

Resource Inventory and Effects Evaluation for Port of Brookings dredging project.

Resource Inventory:

1.) The Proposed Action

Described in the Joint Permit Application

2.) Location and Description of Affected Areas

Described in the Joint Permit Application

3.) Physical and chemical conditions such as:

(a) Water depth;

The depth of the water at the site is 78 feet and deeper (up to 85 feet deep).

(b) Wave regime;

Unknown.

(c) Current velocities;

Velocities of the currents range from 5 to 20 knots per hour moving south to the north and north to the south as the seasons change.

(d) Dispersal, horizontal transport, and vertical mixing characteristics of the area;

The dispersal of materials in this area goes in several directions due to the varying currents. Most often the materials discharged in this region move up into the shallower regions to replenish the ongoing erosion areas.

(e) Meteorological conditions; and

Meteorological conditions have remained unchanged and will remain unchanged by the project.

(f) Water quality.

Water quality at the site will remain unchanged and unharmed. The sediment evaluation of the materials being discharged were determined to be suitable for unconfined in-water disposal by the Portland Sediment Evaluation Team comprised of the Corps of Engineers, Oregon Department of Environmental Quality, U.S. Fish and Wildlife Service, National Marine Fisheries Services, Environmental Protection Agency, and Washington Department of Ecology.

4.) Bathymetry (bottom topography).

The bathymetry at the site is shown in the enclosure. The area proposed for discharge is below 78 feet in depth and is comprised of a bedrock bottom. There are no rock structures or features in this area to provide habitat for any species. The lack of materials being present is suggestive of high currents which moves materials quickly through this region.

5.) Geological structure and hazards.

There are no geological structures or hazards in this region. The site is all bedrock with minimal sediments or deposits.

6.) Biological features, including:

(a) Critical marine habitats (see Definitions);

The site is not a critical marine habitat as mentioned in the definitions.

(b) Other habitats important to the marine ecology, such as kelp and other algae beds, exposed seafloor gravel beds, seagrass beds, rocky reef areas, marine mammal rookeries and haulout areas, seabird rookeries, and areas where fish and shellfish congregate in large numbers;

The site is devoid of any seagrass, algae, reefs, rookeries, haulouts, congregations or other natural attractant for sea life. The site is composed of bedrock and does not have any exposed gravels or habitat friendly materials.

(c) Fish and shellfish stocks and other biologically important species;

No fish or shellfish are in the immediate region of the disposal site. This is due to the lack of habitat for various species. Regions to the east and to the northwest have more favorable areas for fish and shellfish.

(d) Recreationally or commercially important finfish or shellfish species;

No finfish or shellfish are found in this area. Other regions to the north and east of the site are more favorable for finfish and shellfish.

(e) Planktonic and benthic flora and fauna; and

The velocity of the current is pretty quick and moves the planktonic and benthic flora and fauna through the water column. There will be a lack of benthic organisms in this region due to the lack of habitat (substrate for the organisms).

(f) Other elements important to the primary productivity and the food chain. The primary productivity at the site is minimal and the potential impacts to the area is minimal due to the lack of substrate and the need to replenish areas lacking substrate.

7.) Mineral deposits, including sand, gravel and hydrocarbon resources.

The site is devoid of mineral deposits. The project will increase the mineral deposits in the area and replenish other regions where mineral deposits are needed to improve habitat. There are no hydrocarbon resources at the disposal site and hydrocarbons found in the disposal materials are below screening level thresholds for fresh and saline environments.

8.) Cultural, economic, and social uses (present and projected) associated with the affected resources, such as:

(a) Commercial and sport fishing;

The project is a short-term impact which would benefit commercial and sport fishing by increasing mineral deposits needed for shellfish and for improved boat passage into the Brookings Marina. Currently the Marina is limited in the depth vessels can travel through due to the deposits of sediments in the marina.

(b) Aquaculture;

There will be no adverse affect to aquaculture since the project will add to sediments and materials in a region where there is a lack of materials.

(c) Scientific research;

There will be no effect to scientific research. However, after the first discharge, the EPA and the Corps will be evaluating how effective permit conditions and the site are functioning with the material placement.

(d) Ports, navigation, and DMD sites;

Beneficial Effect. The project will improve navigation and access for vessels coming into the Port of Brookings. Currently the site conditions have become worse since the tsunami which deposited additional sediments and materials at the Port's facilities. The discharge at the ODMD site will have no adverse effect to the site and will be well below the capacity of the site. The site will be monitored by the EPA and the Corps to ensure the even dispersal of the materials and to ensure the sediments are moving as anticipated.

(e) Recreation;

There are recreational fisherman who are also affected by the built up sediments at the Port. The project will benefit recreation by allowing easier boat access and increasing sediments needed by shellfish.

(f) Tourism;

There will be no effect to tourism.

(g) Mineral extraction; and

The project is the extraction of minerals by suction dredge for improved access. The project will remove only the minerals necessary to maintain the depth of the marina.

(h) Waste discharge.

There will be no increase or decrease in waste discharge from the project. Therefore there will be no effect on waste discharge.

9.) Significant historical or archeological sites.

There is one known listed archaeological site at the Port. The project was consulted on with SHPO and it was determined the project will have no effect to the archaeological site or historic properties.

Effects Evaluation:

Contained in the Biological Analysis