

# **Final Environmental Assessment**

---

## **South Jetty Breach Fill**

**Grays Harbor County, Washington  
March 2002**



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

## TABLE OF CONTENTS

1.	INTRODUCTION .....	1
1.1	BACKGROUND .....	1
1.2	PROJECT PURPOSE AND NEED .....	1
1.3	LOCATION .....	2
1.4	AUTHORITY .....	2
2.	DESCRIPTION OF THE PROPOSED ACTION .....	2
3.	ALTERNATIVES CONSIDERED .....	6
3.1	NO ACTION .....	6
3.2	EASTWARD EXTENSION OF THE SOUTH JETTY .....	6
3.3	HYDRAULIC PIPELINE .....	6
3.4	REDUCED VOLUME OF DREDGED MATERIAL .....	7
3.5	ALTERNATIVE SAND SOURCES .....	7
4.	EXISTING ENVIRONMENT .....	7
4.1	GEOLOGY .....	7
4.2	VEGETATION .....	8
4.3	FISH AND WILDLIFE .....	8
4.4	THREATENED AND ENDANGERED SPECIES .....	9
4.5	WATER QUALITY, AIR QUALITY, AND NOISE .....	9
4.6	RECREATION .....	9
5.	ENVIRONMENTAL EFFECTS .....	10
5.1	GEOLOGY .....	10
5.2	VEGETATION .....	10
5.3	FISH AND WILDLIFE .....	11
5.4	THREATENED AND ENDANGERED SPECIES .....	11
5.5	WATER QUALITY, AIR QUALITY, AND NOISE .....	11
5.6	RECREATION .....	12
6.	COORDINATION WITH AGENCIES AND INTERESTED PUBLIC .....	12
7.	ENVIRONMENTAL COMPLIANCE .....	13
7.1	NATIONAL ENVIRONMENTAL POLICY ACT .....	13
7.2	ENDANGERED SPECIES ACT .....	13
7.3	CLEAN WATER ACT .....	14
7.4	COASTAL ZONE MANAGEMENT ACT .....	14
7.5	NATIONAL HISTORIC PRESERVATION ACT .....	14
8.	CONCLUSION .....	14
9.	REFERENCES .....	15
	APPENDIX A. Photographs of the Project Site	
	APPENDIX B. Coastal Zone Management Consistency Determination	
	APPENDIX C. Public Notice	
	APPENDIX D. Comment Letters	
	APPENDIX E. Regulatory Approval Letters	
	FIGURE 1. Upland Stockpile Excavation Plan .....	3
	FIGURE 2. Sand Placement Plan .....	4
	FIGURE 3. Cross Sections .....	5

## 1. INTRODUCTION

Pursuant to the National Environmental Policy Act (NEPA), this Environmental Assessment evaluates the impacts of rehandling approximately 125,000 cubic yards of sandy dredged material from the existing Half Moon Bay Nearshore Nourishment disposal site and moving it via trucks to an area directly south of the Grays Harbor south jetty which is experiencing severe erosion. The proposed work would occur in April and May 2002. The large borrow pit created in the disposal site would then be filled by material dredged from the Grays Harbor and Chehalis River navigation channel during routine maintenance in June 2002.

### *1.1 Background*

Erosion of the shoreline at the landward end of the south jetty at Grays Harbor, Washington resulted in the formation of a breach between the jetty and the adjacent South Beach shoreline during a winter storm on December 10, 1993 (see Photo 1 in Appendix A). 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 with a maximum depth just above the mean lower low water datum (0' MLLW). Local officials were alarmed by the formation of the breach and 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.

On March 23, 1994, the Department of the Army authorized the Corps of Engineers, Seattle District (Corps) to fill the breach between the South Jetty and the adjacent South Beach shoreline. In late fall 1994, the breach was filled with approximately 600,000 cubic yards of material dredged from the Federal Grays Harbor and Chehalis River navigation channel (see Photo 2 in Appendix A). The breach fill was an interim measure to help protect the local beaches, the south jetty, and the navigation channel until a long-term solution could be implemented. Since that time, sand has eroded from the breach fill site at a rate of approximately 10,000 cubic yards per year.

### *1.2 Project Purpose and Need*

Severe storms during November and December of 2001 caused overtopping of the South Beach shoreline directly south of the jetty. The temporary construction haul road used to transport armor rock as part of the South Jetty maintenance project was breached and three large ravines, each about 5 feet deep, cut through the narrow strip of land remaining. In January 2002, the Corps' contractor for the South Jetty maintenance project made emergency repairs to the haul road and placed 13,000 cubic yards of gravels and cobbles along the western shore of Half Moon Bay.

The purpose of the proposed project is to restore and increase the top elevation the breach fill placed in 1994 in order to prevent, in the short-term, another breach from forming. This would serve to protect the South Jetty and Grays Harbor navigation channel. Given the large quantities of fill material required to close the 1993 breach, the Corps believes that preventative maintenance, as opposed to another emergency breach fill, would be a more cost-effective means to maintain the shoreline directly adjacent to the jetty.

### 1.3 Location

The South Jetty breach fill area is located in Westhaven State Park, adjacent to the South Jetty at the entrance to Grays Harbor, in Westport, Washington. The upland stockpile disposal site is located approximately 3,000 feet to the east, along the eastern shore of Half Moon Bay. The location of the proposed work is shown on the 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, 73<sup>rd</sup> Congress, 2<sup>nd</sup> Session) and the Water Resources Development Act of November 17, 1986 (Public Law 99-662). This work is intended to maintain the stability of the jetty and, therefore, is within the Grays Harbor and Chehalis River Project operations and maintenance (O&M) authority.

## 2. DESCRIPTION OF THE PROPOSED ACTION

Approximately 125,000 cubic yards of sandy dredged material will be excavated from the Corps' existing Half Moon Bay Nearshore Nourishment disposal site (Figure 1 and Photo 2). This dredged material disposal site is an upland stockpile situated above the Point Chehalis revetment extension constructed in 1999. The material will be placed into off-road trucks with a capacity of 25 cubic yards. The trucks will exit the disposal site (Figure 3) by ramping over the buried revetment. The trucks will travel to the breach fill site via a temporary haul road immediately north of the state park access road (see Photo 2). The haul road, located between the road and utility poles, will be approximately 16 feet wide with occasional turnouts. Since the trucks have off-road capabilities, no crushed rock will be placed along the haul road alignment. Closer to the fill site, the trucks will use the rock haul road currently in place for the South Jetty major maintenance project. Angular rock on the surface of the temporary haul road will be removed prior to fill being placed on its surface.

The breach fill area is located directly south of the Grays Harbor south jetty (Figure 2 and Photo 2). The area is largely unvegetated, and has been subject to widespread disturbance over the past decade. Sand will be placed over approximately 8 acres. The fill will be placed to elevations shown on Figure 2. The fill will be minimally graded so to mimic a natural dune (Figure 3). The dunes created by the fill will be planted with dune grass beginning in November 2002. This delay is intended to increase plant survival, since planting at the beginning of the dry season would cause stress to the plants. The vegetation plan will be coordinated with the manager of the Twin Harbors State Park, and coastal dune ecology experts.

The proposed rehandling of dredged material would occur in April and May 2002. The upland stockpile will be refilled by material dredged from the Grays Harbor and Chehalis River navigation channel during routine maintenance in June and July 2002.

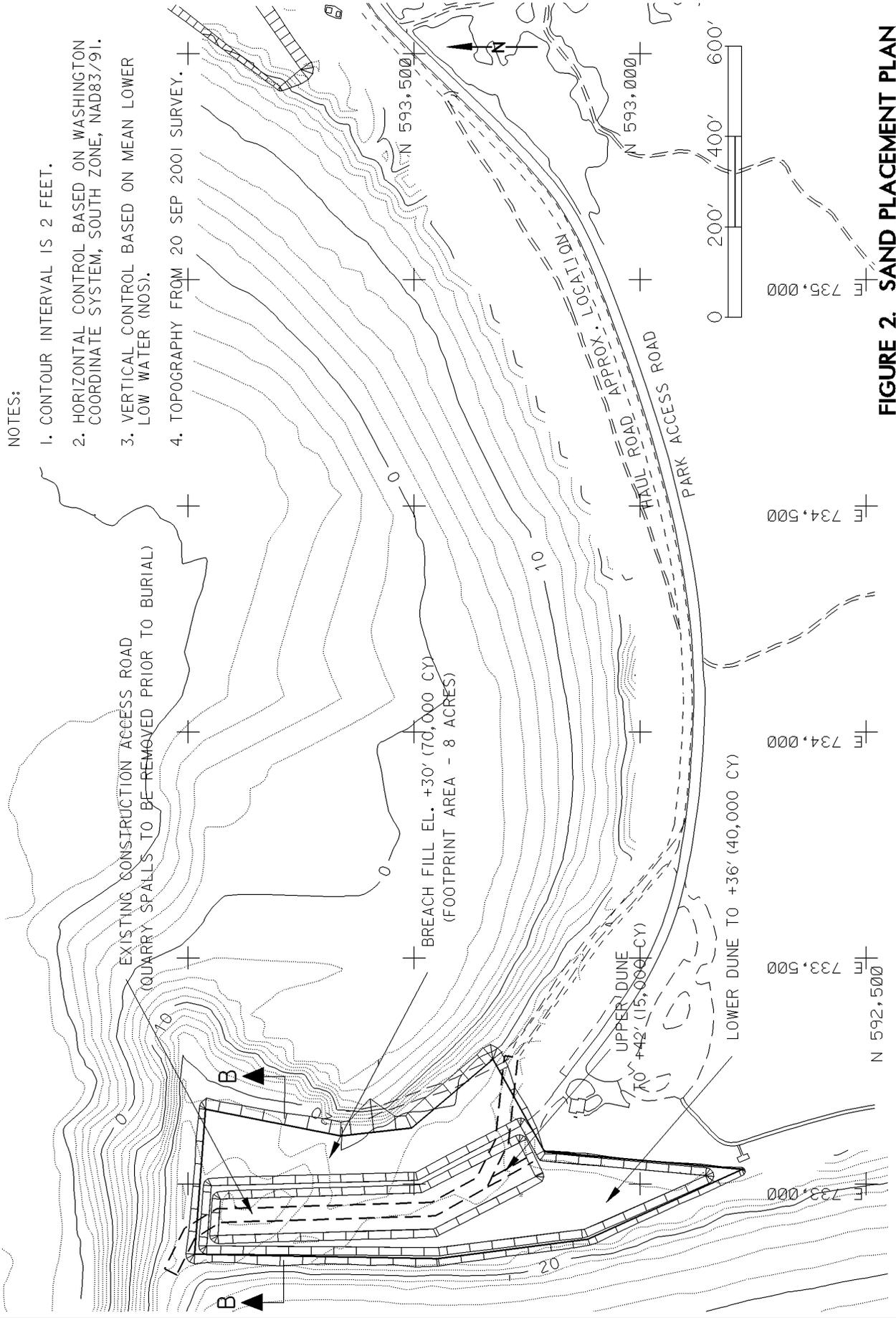
The routine maintenance dredging and disposal of dredged material associated with this work were described in Public Notice CENWS-OD-TS-NS-12 (February 7, 2001), and *Fiscal Years*



# SOUTH JETTY BREACH FILL

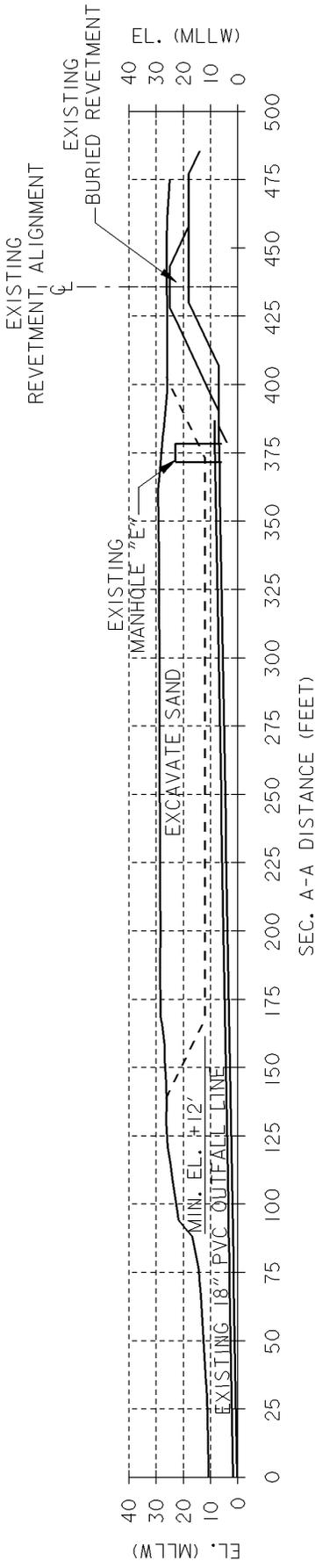
## NOTES:

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 (NOS).
4. TOPOGRAPHY FROM 20 SEP 2001 SURVEY.

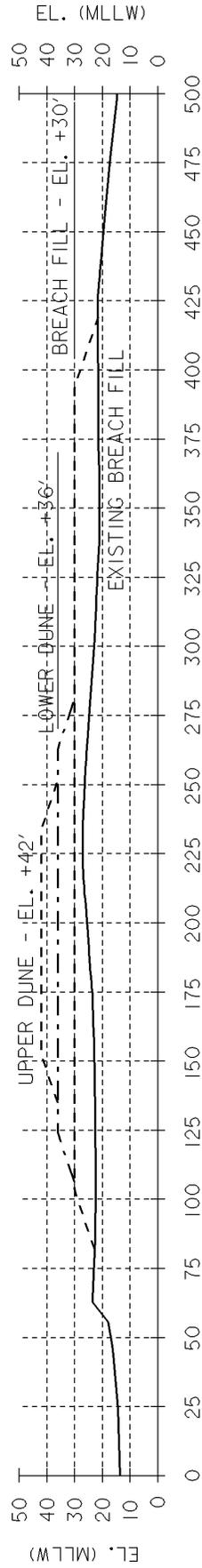


**FIGURE 2. SAND PLACEMENT PLAN**

# SOUTH JETTY BREACH FILL



## EXCAVATION PLAN



## PROPOSED BREACH FILL GRADING PLAN

FIGURE 3. CROSS SECTIONS

### 3. ALTERNATIVES CONSIDERED

#### 3.1 No Action

Under the no action alternative, sand would continue to erode from the 1994 breach fill site. As demonstrated during the winter of 2001-2002, the area would continue to be susceptible to another breach. The Corps eliminated the no action alternative from further consideration because preventative maintenance of the breach fill will reduce the potential for damage to public structures/facilities, is a much more cost-effective strategy than after-the-fact emergency breach fills, and requires a relatively small quantity of material to restore the height of the fill area (125,000 cubic yards rather than ~600,000 cubic yards).

#### 3.2 Eastward Extension of the South Jetty

After the breach fill in 1994, the Corps was directed to determine the most appropriate long-term solution to the ongoing erosion problems associated with the South Jetty. The results of this study were released in a 1997 report entitled *Long Term Maintenance of the South Jetty at Grays Harbor, Washington*. At that time, the preferred alternative involved an eastward extension of the South Jetty to meet the existing Point Chehalis revetment, combined with beach nourishment. This plan was to be constructed in two phases: (1) a 1,900 foot long westward extension of the Point Chehalis revetment; and (2) a 2,300 foot long eastward extension of the South Jetty. The intent of the jetty extension was to stabilize the shoreline at the western end of Half Moon Bay from further erosion of the breach fill material. Phase 1 of this proposal, the Point Chehalis revetment extension, was constructed in 1999. Phase 2, the jetty extension, was not constructed because the breach fill material eroded much more slowly than originally anticipated, there was local opposition to the proposal, and it would have been difficult to obtain the necessary environmental approvals for the structure. Instead, a modified Phase 2 was implemented when a wave deflection mound was constructed at the eastern tip of the south jetty. The deflection structure is intended to reduce erosion due to waves that are transmitted down the jetty and diffracted around the end of the jetty. At this time, the Corps dropped the jetty extension proposal from consideration in favor of a soft approach that utilizes dredged material beneficially.

#### 3.3 Hydraulic Pipeline

The 1993 breach was filled with dredged material that was slurried with water and placed directly on the breach site using a hydraulic pipeline booster. The dredged material was offloaded from the hopper dredge at Firecracker Point and then pumped as slurry across Point Chehalis to the breach site. The Corps eliminated the hydraulic pipeline alternative from further consideration because it is more expensive, and would be difficult to place material above +30' MLLW. In addition, booster pump use would require dewatering of the dredged material slurry and associated discharge of effluent water into surface waters, which could result in adverse

impacts to fishery resources. Under the proposed alternative, dewatered dredged material would simply be rehandled and brought to the site by truck.

### *3.4 Reduced Volume of Dredged Material*

Since 1993, an estimated 70,000 cubic yards has eroded from the breach fill site. The Corps is currently proposing to place 125,000 cubic yards at the breach site. This quantity was selected because this amount of dredged material is readily available, would enable the fill to be placed up to the height of a natural dune, and is more cost-effective. This is because a 125,000 cubic yard void in the disposal site is less expensive to fill with dredged material than a 70,000 cubic yard void (i.e., the cost per cubic yard of stockpile material is lower because mobilization and demobilization charges for the booster hydraulic pump pipeline are distributed over the higher yardage). For these reasons, this alternative was excluded from further consideration.

### *3.5 Alternative Sand Sources*

Upland sources containing enough suitable, clean sandy material were not located within the Westport Area. Material from other sources would likely have to be chemically tested to verify its suitability for placement, and processed to ensure the proper mix of grain sizes. The Corps eliminated this alternative from further consideration because of the cost and logistical constraints involved. In addition, the Corps views the proposed alternative as preferable to this alternative because it proposes to beneficially re-use dredged material.

## **4. EXISTING ENVIRONMENT**

Extensive information on the existing environment of Grays Harbor has been provided in previous environmental and biological assessments. Only summary information specific to the Westhaven/Half Moon Bay area is provided in this brief assessment.

### *4.1 Geology*

The narrow neck of land that connects the South Jetty to South Beach is a high-energy area subject to direct tidal, wave, and wind action. The beach is composed of fine- to medium-grained sands and some gravel, all materials derived from northbound littoral drift. Wave energy results in shifting substrate that lacks organic material. This area has undergone major changes during the life of the South Jetty. This area has accreted and retreated several times from the early 1900's until about 1967 when the shoreline began its constant retreat.

Half Moon Bay is a type of coastal feature common at the landward end of jetties. The bay appeared in 1945, six years after the South Jetty was reconstructed. The Point Chehalis Revetment was constructed between 1950 and 1956 to combat rapid retreat of the Half Moon Bay shoreline. Between 1957 and 1993, the unarmored portion of the shoreline retreated at an average annual rate of 5 to 10 feet per year. Between May 1993 and December 1994, localized areas retreated up to 150 feet. A 1,900 foot long revetment extension was constructed in 1998-1999 to protect Westport's wastewater treatment plant and sewer outfall. When bathymetric conditions allow for a loaded bottom-dump barge to enter the bay, the Corps deposits sandy dredged materials into offshore of the eroding shoreline. Wave action carries the material shoreward, which helps to maintain a gently-sloping shallow bay.

## 4.2 Vegetation

Given the degree of disturbance the breach area has been subjected to over the past decade, it remains largely unvegetated. Likewise, the dredged material disposal stockpile is unvegetated. Scattered clumps of European beach grass (*Ammophila arenaria*) and the native dune grass *Elymus mollis* are present along the western shore of Half Moon Bay. Dunal areas south of the project area are dominated by non-native invasive plants such as European beach grass, Scot's broom (*Cytisus scoparius*) and Himalayan blackberry (*Rubus discolor*), but some natives, including the native dune grass, soft rush (*Juncus effusus*), beach lovage (*Ligustichum scoticum*), and beach carrot (*Glehnia littoralis*), are also present.

The area which will serve as a temporary haul road for the proposed project was also impacted by placement of the hydraulic pipeline seven years ago during the first breach fill (see Photo 2 in Appendix A). The alignment is dominated by European beach grass (*Ammophila arenaria*) and Scot's broom (*Cytisus scoparius*).

A large deflation plain wetland is present on the south side of the State 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 along with steelhead, bull trout, and cutthroat trout, also utilize Half Moon Bay.

R2 Resource Consultants (1999) conducted weekly beach seine surveys at two sites in Half Moon Bay between April 9 and May 21, 1999. Smelt, chum salmon, coho salmon, Pacific sanddab, starry flounder and shiner perch were the species most frequently captured. No other salmonids were caught. Smelt dominated the total catch, representing greater than 89 percent of the 3,032 fish captured at both sites during the study period. The number of coho and chum captured was low during the early portion of the sampling period, and increased beginning in mid-May. A total of 106 coho and chum were caught, 43 of those on May 21. 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). Those salmon captured at Site 2 were noticeably larger than their counterparts at Site 1.

Shellfish that may be found waters adjacent to the project area include: red rock and kelp crabs; blue and California mussels; butter, gaper, soft shell, razor, and horse clams; and cockles. In addition, the commercially important Dungeness crab is found in Half Moon Bay. Their numbers are monitored closely in conjunction with nearshore disposal of dredged material in Half Moon Bay.

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, and Steller sea lion. A wide variety of migratory waterfowl, shorebirds, and seabirds frequent the project area. The western sandpiper and overwintering dunlins are particularly numerous species.

#### *4.4 Threatened and Endangered Species*

Fifteen 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 plover (*Charadrius alexandrius nivosus*), marbled murrelet (*Brachyramphus marmoratus*), bull trout (*Salvelinus confluentus*). In addition, the Southwest Washington/Columbia River ESU cutthroat trout (*Salmo clarki clarki*) has been proposed for listing. 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. In December of 1987, winter storms washed away the restroom, 2 picnic sites and much of a paved parking area. 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.

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. During times of windy and stormy

weather that are frequent throughout the fall, winter and spring, Half Moon Bay serves as a haven for beachgoers and water recreationists. 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 on the sand berm between the U.S. Coast Guard Rear Range and the U.S. Coast Guard Surf Tower occurs, but this area is not a designated parking lot. Parking lots in this area are proposed for development by the City of Westport, in conjunction with a proposed pedestrian trail that will be constructed on the Point Chehalis revetment extension. One parking area is planned for development near the U.S. Coast Guard Surf 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 rideable 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 after by surfers. Conditions in Half Moon Bay frequently allow surfing waves during the fall, winter and spring. Nearshore dredged material disposal operations in Half Moon Bay have reportedly contributed to the offshore shoaling of swells, further enhancing surf breaks which provide rideable waves.

## 5. ENVIRONMENTAL EFFECTS

### 5.1 Geology

The proposed project is intended to replenish an estimated 70,000 cubic yards of fill materials that have eroded from the breach site since 1994. An additional 50,000 cubic yards of sand will be placed to raise the breach area to an elevation similar to the dunes south of the site. Material placed at the breach site this year is expected to be transported from the beach as it has in the past. The project is a short-term solution intended to prevent another breach from occurring in the immediate future. This work will not stop erosion in the project area. However, the planting of dune grass may reduce wind and wave erosion rates.

### 5.2 Vegetation

The use of the haul road will impact vegetation along the State Park access road, but this area is dominated by non-native invasive species. Very little, if any, vegetation will be disturbed on the 8 acre breach fill site or the disposal stockpile site. The deflation plain wetland south of the State Park access road will not be impacted by the proposed action.

The fill placed at the breach site will be minimally graded so to mimic a natural dune (Figure 3). The dunes created by the fill will be planted with the native dune grass *Elymus mollis* beginning in November 2002. This delay is intended to increase plant survival, since planting at the beginning of the dry season would cause stress to the plants. Other native nitrogen-fixing dune species may also be planted so that the native dune grass may be better able to compete with European beach grass. The Corps plans to work closely with the Washington Parks and

Recreation Commission's environmental program staff and other coastal dune experts to identify suitable species and planting techniques.

European beach grass control will not be part of the proposed project. European beach grass may be controlled by burning followed by herbicide application, or by the removal of young plants, but these methods require constant patrolling (Weidman 1984). Such an extensive control program is not within the scope of this project.

### *5.3 Fish and Wildlife*

During April and May, surf smelt spawn in a pea gravel bed along the Pacific Ocean adjacent to the project. Fill material will not be discharged in this area, so spawning success should not be impacted by the project any more than it would be by natural sediment transport processes. Since trucks will be used to transport the already dewatered dredged material, the project will not involve discharges of pipeline slurry effluent. April through June are also the peak of the juvenile salmonid migration period. As described in Section 5.5 below, water quality impacts are not expected to result from the proposed project, so the no adverse affects to salmonids are anticipated.

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 displacement will be localized and temporary, and thus is not expected to result in significant injury.

### *5.4 Threatened and Endangered Species*

As discussed in Section 5.3 above, significant impact to fish and wildlife species are not expected to result from the proposed project. This holds true for listed species as well. The Corps has determined that the project will have no effect on the marine mammal and sea turtle species under the jurisdiction of NMFS, and may affect, but is not likely to adversely affect species under the jurisdiction of USFWS.

### *5.5 Water Quality, Air Quality, and Noise*

Impacts to water quality are not expected to result from the proposed project. The sandy material disposed at the breach site will be placed in an upland location, above +20' MLLW, and is expected to stay in the general disposal area over the short term. Eventually this material will erode, but given its sandy consistency water quality impacts would be no different than those resulting from natural sediment transport processes.

There will be a temporary and localized reduction in air quality due to the emissions of equipment operating during dredged material transport. The impact of this increase is not expected to be significant because it 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, so impacts are not expected to be significant.

## 5.6 Recreation

During construction, recreation within the project limits shown on Figures 1 and 2 will be restricted for public safety reasons. Construction vehicles will access the construction site via the State Park access road, but during the rehandling operations they will travel adjacent to the State Park access road on a construction haul road. Therefore, the construction vehicles will not impede public access to, nor restrict parking at, the State Park. Pedestrian and vehicle access to the Half Moon Bay beach from the State Park parking area will be restricted during the period of construction for safety reasons. Given the short-term nature of the proposed construction activities, surfing and related offshore activities are not expected to be significantly affected by construction activities. Pedestrian access to South Beach will not be affected by construction activities.

## 6. COORDINATION WITH AGENCIES AND INTERESTED PUBLIC

The following agencies and organizations have been involved with the environmental review of the proposed project.

- Washington Parks and Recreation Commission (State Parks)
- Washington Department of Fish and Wildlife (WDFW)
- Washington Department of Ecology (Ecology)
- Washington Department of Natural Resources (WDNR)
- Environmental Protection Agency (EPA)
- City of Westport
- Port of Grays Harbor
- Surfrider Foundation-Westport and Washington State Chapters
- Friends of Grays Harbor
- Chehalis River Council

Representatives of each of these agencies and organizations were present at a February 15, 2002 site visit where Corps representative explained the proposal and solicited comments. Comments on the proposed work were generally positive. Coordination with the U.S. Fish and Wildlife Service (USFWS) occurred during the Endangered Species Act Section 7 consultation for fiscal year 2002 Grays Harbor maintenance dredging and disposal.

A Public Notice (CENWS-OD-TS-NS-17, dated February 28, 2002) was prepared and mailed to interested parties and agencies (see Appendix C). The Public Notice was also prominently displayed on the main page of the Seattle District's web site, on the "Public Notice" page of the City of Westport's web site, and on the "Westport Erosion Issues" page of the Westport Chapter Surfrider Foundation web site. In addition, an article regarding the proposed work appeared in the Aberdeen Daily World newspaper on March 7, 2002. The article included information on how to formally comment on the project.

Comment letters were received from WDFW and EPA (see Appendix D). Both letters were supportive of the project. WDFW comments included: (1) a request for clarification that the project will occur landward of the ordinary high water line; (2) a request that a temporary silt fence or hay bale check dams be installed between fill runoff areas and water bodies to avoid turbidity impacts to juvenile salmon in Half Moon Bay and siltation of surf smelt spawning beds;

and (3) a request that discharges associated with dredged material de-watering be routed away from Half Moon Bay. All fill activity will occur above +20' MLLW, which is well above the ordinary high water line (approximately +11' to +12' MLLW in this area). The project manager has forwarded WDFW's letter to Corps' contracting office and construction inspector, where their concerns will be addressed. An on-site pre-construction meeting will be scheduled with the project contractor to discuss best management practices to control runoff and turbidity during construction and placement of dredged material into the disposal site.

EPA comments included: (1) a request for more information on the goals and management of the project than what was included in the Public Notice; (2) a request for a copy of the EA when it is available; and (3) a request for an interagency site visit during construction. Additional information on the goals and management of this project have been incorporated into this EA, a copy of which will be sent to EPA. The Corps will schedule an inter-agency site visit during construction.

## **7. ENVIRONMENTAL COMPLIANCE**

### *7.1 National Environmental Policy Act*

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

### *7.2 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 November 2001, the Corps entered into an informal consultation with the U.S. Fish and Wildlife Service (USFWS) regarding routine maintenance dredging and disposal activities in the Federal navigation channel. This consultation was based upon the December 2000 *Programmatic Biological Assessment for Grays Harbor Navigation Project Fiscal Years 2001-2006 Maintenance Dredging and Disposal*, which are available online at: <<http://www.nws.usace.army.mil/ers/envirdocs.html>>. In December 2001, USFWS requested information on which disposal sites would be used in 2002. The proposed work was incorporated into the Corps' response. This consultation concluded with a USFWS letter dated January 16, 2002 concurring with the Corps' determination that the all work associated with maintenance of the navigation channel in 2002, including the proposed project, may affect, but is "not likely to adversely affect" species under the jurisdiction of the USFWS (see Appendix E).

Due to the upland location of the proposed work, a determination has been made that the project would have “no effect” on species under the jurisdiction of the National Marine Fisheries Service (NMFS).

### *7.3 Clean Water Act*

The Corps must demonstrate compliance with the substantive requirements of the Clean Water Act (CWA) prior to discharging dredged materials into waters of the United States. A 404(b)(1) evaluation, which demonstrates compliance with the substantive requirements of the CWA, and a 401 Water Quality Certification from the Washington Department of Ecology is required for work involving discharge of fill material into the waters of the United States.

Since all fill work will occur above the mean higher high water depth contour (+8.90' MLLW at this location), this project does not fall under the jurisdiction the Clean Water Act of 1977. In 2001, a 404(b)(1) evaluation was prepared and a 401 water quality certification was received for routine maintenance dredging and disposal operations in Grays Harbor. These documents are valid until 2006.

### *7.4 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 has prepared a Coastal Zone Management Act Consistency Determination for the navigation channel maintenance program (see Appendix B). This evaluation established that the proposed work complies with the policies, general conditions, and general activities specified in the City of Westport Shoreline Management Master Plan. The City of Westport also completed a local determination of consistency for the project. The proposed action is thus considered consistent to the maximum extent practicable with the State of Washington Shoreline Management Program. Ecology concurred with this determination in a letter dated March 25, 2002 (see Appendix E).

### *7.5 National Historic Preservation Act*

The National Historic Preservation Act (16 USC 470) requires that the effects of proposed actions on sites, buildings, structures, or objects included or eligible for the National Register of Historic Places must be identified and evaluated. Given the recent geological origin of Point Chehalis and the extent of construction activities that have occurred there in recent years, the Corps has determined that no resources included or eligible for inclusion in the National Register of Historic Places would be effected by the proposed project.

## **8. CONCLUSION**

Based on the above analysis, 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.

## 9. REFERENCES

R2 Resource Consultants. 1999. *Juvenile Salmonid Use of Half Moon Bay, Grays Harbor, Washington*. Report to the U.S. Army Corps of Engineers, Seattle District.

U.S. Army Corps of Engineers. 1997. *Long Term Maintenance of the South Jetty at Grays Harbor, Washington, Evaluation Report*. U.S. Army Corps of Engineers, Seattle District, Seattle, WA.

U.S. Army Corps of Engineers, Port of Grays Harbor, Washington Department of Ecology, Washington Department of Fish and Wildlife, City of Westport, and U.S. Fish and Wildlife Service. 1998. *Point Chehalis Revetment Extension Project, Westport, Washington, Interagency Mitigation Agreement*. U.S. Army Corps of Engineers, Seattle District, Seattle, WA.

U.S. Army Corps of Engineers. 2001. *Final Environmental Assessment: Fiscal Years 2001-2006 Maintenance Dredging and Disposal, Grays Harbor and Chehalis River Navigation Project, Grays Harbor County, Washington*. U.S. Army Corps of Engineers, Seattle District, Seattle, WA. <<http://www.nws.usace.army.mil/ers/envirdocs.html>>.

U.S. Army Corps of Engineers. 2001. *Programmatic Biological Evaluation: Fiscal Years 2001-2006 Maintenance Dredging and Disposal, Grays Harbor and Chehalis River Navigation Project, Grays Harbor County, Washington*. U.S. Army Corps of Engineers, Seattle District, Seattle, WA. <<http://www.nws.usace.army.mil/ers/envirdocs.html>>.

Wiedemann, A.M., L.J. Dennis, and F.H. Smith. 1974. *Plants of the Oregon Coastal Dunes*. Corvallis: Oregon State University.

Wiedemann, A.M. 1984. *The Ecology of Pacific Northwest Coastal Sand Dunes: A Community Profile*. U.S. Fish and Wildlife Service, FWS/OBS-84/04.

**Appendix A**  
**Photographs of the Project Site**



**Photo 1** Aerial view of the 1993 breach between the South Jetty and the adjacent shoreline (12/17/93 photograph).



**Photo 2** Aerial view of Point Chehalis after the breach was filled to an elevation of +31' MLLW in 1994 (2/1/96 photograph).

## **Appendix B**

### **Coastal Zone Management Consistency Statement**

#### **1. INTRODUCTION**

In December 1993, a breach formed between the Grays Harbor South Jetty and the adjacent South Beach shoreline during a winter storm. In late fall 1994, the breach was filled with approximately 600,000 cubic yards of material dredged from the Grays Harbor and Chehalis River navigation channel. The proposed Federal action is placement of sandy dredged material at this breach fill site.

The proposed breach fill work consists of:

- a. Excavating approximately 125,000 cubic yards of sandy dredged material from the Corps' existing Half Moon Bay direct beach nourishment disposal site (see Figures 1 and 3). This dredged material disposal site is an upland protective stockpile located on top of the Point Chehalis revetment extension. In accordance with an inter-agency mitigation agreement, the stockpile nourishes sandy material fronting the revetment so that no rock is exposed as erosion occurs. This work would occur in April and May 2002.
- b. Transporting the dredged material, using off-road trucks with a capacity of 25 cubic yards, to the eroding breach fill area directly south of the south jetty (see Figures 2 and 3). No rock will be placed for haul roads as part of the transport operation. This work would occur in April and May 2002.
- c. Refilling the disposal site by hopper dredge pump-off during routine maintenance of the navigation channel in June 2002.<sup>1</sup>
- d. Revegetating the dune-like area created by the fill with native dune species beginning in November 2002. The delay is intended to increase plant survival, since planting at the beginning of the dry season would likely reduce the success of the plantings.

#### **2. WASHINGTON STATE COASTAL ZONE MANAGEMENT PROGRAM**

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 (CZM) Programs. The Shoreline Management Act of 1972 (RCW 90.58) is the core of authority of Washington's CZM Program. Primary responsibility for the implementation of the SMA is assigned to local government. The City of Westport has implemented the SMA through the preparation of a Shoreline Master Program, which was approved by the Washington Department of Ecology on December 14, 1998.

#### **3. CITY OF WESTPORT SHORELINE MASTER PROGRAM**

The City of Westport implemented the SMA through the adoption of goals and policies in Chapter 17.32 (Shoreline Overlay) of the development regulations in the City's Municipal Code

---

<sup>1</sup> Please note that is portion of the project was included in the Corps' February 2001 consistency determination for the Grays Harbor navigation project (covering fiscal years 2001-2006 maintenance dredging and disposal). Ecology agreed with the Corps' determination on routine maintenance dredging and disposal work in a letter dated April 16, 2001. Therefore, the proposed June 2002 disposal at the Half Moon Bay direct beach nourishment site is not evaluated in this consistency determination.

(Ordinance 1146, adopted April 28, 1998) and Chapter 9 of the City's Comprehensive Plan. This coastal zone consistency determination is based on review of applicable policies and standards of the City of Westport Shoreline Master Program (SMP). Applicable portions of the shoreline environment guidelines are presented below, with the Corps' consistency indicated in ***bold italics***.

The proposed project footprint is located in an area designated as *Urban Shoreline-Recreation and Parks Zone* (RP). The overlaying zone is Urban Shoreline Environment, with Recreation and Parks as the underlying zoning designation.

#### Chapter 17.30 RP (Recreation and Parks) District

17.30.010 Purpose. The purpose of the recreation and parks or "RP" district is to reserve suitable areas for a broad variety of outdoor recreational activities serving both local residents and visitors while protecting the unique natural recreation areas of the city thereby enabling the long term use, enjoyment, and conservation of these unique areas. ***The proposed action will temporarily restrict public access to portions of the Half Moon Bay shoreline adjacent to Westhaven State Park. However, the project is intended to reduce the rate and effects of erosion along the portion of the South Beach shoreline adjacent to the South Jetty. The net effect of the project would be to maintain beaches for public enjoyment. The temporary (~3 months) access restrictions will be outweighed by the creation of naturalistic dunes which will help enhance the beach for recreational uses.***

#### 17.32.050 Shoreline Environment Guidelines.

##### (1) Urban Shoreline Guidelines.

(F) Conditional Uses. The following uses may be permitted when they comply with this Chapter and the criteria for shoreline conditional uses in Section 17.32.80: ...mineral extraction and storage; ...diking; bank line erosion control; ...and landfills consistent with this Chapter. ***The proposed action is a conditional use in an Urban Shoreline-Recreation and Parks Zone.***

##### (G) Standards.

(5) Grading and filling operations consistent with the permitted uses shall be permitted shoreward of the primary dune, where such dune is ascertainable. Modifications in 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. Grading and filling will not be permitted for the purpose of creating new land out of the waters of the state. ***A primary dune is not ascertainable in the project area. The area has been subject to severe natural and human disturbance over the past decade, including placement of 600,000 cubic yards of sand to protect public facilities. Grading and plantings associated with the proposed project will create a more natural dune structure than what is currently present at the project site. No sand will be placed in waters of the state (i.e., below the mean higher high water depth contour, elevation +8.90' MLLW).***

17.32.055 Shoreline Use Activities.

(3) Clearing and Grading. This Section applies to all acts which alter the existing or natural contour of the land, shorelands, or bottom land. Such acts as mining, dredging, land clearing, grading, road building, landfilling, and the like. Land, wetland, and bottom land shall all be termed "land" within this Section.

(A) Land shall be restored to a natural contour after mining. ***The large hole created in the Corp's dredged material disposal site will be refilled with material dredged from the navigation channel shortly after the sand transport operations are complete. The sand placed at the breach site will be minimally graded so to mimic a natural dune.***

(B) Protection from siltation and erosion shall be provided during and after clearing and grading activities. ***No erosion protection will be provided, as incorporating such protection into the project would be more environmentally and aesthetically damaging than to provide none. Erosion of the sands placed adjacent to the jetty will mimic natural littoral processes. The material to be moved is course sand, so no adverse water quality effects will result from the proposed operation.***

(C) 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. ***Sand will be removed from an exiting dredged material disposal site, not a beach area.***

(8) Shoreline Works and Structures.

(D) Landfill. Pursuant to WAC 173-16-060(14), landfill is the creation of dry upland area by the filling or depositing of sand, soil, or gravel into a wetland area. ***No material will be placed in a wetland area as part of the proposed action. All work will occur above the mean higher high water datum—no in-water work will occur.***

(E) Dredging.

2. Use of dredge spoils for protective areas and to restore areas of high erosion is appropriate. Depositing of dredge material in water areas should be allowed only for habitat improvement, to correct problems of material distribution adversely affecting fish and shellfish resources, or where the alternatives of depositing materials on land is more detrimental to shoreline resources than depositing it in water areas. ***The proposed action will utilize dredged material to restore an area subject to high erosion. No in-water disposal will occur.***

3. Dredging of bottom materials for the sole purpose of obtaining fill material should be discouraged. ***The material which will be excavated from the Half Moon Bay direct beach nourishment disposal site was dredged as part of routine maintenance of the Federal Grays Harbor and Chehalis River navigation channel. The proposed action does not involve dredging for the sole purpose of obtaining fill material.***

17.32.80 Shoreline Permits.

**The City of Westport has, in accordance with WAC 173-27-060, reviewed the proposed action for consistency with the City's approved Shoreline Master Program without using the permit system. In a March 1, 2002 letter to the Department of Ecology Permit Coordination Unit, the City Administrator certified that that the proposed action is consistent with the requirements and provisions of the local master program.**

(3) Review Criteria for Shoreline Permits.

(B) Review Criteria for Shoreline Conditional Uses

1.(b) *The proposed use will not interfere with the normal public use of public shorelines. **The proposed action will temporarily (~3 months) restrict normal use of public shorelines adjacent to Half Moon Bay and the south jetty for public safety reasons. Construction vehicles will not impede public access to, nor restrict parking at, Westhaven State Park. Pedestrian access to South Beach will not be affected by construction activities. The net effect of the project would be to maintain beaches for public enjoyment.***

1.(d) *The proposed use of the site and design of the proposed project will cause no unreasonably adverse effects to aquatic and shorelines areas. **The proposed action will not result in adverse effects to aquatic resources and shoreline areas.***

1.(e) *The proposed use will not have substantial adverse cumulative effects. **The proposed action will not have substantial adverse cumulative effects.***

1.(f) *There will not be substantial detrimental effects to the public's interest in the area, including normal public use of the shorelines. **See 1.(b) above.***

#### **4. STATEMENT OF CONSISTENCY**

Based on the above evaluation, the Corps has determined that the proposed action complies with the policies, general conditions, and activities as specified in the City of Westport Shoreline Management Program adopted April 28, 1998 by the Westport City Council and approved December 14, 1998 by the Director of the Washington Department of Ecology. The proposed action is thus considered to be consistent to the maximum extent practicable with the State of Washington Shoreline Management Program and policies and standards of the City of Westport Shoreline Master Program.