SECTION 404(b)(1) EVALUATION
COLUMBIA RIVER AT THE MOUTH CHANNEL MAINTENANCE
NEW DISPOSAL SITE

1. Introduction

Section 404 of the Clean Water Act of 1977 requires that all civil works projects involving the discharge of dredged or fill material into waters of the United States be evaluated for water quality effects prior to making the discharge. This evaluation assesses the effects of placing dredged material, consisting of fine to medium grained sand at Benson Beach, Pacific County, Washington near the mouth of the Columbia River.

2. Description of the Proposed Activity

The proposed action is to place dredged material from maintenance of the MCR entrance channel at Benson Beach in the State of Washington. Placement of dredged material at this site is proposed as a demonstration project to address beach erosion concerns. The quantity of material placed on Benson Beach is not certain. The intent is to place the maximum quantity possible in order to maximize benefits and monitor its effectiveness at offsetting erosion. This demonstration action would take place during the 2002 dredging season. If determined effective, long-term use of this site for dredged material disposal will undergo further evaluation.

3. Description of the Fill Site

In addition to the description provided in the above paragraph, the disposal site is typical of the nearshore marine environment with a substrate composed primarily of sand containing little or no organic material. Site topography is gently to moderately sloped with no distinctive features other than low relief sand waves. The site is located in an area of high current and wave activity and is subjected to continual movement of sand to and from the site. The sandy substrate supports benthic organisms which are adapted to this high energy environment. Crab and bottom fish likely feed on benthic organisms and detritus in the vicinity of the site.

4. Factual Determinations

a. Physical Substrate Determinations

The substrate is composed of fine to medium-grained sand subjected to continual movement by wave and current action. Bottom topography is gently to moderately sloped consisting of low relief sand waves. Placement of material at Benson Beach would rapidly dissipate within the high energy wave environment.

b. Water Circulation, Fluctuation, and Salinity Determinations

Compared to ambient ocean conditions created by high wave and current activity, the disposal action would have little or no effect on water circulation, fluctuation, or salinity.

c. Suspended Particulate/Turbidity Determination

Short-term turbidity increase is expected during disposal at the Benson Beach location. The turbidity would be created by the additional quantity of sand resuspended within the surf zone by wave action.

d. Contaminant Determinations

Fill would consist of recently accumulated sand of marine origin. Sediment analysis has determined that the MCR dredged material meets the exclusionary guidelines of the Lower Columbia River Dredged Material Evaluation Framework.

e. Aquatic Ecosystem and Organism Determinations

Impacts of fill and discharge to the structure and function of the aquatic ecosystem and organisms are expected to be minor, in that the disposal would temporarily disrupt feeding and food sources of organisms present within the site. Aquatic ecosystem functions would essentially remain unchanged within the high-energy environments of the site. Organisms would rapidly reestablish at the site within a short time following disposal.

f. Proposed Disposal Site Determinations

The dredged material would not violate Environmental Protection Agency or State water quality standards. Relocation of sediments would not introduce substances into surrounding waters or violate the primary drinking water standards of the Safe Drinking Water Act (42 USC 300 et seq.).

g. Determination of Cumulative effects on the Aquatic Ecosystem

The fill action is not expected to have significant adverse cumulative effects on the aquatic ecosystem. Potential short-term effects such as temporary disruption of feeding patterns and/or food sources are expected.

h. Determination of Secondary Effects on the Aquatic Ecosystem

Disposal within the site could result in minor disruption of recreational use during disposal activities.

5. Coordination

A Public Notice, describing the proposed action, has been issued for 30-day public review 21 Dec. 2001 to the following Federal, State, and local resource agencies, organizations, and interested members of the public.

U.S. Environmental Protection Agency
U.S. Department of the Interior
Fish and Wildlife Service
National Marine Fisheries Service
Oregon Department of Environmental Quality
Oregon Department of Parks and Recreation
Oregon Division of State Lands
Oregon Department of Fish and Wildlife
Washington Department of Ecology
Washington Department of Fish and Wildlife
Washington Department of Natural Resources
Lower Columbia River Ports
CREST
Pacific County
various interest groups and other publics

A public hearing, jointly sponsored by the Corps of Engineers and the States of Oregon and Washington, was held on 12 February, 2002 in Astoria, Oregon. Several of the above agencies, groups and interested public were in attendance and commented on the proposed action. The comment letters received in response to the public notice, and public hearing transcript are part of the public record for this action. A summary of comments from these letters and the public hearing and the Portland District response to these comments are included in the Environmental Assessment prepared for this action.

The States of Oregon and Washington have reviewed the applicable actions under State Section 401 review and have issued Water Quality Certification with conditions. Copies of these letters are attached.

6. Findings of Compliance or Non-Compliance with the Restrictions on Discharge

a. No significant adaptations of the guidelines were made relative to this evaluation.

b. Other alternatives were considered including the "no action" alternative but were rejected because they did not address the need to reduce erosion and maintain material within the littoral system.

c. The proposed action is in compliance with applicable State water quality standards.

d. The proposed action would not violate the toxic effluent standards of Section 307 of the Clean Water Act. State water quality certifications have been requested.

e. The specific fill action may affect but is not likely to adversely affect listed threatened or endangered salmonids or their critical habitat. Biological Assessments documenting this conclusion were prepared and submitted to the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service.

f. The proposed fill would not result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreational and commercial fishing, plankton, fish, shellfish, and wildlife. Significant adverse effects on aquatic ecosystem diversity, productivity, and stability, and recreational, esthetic, and economic values would not occur.

g. Appropriate steps to minimize potential adverse impacts will be specified in the Environmental Protection standards prepared for the work.

With the inclusion of appropriate and practical conditions to minimize pollution and adverse effects to the aquatic ecosystem, the proposed action is specified as complying with the requirements of the Section 404(b)(1) guidelines.

/Signed/
Date: _____ RANDALL J. BUTLER
Colonel, EN
Commanding