

MEMORANDUM FOR: RECORD

August 13, 2002

**SUBJECT:** DETERMINATION ON THE SUITABILITY OF PROPOSED DREDGED MATERIAL FROM THE SANDY HOOK YACHT CLUB NAVIGATION CHANNEL AND GRAVEL BAR, FOR BENEFICIAL USES DISPOSAL ON AN ADJACENT BEACH.

1. **Introduction.** The following summary reflects the consensus determination of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Washington Departments of Ecology and Natural Resources, and the Environmental Protection Agency) on the suitability of 26,210 cubic yards (cy) of dredged sand and gravel from a gravel bar and navigation channel near Sandy Hook, Whidbey Island, Washington (Figure 1). Suitable material is planned for nourishment of the adjacent beach. The project will shorten a rock breakwater to allow resumption of littoral drift, and restore a project depth of -4.5 ft. MLLW in the navigation channel.

Table 1. Regulatory Tracking Dates

SAP received	April 25, 2002
SAP approved	May 24, 2002
Sampling dates	June 10, 2002
Data report submitted	July 24, 2002
Recency Determination (Exclusion)	June 2009
DAIS Tracking number	SANDY-1-A-O-179

Table 2. Project Synopsis

Time of proposed dredging	2002
Proposed disposal sites	Beach nourishment, Sandy Hook
Sediment ranking	exclusionary
Project last dredged	1998 (partial dredging)

2. **Tier I Evaluation.** The DMMP agencies conducted a Tier I analysis to determine if this sediment should be tested prior to placement on the adjacent beach. A Tier I evaluation is done for every DMMP project, and includes a comprehensive analysis of all existing information on the proposed dredging project. Only limited testing, to determine the applicability of any exclusions, is sometimes necessary for Tier I. If the information compiled in Tier I is adequate to meet exclusionary criteria, factual determinations can be made without proceeding to the higher tiers (Inland Testing Manual 1998).

There are no sources of chemical contamination in the vicinity of the project and no known spills of any kind. This material is similar in nature to the material on the adjacent beach, where disposal is planned. The area to be dredged is outside the marina itself and is located in a high-energy area.

To assist in the Tier I evaluation for this project, additional grain size and total volatile solids (TVS) information was requested. When completed, the Tier I evaluation found that the proposed dredged material met federal criteria, under the Clean Water Act (40 CFR 230.60), for exclusion from further testing. In most areas of Puget Sound the Tier I analysis leads to chemical sampling under Tier II. But in this case the Tier I Evaluation showed considerable evidence that no further testing to was necessary to determine that the material is suitable for open water disposal, including disposal at the beneficial use site proposed.

For these reasons, the DMMP agencies agreed that no chemical or biological testing for this project was required for making a determination on suitability for open water disposal.

3. **Grain Size Analysis.** Eight samples were collected with a hand push-coring device in shallow water at low tide along the length of the channel (Figure 2). The samples were composited for two analyses roughly representing the inner and outer channel. Grain size and total volatile solids analyses were performed on the two samples (Table 3). Both samples contained well over 90% sand and gravel and the TVS was well below 5%, indicating that the material was coarse grained and largely inert, as specified for exclusion under the CWA.

Table 3. Grain size and TVS for Sandy Hook Navigation Channel.

		Inner (SH9)	Outer (SH10)
<b>GRAIN SIZE</b>	% Gravel	5.4	0.0
	% Sand	92.8	98.6
	% Silt	1.0	0.6
	% Clay	0.7	0.8
	% Fines (clay + silt)	1.7	1.4
<b>TOTAL VOLATILE SOLIDS, %</b>		0.31	0.35

4. **Suitability.** This memo documents the suitability of proposed dredged sediments for the Sandy Hook Yacht Club navigation channel for open water disposal, including placement on the local beach. The data gathered were deemed sufficient and acceptable for regulatory decision-making under the DMMP program. Based on the results of the previously described evaluation, the DMMP agencies concluded that all 26,210 cy are suitable for open water disposal. Open water disposal is anticipated to be on the local beach for beneficial uses (erosion control).

5. **References.**

US Army Corps of Engineers and US Environmental Protection Agency. 1998. Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Inland Testing Manual. EPA-823-F-98-005.

US Army Corps of Engineers - Seattle District, US Environmental Protection Agency, Washington Dept. of Ecology, Oregon Dept. of Environmental Quality, Washington Dept. of Natural Resources. 1998. Dredge material evaluation framework: Lower Columbia River management area. November 1998.

Concur:

Signed copy on file in the DMMO office.

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Date

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Lauran Cole Warner, Seattle District Corps of Engineers

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Date

\_\_\_\_\_  
Justine Barton, Environmental Protection Agency

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Date

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DMMO file

Scale: 1:50,000. Contour Interval: 5 Feet. Head Design and Beach Nourishment Project #219. Priority Map. 8/5/07

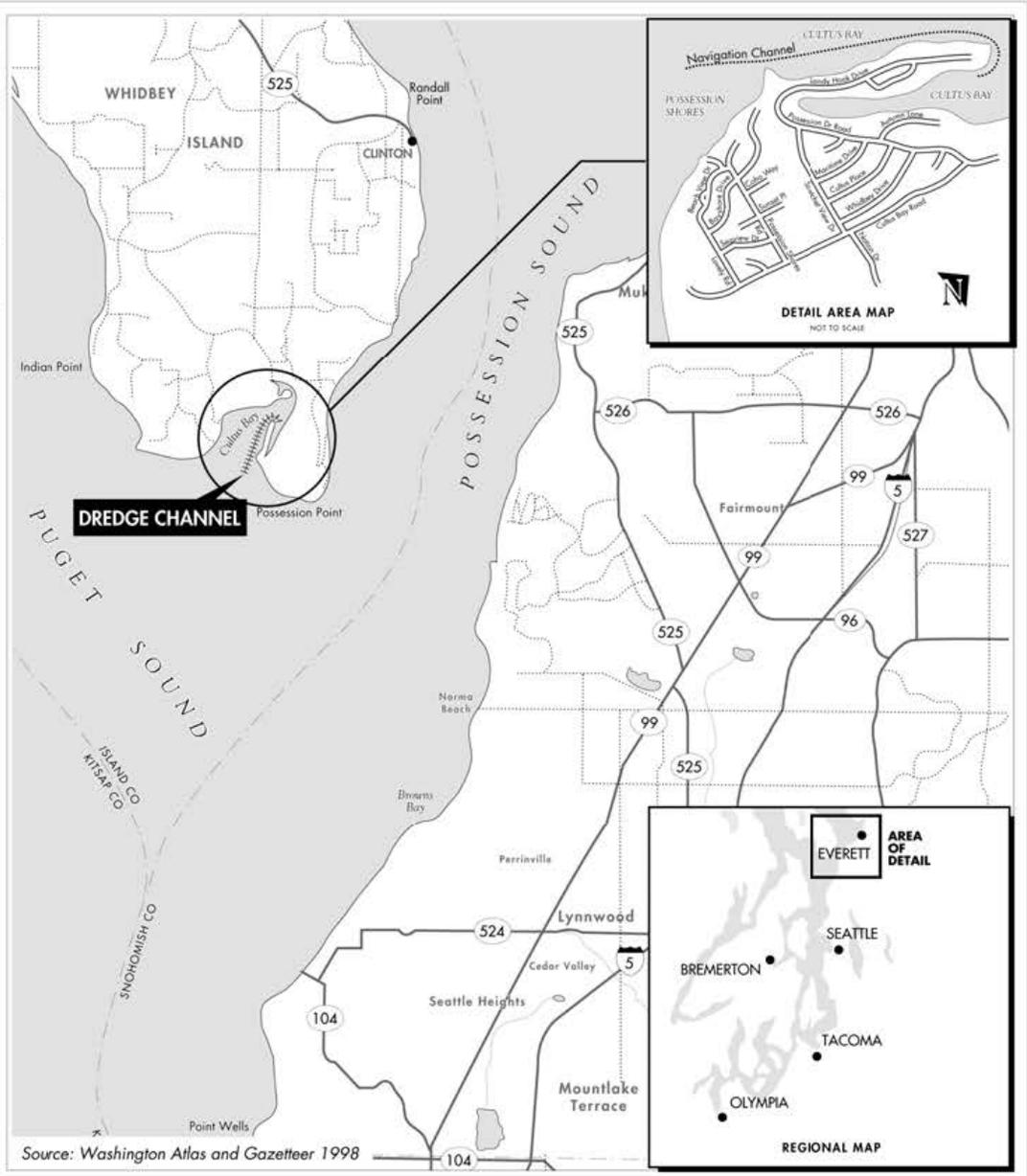
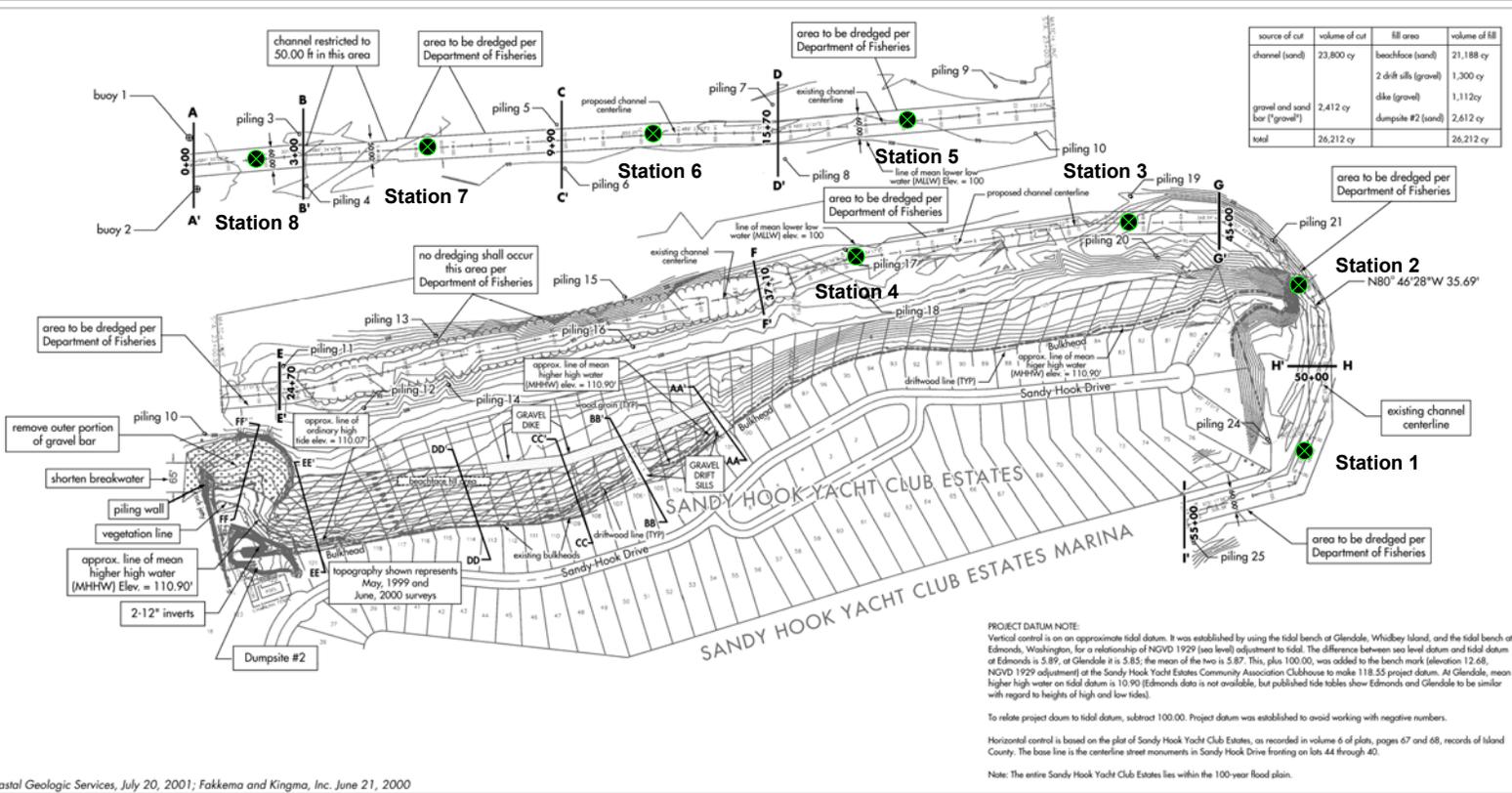


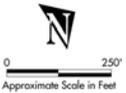
FIGURE 1

VICINITY MAP

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Source: Coastal Geologic Services, July 20, 2001; Fakkema and Kingma, Inc. June 21, 2000



● Sample Station Location

FIGURE 2  
SITE PLAN