and external (Columbia River) sources (Kaminsky et al 2001). The reduction of internal sources appears to be the dominant factor in the recent reversal of historical shoreline advance.

Longshore transport

Ocean circulation and severe winter storms that create intense waves from the southwest combine to produce northerly transport of sediments along the Washington Shelf. Recent modeling studies have suggested that shoreline reorientation caused by structures at the Grays Harbor entrance has caused localized reversal of net sediment transport along the northern Grayland beaches adjacent to the entrance. Despite these localized reversals, the balance of evidence suggests that the regional trend for sediment transport is from the south to the north. Sediment bypasses the Grays Harbor entrance and feeds North Beach. A possible localized reversal of net transport and the rip current that forms adjacent to the south jetty contribute to the persistent erosion at South Beach adjacent to the jetty.

Primary Impacts Associated with Navigation Projects

The geologic record for the study area demonstrates several long-term cycles of erosion and deposition along the southwest Washington Coast. For the past five thousand years, the beaches accumulated Columbia River sediment, creating broad coastal barrier plains and dune fields. However, coastal Washington also experienced seismic uplift and subsidence associated with great Cascadia earthquakes (Atwater, 1987). Doyle (1996) provides that the Cascadia events resulted in abrupt tectonic subsidence of 4-5 feet resulted in 600 to 100 feet of catastrophic beach retreat throughout the Columbia littoral cell. Between the earthquakes, rapid shoreline accretion occurred from rebound-uplift, the abundant sand supply from the Columbia River, and effective longshore dispersion of the available sand.

Before the development of navigation projects, the coastal plains and sand dune fields were highly dynamic and adaptive ecosystems that both influenced and were influenced by shifting sands. Plant community diversity was high, which supported a variety and diversity of animal species. Many of the species found in the coastal plains were endemic species uniquely adapted to the dynamic nature of rapid erosion and accretion. Even in periods of rapid erosion, recolonization of accreted lands was rapid as long as remnant habitats remained to ‘seed’ the newly accreted lands (for in-depth evaluation of community dynamics sand dune and strand communities, see Wiedemann 1966).

The installation of jetties in the early 1900s at the entrances to Grays Harbor was followed by rapid accretion within several miles of the jetties (Kaminsky et al 1999). In stark contrast to the

relatively low shoreline change rates over the past 4,000 years, some coastal areas accreted nearly 130 feet a year during the first half of this century (Woxell 1998). Vegetation quickly colonized the accreted lands. This trend began somewhere in the late 1940s and became much more apparent in the last 20 years, especially in certain 'hot spots' along the Oregon and Washington Coast. The proposed project is in one of the rapid erosion areas. This trend is likely in response to the influences the construction of jetties, activities on the Columbia River, sea-level rise, and other yet identified causes.

Erosion at the study site has resulted in a significant loss of the lands accreted since the construction of the south jetty. The erosion has reduced the availability of coastal strand and dune communities to both plant and animals. In some areas, it has increased the availability of shallow marine or estuarine aquatic communities. While this effect may be locally profound, the highly dynamic nature of coastal ecosystems supports those species that can adapt well to rapid change. What researchers cannot predict is if long-term erosion trends will ever reverse. Many ecosystems are endemic to the coastal areas and extensive erosion (and/or development) could imperil or eradicate the functions associated with them. These include plant and animal diversity, endangered species habitat, and shorebird support habitat.

Primary Impacts Associated Human Occupation of Coastal Strand and Sand Dune Communities

The historically developed areas of southwest Washington were built on or behind a rapidly accreting shoreline. Land use planning issues usually dealt with the problem of accreting and drifting dunes that interrupted views and limited public access. Traditional coastal erosion and development hazards in the region were treated as localized problems with negligible regional impacts. However, recent sustained erosion at a number of sites has damaged infrastructure that required millions of Federal, State, and local dollars to be spent for shore protection. In many areas, long-term accretion appears to have slowed or reversed, indicating a regional trend toward erosion. In order to predict coastal behavior at management scale (over decades), the State of Washington investigated long-term coastal evolution and shoreline responses (see Kaminsky and Gelfenbaum 2000). Until long-term management strategies are developed, localized shoreline erosion projects are likely to increase in number and extent.

Human occupation of the coastal strand and dune ecosystem will continue to require shoreline protection measures. Given the apparent long-term erosion trend, these activities will continue to increase. Additional occupation of the coastal zone will also necessitate additional erosion protection features (such as shoreline armoring or hardening, bulkheads, dikes, seawalls, and/or beach nourishment), as well as management strategies including land use planning to discourage development in coastal erosion hazard areas, movement of infrastructure out of the erosion zone, and education of property buyers in coastal hazard areas.

The long-term impacts of hardened shoreline protection measures are unknown. Hardening of the dynamic shoreline may result in erosion or scour elsewhere along the shore or may prove to be only a temporary solution to a large scale, long-term problem. Unlike the natural dynamics of the shifting coastal strand and sand dune ecosystems, which result in shifts of habitat types over time, hardening represents a loss or degradation of habitat by creating a static feature within the landscape. Erosion may continue to occur around the static feature, resulting in both loss and gain of habitat types. To date, hardening measures have usually resulted in a loss of habitat

because of the location of most projects (along eroding shorelines). The loss of habitat results in impacts to shorebird resting and feeding habitat, migratory and resident fish resting, feeding, and spawning habitat, and loss of human access to shorelines. Development of the coastal sand and dune areas also result in loss of unique dune and interdunal ecosystems that support a variety of plant and animal species. Between development pressures and erosion, the vegetated dune communities are most at risk because of the lack of opportunity for them to re-establish elsewhere. That is, there is a finite amount of space for these communities to exist along the coastal shelf.

Reasonably Foreseeable Future Impacts

Current studies by the State of Washington are ongoing with hopes to provide local communities with some management strategies for what appears to be long-term erosion issues (Kaminsky and Gelfenbaum 1999). Those management strategies have yet to be developed. Erosion control and development will continue to be active within the project area in the foreseeable future. New developments are proposed along the coastal strand and protection of existing infrastructure will be an on-going concern for the City of Westport, the State of Washington, and private landowners. These will likely include a multitude of shoreline stabilization projects, channel diversion projects, and other proposals to either dissipate energy or provide additional sand sources to the littoral processes.

Current Actions

No other known projects are being implemented in the project area at this time. The Corps is planning a study of long-term solutions to assure continued function of the navigation channel. A development project (golf course and condominium complex) has also been proposed south of the project area, but this project has not received all of the necessary permits to begin construction (see discussion under Indirect Impacts in Section 6).

Cumulative Impacts Associated with the Proposed Project

The placement of sand along the Half Moon Bay shoreline for protection of the breach fill will mimic natural accretion patterns of the coastal strand and sand dune ecosystems. The additional sand will likely experience water and wind erosion and deposition much like the existing landscape. The project will not change the characteristics of the function or extent of the existing navigation project so therefore will not affect other shoreline processes. The project will also not result in any changes to the human occupancy of the project area. The Corps concludes that there will not be a significant cumulative effect associated with this action.

Appendix C
Public Notice



US Army Corps
of Engineers.

Seattle District

Public Notice

Navigation Section
Post Office Box 3755
Seattle, Washington 98124-3755
ATTN: Hiram Arden (OD-TS-NS)
Email: hiram.t.arden@usace.army.mil

Public Notice Date: December 24, 2003
Expiration Date: January 14, 2004
Reference: CENWS-OD-TS-NS-21R

U.S. ARMY CORPS OF ENGINEERS, PLACEMENT OF SAND, SOUTH JETTY
BREACH FILL MAINTENANCE, WESTPORT, WASHINGTON

REVISED
21-DAY NOTICE

Interested parties are hereby notified that the U.S. Army Corps of Engineers, Seattle District (Corps) proposes the placement of approximately (25,000 cubic yards) of sandy dredged materials at the South Jetty breach fill and along a rapidly eroding sandy shoreline adjacent to the Grays Harbor south jetty. The proposed sand placement is considered an interim measure intended to reduce the risk of another breach occurring until a long-term management solution can be formulated and implemented. The proposed project is described below and shown on the enclosed figures. The proposed work will occur in January - February 2004 with in water work completed by February 14, 2004. The in water construction window opens again on July 15, 2004. The purpose of this Public Notice is to solicit comments from interested persons, groups and agencies.

LOCATION

The project area is located along the shoreline of Half Moon Bay in southwestern Grays Harbor, adjacent to Westhaven State Park in Westport, Grays Harbor County, Washington (T16N, R12W, Section 1).

PROJECT PURPOSE AND NEED

After winter storms breached the sand spit adjacent to the Grays Harbor south jetty in 1993, the Corps placed about 600,000 cubic yards of sand to close the breach until a "long term solution" could be developed. Rapid erosion has continued and if left unchecked would result in the formation of another breach between the South Jetty and the adjacent South Beach. An interim action is necessary to prevent another breach from occurring and threatening the stability of the jetty until a long-term plan has been implemented.

AUTHORITY

The Grays Harbor and Chehalis River Project, including maintenance of the Federal

navigation channel and the South Jetty, is authorized by the River and Harbor Act of August 30, 1935 (House Document 53, 73rd Congress, 2nd Session) and the Water Resources Development Act of November 17, 1986 (Public Law 99-662). The proposed work is within the Grays Harbor and Chehalis River Project operations and maintenance (O&M) authority because its intent is to protect navigation features, including the south jetty and navigation channel. There is a proper use of O&M funds because of the reasonable relationship between the project and its purpose for protecting a Congressionally authorized navigation project, including features (i.e., South Jetty and Federal Channel), from a possible breach landward of the South Jetty.

PROPOSED PROJECT

The proposed project consists of placing approximately (25,000 cubic yards) of sand material in three locations on the breach fill. The material will be placed along the southeast corner of the fill between the rapidly eroding shoreline edge and the +4-foot depth contour (MLLW datum), in a "channel" that has formed on the east side of the fill, and on the northeast corner of the fill, as shown on the attached drawing. The material will be end-dumped by trucks from an access road on the upper bank. Upland grading of sand material will occur. Currents and waves are expected to re-grade and disperse the material that is placed along the beach.

The sand material will be rehandled from the existing Corps' sand stockpile. The sand stockpile is sacrificial to nourish the highly erosive sand beach of Half Moon Bay. The sand stockpile has also been used to nourish the breach fill against continued erosion. The performance of sand materials placed will be carefully monitored during the formulation of a long-term solution for management of erosion in this area.

ENDANGERED SPECIES

The Endangered Species Act of 1973, as amended, requires assessment of potential impacts to listed and proposed species. Federally listed and proposed species which may occur in the project vicinity include five species listed as threatened, the bald eagle (*Haliaeetus leucocephalus*), brown pelican (*Pelecanus occidentalis*), Western snowy plover (*Charadrius alexandrius nivosus*), marbled murrelet (*Brachyramphus marmoratus*), and bull trout (*Salvelinus confluentus*).

After receipt of comments from the initial June 2003 public notice, covering essentially the same area with different material, the Corps evaluated the potential impacts to the listed species and received letters from both service agencies that confirmed a preliminary determination made that the proposed work may affect, but is not likely to adversely affect threatened species, or their critical habitat, under the jurisdiction of U.S. Fish and Wildlife Service. The project is expected to have no effect on marine mammal and sea turtle species under the jurisdiction of National Marine Fisheries Service.

CULTURAL AND HISTORIC RESOURCES

The Seattle District has reviewed the latest published version of the National Register of

Historic Places, lists of properties determined eligible, and other sources of information. The following is current knowledge of the presence or absence of historic properties and the effects of the undertaking upon these properties:

The project area was created after construction of the Grays Harbor South Jetty and has had no historic human habitation; therefore, little likelihood exists for the proposed project to impinge on an historic property.

The District Engineer invites responses to this Public Notice from Federal, State and local agencies, historical and archeological societies, Indian tribes and other parties likely to have knowledge of or concerns with historic properties in the area.

PUBLIC HEARING

Any person may request, in writing and within the comment period specified in this notice, that a public hearing be held to consider this proposal. Requests for public hearings shall state, with particularity, the reason for holding a public hearing.

EVALUATION

The decision whether to perform the proposed work will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to modify, condition, or not proceed with the proposed work. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

The evaluation of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act. This evaluation will include an alternatives analysis.

ADDITIONAL EVALUATION

The State of Washington reviewed the initial public notice date June 27, 2003, for the previously proposed work in the same area for consistency with the approved Washington Coastal Zone Management Program. A coastal zone consistency statement was prepared and submitted to the Department of Ecology. A determination was made that the proposed maintenance work is consistent to the maximum extent practicable with the enforceable policies of the State of Washington Coastal Zone Management Program.

A Section 401 water quality certification is requested from the State of Washington.

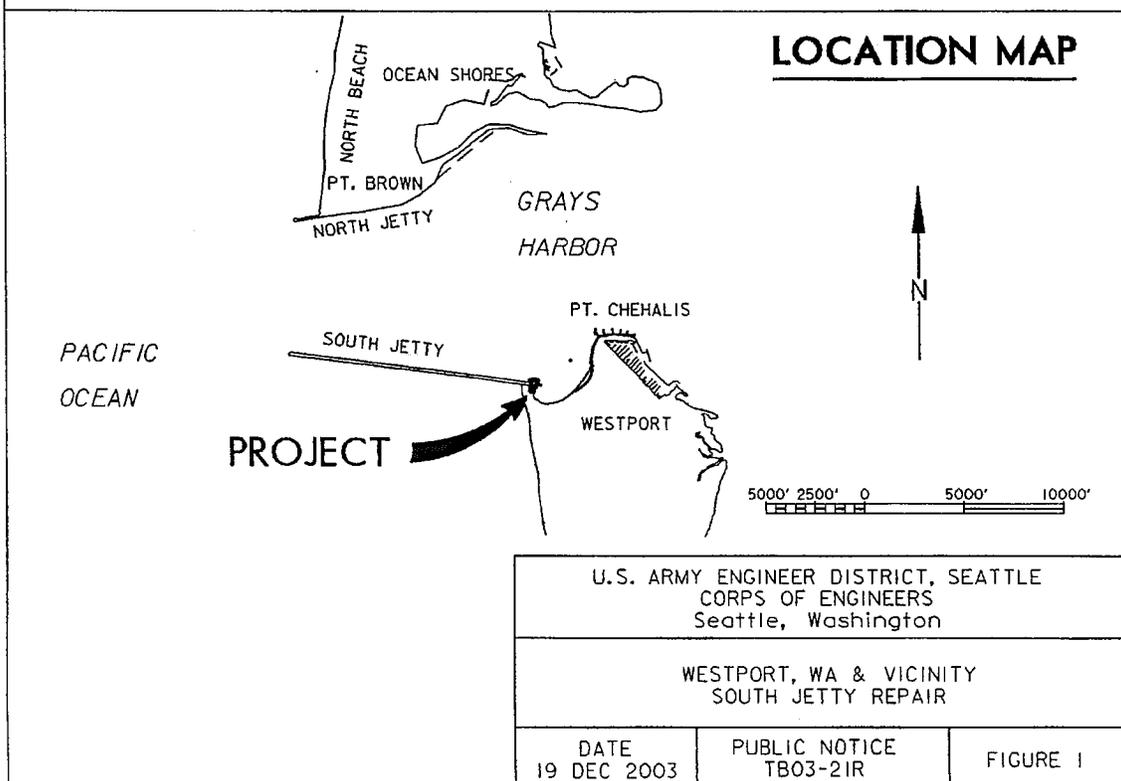
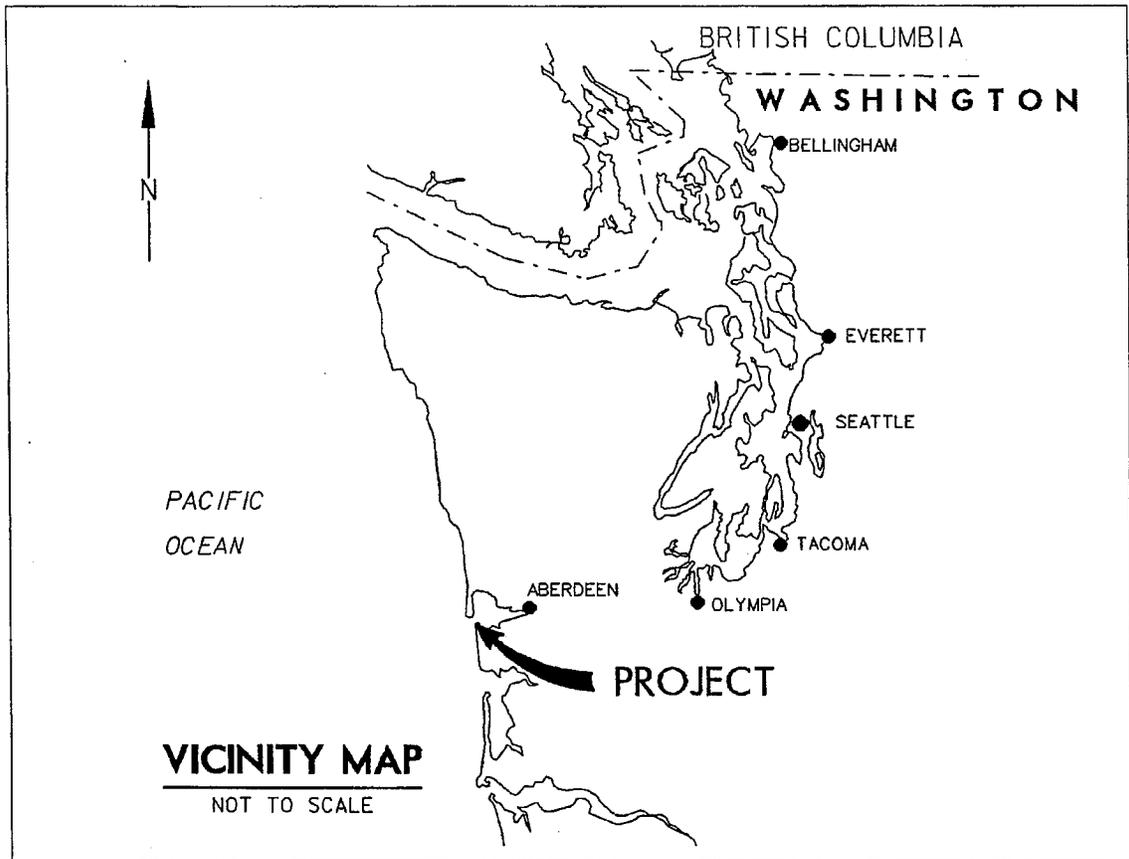
Pursuant to the National Environmental Policy Act, a draft Environmental Assessment has been prepared for the placement of sand and is available on the Seattle District web site at: <http://www.nws.usace.army.mil/ers/envirdocs.html>. A preliminary determination has been made that the proposed maintenance work will not significantly affect the quality of the human environment and, therefore, an Environmental Impact Statement is not required.

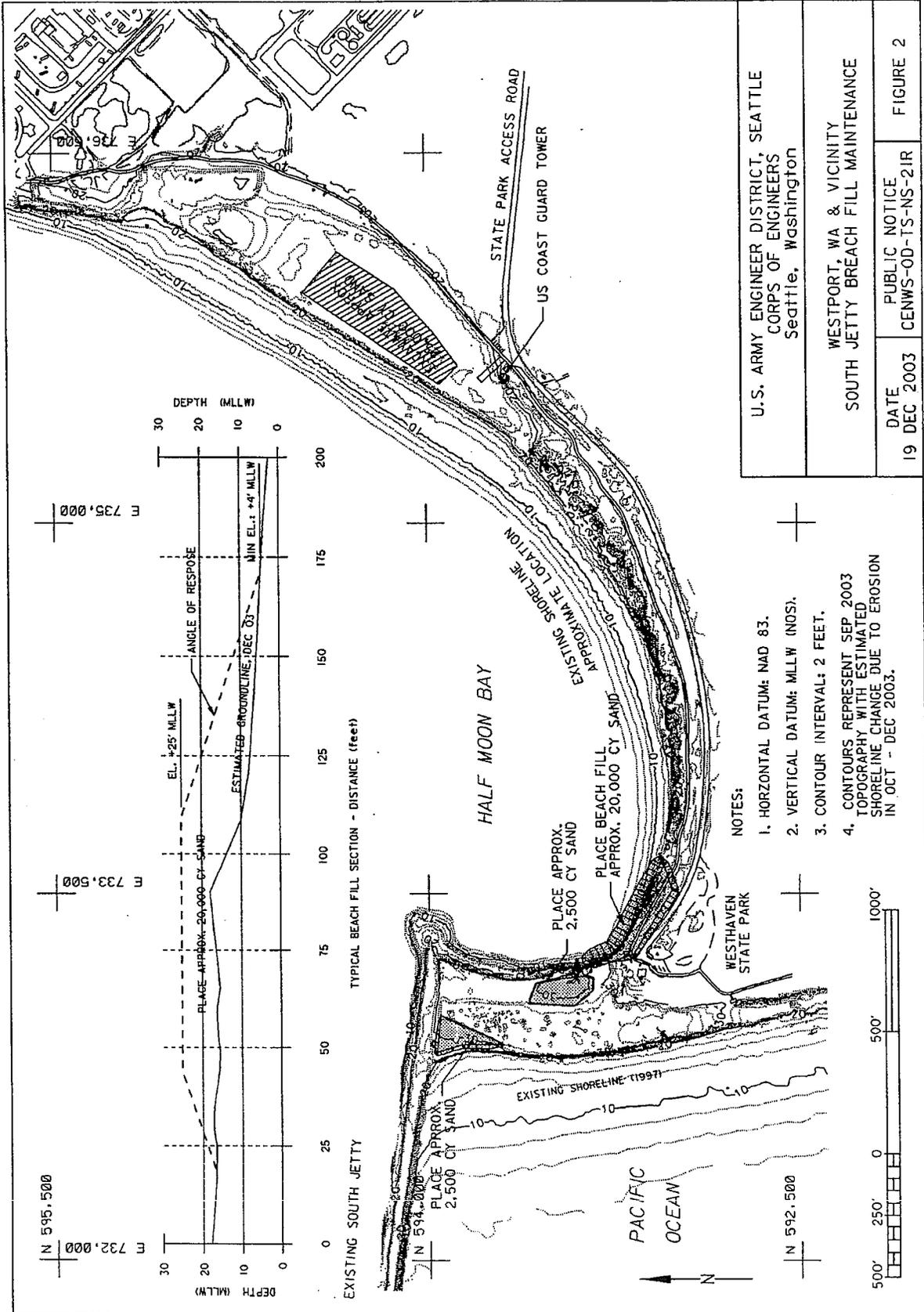
COMMENT AND REVIEW PERIOD

Conventional mail or e-mail comments on these factors will be accepted, made part of the record, and will be considered in determining whether it would be in the best public interest to proceed with the proposed project. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include the subject line of the e-mail message the permit applicant's name and reference number as shown on the notice. All e-mail comments should be sent to hiram.t.arden@usace.army.mil. Conventional mail comments should reach this office, ATTN: Navigation Section, not later than the expiration date of this public notice to ensure consideration. Requests for additional information should be directed to Hiram Arden, Project Manager at (206) 764-3401.



Hiram Arden
Project Manager
Navigation Section





U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS Seattle, Washington	
WESTPORT, WA & VICINITY SOUTH JETTY BREACH FILL MAINTENANCE	
DATE 19 DEC 2003	PUBLIC NOTICE CENWS-0D-TS-NS-2IR
FIGURE 2	

- NOTES:
1. HORIZONTAL DATUM: NAD 83.
 2. VERTICAL DATUM: MLLW (INOS).
 3. CONTOUR INTERVAL: 2 FEET.
 4. CONTOURS REPRESENT SEP 2003 TOPOGRAPHY WITH ESTIMATED SHORELINE CHANGE DUE TO EROSION IN OCT - DEC 2003.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Notice of Application for
Water Quality Certification
and for
Certification of Consistency with the
Washington Coastal Zone Management Program

Date: December 24, 2003

Notice is hereby given that a request has been filed with the Department of Ecology, pursuant to the requirements of Section 401 of the federal Clean Water Act of 1977 (PL 95-217), to certify that the project described in the U.S. Army Corps of Engineers Public Notice No. CENWS-OD-TS-NS-21R will comply with the Sections 301, 302, 303, 306, and 307 of the Act, and with applicable provisions of State and Federal water pollution control laws.

Notice is hereby given that a request has been filed with the Department of Ecology, pursuant to the requirements of Section 307© of the Federal Coastal Zone Management Act of 1972 (16 U.S.C. 1451), to certify that the above referenced project will comply with the Washington State Coastal Zone Management Program and that the project will be conducted in a manner consistent with that program.

Any person desiring to present views on the project pertaining to the project on either or both (1) compliance with water pollution control laws or (2) the project's compliance or consistency with the Washington State Coastal Zone Management Program may do so by providing written comments within 30 days of the above publication date to:

Federal Permit Coordinator
Department of Ecology
SEA Program
Post Office Box 47600
Olympia, Washington 98504-7600

Appendix E
Comment Responses

South Jetty Breach Fill Maintenance at Westport in Grays Harbor, Washington

Public Notice CENWS-OD-TS-NS-21R and draft EA Comment and Response Summary

The Corps received twenty-six comment sources (letters and e-mails) on the south jetty breach fill maintenance (sand placement) proposal. Eleven of the letters were from Federal, state and local governments, including three regulatory agencies. The remaining letters were from private citizens, and environmental interest groups. The comments summarized below came from: Washington Department of Fish and Wildlife, US Coast Guard, US Environmental Protection Agency, US Fish and Wildlife Service, Washington State Parks and Recreation Commission, Grays Harbor County, City of Ocean Shores, City of Westport, Port of Grays Harbor, Friends of Grays Harbor, Surfrider Foundation, Chehalis River Council, Washington Environmental Council, Wildlife Forever, Waste Action Project (WAP) and private citizens. In addition, a Water Quality Certification ORDER #04SEASR-5992 / Coastal Zone Consistency Determination for the Army Corps of Engineers' public notice number CENWS-OD-TS-NS-21R issued by the Washington State Department of Ecology dated January 29, 2004.

Letter 1 (WDFW Advisory HPA 1/8/04):

- WDFW is concerned that the wave diffraction mound is not functioning as planned, due to the remnant jetty rock east of the mound. The wave diffraction system should be physically modeled with the remnant jetty in place. We encourage a planning process to design interventions to utilize natural forces to promote accretion of native material.

Response:

- Seattle District shares your concerns about the performance of the wave diffraction mound. The Corps of Engineers' Engineer Research and Development Center (ERDC) Coastal and Hydraulics Laboratory (CHL) has completed two technical reports on the Grays Harbor project titled South Jetty Processes Study, Grays Harbor, Washington: Evaluation of Engineering Structures and Maintenance Measures (ERDC/CHL TR-03-4) dated April 2003 and North Jetty Performance and Entrance Navigation Channel Maintenance, Grays Harbor, Washington (ERDC/CHL TR-03-12) dated September 2003. However, we disagree that the remnant jetty stone is contributing to the erosion in the southwest corner of the bay. The remnant jetty acted as a breakwater and reduced wave energies during certain water level/storm combinations in the areas where we are now seeing more pronounced erosion. ERDC has constructed a physical model of Half Moon Bay to evaluate several modifications to the mound and the remnant jetty. The Corps strives to manage our maintenance activities to promote beneficial uses of the dredged resources.

Letter 2 (Friends of Grays Harbor 1/12/04 email):

We respectfully request an extension for comment until January 23, 2004.

Sand placement at ocean side fill and topside gully site is appropriate.

The third fill site near West Haven State Park of 20,000 CY is inappropriate for the following reasons: (1) The fill does not protect the navigation channel as required by O&M limitations; (2) the erosion at that location is not an emergency; (3) the fill emboldens development in the near shoreland vicinity and (4) its placement adds to cumulative impact already visited on the Half Moon Bay (HMB) beach environment by previous erosion interventions.

It is FOGH's contention that a better use of tax payers' funds would be to use the money now appropriated for the 20,000 CY fill be applied to a long term study that would develop a menu of options that in time would solve this problem that first occurred in 1948.

It is the board's conviction that development of a comprehensive, peer reviewed NEPA [document] for HMB is needed to better serve the public interest in addressing erosion issues at Westport.

Responses:

A time extension on the public notice from January 14 to January 23, 2004 was not granted on the basis of the email comment that the drawings were not legible with their computer soft ware. Within an hour of receiving the email request large- scale copies were sent certified mail to Mr. Grunbaum. Comments dated no later than January 23, 2004 were accepted.

Appreciate the comment that placement of sand is appropriate in two of the three areas proposed.

- (1) See EA Section 1.4 "Authority" for discussion of project authorization. (2) See 2nd and 3rd paragraphs of EA Section 2.1 "No Action" for discussion of potential consequences of unabated shoreline erosion in locations where sand placement is proposed. Interpretations of "emergency" vary but it is the Corps' view that taking action now to prolong the life of the breach fill is more cost effective than dealing with a breach once it has occurred. Furthermore, as stated in Section 2.1, development of a suitable long-term approach to maintenance of the Federal Navigation Project will be compromised should a breach be allowed to recur. The Corps presently has the choice of addressing the causative agents of an impending "emergency" now or doing so at much greater expense and with less options should an "emergency" occur. (3) See EA Section 6 "Indirect Effects" for discussion of potential effects of breach fill maintenance efforts on local development. (4) See EA Section 7 "Cumulative Effects" which states the Corps' position that sand placement will result in a small (but not "significant") addition to the cumulative impacts on the biological environment at Half Moon Bay.

Seattle District is committed to leading an improved participatory, collaborative process with federal and state agencies and other stakeholders to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement. Relative to this, a study is currently being conducted to develop a plan for long-term maintenance of the Federal Project. This will be a major item for discussion in the collaborative process. It is the Corps' position that the proposed expenditure associated with prolonging the breach fill until the long-term study can be completed is prudent and in the best interest of the American taxpayer. Doing nothing now could

allow a breach to recur and require the taxpayer to bear the costs associated with filling the breach at some point in the future. This cost would be much greater than the cost of the currently proposed sand placement. In addition, as stated in Section 2.1 of the EA, "if action is not taken to slow ongoing erosion in HMB, the effects of this erosion may constrain the array of suitable design options available for long-term maintenance of the South jetty." In other words, the comprehensive and deliberate planning process associated with developing a prudent long-term approach to maintenance of the navigation project could be preempted by external factors should a breach recur and the commensurate public perception of an acute emergency arise.

- The Corps believes the EA is comprehensive and deals fairly with all pertinent environmental issues. Based on the EA, the finding of no significant impact (FONSI) has determined that no Federal environmental impact statement is required.

Letter 3 (Environmental Protection Agency 1/14/04):

- EPA is pleased sand will be used rather than the originally proposed gravel and cobble. We do not support the Corps placing sand for the purposes of protecting the walkway, road, or the portable restroom facilities.
- A transparent and credible problem identification process, followed by planning and pursuit of a coordinated long-term management strategy is absolutely critical.
- EPA continues to be concerned by the lack of coordination/communication from the Corps regarding conditions and actions on-the-ground in the vicinity of the breach fill, as well as information on the status of on-going studies, the long-term strategy, and public notices.
- It is critical that technical work done in support of a long-term planning effort receive peer review. EPA is willing to work with the Corps on a peer review strategy.
- Long-term alternatives based on technical work that lacks appropriate coordination and review will lack credibility, and will ultimately undermine our mutual goal of achieving a clear and acceptable long-term strategy.
- Specific comments in the enclosure should be incorporated into the EA.

Responses:

- Appreciate EPA’s approval of sand placement for preservation of the south jetty breach fill, not for the protection of a walkway, road or temporary restroom.
- Seattle District is committed to leading an improved participatory, collaborative process with federal and state agencies and other stakeholders to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement.
- Peer review of the technical studies is planned.
- Comment noted.
- All comments provided in the enclosure were addressed in the final EA.

Letter 4 (Surfrider Foundation 1/14/04 email):

Our concern with this project is that it is, by our count, the ninth major project in Half Moon Bay since the original breach fill project in 1994. At no point have the impacts of these various interim and “emergency” projects been considered cumulatively. In keeping with the letter and spirit of the National Environmental Protection Act, it is our view that this and any future projects should be reviewed with a full Environmental Impact Statement.

We respectfully request that your office make an immediate and pro-active effort to coordinate the various interest groups in a community-driven long-term strategy development process.

Responses:

Impacts of all of the nine actions you referred to have been evaluated in previous Corps environmental assessments.

This current NEPA EA has a section that addresses cumulative impacts in the project region.

Seattle District is committed to leading an improved participatory, collaborative process with federal and state agencies and other stakeholders to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement.

Letter 5 (Chehalis River Council 1/14/04 email):

We are concerned that millions of dollars of taxpayers’ money have gone into protecting a tiny area of coastline that cannot effectively be protected from the impacts of weather, tides and shifting patterns of sand dispersion. The Corps’ own environmental assessment points out that erosion will continue to occur in this area and sand will have to be replenished year after year.

...A comprehensive, long-term plan for this area needs to be developed and reviewed through the NEPA environmental impact statement process. This EIS should be independent and peer reviewed. Until this review is complete, ad hoc “fixes” that will necessarily have unforeseen consequences and that delay grappling with long-term issues

should be halted.

The CRC believes that the mandate of the Corps of Engineers is limited to protecting navigation in the Westport harbor and specifically in this case protecting the South Jetty. We are concerned about sand destined for the Half Moon Bay shoreline. The Corps should strictly adhere to its stated position and be sure that interim actions are not taken with the intention of directly or indirectly facilitating development of the Links golf course and condominium project.

Humans can decide to pull back from the near shore areas and allow the sea to do its work...The Corps should encourage this picture, which will leave it free to concentrate on limited engineering projects that have some hope of effectively protecting those shoreline features that need to be protected such as jetties and navigation channels.

Responses:

The proposed project is intended to slow the degradation of the breach fill until a comprehensive study of the effects of continued breach fill recession on the Federal Project can be completed. This study is expected to yield a feasible, cost effective recommendation for ensuring the continued viability of the Federal Project. We believe that taking action now will be less costly than waiting to respond in a crisis mode to the recurrence of a breach.

Seattle District is committed to leading an improved participatory, collaborative process with federal and state agencies and other stakeholders to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement.

See EA Section 1.4 "Authority" and EA Section 2.1 (paragraphs 2 & 3) for discussion on why this action is appropriate and legitimate within the current Corps mandate in Grays Harbor. See EA Section 6 "Indirect Effects" for discussion of potential effects of breach fill maintenance efforts on local development. The intent of the proposed project is solely to preserve the Breach Fill and not to accommodate, facilitate or encourage local development.

The sole purpose of the proposed action is to ensure the continued viability of the Grays Harbor Federal Navigation Project. Maintaining the breach fill through sand placement is viewed by the Corps as a viable and reasonably effective means of protecting essential navigation features until a permanent plan for maintenance of the Federal Project can be formulated and implemented.

Letter 6 (Knoll Lowney 1/14/04 email):

- Please consider these pictures of the building of the buried revetment in 1998-1999 provided by the Corps in your decision.

Response:

- Thank you for these pictures. We have evaluated them and they are hereby incorporated into the administrative record.

Letter 7 (Knoll Lowney 1/14/04 email):

- Please consider these slides on sand placement proposal in your decision.

Response:

- The slides were prepared by a consultant to the Southwest Washington Coastal Communities, in response to inquiries about the performance of the two placements of transition gravel at Half Moon Bay to slow erosion of the South Jetty breach fill. They were associated with a very preliminary assessment of the potential shoreline response to placing additional transition gravel. This is not a Corps document although some of the slides were generated from Corps survey data and exhibits from a South Jetty Study Processes study report. The context is a source of confusion. A Corps' third placement proposal for additional gravel has been withdrawn and there was never a proposal for a fourth placement. The sand placement plan dated 2001 was limited to the estimated sand volume available for restoring the breach fill. These slides have been included in the administrative records.

Letter 8 (Arthur Grunbaum 1/14/04 email):

- Proposal to excavate 25,000 cubic yards of sand material from the stockpile would be a repeat of the excavation made in 2002 and replacement was not adequately achieved with a section of the mitigation beach not available for recreational purposes. The public has to traverse a narrow path to avoid walking in a wet weather inundation area.
- The recent illegal "emergency fix" by the City of Westport has created a dangerous drop to the beach and the proposed addition of sand will exacerbate public access.
- I strongly believe that the Corps and regulatory agencies should not allow further experimental fixes without a complete, peer-reviewed NEPA EIS.

Responses:

- The currently proposed volume 25,000 cubic yards is approximately one fifth of the volume excavated in 2002. The excavation area is set back adequately to provide pedestrian access; however, we acknowledge that some temporary public access restrictions will be necessary for safety. A perimeter dike and temporary retention pond area is necessary for the confinement of the hydraulic slurry of water and sandy dredged materials. A minimum pond area is a temporary requirement for return water compliance with receiving water quality criteria. A small depression of seasonal standing water is not uncommon at such direct placement sites.
- The final Environmental Assessment contains a revised discussion of recreational impacts and recognizes that the project will have temporary adverse impacts on public shoreline access during the placement activity; however, the seasonal erosion scarp affects recreational access due to the dynamic nature of the area that is eroding the adjacent foredune.
- The Corps has prepared this comprehensive EA that evaluates project impacts. Based on the EA, we determined that a Finding of No Significant Impact (FONSI), and not a Federal EIS, was appropriate. However, regarding long-term strategy, we are committed to leading an improved participatory, collaborative process with federal and state agencies and other stakeholders to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement. This process could be initiated as early as next summer, with collaborative training for the agencies and stakeholders prior to collaborative meetings. The sand placement interim action is necessary to avoid more costly emergency repairs and should facilitate a focus on a long-term management strategy and appropriate peer review.

Letter 9 (David and Vicky Mascarenas 1/13/04):

- A full environmental impact statement should be prepared. No one has looked at the long-term effects armoring would have on the shoreline, adjacent wetlands, marine life, and recreation.
- Millions of taxpayer dollars have been spent.
- The sand that has been placed on the shoreline by the state park has made the beach inaccessible.

Responses:

- The proposed project does not involve shoreline armoring. Rather, we have proposed using sandy dredged material to slow shoreline retreat. The effects of this project on the shoreline, adjacent wetlands, marine life, and recreation have been comprehensively evaluated in this NEPA environmental assessment.
- We agree that a large amount of money has been spent to protect features of the federal navigation project. However, as described in sections 1.2 and 2.1 of the NEPA environmental assessment for this project, the Corps' position is that preventative maintenance of the breach fill is a more cost-effective strategy than after-the-fact emergency repairs. A relatively small quantity of material is required to restore the existing breach fill as compared to the quantity required to fill a breach (25,000 cubic yards proposed here vs. 600,000 cubic yards placed in 1994).
- We agree that the project temporarily impacts public access to the beach but not significantly more than seasonal erosion of the fore dune in this dynamic area. Refer to our revised section on recreation impacts in this final EA

Letter 10 (Linda Orgel 1/12/04 email):

- The frequent, short-term and ultimately unsuccessful attempts at stopping erosion have introduced intrusive structures on the shoreline at great expense and harm to the environment.
- The continued piecemealing of "emergency" fixes are a way to circumvent the law and harmful to the environment. The Corps needs to stop doing interim measures and prepare a thorough environmental impact study of the long-term cumulative impacts of erosion control.
- The major portion of the proposed sand placement will be in an area other than the 1993 breach. Where is the study that shows the erosion in the area where most of the placement is planned will threaten the jetty?
- The sand that will be excavated from the dredged material disposal site is required by litigation to cover the Point Chehalis revetment extension. Where is the environmental review for the impact of removing sand from this area?
- What important resource will this action protect that justifies the use of public funds?
- Since 20,000 cubic yards of fill will be placed in an area that threatens no infrastructure other than a proposed private condominium development, what is the justification for spending public funds to protect private development?
- You are planning to spend up to \$1,000,000 for an action that you claim will have no consequence because it will be washed away.

Responses:

- It has never been our attempt to stop erosion. Our intent is to protect federally authorized features of the Grays Harbor and Chehalis River navigation project by maintaining the integrity of the breach fill, thereby preventing another breach. We have modified this

proposal (from the originally proposed transition cobble and gravel beach) to reduce biological and recreational impacts.

- Seattle District is committed to leading an improved participatory, collaborative process with federal and state agencies and other stakeholders to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement.
- All of the sand will be deposited either on the existing breach fill or landward of the area where sand was placed in 1994 to fill the breach. See 2nd and 3rd paragraphs of EA Section 2.1 “No Action” for discussion of potential consequences of unabated shoreline erosion in locations where sand placement is proposed. An analysis of the consequences of a breach on the Federal Project (South Jetty and Navigation Channel) is part of the ongoing study to develop a plan for long-term maintenance of the Navigation Project.
- Section 5.1 of the NEPA environmental assessment addresses the impact of removing material from the Point Chehalis revetment extension mitigation stockpile.
- The intent of this action is to protect the south jetty and navigation channel.
- The intent of this action is not to protect private development. Please see sections 1.2 and 2.1 of the NEPA environmental assessment for the Corps’ justification for this proposal.
- The estimated cost range is between \$100,000 and \$500,000. The purpose of this proposed action is not to stop erosion in HMB but to prolong the life of the breach fill until a study to develop a viable plan for long-term maintenance of the Federal Project is completed and implemented. It is the Corps’ position that the proposed expenditure associated with preserving the breach fill is justified and in the best interest of the American taxpayer. Doing nothing now could allow a breach to recur and require the taxpayer to bear the costs associated with filling the breach at some time in the future. This cost would be much greater than the cost of the currently proposed sand placement.

Letter 11(Grays Harbor County 1/12/04):

- Grays Harbor County fully supports this proposal, as it will allow for the interim stabilization of the Half Moon Bay shoreline and reduce the risk of another breach until a long-term solution can be formulated and implemented.

Response:

- Comment acknowledged.

Letter 12 (Knoll Lowney, draft 1/14/04 and final 1/23/04):

- The proposed project describes what can be considered two distinct projects to (1) extend the life of the breach fill and to (2) nourish an area adjacent to the previous gravel placement. The Corps should consider all available information on the erosion situation in Half Moon Bay as well as previous actions.
- The Corps should consider all scientific data including ERDC and D. Kraus statement “that’s what we thought at first”, but the model shows that this would not be the case. He stated that the breach channel would have little or no effect.
- Corps public notice is inadequate because the e-mail address published on the notice was incorrect. The Corps has no existing authority to excavate sand from the beach and the public is not made aware of the importance of commenting on the existing Corps’ sand stockpile. The Corps proposes to excavate the beach.
- The Corps should take no more action in Half Moon Bay without first preparing and EIS on its erosion control in HMB. The Corps has failed to conduct an adequate evaluation of cumulative impacts in HMB. The Corps does not discuss the source of sand or the dredging project that will be required to replace the sand. The Corps incorrectly states that the project will not result in changes to the human occupancy of the area. The Corps has never determined the biological harm and cumulative impact.
- The Corps should not excavate sand from the beach in Half Moon Bay. The last excavation created significant impacts on public access, and major aesthetic and water quality impacts that may have contributed to draining and adjacent wetland. The Corps incorrectly states excavation will take place behind the buried revetment.
- Excavation violates the Coastal Zone Management Act. The Corps should not place sand on the shoreline of Half Moon Bay. Protecting the jetty access road and shoreward edge of the State Park parking lot is outside of the Corps’ authority.
- Placing sand on the beach will have significant and uncertain impacts.
- Protecting the jetty access road will facilitate the links project and development of condominiums, with resulting impacts.
- Half Moon Bay is a popular coastal access important for human activity that provides habitat for a variety of fish species. The Corps has completed discrete and major projects in Half Moon Bay and combats erosion routinely by “nourishing” Half Moon Bay Beaches with sand from Corps’ maintenance dredging operations.

Responses:

- The Corps has considered all available information in development of this EA. Dr. Kraus' extemporaneous response was to a question at a meeting to update stakeholders and agencies on technical studies and modeling capabilities in support of a determining a long-term solution on October 1, 2003 and concerned the capture of the ebb flow by a breach. His response referred to numerical modeling simulations of tidal circulation with the breach in place. There are two other important, longer-term processes that are not as immediate as a shift in ebb flow, that are presently under study. (1) Probable increase in channel infilling, hence dredging requirements, were the breach to remain open. (2) Evolution of a breach under storm waves and during extended periods of reversal in longshore sediment transport. Storms and denial of longshore sediment transport supply would tend to widen and deepen a breach beyond that which occurred in 1993 and possibly capture the ebb flow with significant adverse consequences.
- The email address on the public notice was correct. The Corps has the authority to use the sandy dredged materials for the protection of the federal navigation features. The proposed excavation is on the upper elevation of the mitigation stockpile and well above the beach.
- Cumulative impacts have been addressed in the final EA.
- The proposal does not excavate the beach of Half Moon Bay. The excavation is proposed on the top of the western portion of the mitigation stockpile and will be offset from the perimeter to accommodate public access, without significant aesthetic or water quality impacts. The documents have been corrected to indicate that the mitigation stockpile is located in front of the buried revetment.
- The Corps has determined that the proposed action is consistent with the City of Westport Shoreline Management Master Plan and the State Shoreline Management Program. The Corps has sent the rationale for this determination to the Department of Ecology for their review and concurrence. See EA Section 1.4 "Authority" for a discussion of our operations and maintenance authority relative to the Grays Harbor navigation project features.
- Placing sand on this sandy beach will not have significant impacts. See EA section 5 for a discussion of environmental effects. The EA also contains a revised treatment of recreational impacts.
- It is not the intent of this action to promote development. See EA section 6 "Indirect Effects".
- Comment noted.

Letter 13 (Knoll Lowney, 1/15/04 email):

- The Waste Action Project, a not for profit organization, has asked to join in the comments submitted by Friends of Grays Harbor (FOGH) on the public notice and also on any comments FOGH submits on the environmental assessment, finding of no significant impact (FONSI), and the Coastal Zone Management Act (CZMA) determination.

Response:

- Thank you for your comment.

Letter 14 (City of Ocean Shores 1/14/04 email)

The City of Ocean Shores approves of the Corps proposal.

Response:

Thank you for your comment.

Letter 15 (City of Westport 1/14/04 e-mail)

The City of Westport strongly supports the proposed placement of clean sand. The impacts of the proposed project will be insignificant due the material being used coming from a stock pile of sand that has been dredged from the entrance channel located adjacent to the South Jetty and Half Moon Bay.

The impact of a no action alternative has been demonstrated clearly. Since June approximately 28,000 square feet of shoreline area has been lost with in the footprint of the original breach fill, placed in 1993. With each storm, the breach fill area is reduced, increasing the potential for a rebreach to occur.

The erosion that is currently being experienced along the western shore of Half Moon Bay is directly related to the Corps previous actions. The design of the first two projects was modified based upon philosophical, not technical concerns of regulatory agencies during the permitting process. The removal of the remnant jetty was required as mitigation for the other two projects. The combined performance of these actions has directly contributed to the increased erosion rate in the relatively limited area of the currently proposed sand placement project.

As stated in the notice, this project is an interim measure until a long-term solution is identified. Without the proposed action by the Corps, the area of the breach fill will continue to erode and will almost undoubtedly reach a critical state requiring the Corp to take emergency action.

The City of Westport has placed clean sand and ecology blocks down in an attempt to protect the trail. The city is required to by the Hydraulics Project Approval issued by the Washington State Department of Fish and Wildlife to remove the blocks no later than February 14.

The City is also concerned about the Corps' commitment to maintenance of the proposed sand placement, because the sand fill will require periodic renourishment.

Responses:

Thank you for your comment.

The Corps agrees that impacts from this project will not be significant. Actually the stockpile of sand is primarily from the south reach channel maintenance dredging in 2002.

Thank you for your comment.

Letter 16 (USFWS 1/16/04):

- The Service does not object to the proposed work, providing the placement of sand on the Half Moon Bay shoreline does not negatively affect the City of Westport's ability to fulfill its obligation to remove the ecology blocks by February 15, 2004.
- The Service requests that the Corps' development of the long-term solution to the erosion problem at Half Moon Bay involve the participation of the federal and state resource agencies and other stakeholders in the early development phase of the planning process.
- The Service believes the limited or lack of success of the various shoreline protection measures that have been implemented since 1993 indicates the interaction of waves, currents, and sediment with the shoreline and existing structures is highly complex and warrants the full consideration and evaluation of a wide range of alternatives.
- The Service looks forward to working with the Corps on developing a long-term solution that both addresses the shoreline erosion problem at Half Moon Bay and protects the fish and wildlife resources of the area.

Responses:

- Thank you for your comment.
- If the City has not removed the ecology blocks prior to the proposed placement, the Corps will not place sand over the blocks. The Corps would reduce the yardage of sand placed at the site rather than bury the blocks so that they are irretrievable. However, the Corps fully expects the City to remove the blocks as required by their permit (see the letter dated January 16, 2004 summarized below).
- Seattle District is committed to leading an improved participatory, collaborative process with federal and state agencies and other stakeholders to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement.
- The Corps agrees that the South Jetty and Half Moon Bay area interaction is highly complex requiring the full consideration of a wide range of alternatives.
- The Corps welcomes your assistance in helping us develop a long-term strategy. that is protective of fish and wildlife resources.

Letter 17 (City of Westport 1/16/04):

- If the Corps project is constructed, the City will comply with the responsibilities under its Hydraulic Project Approval (HPA) to remove the ecology blocks from the shoreline no later than February 14, 2004.
- The Corps of Engineers inability to successfully permit and implement an interim measure to stabilize the shoreline until a long-term solution can be identified has led to the current situation.

Responses:

- Removal of the blocks is a prerequisite for the project sand placement as proposed.
- The purpose of the proposed project is not to stabilize the shoreline. Shoreline retreat in this area will continue. The purpose of the proposed action is to reduce the likelihood of another breach occurring.

Letter 18 (Kristi Ballo 1/13/04 email):

- Ms. Ballo would like the Corps to conduct a NEPA study on Half Moon Bay erosion.
- As a long-time resident of Grays Harbor, Ms. Ballo has seen the beach she loves disappear. She cannot provide happy memories of the beach to her children because the beach has eroded.
- The erosion fixes are not working. Armoring the beach is not the answer.
- It is not in the best interest of the public to lose a valuable recreational beach and at the same time spend taxpayer dollars on quick fixes.

Responses:

- The Corps has prepared this final EA and Finding of No Significant Impact that meets NEPA guidelines. However, we are planning to lead an improved participatory, collaborative process with federal and state agencies and other stakeholders, such as yourself, to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement.
- The Corps agrees that the project will have temporary adverse impact on shoreline access. Your comment is appreciated.
- The South Jetty and Half Moon Bay area is very dynamic. Interim measures have been monitored with varying success at slowing erosion. Placement of sand, not armoring is proposed in the interim until a long-term solution is determined and implemented.
- Some existing intertidal area will be lost due to the project. However, sand placement as an interim action is much less expensive than the cost of restoring the breach fill after a breach.

Letter 19 (Berkley Barker, Former Mayor of City of Westport 1/13/04 email):

It has been proven by many Federal, Corps, State and Private studies that the erosion in the area associated with the South Jetty in Westport is in fact caused by the jetty structure itself and the Army Corps of Engineers' practice of dredging the channel on the South side. This moved the channel from the North Jetty, its original position, to where it is today. In the past 50 years hundreds of acres of land adjacent to the jetty and Westport have been lost due to this man made erosion. According to Army Corps maps, the area we now call Half Moon Bay was a landmass that the South Jetty was attached to and extended to what is now the NW armored tip of the Westport downtown marina area. It is time for the Army Corps of Engineers to step up and address the damage caused to the land by their practices.

The Corps needs to stand up to those that would use this man made erosion for their own ends and agendas. The Corps has allowed environmental activists to alter every proven project engineered and tested so far with disastrous results.

Responses:

Accretion and erosion have been alternating phenomena at the entrance to Grays Harbor. Prior to construction of the jetty system around the beginning of the 20th century, the shoreline of Point Chehalis/Point Hansen was landward of the area currently occupied by Westhaven State Park and the breach fill. Subsequent to Jetty construction, rapid shoreline accretion occurred within several miles North of the North Jetty and South of the South Jetty. In other words, part of the landmass that has been eroding over the past 60+ years to produce the feature known as "Half Moon Bay" was originally formed by the sediment retaining effects of the South Jetty. The erosion leading to formation of Half Moon Bay was initiated partly by the rehabilitation of the South Jetty in the late 1930s, which lead to a reduction in the quantity of sediment traveling past the South Jetty along Point Chehalis. The sand placement currently proposed is intended to protect the breach fill and, by extension, the Federal Navigation Project. Addressing shoreline erosion caused by the Federal Project falls outside the O&M authority under which the current action is being initiated

The Corps has been mandated by the United States Congress to ensure the continued maintenance of the Federal Navigation Project. In pursuit of this mission, the Corps is committed to preparing high quality technical products, including this environmental assessment, crafted in close but objective consultation with all stakeholders involved.

Letter 20 (Jinx Stedman 1/13/04 email):

- Mr. Stedman is displeased with the proposed action.
- Mr. Stedman believes that no action should be taken without first preparing an environmental impact statement.
- Nine major projects have been constructed in a decade, and all were implemented without adequate environmental reviews. Each had significant environmental consequences and many have had unintended consequences in relocating the erosion problems to other areas of the beach.

Responses:

- Comment noted.
- Based on this final environmental assessment, prepared pursuant to NEPA, we have determined that a Federal Environmental Impact Statement is not required, but rather have prepared a finding of no significant impact (FONSI).
- We acknowledge that over the past several years Seattle District has responded to erosion concerns in the vicinity of the south jetty in a crisis-management mode. All of the nine actions you refer to have been evaluated in earlier Corps' environmental assessments. We recognize that some of these actions may have had unintended consequences. In view of this, we plan to lead an improved participatory, collaborative process with federal and state agencies and other stakeholders, such as yourself, to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement.

Letter 21 (Port of Grays Harbor 1/7/04 email):

- The Port of Grays Harbor believes this project is vital to the maintenance of the Grays Harbor Navigation Project and specifically the integrity of the south jetty. This interim action is necessary to prevent another breach from occurring and threatening the stability of the jetty until a long-term plan has been implemented.

Response:

- Thank you for your comment.

Letter 22 (Washington Environmental Council 1/13/04 email):

- Erosion control activities occurring along Washington's coastline continue to raise significant ecological and fiscal questions. To date, federal, state, and local governments continue to respond to concerns over potential damage to private property and public facilities by allowing tons of fill to be placed on public beaches. This "solution" can have profound impacts to fish and wildlife habitat and public recreation.
- We are very concerned that the Corps' erosion control program in the vicinity of the Grays Harbor south jetty has included over nine major projects in a decade, and that each project was implemented without adequate environmental review.
- This latest proposal will be the fourth placement of dredge materials along the Half Moon Bay shoreline, and appears to be yet another example of an ongoing, piecemeal approach to coastal erosion.
- The Washington Environmental Coalition (WEC) calls for a comprehensive NEPA environmental review of this action. This review should include an assessment of cumulative impacts to the beach, uplands, and associated fish and wildlife habitats resulting from this and other related Corps projects along the Half Moon Bay shoreline.
- The WEC calls for an opportunity for stakeholders to participate in decision-making related to erosion control in the vicinity of the Grays Harbor south jetty and help define a long-term erosion policy framework that will adequately protect fish and wildlife and public recreation resources in the area.

Responses:

- proactive about the responsible coordination of maintenance activities at our navigation projects with Federal, state, and local interests, as well as all involved stakeholders. This includes placement of maintenance dredged materials that is consistent with best management practices and fisheries windows.
- All of these projects were examined closely and evaluated pursuant to NEPA, with the preparation of environmental assessments. In each case, the Corps determined that the proposed actions were not major Federal actions significantly affecting the quality of the human or natural environment, and therefore did not require preparation of an environmental impact statement.
- Our proposed sand placement is to restore integrity of the south jetty breach fill for the protection of the Federal South Jetty and Navigation Channel.
- The impacts of this project on the beach, uplands, and associated fish and wildlife habitats have been evaluated in the NEPA environmental assessment for this proposal.
- We plan to lead an improved participatory, collaborative process with federal and state agencies and other stakeholders, such as yourself, to help develop a long-term management strategy for the outer Grays Harbor estuary and shorelines. One potential outcome would be the development of a NEPA programmatic environmental impact statement.

Letter 23 (Abraham Ringel 1/13/04 email):

- There is ample reason to believe that proposed project has a sufficient number of environmental impacts and should receive the benefit of an Environmental Impact Statement under NEPA.
- Corps efforts to control erosion have not been successful and have significantly reduced the use of the beach at Half Moon Bay. The Corps' mission in this area is to protect the shipping channel.
- I hope the Corps will conduct a full-scale evaluation of its activities in the Westport area.
- Does the public truly benefit from the proposed actions or is the money being spent to promote large-scale developments?

Responses:

- Based on the discussions presented in this final EA, we have determined that the proposed action is not a major Federal action significantly affecting the quality of the human or natural environment, and therefore does not require preparation of an environmental impact statement.
- Some of the efforts to slow the rate of breach fill erosion have been more effective than others and preservation of the south jetty breach fill is necessary for the protection of the south jetty and federal navigation channel.
- The Corps is prepared to conduct a full-scale investigation of its activities at Westport utilizing the technical expertise the Engineering Research Development Center including physical and numerical models specific to Westport conditions.
- A reliable safe navigation channel is vital to the local Grays Harbor economy. The proposed sand placement is not the Corps' intent to promote large-scale developments.

Letter 24 (City of Westport 1/23/04 email):

Westport supports a proactive approach to preventing the reoccurrence of a breach. The proposal mitigates the damage caused by erosion at one of the most vital resources in the City, namely Westhaven State Park.

The Corps has both the authority and a duty to maintain facilities needed to protect the navigation channel, including the jetty, and provide associated erosion control and protection.

Replacement of sand from recently eroded areas will have little or no impact on the beach. Erosion of the dredged materials placed on the shoreline is to be expected, there is no difference between the proposed action and the no action alternative in this regard. It makes little difference to the environment affected by such erosion if the source of the eroded sand is from the existing shoreline or the restored shoreline.

Inaction will have severe adverse consequences. Further erosion of Half Moon Bay, can

cause immeasurable damage from asphalt, concrete and other materials in the path of the erosion. Indeed, prior experience demonstrates that erosion can accelerate dramatically, creating the possibility of a future breach, as occurred in 1993. The consequences of allowing a breach threaten the environment and economic core of the entire region. The impact of a breach on the Navigation channel could close the shipping channel jeopardizing access to the only port along the Washington coastline. Over time, erosion directed from the Corps' facilities has eroded the 1994 breach fill area despite the Corps' determination to maintain that area through periodic beach nourishment.

Corps should be commended for selection of soft interim remedy consistent with recommendations of resource agencies and environmental groups.

The City of Westport agrees with the position of numerous environmental organizations that this evaluation should proceed and encompass the best available scientific analysis. The Corps' proposal will not only preserve pockets of sand, but replaces the same material lost due to erosion originating from the jetty and wave diffraction mound. This will directly replace lost habitat for a variety of species. The proposal does so in a manner that promotes availability for public recreation and maintains the aesthetic quality of the shoreline to the maximum extent possible.

The preferred alternative is consistent with the coastal zone management act and city shoreline regulations

The EA incorrectly ties erosion control projects to the proposed links at Half Moon Bay development. The Links at Half Moon Bay resort project has already applied and been granted the local permits. The Corps' action will not have any impact on consideration of the Links proposal, which has already completed the local hearing process. Any suggestion in the EA that this was an effort to protect the development is incorrect. The possible impacts of Corps erosion on future development are not germane to the existing proposal, which adopts the soft approach advocated by resource agencies and concerned public interest groups to maintain the status quo so that such impacts can be meaningfully evaluated and various alternatives considered.

The proposal will not contribute to cumulative impacts. The city strongly urges the Corps to undertake appropriate studies to evaluate and select a long-term solution to the erosion that is currently directed at this vital resource. The City disagrees with the assertion that this interim action is a piecemeal implementation of a larger extension of hard structures across Half Moon Bay. Rather it is an appropriate action to preserve the existing situation pending evaluation of long-term options. Since this proposal is a limited, interim restoration of the shoreline from recent erosive events, the City does not believe that it will contribute to any cumulative impacts.

No impact from the present proposal to conduct beach nourishment is expected to contribute to such cumulative impacts. The use of clean sand as an interim measure will not contribute to future cumulative impacts nor foreclose consideration of possible long-term options. Thus, the City believes that the EA is fully consistent with the obligations under NEPA.

The City concurs in the observation of the EA that the placement of sand will mimic natural accretion patterns in Half Moon Bay and will be affected much like the existing landscape. Also that the project will not impact the characteristics or function of other shoreline processes because it is designed to maintain the status quo while a long term evaluation occurs. As such, the Finding of No Significant Impact, based on an EA rather

than an EIS is appropriate for this proposal.

Responses:

Thank you for your comments.

The purpose of the proposed action is to prevent a breach not for mitigation of erosion caused by Federal navigation structures.

The purpose of this action is to protect the Federal navigation features, not to provide erosion control.

Thank you for your comment..

Thank you for your comment.

The proposed interim action is for the restoration of the south jetty breach fill and the protection of the Federal south jetty and navigation channel not for shoreline restoration.

The cumulative effects are discussed in Appendix B of this Environmental Assessment.

Thank you for your comment.

Thank you for your comment.

Letter 25 (United States Coast Guard 1/22/04):

The USCG uses the South Jetty Breach Fill daily for operational purposes because of its height and location for visual observations of wave conditions at the Grays Harbor entrance. The area is also a staging area for major search and rescue operations. The USCG supports reasonable efforts by the Corps to protect areas adjacent to the South Jetty.

Response:

Thank you for your comment.

Letter 26 (Washington Parks and Recreation Commission, 1/20/04):

- State Parks recognizes the obligation of the Corps under Federal mandates to protect the navigation channel and the south jetty of Grays Harbor.
- State Parks is supportive of all appropriate, permissible measures to assure the protection of the public's beaches and citizens' safe access to and enjoyment of them.
- State Parks commends the Corps for its past and proposed work to reestablish a protective dune and enhance it and its stability with native beach grass plantings.
- State Parks considers Westhaven State Park to be an important and prized public facility with annual visitation of approximately 30,000 citizens, a substantial state recreational resource and an economic and quality-of-life asset to the City of Westport.
- State Parks is not itself a regulatory agency and defers to its professional colleagues in the state and federal regulatory agencies with respect to permissibility of this and similar projects.
- State Parks generally favors "soft" over "hard" erosion solutions wherever possible, and

more sound ecologically and financially in the long run.

- State Parks' contingency planning to remove its portable restrooms and relocate them and its parking lot in the event erosion again threatens, rather than seek "coastal armoring solutions," is consistent with the policy direction of our State Parks and Recreation Commissioners.
- Specific comments 1-5 below should be incorporated into the EA.

Responses:

- Thank you for your comment.
- All five specific comments were incorporated into this final EA.

Appendix F
Regulatory Approvals



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

January 29, 2004

REGISTERED MAIL

Mr. Hiram Arden (OD-TS-NS)
Navigation Section
US Army Corps of Engineers
PO Box 3755
Seattle WA 98155-3755

RE: Water Quality Certification ORDER #04SEASR-5992 / Coastal Zone Consistency
Determination for the Army Corps of Engineers Public Notice #CENWS-OD-TS-NS-
21R for the Half Moon Bay Transition Project, Westport, Grays Harbor County,
Washington.

Dear Mr. Arden:

This certification supersedes the Department of Ecology's Water Quality Certification
#03SEASR-5839 issued October 31, 2003.

The request for certification for proposed work in and adjacent to Half Moon Bay in
southwestern Grays Harbor adjacent to Westhaven State Park, Grays Harbor County,
Washington has been reviewed. On behalf of the State of Washington, we certify that the
proposed work, as conditioned by the enclosed Order, will comply with applicable provisions of
Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended, and other appropriate
requirements of State law. This letter also serves as the State response to the Corps of Engineers.

Pursuant to 16 U.S.C. 1456 et. seq. (Section 307(c)(3) of the Coastal Zone Management Act of
1972 as amended), Ecology concurs with the applicant's determination that this work will be
consistent with the approved Washington State Coastal Zone Management Program. This
concurrence is based upon the applicant's compliance with all applicable enforceable policies of
the Coastal Zone Management Program, including Section 401 of the Federal Water Pollution
Control Act.

We anticipate working together with you and the other stakeholders toward development of a
long-term strategy to help manage the erosion issues in this area.

This certification is subject to the conditions contained in the enclosed Order. If you have any
questions, please contact Helen Pressley at (360) 407-6926. Written comments can be sent to her
at the Department of Ecology, Southwest Regional Office, PO Box 47775, Olympia WA 98504-



7775 or at hpre461@ecy.wa.gov. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,



Paula Ehlers
Section Supervisor
Shorelands and Environmental
Assistance Program

PE:hp:dn

Enclosure

cc: Linda Rankin, Ecology
Yvonne Oliva, Ecology
Deborah Cornett, Ecology

IN THE MATTER OF GRANTING)
A WATER QUALITY)
CERTIFICATION TO)
the U.S. Army Corps of Engineers)
in accordance with 33 U.S.C. 1341)
FWPCA § 401, RCW 90.48.260)
and WAC 173-201A)

ORDER #04SEASR-5992
(CORPS #CENWS-OD-TS-NS-21R)
Placement of approximately 25,000
cubic yards of sandy dredged material at
the South Jetty breach fill and along the
rapidly eroding sandy shoreline adjacent
to the Grays Harbor south jetty.

TO: Navigation Section
US Army Corps of Engineers
PO Box 3755
Seattle WA 98124-3755

ATTN: Mr. Hiram Arden (OD-TS-NS):

On June 27, 2003, a request for water quality certification from the State of Washington was submitted for the above-referenced project pursuant to the provisions of 33 U.S.C. 1341 (FWPCA § 401). The request for certification was made available for public review in the Corps Public Notice CENWS-OD-TS-NS-21 dated June 27, 2003. The State of Washington Department of Ecology (Ecology) issued the US Army Corps of Engineers (Corps) a Water Quality Certification #03SEASR-5839, on October 31, 2003. On December 24, 2003, the Corps submitted a request for revisions to the original project. This request for revisions was made available for public review in the Corps Public Notice CENWS-OD-TS-NS-21R dated December 24, 2003.

The original proposed work described in the above referenced Corps public notice # CENWS-OD-TS-NS-21 involved placement of 40,000 tons (27,000 cubic yards) of gravel and cobble along approximately 1,000 linear feet of beach in the southwest portion of Half Moon Bay, Grays Harbor County, Washington. The material was intended to create a gradual "transition" beach area between the wave diffraction mound adjacent to the south jetty and the sandy beach to the west. This material would have been placed between the rapidly eroding shoreline edge and the +4 foot depth contour (MLLW datum). Heavily incised stormwater drainage channels at the top of the bank were also to be filled. The material would be end-dumped by trucks from an access road on the upper bank. Currents and waves were expected to regrade and disperse the materials along the beach.

The revised project involves placement of approximately 25,000 cubic yards of sandy dredged material at the South Jetty breach fill and along the rapidly eroding sandy shoreline adjacent to the Grays Harbor south jetty. The proposed sand placement is considered an interim measure intended to reduce the risk of another breach occurring until a long-term management solution can be formulated and implemented.

This certification supersedes all previous Water Quality Certifications issued to the Corps for this project.

AUTHORITIES:

In exercising authority under 33 U.S.C. 1341 and RCW 90.48.260, Ecology has investigated this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. Sections 1311, 1312, 1313, 1316, and 1317 (FWPCA Sections 301, 302, 303, 306, and 307);

2. Conformance with the state water quality standards as provided for in Chapter 173-201A WAC authorized by 33 U.S.C. 1313 and by Chapter 90.48 RCW, and with other appropriate requirements of state law; and,
3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

WATER QUALITY CERTIFICATION CONDITIONS: In view of the foregoing and in accordance with 33 U.S.C. 1341, 90.48.260 RCW and Chapter 173-201A WAC, certification is granted to the U. S. Army Corps of Engineers (Applicant) subject to the following conditions:

A. No Further Impairment of Existing Water Quality:

A1. Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (173-201A WAC), including the state sediment quality standards (173-204 WAC). Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters or sediments occurring as a result of project construction or operations.

B. Temporary Modification of Water Quality Standards:

B1. Project construction, operation, and maintenance shall be done in compliance with WAC 173-201A. **This certification does not authorize a modification of standards above those established in WAC 173-201A.**

C. Construction Conditions:

- C1. Work in or near waters of the state shall be done so as to minimize turbidity, erosion, and other water quality impacts. Construction sediment and erosion control Best Management Practices suitable to prevent exceedances of state water quality standards shall be in place before starting filling or grading work at the impact site.
- C2. Water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working areas shall not be discharged into state waters except as otherwise authorized.
- C3. All trucks shall enter the project site via the park access road and haul roads.

D. Monitoring and Contingency Conditions:

D1. The Corps shall begin immediately to coordinate and develop a process for planning and then pursuing a long-term management strategy to address ongoing erosion management issues at Half Moon Bay. This process shall include participation of resource agencies and allow opportunities for review and comment by the public. Development of the long-term plan should include a review of existing data and a thorough evaluation of the relevant physical, bathymetric, and hydraulic prior to selection of a preferred long-term solution for the erosion at Half Moon Bay.

D2. The Corps shall develop a comprehensive monitoring program to evaluate the specific conditions contributing to the shoreline erosion. Monitoring shall include beach surveys documenting the erosion and accretion patterns. The Corps shall submit the results to Ecology.

D3. **"As Built" Report:** a detailed "as built" report shall be prepared for the project at completion. The "as-built" report shall show any variances from the plans as submitted. All variances must be approved by Ecology prior to their installation. The "as-built" shall be the baseline document used for all future monitoring of the project. Contents of the "as-built" shall include but not be limited to:

- (a.) comments from staff present on site during construction;
- (b.) final site plan topography (both site plan view and typical sections), and
- (c.) photographs of the area taken from permanent photo points.

D4. Two copies of "As Built" report shall be prepared and submitted to Ecology's Federal Permit Coordinator at the Southwest Regional Office, P. O. Box 47775, Olympia, WA 98504-7775.

E. Notification:

E1. The Corps shall submit an updated application to Ecology if the information contained in the Corps public notice is altered. Within 30 days of receipt of an updated application Ecology will determine if a modification to this Order is required. All submittals shall be sent to SWRO Federal Permit Coordinator at the above address.

E2. The Corps must provide written notice of the start of project construction to Ecology's SWRO Federal Permit Coordinator at the above address, e-mail, or phone number approximately three days prior to construction.

E3. The Corps shall immediately notify Ecology's SWRO Federal Permit Coordinator should any emergency activities be required.

F. Emergency Measures:

F1. Any in-water work that is out of compliance with the provisions of this Order, or any discharge of oil, fuel, or chemicals into state waters or onto land with a potential for entry into state waters, is prohibited. If these occur, the operator shall immediately take the following actions:

- (a.) Cease operations.
- (b.) Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
- (c.) In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials.

F2. Spills into state waters, spills onto land with a potential for entry into state waters, or other significant water quality impacts, shall be reported immediately to Ecology's Southwest Regional Spill Response Office at (360) 407-6300.

F3. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters, including wetlands.

F4. Toxic conditions resulting in distressed or dying fish are not allowed. If these conditions exist, construction shall cease immediately and the Applicant or the contractor shall contact Ecology's Southwest Regional Spill Response Office at (360) 407-6300.

G. General Conditions:

G1. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this Order.

G2. This certification does not exempt and is conditioned upon compliance with other statutes and codes administered by federal, state, and local agencies.

G3. The Corps shall construct and operate the project in a manner consistent with the project description contained in the Public Notice for certification, or as otherwise approved by Ecology.

G4. The Corps shall reapply with an updated application for certification if five years elapse between the date of the issuance of this Order and the beginning of construction and/or discharge for which the federal license or permit is being sought.

G5. The Corps shall reapply with an updated application if the information contained in the Public Notice is voided by subsequent submittals to the federal agency. Any future action at this project location, emergency or otherwise, that is not defined in the public notice, or has not been approved by Ecology, is not authorized by this Order. All future actions shall be coordinated with Ecology for approval prior to implementation of such action.

G6. The Corps shall provide access to the project site upon request by Ecology personnel for site inspections, monitoring, necessary data collection, or to ensure that conditions of this Order are being met.

G7. Copies of this Order and all related permits, approvals, and documents shall be kept on the project site and readily available for reference by the project managers, construction managers and foremen, other employees and contractors of the Corps, and state agency personnel.

G8. The Corps shall ensure that all appropriate supervisors and contractors at the project site have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order.

G9. Ecology retains continuing jurisdiction to make modifications hereto through supplemental Order, if it appears necessary to further protect the public interest.

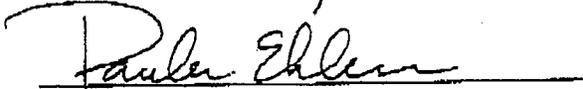
Any person who fails to comply with any provision of this Order shall be liable for a penalty of up to ten thousand dollars (\$10,000) per violation for each day of continuing noncompliance.

Any person aggrieved by this Order may obtain review thereof by appeal. The Applicant can appeal up to 30 days after receipt of the permit, and all others can appeal up to 30 days from the postmarked date of

Water Quality Certification ORDER #04SEASR-5992
January 29, 2004
Page 5

the permit. The appeal must be sent to the Washington Pollution Control Hearings Board, P.O. Box 40903, Olympia, WA 98504-0903. Concurrently, a copy of the appeal must be sent to the Department of Ecology, Shorelands and Environmental Assistance Program, P.O. Box 47600, Olympia, WA 98504-7600. These procedures are consistent with the provisions of Chapter 43.21B RCW and the rules and regulations adopted thereunder.

Dated January 29, 04 at Lacey, Washington



Paula Ehlers Section Supervisor
Shorelands and Environmental Assistance Program
Department of Ecology - Southwest Regional Office

Rec'd 1/23/04



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Western Washington Fish and Wildlife Office
510 Desmond Dr. SE, Suite 102
Lacey, Washington 98503

In Reply Refer To:
1-3-04-IR-0353
X-Ref 1-3-03-I-1956

JAN 16 2004

Colonel Debra M. Lewis, District Engineer
Seattle District, Corps of Engineers
ATTN: Environmental Resources Section (Kinney)
P.O. Box 3755
Seattle, Washington 98124-3755

Dear Colonel Lewis:

Subject: Half Moon Bay, South Jetty Breach Fill Maintenance

This is in response to your letter dated December 29, 2003, and enclosed Biological Evaluation (BE). The letter and BE for the placement of 25,000 cubic yards of sand over a 1,000 linear feet of beach at Half Moon Bay near Westport, Grays Harbor County, Washington, were received in our office on December 30, 2003. Your letter requests that we reinitiate consultation number 1-3-03-I-1956 and concur with the original effects determination of "may affect, not likely to adversely affect" for bald eagles (*Haliaeetus leucocephalus*), bull trout (*Salvelinus confluentus*), marbled murrelets (*Brachyramphus marmoratus*), western snowy plover (*Charadrius alexandrius nivosus*), and brown pelican (*Pelecanus occidentalis*), as evaluated in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). The re-initiation of this consultation is due to the change in material that is being used. The original consultation was for the placement of 27,000 cubic yards of gravel/cobble.

We believe that sufficient information was provided in the re-initiation package to determine the effects of the proposed project to federally listed species and to conclude whether the project is likely to adversely affect those species. We, therefore, concur with the "may affect, not likely to adversely affect" determination for bald eagles, bull trout, marbled murrelets, western snowy plover, and brown pelican. Our concurrence is based on the information and conservation measures described in the BE, cover letter, and the following information:

- Work will be conducted at a time when listed species would least likely be present in the project area.

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-No foraging, wintering, or nesting habitat of avian listed species would be impacted.

-Native clean (uncontaminated) material (sand) is being used. The source of the sand is from a dredge material stockpile created when the Corps dredged the Chehalis River navigation channel.

Part of the consideration for this concurrence is based on the Hydraulic Project Approval dated October 16, 2003 from the Washington Department of Fish and Wildlife to the City of Westport. The Hydraulic Project Approval states in provision 6 that the ecology blocks will be removed before February 15, 2004. In addition, an email from the Corps dated January 14, 2003, stated that the Corps will not place sand on the beach until the eco-blocks are removed.

Furthermore, the U. S. Fish and Wildlife Service strongly recommends the development of a long term solution to the erosion problems at Half Moon Bay and to include all pertinent agencies in this process.

This concludes the re-initiation of the informal consultation pursuant to the regulations implementing the Endangered Species Act (50 CFR 402.13). This project should be reanalyzed if new information reveals effects of the action that may affect listed species or critical habitat in a manner, or to an extent, not considered in this consultation. The project should also be reanalyzed if the action is subsequently modified in a manner that causes an effect to a listed species or critical habitat that was not considered in this consultation, and/or a new species is listed or critical habitat is designated that may be affected by this project.

If you have further questions about this letter or your responsibilities under the Act, please contact Brian Missildine at (360)753-9561 or Lynn Childers at (360)753-9440.

Sincerely,


for Ken S. Berg, Manager
Western Washington Fish and Wildlife Office

cc:

WDFW, Region 6
DOE, Lacey (H. Pressley)
Corps, Seattle Regulatory (Mueller)
EPA, Seattle (J. Barton)
NOAA, Lacey (K. Reece)

Rec'd 2/3/04
mcc

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 NATIONAL MARINE FISHERIES SERVICE
 Northwest Region
 7600 Sand Point Way N.E., Bldg. 1
 Seattle, WA 98115

NMFS Tracking No.:
2003/01026

February 2, 2004

Thomas Mueller
 Chief, Regulatory Branch
 U.S. Army Corps of Engineers
 Seattle District
 P.O. Box 3755
 Seattle, Washington 98124-3755

Re: Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat
 Consultation for the Half Moon Bay Transition Gravel and Cobble Placement project
 (COE No. 200301101), Westport, WRIA 22, Grays Harbor, Washington.

Dear Mr Mueller:

This correspondence is in response to your request for re-initiation of consultation under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for the above reference project.

Magnuson-Stevens Fishery Conservation and Management Act

Federal agencies are required, under section 305(b)(2) of the MSA and its implementing regulations (50 CFR 600 Subpart K), to consult with NOAA's National Marine Fisheries Service (NOAA Fisheries) regarding actions that are authorized, funded, or undertaken by that agency that may adversely affect Essential Fish Habitat (EFH). The MSA (section 3) defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." If an action would adversely affect EFH, NOAA Fisheries is required to provide the Federal action agency with EFH conservation recommendations (MSA section 305(b)(4)(A)). This consultation is based, in part, on information provided by the Federal agency and descriptions of EFH for Pacific coast groundfish, coastal pelagic species, and Pacific salmon contained in the Fishery Management Plans developed by the Pacific Fishery Management Council and approved by the Secretary of Commerce.

The original consultation was for the placement of 40,000 tons (27,000 cubic yards) of gravel and cobble material along approximately 1,000 linear feet of beach in the southwest corner of Half Moon Bay in Westport, Washington. The modified project is for the placement of 25,000 cubic yards of sand to be placed over the same area and will implement conservation



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recommendations made in the original consultation. These measures include placing smaller transition materials and reducing the in-water project footprint.

NOAA Fisheries agrees with the assessment of the U.S. Army Corps of Engineers (COE) that the proposed action may adversely affect the EFH of the species listed in Table 1. NOAA Fisheries agrees with the effects listed by the COE including:

1. Adverse effects to infaunal and bottom-dwelling organisms.
2. Changes to benthic habitats resulting from erosion, slumping or lateral displacement of surrounding bottom deposits.
3. Elevated turbidity which may impact aquatic vegetation or directly affect fish species.
4. Changes to the chemistry and physical characteristics of the receiving water.
5. Loss of habitat function due to burial.

EFH Conservation Recommendations: Because the conservation measures that the COE included as part of the proposed action to address ESA concerns are also adequate to avoid, minimize, or otherwise offset potential adverse effects to the EFH of the species in Table 1, conservation recommendations pursuant to MSA (§305(b)(4)(A)) are not necessary. Since NOAA Fisheries is not providing conservation recommendations at this time, no 30-day response from the COE is required (MSA §305(b)(4)(B)).

This concludes consultation under the MSA. If the proposed action is modified in a manner that may adversely affect EFH, or if new information becomes available that affects the basis for NOAA Fisheries' EFH conservation recommendations, the COE will need to reinstate consultation in accordance with the implementing regulations for EFH at 50 CFR 600.920(1).

NOAA Fisheries appreciates your effort to comply with requirements under the EFH. If you have questions, please contact Karla Reece at the Washington Habitat Branch Office, (360) 753-4374, email: karla.reece@noaa.gov.

Sincerely,



D. Robert Lohn
Regional Administrator

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Table 1. Species of fishes with designated EFH in the Estuarine EFH composite habitat.

Groundfish Species		Coastal Pelagic Species
soupin shark <i>Galeorhinus galeus</i>	sablefish <i>Anoplopoma fimbria</i>	anchovy <i>Engraulis mordax</i>
spiny dogfish <i>Squalus acanthias</i>	bocaccio <i>Sebastes paucispinis</i>	Pacific sardine <i>Sardinops sagax</i>
California skate <i>R. inornata</i>	brown rockfish <i>S. auriculatus</i>	Pacific mackerel <i>Scomber japonicus</i>
ratfish <i>Hydrolagus colliei</i>	copper rockfish <i>S. caurinus</i>	market squid <i>Loligo opalescens</i>
lingcod <i>Ophiodon elongatus</i>	quillback rockfish <i>S. maliger</i>	
cabezon <i>Scorpaenichthys marmoratus</i>	English sole <i>Parophrys vetulus</i>	
kelp greenling <i>Hexagrammos decagrammus</i>	Pacific sanddab <i>Citharichthys sordidus</i>	Pacific Salmon Species
Pacific cod <i>Gadus macrocephalus</i>	rex sole <i>Glyptocephalus zachirus</i>	chinook salmon <i>Oncorhynchus tshawytscha</i>
Pacific whiting (hake) <i>Merluccius productus</i>	starry flounder <i>Platichthys stellatus</i>	coho salmon <i>O. kisutch</i>

**South Jetty Breach Fill Maintenance
Westport, Grays Harbor County, Washington**

**Substantive Compliance for
Clean Water Act Section 404 and Rivers and Harbors Act**

- 1. Introduction.** The purpose of this document is to record the Corps' evaluation and findings regarding this project pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA).

The action covered by this document is the placement of approximately 25,000 cubic yards of sand on the south jetty breach fill placed in 1994 and re-nourished in 2002, and along a rapidly eroding sandy shoreline in the southeast corner of the breach fill. This placement of sand would occur prior to February 15, 2004 or after July 15, 2004. Additional placements will likely be required over the next three to five years.

The information contained in this document reflects the findings of the project record. Specific sources of information included the following:

- a. Long Term Maintenance of the South Jetty at Grays Harbor, Washington, Evaluation Report, dated June 1997
- b. Design Analysis (Revised), Grays Harbor, Washington FY 1999 South Jetty Repair, dated September 1999
- c. South Jetty Sediment Processes Study, Grays Harbor, Washington: Evaluation of Engineering Structures and Maintenance Measures, dated April 2003
- d. Half Moon Bay-Transition Beach Fill Extension Design Analysis, dated May 28, 2003
- e. Half Moon Bay Transition Gravel and Cobble Placement Biological Evaluation, dated August 2003
- f. Memorandum for the Commander, Grays Harbor South Jetty, dated October 28, 2003
- g. South Jetty Breach Fill Maintenance Draft Environmental Assessment, dated December 2004
- h. 404(b)(1) Evaluation (see below)
- i. Public Interest Review (see below)

This document addresses the substantive compliance issues of the Clean Water Act 404(b)(1) Guidelines [40 CFR §230.12(a)] and the Regulatory Programs of the Corps of Engineers [33 CFR §320.4(a)].

- 2. Project Background.** After winter storms breached the sand spit adjacent to the Grays Harbor south jetty in 1993, there were concerns about the stability of the south jetty structure and potential damages to the navigation channel. In response, the Corps placed about 600,000 cubic yards of sand to close the breach and constructed a wave diffraction mound to reduce wave-caused erosion in the western portion of Half Moon Bay adjacent to the jetty.

Placement of cobble and gravel material on the adjacent beach was part of the diffraction mound design; its purpose was to provide a gradual "transition" area between the angular armor rock and sandy beach to the east. Severe erosion is occurring at the end of the transition gravel along the sandy beach.

3. **Project Purpose and Need.** The purpose of the proposed project is to extend the life of the breach fill by nourishing the area adjacent to the south jetty. .

4. **Availability Of Less Environmentally Damaging Practicable Alternatives to Meet the Project Purpose.** The alternatives evaluated for this project were as follows:
 - a. **Alternative 1 (No Action).** Under this alternative, the Corps would not take any actions to prevent further recession of the shoreline along the southwest corner of Half Moon Bay which may result in another breach.

 - b. **Alternative 2 (Placement of Cobble/Gravel Material).** Alternative 2 consists of the placement of up to 40,000 tons (27,000 cubic yards) of 12-inch minus gravel and cobble material along approximately 1,000 linear feet of beach in the southwest corner of Half Moon Bay. Barring an increase in the frequency of severe winter storms, this interim measure should provide adequate erosion protection for the next 5 years without a need for placement of additional material.

 - c. **Alternative 3 (Proposed Action).** The proposed action consists of the placement of approximately 25,000 cubic yards of sand in three areas during February 2004. The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999. Approximately 5,000 cubic yards will be placed in two vulnerable areas on the breach fill (both of these areas are located well above the mean higher high water depth contour). Approximately half of the remaining 20,000 cubic yards will be placed in the southwest corner of Half Moon Bay. Based upon the results of post-placement monitoring, and dependant on funding availability, the Corps may make additional sand placements (estimated at approximately 15,000 cubic yards annually).

Findings. Alternative 1 failed to meet the project purpose and was rejected from further consideration. Alternative 2 would be expected to provide some protection to the breach fill with less frequent replacement of materials. However, due to a lack of sufficient data on the two previous placements of gravel and cobble in Half Moon Bay or from similar projects elsewhere, there is uncertainty regarding the significance of biological effects associated with placement of cobbles on a sandy beach. As a result, the 12-inch minus cobble/gravel alternative has been eliminated from further consideration. . Therefore, Alternative 3 was selected as the preferred alternative.

5. **Significant Degradation, Either Individually or Cumulatively, To the Aquatic Environment**
 - a. **Impacts on Ecosystem Function.** Benthic organisms in and adjacent to the project footprint would be directly impacted by implementation of the project, but the impacts are expected to be temporary in nature and limited in extent. A reduction in benthic

invertebrate abundance may affect fish, birds, and other species which prey on these organisms. However, this impact is expected to be temporary because any invertebrates which have colonized this high-energy, rapidly eroding area are highly mobile and adapted to heavy disturbance regimes, and are thus expected to recolonize the nourishment area relatively quickly. Since there will not be a major change in substrate size distribution as a result of the fill placement, no major shifts in the composition of benthic invertebrate community structure are anticipated over time. These impacts are expected to be limited in extent and short-term in duration.

- b. Impacts on Recreational, Aesthetic and Economic Values.** The proposed placement will occur in a day-use State park. Over the 2- to 3-week long construction period, park visitors will be inconvenienced by the construction activity. Parking and pedestrian access to the stockpile and the western Half Moon Bay shoreline would be closed during construction. Between 1000 and 2500 truck trips may be needed to move 25,000 cubic yards of sand. Flagmen would be present at both the stockpile site and main parking area to insure park visitors are safely routed around construction activities. The northeastern portion of the main parking area and City of Westport boardwalk would be closed both during construction and until the sacrificial dune erodes into the bay. The placement of sand will increase the height of the breach fill, making the elevation drop between the shoreline and the beach below steeper. There are two primary public access routes from the top of the beach fill to South Beach. Neither of these access routes would be affected by the proposed sand placement. Pedestrian access to the Half Moon Bay shoreline will be restricted by the steep bank formed by the fill. Beach access will be limited along approximately 720 linear feet of bay shoreline; visitors will be able to access the beach by descending the remnants of the foredune east of the project site. This condition will remain after project implementation.

Findings. The Corps has determined that no significant adverse impacts to aquatic ecosystem functions and values would occur. The Corps has determined that no significant adverse impacts to recreation, aesthetic and economic values would occur.

6. Appropriate and Practicable Measures To Minimize Potential Harm to the Aquatic Ecosystem

- a. Impact Avoidance Measures.** Potential direct impacts of the proposed work on bull trout and juvenile salmonids will be avoided through the implementation of timing restrictions. Work would not occur between February 15 and July 15.
- b. Impact Minimization Measures.** Impacts associated with the proposed work have been minimized by placing material only above the +4' MLLW depth contour (limited seaward extent), and in areas subject to high rates of longshore transport (limited lateral extent). Much of the sand will be placed upland, thereby avoiding direct in-water impacts.
- c. Compensatory Mitigation Measures.** In order to address unavoidable impacts associated with the proposed action, the Corps will plant approximately 20,000 sprigs of

native dune grass (*Elymus mollis*) on the breach fill during the spring of 2004. This effort will concentrate on areas that were disturbed as part of construction activities, and areas not densely planted as part of the 2002 revegetation effort. The dune grass will reduce wind erosion of the breach fill.

- d. **Findings.** The Corps has determined that all appropriate and practicable measures have been taken to minimize potential harm.

7. **Other Factors In the Public Interest.**

- a. **Fish and Wildlife.** The Corps has coordinated the proposal with State and Federal agencies. The Corps has obtained an advisory Hydraulic Project Approval (HPA) from the Washington Department of Fish and Wildlife. This proposal is consistent with a U.S. Fish and Wildlife Service recommendation submitted pursuant to the Fish and Wildlife Coordination Act to use sand rather than cobble and gravel material.
- b. **Water Quality.** In a December 29, 2003 letter to the Washington Department of Ecology (Ecology), the Corps requested an amendment to the Section 401 Water Quality Certification issued on October 31, 2003. The Corps received an amended 401 Certification from Ecology on January 29, 2004, and will abide by the conditions of that certification to ensure compliance with State water quality standards.
- c. **Historic and Cultural Resources.** Archaeological and historic site records were examined, and a pedestrian survey of the project area was conducted. The Corps sent a letter report to the Washington State Historic Preservation Officer (SHPO) stating the negative results of the archeological survey and background research and recommending a determination of no historic properties affected for the project. A letter concurring with this determination was received from the SHPO on September 30, 2003.
- d. **Activities Effecting Coastal Zones.** The Corps prepared a Coastal Zone Management Act Consistency Determination to ensure that the original transition cobble/gravel proposal complied with the policies, general conditions, and general activities specified in the City of Westport Shoreline Management Master Plan and the State of Washington Shoreline Management Program. Ecology concurred with the Corps determination in a letter dated October 31, 2003. In a December 29, 2003 letter to Ecology, the Corps indicated that the change in project scope did not change our effect determination. Ecology concurred with this determination in a letter dated January 29, 2004.
- e. **Environmental Benefits.** The placement of sand along the shoreline would temporarily postpone further steepening of the lower beach profile and further deepening of subtidal portions of the bay.
- f. **Navigation.** There will be no change to the existing navigation channel.

Findings. The Corps has determined that this project is within the public interest.

8. **Conclusions.** Based on the analyses presented in project NEPA documents, as well as the following 404(b)(1) Evaluation and General Policies for the Evaluation of Permit Applications analysis, the Corps finds that this project complies with the substantive elements of Section 404 of the Clean Water Act and the Rivers and Harbors Act.

404(b)(1) Evaluation [40 CFR §230]

Potential Impacts on Physical and Chemical Characteristics (Subpart C)

1. **Substrate [230.20]** The fill material is similar to native beach material in size, shape, and degree of compaction. Changes to elevation and bottom contours will occur as a result of the fill, but will reduce steepening of the beach and maintain intertidal habitats in the southwestern portion of the bay.
2. **Suspended Particulate/Turbidity [230.21]** Any increases in turbidity resulting from the proposed discharge would mimic those resulting from existing sediment transport processes at the site. No reductions in primary productivity, foraging success, and oxygen availability, or increases in contaminant mobility, are anticipated.
3. **Water Quality [230.22]** No changes in the chemistry or physical characteristics of waters are expected to result from the proposed discharge (see number 2. above).
4. **Current Patterns and Water Circulation [230.23]** The proposed discharge will not obstruct flow, or change the direction or velocity of water flow/circulation. The proposed discharge will result in a minor change in the dimensions of the receiving water body; the fill will partially reclaim shoreline lost to erosion during fall 2003. The discharge will not alter shoreline and substrate erosion rates, but will provide sacrificial material in an effort to temporarily prevent further shoreline retreat.
5. **Normal Water Fluctuations [230.24]** The project will not alter the extent or characteristics of normal water fluctuations subject to normal tidal fluctuations.
6. **Salinity Gradients [230.25]** The proposed discharge will not divert or restrict tidal flows or affect salinity gradients (see number 5. above).

Potential Impacts on Biological Characteristics of the Aquatic Ecosystem (Subpart D)

1. **Threatened and Endangered Species [230.30]** Pursuant with Section 7 of the Endangered Species Act, the Corps prepared a Biological Evaluation to assess potential impacts of the placement of fill along the Half Moon Bay shoreline on species protected under the Act. This document concluded that the proposed discharge was not likely to adversely affect bull trout (*Salvelinus confluentus*), brown pelican (*Pelecanus occidentalis*), Western snowy plover (*Charadrius alexandrius nivosus*), marbled murrelet (*Brachyramphus marmoratus*), bald eagle (*Haliaeetus leucocephalus*), Oregon silverspot butterfly (*Speyeria zerene hippolyta*), and would have no effect on the Steller sea lion (*Eumetopias jubatus*), humpback whale (*Megaptera novaeangliae*), blue whale (*Balaenoptera musculus*), fin whale (*Balaenoptera physalus*), Sei whale (*Balaenoptera borealis*), sperm whale (*Physeter macrocephalus*), green sea turtle (*Chelonia mydas*), olive ridley sea turtle (*Lepidochelys olivacea*), leatherback sea turtle (*Dermochelys coriacea*), or loggerhead sea turtle (*Caretta caretta*).

2. **Aquatic Food Web [230.31]** Benthic organisms in and adjacent to the project footprint would be directly impacted by implementation of the proposed discharge, but the impacts are expected to be temporary in nature and limited in extent. The temporary reduction in benthic invertebrate abundance may affect fish, birds, and other species which prey on these organisms. However, this impact is expected to be temporary because any invertebrates which have colonized this high-energy, rapidly eroding area are highly mobile and adapted to heavy disturbance regimes, and are thus expected to recolonize the nourishment area relatively quickly. Since there will not be a major change in substrate size distribution as a result of the fill placement, no major shifts in the composition of benthic invertebrate community structure are anticipated over time.
3. **Wildlife [230.32]** Since the proposed discharge would not result in major changes in physical habitat characteristics, the discharge is not expected to have long-term effects on the suitability of the site for foraging by birds or marine mammals.

Potential Impacts to Special Aquatic Sites (Subpart E)

1. **Sanctuaries and Refuges [230.40]** The proposed discharge will not impact any designated sanctuary or refuge area managed principally for the preservation and use of fish and wildlife resources.
2. **Wetlands [230.41]** Material will not be discharged in wetland areas. The proposed discharge will not alter the inundation patterns of wetlands in the project vicinity.
3. **Mudflats [230.42]** Material will not be discharged in mudflat areas. The project will not alter the inundation patterns of nearby mudflats.
4. **Vegetated Shallows [230.43]** Material will not be discharged in or adjacent to vegetated shallows.
5. **Coral Reefs [230.44]** Not applicable.
6. **Riffle and Pool Complexes [230.45]** Not applicable.

Potential Effects on Human Use Characteristics (Subpart F)

1. **Municipal and Private Water Supplies [230.50]** The proposed discharge will not affect the quality of water supplies. The discharge may offer some protection to a water line supplying the Westhaven State Park restrooms from erosion.
2. **Recreational and Commercial Fisheries [230.51]** The project is not expected to affect the suitability of the area for recreational or commercial fisheries.

3. **Water-Related Recreation [230.52]** The proposed discharge will not modify or destroy water use for recreation by changing physical characteristics the receiving water body. However, the proposed discharge will limit pedestrian access between the beach and the shoreline and Westhaven State Park parking area.
4. **Aesthetics [230.53]** The proposed discharge will reduce access to Half Moon Bay and, to some extent, the view of the bay from the Westhaven State Park parking area.
5. **Parks, National and Historic Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves [230.54]** The proposed discharge will occur in an area managed by the State of Washington for its recreational value. The proposed discharge will modify some recreational qualities, potentially reducing the uses for which the site is managed (see number 4. above).

Evaluation and Testing (Subpart G)

1. **General Evaluation of Dredged or Fill Material [230.60]** The fill material will be obtained from the Half Moon Bay direct beach nourishment dredged material disposal site. The dredged materials placed into this site are sands dredged from the South Reach of the navigation channel. Under Section 103 of the Marine Protection, Research, and Sanctuaries Act, this material meets the no-test guidelines for high-energy areas removed from contaminant sources. This material has been determined to be suitable for unconfined open water disposal.
2. **Chemical, Biological, and Physical Evaluation and Testing [230.61]** The extraction site is sufficiently removed from sources of pollution to provide reasonable assurance that the proposed discharge material is not a carrier of contaminants. Therefore, the required determinations pertaining to the presence and effects of contaminants can be made without testing (see 1. above)

Action to Minimize Adverse Effects (Subpart H)

1. **Actions Concerning the Location of the Discharge [230.70]** Impacts associated with the proposed work have been minimized by placing material only above the +4' MLLW depth contour, thereby avoiding the more productive lower intertidal zone. The quantity of fill proposed for in-water placement has also been minimized. Much of the material will be placed on a shoreline scarp above mean higher high water, and allowed to wash into the bay through wave action.
2. **Actions Concerning the Material to be Discharged [230.71]** None taken.
3. **Actions Controlling the Material after Discharge [230.72]** None taken.
4. **Actions Affecting the Method of Dispersion [230.73]** None taken.

5. **Actions Related to Technology [270.74]** Appropriate machinery and methods of transport of the material for discharge will be employed. All machinery will be properly maintained and operated.
6. **Actions Affecting Plant and Animal Populations [270.75]** The timing of the proposed discharge operations will minimize the potential for adverse effects to juvenile salmonids.
7. **Actions Affecting Human Use [230.76]** The timing of the discharge will avoid the season when human recreational activity associated with the site is most important.
8. **Other Actions [230.77]** Not applicable.

General Policies for the Evaluation of Permit Applications [33 CFR §320.4]

1. **Public Interest Review [320.4(a)]** The Corps finds these actions to be in compliance with the 404(b)(1) guidelines and not contrary to the public interest.
2. **Effects on Wetlands [320.4(b)]** No wetlands will be altered by the proposed discharge.
3. **Fish and Wildlife [320.4(c)]** On January 16, 2004, the U.S. Fish and Wildlife Service submitted comments related to the proposed discharge pursuant to the Fish and Wildlife Coordination Act. The Service does not object to the proposed work, providing that the placement of sand along the Half Moon Bay shoreline does not negatively affect the City of Westport's ability to fulfill its obligation to remove the ecology blocks as required by its Hydraulic Project Approval. The proposed discharge has been modified from a previous proposal to place cobble and gravel material along the Half Moon Bay shoreline. By modifying the proposed project, the Corps is implementing two of the conservation recommendations suggested by NOAA-Fisheries as part of consultation pursuant to the Magnuson-Stevens Fishery Conservation and Management Act. The Corps has also obtained an advisory Hydraulic Project Approval from the Washington Department of Fish and Wildlife.
4. **Water Quality [320.4(d)]** The Corps will abide by the conditions of the Section 401 Water Quality Certification issued by the Department of Ecology to ensure compliance with Washington water quality standards.
5. **Historic, Cultural, Scenic, and Recreational Values [320.4(e)]** No wild and scenic rivers, historic properties, National Landmarks, National Rivers, National Wilderness Areas, National Seashores, National Recreation Areas, National Lakeshores, National Parks, National Monuments, estuarine and marine sanctuaries, or archeological resources will be adversely impacted by the proposed discharge. Recreational values of a Washington State Park may be affected by access limitations caused by the proposed discharge.
6. **Effects on Limits of the Territorial Sea [320.4(f)]** The proposed maintenance work will not alter the coastline nor baseline from which the territorial sea is measured for the purposes of the Submerged Lands Act and international law.
7. **Consideration of Property Ownership [320.4(g)]** The proposed discharge will not cause damage to the property of others. The Corps has obtained a Right of Entry Permit from the property owner, the Washington State Parks and Recreation Commission, to access Westhaven State Park for deposit of materials associated with the rehabilitation of the south jetty.
8. **Activities Affecting Coastal Zones [320.4(h)]** The Corps prepared a consistency statement and determined that the proposed discharge complies with the policies, general conditions, and general activities specified in the City of Westport Shoreline Management Master Plan and Washington Administrative Code.

9. **Activities in Marine Sanctuaries [320.4(i)]** Not applicable.

10. **Other Federal, State, or Local Requirements [320.4(j)]**

a. **National Environmental Policy Act.** Draft and Final Environmental Assessments (EAs) have been prepared to satisfy the documentation requirements of NEPA.

b. **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 (BE) for the placement of cobble and gravel material (Alternative 2) was submitted to USFWS and NOAA-Fisheries on August 11, 2003. Letters concurring with the determinations made in the BE were received on November 10, 2003 (NOAA-Fisheries) and November 7, 2003 (USFWS). On December 29, 2003 the Corps requested to re-initiate consultation with both Services due to the change to sand (Alternative 3). A letter from USFWS concurring with the Corps determination that this change would not result in adverse effects to listed species was received on January 21, 2004. A letter from NOAA-Fisheries was not required since a "no effect" determination was made for species under that agency's jurisdiction.

c. **Clean Water Act.** The Corps must demonstrate compliance with the substantive requirements of the Clean Water Act. This document records the Corps' evaluation and findings regarding this project pursuant to Section 404 of the Act. The Corps requested an amendment to the Section 401 Water Quality Certification issued on October 31, 2003 in a December 29, 2003 letter to the Washington Department of Ecology (Ecology). The Corps received an amended 401 Certification from Ecology on January 29, 2004, and will abide by the conditions of that certification to ensure compliance with State water quality standards.

d. **Coastal Zone Management Act.** The Corps prepared a Coastal Zone Management Act Consistency Determination for the originally proposed cobble and gravel fill (Alternative 2). This evaluation demonstrated that the proposed work complies with the policies, general conditions, and general activities specified in the City of Westport Shoreline Management Master Plan and the State of Washington Shoreline Management Program. Ecology concurred with the Corps determination of consistency in a letter dated October 31, 2003. In a December 29, 2003 letter to Ecology, the Corps explained the revised proposal and maintained that the proposed discharge was also consistent with local and state management plans. Ecology concurred with this determination of consistency in a letter dated January 29, 2004.

e. **Rivers and Harbors Act.** This document records the Corps' evaluation and findings regarding this project pursuant to the Rivers and Harbors Act.

f. **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. Archaeological and historic site records at the were examined, and a pedestrian survey of the project area was conducted. The Corps sent a letter report to the Washington

State Historic Preservation Officer (SHPO) stating the negative results of the archeological survey and background research and recommending a determination of no historic properties affected for the project. A letter concurring with this determination was received from the SHPO on September 30, 2003.

g. Fish and Wildlife Coordination Act. The Fish and Wildlife Coordination Act (16 USC 470) requires that wildlife conservation receive equal consideration and be coordinated with other features of water resource development projects. U.S. Fish and Wildlife Service provided comments pursuant to the Fish and Wildlife Coordination Act on January 16, 2004 (see section 3. above).

11. Safety of Impoundment Structures [320.4(k)] Not applicable.

12. Floodplain Management [320.4(l)] The proposed maintenance work will not alter any floodplain areas.

13. Water Supply and Conservation [320.4(m)] Not applicable.

14. Energy Conservation and Development [320.4(n)] Not applicable.

15. Navigation [320.4(o)] The project will not impact the Federal Grays Harbor and Chehalis River navigation project.

16. Environmental Benefits [320.4(p)] The project will have no impact on the economic characteristics of the area.

17. Economics [320.4(q)] The purpose of the proposed discharge is to prevent more costly repairs to the south jetty breach fill in the future.

Mitigation [320.49(r)] The Corps will also plant approximately 20,000 sprigs of native dune grass (*Elymus mollis*) on the breach fill during the spring of 2004. This effort will concentrate on areas that were disturbed as part of construction activities, and areas that were not densely planted as part of the 2002 revegetation effort. The dune grass will reduce wind erosion of the breach fill.

Appendix D
Comment Letters



HYDRAULIC PROJECT APPROVAL
RCW 77.55.100 - appeal pursuant to Chapter 34.05 RCW

Recd 1/12/04
State of Washington
Department of Fish and Wildlife
Region 6 Office
48 Devonshire Road
Montesano, Washington 98563-9618

DATE OF ISSUE: January 8, 2004

LOG NUMBER: ST-E1564-02

The request of, Hiram Arden, in a Public Notice received on January 5, 2004, this Hydraulic Project Approval (HPA), which now supersedes all previous HPAs for this project, is a change of the original HPA issued August 21, 2003.

<u>PERMITTEE</u>	<u>AUTHORIZED AGENT OR CONTRACTOR</u>
Army Corps of Engineers, Navigation Section Attention: Hiram Arden Office Box 3755 Westport, Washington 98124-3755 Phone: 360-764-3401	Not Applicable

PROJECT DESCRIPTION: Place Sand on Beach

PROJECT LOCATION: Westhaven State Park, Westport, Latitude 46.90406 North, Longitude 124.12923 West

<u>WRIA</u>	<u>WATER BODY</u>	<u>TRIBUTARY TO</u>	<u>1/4 SEC.</u>	<u>SEC.</u>	<u>TOWNSHIP</u>	<u>RANGE</u>	<u>COUNTY</u>
22.9020	Half Moon Bay	Grays Harbor	01	16	North	12 West	Grays Harbor

NOTE: WDFW is concerned that the wave diffraction mound is not functioning as planned, due to the remnant jetty rock east of the mound re-aligning the waves diffracted by the mound and concentrating their energy in the erosive area proposed for sand placement. The physical model that the wave diffraction mound was designed to emulate did not have the remnant jetty in place. This remnant jetty was also required to be removed by WDFW as a condition of the wave diffraction mound HPA to provide no-net-loss of the productive capacity of fish habitat as required by State law (WAC 220-110). WDFW believes that this remnant jetty should be removed as soon as possible to reduce erosion and further intervention in this area. As an alternative, and if necessary to indicate if our concerns are valid, the wave diffraction system should be physically modeled with the remnant jetty in place and the results reported to WDFW.

WDFW is additionally concerned about future erosion control interventions in the Half Moon Bay area. We encourage the Corps to involve all interested agencies and parties early in the planning process, to develop interventions that work with the system, and to design any future interventions to utilize natural forces to promote accretion of native material for protection of shoreline developments.

PROVISIONS

TIMING LIMITATIONS: The project may begin **Immediately** and shall be completed by **February 14, 2005**, provided:

- a. Work below the ordinary high water line shall not occur from **February 15** through **July 14** of any year for the protection of migrating juvenile salmonids.

Work shall be accomplished per plans and specifications entitled, Public Notice CENWS-OD-TS-NS-21R, dated December 24, 2003, and submitted to the Washington Department of Fish and Wildlife, except as modified by this Hydraulic Project Approval. These plans reflect design criteria per Chapter 220-110 WAC. These plans reflect mitigation procedures to significantly reduce or eliminate impacts to fish resources. A copy of these plans shall be available on site during construction.

Contracting Division
ERS, King



HYDRAULIC PROJECT APPROVAL
RCW 77.55.100 - appeal pursuant to Chapter 34.05 RCW

State of Washington
Department of Fish and Wildlife
Region 6 Office
48 Devonshire Road
Montesano, Washington 98563-9618

DATE OF ISSUE: January 8, 2004

LOG NUMBER: ST-E1564-02

3. All manmade debris on the beach, such as asphalt, concrete, angular rock, metal, plastic, glass, and other unnatural debris shall be removed and disposed of upland such that it does not enter waters of the state.
4. Sand for the beach shall be clean, and obtained from portions of the identified stockpile area that contain the least amount of fines.
5. Project activities shall not occur when the project area is inundated by tidal waters to the greatest extent possible.
6. Use of equipment on the beach shall be held to a minimum, confined to a single access point, and limited to the footprint of the transition beach or any other unnatural material proposed to be removed, such as the remnant jetty. Construction materials shall not touch the beach outside this work corridor.
7. Tracks of equipment shall not operate in the water.
8. Bed material shall not be utilized for project construction or fills.
9. All trenches, depressions, or holes created in the beach area shall be backfilled prior to inundation by tidal waters.
10. Removal or destruction of overhanging bankline vegetation shall be limited to that necessary for the construction of the project.
11. All natural habitat features on the beach larger than 12 inches in diameter, including trees, stumps, and logs, shall be retained on the beach following construction. These habitat features may be moved during construction if necessary.
12. Project activities shall be conducted to minimize siltation of the beach area and bed.
13. If a fish kill occurs or fish are observed in distress, the project activity shall immediately cease and WDFW Habitat Program shall be notified immediately.
14. All debris or deleterious material resulting from construction shall be removed from the beach area and bed and prevented from entering waters of the state.
15. No petroleum products or other deleterious materials shall enter surface waters.
16. Materials shall not be burned below the ordinary high water line.
17. Project activities shall not degrade water quality to the detriment of fish life.

SEPA: Draft NEPA EA by US Army Corps of Engineers, December 2003.

APPLICATION ACCEPTED: January 5, 2004

ENFORCEMENT OFFICER: Nixon 042 [P2]

Robert L. Burkle (360) 249-1217
Assistant Habitat Program Manager

for Director
WDFW



HYDRAULIC PROJECT APPROVAL
RCW 77.55.100 - appeal pursuant to Chapter 34.05 RCW

State of Washington
Department of Fish and Wildlife
Region 6 Office
48 Devonshire Road
Montesano, Washington 98563-9618

DATE OF ISSUE: January 8, 2004

LOG NUMBER: ST-E1564-02

cc: Justine Barton, EPA Seattle
Loree Randall, WDOE Lacey
Bill Jolly, WSPRC Tumwater

GENERAL PROVISIONS

This Hydraulic Project Approval (HPA) pertains only to the provisions of the Fisheries Code (RCW 77.55 - formerly RCW 75.20). Additional authorization from other public agencies may be necessary for this project.

This HPA shall be available on the job site at all times and all its provisions followed by the permittee and operator(s) performing the work.

This HPA does not authorize trespass.

The person(s) to whom this HPA is issued may be held liable for any loss or damage to fish life or fish habitat which results from failure to comply with the provisions of this HPA.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil penalty of up to one hundred dollars per day or a gross misdemeanor charge, possibly punishable by fine and/or imprisonment.

All HPAs issued pursuant to RCW 77.55.100 or 77.55.200 are subject to additional restrictions, conditions or revocation if the Department of Fish and Wildlife determines that new biological or physical information indicates the need for such action. The permittee has the right pursuant to Chapter 34.04 RCW to appeal such decisions. All HPAs issued pursuant to RCW 77.55.110 may be modified by the Department of Fish and Wildlife due to changed conditions after consultation with the permittee: PROVIDED HOWEVER, that such modifications shall be subject to appeal to the Hydraulic Appeals Board established in RCW 77.55.170.

APPEALS - GENERAL INFORMATION

IF YOU WISH TO APPEAL A DENIAL OF OR CONDITIONS PROVIDED IN A HYDRAULIC PROJECT APPROVAL, THERE ARE INFORMAL AND FORMAL APPEAL PROCESSES AVAILABLE.

A.
INFORMAL APPEALS (WAC 220-110-340) OF DEPARTMENT ACTIONS TAKEN PURSUANT TO RCW 77.55.100, 77.55.110, 77.55.140, 77.55.190, 77.55.200, and 77.55.290:

A person who is aggrieved or adversely affected by the following Department actions may request an informal review of:

(A)

The denial or issuance of a HPA, or the conditions or provisions made part of a HPA; or

(B)

an order imposing civil penalties.

It is recommended that an aggrieved party contact the Area Habitat Biologist and discuss the concerns. Most problems are resolved at this level, but if not, you may elevate your concerns to his/her supervisor. A request for an INFORMAL REVIEW shall be in WRITING to the Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington



HYDRAULIC PROJECT APPROVAL
RCW 77.55.100 - appeal pursuant to Chapter 34.05 RCW

State of Washington
Department of Fish and Wildlife
Region 6 Office
48 Devonshire Road
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DATE OF ISSUE: January 8, 2004

LOG NUMBER: ST-E1564-02

98501-1091 and shall be RECEIVED by the Department within 30-days of the denial or issuance of a HPA or receipt of an order imposing civil penalties. The 30-day time requirement may be stayed by the Department if negotiations are occurring between the aggrieved party and the Area Habitat Biologist and/or his/her supervisor. The Habitat Protection Services Division Manager or his/her designee shall conduct a review and recommend a decision to the Director or its designee. If you are not satisfied with the results of this informal appeal, a formal appeal may be filed.

B.
FORMAL APPEALS (WAC 220-110-350) OF DEPARTMENT ACTIONS TAKEN PURSUANT TO RCW 77.55.100 OR 77.55.140:

A person who is aggrieved or adversely affected by the following Department actions may request a formal review of:

(A)

The denial or issuance of a HPA, or the conditions or provisions made part of a HPA;

(B)

An order imposing civil penalties; or

(C)

Any other "agency action" for which an adjudicative proceeding is required under the Administrative Procedure Act, Chapter 34.05 RCW.

A request for a FORMAL APPEAL shall be in WRITING to the Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington 98501-1091, shall be plainly labeled as "REQUEST FOR FORMAL APPEAL" and shall be RECEIVED DURING OFFICE HOURS by the Department within 30-days of the Department action that is being challenged. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, the deadline for requesting a formal appeal shall be within 30-days of the date of the Department's written decision in response to the informal appeal.

C.
FORMAL APPEALS OF DEPARTMENT ACTIONS TAKEN PURSUANT TO RCW 77.55.110, 77.55.200, 77.55.230, or 77.55.290:

A person who is aggrieved or adversely affected by the denial or issuance of a HPA, or the conditions or provisions made part of a HPA may request a formal appeal. The request for FORMAL APPEAL shall be in WRITING to the Hydraulic Appeals Board per WAC 259-04 at Environmental Hearings Office, 4224 Sixth Avenue SE, Building Two - Rowe Six, Lacey, Washington 98504; telephone 360/459-6327.

D.
FORMAL APPEALS OF DEPARTMENT ACTIONS TAKEN PURSUANT TO CHAPTER 393, LAWS OF 2003:

A person who is aggrieved or adversely affected by the denial or issuance of a HPA, or the conditions or provisions made part of a HPA may request a formal appeal. The FORMAL APPEAL shall be in accordance with the provisions of Chapter 393. The request for FORMAL APPEAL shall be in WRITING to the Environmental and Land Use Hearings Board.

E.
FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS RESULTS IN FORFEITURE OF ALL APPEAL RIGHTS. IF THERE IS NO TIMELY REQUEST FOR AN APPEAL, THE DEPARTMENT ACTION SHALL BE FINAL AND UNAPPEALABLE.

Arden, Hiram T NWS

From: Brady Engvall [broyster@techline.com]
Sent: Monday, January 12, 2004 1:24 PM
To: Kinney, Aimee T; Arden, Hiram T
Subject: Re: Hiram's email address

Aimee,

Here are my comments I sent to Hiram that came back as unable to deliver:

Re: Official Friends of Grays Harbor comment to placement of sand at South Jetty, Westport, Wa.

Dear Hiram,

The project is a very complicated matter. Even those who are following the process are at a loss to keep up let alone the citizen who would like to be part of the outcome. In this phase there are three separate permits to be commented on - all with different comment due dates. Add to that the holidays when government and private organizations are out of the office or on vacation it leaves scarce time to make informed comment on a project as important as this. Having said that we respectfully request a extension for comment until January 23, 2004.

FOGH believes that placement of sand at two out of the three locations is appropriate. The two that are important to the outcome this project (O&M funding authorization) are the ocean side fill of 2500 CY and the topside rainfall gully that would receive 2500 CY. The third fill site, near West Haven State Park. of 20,000 CY is inappropriate for the following reasons: The fill does not protect the navigation channel as required by O&M limitations; the erosion at that location is not an emergency; the fill emboldens development in the near shoreland vicinity and it's placement adds to cumulative impact already visited on the Half Moon Bay (HMB) beach environment by previous erosion interventions.

It is FOGH's contention that a better use of tax payers funds would be to use the money now appropriated for the 20,000CY fill be applied to a long term study that would develop a menu of options that in time would solve this problem that first occurred in 1948. In the recent ten year period nine crafted fixes have been tried without any apparent reduction of the erosion problem at HMB. A NEPA document with peer review would, in the end, better serve the public interest at this location.

In conclusion - it is the board's conviction that development of a comprehensive, peer reviewed NEPA for HMB is needed to better serve the public interest in addressing erosion issues at Westport. Thank you for the opportunity to comment on this very important issue.

Brady Engvall President of: Friends of Grays Harbor

----- Original Message -----

From: Aimee.T.Kinney@nws02.usace.army.mil
To: broyster@techline.com ; Hiram.T.Arden@NWS02.usace.army.mil
Sent: Monday, January 12, 2004 1:05 PM
Subject: Hiram's email address

Hello Brady,

You should be able to send Hiram your comments by hitting "reply to all." Aimee

Aimee Kinney
Environmental Resources Section
Seattle District Corps of Engineers

206-764-3634 voice

206-764-4470 fax

aimee.t.kinney@usace.army.mil

www.nws.usace.army.mil/ers/index.html



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

Rec'd 22 JAN 09, 2004

Reply to
Attn of: ECO-083

JAN 14 2004

Colonel Debra M. Lewis
District Engineer
Seattle District, Corps of Engineers
P.O. Box 3755
Seattle, Washington 98124-3755

RE: Public Notice CENWS-OD-TS-NS-21R, U.S. Army Corps of Engineers,
Placement of Sand, South Jetty Breach Fill Maintenance, Westport, Washington

Dear Colonel Lewis,

Thank you for the opportunity to comment on the above referenced public notice and supporting draft Environmental Assessment (EA), that proposes placement of 25,000 cubic yards (cy) of sand in the original footprint of the breach fill, adjacent to the Grays Harbor south jetty. We are pleased sand will be used rather than the originally proposed gravel and cobble. The proposed sand placement is an interim measure designed to reduce the risk of another breach occurring at that site until a long-term management strategy can be formulated and implemented. The three proposed disposal locations include two smaller channels in the fill (2500 cy each) and a section of the southeast corner of the fill (20,000 cy). The premise of the current interim action is to forestall an inevitable breach until a "management strategy" is developed in the intervening several years.

A transparent and credible problem identification process, followed by planning and pursuit of a coordinated long-term management strategy is absolutely critical. U.S. EPA encourages the Seattle District Corps of Engineers (Corps) to take an immediate active leadership role in the development of a long-term management strategy. This should include a *coordination/communication* component that provides up-to-date information for all stakeholders. U.S. EPA continues to be concerned by the lack of coordination/communication from the Corps regarding conditions and actions on-the-ground in the vicinity of the breach fill, as well as information on the status of ongoing studies, the long-term strategy, and public notices.

It is also critical that technical work done in support of a long-term planning effort receive *peer review*. Peer review is necessary for coastal process and predictive modeling technical work that is to provide the underpinnings for a long-term solution. Eventual alternatives based on technical work that lacks appropriate coordination and review will lack credibility, and will ultimately undermine our mutual goal of achieving a clear and acceptable long-term strategy. U.S. EPA is willing to work with the Corps on a peer review strategy to

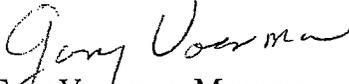
ensure adequate review of the technical work that will provide a foundation for long-term planning and decision-making.

With the above discussion in mind, U.S. EPA does not oppose the interim action subject to the following conditions:

1. As stated in the public notice, the Corps begin immediately to coordinate and develop a transparent and credible process for planning and then pursuing a long-term management strategy to address ongoing erosion management issues at this site. The process should include a communication/coordination component and review of the Corps' past commitments and work, including scoping and coordination of technical studies, e.g., modeling and environmental studies, that will support analysis of alternatives and their environmental effects. In addition, consistent with National Environmental Policy Act, the long-term planning effort/study must provide the process and information necessary for analysis of the cumulative and secondary effects of any alternatives.
2. As part of the long-term management strategy, the Corps coordinate with U.S. EPA and other agencies and stakeholders on development of a peer review strategy to ensure appropriate peer review of the technical work that will provide a foundation for long-term planning and decision-making.
3. A temporary ecology block wall exists in the project footprint but is neither mentioned in the public notice nor evaluated in the draft Environmental Assessment (EA). The Corps has made it clear to U.S. EPA and other agencies that the ecology block wall (including any filter fabric, etc.) will be removed during or prior to the placement of sand. The wall must be specifically mentioned in supporting documentation and must be removed during or prior to sand placement by the Corps.
4. It is our understanding that the SE corner placement of 20,000 cy of sand will occur in the footprint of the original breach fill project with the specific purpose of protecting the existing breach fill. We do not support the Corps placing sand for the purposes of protecting the walkway, road, or the portable restroom facilities. Discussions related to the predicted long-term equilibrium position of the Half Moon Bay shoreline, per the EA, along with potential management actions if any, could be conducted as part of the long-term management strategy.
5. The Corps should incorporate the attached comments into the draft EA, or respond to our comments. If you do not agree with our comments, or would like to provide clarification please provide a response. Failing revisions to the EA or lack of receipt of a response, U.S. EPA reserves the right to revisit our position on this project.

For further coordination and discussion of the specifics of this project or the long-term management strategy, please contact Justine Barton, at (206)553-4974 or Otto Moosburner, at (206)553-5198.

Sincerely,


Gary Voerman, Manager
Aquatic Resources Unit

Enclosure

cc. w/enclosures

WDNR (Peter Leon)

NOAA Fisheries (Karla Reece)

USFWS (Gwill Ging/Brian Missildine)

USGS (Guy Gelfenbaum)

State Parks (Bill Jolly)

WDFW (Bob Burkle)

Ecology (Helen Pressley, George Kaminsky)

City of Westport (Randy Lewis)

Surfriders Foundation (Ian Miller)

FOGH (Arthur Grunbaum)

Enclosure

Specific Comments on Draft Environmental Assessment
South Jetty Breach Fill Maintenance
December 2003

1. P. 3. Section 1.2 paragraph 1. last sentence. Please place the word “probably” before or after the word “would.”
2. P. 6. Section 2.1 paragraph 2. Suggest separating this discussion into a section on the breach fill status and then a section on the Half Moon Bay south shore road and the park facilities (which are not the focus of this public notice). Change verbs from “will” to “could” or “would” where appropriate as this is predictive discussion. For example, “By the summer of 2005, the Park portable restroom facilities would require relocation, and within 3 years, the access road along the
3. P. 8. Section 2.3 last paragraph. In several places the draft EA mentions interim placement of up to 15,000 cy of sand in subsequent years. This is not consistent with the present public notice.
4. P. 8 Section 3. Include a description of the Corps’ proposed physical monitoring of the site, including standard bathymetry and aerial photography that will allow Corps and others to assess the status and success of the project in protecting the breach fill.
5. P. 12 Existing Environment. Section 4.1. Must mention ecology blocks and their removal prior to or during the proposed construction project.
6. P. 12 Existing Environment. Section 4.1 or 4.6. Should include more information on the status (e.g. lack of vegetation) of the stockpile.
7. P. 14 Section 4.6, paragraph 1. Please mention that the Parks Department has replaced the restroom facilities with portable units specifically to provide future flexibility in this erosive area.
8. P. 15 Section 5.1. Include description of the stockpile area post-material removal...e.g.. 3 feet lower and how this might or might not affect recreation, etc. Also include that ecology blocks and any associated geo-fabric would be removed from the upper intertidal area.
9. P. 17 Section 5.3, paragraph 4. Edit so that it’s clear that the last two sentences are the result of a personal communication with Bob Burkle (WDFW).
10. P. 18, Section 6, first sentence. The sentence defining “indirect effects” is awkward and could be clarified. In this discussion it should be clear that any projects mentioned are only proposed. Therefore, insert “potential” development in paragraph 4 for example.
11. Appendix B, Cumulative Effects. Primary Impacts Associated Human Occupation... section.

This discussion focuses on structural erosion controls being necessary and excludes other options for managing human occupation. Please see the attached Washington Coastal Erosion Task Force Report Executive Summary (3/31/99) and insert other appropriate potential actions. Many other actions are possible and necessary for managing human occupation of erosive coastal areas. For example, local land use planning could include inventories and plans to move or keep municipal infrastructure away from erosion zones, and discourage development in coastal erosion hazard areas. Mechanisms could be developed or reinforced to warn property interests of the danger of building or buying in hazardous erosion areas, etc.

WASHINGTON COASTAL EROSION TASK FORCE REPORT

EXECUTIVE SUMMARY

In 1998, Governor Gary Locke directed the Department of Community, Trade and Economic Development to create a Coastal Erosion Task Force. The Task Force's goal was to develop short and long-range policy recommendations on coastal processes. **This document should not be used as a regulatory document.**

The following recommendations resulted from the Task Force and steering committee meetings:

1. Coastal erosion solutions and policies should not come at the expense of the state's natural resources and critical habitat; e.g., solutions should minimize interference with fishing areas and/or keep solution impacts to a minimum.
2. Dredged material should be managed as a resource and reused beneficially within the Columbia littoral cell. For example, dredged sand should remain within the active littoral zone.
3. The Southwest Washington Coastal Erosion Study should be completed. The federal, state, and local partners will establish roles and expectations among themselves.
4. Scientific studies of coastal processes along the southwest coast of Washington should examine the influence of the Columbia River system. These studies should also include an analysis of the effects and opportunity for mitigation of past interventions in coastal processes, particularly those related to navigation projects and engineering studies describing the effects of hard structures on high-energy shorelines.
5. Long-term scientific monitoring of the condition of Southwest Washington ocean beaches, and the impacts and performance of past and proposed interventions to the system, should be a priority.
6. There should be an independent technical review of all State-funded coastal studies and analyses that will form a part of the technical foundation for long-term coastal planning, policy development and/or proposed actions.
7. Assessment of coastal hazards, including predictions of future shoreline change rates, should be conducted.
8. Evaluation of socio-economic impacts of actions in the coastal zone should be conducted.

9. Policy and projects related to coastal erosion should be analyzed for their long-term costs and benefits.
10. In the long term, the state and local governments must develop a policy of land management that:
 - acknowledges the natural processes of the ocean, and the potential conflicts with private property owners located in the erosion hazard areas,
 - encourages and supports the work of local jurisdictions to protect life and property interests,
 - supports the efforts of governments and non-profit organizations to protect recreational opportunities and the natural qualities of the coast.
11. An inventory of local land use information should be undertaken to determine appropriate policies and actions. The inventory should include an accounting of public infrastructure, platted and unplatted properties, and built and un-built properties. Zoning overlays, as well as shoreline area designations and their applicable rules, regulations, and policies, should be included.
12. Federal, state, tribal and local jurisdictions could use the information gathered from the inventory to better understand how to protect the public's health, safety, and welfare, particularly as it pertains to erosion-hazard areas.
13. State and local governments should take steps to identify the extent of the dynamic zone and inventory existing natural and community resources within that zone.
14. As part of a comprehensive inventory, erosion hazard zones should be mapped using available shoreline data and current best science. Such hazard zones may incorporate both accretion and erosion areas, and could identify: imminent erosion hazards, intermediate erosion hazards, and long-term erosion hazards.
15. Federal, state, local and tribal jurisdictions should work together to define coastal erosion hazard areas and regulate and discourage development in high hazard coastal erosion areas. The State should work with local jurisdictions to ensure that mapping projects are based on sound science and consistency of policy.
16. The State should continue to provide technical and financial assistance to local jurisdictions, and tribal governments where applicable, to review and revise comprehensive plans, flood hazard management plans, and development regulations to discourage development in coastal erosion hazard areas.

17. Local jurisdictions should develop new mechanisms or re-enforce existing mechanisms to warn those with property interests of the danger of building or buying in hazardous erosion areas.
18. Federal, state, local and tribal jurisdictions should recognize that effective coastal protection may have some economic consequences for coastal communities, and should take steps to ameliorate these impacts through measures such as shared risk, buyout assistance, and others.
19. Local jurisdictions should develop long-term strategies to assess the location of critical, at-risk public infrastructure such as highways, water and sewer facilities, schools, etc. and private investments in light of coastal zone hazards. These might include threats from chronic hazards like long-term erosion.
20. Southwest Washington coastal communities should continue the development and analysis of alternative strategies to address current and long-term coastal erosion and accretion issues. Financial assistance from a variety of funding sources, including state funding should be sought.
21. Federal, state, local and tribal jurisdictions should adopt the following guidance to address coastal processes (given the unique nature of tribal reservation land, not all criteria may apply to tribes):
 - A. New development in erosion hazard areas and recently accreted areas should be discouraged, based on assessment of risk.
 - B. Landowners should be expected to assume all risk if they knowingly buy and develop property (plat or place structures) in such an area.
 - C. New structural solutions to erosion problems should be discouraged when there is a potentially adverse impact to the natural conditions of the beach, habitat, public access, other recreational resources, long-term maintenance costs, and impact to adjacent properties. The spirit and intent of state laws discourage armoring--such as sea walls, wave bumpers, rock revetments, and other types of hard structures--in favor of other alternatives that are more likely to preserve a dune/beach environment.
 - D. Structural solutions should only be considered in situations where it has been determined that erosion is threatening critical public facilities such as bridges, major highways, sewage treatment plants, utility lines, and municipal water supplies.
 - E. The selection and implementation of any alternative should be based upon an analysis of effectiveness, impacts, risk, and cost compared to other alternatives within a long-term plan.

F. Maintenance and modification of existing navigation structures should be subject to the criteria for successful solutions outlined in Section V.

22. Public education, participation, and outreach are important to a wide perspective on the issues. While this is a primary responsibility of local, state, and tribal governments, there is an awareness of the need for the general public and non-governmental organizations to participate in community education issues and recognition of the role of non-governmental organizations in accomplishing this task.

Arden, Hiram T NWS

From: Ian Miller [imiller@surfrider.org]
Sent: Wednesday, January 14, 2004 9:11 AM
To: Arden, Hiram T
Subject: comments on sand proposal/westport

Mr. Arden:

I am sending our comment letter to this address as well, as the one that I sent our previous letter to may not be working.

Ian Miller
Washington Field Coordinator
Surfrider Foundation
533 W. 10th St.
Port Angeles, WA 98362
imiller@surfrider.org
360 808 1103

Surfrider Foundation
533 W. 10th Street
Port Angeles, Washington 98362
12 January 2004



Hiram Arden
Project Manager
Navigation Section
PO Box 3755
Seattle, Washington 98124

RE: Public Notice Reference # CENWS-OD-TS-NS-21R, AU.S. Army Corps of Engineers, Placement of Sand, South Jetty Breach Fill Maintenance, Westport, Washington@

Mr. Arden:

The Surfrider Foundation is a grass-roots environmental organization dedicated to the preservation of the world's waves, oceans and coastline through conservation, activism, research and education. The following comments are submitted on behalf of the Northwest Regional Office of the Surfrider Foundation.

We thank your office for accepting public comment on the proposal to place 25,000 yards of sand at the west end of Half Moon Bay. First, thank you for amending your original Transitional Cobble proposal. We were delighted that the current proposal uses sand to nourish and protect the South Jetty Breach area. We feel that the use of sand is the best possible marriage between short term South Jetty breach protection and maintaining Half Moon Bay's significant recreational and ecological values. We applaud the Army Corps of Engineers for taking this bold step in considering the use of a "soft-solution" to a persistent coastal management issue.

Our concern with this project is that it is, by our count, the ninth major project in Half Moon Bay since the original breach fill project in 1994. At no point have the impacts of these various interim and "emergency" projects been considered cumulatively. Taken individually, each project has been associated with an Environmental Assessment. When the projects are considered cumulatively, however, we feel that their level of impact warrants a full Environmental Impact Statement. In keeping with the letter and spirit of the National Environmental Protection Act it is our view that this and any future projects should be reviewed with a full Environmental Impact Statement.

Finally, we would like to re-emphasize our commitment to finding a long-term solution that will not compromise the ecological and increasingly important recreational benefits of a sand beach in Half Moon Bay. We respectfully request that your office make an immediate and pro-active effort to coordinate the various interest groups in a community-

driven long-term strategy development process. The Surfrider Foundation will offer its experience and expertise to that process, and we look forward to the opportunity. Only a fully-inclusive, locally-based process will produce a “solution” that will meet the needs of the beach at Half Moon Bay and Westport’s diverse interests.

Thank you.

Sincerely,

Ian Miller
Washington Field Coordinator
Surfrider Foundation

Arden, Hiram T NWS

From: Holmfarm@aol.com
Sent: Wednesday, January 14, 2004 9:39 AM
To: Arden, Hiram T
Subject: Attn: Hiram Arden OD-TS-NS, CENWS-OD-TS-NS

January 14, 2004

Hiram T. Arden, Project Manager (OD-TS-NS)
Navigation Section
P.O. Box 3755
Seattle, WA 998124-3755

RE: CENWS-OD-TS-NS

Dear Sir:

We are writing to comment on the proposal of the U.S. Army Corps of Engineers to place approximately 25,000 cubic yard of sand at the South Jetty breach fill and along the shoreline adjacent to the south jetty.

The Chehalis River Council is non-profit organization made up of citizens who are concerned with natural resource issues in the Chehalis River Basin. Our group is grass-roots and staffed by volunteers, and we are committed to doing what we can to help protect the natural environment in the watershed, and in and around Grays Harbor.

We are concerned that millions of dollars of taxpayers' money have gone into protecting a tiny area of coastline that cannot effectively be protected from the impacts of weather, tides and shifting patterns of sand dispersion. The Corps' own environmental assessment points out that erosion will continue to occur in this area and sand will have to be replenished year after year.

We agree with the comments provided by Friends of Grays Harbor, Wildlife Forever, and others that a comprehensive, long-term plan for this area needs to be developed and reviewed through the NEPA environmental impact statement process. This EIS should be independent and peer reviewed. Until this review is complete, ad hoc "fixes" that will necessarily have unforeseen consequences and that delay grappling with long-term issues should be halted. A significant part of that review should be a cost/benefit analysis. The cost of failed efforts since the 1993 breach should be included in the calculation. King Canute learned that he could not order the tide to retreat, and we should have learned by now that constant change is a fact of life, especially on the coast.

The CRC believes that the mandate of the Corps of Engineers is limited to protecting navigation in the Westport harbor and specifically in this case protecting the South Jetty. We are not opposed to placing 5,000 cubic yards of clean fill on the upland area of the breach as an interim measure. We are, however, concerned about sand destined for the Half Moon Bay shoreline.

It is interesting that the Corps makes the following comment in the draft Environmental Assessment: "The sand placement actions proposed in this document will only forestall shoreline retreat—not prevent further retreat—so these placements of sand cannot be considered an erosion control action. At this time, the

Corps is not committing to continue to place sand as needed to protect the park access road. The focus of this effort is maintaining the breach fill, and future efforts to protect the breach fill may focus more on other vulnerable areas (e.g., the ocean side). This action will not protect the road, so growth-inducing effects are unlikely and thus the indirect effects are insignificant." (Page 19.) Nevertheless, the Assessment also states that, "... any project to stabilize the shoreline with a view towards protecting the road would also offer some level of protection for any development relying on the road for access." (Page 18.)

The Corps should adhere strictly to its stated position and be sure that interim actions are not taken with the intention of directly or indirectly facilitating development of the Links golf course and condominium project. Development in the dunes area is the one factor humans are able to change, in the face of the continuing forces of nature.

The Environmental Assessment Appendix B, Cumulative Effects, paints a bleak picture of the future of the coastline: "Human occupation of the coastal strand and dune ecosystem will continue to require shoreline protection measures. Given the apparent long-term erosion trend, these activities will continue to increase. Additional occupation of the coastal zone will also necessitate additional erosion protection features, such as shoreline armoring or hardening, bulkheads, dikes, seawalls, and/or beach nourishment." (None of these efforts have proven to work in other parts of the country.)

But there's an alternative picture. Humans can decide to pull back from the near shore areas and allow the sea to do its work. Such a course of action would be much less expensive and more protective of wildlife habitat and of the fragile interdunal wetlands. Given the projected rise in sea levels due to global warming, it will prove the most prudent and wisest course of action. The Corps should encourage this picture, which will leave it free to concentrate on limited engineering projects that have some hope of effectively protecting those shoreline features that need to be protected such as jetties and navigation channels.

Thank you for the opportunity to comment on this interim action.

Sincerely,

Margaret Rader
Chair, Board of Trustees
Chehalis River Council
417 No. Pearl Street
Centralia, WA 98531

[Handwritten mark]

Arden, Hiram T NWS

From: Knoll Lowney [knoll@igc.org]
Sent: Wednesday, January 14, 2004 12:36 PM
To: Hiram Arden
Cc: knoll
Subject: For the record of 2004 Breach Fill project.

Please consider this in your decision.

Knoll D. Lowney
Smith & Lowney PLLC, Attorneys at Law
2317 E. John St.
Seattle, WA 98112
(206) 860-2883; fax 860-4187
knoll@igc.org

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----- Original Message -----

From: OlearyCrk@aol.com
To: knoll@igc.apc.org
Sent: Wednesday, January 07, 2004 5:26 PM
Subject: Revetment 1.4mb

Here's some of the pictures of the building of the revetment 98-98 provided by the Corps

*cfi DC, Marsh
ERS, Kinney*

C:\Documents and Settings\g3odthta\Local Settings\Temporary Internet Files\OLK62\Revetment.zip

Name	Modified	Size	Ratio	Packed	Path
BeachNourishHMB99.tif	1/7/2004 5:08 PM	410,060	58%	172,154	Revetment\
ClayforHMBWetland.tif	1/7/2004 5:12 PM	1,185,688	50%	596,270	Revetment\
HMBSept99.tif	1/7/2004 5:09 PM	409,172	67%	134,377	Revetment\
QuarrySpall.tif	1/7/2004 5:02 PM	408,792	79%	85,496	Revetment\
RevetExtenOverview.tif	1/7/2004 1:08 PM	410,320	50%	204,379	Revetment\
RevetmentToe.tif	1/7/2004 4:59 PM	409,772	75%	101,690	Revetment\
RevtCompleted.tif	1/7/2004 4:57 PM	408,660	79%	85,386	Revetment\
SandDikeOverhead.tif	1/7/2004 5:05 PM	409,688	67%	133,266	Revetment\
8 file(s)		4,052,152	63%	1,513,018	

POINT CHEHALIS REVETMENT EXTENSION

19 MAR 1999 - LOOKING NORTH

A LAYER OF CLAY WAS PLACED ALONG THE BACK OF THE
REVETMENT TO PREVENT DRAINAGE OF THE WETLAND



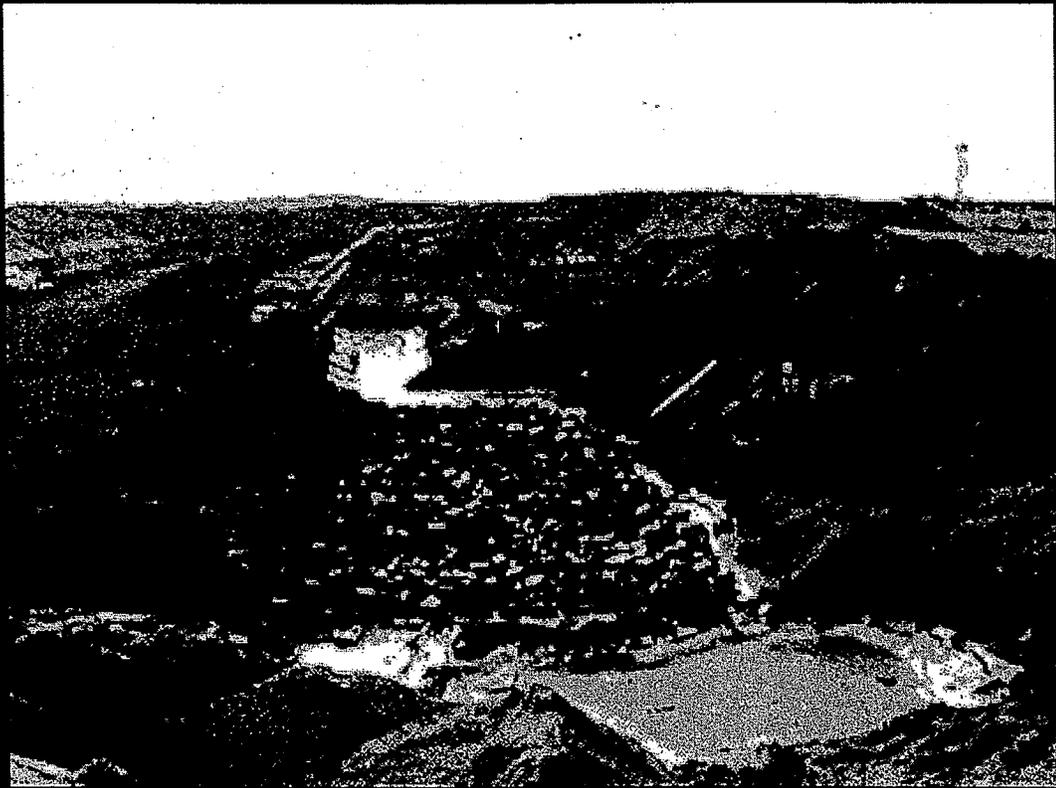


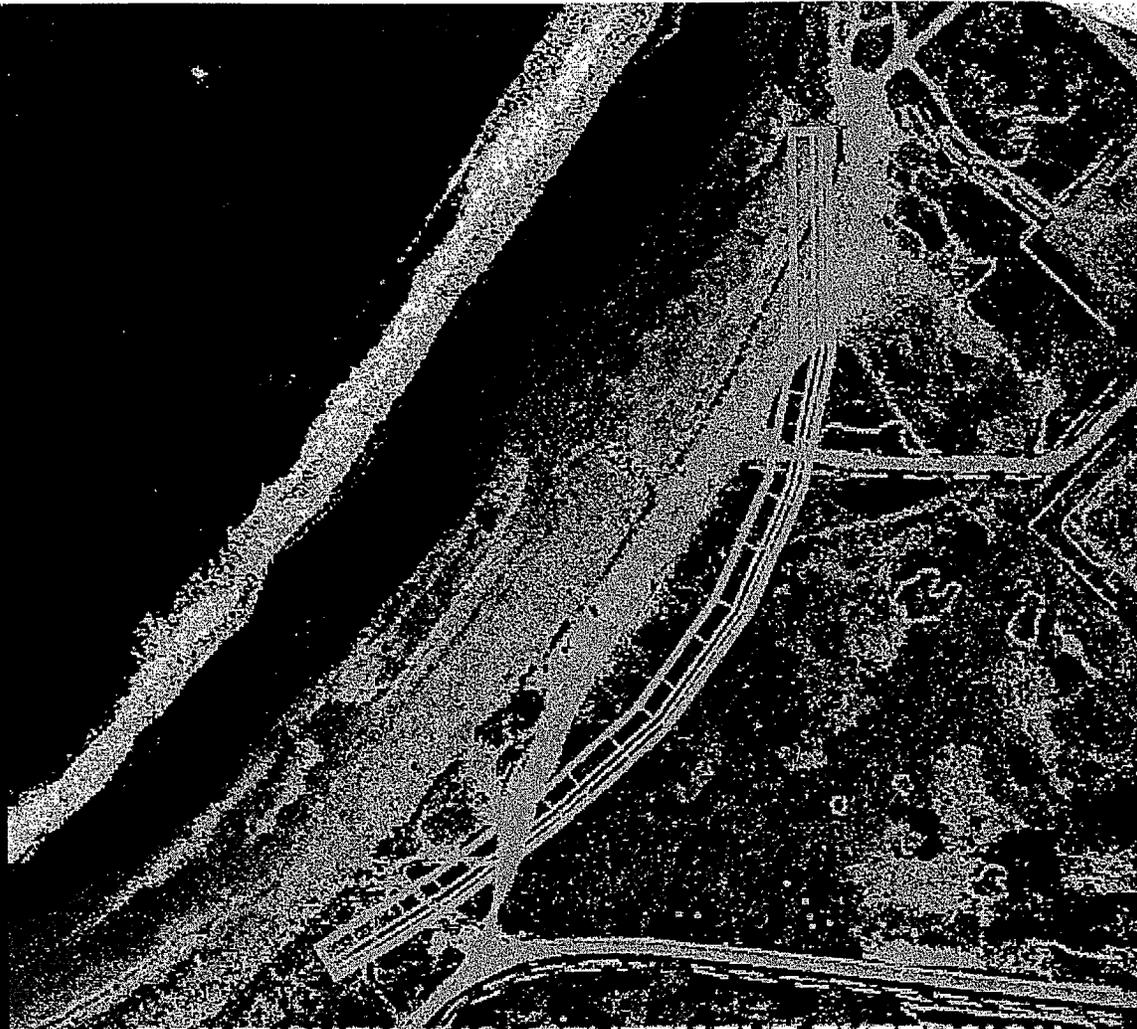
SEPTEMBER 1999 - HALF MOON
BAY BEACH NOURISHMENT



SEP 1999

POINT CHEHALIS REVETMENT EXTENSION
22 DEC 1998 - LOOKING SOUTH
QUARRY SPALL PLACEMENT



An aerial photograph showing a coastal area. A road or path runs diagonally from the bottom left towards the top right. A large, rectangular structure, possibly a building or a pier, is situated near the top center. The terrain appears to be a mix of land and water, with some vegetation and a body of water visible on the left side. The image is in black and white with a high-contrast, grainy texture.

**POINT CHEHALIS REVETMENT EXTENSION
CONSTRUCTED NOV 1998 - MAR 1999**

POINT CHEHALIS REVETMENT EXTENSION

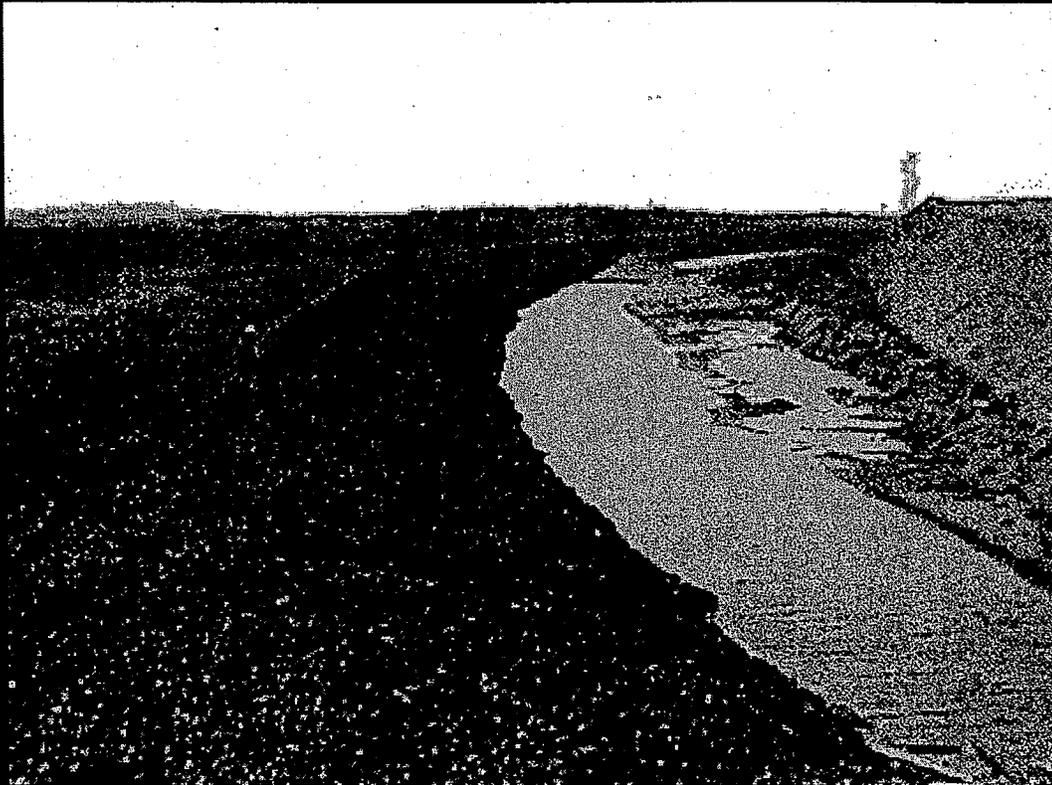
25 MARCH 1999 - LOOKING NORTH

AT THE COMPLETION OF CONSTRUCTION, THE NEWLY
PLACED REVETMENT TOE ROCK WAS COVERED BY SAND
TO AN ELEVATION OF APPROXIMATELY + 15' MLLW



REVETMENT TOE

POINT CHEHALIS REVETMENT EXTENSION
REVETMENT COMPLETED MARCH, 1999
REVETMENT LENGTH: 1900' COST: \$2,389,000



POINT CHEHALIS REVETMENT EXTENSION
THE EXCAVATED SAND WAS USED TO CONSTRUCT A
CONTAINMENT DIKE TO ALLOW PLACEMENT OF ABOUT
200,000 CY OF DREDGED MATERIAL IN APRIL AND MAY 1999



Arden, Hiram T NWS

From: Knoll Lowney [knoll@igc.org]
Sent: Wednesday, January 14, 2004 12:36 PM
To: Hiram Arden
Subject: Record on sand placement proposal

Please consider these documents in your decision

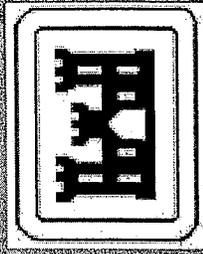
Knoll D. Lowney
Smith & Lowney PLLC, Attorneys at Law
2317 E. John St.
Seattle, WA 98112
(206) 860-2883; fax 860-4187
knoll@igc.org

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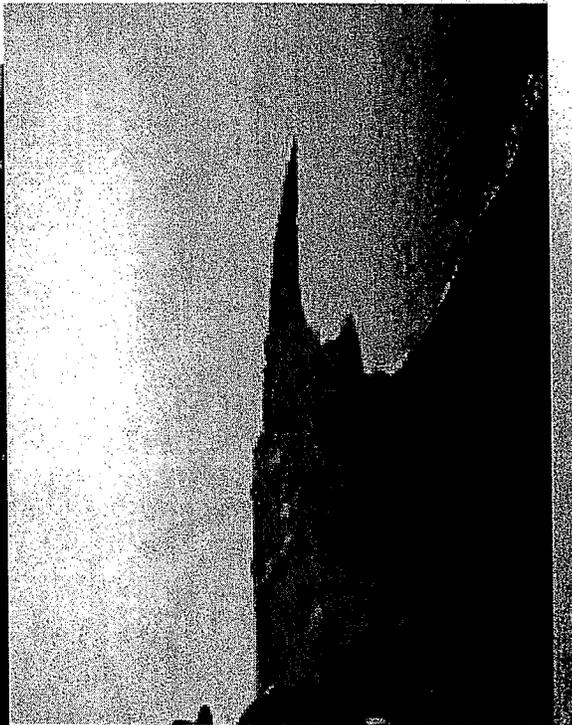
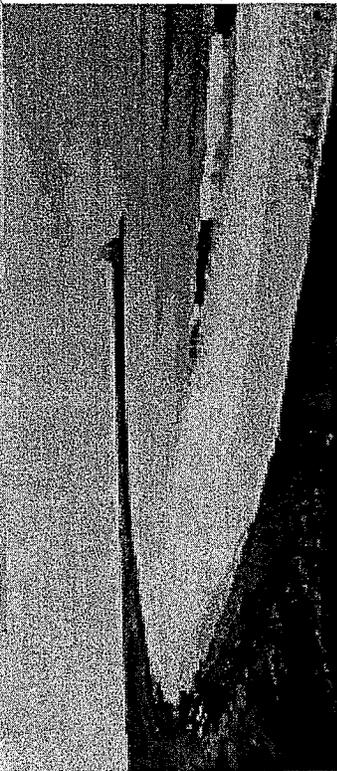
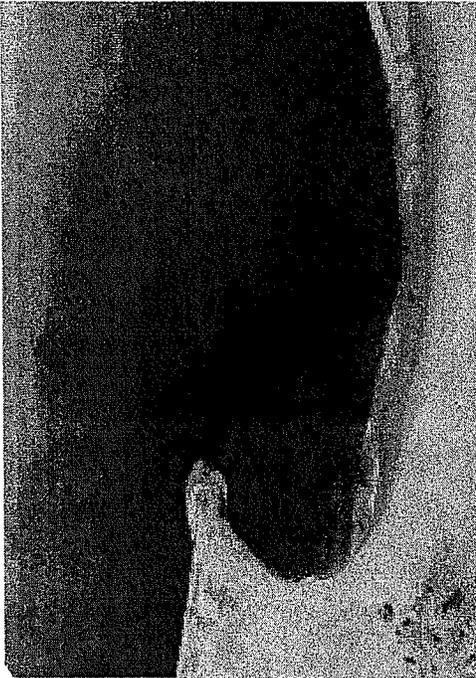
II

Diffraction Mound Gravel Transition

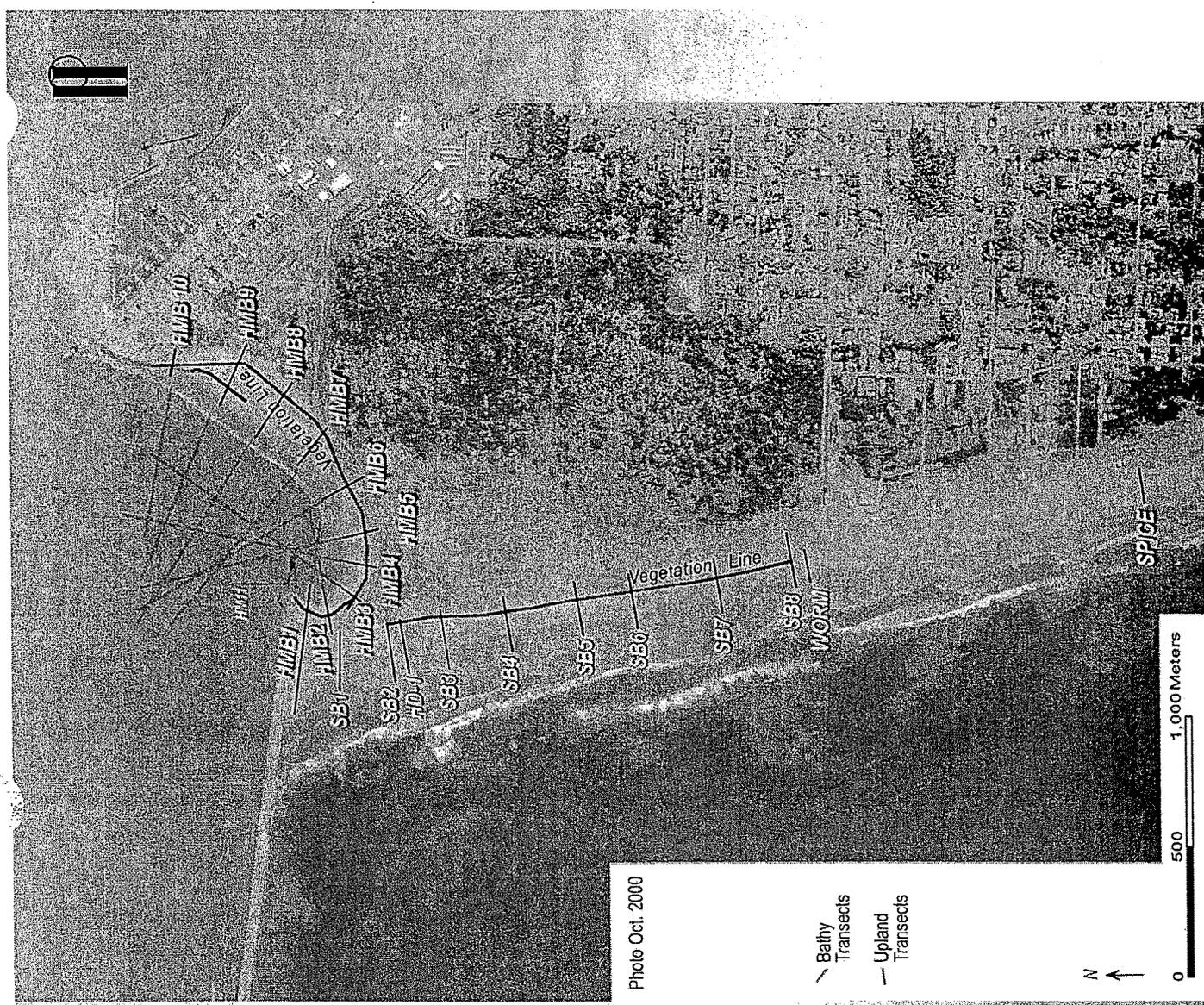
Half Moon Bay, Westport, Grays Harbor, WA,



PACIFIC
INTERNATIONAL
ENGINEERING PLLC

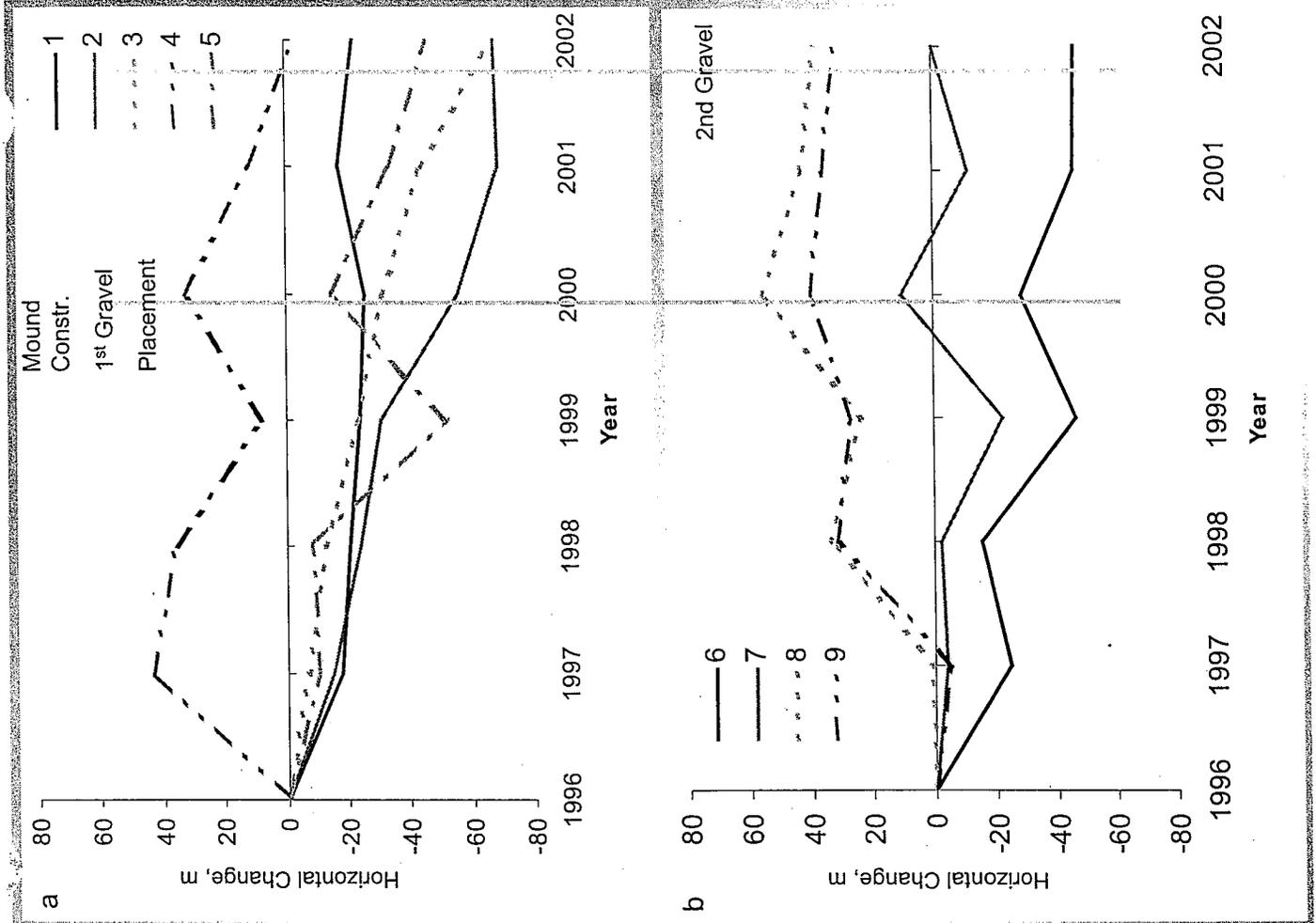


- Aerial photo derived shoreline change
- Beach profile analysis
- Aerial photo derived scarp position
- Recommendations for short term solution



Shoreline Position Change at Transects HMB 1-9 relative to 1996

- Shoreline change analysis indicates the shoreline has been stable since mound construction and placement of 300 ft gravel/cobble berm, in that area where gravel placed (e.g. Transects 1 and 2)
- Erosion continued at Transects 3, 4, and 5 and to a lesser extent at Transect 6.



Beach Profiles

Transects 2, 3, 4
 Dec 2001
 April 2002
 June 2002

- Between Dec 01 and July 02 placement, beach profiles:

- Eroded

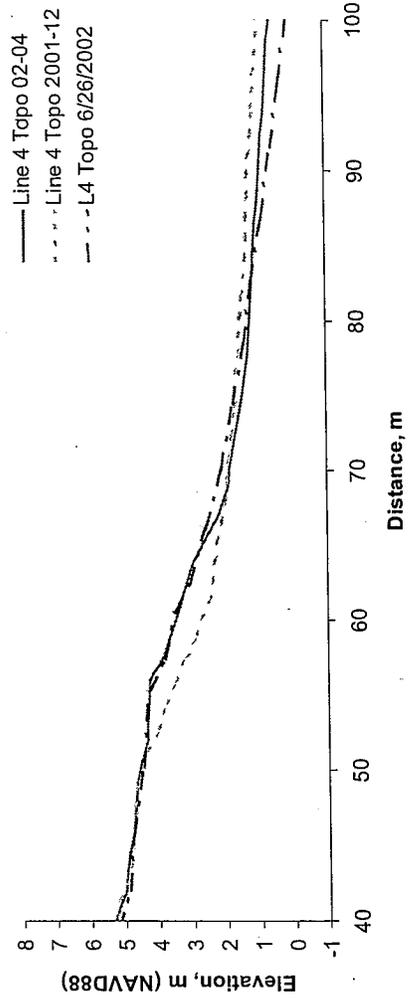
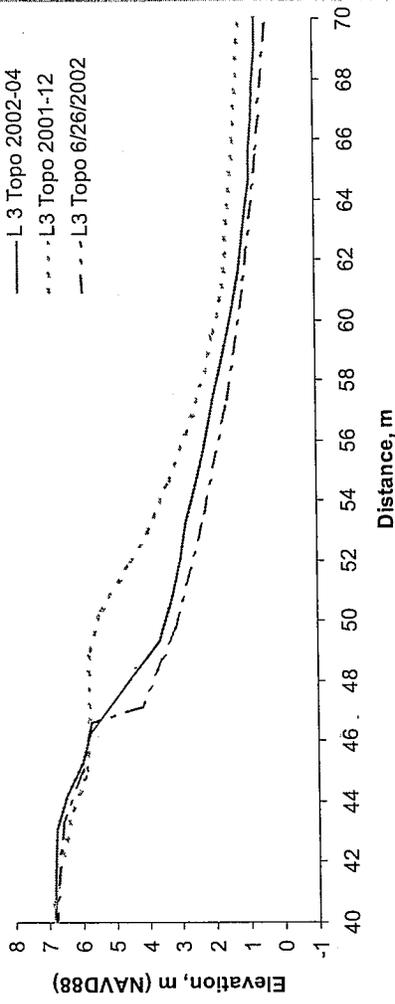
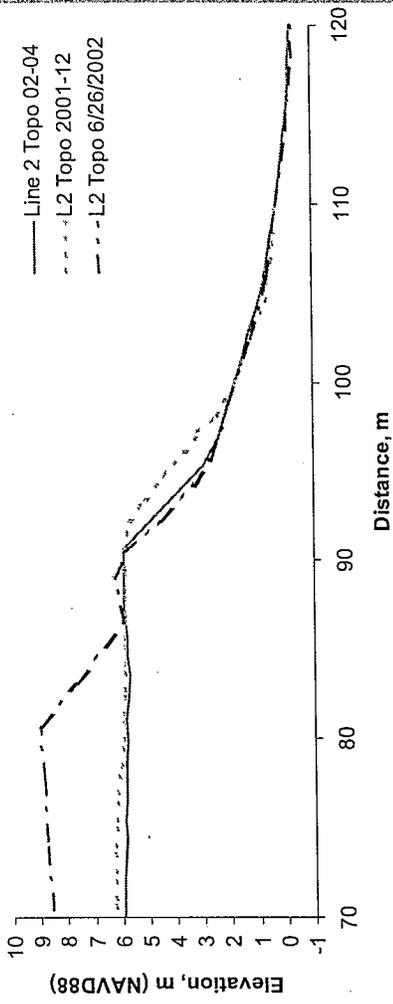
- slightly at Transect 2 (gravel), significantly at Transect 3 (end of gravel transition)*

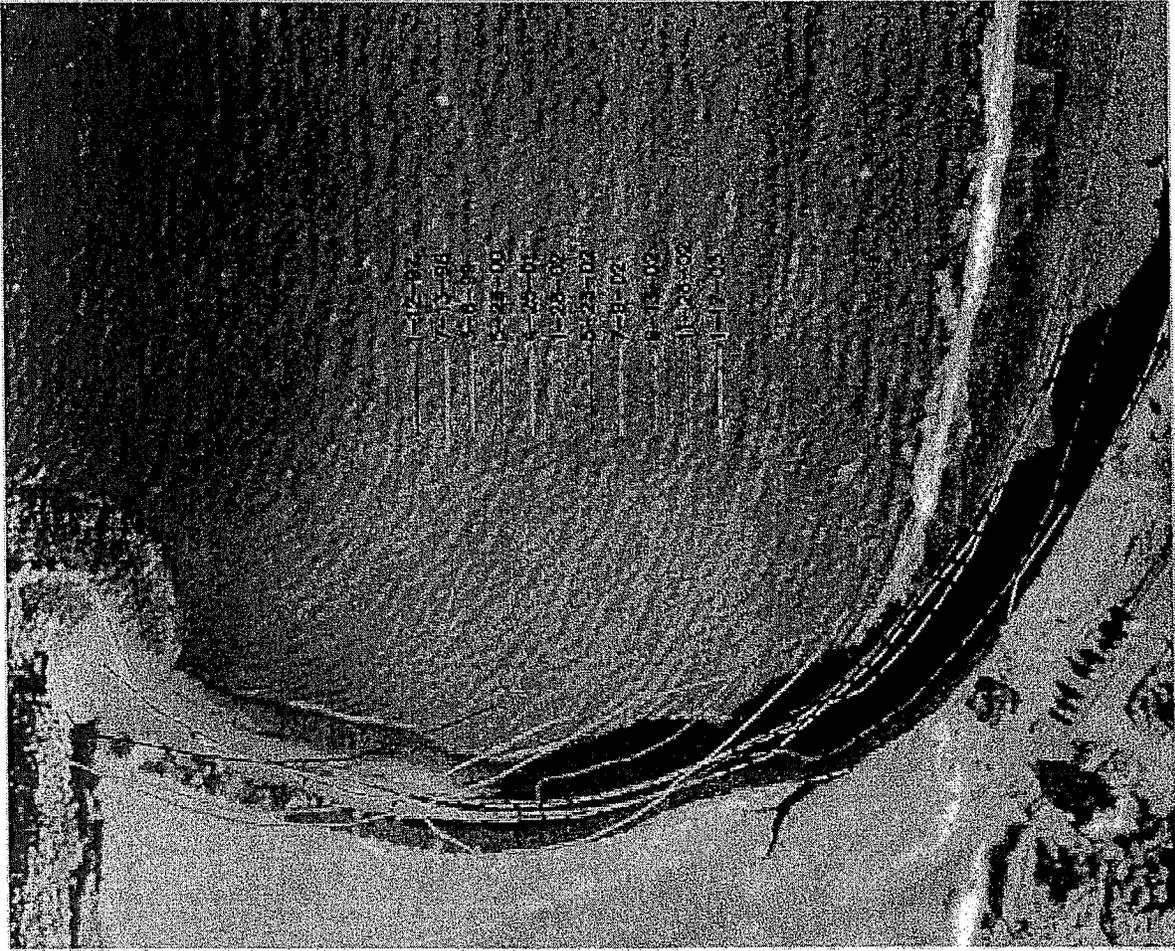
- Accreted

- at Transect 4*

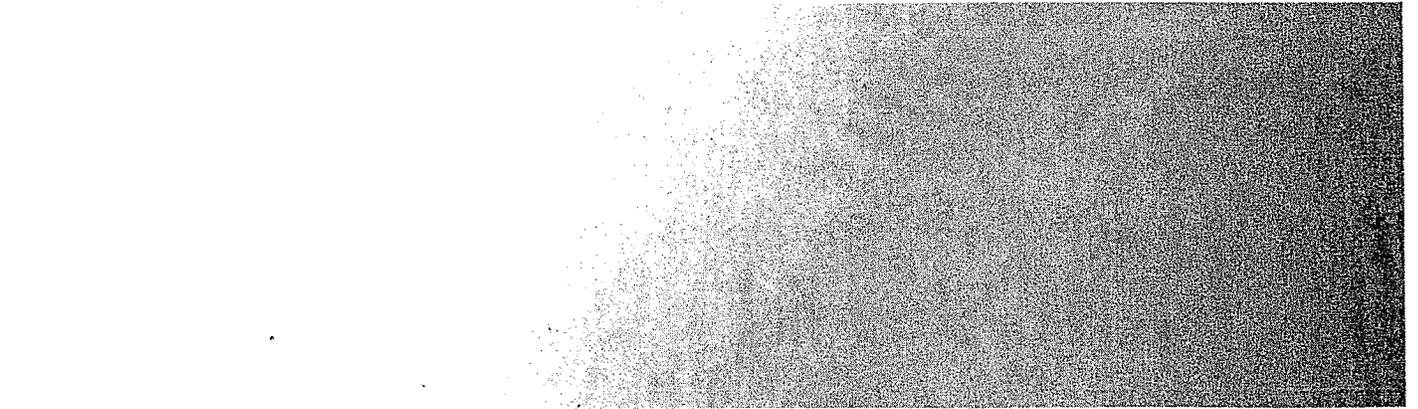
- Gravel redistributed between transects 3 and 4

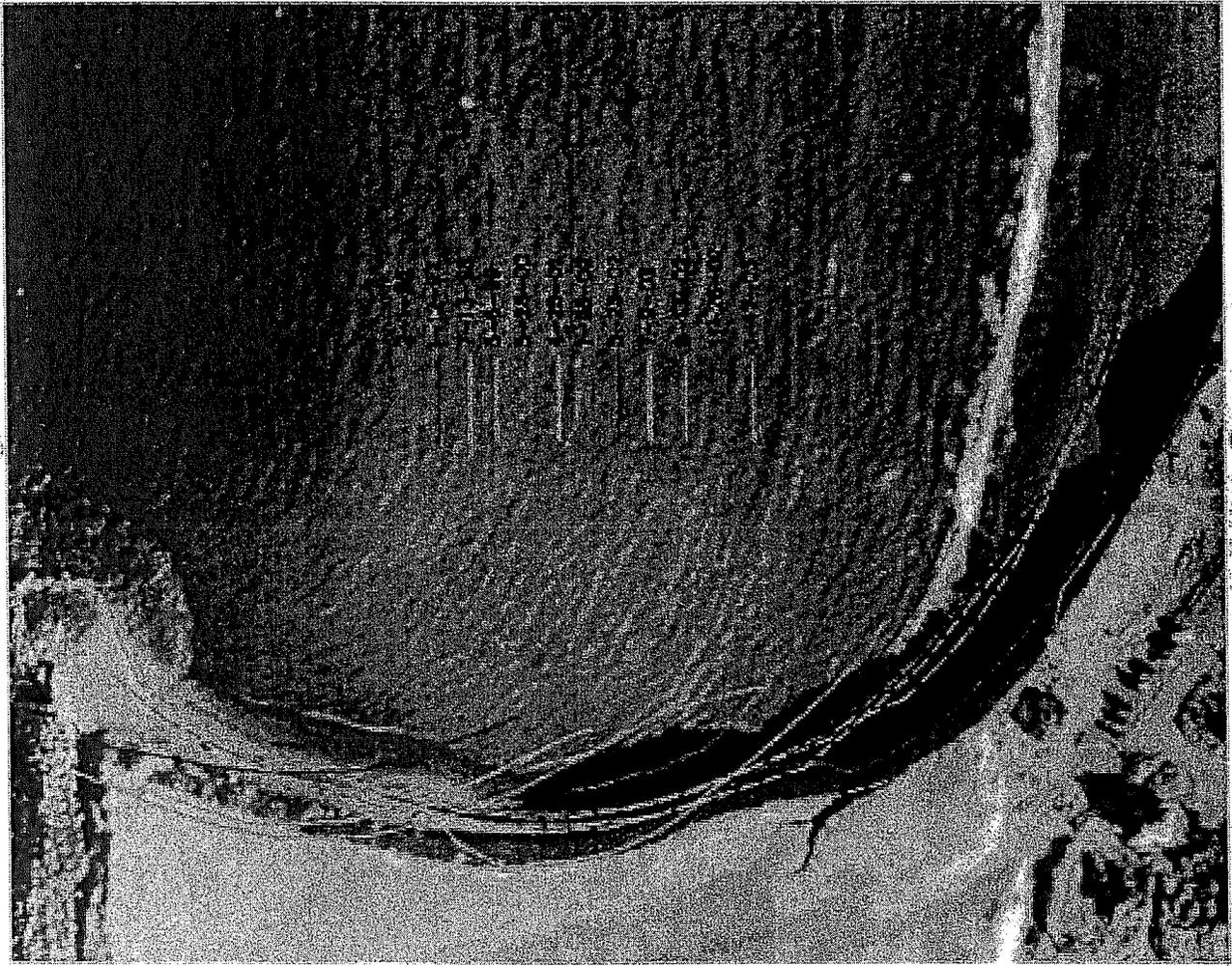
Suggests transport to the south and then east along shore





Half Moon Bay
Observed Scarp Position





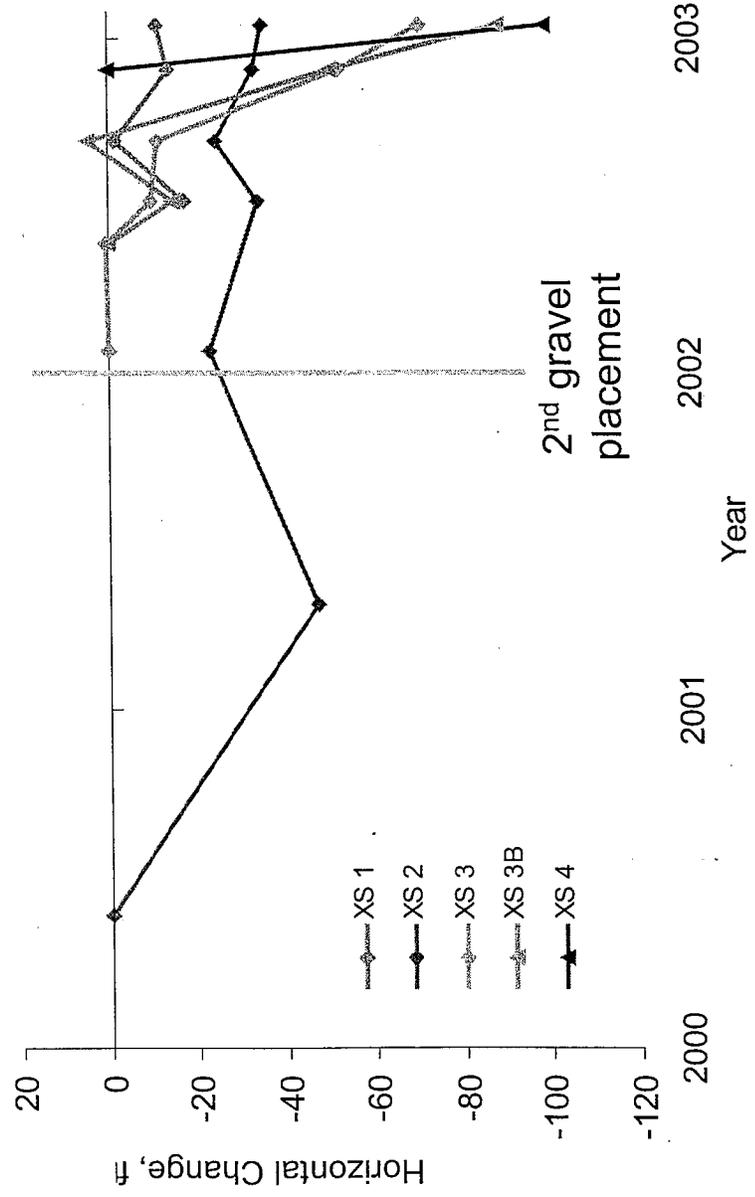
Half Moon Bay
Observed Scarp Position
(Base Aerial : 1-17-03)

Scarp Erosion



- Scarp positions were derived from air photos for 2001 to 2003.
- Scarp has been stable at Transects 1 and 2 since 2nd placement of gravel.
- Scarp has receded between 60 to 100 ft between Transects 3 and 4 off the end of gravel placement

Scarp Position Relative to First
Observance at Respective Cross Section

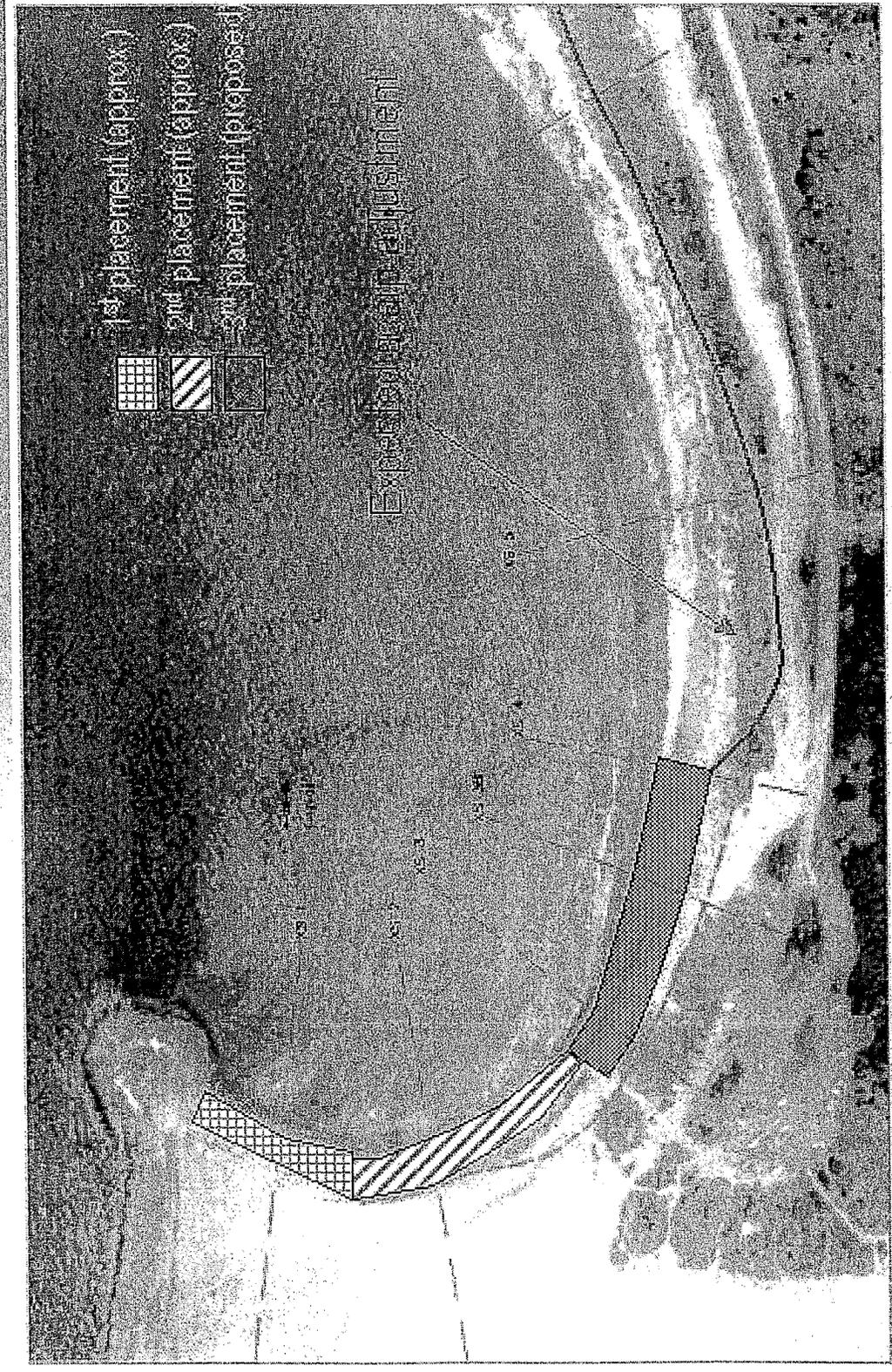




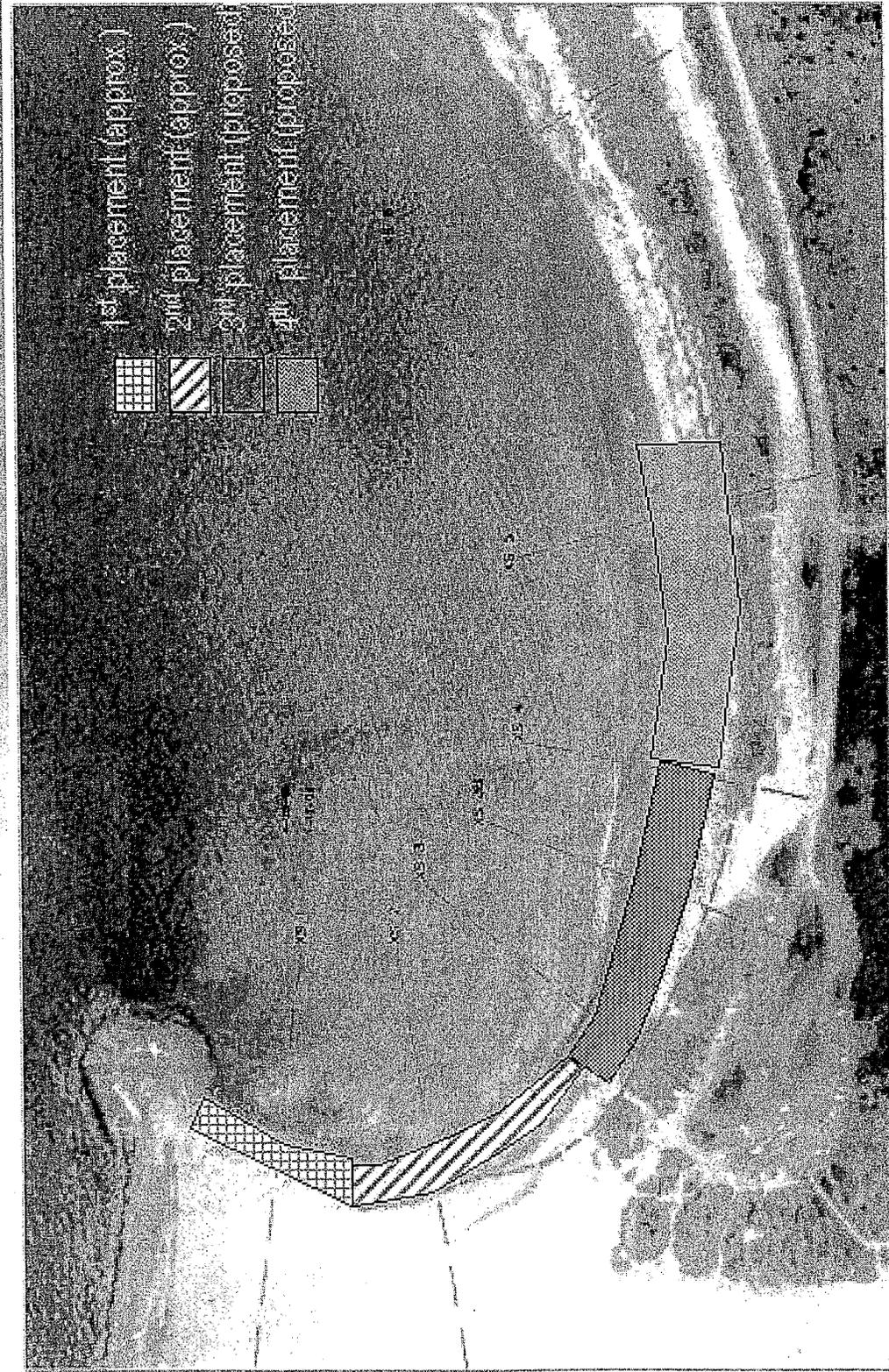
Half Moon Bay
Observed Scarp Position
(Base Aerial : 5-23-05)



Half Moon Bay
Observed Scarp Position
(Base Aerial : 5-23-2002)



Half Moon Bay
Observed Scarp Position
(Base Aerial : 5-23-2002)



Half Moon Bay
Observed Scarps Position
(Base Aerial : 5-23-2002)

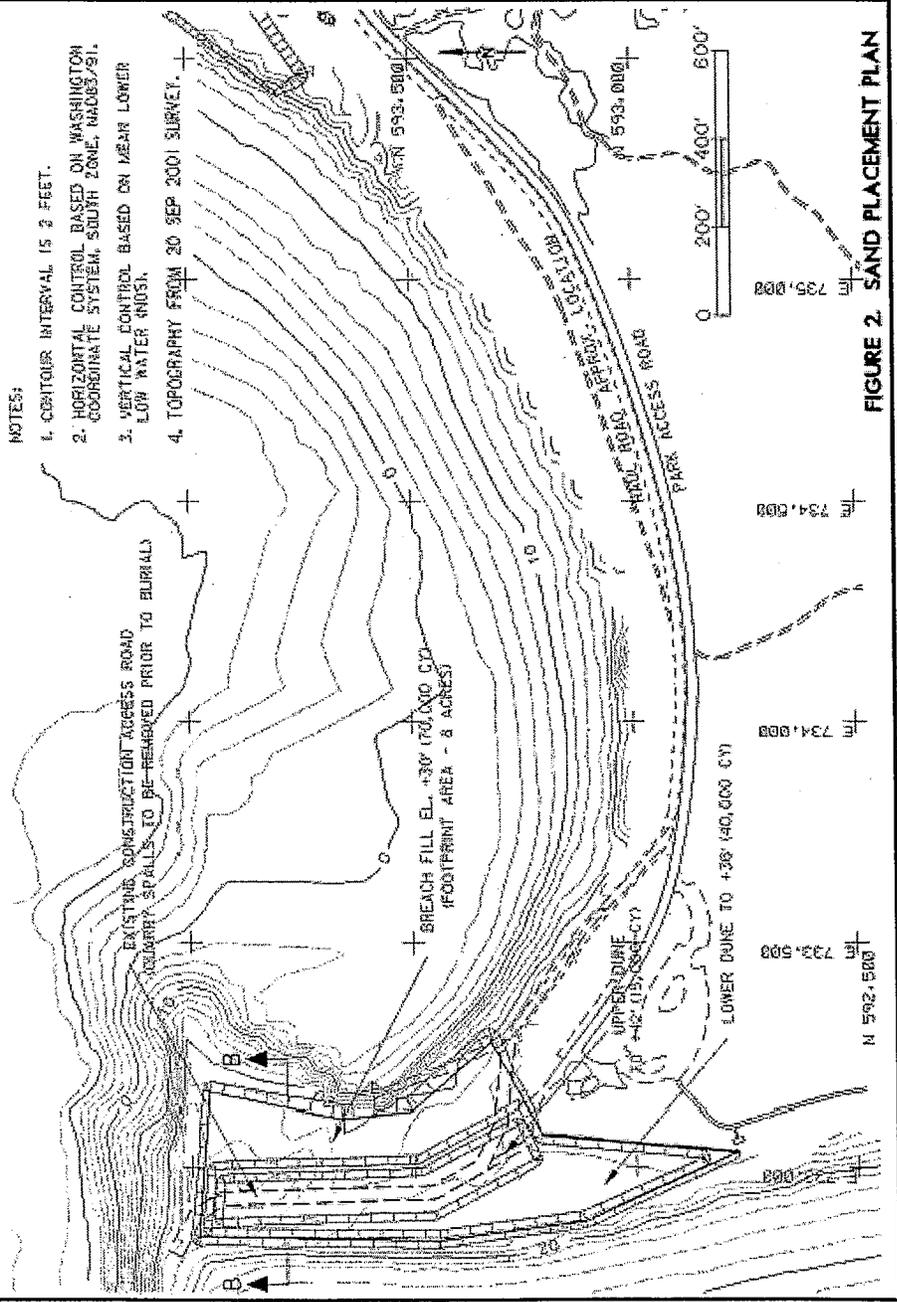
Summary (see also Summary document)

- Shoreline has adjusted to mound and gravel placements in the area between mound and Transect 3.
- Based on shoreline change trends, required length for gravel placement is not likely to extend beyond Transect 5 to 6 (1500 ft) from mound
- If placement needed to Transect 5, approximately 41000 tons would be required.
- Volume of material required could be reduced if the size of material is increased
- Recommended that a minimum size of 3 inch be considered for the gravel/cobble wet gradation
- Adaptive management approach: extend gravel half of this distance (e.g. 350 ft) from its present end point to approximately transect 4.



Figure 17. Gravel embankment at Transect HMB3, 14 January 2002

SOUTH JETTY BREACH FILL



NOTES:

1. CONTOUR INTERVAL IS 2 FEET.
2. HORIZONTAL CONTROL BASED ON WASHINGTON COORDINATE SYSTEM, SOUTH ZONE, NAD83/91.
3. VERTICAL CONTROL BASED ON MEAN LOWER LOW WATER (MLLW).
4. TOPOGRAPHY FROM 20 SEP 2001 SURVEY.

FIGURE 2. SAND PLACEMENT PLAN

Arden, Hiram T NWS

From: OlearyCrk@aol.com
Sent: Wednesday, January 14, 2004 2:23 PM
To: Arden, Hiram T
Cc: Kinney, Aimee T
Subject: Figure 2 Public Notice CENWS-OD-TS-NS-21R

Mr. Arden,

I want to particularly express my concern over the proposal to excavate 25,000 cubic yards of sand material from the "existing sand stockpile." This would be a repeat of the excavation made in 2002 in which the Corps placed approximately the same volume in same location. The promise in the previous notice was as follows:

The purpose of this Public Notice is to solicit comments from interested persons, groups and agencies on proposed Corps of Engineers, Seattle District (Corps) placement of sandy dredged materials at the South Jetty breach fill. The work consists of mechanically rehandling approximately 125,000 cubic yards of sandy dredged material from the Corps' existing Half Moon Bay direct beach nourishment disposal site (upland stockpile) to the eroding breach fill area directly south of the Grays Harbor south jetty. The proposed work would occur in April and May 2002. The excavated upland stockpile area will then be refilled by hopper dredge pump off of material dredged from the Grays Harbor and Chehalis River (South Reach) navigation channel during routine maintenance in June 2002. (Public Notice CENWS-OD-TS-NS February 28, 2002).

As can be seen by the attached photo, this replacement was not adequately achieved. The result was that section of the mitigation beach was not available for recreational purposes to the general public. The attached photo (taken by me from the observation walk at the Coast Guard tower) indicates wet weather completely inundates a significant area and creates a lake.

My observations from a January 10, 2004 visit (see attached photo taken from the ground on that day) to the same area confirmed that this same spot was still a lake with several seagulls the only users. The public has to traverse a narrow path at the top of the dune in order to avoid walking in the water, otherwise they have to walk at the back of the stockpile area away from and out of sight of the beach.

These impacts have not been or are not now being adequately addressed.

In addition, I am very concerned about the proposed placement of the 20,000 cubic yards of sand adjacent to the restrooms and parking lot at Westhaven State Park. Attached you will find a couple of photos that I took of the Clean Water Paddle sponsored by Surfrider Foundation, of which I am a member.

The recent illegal "emergency fix" by the City of Westport which placed cement blocks and dredged sand on this beach area has created a dangerous precipice drop to the beach. This effectively excludes access to the general public. I am concerned that the proposed addition of the sand will further exacerbate the limiting of public access.

I very strongly believe that the Corps and regulatory agencies should NOT allow any further experimental fixes to these important shorelines of statewide and international significance without a complete, detailed, independent and peer-reviewed NEPA EIS.

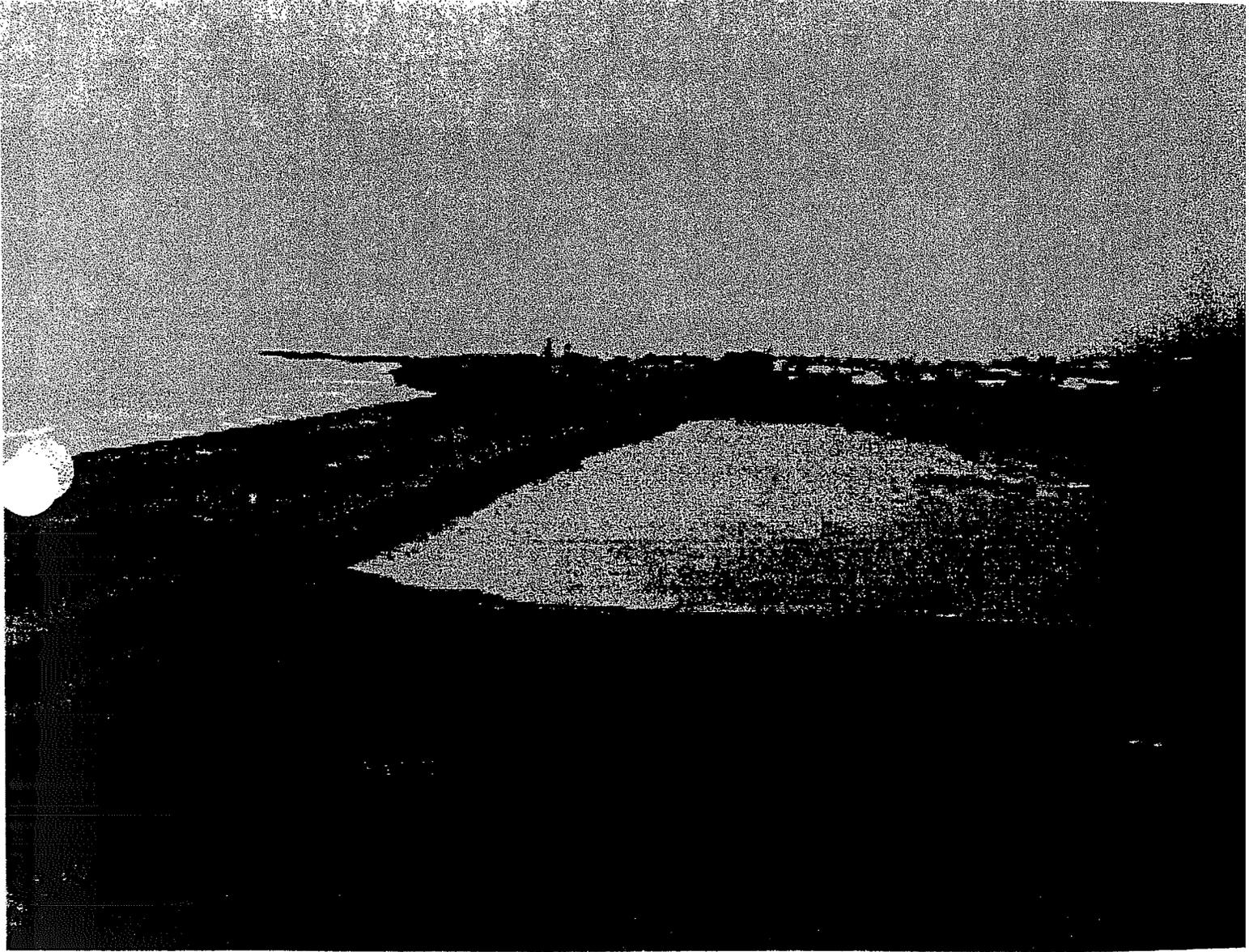
Thank you for this opportunity to express my personal concerns and the concerns I have for the public.
 Sincerely,

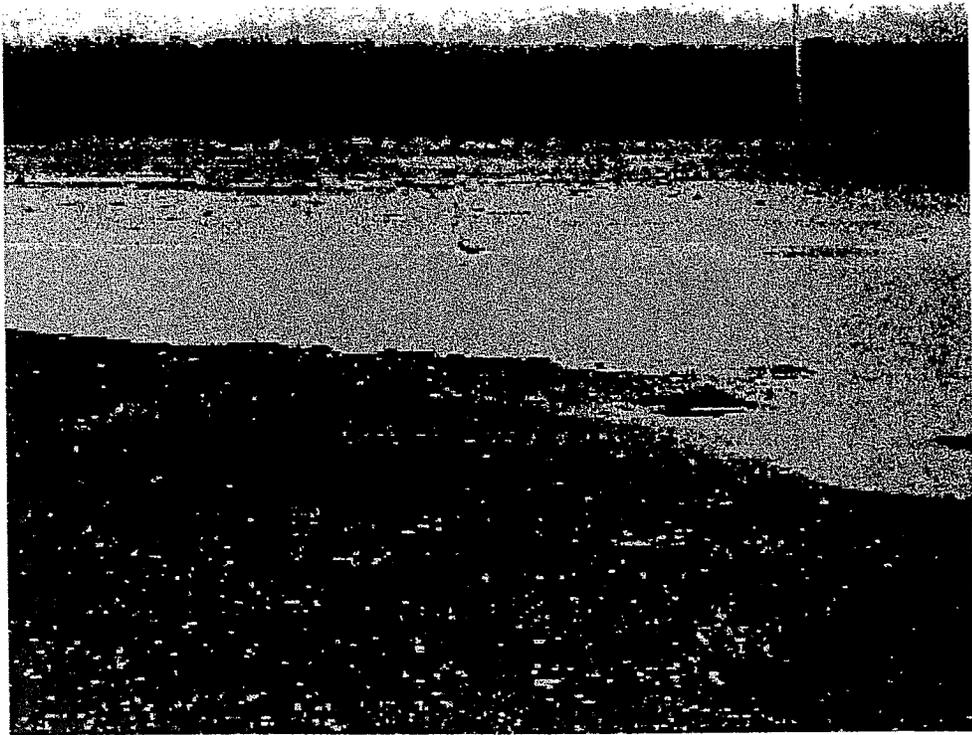
Arthur (R.D.) Grunbaum

Arden, Hiram T NWS

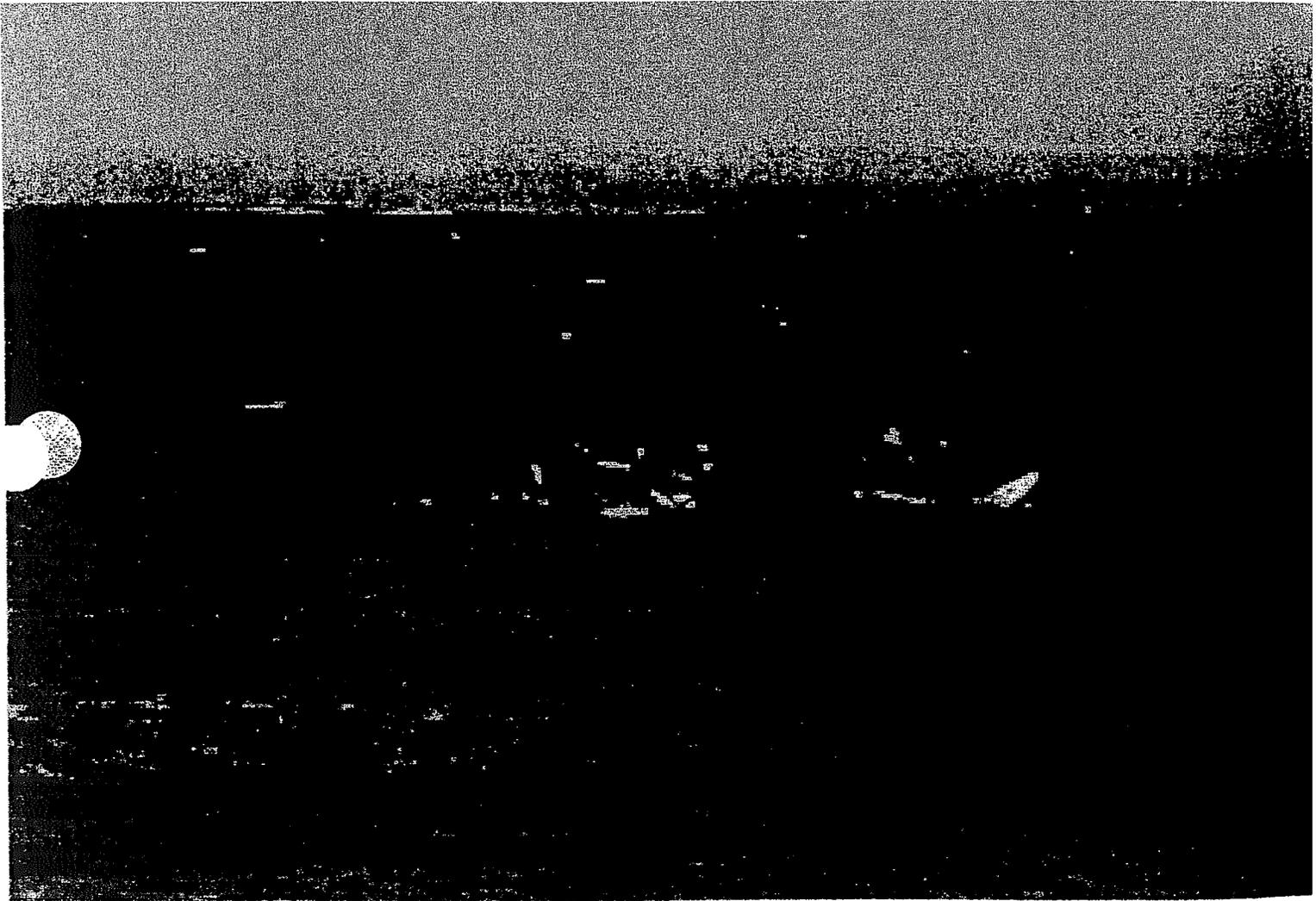
1/14/2004

Letter 8









Rec'd 1/14/04 H

1/13/04

NAVIGATION SECTION

POB 3755

SEATTLE WA 98124-3755

ATTN: HIRAM ARDEN (OD-TS-NS)

REF: CENWS-OD-TS-NS-21R

A FULL ENVIRONMENTAL IMPACT STATEMENT SHOULD BE REQUIRED OF THE CORPS ON THIS PROJECT. WE FEEL THE CORPS WOULD REQUIRE A CITY, COUNTY, OR PRIVATE DEVELOPER TO DO AN EIS ON A PROJECT OF THIS MAGNITUDE. AS A GOVERNMENT AGENCY THE CORPS SHOULD BE LEADING BY EXAMPLE.

IT APPEARS THAT MILLIONS OF TAXPAYERS' DOLLARS HAVE BEEN SPENT OVER THE YEARS ON INTERIM FIXES ON THIS PROJECT WITH MANY MORE TO BE SPENT IN THE FUTURE WITHOUT ANYONE EVER LOOKING AT THE LONG TERM EFFECTS ARMORING WOULD HAVE ON THE SHORELINE. WHAT OF EROSION PROBLEMS TO OTHER AREAS OF THE BEACH? WHAT HARM IS BEING DONE TO THE ENVIRONMENT? SUCH AS ADJACENT WETLANDS BEING DRAINED, EFFECTS ON MARINE LIFE, CRAB, AND OTHER SEALIFE POPULATIONS ALSO EFFECTS ON

cc: ERS

Letter 9

ATTN: HIRAM ARDEN

P. 2

REF: CENWS-OD-TS-NS-21R

RECREATION. ALL THE SAND THAT HAS BEEN PLACED ON THE SHORELINE BY THE STATE PARK HAS MADE THE BEACH INACCESSIBLE BECAUSE OF A HUGE CLIFF PREVENTING SURFERS, THE ELDERLY, DISABLED, CLAMMERS AND OTHERS FROM GETTING TO THE BEACH FOR RECREATION.

THIS PROJECT HAS BEEN GOING ON LONG ENOUGH WITH MILLIONS OF TAX DOLLARS AND WITH INTERIM AND EMERGENCY FIXES WITHOUT ADEQUATE ENVIRONMENTAL REVIEW. IT IS TIME FOR A FULL ENVIRONMENTAL IMPACT STATEMENT ON THIS PROJECT.

THANK YOU

David + Vicky Mascarenas

DAVID + VICKY MASCARENAS

517 LAUREL DR

EVERETT, WA 98201-4130 (MAILING ADDRESS)

+

805 COHASSETT DUNES LANE

WESTPORT, WA 98595

Arden, Hiram T NWS

From: LdotOrg@aol.com
Sent: Monday, January 12, 2004 9:20 PM
To: Arden, Hiram T
Subject: Ref: CENWS-OD-TS-NS-21R

January 11, 2004

Navigation Section
P.O. Box 3755
Seattle, WA 98124-3755
ATTN: Hiram Arden (OD-TS-NS)
Ref: CENWS-OD-TS-NS-21R
hiram.t.arden@usace.army.mil

Placement of Sand, South Jetty Breach Fill Maintenance, Westport, WA

Dear Mr. Arden:

I wish to comment on the proposed placement of 25,000 cubic yards of sandy dredged material on the "rapidly" eroding sandy shoreline at Half Moon Bay, adjacent to the Grays Harbor South Jetty.

As a resident of Grays Harbor and a frequent visitor to Westhaven State Park and the adjoining beaches, I have witnessed the frequent, short-term and ultimately unsuccessful attempts at stopping the erosion along the shoreline in question. Each time an "emergency" is declared, a more intrusive obstruction is placed on the shoreline, at great expense to the public and harm to the environment, only to be washed away, littering the landscape with debris. It is apparent to many who can count the number of "emergencies" over the years that these engineered solutions are a way to circumvent the law. They really cannot continue.

I object on several counts:

1. Your public notice states that the sand placement is necessary "to prevent another breach from occurring and threatening the stability of the jetty..." The major portion of the proposed sand placement, however, will be in an area other than the 1993 breach. Where is the study that shows the erosion in the area where most of the placement is planned will threaten the jetty?
2. You claim that the location of the sand material that will be taken to nourish the eroding beach at Half Moon Bay is "sacrificial". Wasn't that sand required by litigation to remain to cover the rock revetment built in order to protect the Westport Waste Water Treatment Plant? Where is the environmental review for the impact of removing sand from this area?
3. What important resource will this action protect that justifies the use of public funds? Since 20,000 cubic yards of fill will be placed in an area that threatens no infrastructure other than a proposed private condominium development, what is the justification for spending public funds to protect private development?
4. The continued piecemealing of these "emergency" fixes are harmful to the environment. The Corps needs to stop doing "interim" measures and get on with the business of a thorough environmental impact study of the long-term cumulative impacts of erosion control. What was the scientific study used to justify the current proposal?

This latest attempt is foolhardy by your own admission. On page 6 of your Draft Environmental Assessment, you state, "The additional sand will likely experience water and wind erosion and deposition much like the existing landscape." You go on to state that, "...the action would be of little consequence." My question, then, is why bother to do it? You are planning to spend up to \$1,000,000 for an action that you claim will have no consequences. Are you asking the public to throw money away, as grains of sand are washed away by the forces of nature?

In this same document, you describe how detrimental hardening protection measures may be to the shoreline. You acknowledge what any layperson can readily see - end cut erosion occurs whenever hardening measures are introduced. Why is it that not more than one month ago you planned to dump 40,000 tons of rock on this very same shoreline? Do you expect the public to have confidence in your "solutions" when you continuously claim that each action would be of "little consequence?" Are you asking the public to pay for the destruction of their

beaches?

These are public resources and public funds that are being expended. It is time the Corps used its skill and energy in the positive pursuit of a long-term environmental impact study and refrained from engaging in risky quick fixes.

Linda Orgel
1128 State Route 105
Aberdeen, WA 98520

OFFICE OF
COUNTY COMMISSIONERS

BOB BEERBOWER
FIRST DISTRICT
DENNIS MORRISSETTE
SECOND DISTRICT
ALBERT A. CARTER
THIRD DISTRICT
DONNA CATON
ADMINISTRATIVE ASSISTANT



100 West Broadway, Suite #1
MONTESANO, WASHINGTON 98563
PHONE (360) 249-3731
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STATE OF WASHINGTON

January 12, 2004

Hiram Arden
Seattle District Office
Army Corps of Engineers
United States of America
PO box 3755
Seattle, WA 98124-3755

RE: CENWS-OD-TS-NS-21R

Dear Mr. Arden:

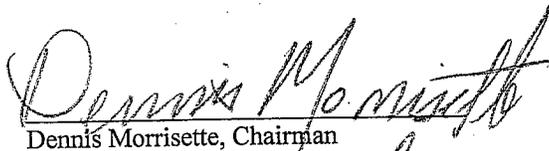
Thank you for the opportunity to comment on the proposed project by United States Army Corps of Engineers for the placement of approximately 25,000 cubic-yards of sandy dredged materials on the rapidly-eroding shoreline adjacent to the Grays Harbor south jetty in Half Moon Bay near Westport, Grays Harbor County, Washington.

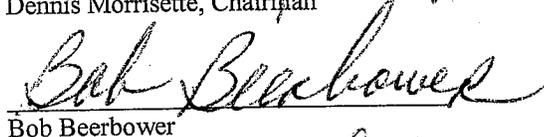
Grays Harbor County fully supports this proposal, as it will allow for the interim stabilization of the Half Moon Bay shoreline and reduce the risk of another breach occurring until a long-term management solution can be formulated and implemented. The County is concerned with potential impacts to fish habitat from the proposed action, therefore understands and recommends that any in-water activity will be performed during a time that minimizes impacts to fish rearing or spawning and in a manner consistent with direction provided by the Washington State Department of Fish and Wildlife.

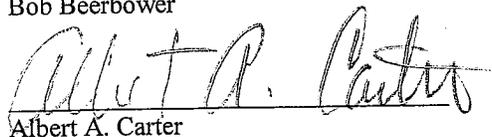
Please contact Paul Easter, Grays Harbor County Public Services Director, at (360) 249-5579, extension 411 should you have any questions concerning this comment.

Sincerely,

BOARD OF COMMISSIONERS
GRAYS HARBOR COUNTY


Dennis Morrisette, Chairman


Bob Beerbower


Albert A. Carter

Cc: Paul Easter, Director of Public Services
Randy Lewis, Westport City Administrator

cc: ERS

Letter 11

Rec'd 1/14/04

SMITH & LOWNEY, P.L.L.C.

2317 EAST JOHN STREET
SEATTLE, WASHINGTON 98112
(206) 860-2883, FAX (206) 860-4187

W/98
Exhibits
≈ 8-inches

January 14, 2004

Hiram Arden, Project Manager
Navigation Section
U.S. Army Corps of Engineers
Post Office Box 3755
Seattle, WA 98124-3755

Re: Revised 21-day notice, U.S. Army Corps of Engineers, Placement of Sand, South Jetty Breach Fill Maintenance, Westport, Washington.
EARLY DEADLINE DRAFT

To Whom It May Concern:

This comment letter is being submitted on behalf of Wildlife Forever of Grays Harbor, Friends of Grays Harbor, and Arthur Grunbaum. These comments are submitted regarding the U.S. Army Corps of Engineers' ("Corps") proposed 2004 action.¹ These comments are submitted in a draft form, to meet the 21-day notice letter, and shall be resubmitted in a final form during the comments period for the EA, FONSI and CZMA.

These comments address the Corps' decision as to whether to undertake the proposed project, as well as the project's compliance with the Coastal Zone Management Act ("CZMA") and the National Environmental Policies Act ("NEPA"). Additional comments on CZMA and NEPA will be submitted within the comment deadlines for those laws.

A. Description of proposed project.

On December 24, 2003, the Corps issued a Revised Public Notice ("Dec. 2003 Public Notice"), a Draft Environmental Assessment ("Dec. 2003 EA") and a Draft Finding of No Significant Impact ("Dec. 2003 FONSI"). These documents describe what can be considered two distinct projects:

"[1] The purpose of the proposed work is to extend the life of the breach fill by nourishing the area adjacent to the south jetty. ... [2] The proposed project will

¹ In addition to these comments, we incorporate by reference the comments of other citizens and organizations, including Washington Environmental Council, Chehalis River Council, Surfrider Foundation, Brady Engvall.

Letter 12 (Draft

also partially nourish the area adjacent to the previous gravel placement which has severely eroded"

Dec. 2003 FONSI.

"The proposed action consists of placement of 25,000 cubic yards of sand on the south jetty breach fill and in the southeast corner of the breach fill prior to February 14, 2004 or after July 16, 2004. The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999. Approximately 2,500 cubic yards of sand will be placed on the large rainwater runoff gullies that have formed along the southeastern corner of the breach fill. Approximately 2,500 cubic yards of sand will be placed directly adjacent to the jetty in the northwest corner of the breach fill. Approximately 20,000 cubic yards of sand will be placed in the southwest corner of the bay, adjacent to the Westhaven State Park access road and parking lot where severe end-cutting erosion is threatening the breach fill. Of that 20,000 cubic yards, approximately 10,000 cubic yards will be placed in upland areas along the shoreline.

Based upon the results of post-placement monitoring, and dependant on funding availability, the Corps may place up to 15,000 additional cubic yards of sand annually until the time when a long-term erosion management strategy has been implemented."

Dec. 2003 FONSI.

B. Facts and documents that the Corps should consider.

The Corps has admitted that it has taken approximately nine "interim" measures in the past decade to deal with the erosion issue in Half Moon Bay. Each of these actions should be considered collectively as an ongoing management program. Thus, in considering whether to take the proposed 2004 action, the Corps should consider all available information on the erosion situation in Half Moon Bay as well as on the Corps previous actions within the past decade. These actions have been discussed in the Dec. 2004 EA and its accompanying cumulative impact analysis. The documents that should be considered for each of these actions include:

- Environmental documents including EA's and FONSI's.
- Public and agency comments.
- Monitoring data.
- Analysis of impacts associated with the project.
- Other documents making up the record of decision for those actions.

In addition, the Corps substantive decision on whether to undertake the 2004 project should evaluate the entire record on the Dec. 2004 EA and FONSI, including

documents and comments that will be submitted to the record on the Corps' NEPA decision. Such comments and documents are hereby incorporated by reference as if attached hereto.

The Corps should also consider all scientific data it has developed and/or possesses on the erosion situation in Half Moon Bay. This includes the research and analysis prepared by the Corps' Coastal and Hydraulics Laboratory (CHL) and U.S. Army Engineer Research and Development Center (ERDC). For example, in a meeting held in Seattle on October 1, 2003, Dr. Nicolas C. Kraus of CHL made a presentation before the assembled group of a computer model of a breach at Half Moon Bay. Someone from the audience made the comment that if that were allowed it would jeopardize the navigational channel. Dr. Kraus counter with the statement "that's what we thought at first", but the model shows that this would not be the case. He commented that the navigational channel was too deep and well-established. He stated that the breach channel would have little or no effect. This analysis and presentation should be made part of this record. This is also true of the work of Patrick Naher and other presenters at meetings relating to erosion in Half Moon Bay.

Among the many documents that should be considered are the South Jetty Sediment Processes Study, April 2003, and South Beach Shoreline Change Analysis, prepared by the Southwestern Coastal Communities, August 2003. These are incorporated by reference.

We are submitting numerous documents that generally discuss the erosion situation in Half Moon Bay and the Links at Half Moon Bay project. We have numbered these documents 1-98, although some of these document numbers contain multiple documents. Please make these documents part of the official record for this action.

C. *The Corps' public notice is inadequate.*

The Dec. 2003 public notice solicited public and agency comments by e-mail. However, e-mail address published on the notice was incorrect. The comments period should be extended due to this error.

In addition, the public notice is inadequate and violates due process by failing to acknowledge that the Corps has no existing authority to excavate sand from the beach in the area proposed. Thus, the public is not made aware of the importance of commenting on this part of the proposal.

Indeed, the public notice relies on the NEPA documents to describe the excavation aspect of the 2004 project. The NEPA documents incorrectly state that "The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999." Dec. 2003 FONSI. Instead of excavating from a stockpile above the revetment extension, the Corps proposes to excavate the beach beneath the revetment extension, as discussed below.

D. An EIS is required before the Corps takes further action in Half Moon Bay.

The Corps should take no more action on erosion in Half Moon Bay without first preparing an environmental impact statement (EIS) on its ongoing program of erosion control in HMB. This program has included over nine major projects in a decade. Each was called "interim;" each was implemented without adequate environmental review. Each had significant environmental consequences and many have had unintended consequences in relocating the erosion problems to other areas of the beach. Additional comments and evidence shall be submitted during the comment period for the EA and FONSI.

F. The cumulative impacts of the Corps' many projects are significant and require a comprehensive EIS.

The Corps has failed to conduct an adequate evaluation of cumulative impacts of its projects in HMB. The "South Jetty Breach Fill Maintenance Cumulative Effects Analysis" attached to the EA does not even describe the Corps ongoing erosion control activities within the vicinity of HMB. It does not describe or analyze the cumulative impacts of the proposed project in conjunction with the other nine projects conducted in HMB over the past decade. Nor does it describe or evaluate the likely cumulative impacts such as impacts on recreation, impacts on fish and wildlife, impacts on benthic communities, or aesthetic impacts. It also does not discuss the cumulative impacts of other erosion control activities, including that of the City of Westport. It does not discuss the related impacts of the excavation project. For example, it does not discuss the source of the sand or the dredging project that will be required to replace the sand.

The analysis fails to acknowledge the uncertainty as to the limited subject areas it discusses, including longshore sand transport, impacts of the Links at Half Moon Bay project. The Corps incorrectly states that the project will not result in changes to the human occupancy of the area, when in fact it will enable additional occupancy in the erosion zone.

The Corps' conclusion on cumulative impacts is that

The proposed placement consists of less than 1% of the total volume of materials placed in Half Moon Bay over the past 10 years. In the context of all that has occurred in the past, the placement of 25,000 cubic yards of sand along the Half Moon Bay shoreline, the placement of 25,000 cubic yards of sand along the Half Moon Bay shoreline and on the breach fill will cause only a tiny increment more harm to biological function.

Dec. 2003 EA, at 22.

This analysis is flawed. The Corps has never determined the biological harm that has occurred and cannot merely shrug off the cumulative impacts analysis by concluding that the current project is small compared with past projects. The cumulative impact analysis must consider the impact of all of these projects.

G. *The Corps should not excavate sand from a beach in HMB that is currently used for recreational activities.*

The proposed excavation on the beach will create significant impacts and should not be allowed. The last excavation in this area created significant impacts by excluding the public from the beach and creating major aesthetic and water quality impacts. The excavation also may have contributed to draining an adjacent wetland. The Corps is legally bound to maintain the area in front of the revetment extension at a 60:1 slope for public recreation. Excavation in this area is contrary to the Corps' commitment and contrary to the City of Westport's Shoreline Master Program and Comprehensive Plan. Excavation in this area has never been subject to environmental review.

1. The Corps incorrectly states that the excavation will take place behind the revetment.

The EA states that "The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999 (see Figure 3)" Dec. 2003 EA p. 8. (emphasis added). In fact, Figure 3 of the Dec. 2003 EA shows that Corps proposes to excavate sand from the beach *below* the Revetment Extension.

2. The proposed excavation will take place in an area currently used for recreational activities.

This area of the beach is used for recreation including beach walking, etc.

3. The Corps is legally obligated to preserve this portion of the beach at a 60:1 slope for public recreation.

The area that the Corps proposes to excavate is subject to the October 7, 1998, Interagency Mitigation Agreement (IMA) for the Point Chehalis Revetment Extension Project. The mitigation plan was to address the Corps' proposal for a 1,900-foot long rock extension of the Point Chehalis revetment. IMA. p. 1. The Corps entered into the IMA with the Washington Department of Fish and Wildlife, Washington Department of Ecology, and the U.S. Fish and Wildlife Service.

The issues of concern resolved in the agreement included "maintenance of beach profile." *Id.* p. 1. The IMA provides:

BEACH NOURISHMENT.

Description.

...

Periodic nourishment of the beach to maintain a stable beach profile of approximately 1 vertical to 60 horizontal (1V on 60H) and to ensure that the toe of the revetment is not exposed is an integral part of the Point Chehalis revetment and South Jetty extension plan. ... It has been agreed that periodic beach nourishment will be treated as a mitigation measure of the revetment extension project, as well as a measure to provide structural integrity to the toe of the revetment.

Mitigation.

The Half Moon Bay shoreline will be periodically nourished with clean sand ... Beach nourishment will be performed so as to establish and maintain an approximate beach profile of 1V on 60H and cover the area shown on Figure 3.

...

Beach nourishment material will be placed on the beach above MHHW (above +9.0 feet MLLW) by hydraulic pipeline. ... Following hydrolic placement of dredged material, the material shall be shaped to a uniform elevation and slope, generally as indicated on Figure 3.

...

Beach Nourishment Stockpile.

...

Sand will be stockpiled behind the revetment extension, between stations 1+00 to 7+00 (see Figure 1), in the area disturbed by revetment construction. The area is presently largely unvegetated. Initially, surplus sand (estimated at between 10,000 and 30,000 CY) will be stockpiled and shaped to a uniform elevation and slope. To maintain a minimum stockpile of 20,000 CY, the stockpile will be replenished in conjunction with periodic beach nourishment. ...

Mitigation Plan, p. 2-3 (emphasis added).

Pursuant to this agreement, the Corps is not allowed to excavate sand from in front of the revetment extension, as they now propose. They are to maintain this area for public recreation.

The protection of this area was also required as a condition of the Corps' water quality certification for the revetment extension. The Surfrider Foundation appealed the water quality certification issued by the Department of Ecology for the revetment extension. That appeal was resolved when the Corps committed to implementing the Mitigation Plan of the IMA, including the protection of the beach in front of the revetment extension.

The Corps' current proposal to excavate on the beach violates the IMA and the Corps' Water Quality Certification for that project. *See* TB 98-02.

Excavation in this area of the beach will create significant impacts to recreation and aesthetics.

Excavation from in front of the revetment extension creates significant impacts to recreation and aesthetics. When the Corps previously removed sand from this area, the result was a huge pit on the beach, which filled with water. The aesthetics of the beach were destroyed and the public was effectively excluded from this part of the beach.

In addition, the excavation in this area may have contributed to draining a wetland that is directly upland of the revetment extension. The IMA required the Corps to protect

the integrity of this interdunal wetland. However, subsequent to the Corps' excavation in this area, the developer of the Links project claimed that the wetland had significantly decreased in size since the revetment extension project was completed.

5. The Excavation violates the Coastal Zone Management Act.

The Westport Shoreline Master Program does not allow the Corps to remove sand from the beach. The sand will be excavated from an area designated as the Urban Environment under the Master Program. WMC 17.32.120(1). The Master Program provides:

The removal of sand and gravel from marine beaches shall only be permitted to create an access on existing right-of-way or to keep existing road accesses open. *The removal of sand and gravel from marine beaches for any other purpose is prohibited.*

WMC 17.32.055(3)(C) (emphasis added).

"Grading and filling operations consistent with the permitted uses shall be permitted *shoreward* of the primary dune, where such dune is ascertainable. Modifications to the primary dune are permitted only where other alternatives are not available and then only when necessary to serve a public purpose (e.g., road, public access, utility, or safety measure) and not merely private or recreational purposes."

WMC 17.32.050(1) (emphasis added).

Moreover, "mineral extraction and storage" is a conditional use under the Master Program and the Corps has not shown its entitlement to a conditional use permit. WMC 17.32.050(1)(F).

H. The Corps should not place sand on the shoreline in HMB is not OK. That part of the project is outside of the Corps' mission and is unrelated to the stated purpose of the project -- to prevent a recurrence of the breach.

1. Protecting Jetty Access Road is outside of the Corps' authority.

The Corps has repeatedly acknowledged that it lacks authority to protect the shoreline position of Half Moon Bay. Yet this is exactly what the sand placement in Half Moon Bay is designed to do. The protection of a small portion of Jetty Access Road and the waterward portion of the parking lot is outside of the Corps' authority and is unrelated to preventing a breach. Aerial photos show that there has never been any breach threat in the area of the Westhaven State Park parking lot (Park parking lot). While fill was placed there after the breach was repaired, all of that fill has eroded away and placing fill there has no relationship to preventing a breach.

2. It is not necessary to protect the northwestern end of Jetty Access Road and the shoreward edge of the State Park parking lot.

For most of the Jetty's history, maintenance equipment and vehicles have accessed the Jetty without benefit of a paved road. During the 2002 Breach Fill, the Corps used "off road trucks" so that a road was not necessary to conduct that major

project. Jetty access for maintenance could be accomplished via the southern portion of the Park parking lot, viat temporary roads, or via the Ocean Beach trail.

Recreational beach users also have traditionally accessed the South Beach and other parks of Westhaven State Park over dirt roads. The paved road, parking lot, and bathrooms are recent additions that can be relocated. The Parks department relocated the parking lot that used to be in the area of the breach; they have now said they would relocate the parking lot and road if necessary. It makes no sense to fight the ocean and harm habitat and recreation in the name of benefiting recreational users.

3. Placing sand on the beach will have significant and uncertain environmental impacts.

The Corps admits that it does not understand the benthic communities in Half Moon Bay and their relationship to other populations, including threatened and candidates fish species. It is recognized that the placement of sand in this area will prevent the establishment of stable benthic communities, at the base of the aquatic foodchain. The Corps admits that it does not know the significance of this impact. It will also harm crab and other sealife populations. It also will prevent recreation on and access to the beach in the area adjacent to the parking lot. Previous sand placement has created major cliffs that made the beach inaccessible to the elderly and people with disabilities.

The area that the Corps will place sand was previously an important recreational area, especially since it is close to the parking lot. For example, it was the site of a previous clean water paddle. Placing large amounts of sand in that area will prevent public access to this area of the beach.

4. The sand placement is contrary to Coastal Zone Management Act.

Under the Westport Shoreline Master Program, the proposed sand placement is defined as a "landfill." *See* Westport Municipal Code (WMC) 17.32.055(D) ("Landfills also occur to replace shoreland areas removed by wave action or the normal erosive processes of nature."). Landfills are a conditional use in either the Conservancy Environment or the Urban Environment. WMC 17.32.050(1)(F), (2)(F).² However, landfills are allowed only if "associated with approved shoreline permit and consistent with other regulations of this Master Program." *Id.* In addition, "In-water landfills and landfills waterward of ordinary high water ... shall not be permitted unless the landfill is ... necessary for a water dependent use. ... Where landfill does occur ... [m]aterials which could create water quality problems or which will rapidly deteriorate are not permitted. WMC 17.32.055(3)(F), (G). These standards are not met.

I. Protecting Jetty Access Road will facilitate the Links project, which will have significant environmental impacts.

Protecting Jetty Access Road will facilitate the development of the Links golf course, which is recognized to have significant environmental impacts, including: over 56

² The sand will be placed waterward of the Ordinary High Water Mark and therefore within an area designated as Conservancy Environment under the City's Shoreline Master Program. Westport Municipal Code (WMC) 17.32.120(1).

acres of wetland and buffer impacts; aesthetic impacts from building large structures in the erosion zone and adjacent to the public beach; pollution of wetlands with over 39 tons of pesticides and fertilizers every year. A NEPA EIS on the Links Project is required before the Corps takes an action that will facilitate that project.

J. Protecting the Jetty Access Road now will facilitate development of 200 condominiums in the erosion zone, with resulting impacts.

The Corps placement of sand in the erosion zone will enhance and stabilize the beach directly in front of the proposed development site for 200 condominiums. The construction of 200 condominium units directly on the eroding beach would inevitably require the armoring of the shoreline to protect the condominiums from the ongoing erosion. Thus, protecting the development site in the "interim" will foreclose options for dealing with erosion in the long term. For example, "stepping back" development and other environmentally friendly options will no longer be viable. The remaining long term options, such as armoring the beach in front of the condominiums or extending the jetty to enclose half moon bay, will significantly harm the environment, marine life, and recreation.

K. Mitigation is inadequate.

The Corps' Coastal Engineering Manual recognizes the inadequacy of mitigation in this type of environment:

d. Compensatory mitigation has been criticized and deemed largely unsuccessful in coastal habitats (Race 1985, Zedler 1996a). Restoration of lost ecological functions is difficult to achieve in created wetlands, particularly those that are small and/or isolated and affected by surrounding land use. Even when vastly more habitat area is created than was lost, it may be insufficient to provide functional equivalency to tidal wetlands lost (Zedler 1996b). In recent years, there has been considerable research on measurement and assessment of functional equivalency in restored and created coastal habitats. The results suggest that even in the case of the most well-designed and carefully executed projects, restoration of certain ecological functions may not occur for decades (Simenstad and Thom 1996).

L. Additional factual statement.

With over 536,000 visitors annually, Westhaven State Park is one of the most popular coastal access in the State. Grunbaum Dec. ¶ 3. It is the closest point of coastal access from Seattle. The Half Moon Bay shoreline is used for walking, surfing, kayaking, swimming, and other beach activities. *Id.*

In addition to this important human activity resource, Half Moon Bay also provides habitat for a variety of fish species, including smelt, Pacific herring, starry flounder, shiner perch, sand lance, northern anchovy, Pacific sanddab, lingcod, redbtail surfperch, sand sole, threespine stickleback, and Pacific staghorn sculpin. 2003 EA, p. 12. Salmonids, including chinook, coho, and chum salmon along with steelhead, bull trout,

and cutthroat trout, also utilize Half Moon Bay and for some Half Moon Bay is designated as Essential Fish Habitat. 2003 EA, p. 15. The commercially important Dungeness crab is found in Half Moon Bay. *Id.* Grays Harbor including the Half Moon Bay shoreline is also a major shorebird staging area, and a critical part of the Pacific Coast shorebird migration. *Id.*

The Washington State Department of Fish and Wildlife has found that "During their spring migration, juvenile salmonids utilize the intertidal and shallow subtidal areas of Half Moon Bay for rearing and escape from predators." January 12, 1995 letter to Corps, *Grunbaum Ex. C*. Negative changes to rearing habitat in Half Moon Bay could "result in a marked cumulative decrease in salmonid survival in Grays Harbor. Salmonids impacted would include wild coastal coho," *Id.*, which is a candidate for listing under the Federal Endangered Species Act. 60 FR 38011-38030.

The history of the erosion issue in Half Moon Bay is discussed in the 2003 EA, p. 1. In 1993, this erosion caused a breach of the neck of land joining Westhaven State Park with the South Jetty. *Id.*

In the first of its string of piecemeal actions, in 1994 the Corps filled the breach between the South Jetty and Westhaven State Park with approximately 600,000 cubic yards of material dredged from the Grays Harbor and Chehalis River navigation channel, at a cost of \$4 million. *Id.* The 1994 project was "*an interim measure ... until an acceptable long-term solution could be implemented.*" *Id.* The stated need for the breach fill included protecting City's infrastructure including its wastewater treatment plant from erosion. *Id.* The Corps' decision to "fill the breach" set a policy direction that has driven its ongoing program of actions to fight erosion on these beaches, including its 2003 proposal. *Id.* at 1-3.

The Corps prepared only an EA and FONSI even though resource agencies including US Fish and Wildlife requested an EIS. See 1994 Environmental Assessment for Breach Fill, *Lowney Ex. C*.

Between November 1998 and March 1999, the Corps constructed a 1,900 foot extension to the Point Chehalis Revetment in Half Moon Bay, also designed to protect City infrastructure if a breach recurred. See 1998 Environmental Assessment for Revetment Extension, *Lowney Ex. D*, p. 4, 6. The 1,900-foot revetment was armored with rock up to 10,000 pounds. *Id.* The project was extremely controversial, resulting in a lawsuit by several environmental organizations including the Surfrider Foundation and Washington Environmental Council and a multi-agency mitigation agreement. *Lowney Dec.* ¶ 3. The Corps issued an EA and FONSI. *Lowney Dec. Ex. C*.

Between December 1999 and February 2000, the Corps took two more major actions in responding to erosion in Half Moon Bay. First, it constructed within Half Moon Bay a wave diffraction mound, which was supposed to reduce wave-induced erosion in the western portion of Half Moon Bay adjacent to the Jetty. Second, it rehabilitated the South Jetty to help reduce wave-caused erosion of the unprotected portion of Half Moon Bay. 2003 EA, p. 2. The Corps issued EAs and FONSI for these projects.

The Corps also began experimenting with placing rock directly on the shoreline of Half Moon Bay. First, when it constructed the wave diffraction mound, the Corps placed 11,600 cubic yards of rock up to 12-inches in size on the adjacent beach. Then, in January of 2002, the Corps placed another 16,100 cubic yards of rock, this time covering a larger area. Lowney Ex. A. p. 2. The Corps prepared an EA and FONSI for the first placement, but it is unclear whether it conducted a NEPA analysis for the second. See *Grunbaum Ex. A* (diagram of increasingly wide rock placement); ¶ 4, 5.

In 2002, the Corps completed a second breach fill project, which placed approximately 125,000 cubic yards of sandy dredge materials in the area of the breach. Again, the Corps merely completed an EA and FONSI. See Environmental Assessment for South Jetty Breach Fill, 2002, *Lowney Ex. E*. This project also had unintended consequences in that it created a 20 foot steep cliff between the public beach and the access from the Park's parking lot. The elderly and people with disabilities were effectively excluded from the public beach. Grunbaum Dec. ¶ 6.

In addition to these discrete projects, the Corps combats erosion in Half Moon Bay by routinely "nourishing" Half Moon Bay beaches with sand from the Corps' maintenance dredging operations. The impact of dumping of 700,000 cubic yards of sandy in Half Moon Bay was analyzed in an EA and FONSI. *Lowney Ex. F*.

Please inform me of any decision reached in this matter.

Yours truly,
Smith & Lowney PLLC

By 
Knoll D. Lowney
Attorneys for Wildlife Forever of Grays
Harbor, Friends of Grays Harbor, and Arthur
Grunbaum.

Rec'd 1/23/04 ☆

SMITH & LOWNEY, P.L.L.C
2317 EAST JOHN STREET
SEATTLE, WASHINGTON 98112
(206)860-2883, FAX (206)860-4187

FAX COVER SHEET

This fax is 39 pages, including this sheet.

Date: 1/23/04

To: HELEN PRESLEY
360 407 6305

Fax #: HIRAM ARDEN
206 764 3308

This document is from: Knoll D. Lowney, (206)-860-2976

Comments:

The information contained in this fax message is attorney/client privileged and/or confidential information intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and return the original to us at the above address via the U.S. mail. Thank you.

Letter 12 (final)

SMITH & LOWNEY, P.L.L.C.

2317 EAST JOHN STREET
SEATTLE, WASHINGTON 98112
(206) 860-2883, FAX (206) 860-4187

January 23, 2004

Hiram Arden, Project Manager
Navigation Section
U.S. Army Corps of Engineers
Post Office Box 3755
Seattle, WA 98124-3755

Re: Revised 21-day notice, U.S. Army Corps of Engineers, Placement of Sand CENWS-0D-TS-NS-21R, and Draft Environmental Assessment, South Jetty Breach Fill Maintenance, Westport, Washington.

To Whom It May Concern:

This comment letter is being submitted on behalf of Wildlife Forever of Grays Harbor, Friends of Grays Harbor, and Arthur Grunbaum. These comments are submitted regarding the U.S. Army Corps of Engineers' ("Corps") proposed 2004 action.¹ These comments are submitted in a draft form, to meet the 21-day notice letter, and shall be resubmitted in a final form during the comments period for the EA, FONSI and CZMA.

These comments address the Corps' decision as to whether to undertake the proposed project, as well as the project's compliance with the Coastal Zone Management Act ("CZMA") and the National Environmental Policies Act ("NEPA"). Additional comments on CZMA and NEPA will be submitted within the comment deadlines for those laws.

A. *Description of proposed project.*

On December 24, 2003, the Corps issued a Revised Public Notice ("Dec. 2003 Public Notice"), a Draft Environmental Assessment ("Dec. 2003 EA") and a Draft Finding of No Significant Impact ("Dec. 2003 FONSI"). These documents describe what can be considered two distinct projects:

¹In addition to these comments, we incorporate by reference the comments of other citizens and organizations, including Washington Environmental Council, Chehalis River Council, Surfrider Foundation, Brady Engvall.

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"[1] The purpose of the proposed work is to extend the life of the breach fill by nourishing the area adjacent to the south jetty. ... [2] The proposed project will also partially nourish the area adjacent to the previous gravel placement which has severely eroded"

Dec. 2003 FONSI.

"The proposed action consists of placement of 25,000 cubic yards of sand on the south jetty breach fill and in the southeast corner of the breach fill prior to February 14, 2004 or after July 16, 2004. The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999. Approximately 2,500 cubic yards of sand will be placed on the large rainwater runoff gullies that have formed along the southeastern corner of the breach fill. Approximately 2,500 cubic yards of sand will be placed directly adjacent to the jetty in the northwest corner of the breach fill. Approximately 20,000 cubic yards of sand will be placed in the southwest corner of the bay, adjacent to the Westhaven State Park access road and parking lot where severe end-cutting erosion is threatening the breach fill. Of that 20,000 cubic yards, approximately 10,000 cubic yards will be placed in upland areas along the shoreline.

Based upon the results of post-placement monitoring, and dependant on funding availability, the Corps may place up to 15,000 additional cubic yards of sand annually until the time when a long-term erosion management strategy has been implemented."

Dec. 2003 FONSI.

B. *Facts and documents that the Corps should consider.*

The Corps has admitted that it has taken approximately nine "interim" measures in the past decade to deal with the erosion issue in Half Moon Bay. Each of these actions should be considered collectively as an ongoing management program. Thus, in considering whether to take the proposed 2004 action, the Corps should consider all available information on the erosion situation in Half Moon Bay as well as on the Corps' previous actions within the past decade. These actions have been discussed in the Dec. 2004 EA and its accompanying cumulative impact analysis. The documents that should be considered for each of these actions include:

Environmental documents including EA's and FONSI's.

Public and agency comments.

Monitoring data.

Analysis of impacts associated with the project.

Other documents making up the record of decision for those actions.

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In addition, the Corps' substantive decision on whether to undertake the 2004 project should evaluate the entire record on the Dec. 2004 EA and FONSI, including documents and comments that will be submitted to the record on the Corps' NEPA decision. Such comments and documents are hereby incorporated by reference as if attached hereto.

The Corps should also consider all scientific data it has developed and/or possesses on the erosion situation in Half Moon Bay. This includes the research and analysis prepared by the Corps' Coastal and Hydraulics Laboratory (CHL) and U.S. Army Engineer Research and Development Center (ERDC). For example, in a meeting held in Seattle on October 1, 2003, Dr. Nicolas C. Kraus of CHL made a presentation before the assembled group of a computer model of a breach at Half Moon Bay. Someone from the audience made the comment that if that were allowed it would jeopardize the navigational channel. Dr. Kraus counter with the statement "that's what we thought at first", but the model shows that this would not be the case. He commented that the navigational channel was too deep and well-established. He stated that the breach channel would have little or no effect. This analysis and presentation should be made part of this record. This is also true of the work of Patrick Naher and other presenters at meetings relating to erosion in Half Moon Bay.

Among the many documents that should be considered are the South Jetty Sediment Processes Study, April 2003, and South Beach Shoreline Change Analysis, prepared by the Southwestern Coastal Communities, August 2003. These are incorporated by reference.

We are submitting numerous documents that generally discuss the erosion situation in Half Moon Bay and the Links at Half Moon Bay project. We have numbered these documents 1-98, although some of these document numbers contain multiple documents. Please make these documents part of the official record for this action.

C. *The Corps' public notice is inadequate.*

The Dec. 2003 public notice solicited public and agency comments by e-mail. However, the e-mail address published on the notice was incorrect. The comments period should be extended due to this error.

In addition, the public notice is inadequate and violates due process by failing to acknowledge that the Corps has no existing authority to excavate sand from the beach in the area proposed. Thus, the public is not made aware of the importance of commenting on this part of the proposal.

Indeed, the public notice relies on the NEPA documents to describe the excavation aspect of the 2004 project. The NEPA documents incorrectly state that "The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999." Dec. 2003 FONSI. Instead of

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excavating from a stockpile above the revetment extension, the Corps proposes to excavate the beach beneath the revetment extension, as discussed below.

D. An EIS is required before the Corps takes further action in Half Moon Bay.

The Corps should take no more action on erosion in Half Moon Bay without first preparing an environmental impact statement (EIS) on its ongoing program of erosion control in HMB. This program has included over nine major projects in a decade. Each was called "interim;" each was implemented without adequate environmental review. Each had significant environmental consequences and many have had unintended consequences in relocating the erosion problems to other areas of the beach. Additional comments and evidence shall be submitted during the comment period for the EA and FONSI.

F. The cumulative impacts of the Corps' many projects are significant and require a comprehensive EIS.

The Corps has failed to conduct an adequate evaluation of cumulative impacts of its projects in HMB. The "South Jetty Breach Fill Maintenance Cumulative Effects Analysis" attached to the EA does not even describe the Corps' ongoing erosion control activities within the vicinity of HMB. It does not describe or analyze the cumulative impacts of the proposed project in conjunction with the other nine projects conducted in HMB over the past decade. Nor does it describe or evaluate the likely cumulative impacts such as impacts on recreation, impacts on fish and wildlife, impacts on benthic communities, or aesthetic impacts. It also does not discuss the cumulative impacts of other erosion control activities, including that of the City of Westport. It does not discuss the related impacts of the excavation project. For example, it does not discuss the source of the sand or the dredging project that will be required to replace the sand.

The analysis fails to acknowledge the uncertainty as to the limited subject areas it discusses, including longshore sand transport, impacts of the Links at Half Moon Bay project. The Corps incorrectly states that the project will not result in changes to the human occupancy of the area, when in fact it will enable additional occupancy in the erosion zone.

The Corps' conclusion on cumulative impacts is that

The proposed placement consists of less than 1% of the total volume of materials placed in Half Moon Bay over the past 10 years. In the context of all that has occurred in the past, the placement of 25,000 cubic yards of sand along the Half Moon Bay shoreline, the placement of 25,000 cubic yards of sand along the Half Moon Bay shoreline and on the breach fill will cause only a tiny increment more harm to biological function.

Dec. 2003 EA, at 22.

This analysis is flawed. The Corps has never determined the biological harm that has occurred and cannot merely shrug off the cumulative impacts analysis by concluding

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that the current project is small compared with past projects. The cumulative impact analysis must consider the impact of all of these projects.

G. *The Corps should not excavate sand from a beach in HMB that is currently used for recreational activities.*

The proposed excavation on the beach will create significant impacts and should not be allowed. The last excavation in this area created significant impacts by excluding the public from the beach and creating major aesthetic and water quality impacts. The excavation also may have contributed to draining an adjacent wetland. The Corps is legally bound to maintain the area in front of the revetment extension at a 60:1 slope for public recreation. Excavation in this area is contrary to the Corps' commitment and contrary to the City of Westport's Shoreline Master Program and Comprehensive Plan. Excavation in this area has never been subject to environmental review.

1. The Corps incorrectly states that the excavation will take place behind the revetment.

The EA states that "The sand will be excavated from the existing Half Moon Bay direct beach nourishment dredged material disposal site, which is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999 (see Figure 3)" Dec. 2003 EA p. 8. (emphasis added). In fact, Figure 3 of the Dec. 2003 EA shows that Corps proposes to excavate sand from the beach *below* the Revetment Extension.

2. The proposed excavation will take place in an area currently used for recreational activities.

This area of the beach is used for recreation including beach walking, etc.

3. The Corps is legally obligated to preserve this portion of the beach at a 60:1 slope for public recreation.

The area that the Corps proposes to excavate is subject to the October 7, 1998, Interagency Mitigation Agreement (IMA) for the Point Chehalis Revetment Extension Project. The mitigation plan was to address the Corps' proposal for a 1,900-foot long rock extension of the Point Chehalis revetment. IMA, p. 1. The Corps entered into the IMA with the Washington Department of Fish and Wildlife, Washington Department of Ecology, and the U.S. Fish and Wildlife Service.

The issues of concern resolved in the agreement included "maintenance of beach profile." *Id.* p. 1. The IMA provides:

BEACH NOURISHMENT.

Description.

...

Periodic nourishment of the beach to maintain a stable beach profile of approximately 1 vertical to 60 horizontal (1V on 60H) and to ensure that the toe of the revetment is not exposed is an integral part of the Point Chehalis revetment and South Jetty extension plan. ... It has been agreed that periodic beach nourishment will be treated as a mitigation measure of

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the revetment extension project, as well as a measure to provide structural integrity to the toe of the revetment.

Mitigation.

The Half Moon Bay shoreline will be periodically nourished with clean sand ... Beach nourishment will be performed so as to establish and maintain an approximate beach profile of 1V on 60H and cover the area shown on Figure 3.

...
Beach nourishment material will be placed on the beach above MHHW (above +9.0 feet MLLW) by hydraulic pipeline. ... Following hydraulic placement of dredged material, the material shall be shaped to a uniform elevation and slope, generally as indicated on Figure 3.

Beach Nourishment Stockpile.

...
Sand will be stockpiled behind the revetment extension, between stations 1+00 to 7+00 (see Figure 1), in the area disturbed by revetment construction. The area is presently largely unvegetated. Initially, surplus sand (estimated at between 10,000 and 30,000 CY) will be stockpiled and shaped to a uniform elevation and slope. To maintain a minimum stockpile of 20,000 CY, the stockpile will be replenished in conjunction with periodic beach nourishment. ...

Mitigation Plan, p. 2-3 (emphasis added).

Pursuant to this agreement, the Corps is not allowed to excavate sand from in front of the revetment extension, as they now propose. They are to maintain this area for public recreation.

The protection of this area was also required as a condition of the Corps' water quality certification for the revetment extension. The Surfrider Foundation appealed the water quality certification issued by the Department of Ecology for the revetment extension. That appeal was resolved when the Corps committed to implementing the Mitigation Plan of the IMA, including the protection of the beach in front of the revetment extension.

The Corps' current proposal to excavate on the beach violates the IMA and the Corps' Water Quality Certification for that project. See TB 98-02.

Excavation in this area of the beach will create significant impacts to recreation and aesthetics.

Excavation from in front of the revetment extension creates significant impacts to recreation and aesthetics. When the Corps previously removed sand from this area, the

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result was a huge pit on the beach, which filled with water. The aesthetics of the beach were destroyed and the public was effectively excluded from this part of the beach.

In addition, the excavation in this area may have contributed to draining a wetland that is directly upland of the revetment extension. The IMA required the Corps to protect the integrity of this interdunal wetland. However, subsequent to the Corps' excavation in this area, the developer of the Links project claimed that the wetland had significantly decreased in size since the revetment extension project was completed.

5. The Excavation violates the Coastal Zone Management Act.

The Westport Shoreline Master Program does not allow the Corps to remove sand from the beach. The sand will be excavated from an area designated as the Urban Environment under the Master Program. WMC 17.32.120(1). The Master Program provides:

The removal of sand and gravel from marine beaches shall only be permitted to create an access on existing right-of-way or to keep existing road accesses open. The removal of sand and gravel from marine beaches for any other purpose is prohibited.

WMC 17.32.055(3)(C) (emphasis added).

"Grading and filling operations consistent with the permitted uses shall be permitted *shoreward* of the primary dune, where such dune is ascertainable. Modifications to the primary dune are permitted only where other alternatives are not available and then only when necessary to serve a public purpose (e.g., road, public access, utility, or safety measure) and not merely private or recreational purposes."

WMC 17.32.050(1) (emphasis added).

Moreover, "mineral extraction and storage" is a conditional use under the Master Program and the Corps has not shown its entitlement to a conditional use permit. WMC 17.32.050(1)(F).

H. The Corps should not place sand on the shoreline in HMB. It is not OK. That part of the project is outside of the Corps' mission and is unrelated to the stated purpose of the project – to prevent a recurrence of the breach.

1. Protecting Jetty Access Road is outside of the Corps' authority.

The Corps has repeatedly acknowledged that it lacks authority to protect the shoreline position of Half Moon Bay. Yet this is exactly what the sand placement in Half Moon Bay is designed to do. The protection of a small portion of Jetty Access Road and the waterward portion of the parking lot is outside of the Corps' authority and is unrelated to preventing a breach. Aerial photos show that there has never been any breach threat in the area of the Westhaven State Park parking lot (Park parking lot). While fill was placed there after the breach was repaired, all of that fill has eroded away and placing fill there has no relationship to preventing a breach.

2. It is not necessary to protect the northwestern end of Jetty Access Road and the shoreward edge of the State Park parking lot.

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For most of the Jetty's history, maintenance equipment and vehicles have accessed the Jetty without benefit of a paved road. During the 2002 Breach Fill, the Corps used "off road trucks" so that a road was not necessary to conduct that major project. Jetty access for maintenance could be accomplished via the southern portion of the Park parking lot, via temporary roads, or via the Ocean Beach trail.

Recreational beach users also have traditionally accessed the South Beach and other parts of Westhaven State Park over dirt roads. The paved road, parking lot, and bathrooms are recent additions that can be relocated. The Parks department relocated the parking lot that used to be in the area of the breach; they have now said they would relocate the parking lot and road if necessary. It makes no sense to fight the ocean and harm habitat and recreation in the name of benefiting recreational users.

3. Placing sand on the beach will have significant and uncertain environmental impacts.

The Corps admits that it does not understand the benthic communities in Half Moon Bay and their relationship to other populations, including threatened and candidate fish species. It is recognized that the placement of sand in this area will prevent the establishment of stable benthic communities, at the base of the aquatic foodchain. The Corps admits that it does not know the significance of this impact. It will also harm crab and other sealife populations. It also will prevent recreation on and access to the beach in the area adjacent to the parking lot. Previous sand placement has created major cliffs that made the beach inaccessible to the elderly and people with disabilities.

The area that the Corps will place sand was previously an important recreational area, especially since it is close to the parking lot. For example, it was the site of a previous clean water paddle. Placing large amounts of sand in that area will prevent public access to this area of the beach.

4. The sand placement is contrary to Coastal Zone Management Act.

Under the Westport Shoreline Master Program, the proposed sand placement is defined as a "landfill." See Westport Municipal Code (WMC) 17.32.055(D) ("Landfills also occur to replace shoreland areas removed by wave action or the normal erosive processes of nature."). Landfills are a conditional use in either the Conservancy Environment or the Urban Environment. WMC 17.32.050(1)(F), (2)(F).² However, landfills are allowed only if "associated with approved shoreline permit and consistent with other regulations of this Master Program." *Id.* In addition, "In-water landfills and landfills waterward of ordinary high water ... shall not be permitted unless the landfill is ... necessary for a water dependent use. ... Where landfill does occur ... [m]aterials which could create water quality problems or which will rapidly deteriorate are not permitted. WMC 17.32.055(3)(F), (G). These standards are not met.

²The sand will be placed waterward of the Ordinary High Water Mark and therefore within an area designated as Conservancy Environment under the City's Shoreline Master Program. Westport Municipal Code (WMC) 17.32.120(1).

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Comments on breach fill maintenance proposal.

I. Protecting Jetty Access Road will facilitate the Links project, which will have significant environmental impacts.

Protecting Jetty Access Road will facilitate the development of the Links golf course, which is recognized to have significant environmental impacts, including: over 56 acres of wetland and buffer impacts; aesthetic impacts from building large structures in the erosion zone and adjacent to the public beach; pollution of wetlands with over 39 tons of pesticides and fertilizers every year. A NEPA EIS on the Links Project is required before the Corps takes an action that will facilitate that project.

J. Protecting the Jetty Access Road now will facilitate development of 200 condominiums in the erosion zone, with resulting impacts.

The Corps placement of sand in the erosion zone will enhance and stabilize the beach directly in front of the proposed development site for 200 condominiums. The construction of 200 condominium units directly on the eroding beach would inevitably require the armoring of the shoreline to protect the condominiums from the ongoing erosion. Thus, protecting the development site in the "interim" will foreclose options for dealing with erosion in the long term. For example, "stepping back" development and other environmentally friendly options will no longer be viable. The remaining long term options, such as armoring the beach in front of the condominiums or extending the jetty to enclose half moon bay, will significantly harm the environment, marine life, and recreation.

K. Mitigation is inadequate.

The Corps' Coastal Engineering Manual recognizes the inadequacy of mitigation in this type of environment:

d. Compensatory mitigation has been criticized and deemed largely unsuccessful in coastal habitats (Race 1985, Zedler 1996a). Restoration of lost ecological functions is difficult to achieve in created wetlands, particularly those that are small and/or isolated and affected by surrounding land use. Even when vastly more habitat area is created than was lost, it may be insufficient to provide functional equivalency to tidal wetlands lost (Zedler 1996b). In recent years, there has been considerable research on measurement and assessment of functional equivalency in restored and created coastal habitats. The results suggest that even in the case of the most well-designed and carefully executed projects, restoration of certain ecological functions may not occur for decades (Simenstad and Thom 1996).

L. Additional factual statement.

With over 536,000 visitors annually, Westhaven State Park is one of the most popular coastal access in the State. Grunbaum Dec. ¶ 3. It is the closest point of coastal access from Seattle. The Half Moon Bay shoreline is used for walking, surfing, kayaking, swimming, and other beach activities. *Id.*

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In addition to this important human activity resource, Half Moon Bay also provides habitat for a variety of fish species, including smelt, Pacific herring, starry flounder, shiner perch, sand lance, northern anchovy, Pacific sanddab, lingcod, redbelt surfperch, sand sole, threespine stickleback, and Pacific staghorn sculpin. 2003 EA, p. 12. Salmonids, including chinook, coho, and chum salmon along with steelhead, bull trout, and cutthroat trout, also utilize Half Moon Bay and for some Half Moon Bay is designated as Essential Fish Habitat. 2003 EA, p. 15. The commercially important Dungeness crab is found in Half Moon Bay. *Id.* Grays Harbor including the Half Moon Bay shoreline is also a major shorebird staging area, and a critical part of the Pacific Coast shorebird migration. *Id.*

The Washington State Department of Fish and Wildlife has found that "During their spring migration, juvenile salmonids utilize the intertidal and shallow subtidal areas of Half Moon Bay for rearing and escape from predators." January 12, 1995 letter to Corps, *Grunbaum Ex. C*. Negative changes to rearing habitat in Half Moon Bay could "result in a marked cumulative decrease in salmonid survival in Grays Harbor. Salmonids impacted would include wild coastal coho," *Id.*, which is a candidate for listing under the Federal Endangered Species Act. 60 FR 38011-38030.

The history of the erosion issue in Half Moon Bay is discussed in the 2003 EA, p. 1. In 1993, this erosion caused a breach of the neck of land joining Westhaven State Park with the South Jetty. *Id.*

In the first of its string of piecemeal actions, in 1994 the Corps filled the breach between the South Jetty and Westhaven State Park with approximately 600,000 cubic yards of material dredged from the Grays Harbor and Chehalis River navigation channel, at a cost of \$4 million. *Id.* The 1994 project was "an interim measure ... until an acceptable long-term solution could be implemented." *Id.* The stated need for the breach fill included protecting City's infrastructure including its wastewater treatment plant from erosion. *Id.* The Corps' decision to "fill the breach" set a policy direction that has driven its ongoing program of actions to fight erosion on these beaches, including its 2003 proposal. *Id.* at 1-3.

The Corps prepared only an EA and FONSI even though resource agencies including US Fish and Wildlife requested an EIS. See 1994 Environmental Assessment for Breach Fill, *Lowney Ex. C*.

Between November 1998 and March 1999, the Corps constructed a 1,900 foot extension to the Point Chehalis Revetment in Half Moon Bay, also designed to protect City infrastructure if a breach recurred. See 1998 Environmental Assessment for Revetment Extension, *Lowney Ex. D*, p. 4, 6. The 1,900-foot revetment was armored with rock up to 10,000 pounds. *Id.* The project was extremely controversial, resulting in a lawsuit by several environmental organizations including the Surfrider Foundation and Washington Environmental Council and a multi-agency mitigation agreement. *Lowney Dec. ¶ 3*. The Corps issued an EA and FONSI. *Lowney Dec. Ex. C*.

Between December 1999 and February 2000, the Corps took two more major actions in responding to erosion in Half Moon Bay. First, it constructed within Half Moon Bay a wave diffraction mound, which was supposed to reduce wave-induced erosion in the western portion of Half Moon Bay adjacent to the Jetty. Second, it

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rehabilitated the South Jetty to help reduce wave-caused erosion of the unprotected portion of Half Moon Bay. 2003 EA, p. 2. The Corps issued EAs and FONSI for these projects.

The Corps also began experimenting with placing rock directly on the shoreline of Half Moon Bay. First, when it constructed the wave diffraction mound, the Corps placed 11,600 cubic yards of rock up to 12-inches in size on the adjacent beach. Then, in January of 2002, the Corps placed another 16,100 cubic yards of rock, this time covering a larger area. Lowney Ex. A. p. 2. The Corps prepared an EA and FONSI for the first placement, but it is unclear whether it conducted a NEPA analysis for the second. See *Grunbaum Ex. A* (diagram of increasingly wide rock placement); ¶ 4, 5.

In 2002, the Corps completed a second breach fill project, which placed approximately 125,000 cubic yards of sandy dredge materials in the area of the breach. Again, the Corps merely completed an EA and FONSI. See *Environmental Assessment for South Jetty Breach Fill, 2002, Lowney Ex. E*. This project also had unintended consequences in that it created a 20 foot steep cliff between the public beach and the access from the Park's parking lot. The elderly and people with disabilities were effectively excluded from the public beach. Grunbaum Dec. ¶ 6.

In addition to these discrete projects, the Corps combats erosion in Half Moon Bay by routinely "nourishing" Half Moon Bay beaches with sand from the Corps' maintenance dredging operations. The impact of dumping of 700,000 cubic yards of sandy in Half Moon Bay was analyzed in an EA and FONSI. *Lowney Ex. F*.

Please inform me of any decision reached in this matter.

Yours truly,
SMITH & LOWNEY PLLC

By 
Knoll D. Lowney
Attorneys for Wildlife Forever of Grays
Harbor, Friends of Grays Harbor, and Arthur
Grunbaum.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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August 30, 1999

Mr. Steven Babcock, Project Manager
Civil Projects and Planning Branch
Seattle District Corps of Engineers
P.O. Box C-3755
Seattle, WA 98124-3755

RE: Revisions to Water Quality Certification/Modification
Corps Public Notice TB-98-02
Extension of Point Chehalis Revetment.

Dear Mr. Babcock:

Revisions to the above referenced water quality certification are required as a result of the settlement of the appeal of the certification to the Pollution Control Hearings Board, Case No. 98-257. The revisions are specified in Part 3.a.(1) and (2) of the "Stipulation and Agreed Order" dated July 15, 1999. Except as revised, all other conditions of certification, contained in Order No. TB-98-02, shall remain in effect. The revisions of note are shown as bold italic font in the order enclosed with this letter.

Revision to Transmittal Letter: *This water quality certification is granted to the Seattle District Corps of Engineers on the condition that those provisions of approval applicable to the life of the Point Chehalis Revetment Project (noted in the Order) shall remain in effect for the entire life of the project. At a minimum, project life is predicated upon an economically-derived structural life span of 50 years. In addition, certification of the project is contingent upon the full faith implementation by the Seattle District Corps of Engineers of the mitigation plan contained as Attachment A to the signed Interagency Mitigation Agreement dated October 7, 1998. The department considers this commitment to be unconditional and not subject to or contingent upon the availability of federal funding.*

If you have any questions concerning the content of the revisions to the Order, please contact Rick Vining at (360) 407-6944.

Sincerely,

Paula Ehlers, Supervisor
Environmental Coordination Section
Shorelands and Environmental Assistance Program

cc: AG - Tanya Barnett
City of Westport
Port of Grays Harbor
Knoll Lowney, Agent for Surfrider Foundation

DEPARTMENT of ECOLOGY

**In the Matter of Granting a Water
Quality Certification/Modification
to: Seattle District Corps of Engineers
in accordance with 33 U.S.C. 1341
[FWPCA § 401], RCW 90.48.260
and WAC 173-201A**)
)
)
)
)
)

**Order No. TB-98-02
Construct a 1,900-foot extension
to the Point Chehalis revetment.**

**TO: Mr. Steven Babcock
Seattle District Corps of Engineers
Civil Projects and Planning Branch**

On June 26, 1998, a request for water quality certification from the State of Washington was submitted for the above-referenced project pursuant to the provisions of 33 U.S.C. 1341 (FWPCA § 401). The request for certification was made available for public review and comment by inclusion in Seattle Corps Public Notice No. TB-98-02.

The proposed project involves several elements:

- (1) the construction of a 1,900-foot extension to the Point Chehalis revetment in an alignment that lies above mean higher high water of Half Moon Bay;
- (2) the placement of revetment fill into approximately 1.4 acres of palustrine emergent (dunal) wetland situated within the proposed alignment (on the landward side);
- (3) the construction of a mitigation site to compensate for the unavoidable loss of approximately 1.4 acres of palustrine dunal wetland;
- (4) the nourishment of the beach at Half Moon Bay by periodic placement of clean dredged material just offshore and directly onto the beach; and
- (5) the placement and maintenance of an emergency supply of sand (stockpile) at a convenient location behind the revetment.

In exercising its authority under 33 U.S.C. 1341 and RCW 90.48.260, Ecology has investigated this application pursuant to the following:

- 1. Conformance with the state water quality standards as provided for in Chapter 173-201A WAC authorized by 33 U.S.C. 1313 and by Chapter 90.48 RCW, and with other appropriate requirements of state law;
- 2. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

In view of the foregoing and in accordance with 33 U.S.C. 1341, 90.48.260 RCW and Chapter 173-201A WAC, certification is granted to the Seattle District Corps of Engineers subject to the following conditions:

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August 30, 1999

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1. Revetment Design. State approval of the proposed revetment extension is based, in part, on the following design features committed to by the Corps and project sponsors (City of Westport and Port of Grays Harbor):

a) The 1,900-foot extension of the revetment is to be constructed entirely landward of the ordinary high water line and kept buried by a suitable covering of sand so as to appear as a part of the Half Moon Bay dune system. *This requirement is one of the conditions of certification that shall remain in effect for the life of the (revetment) project.*

b) Periodic or "as needed" beach nourishment is included as an integral element of the revetment project to maintain burial of the revetment and to prevent shoreline erosion that could eventually expose the lower face the revetment to marine waters. If sufficient quantities of dredged material are not available to maintain the agreed upon beach profile, the Corps and project sponsors shall be considered responsible for procuring and placing an alternate source of suitable nourishment material, such as from an upland source. *This requirement is one of the conditions of certification that shall remain in effect for the life of the (revetment) project.*

2. Revetment Construction.

a) The contractor shall use all reasonable measures to minimize the impacts of construction activity on waters of the state, including the dunal wetlands situated immediately adjacent to the revetment. The alignment of the revetment extension shall be staked during a pre-construction meeting involving the Corps, the contractor and representatives from Ecology and WDFW. Construction methods and measures to minimize impacts to surface waters and wetlands will also be described and discussed at the pre-construction meeting.

b) Any turbid water generated from construction activities shall not be discharged directly into Half Moon Bay or the dunal wetland area. Temporary sediment control structures or traps shall be used to allow the turbid water to settle for a minimum of two hours before discharge. All planned sediment and erosion control measures shall be adjusted to meet field conditions at the time of construction. Sediment control measures shall be inspected periodically and maintained so as to be in working condition at the end of each workday.

c) Any excess excavated or construction material shall be transported and disposed of in a manner that prevents the material from entering state waters, including wetlands.

d) In the event of a spill or discharge of oil, fuel, or chemicals at the construction site, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials. Such spills shall be reported immediately to the Department of Ecology, Southwest Regional Office at (360) 407-6300 (24-hour phone number).

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2. Beach Nourishment

a) *Certification of the revetment extension project is contingent upon the implementation of the Beach Nourishment Plan specified in Attachment A of the Interagency Mitigation Agreement dated October 7, 1998).*

b) **Sediment Quality.** The sediments to be used for beach nourishment are to come primarily from the two reaches of the Grays Harbor navigation channel designated as the Entrance and South Reach. Dredged material from these reaches, as well as from the other outer reaches of the channel, has been sampled and analyzed according to guidelines and procedures prescribed in the Grays Harbor/Willapa Bay Dredged Material Evaluation Manual and found suitable for unconfined in-water disposal. Thus the dredged material from these reaches is deemed suitable for the beneficial purpose of beach nourishment. The Manual contains Recency/Frequency guidelines that provide for the periodic reassessment of the quality of sediments dredged from the navigation channel.

c) **Emergency Stockpile.** Per Attachment A of the Mitigation agreement, the project includes the provision for an upland stockpile of sand to be used in the case of sudden catastrophic erosion to the beach immediately adjacent to the revetment. A sufficient quantity of sand should be available to restore the beach to a condition suitable to isolate the revetment from the ordinary high water line. If restoration is necessary, it particularly important that it be completed prior to the period of juvenile salmonid migration (March 1st through June 14th). The Corps/City of Westport shall take appropriate steps to insure that the stockpile is reserved for this use only and is re-supplied as necessary. *This requirement is one of the conditions of certification that shall remain in effect for the life of the (revetment) project.*

d) **Crab Mitigation.** Dungeness crabs killed by the placement of dredged material directly onto the beach shall be mitigated for in accordance with the Grays Harbor Dungeness Crab Mitigation Strategy Agreement. *This requirement is one of the conditions of certification that shall remain in effect for the life of the (revetment) project.*

3. Water Quality Modification.

a) The direct placement of dredged material on the Half Moon Bay beach may have water quality effects that will exceed the state water quality criteria specified in WAC 173-201A. Per Section 173-201A-110, the department may grant a Modification to the Standards to allow for exceedances of the criteria on a short-term basis when necessary to accommodate essential activities.

b) The project site is classified as Class AA marine waters and thus the criteria of that class apply except as specifically modified by this order. A dilution zone extending 300 feet radially from the approximate center of dredged material placement is considered to be reasonably sufficient to allow for temporary impacts resulting from direct beach nourishment. Within the

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dilution zone, the standard for turbidity is waived. All other applicable water quality standards shall remain in effect within the dilution zone and all water quality standards are expected to be met outside of the authorized dilution zone.

c) Duration. As a result of recent changes to the water quality standards (Chapter 173-201A WAC), "modifications to the standards" may be issued for indefinite periods of time. Thus the modification allowance for direct beach nourishment at Half Moon Bay is granted for the same duration as the water quality certification, *that being for the life of the project.*

The intent of a "modification to the standards" as a means to temporarily waive a water quality standard needs to be made clearer given the extended period of approval. The waiver of a water quality parameter (such as turbidity) within a specified dilution zone is intended only for brief periods of time (such as a few hours or a day) and is not an authorization to exceed the standard for the entire duration of construction. In no case does the waiver authorize degradation of water quality that might significantly interfere with or become injurious to characteristic water uses or cause long-term harm to the marine waters of Half Moon Bay. Also, the modification does not authorize any in-water work during closure periods specified by the Department of Fish and Wildlife.

A modification is also granted on condition that all reasonable and appropriate "best management practices" are being undertaken to reduce the impacts that may cause exceedances of the water quality standards.

4. Compensatory Mitigation for Unavoidable Wetland Fill.

a) To compensate for the loss of approximately 1.4 acres of palustrine dunal wetland, the Port of Grays Harbor has agreed to provide to the Corps of Engineers 2.8 acres of property located near Firecracker Point for the purpose of removing fill and restoring what was originally salt marsh habitat. The mitigation site is situated along the eastern edge of the large fill area located just to the south of the barge unloading facility at Firecracker Point. Included within the mitigation acreage is a fresh water wetted area that supports the only significant stand of woody vegetation on the site.

b) A more detailed Salt Marsh Restoration Plan shall be prepared for the proposed mitigation site and submitted to Ecology for review and approval prior to starting the salt marsh restoration work.

c) The primary purpose of wetland mitigation is to protect, in perpetuity, the functions and values of the wetland mitigation site, along with the rights and restrictions necessary to ensure that habitat and wetland functions and values continue. To this end, the Port of Grays Harbor (as land owner and sponsor) shall take appropriate action to insure the preservation of the salt marsh restoration site. The most common means for preserving a mitigation site involves a deed restriction or a conservation easement.

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ENVIRONMENTAL COMPLIANCE.

The Corps does not anticipate that additional environmental compliance will be required for implementation of this mitigation plan. Periodic beach nourishment will be addressed in future Public Notices and Environmental Assessments for maintenance dredging of the Federally authorized navigation channel. In the event that further environmental compliance is necessary with regard to wetland mitigation, WDFW and Ecology agree to assist with this effort.

BEACH NOURISHMENT.

Description. The 1,900-foot extension of the Point Chehalis revetment will be constructed along the alignment shown on Figure 1. The majority of the structure is considerably landward of the foredune and beach face. The toe of the structure will be placed at elevation +4 feet mean lower low water (MLLW), with a top elevation of the structure at elevation +25 feet MLLW (see cross sections on Figure 2). An artificial dune will be constructed and maintained by backfilling and covering the revetment with excavated sand. The revetment is thus designed to become active only if the Half Moon Bay shoreline severely erodes during an extreme storm event and the revetment must serve as a "last line of defense" in the event Half Moon Bay were to experience severe erosion before periodic beach nourishment could be performed.

Periodic nourishment of the beach to maintain a stable beach profile of approximately 1 vertical on 60 horizontal (1V on 60 H) and to ensure that the toe of the revetment is not exposed is an integral part of the Point Chehalis revetment and South Jetty extension project plan. Of particular concern to the resource agencies is ensuring that the revetment toe is not exposed during the juvenile salmon out-migration period that begins on March 1 and ends on June 14. It has been agreed that periodic beach nourishment will be treated as a mitigation measure of the revetment extension project, as well as a measure to provide structural integrity to the toe of the revetment.

Mitigation. The Half Moon Bay shoreline will be periodically nourished with clean sand dredged during maintenance of the Federally authorized navigation channel. Beach nourishment will be performed so as to establish and maintain an approximate beach profile of 1V on 60 H and cover the area shown on Figure 3. The current beach slope (above elevation -10 feet MLLW) ranges from 1V on 20 H to 1V to 30 H. The primary source of nourishment material will be clean sand dredged during maintenance of the Federally authorized Entrance and South Reach channels. The anticipated schedule for periodic nourishment is shown on Table 1. The initial direct beach placement is scheduled for project year three, following construction of the revetment extension. Placement of approximately 460,000 cubic yards (CY) of maintenance dredged material on the beach and 680,000 CY of material by nearshore disposal, is scheduled over the first five years. Table 1 also shows that, after year 5, direct beach nourishment will be required at estimated four year intervals, leveling off at an estimated 100,000 CY by project year 18. By Year 16, nearshore disposal of dredged material will level off at an estimated 100,000 CY per year, as well.

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Beach nourishment material will be placed on the beach above MHHW (above +9.0 feet MLLW) by hydraulic pipeline. No material will be placed between March 1 and June 14. Berms will be constructed to protect newly placed fill material from wave and tidal action, and may be constructed from existing beach material from within the fill limits. Following hydraulic placement of dredged material, the material shall be shaped to a uniform elevation and slope, generally as indicated on Figure 3.

Construction plans for maintenance dredging and hydraulic placement of dredged material on the beach shall be prepared by the Corps for each beach nourishment cycle and reflected in a Public Notice and in an Environmental Assessment prepared in conjunction with the maintenance dredging. The hydraulic pipeline will extend overland from the offloading facility located at Firecracker Point near the U.S. Coast Guard Station in Westport. The Corps has a permanent easement for the offloading facility and the pipeline right-of-way, both of which have recently been used for hydraulic placement of dredged material for beach nourishment at Half Moon Bay.

In the intervening years, maintenance dredged material will be placed in the Half Moon Bay nearshore environment by hopper dredge or bottom dump barge. The volume of material scheduled for placement in Half Moon Bay is designed to establish a sustainable beach profile of approximately 1V on 60 H so renourishment of the upper beach every fourth year will occur entirely above the mean higher high water (MHHW) contour (+9 feet MLLW) (see Figure 3). If conditions so warrant, the interval for periodic beach nourishment will be reevaluated and maintenance dredged material will be placed on the beach in a given year of need rather than placed in the Half Moon Bay nearshore environment. Extensive analysis clearly indicates that suitable material for either direct beach nourishment or nearshore disposal in Half Moon Bay will continue to be available on an annual basis in quantities that will ensure the desired beach profile and revetment toe protection can be achieved.

Beach Nourishment Stockpile. If winter storms have eroded sand from the toe of the revetment below elevation +10.0 feet MLLW, stockpiled sand will be placed against the toe of the revetment in the affected areas to correct the deficiency prior to the March 1 juvenile salmon migration period. Of particular concern to the resource agencies is erosion of beach sand along the toe of the revetment near the tie-in with the existing Point Chehalis revetment.

Sand will stockpiled behind the revetment extension, between stations 1+00 and 7+00 (see Figure 1), in the area disturbed by revetment construction. This area is presently largely unvegetated. Initially, surplus sand (estimated at between 10,000 and 30,000 CY) will be stockpiled and shaped to a uniform elevation and slope. To maintain a minimum stockpile of 20,000 CY, the stockpile will be replenished in conjunction with periodic beach nourishment.

Monitoring. Bathymetric and topographic surveys in Half Moon Bay will be conducted. Topographic surveys of the beach profile will be conducted at least every two years to monitor the beach profile. The surveys will determine any changes in the beach profile relative to the anticipated year five slope of 1V on 60 H and any deficiencies of sand covering the revetment (i.e., rock exposed below elevation +10 feet MLLW). The frequency of surveys and survey

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methods will depend on storm and erosion conditions and will reflect changing technology. Visual surveys will be routinely made by both City of Westport and Corps personnel, to monitor sand coverage of the revetment side slopes and toe. Annual aerial flight monitoring of Half Moon Bay will be conducted. Topographic surveys and aerial photographic coverage will be needed for the life of the project. Survey data will be analyzed by the Corps and provided to the resource agencies for their review. Survey results and the position of the +9 foot MLLW contour shown on Figure 3 will be used in coordination with the resource agencies to aid in determining the need for periodic beach nourishment relative to the schedule shown on Table 1.

Bathymetric surveys will continue to be conducted by the Corps in conjunction with nearshore placement of maintenance dredged material in Half Moon Bay. These surveys are conducted prior to and following nearshore disposal operations, to monitor the nearshore bathymetry and distribution of sand in Half Moon Bay. The anticipated schedule for both nearshore disposal and beach nourishment is shown on Table 1.

Estimated beach nourishment cost (including stockpile maintenance): \$2 million at year 3, \$1 million at year 7, decreasing to \$800,000 each cycle by year 15.

Estimated monitoring cost: To be performed as part of ongoing program of aerial and bathymetric surveys of Half Moon bay and the Grays Harbor navigation project.

WETLAND MITIGATION.

Description. A low-lying area within the back dunes where a portion of the proposed revetment will be constructed supports a palustrine emergent (dunal) wetland area approximately 6 acres in size (see Figure 4). The National Wetland Inventory (NWI) classification for this wetland is palustrine emergent/scrub shrub temporary tidal. Dominant plants are shore pine (*Pinus contorta*), willows (*Salix hookerana* and *S. exigua*), wax myrtle (*Myrica californica*), sedge (*Carex obnupta*), rush (*Juncus effusus*), and Pacific silverweed (*Potentilla anserina*). Elevated areas (mounds) within the wetland support Scotch broom (*Cystisus scoparius*), Himalayan blackberry (*Rubus procerus*), European dune grass (*Alymus arenarius*), rush (*J. effusus*), lovage (*Ligusticum scoticum*), and *Glehnia littoralis*. Animals observed in the wetland include deer, voles, gulls, crows, western goldfinch, and various shorebirds. The source of water supporting the wetland is believed to be a combination of rainwater and shallow groundwater, and possibly some ocean water that intrudes during high tide. The functions provided by the wetland are considered modest: some wildlife habitat use, slight stormwater detention, and groundwater recharge. Aerial photographs from early winter 1995 and in 1996 show that this area had minimal vegetation, with evidence of recent disturbance. However, vegetation at the time of the August 11, 1998 field review was relatively thick, indicating that vegetation in this area recovers in a relatively short period of time.

Construction of the revetment extension will result in the unavoidable filling of approximately 1.4 acres of this dunal wetland. Mitigation for the unavoidable loss of 1.4 acres of dunal wetland is required.

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Mitigation.

1. Estuarine Emergent Wetland (Salt Marsh) Restoration. To compensate for the unavoidable loss of the 1.4 acres of dunal wetland, a previous fill will be removed from Port of Grays Harbor property located south and west of the barge unloading facility at Firecracker Point and directly south of the U.S. Coast Guard Westport Station. Portions of a former dredged material disposal containment dike will be removed, as shown on Figure 5. Dike material (estimated at 16,000 CY) will be removed to about elevation +10 feet MLLW. The excavated material will be disposed of on an adjacent upland area, as indicated on the drawing. The fill removal area is 1,200 feet long by 100 feet wide, excluding an area vegetated by trees and shrubs. The existing trees and shrubs will be preserved as part of the mitigation plan. This fill removal will restore 2.8 acres of high value estuarine emergent salt marsh in the tidal estuary. Estuarine emergent wetlands are of high value and a high priority for restoration by Ecology, WDFW, and USFWS. Concurrent with construction of the revetment extension, the Corps will develop a salt marsh restoration plan in conjunction with the resource agencies. This plan will be included as a future appendix to this agreement. As recommended by Ecology staff, implementation of the salt marsh restoration plan will be by mutual agreement of the agencies, at a time of year chosen to maximize the success of the restoration.

A right-of-entry will be obtained from the Port of Grays Harbor to perform the work. Ownership of the property will be retained by the Port, and the Port agrees to preserve the wetland mitigation site in perpetuity.

2. Preserving Hydrology of Remaining Dunal Wetland. To ensure that the revetment extension does not change the hydrology of the remaining dunal wetland, a drainage barrier (either a clay layer or heavy plastic sheeting) will be installed as shown in the cross section drawing on Figure 4.

Monitoring. The restored salt marsh and the dunal wetland area landward of the revetment extension will be monitored at years 1, 2, 3, 5, 7, and 10 following wetland restoration and revetment construction, respectively. The purpose of monitoring will be to verify that there are no adverse hydrologic effects of the project on the remaining dunal wetland, and to document the progress of restoration of the salt marsh. Monitoring will consist of a site visit by a qualified wetland biologist, a vegetation transect, and interpretation of aerial flight photographs. A memorandum will be prepared by the Corps and submitted to the resource agencies for review. If the revetment is shown to adversely change the dunal wetland's hydrology, the technical committee will consider measures to mitigate for the additional loss.

Estimated construction cost: \$50,000.

Estimated monitoring cost: \$21,000 (\$3,500 x 6 times).

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REPLANTING UPLAND VEGETATION

Description. Portions of the revetment extension construction zone are vegetated with upland vegetation. Rush (*Juncus effusus*), dune grass (*Elymus mollis*), Himalayan blackberry (*Rubus procerus*), and Scotch broom (*Cystisus scoparius*) dominate the vegetation in this upland dune area. Approximately 70 percent of the upland area that will be impacted by revetment extension and dune creation is so vegetated. The remainder of the area is heavily used for public access and is not vegetated. Mitigation for the unavoidable loss of up to 4 acres of upland vegetation is required.

Mitigation. Removal or destruction of upland vegetation will be limited to that necessary for the construction of the revetment extension. The revetment extension will result in an unavoidable loss of 4 acres of vegetated dunal upland area. This 4-acre area will be replanted, including the side slopes of the completed revetment covered by sand. Species to be planted will include both native American dune grass (*Elymus mollis*) and rush (*Juncus effusus*). A planting plan will be developed by the Corps and submitted to the resource agencies for approval prior to replanting of upland vegetation.

Monitoring. The plantings will be monitored for success, with a performance measure of 80 percent survival after the 2nd year. Monitoring will consist of a site visit by a qualified wetland biologist, vegetation transect, and interpretation of aerial flight photographs. Monitoring will be conducted in the second year following planting. A memorandum will be prepared by the Corps and submitted to the resource agencies for review.

Estimated replanting cost: \$12,000.

Estimated monitoring cost: \$3,000.

INTERTIDAL HABITAT LOSS.

Description. The intertie between the existing Point Chehalis revetment and the proposed revetment extension, as originally designed and as described in the Public Notice, would have resulted in a loss of 45 lineal feet (215 square feet) of intertidal habitat (habitat below MHHW — i.e., below +9 feet MLLW) in Half Moon Bay. Intertidal habitat such as this is a valuable refuge area for juvenile salmon migrating from Grays Harbor to the Pacific Ocean. Juvenile salmon could be adversely impacted during their migration to the ocean if the beach profile in front of this portion of the revetment extension steepens or by having to migrate past additional rock face as they are forced to migrate through deeper water away from the sandy beach. Higher mortality from piscivorous, avian, or mammalian predators is the main concern.

Mitigation/Avoidance. Based upon resource agency concerns, the intertie has been redesigned to avoid the loss (see Figures 1 and 3). The revetment extension will not result in loss of intertidal habitat.

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REFERENCES.

Corps of Engineers. June 1997. *Evaluation Report - Long term Maintenance of the South Jetty at Grays Harbor, Washington*. Seattle District, U.S. Army Corps of Engineers, Seattle, Washington.

_____. September 1998. *Environmental Assessment: Extension of Point Chehalis Revetment, Grays Harbor Navigation Project, Westport, Washington*. Seattle District, U.S. Army Corps of Engineers, Seattle, Washington.

_____. August 13, 1998. Memorandum for Record: Field Review and Jurisdictional Summary for Point Chehalis O&M Revetment. Memorandum prepared by Cindy Barger, Biologist, Regulatory Branch, on the August 11, 1998 wetland delineation. Seattle District, U.S. Army Corps of Engineers, Seattle, Washington.

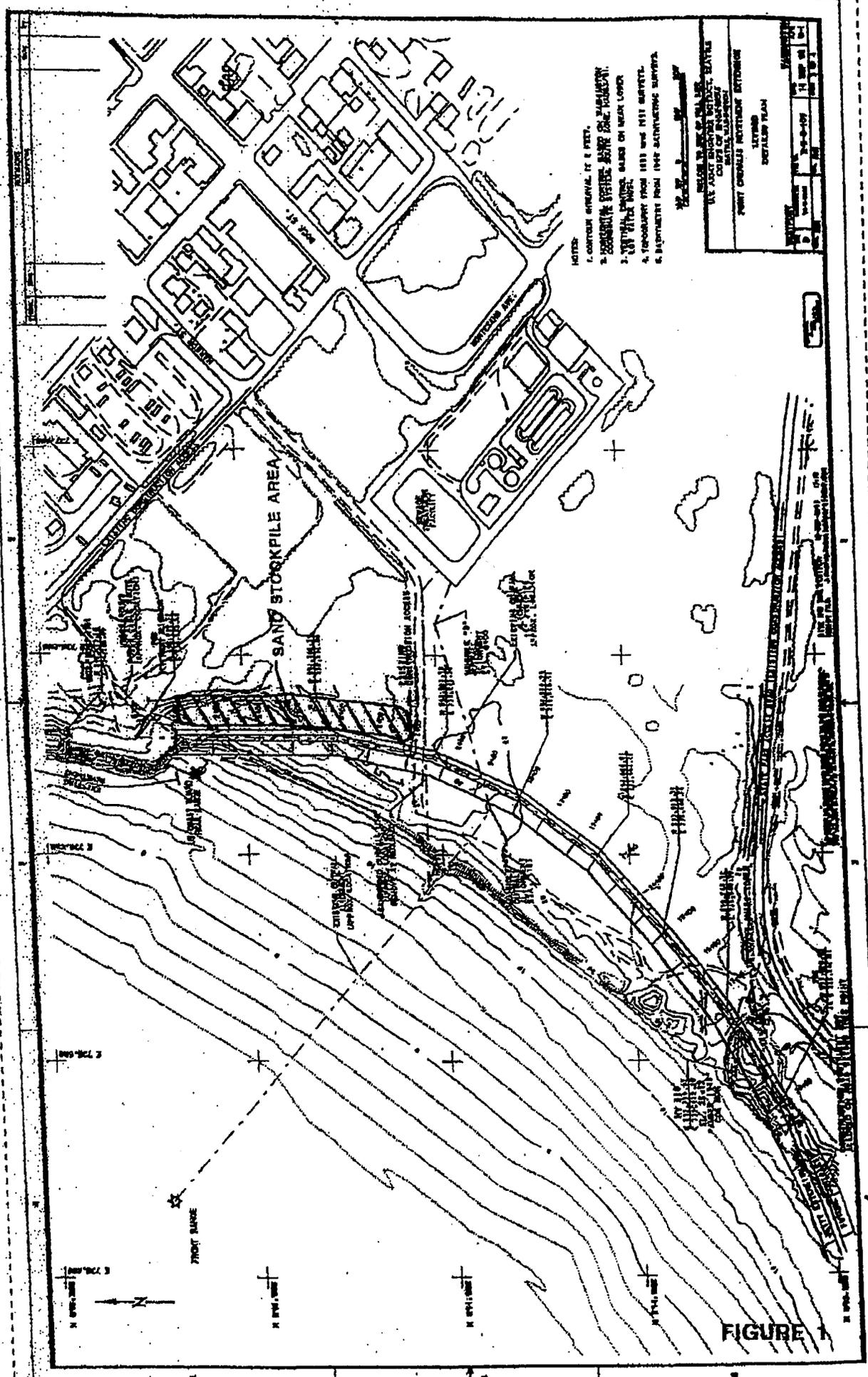
October 7, 1998

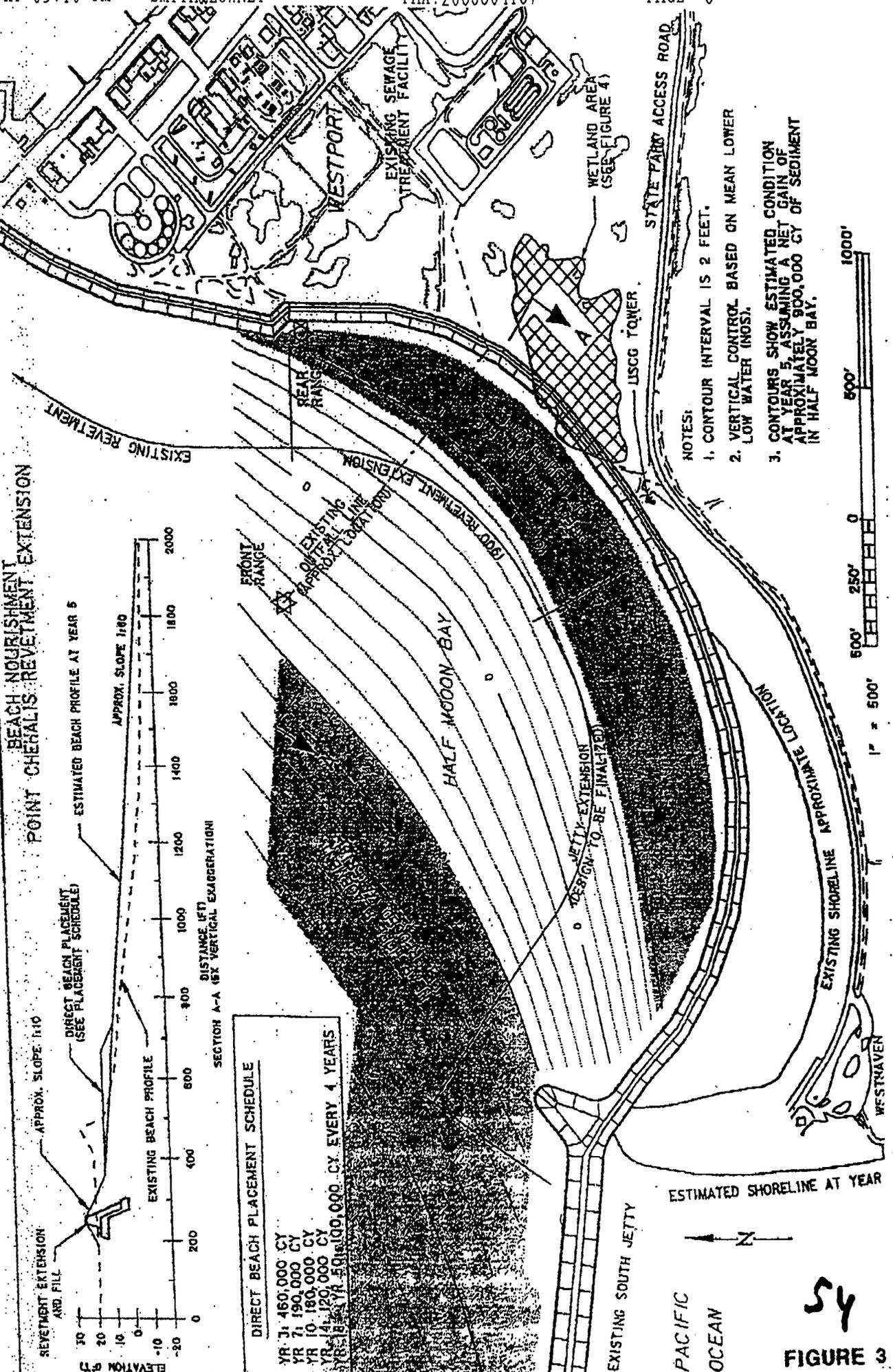
ATTACHMENT B

PROJECT PLANS

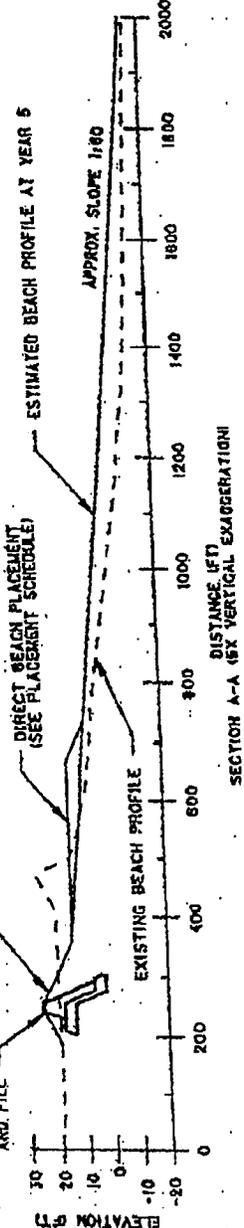
Point Chehalis Revetment Extension

- Figure 1 Revised Detailed Plan
- Figure 2 Revised Revetment Sections
- Figure 3 Beach Nourishment
- Figure 4 Palustrine Wetland Area
- Figure 5 Wetland Mitigation Site
- Table 1 Placement Schedule for Beach Nourishment and Nearshore Disposal





BEACH NOURISHMENT EXTENSION
POINT CHERALIS REPLENISHMENT



DIRECT BEACH PLACEMENT SCHEDULE

YR 1	180,000 CY
YR 3	180,000 CY
YR 5	180,000 CY
YR 7	180,000 CY
YR 10	180,000 CY
YR 14	120,000 CY
YR 18	50,000,000 CY EVERY 4 YEARS

- NOTES:**
1. CONTOUR INTERVAL IS 2 FEET.
 2. VERTICAL CONTROL BASED ON MEAN LOWER LOW WATER (INSD).
 3. CONTOURS SHOW ESTIMATED CONDITION AT YEAR 5, ASSUMING A NET GAIN OF APPROXIMATELY 800,000 CY OF SEDIMENT IN HALF MOON BAY.



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FIGURE 3

PALUSTRINE WETLAND AREA

- NOTES:
1. CONTOUR INTERVAL IS 2 FEET.
 2. VERTICAL CONTROL BASED ON MEAN LOWER LOW WATER (MOLL).
 3. TOPOGRAPHY FROM 1993 and 1997 SURVEYS.
 4. BATHYMETRY FROM 1996 BATHYMETRIC SURVEYS.

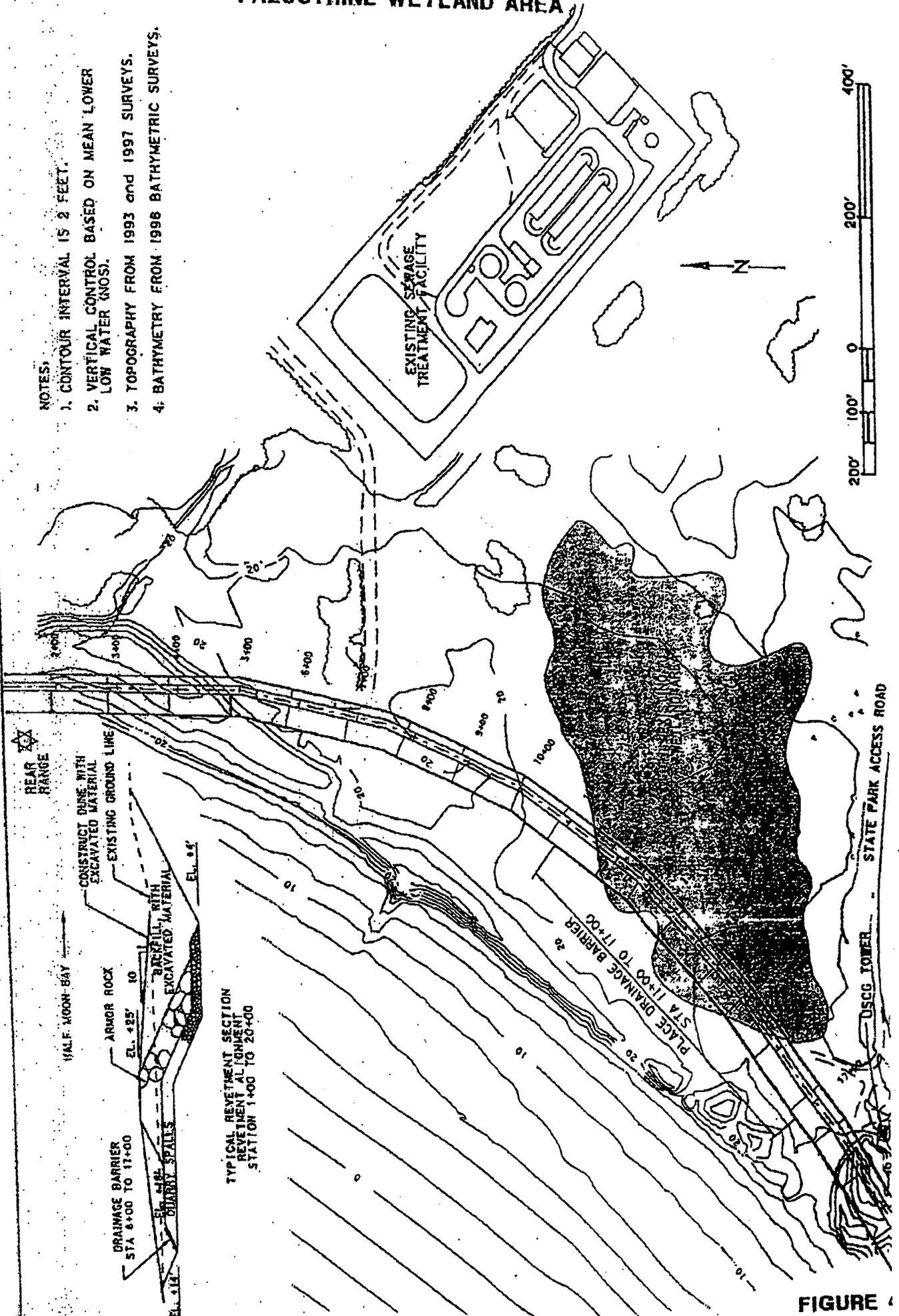


FIGURE 4

WETLAND MITIGATION SITE

SALT MARSH RESTORATION

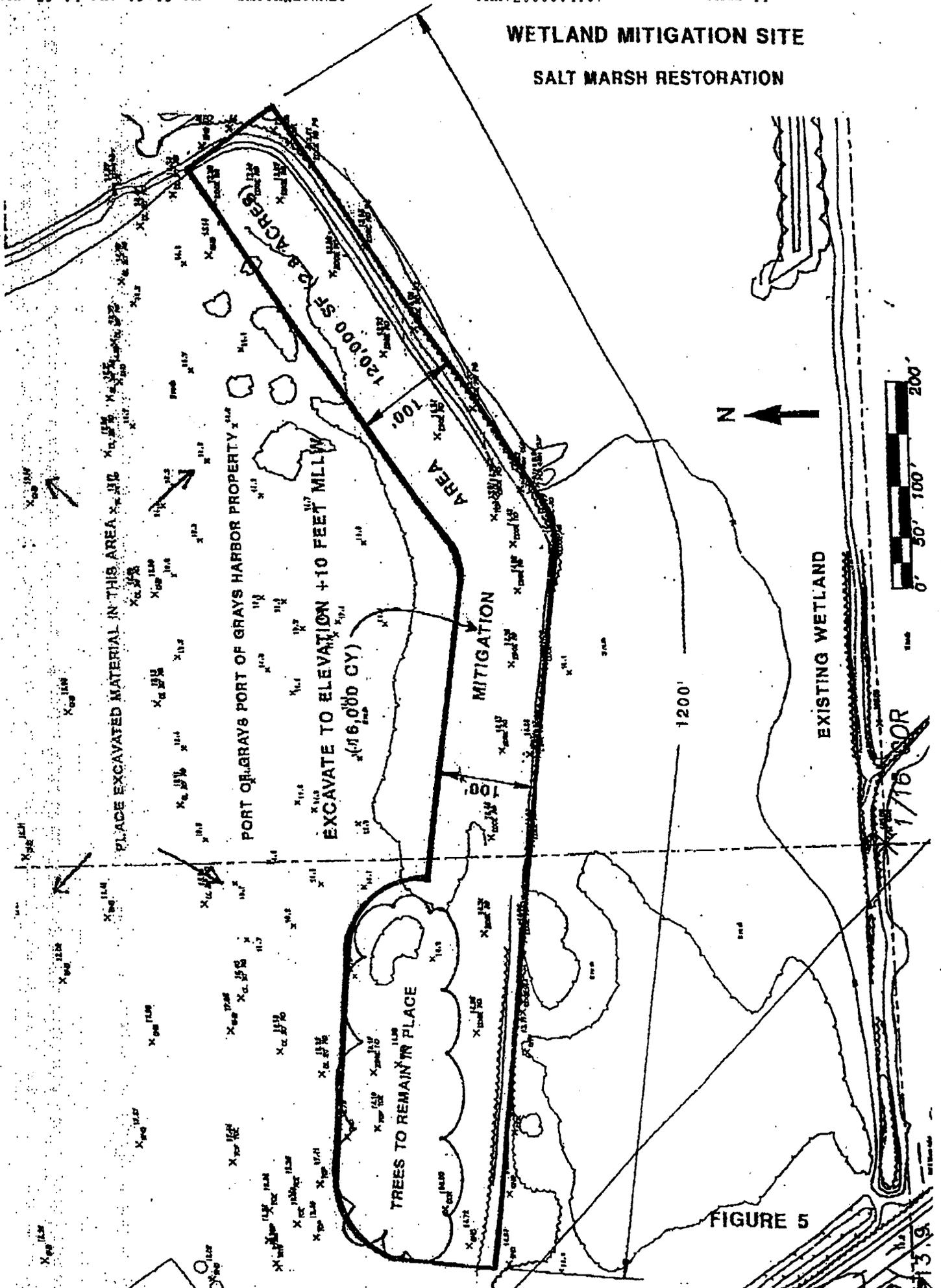


FIGURE 5

TABLE 1
PLACEMENT SCHEDULE FOR BEACH NOURISHMENT AND NEARSHORE DISPOSAL

YEAR	SOURCE: SOUTH REACH CHANNEL				SOURCE: ENTRANCE CHANNEL				HALF MOON BAY TOTAL PLACEMENT VOLUME
	DESTINATION: HALF MOON BAY		DESTINATION: SOUTH JETTY	SOUTH REACH TOTAL DREDGE VOLUME	DESTINATION: HALF MOON BAY		DESTINATION: SOUTH JETTY	ENTRANCE TOTAL DREDGE VOLUME	
	HALF MOON BAY DIRECT	HALF MOON BAY NEARSHORE	SOUTH JETTY DISPOSAL SITE		HALF MOON BAY DIRECT	HALF MOON BAY NEARSHORE	SOUTH JETTY DISPOSAL SITE		
	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	
1	0	50,000	200,000	250,000	0	250,000	0	250,000	500,000
2	0	50,000	220,000	270,000	0	240,000	0	240,000	510,000
3	220,000	0	0	220,000	220,000	0	0	220,000	440,000
4	0	0	220,000	220,000	0	220,000	0	220,000	440,000
5	0	0	210,000	210,000	0	210,000	0	210,000	420,000
6	0	0	200,000	200,000	0	0	200,000	200,000	400,000
7	0	0	150,000	150,000	100,000	0	0	100,000	250,000
8	0	0	180,000	180,000	0	180,000	0	180,000	360,000
9	0	0	170,000	170,000	0	0	170,000	170,000	340,000
10	0	0	160,000	160,000	100,000	0	0	100,000	260,000
11	0	0	150,000	150,000	0	0	150,000	150,000	300,000
12	0	0	140,000	140,000	0	140,000	0	140,000	280,000
13	0	0	130,000	130,000	0	0	130,000	130,000	260,000
14	0	0	120,000	120,000	120,000	0	0	120,000	240,000
15	0	0	110,000	110,000	0	110,000	0	110,000	220,000
16	0	0	100,000	100,000	0	100,000	0	100,000	200,000
17	0	0	90,000	90,000	0	0	90,000	90,000	180,000
18	0	0	80,000	80,000	100,000	0	0	100,000	180,000
19	0	0	70,000	70,000	0	100,000	0	100,000	170,000
20	0	0	60,000	60,000	0	100,000	0	100,000	160,000
21	0	0	50,000	50,000	0	100,000	0	100,000	150,000
22	0	0	40,000	40,000	100,000	0	0	100,000	140,000
23	0	0	30,000	30,000	0	100,000	0	100,000	130,000
24	0	0	20,000	20,000	0	100,000	0	100,000	120,000
25	0	0	10,000	10,000	0	100,000	0	100,000	110,000
26	0	0	0	0	100,000	0	0	100,000	100,000
27	0	0	0	0	0	100,000	0	100,000	100,000
28	0	0	0	0	0	100,000	0	100,000	100,000
29	0	0	0	0	0	100,000	0	100,000	100,000
30	0	0	0	0	0	100,000	0	100,000	100,000
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36	0	0	0	0	0	100,000	0	100,000	100,000
37	0	0	0	0	0	100,000	0	100,000	100,000
38	0	0	0	0	100,000	0	0	100,000	200,000
39	0	0	0	0	0	100,000	0	100,000	100,000
40	0	0	0	0	0	100,000	0	100,000	100,000
41	0	0	0	0	0	100,000	0	100,000	100,000
42	0	0	0	0	100,000	0	0	100,000	200,000
43	0	0	0	0	0	100,000	0	100,000	100,000
44	0	0	0	0	0	100,000	0	100,000	100,000
45	0	0	0	0	0	100,000	0	100,000	100,000
46	0	0	0	0	0	100,000	0	100,000	100,000
47	0	0	0	0	0	100,000	0	100,000	100,000
48	0	0	0	0	0	100,000	0	100,000	100,000
49	0	0	0	0	0	100,000	0	100,000	100,000
50	0	0	0	0	0	100,000	0	100,000	100,000
51	0	0	0	0	100,000	0	0	100,000	200,000
TOTALS	220,000	60,000	2,890,000	3,170,000	1,360,000	3,850,000	650,000	5,260,000	9,420,000

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An example of a deed restriction acceptable to the department is provided in Enclosure 1. Once finalized, the deed restriction or conservation easement shall be filed with (the local assessor's office) with a copy provided to the department, ATTN: Rick Vining

d) Enforcement. To monitor the successful accomplishment of restrictions placed on the deed or conservation easement for the mitigation site, the following actions may be taken by the department:

- 1) To enter upon the mitigation site at reasonable times and upon reasonable notification to the owner in order to monitor compliance with and otherwise enforce the terms of the deed restrictions.
- 2) To prevent any activity on or use of the mitigation site that is inconsistent with the deed restrictions and to require restoration of such areas or features of the site if damaged by any inconsistent activity or use.
- 3) To recover any costs incurred by the department in enforcing the terms of the deed restriction, including without limitation, costs of the suit and attorneys' fees and any costs of restoration necessitated by the violation of the terms of the deed restriction.

5. HPA Letter of Approval. The following referenced provisions contained in the HPA "letter of approval" submitted by the Department of Fish and Wildlife (Enclosure 2) are included as conditions of this Order: Provision Number 1, 8 through 14, 19, 20, 21, 24 through 28, and 30. Some of the other provisions have been incorporated into the main text of this certification.

6. Other Requirements.

- a) Copies of this Order shall be kept on the job site and readily available for reference by the Corps of Engineers, Ecology personnel, the contractor, and other appropriate state and local government inspectors.
- b) The Department of Ecology, Environmental Coordination Section retains jurisdiction to make modifications hereto through supplemental order, if it appears necessary to protect the public interest during the construction and monitoring of this project.
- c) The Corps or designated contractor shall notify the department at least 14 days prior to the scheduled start of construction. The contact person is Rick Vining at (360) 407-6944.
- d) This certification does not exempt and is provisional upon compliance with other statutes and codes administered by federal, state, and local agencies.

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e) The permittee (Corps) shall be considered out of compliance with this certification if:

1. the project is constructed and/or operated in a manner not consistent with the project description contained in the Public Notice.
2. five years elapse between the date of the issuance of this certification and the start of construction and/or discharge for which the federal permit is being sought; however, the expiration date may be extended by the department at the request of the permittee.
3. the information contained in the Public Notice is voided by subsequent submittals to the federal agency, in which case the permittee must reapply for certification with the updated information.

7. **Penalties.** Failure to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

8. **Appeal Process.** Any person aggrieved by this Order may obtain review thereof by appeal. The applicant can appeal up to thirty (30) days after receipt of this Order, and all others can appeal up to thirty (30) days from the postmarked date of this Order. The appeal must be sent to the Washington Pollution Control Hearings Board, PO Box 40903, Olympia WA 98504-0903. Concurrently, a copy of the appeal must be sent to the Department of Ecology, Enforcement Section, PO Box 47600, Olympia WA 98504-7600. These procedures are consistent with the provisions of Chapter 43.21B RCW and the rules and regulations adopted thereunder.

Dated 8-30-99 at Lacey, Washington



Paula Ehlers, Supervisor
Environmental Coordination Section
Shorelands and Environmental Assistance Program
Department of Ecology

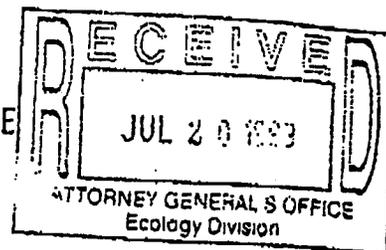
Pollution Control Hearings Board
Shorelines Hearings Board
Forest Practices Appeals Board
Hydraulics Appeals Board



(360) 459-6327
(FAX) (360) 438-7699
E-Mail: EHO@EHO.WA.GOV

STATE OF WASHINGTON
ENVIRONMENTAL HEARINGS OFFICE

4224 - 6th Avenue SE, Bldg. 2, Rowe Six
P.O. Box 40903, Lacey, WA 98504-0903



July 15, 1999

Knoll D. Lowney
SMITH & LOWNEY
1108 Smith Tower
506 Second Avenue
Seattle WA 98104

Tanya Barnett
Assistant Attorney General
Department of Ecology
PO Box 40117
Olympia WA 98504-0117

Ronald S. Marsh
Asst. District Counsel
Department of the Army
Seattle District Corps of Engineers
PO Box 3755
Seattle WA 98124-2255

RE: PCHB NO. 98-257
**SURFRIDER FOUNDATION; WASHINGTON STATE CHAPTER v. ECOLOGY
And US ARMY CORPS OF ENGINEERS**

Dear Parties:

Enclosed is the Stipulation and Agreed Order of Dismissal in this matter.

If you have questions, please do not hesitate to call.

Sincerely yours,

Ann Daley
Ann Daley
Presiding

AD/jg/surfrider
Cc: Leann Ryser - Ecology
enc.

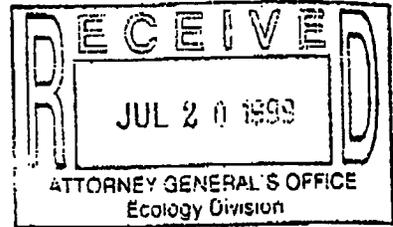
CERTIFICATION

On this day, I forwarded a true and accurate copy of the documents to which this certificate is affixed via United States Postal Service postage prepaid to the attorneys of record herein.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.
DATED July 15, 99 at Lacey, WA.

Tracey S. Johnson





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POLLUTION CONTROL HEARINGS BOARD

SURFRIDER FOUNDATION,
WASHINGTON STATE CHAPTER,

Appellant,

v.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY; and
UNITED STATES ARMY CORPS OF
ENGINEERS,

Respondents.

NO. 98-257

STIPULATION AND AGREED
ORDER OF DISMISSAL

STIPULATION

The Parties to this matter hereby stipulate as follows:

1. On October 2, 1998, the State of Washington, Department of Ecology (Ecology) issued to the U.S. Army Corps of Engineers (Corps) a water quality certification under § 401 of the Clean Water Act in the form of Order No. TB-98-02. The certification pertained to the Corps' proposal to extend the Point Chehalis revetment near Westport, Washington. The Corps had submitted to Ecology a Coastal Zone Management Act (CZMA) consistency determination for the same project on August 27, 1998. Ecology took no action on the determination within the time allowed by federal law.

2. Appellant Surfrider Foundation, Washington State Chapter appealed Ecology's issuance of the § 401 certification and its failure to take action on the CZMA consistency determination to the Pollution Control Hearings Board on November 2, 1998.

1 3. To avoid the costs and uncertainties of litigation, the Parties agree to resolve this
2 appeal in the following manner:

3 a. By July 30, 1999, Ecology will amend Order No. TB-98-02 to:

4 (1) Require the Corps to comply with the Mitigation Plan for the Point *done*
5 Chehalis Revetment Extension, Westport, Washington, dated October 7, 1998, as a condition of
6 the § 401 certification. The Mitigation Plan will be attached to, and incorporated by reference
7 into, Order No. TB-98-02. Ecology will make clear that the Corps' obligation to comply with *done*
8 the Mitigation Plan is not contingent on its receipt of funding. This does not constitute a waiver
9 by the Corps that its obligations under the Mitigation Plan are subject to the provisions of the
10 Anti-Deficiency Act, 31 U.S.C. § 1341, nor does it constitute a waiver by Ecology that the
11 Corps' obligations under the Mitigation Plan are not subject to the Anti-Deficiency Act.

12 (2) Extend the duration of the Order, including the water quality modification
13 granted in the Order, for the life of the Point Chehalis Revetment Extension project.

14 b. Ecology will adopt the following policy and procedure documents, each of which
15 is attached to this Stipulation:

16 (1) Procedures for coordinated 401/CZM implementation (November 16,
17 1998) (2 pages);

18 (2) Procedures/Federal Consistency/General Process (November 16, 1998) (2
19 pages); and

20 (3) Procedures/Federal Consistency/Direct Federal Actions (Corps, Coast
21 Guard, Navy, BPA etc.) (November 16, 1998) (2 pages).

22 c. Ecology is currently reorganizing and updating its Coastal Zone Management
23 Program Document. No later than December 31, 1999, Ecology will provide the Surfrider
24 Foundation, Washington State Chapter with a copy of its proposed changes to the Program
25 Document, and an opportunity to comment on those changes. In the future, Ecology will review
26 its Program Document to determine whether substantive changes are necessary. If it decides that

1 substantive changes are necessary, Ecology will convene a workgroup to assist in making those
 2 changes, and will invite the Surfrider Foundation and other stakeholders to participate in the
 3 workgroup.

4 4. This Stipulation fully resolves this appeal. Therefore, the Parties request that the
 5 Board enter the attached Order of Dismissal.

6 DATED this 9th day of July, 1999.

7 CHRISTINE O. GREGOIRE
 8 Attorney General

9 Tanya Barnett
 10 TANYA BARNETT, WSBA #17491
 11 Assistant Attorney General
 12 Attorney for Respondent
 13 Department of Ecology

Ronald S. Marsh
 14 RONALD S. MARSH
 15 Assistant District Counsel
 16 Attorney for Respondent
 17 U.S. Army Corps of Engineers

18 Knoll D. Lowney
 19 KNOLL D. LOWNEY, WSBA #23457
 20 Attorney for Appellant
 21 Surfrider Foundation

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STIPULATION AND AGREED ORDER
 OF DISMISSAL

AGREED ORDER OF DISMISSAL

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Having reviewed the foregoing Stipulation and the file and pleadings herein, and it appearing that the parties have reached an agreement:

IT IS HEREBY ORDERED that the foregoing Stipulation is entered as an Order of this Board, and this case, *Surfrider Foundation, Washington State Chapter v. State of Washington, Department of Ecology and U.S. Army Corps of Engineers*, PCHB No. 98-257, is hereby DISMISSED with prejudice.

DATED this 5th day of July, 1999:

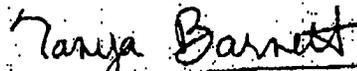

ANN DALEY, Presiding

ROBERT V. JENSEN, Member

JAMES A. TUPPER, Member

Presented by:

CHRISTINE O. GREGOIRE
Attorney General



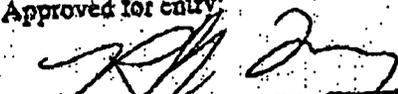
TANYA BARNETT, WSBA #17491
Assistant Attorney General
Attorney for Respondent
Department of Ecology

Approved for entry:



RONALD S. MARSH
Assistant District Counsel
Attorney for Respondent
U.S. Army Corps of Engineers

Approved for entry:



KNOLL D. LOWNEY, WSBA #23457
Attorney for Appellant
Surfrider Foundation

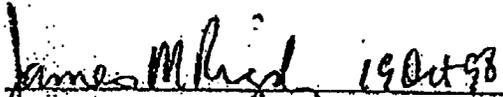
October 7, 1998

POINT CHEHALIS REVETMENT EXTENSION PROJECT WESTPORT, WASHINGTON INTERAGENCY MITIGATION AGREEMENT

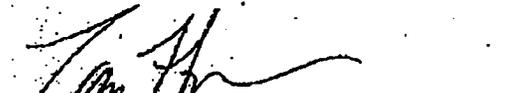
PURPOSE. The purpose of the attached mitigation plan is to establish an interagency partnership for addressing fish and wildlife mitigation issues related to the Point Chehalis revetment extension project at Westport, Grays Harbor County, Washington.

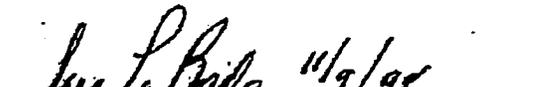
RESPONSIBILITIES. The U.S. Army Corps of Engineers (Corps) agrees to fund the mitigation, as described in the attached mitigation plan (Attachment A) and project plans (Attachment B), or as modified by mutual agreement of the parties to this agreement. Sufficient funding is believed to be available for implementation of the wetland mitigation and replanting of upland vegetation. Funding for the other items in the mitigation agreement is anticipated to come from the Grays Harbor navigation project operations and maintenance annual budget appropriations. All the items set forth in the mitigation agreement are subject to availability of funds for this purpose.

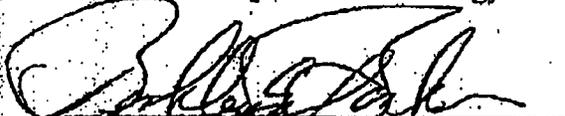
The Washington Department of Ecology, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and Port of Grays Harbor agree to assist the Corps of Engineers in implementing project-related mitigation by participating on a technical committee which will review performance of the mitigation measures. The Port of Grays Harbor agrees to grant a right-of-entry without cost to the Corps of Engineers, to allow wetland mitigation work on Port-owned lands identified in this Agreement. The Port of Grays Harbor further agrees to preserve the salt marsh wetland mitigation site, by deed restriction, conservation easement, or other legal instrument, in perpetuity.


James M. Rigsby (date)
Colonel, U.S. Army Corps of Engineers
District Engineer, Seattle District


Donald C. Fleming, Executive Director (date)
Port of Grays Harbor


Tom Fitzsimmons, Director (date)
Washington Department of Ecology


Sara LaBoide, Regional Director (date)
Washington Department of Fish and Wildlife


Buckley Barber, Mayor (date)
City of Westport


Nancy J. Gloman, Acting Supervisor (date)
U.S. Fish and Wildlife Service

53

October 7, 1998

ATTACHMENT A**MITIGATION PLAN****Point Chehalis Revetment Extension, Westport, Washington****PURPOSE.**

The mitigation plan, as described below, was developed to facilitate the resolution of fish and wildlife resource issues relating to the project by the U.S. Army Corps of Engineers (Corps) to extend the Point Chehalis revetment at Westport, Washington, to prevent further erosion of Half Moon Bay and to protect public facilities landward of the shoreline. Several resource agencies, including the Washington Department of Ecology (Ecology), Washington Department of Fish and Wildlife (WDFW), and U.S. Fish and Wildlife Service, requested the development of a fish and wildlife mitigation plan for the project. This mitigation plan is intended to satisfy that condition and has been jointly developed by the Corps, Port of Grays Harbor, City of Westport and the above named resource agencies.

BACKGROUND.

The Point Chehalis revetment extension project has undergone a number of refinements to improve its effectiveness and to avoid and minimize adverse fish and wildlife impacts, since it was originally proposed. The mitigation plan is based on the Corps' current design of the Point Chehalis revetment extension, as shown in the attached project and mitigation drawings (see Attachment B). Future project elements involving erosion associated with the Grays Harbor South Jetty and Half Moon Bay, including future extension or modification of the South Jetty, will require development of a separate mitigation plan or an amendment to this mitigation plan.

The project that this mitigation plan addresses includes:

1. A 1,900-foot-long rock extension of the Point Chehalis revetment; and
2. Periodic beach nourishment of the Half Moon Bay shoreline using sand dredged during maintenance dredging of the Federally authorized navigation channel.

ISSUES OF CONCERN.

The issues of concern specifically addressed in this mitigation plan are:

1. Maintenance of beach profile and exposure of buried revetment toe;
2. Wetland impacts;
3. Replanting of disturbed upland vegetation; and
4. Intertidal habitat loss at revetment intertie with existing Point Chehalis Revetment.

Arden, Hiram T NWS

From: Knoll Lowney [knoll@igc.org]
Sent: Thursday, January 15, 2004 2:48 PM
To: Hiram Arden
Cc: greg
Subject: Half Moon Bay sand project

Mr. Arden.

I am writing on behalf of Waste Action Project, a not for profit organization. WAP has asked to join in the comments submitted by Friends of Grays Harbor on the 21-day notice and also any comments FOGH submits on the Environmental Assessment, FONSI, and CZMA, including those submitted yesterday and others to be submitted next week. Like FOGH, WAP believes that an EIS is required before any additional projects are undertaken in Half Moon Bay.

Thank you,
Knoll Lowney
Attorney for Waste Action Project.

Knoll D. Lowney
Smith & Lowney PLLC, Attorneys at Law
2317 E. John St.
Seattle, WA 98112
(206) 860-2883; fax 860-4187
knoll@igc.org

CONFIDENTIALITY NOTE: This e-mail message may be privileged, confidential and/or protected from disclosure. The information is intended only for the use of the individual or entity named above. If you think that you have received this message in error, please e-mail the sender. If you are not the intended recipient, any dissemination, distribution or copying is strictly prohibited.

Arden, Hiram T NWS

From: Waypoint [waypoint@techline.com]
Sent: Wednesday, January 14, 2004 6:42 PM
To: Arden, Hiram T
Subject: U.S. Army Corps of Engineers - Reference # CENWS-OD-TS-NS-21R

Dear Sir,

I am writing to put forth my approval of the Corps of Engineers to proceed with the proposed project of sand fill to extend the life of the breach at Half Moon Bay in Westport, WA. until a long term solution is formulated. The proposed project is a short term measure, but local, State and Federal regulations and concerns have been fully addressed and a full breach by doing nothing would be economically and environmentally devastating to Westport and Grays Harbor County.
Go forth with the proposed project.

Sincerely,
Terry Veitz, Mayor
Ocean Shores, WA 98569

Terry Veitz
Waypoint, Inc.
P.O. Box 2015
Ocean Shores, Wa 98569
(360)289-0404

Arden, Hiram T NWS

From: Randy Lewis [cityadm@techline.com]
Sent: Wednesday, January 14, 2004 7:03 PM
To: Arden, Hiram T NWS
Subject: CENWS-OD-TS-NS-21R

The following comments are being submitted by the City of Westport in response to the above notice. The City of Westport strongly supports the proposed placement of clean sand along the rapidly eroding shoreline of Half Moon Bay in the area of the breach fill that was previously placed by the Corps. We will be providing comments on the Environmental Assessment that was submitted on this proposal separately.

The impacts of the proposed project will be insignificant. The current proposal is in reality a rehandling project. The source of the fill material is a stock pile of sand that has been dredged from the entrance channel located adjacent to the South Jetty and Half Moon Bay. Much of that material has eroded from the breach fill area of Half Moon Bay, so the net result is that at least a portion of the fill will be returned to the area it came from. The greatest impact of the current proposal will be the loss of access to the parking area of the state park, and walking areas of the trail and adjacent dunes where the sand will be built up in a stock pile. Without this action being taken, all of these areas will erode away, which will result in a permanent impact.

The City of Westport is very disappointed that the Corps has been unable to complete the necessary review and permitting for the previously proposed placement of Gravel/Cobble material in this same area. While there has been a great deal of discussion and speculation about the potential benefits and impacts of the various options for stabilizing the shoreline as proposed, one thing is certain. The impact of a no action alternative has been demonstrated clearly. Since the original public notice was published in June, approximately 28,000 square feet of shoreline area has been lost. All of this area is within the footprint of the original breach fill placed in 1993. This has resulted in the loss of habitat, the loss of access to the western beach of Half Moon Bay, especially by persons with disabilities who used the fully accessible trail in the area, and environmental damage from the destruction of adjacent infrastructure, and the uncovering of debris from previous Corps projects. The lack of appropriate action by the Corps and the resulting loss of area has threatened access to the Jetty by the Corps, and U. S. Coast Guard who previously commented concerning their use of the area during operations. With each storm, the breach fill area is reduced, increasing the potential for a rebreach to occur. While that may not currently be eminent, the area is continually eroding and has previously experienced severe conditions which have moved faster than the Corps could respond to, resulting in emergency declarations.

The erosion that is currently being experienced along the western shore of Half Moon Bay is directly related to the Corps previous actions included in the South Jetty Project, including the construction of a diffraction mound and gravel transition, and the removal of the remnant portion of the South Jetty. The design of the first two projects were modified based upon philosophical, not technical concerns of regulatory agencies during the permitting process. The removal of the remnant jetty was required as mitigation for the other two projects. The combined performance of these actions has been greatly compromised by the above changes, and have directly contributed to the increased erosion rate in the relatively limited area of the currently proposed sand placement project.

As stated in the notice, this project is an interim measure intended to stabilize the shoreline within the project area until a long term solution is identified. Numerous comments were made concerning the need for a complete environmental assessment and review, solid technical study and analysis, with input from agencies and concerned individuals included throughout the process. The City of Westport supports that concept. Unfortunately the current situation threatens to undermine that process. Common sense indicates it will be very difficult to analyze the pros and cons of various alternatives on an area that is constantly changing. This will greatly increase the uncertainty of the success of the proposed alternatives and could lead to incorrect assumptions. The development of a long term solution and the completion of the required review and permitting could take several years. The Corps has been unsuccessful in completing the current proposal after almost a year of work. Without the proposed action by the Corps, the area of the breach fill will continue to erode and will almost undoubtedly reach a critical state requiring the Corp to take emergency action. That action will again change the shoreline of Half Moon Bay, and will have impacts to the progress of the long term study.

Since October, the City of Westport, in an attempt to prevent the loss of public infrastructure in the area adjacent

to proposed sand fill, including public utilities, and a City owned walking trail, has placed clean sand and ecology blocks in an attempt to protect our trail. Our project was taken as an interim measure in anticipation the Corps would complete the proposed gravel placement in late October. We understand that concerns have been raised by some of the agencies concerning removal of the blocks. We are required by the Hydraulics Project Approval issued by the Washington State Department of Fish and Wildlife to remove the blocks no later than February 14. Our project is not the subject of the current notice. The City is responsible for the removal of the blocks, and we will coordinate that removal so as not to impact progress on the placement of the sand fill as proposed.

The City is also concerned about the Corps' commitment to maintenance of the proposed sand placement. As identified in the previously published Environmental Assessment, the sand fill will not stabilize the beach as well as the previously proposed gravel/cobble material, and will require periodic renourishment. Without periodic renourishment until a long term solution is in place, the sand placement as proposed will have little benefit. Again, the footprint of the current fill proposal is less than the shoreline that was in place in September. There is no way, based upon the conditions experienced in the last several years, that periodic renourishment won't be required.

Thank you for the opportunity to comment on this project.

Randy Lewis
City Administrator
City of Westport

CHRON



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Western Washington Fish and Wildlife Office
510 Desmond Dr, SE, Suite 102
Lacey, Washington 98503



JAN 16 2004

Colonel Debra M. Lewis
District Engineer
Seattle District, Corps of Engineers
P.O. Box 3755
Seattle, Washington 98124-3755
Attn: Hiram Arden(OD-TS-NS)

Dear Colonel Lewis:

Subject: Public Notice CENWS-OD-TS-NS-21R; Placement of Sand, South Jetty Breach Fill Maintenance, Westport Washington

Thank you for the opportunity to comment on the Corps of Engineers' (Corps) proposed action to place 25,000 cubic yards of sand at two locations along the shoreline of Half Moon Bay, adjacent to the Grays Harbor South Jetty in Grays Harbor County, Washington. The proposed action is described as an interim measure to stabilize the Half Moon Bay shoreline and reduce the risk of another breach from occurring until a long-term solution can be developed and implemented. The proposed work would occur in January - February, 2003, with the in-water work accomplished prior to February 14, 2003.

x 7
x 7

The following comments and recommendations are being provided pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661, et seq.). Endangered Species Act consultation on this project has been completed.

In the U.S. Fish and Wildlife Service's (Service) August 29, 2003, letter responding to the Corps' earlier proposal to place gravel and cobble on the shoreline, we expressed our concern over the cumulative hardening of the shoreline and the potential for it to subsequently change the fish and wildlife usage and value of the Half Moon Bay shoreline. We also recommended that the Corps use sand, instead of gravel and cobble, to augment the Half Moon Bay shoreline so that the existing character of the beach is maintained until a long-term solution can be developed and implemented.

cf: Kinney, ERS



Letter 16

Colonel Debra M. Lewis

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It is our understanding that an October 2003 storm resulted in additional erosion to the Half Moon Bay shoreline, and in response, the City of Westport placed several rows of ecology blocks to protect the side walk and access road to Westhaven State Park. If the ecology blocks are allowed to remain on a long-term basis, we believe it will lead to the cumulative hardening of the shoreline and adverse impacts to the wildlife that utilize the beach. It is our understanding based on discussions with Corps staff with regard to the section 7 consultation for this project that the ecology blocks would be removed by the City of Westport concurrent with the Corps' placement of sand.

The Service does not object to the proposed work, providing the placement of sand on the Half Moon Bay shoreline does not negatively affect the City of Westport's ability to fulfill its obligation to remove the ecology blocks by February 15, 2004, as required by its Hydraulic Project Approval.

The current proposal is considered an interim measure that will provide some lead time to develop a long-term solution. We request that the Corps' development of the long-term solution to the erosion problem at Half Moon Bay involve the participation of the federal and State resource agencies and other stake holders in the early development phase of the planning process. We believe the limited or lack of success of the various shoreline protection measures that have been implemented since 1993, indicates the interaction of waves, currents, and sediment with the shoreline and existing structures is highly complex, and warrants the full consideration and evaluation of a wide range of alternatives.

We look forward to working with the Corps on developing a long-term solution that both addresses the shoreline erosion problem at Half Moon Bay and adequately protects the fish and wildlife resources of the area. Please contact Gwill Ging at (360) 753-6041, if you have questions.

Sincerely,


for Ken S. Berg, Manager
Western Washington Fish and Wildlife Office

cc:

EPA (J. Barton)
NOAA Fisheries (J. Stadler)
WDFW (B. Burkle)
WDOE (H. Pressley)



City of Westport

740 N. Montesano • P.O. Box 505 • Westport, WA 98595 • ci.westport.wa.us

January 16, 2004

Brian Missildine
US Fish and Wildlife Service
Western Washington Wildlife Office
510 Desmond Drive SE
Lacey, WA 98503

RE: Removal of Ecology Blocks

Dear Brian:

This letter is in response to the voice mail message you left asking for confirmation of the City of Westport's intentions concerning the ecology blocks located near the state park in Half Moon Bay. These blocks were placed in October, along with sand and filter fabric, in an attempt to prevent damage to the City's trail and adjacent park facilities and corresponding environmental impacts to Half Moon Bay.

The City of Westport currently has a Hydraulic Project Approval (HPA) issued by the Washington State Department of Fish and Wildlife that requires us to remove the blocks no later than February 14, 2004. The City will comply with our responsibilities under the HPA. Our plan was never for the blocks to be in place as long as they have been. The Corps of Engineers inability to successfully permit and implement an interim measure to stabilize the shoreline until a long term solution can be identified and implemented has led to the current situation. We are obviously aware of the Corps current proposal for the placement of sand in the area of our ecology blocks. If that project is constructed, the City will ensure the blocks are removed so as not to impact that project.

Feel free to contact me if you have any other questions.

Sincerely,

Randy D. Lewis
City Administrator
City of Westport

City Hall Administration
360 268-0131
360 268-0921 Fax

Municipal Court
360-268 0125
360-268-1363 Fax

Police Department
360 268 9197
360-268-1363 Fax

Public Works
360 268-0835
360-268-0921 Fax

Fire Department
360-268 9235

Email:
cityhall@techline.com
cityadma@techline.com

westportcourt@netscape.net

records@olympnet.com
chief@olympnet.com

westportbldg@techline.com
cityplan@techline.com

wfdchief@techline.com

CA: ERS, Kinney

Letter 17

Arden, Hiram T NWS

From: Bradys Oysters [bradys@techline.com]
Sent: Tuesday, January 13, 2004 3:58 PM
To: Arden, Hiram T
Subject: applicant:US Corp of engineers reference:CENS-OD-TS-NS-21R

Dear Hiram:

I would like the Corp of Engineers to do a NEPA study on the Half Moon Bay erosion sight. I am requesting this because as a long-time resident of Grays Harbor, I have seen the beach I love disappear. Half Moon Bay was a great beach to play on when I was a child. I have many happy memories of school field trips, watching Westport's fireworks, and beach walking on this beach. However, I can not provide those same memories of this place to my kids an the beach has eroded. It is obvious that the erosion fixes are not working. I do not think that armoring the beach is the answer. In fact, I do not think we will know the answer until a NEPA study is done. It is in the best interest of the public to not lose a very valuable recreational beach and at the same time spend tax payer dollars on quick fixes. Let us find the best solution by doing a NEPA.

Kristi Ballo
Concerned Citizen
For orders call 1-800-572-3252 or go to <http://www.bradysoysters.com>

Arden, Hiram T NWS

From: BerkleyBarker@aol.com
Sent: Tuesday, January 13, 2004 2:29 PM
To: Arden, Hiram T
Cc: southbeachbulletin@olynet.com
Subject: . PLACEMENT OF SAND. SOUTH JETTY BREACH FILL MAINTENANCE.WESTPORT, WA.

Permit applicant: U.S. Army Corps of Engineers. Reference: CENWS-OD-TS-NS-21R

I would like to make comment for the record on the placement of sand in Half Moon Bay . It has been proven by many Federal, Corps, State and Private studies that the erosion in the area associated with the South Jetty in Westport is in fact caused by the jetty structure itself and the Army Corps of Engineers practice of dredging the channel on the south side. This moved the channel from the North Jetty, it's original position, to where it is today. In the past 50 years hundreds of acres of land adjacent to the jetty and Westport have been lost due to this man made erosion. According to Army Corps maps, the area we now call Half Moon Bay was a land mass that the South Jetty was attached to and extended to what is now the N.W. armoured tip of the Westport downtown marina area. This area was heavily armoured in the early 60,s because the channel was aimed there at that time.

It is time for the Army Corps of Engineers to step up and address the damage caused to the land by thier practices. For the short term they need to place this sand in Half Moon Bay adjacent to Westhaven State Park, just to try and slow the erosion during this year,s storm season. They then need to have a permitted plan in place before next winter's storm season starts.

Obviously it would be cost prohibitive to replace all of the lost land and habitat eroded in the past 50 years, but the Corps should be held accountable and take action now to hold in check the erosion caused by thier structure. The Corps needs to stand up to those that would use this man made erosin for thier own ends and agendas. The Corps has allowed enviromental activists to alter every proven project engineered and tested so far with disasterous results.

Half Moon Bay and Westhaven State Park have become one of the largest tourist attractions and day use areas in the state. To allow the man made erosion to continue would cause an irreplaceable loss to this community and to every one in the state of Washington.

Barker
City of Westport
member Westport/Grayland CofC
Mayor 1998-2003 City of Westport

Respectfully
Berkley
Resident
Board
Ex

Arden, Hiram T NWS

From: jinx [jinx@olynet.com]
nt: Tuesday, January 13, 2004 6:28 PM
: Arden, Hiram T
Subject: Westport HMB, The Cove at Risk

Mr. Hiram T. Arden:

I would like to tell you of my displeasure with the action the COE is planning on taking at Half Moon Bay (Westport). I don't believe any action should be taken without first preparing an Environmental Impact Statement. This Program has included over nine major projects in a decade, and all were implemented without adequate environmental reviews. Each had significant environmental consequences and many have had unintended consequences in relocating the erosion problems to other areas of the beach.

Please give this your immediate attention. Thank you.

Jinx Stedman
South Beach resident for 60 years.

Arden, Hiram T NWS

From: Jim Neva [jneva@portgrays.org]
nt: Wednesday, January 07, 2004 3:08 PM
: Hiram Arden (E-mail)
Subject: FW: CENWS-OD-TS-NS-21R

> -----Original Message-----

> From: Jim Neva
> Sent: Wednesday, January 07, 2004 3:05 PM
> To: Hiram Arden (E-mail)
> Subject: CENWS-OD-TS-NS-21R

> Hiram,

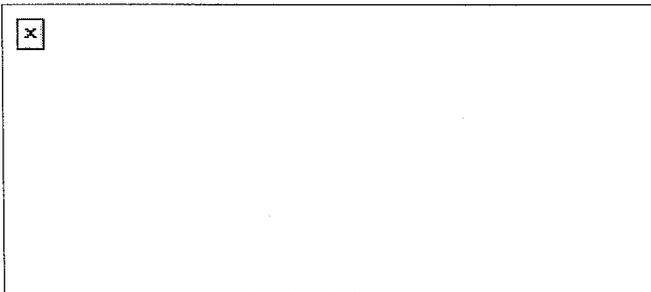
> This is to notify you that the Port of Grays Harbor wishes to go on record
> in support of CENWS-OD-TS-NS-21R, U.S. ARMY CORPS OF ENGINEERS, PLACEMENT
> OF SAND, SOUTH JETTY BREACH FILL MAINTENANCE, WESTPROT, WASHINGTON. We
> believe this project is vital to the maintenance of the Grays Harbor
> Navigation Project and specifacally the integrity of the Grays Harbor
> South Jetty. This interim action is necessary to prevent another breach
> from occuring and threatening the stability of the jetty until a long-term
> plan has been implemented.

> Sincerely,

> Jim Neva,
> Marine Terminals Manager
> PORT OF GRAYS HARBOR

Arden, Hiram T NWS

From: Jerry Gorsline [jerry@wecprotects.org]
Sent: Tuesday, January 13, 2004 10:05 AM
To: Arden, Hiram T
Cc: Kinney, Aimee T
Subject: Public Notice CENWS-OD-TS-NS-21



615 Second Avenue, Suite 380
Seattle, WA 98104

206-622-8103
www.wecprotects.org

Mr..Hiram Arden (OD-TS-NS)
US Army Corps of Engineers
Navigation Section
P.O.Box 3755
Seattle, Washington 98124-3755

Reference: Public Notice CENWS-OD-TS-NS-21

The following comments are submitted in response to the revised 21-day notice of the U.S. Army Corps of Engineers Seattle District's proposal to place approximately 25,000 cubic yards of dredged materials along the shoreline adjacent to Grays Harbor South Jetty.

The Washington Environmental Council ("WEC") is a statewide advocacy organization that works at the state level to improve and enforce our environmental laws. WEC has over 3,000 individual and organizational members throughout Washington.

WEC participated on the Washington State Coastal Erosion Task Force in 1998-99 during which the majority of stakeholders reached consensus on a long-term policy framework for dealing with the issue of coastal erosion. Unfortunately, this framework was never implemented and erosion control activities occurring along Washington's coastline continue to raise significant ecological and fiscal questions. To date, federal, state and local governments continue to respond to concerns over potential damage to private property and public facilities by allowing tons of fill to be placed on public beaches - often at taxpayer expense. This "solution" can have profound impacts to the fish and wildlife habitat and public recreation.

We are very concerned that the Corps' erosion control program in the vicinity of the Grays Harbor South Jetty has included over nine major projects in a decade, and that each project was implemented without adequate environmental review.

This latest proposal will be the fourth placement of dredge materials along the Half Moon Bay shoreline, and appears to be yet another example of an ongoing, piecemeal approach to coastal erosion.

We hereby join with our member group, Friends of Grays Harbor, to call for a comprehensive NEPA environmental review of this action. This environmental review should include an assessment of cumulative impacts to the beach, uplands, and associated fish and wildlife habitats resulting from this and other related Corps

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projects along the Half Moon Bay shoreline. Such an analysis will provide an opportunity for stakeholders to participate in decision-making related to erosion control in the vicinity of the Grays Harbor South Jetty and help define a long-term erosion policy framework that will adequately protect fish and wildlife and public recreation resources in the area.

Thank you for the opportunity to comment.

Sincerely,

Jerry Gorsline

WEC Policy Associate

Arden, Hiram T NWS

From: Bumelia@aol.com
Sent: Tuesday, January 13, 2004 8:40 AM
To: Arden, Hiram T; Arden, Hiram T
Subject: REFERENCE: CENWS-0D-TS-NS-21R

**Hiram T. Arden (OD-TS-NS)
Navigation Section
Post Office Box 3755
Seattle, Washington 98124-3755**

REFERENCE: CENWS-0D-TS-NS-21R

This concerns the US Army Corps of Engineers' (USACE) plan to place 25,000 cubic yards of sand in Westhaven State Park and Half Moon Bay, Westport, Washington. There is ample reason to believe that proposed project has a sufficient number of environmental impacts and should receive the benefit of an Environmental Impact Statement (EIS) under NEPA.

My reasons follow.

In the past several years, the USACE has engaged in multifarious projects to control erosion in Half Moon Bay. Each project, independently, had environmental impacts; yet none had received an EIS. Moreover, the projects' cumulative impacts have never been subject to an EIS.

It is safe to say that the USACE's efforts to control erosion in Half Moon Bay and vicinity have been not been successful. That aside, the time has long since come for the USACE to step back, review its efforts, reevaluate its continued expenditure of taxpayers' dollars in this area, and prepare an EIS of past and proposed erosion control projects.

Past efforts to control erosion have significantly reduced public use of the beach at Half Moon Bay. Such efforts have included sand excavation and replacement of sand in the Bay. None has received an EIS. Most or all have contravened Westport's Comprehensive Plan and Shoreline master Program. Recreation activities have been curtailed by such efforts, and no significant benefits have accrued. Moreover, water quality and wetlands have been affected, although the extent of the impacts cannot be assessed without an EIS the USACE steadfastly refuses to conduct.

The USACE's mission in this area is to protect the shipping canal. It is difficult to see how dumping sand in the beach at Half Moon Bay accords with that mission. The USACE should explain how their proposal will further its mission.

Being 74 years old, I believe my continued enjoyment of the amenities of Half Moon Bay have been, and will be, curtailed by the USACE's activities. Whereas in the past, I could gain access to the beaches from numerous approaches, now the approaches are being converted, by the USACE's activities, into cliffs I cannot climb. That may be suitable for

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younger people or older people of athletic or adventurous spirit, but not many.

I hope the USACE will avail itself of this opportunity to conduct a full-scale evaluation of its activities in the Westport area. Times are tough and taxes high. Does the public truly benefit from the USACE's actions here, or is the money being spent to promote and protect opportunities for large scale development hereabouts? If the latter, does that accord with the USACE's mission?

Please conduct a full-scale Environmental Impact Statement before proceeding.

Abraham Ringel
PO Box 221
Grayland, WA 98547



City of Westport

740 N. Montesano • P.O. Box 505 • Westport, WA 98595 • ci.westport.wa.us

January 23, 2004

Ms. Almee Kinney
Environmental Resources Section
US Army Corps of Engineers
P.O. Box 3755
Seattle, WA 98124-3755

Re: South Jetty Beach Nourishment Environmental Assessment
CENWS-OD-TS-NS-21R

The following represent the City of Westport's our comments on the Environmental Assessment (EA) issued for the proposed placement of 25,000 cubic yards of dredged material to repair damage caused by recent erosion and to maintain the breach fill against future erosion until a long term solution can be identified and implemented. The City commends the Corps on the EA and concurs with the proposed Finding of No Significant Impact.

1. WESTPORT SUPPORTS A PROACTIVE APPROACH TO PREVENTING THE REOCURRENCE OF A BREACH

The Corps' approach begins with the recognition that erosion occurring in Half Moon Bay is a complex and dynamic phenomenon. The current erosion experienced in Half Moon Bay results from previous Corps projects, including the construction of the South Jetty that were designed to safeguard the Navigation Channel and to minimize impacts caused by Corps projects on the surrounding environment. Unfortunately, the area continues to experience erosion resulting in part from construction of the wave diffraction mound, gravel transition beach and removal of the remnant jetty. The proposed action is designed to prevent erosive forces directed by these previous actions from undermining the breach fill placed by the Corps to prevent recurrence of a breach at the South Jetty. Additionally, the proposal mitigates the damage caused by erosion at one of the most vital resources in the City, namely Westhaven State Park. The City supports the Corps' efforts to take responsibility to respond to erosive effects caused by Corps structures.

The City supports the approach recommended by the EA in taking preventative action to minimize the potential for a breach. This approach also minimizes any environmental impacts in comparison to the impacts that would be caused by a breach, and the impacts associated with a large-scale response like the 1994 breach fill project.

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360 268-0921 Fax

Municipal Court
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360-268 1363 Fax

Police Department
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Re: South Jetty Beach Nourishment Environmental Assessment
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The Corps' authority to maintain the breach fill is clear. Its authority to restore areas damaged by erosive forces directed at Westhaven State Park is similar in kind to the authority exercised by the Corps to mitigate impacts from Corps facilities when it entered into the Interagency Mitigation Agreement (IMA) concerning the buried revetment. The Corps has both the authority and a duty to maintain facilities needed to protect the navigation channel, including the jetty, and to provide associated erosion control and protection. All of the activities proposed here are within the area in which the Corps has conducted prior activities in response to the 1993 breach.

2. REPLACEMENT OF SAND FROM RECENTLY ERODED AREAS WILL HAVE LITTLE OR NO IMPACT ON BEACH.

The replacement of recently eroded sand with dredged material is a rational repair of erosion damage by replacement with like materials. Intuitively, the proposal to restore the shoreline to its condition prior to the onset of winter storms will have no significant impacts, either on recreation, public access or beach habitat. We agree with the EA's analysis that the sand placed along the dune will mimic previous conditions along Half Moon Bay and have no significant adverse impacts.

Although erosion of the dredged materials placed on the shoreline is to be expected, there is no difference between the proposed action and the no action alternative in this regard. It makes little difference to the environment affected by such erosion if the source of the eroded sand is from the existing shoreline or the restored shoreline. Thus, there is no reason to expect significant environmental impacts from this proposal. The EA confirms this intuitive observation with analysis of available scientific information.

3. INACTION WILL HAVE SEVERE ADVERSE CONSEQUENCES

By comparison, the consequences of continued inaction will be significant environmental damage to one of the most vital public resources in the City of Westport. The erosive forces from the existing Corps facilities are now directed at the shoreline fronting Westhaven State Park. This park is one of the most frequently visited attractions in the City and is a lynchpin of the local economy. Unfortunately, erosion continues to batter the shoreline along the state park, threatening to wash out the City's ADA accessible trail, the parking and restroom facilities of the park and the access road leading to the jetty itself.

Further erosion could wash these facilities into Half Moon Bay, causing immeasurable damage from asphalt, concrete and other materials in the path of erosion. Indeed, prior experience demonstrates that erosion can accelerate dramatically, creating the

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possibility of a future breach, as occurred in 1993. The consequences of allowing a breach threaten the environment and economic core of the entire region. The impact of a breach on the navigation channel could close the shipping channel jeopardizing access to the only port along the Washington coastline.

The Corps has recognized the devastating consequences in its previous environmental documents, dating back to the original decision to fill the breach in 1994. These consequences include not only a threat to the integrity of the jetty and navigation channel, but to other aspects of the environment. A breach scenario would pose devastating consequences for the environment, including:

- Threatening the viability of the navigation channel and wreaking economic havoc with livelihood of the Grays Harbor economy
- Threatening the stability of the jetty
- Threatening the marina district
- Threatening the City's wastewater treatment plant
- Threatening the buried Pt. Chehalis revetment
- Loss of recreational opportunity at Westhaven St. Park
- Performance of the Corps obligations under the IMA may be rendered impossible

Even without a recurrence of the breach, inaction will result in continuing damage to the environment from erosion caused by prior Corps projects. If erosion in the existing areas is allowed to continue, it will adversely impact recreation and the aesthetics enjoyed by beach users. The growing scarp will only further restrict public access to beach areas, as well as threatening public facilities, such as the bathrooms/changing areas at Westhaven State Park and the City trail.

Moreover, inaction may foreclose the ability of the Corps and others to access the area near the South Jetty. The erosion situation has already eliminated the Jetty Haul Road used for placement of dredge material in the 1994 and 2002 Breach Fill actions. Jetty Access Road is the last publicly owned area of access to reach Westhaven State Park and the South Jetty and is the area where existing easements provide for access. The Corps cannot expect to use the Westport Light Trail from Westport Light State Park for access, since it is for pedestrian use only and does not allow vehicular traffic.

The reason the city trail and state park facilities are threatened is because the Corps has failed to maintain the 1994 breach area. Over time, erosion directed from the Corps' facilities has eroded the 1994 breach fill area despite the Corps' determination to maintain that area through periodic beach nourishment.

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4. CORPS SHOULD BE COMMENDED FOR SELECTION OF SOFT INTERIM
REMEDY CONSISTENT WITH RECOMMENDATIONS OF RESOURCE
AGENCIES AND ENVIRONMENTAL GROUPS

The Corps selection of beach nourishment is consistent with comments offered by multiple resource agencies and environmental groups following the prior proposal to extend the gravel transition beach. The Corps has adopted the recommendations of USFWS, as endorsed by FOGH, Wildlife Forever and Audubon, to:

"Use sand, instead of gravel and cobble, to augment the Half Moon Bay shoreline so that the existing character of the beach is maintained until a long term solution can be developed and implemented." (Letter from Ken Berg, 8/28/03)

Concomitant with the Corps' decision to maintain the existing character of the shoreline in the interim is the responsibility to diligently evaluate and identify long term options. The City of Westport agrees with the position of numerous environmental organizations that this evaluation should proceed and encompass the best available scientific analysis. The Corps' choice of an interim soft remedy allows consideration of the full spectrum of alternatives and does not foreclose any future option. By contrast, allowing unchecked erosion from the existing Corps structures to continue will foreclose available options and could lead to much more intrusive and impactful measures than would otherwise be necessary.

The EA likewise uses available science to predict potential impacts of the sand placement on benthic communities as recommended by the Surfrider Foundation in their prior comments. As the Surfrider Foundation noted,

"Sand plays an important role in the coastal ecosystem, supporting its own biotic community as well as providing nesting spaces, notably for forage fish. It is our hope that if this project proceeds, the use of a smaller size cobble (6" or less) will preserve pockets of sand that will provide critical habitat to a variety of creatures." (Letter from Ian Miller, Surfrider Foundation, 7/26/03)

The Corps' proposal will not only preserve pockets of sand, but replaces the same material lost due to erosion originating from the jetty and wave diffraction mound. This will directly replace lost habitat for a variety of species. The proposal does so in a manner which promotes availability for public recreation and maintains the aesthetic quality of the shoreline to the maximum extent possible. As the Department of Natural Resources pointed out,

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CENWS-OD-TS-NS-21R

"The DNR's recommendation for the placement of sand as an interim measure would have no significant adverse impacts on recreation and aesthetics in HMB." (Letter from Peter Leon, Department of Natural Resources, 8/21/03)

The only impact on public recreation from the proposal would be the inability to use the City trail due to the stockpiling of sacrificial material. This impact is likely inevitable given the erosion that occurred while the Corps has evaluated the gravel transition beach and the beach nourishment proposals. These impacts on recreation are temporary and appropriate when compared to the benefits of the proposed action, and can be mitigated by future restoration of the city trail.

5. THE PREFERRED ALTERNATIVE IS CONSISTENT WITH THE COASTAL ZONE MANAGEMENT ACT AND CITY SHORELINE REGULATIONS

The City's Shoreline Master Program (SMP), as codified in the Westport Municipal Code (WMC) recognizes the use of dredge spoils for protective areas and to restore areas of high erosion is appropriate. WMC 17.32.055(8)(E)(ii). Indeed this measure is less impactful than other alternatives, such as riprapping, that are also allowed by the City master program.

Westport SMP allows erosion control and stabilization of eroding banks of the shoreline. WMC 17.32.055(4) provides:

Bank line erosion control is authorized as a permitted use, subject to the provisions of this section. Activities permitted within the category of bank line erosion control include riprapping and minor straightening and sloping of the bank line as required to stabilize upland areas and prevent accelerated erosion processes.

Likewise, the Corps project meets the criteria for erosion control in WMC 17.32.055(4)(A-1), as follows:

- The project is an interim measure designed to minimize expense of major breach fill pending consideration of long term options.
- Limited to areas of active erosion and to area needed to maintain integrity of upland structures
- Uses clean sand in order not to impair water quality
- No major modification of bank line – designed to maintain existing character of beach.
- No additional developable uplands will be created.

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- Compaction and upland placement will be used to minimize turbidity.
- No concrete slabs proposed.
- The final project should not exceed a 2:1 slope.
- Vegetation should be placed in restored areas, consistent with surrounding areas.

The project is also consistent with Landfill Standards in the SMP, WMC 17.32.055(8)(D), as follows:

- The project is designed to minimize erosion.
- Clean dredged material (sand) will not adversely affect water quality.
- Maintenance of the South Jetty and prevention of breach are priority water dependant and public uses.

The project is consistent with Clearing and Grading standards in WMC 17.32.055(3):

- It is necessary for the water dependant use of maintaining the jetty and prevention of future breach.
- Maintenance of the primary dune in the public park satisfies SMP standards.
- The project is necessary to address the consequences of the Corps' water dependant use of the South Jetty.
- The restrictions on removal of sand and gravel from marine beaches do not apply to dredge material stockpiled on the beach for this very purpose. Moreover, such material will be replaced following regular dredging conducted by the Corps.

6. THE EA INCORRECTLY TIES EROSION CONTROL PROJECTS TO THE PROPOSED LINKS AT HALF MOON BAY DEVELOPMENT.

The Links at Half Moon Bay resort project has already applied for and been granted needed local permits. The Corps' action will not have any impact on consideration of the Links proposal, which has already completed the local hearing process.

The Links project is located on property created after installation of the jetty nearly a century ago. It is the culmination of 40 years of planning efforts by the City and Port of Grays Harbor going back to 1963. The property has been zoned for development under City zoning and shorelines regulations for well over a decade. The development is not arising because the Corps is now placing sand on the beach.

The City's support for the Corp's project and construction of temporary erosion control

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measures were intended to protect the City trail and Westhaven State Park, not the Links development. The shoreline permit for the Links development was conditionally approved by the City with the requirement that the owner acknowledge the current and future risks of coastal erosion and notifies future owners. Any suggestion in the EA (e.g. at 18) that this was an effort to protect the development is incorrect.

Access to the proposed condominium site, which is part of a secondary phase of the Links proposal, is planned to be approximately 400 feet east of the location of the City's temporary erosion control project. The City's temporary erosion control project was located immediately in front of the City trail adjacent to the state park parking lot, not in front of condominium location.

If erosion proceeds towards the proposed condominium site, it will cut the Corps' access to the jetty before it affects the planned access point to the condominiums. Expert testimony at the Links hearings stated that the most likely scenario for impacting the condominium site is a recurrence of a breach. Such an event would threaten the integrity of the jetty and navigation channel, which the Corps clearly has the authority and duty to safeguard. The impacts of the Links proposal, which will occur regardless of the Corps project, are remote and not causally connected to the Corps' action.

The EA jumps to the conclusion that further armoring of Half Moon Bay will be needed to protect the proposed development. The reasoning in the EA on this matter is circular, entirely speculative and one sided. This action does not promote future development, but protects against a future breach and safeguards existing publicly owned infrastructure. The City is unaware of, and requests the Corps to provide, any study documenting that the proposed future development will be at risk, in any other than a breach scenario. We note that the equilibrium shoreline identified in the Corps' *South Jetty Sediment Processes Study (April 2003)* does not impact the condominium or golf course site.

The possible impacts of Corps erosion on future development are not germane to the existing proposal, which adopts the soft approach advocated by resource agencies and concerned public interest groups to maintain the status quo so that such impacts can be meaningfully evaluated and various alternatives considered. To conclude that future armoring is needed to protect development assumes the conclusion and puts the cart before the horse.

7. THE PROPOSAL WILL NOT CONTRIBUTE TO CUMULATIVE IMPACTS

The City of Westport agrees with interested parties such as FOGH and Wildlife Forever who have previously commented that Westhaven State Park is an important resource

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and point of public access to the coast. This park plays a significant role in the local economy and is an important area of regional recreation. We do not understand the zeal displayed by these groups for the notion that the park should be sacrificed to erosion created by the jetty and associated structures. We strongly urge the Corps to undertake appropriate studies to evaluate and select a long term solution to the erosion that is currently directed at this vital resource.

The City disagrees with the assertion that this interim action is a piecemeal implementation of a larger extension of hard structures across Half Moon Bay. Rather it is an appropriate action to preserve the existing situation pending evaluation of long term options. It is not part of a larger extension of the gravel transition area across Half Moon Bay, nor does it rely on any pretextual emergency to bypass NEPA.

Since this proposal is a limited, interim restoration of the shoreline from recent erosive events, the City does not believe that it will contribute to any cumulative impacts.

The Cumulative Effects Appendix contains much general discussion of the impacts of human occupation in the coastal strand and sand dune communities which is not related to the task at hand. The proper framework for assessing cumulative impacts is to assess the totality of past, current and future proposals to control erosion associated with the jetty. As such, the EA's general discussion of the effects of human habitation in intertidal areas is not related to the cumulative effects of Corps activity. This proposal is unrelated to development proposals in the interdunal area and impacts from such development should be analyzed independently from the current project. Future cumulative analyses should focus on the impact of future alternatives in conjunction with prior actions on Half Moon Bay and along South Beach, which is the affected environment in this case. No impacts from the present proposal to conduct beach nourishment are expected to contribute to such cumulative impacts.

Under applicable NEPA regulations, the Corps must take a "hard look" at the impacts of a project, including cumulative impacts. The EA complies with this requirement and correctly concludes that this project does not add to such impacts. We agree that a long term remedy should be analyzed in conjunction with prior Corps projects. However, the need for action to safeguard the breach fill and prevent damage to important public facilities should not be stagnated by uncertainty as to what future actions will occur. The use of clean sand as an interim measure will not contribute to future cumulative impacts nor foreclose consideration of possible long term options. Thus, the City believes that the EA is fully consistent with the obligations under NEPA.

We concur in the observation of the EA that the placement of sand will mimic natural accretion patterns in Half Moon Bay and will be affected much like the existing

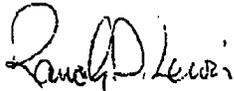
January 23, 2004

Re: South Jetty Beach Nourishment Environmental Assessment
CENWS-OD-TS-NS-21R

landscape. EA Appendix B at 6. We also agree that the project will not impact the characteristics or function of other shoreline processes because it is designed to maintain the status quo while a long term evaluation occurs. As such, the Finding of No Significant Impact, based on an EA rather than an EIS is appropriate for this proposal.

Thank you for your consideration. We urge the Corps to proceed with the sand placement without delay.

Sincerely,



Randy D. Lewis
City Administrator

cc: Jeffrey S. Myers
Mayor Michael Bruce
City Council members
Alyson Daly
Harry Hosey

U.S. Department of
Homeland Security

United States
Coast Guard



Commanding Officer
United States Coast Guard
Station Grays Harbor

P. O. Box 568
Westport, Wa 98595-0568
360-368-0121

Rec'd 1/26/04 AZ

3000
22 JAN 2004

Navigation Section
U.S. Army Corps of Engineers, Seattle District
P.O. Box 3755
Seattle, WA 98124-3755
ATTN: Hiram Arden (OD-TS-NS)

RE: CENWS-OD-TS-NS-21R

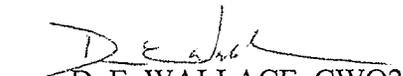
Dear Mr. Arden:

Thank you for the Public Notice of December 24, 2003 and the opportunity to comment on the proposal to place approximately 25,000 cubic yards of sandy dredged materials at the South Jetty breach fill and along a rapidly eroding sandy shoreline adjacent to the Grays Harbor south jetty.

Coast Guard Station Grays Harbor has utilized the area adjacent to the South Jetty every day for operational purposes for countless years. Because of its height, the area of the breach fill provides an ideal location for visual observations of the wave conditions at the entrance of Grays Harbor. This area has also been used as both an observation, access to the beach and staging area during major search and rescue responses. Up until last year, emergency vehicles were able to access this area using the Jetty Haul Road. A large portion of that road has since been lost due to erosion from major storms. We are still able to access the breach area through the State Park, however continued erosion in that area could eliminate that access and remove a vital tool used in our daily operations.

While the project that is currently being proposed will not restore the Jetty Haul Road adjacent to the State Park parking lot, it will provide needed protection to the area so that we can continue using it for operations. As Commanding Officer of Coast Guard Station Grays Harbor I support reasonable efforts by the Corps that are based upon sound technical analysis to protect the areas adjacent to the South Jetty from the negative impacts of further erosion.

Sincerely,


D. E. WALLACE, CWO2
Commanding Officer

Letter 25



STATE OF WASHINGTON
WASHINGTON STATE PARKS AND RECREATION COMMISSION

7150 Cleanwater Lane • P.O. Box 42650 • Olympia, Washington 98504-2650 • (360) 902-8500

Internet Address: <http://www.parks.wa.gov>

TDD (Telecommunications Device for the Deaf): (360) 664-3133

January 20, 2004

Ms. Aimee Kinney
Environmental Resources Section
USACE—Seattle District
POB 3755
Seattle, WA 98124-3755

RE: Public Notice CENWS-OD-TS-NS-21R, Draft EA and FONSI, South Jetty
Breach Fill Maintenance, Westport, Grays Harbor County, Washington
December 2003

Dear Ms. Kinney:

Thank you for the opportunity to comment on the above referenced documents concerning the placement of approximately 25,000 cubic yards of sand in the footprint of the south jetty breach fill and in the southwest corner of Half Moon Bay, which project directly impacts and affects Westhaven State Park.

State Parks recognizes the proposed action is an interim measure intended to reduce the risk of another breach occurring at this site, and that the Corps is recommitting to formulating and implementing a long-term management solution to erosion threats to the south jetty and associated structures. As has been expressed in previous communications to the Corps, as well as to officials of local government and the Port of Grays Harbor, and to other stakeholders, State Parks:

- recognizes the obligation of the Corps under federal mandates to protect the navigation channel and the south jetty of Grays Harbor;
- is supportive of all appropriate, permissible measures to assure the protection of the public's beaches and citizens' safe access to and enjoyment of them;
- commends the Corps for its past and proposed work to reestablish a protective dune and enhance it and its stability with native beach grass plantings;
- considers Westhaven State Park to be an important and prized public facility with annual visitation of approximately 30,000 citizens, a substantial state recreational resource and an economic and quality-of-life asset to the City of Westport;
- is not itself a regulatory agency and defers to its professional colleagues in the state and federal regulatory agencies with respect to permissibility of this and similar projects; and



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- with respect to coastal erosion dynamics and management of Washington citizens' statutorily established Seashore Conservation Area, generally favors "soft" over "hard" solutions, whenever possible, as more sound ecologically and financially in the long-run.. State Parks' contingency planning to remove its portable restrooms and relocate them and its parking lot in the event erosion again threatens, rather than seek "coastal armoring solutions", is consistent with this policy direction of our State Parks and Recreation Commissioners.

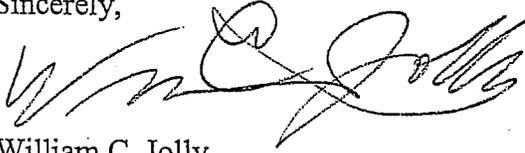
Consistent with the above statements, State Parks is not opposed to the Corps' proposed interim project action. More specific comments on the Draft EA follow.

1. p. 2, Section 1.1 Background, penultimate paragraph. Include information on loss of Corps' haul road and use of Parks access road in lieu.
2. p.3, Section 1.4 Authority. Include information that Corps has a Right of Entry Permit [No. DACW67-9-01-39] from State Parks for access to Westhaven State Park for deposit of materials associated with the rehabilitation of the "South Jetty and Westhaven Breakwater Project". The original Right of Entry has been extended twice and currently is valid through March 1, 2006.
3. p. 12, Section 4 Existing Environment. Mention of the presence of the City of Westport's installed temporary ecology blocks and fabric would be germane. Presumably they will be removed by the City or the Corps as part of the Corps' proposed interim project.
4. p. 14, Section 4.6 Recreation. Add information noting that State Parks, following the 1987 loss of a restroom and paved parking area, subsequently installed restrooms designed to be portable and salvageable for removal and alternative installation in the event future erosion events threatened them. Similarly, State Parks is prepared to remove any road asphalt and to re-locate road and parking lot facilities if necessary to assure harmful materials don't enter the water and that public access and facilities are provided in secure locations.
5. Appendix B Detailed Cumulative Effects Analysis. p. 5, paragraph 2 of information under "Primary Impacts Associated Human Occupation of Coastal Strand and Sand Dune Communities". Structural erosion controls are addressed but non-structural options for managing human occupation and public vs. private risk responsibilities are absent. The report of the Coastal Erosion Task Force submitted to Governor Locke in March 1999 contains much useful discussion of such alternatives to structural "solutions" to coastal erosion. The Task Force consisted of representatives from every major local and regional interest group concerned about coastal erosion, including representatives of the Corps of Engineers.

State Parks welcomes continued positive and constructive cooperation with the Corps and other stakeholders as your long-term management strategy is finally developed and implemented. We appreciate, too, your continued communication with our on-site responsible Park Manager, Ed Girard, at Twin Harbors State Park, with respect to coordinating construction and park access activities .

Thank you again.

Sincerely,



William C. Jolly
Environmental Program Manager
Stewardship Service Center

Cc State Parks Commissioners
 Rex Derr, Director
 Frank Boteler, Deputy Director
 Chris Regan, Stewardship Service Center Interim Manager
 Paul Malmberg, Southwest Regional Manager
 Ed Girard, Manager, Twin Harbors State Park
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