

## DMMP CLARIFICATION PAPER

### DMMP DISPOSAL SITE COORDINATES UPDATE AND CLARIFICATION

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#### INTRODUCTION

The DMMP program requires that all dredged material placed at any open-water disposal site in Puget Sound, Grays Harbor, and Willapa Bay be placed accurately within the disposal site target zone, in accordance with the specifications of each DNR managed site.

#### PROBLEM IDENTIFICATION

The DMMP agencies manage these sites adaptively within the conditions of each shoreline permit to control the disposal of clean dredged material, encourage beneficial use, and protect aquatic resources within the area influenced by the disposal site. Although disposal site locations and boundaries were established in the original Final Environmental Impact Statements and associated technical appendices, the DMMP agencies updated some of the site as conditions changed or more information became available. Examples of this include moving the target zone in Elliott Bay to accommodate the natural drift of disposed sediments, specifying disposal locations in Grays Harbor to shore up the south jetty and provide clean materials to the eroding shoreline in Half Moon Bay, and updating the reference location of USCG Buoy G13 off of Willapa Bay as the Coast Guard relocates it to reflect naturally drifting shoals. While these updates are reflected in more recent DMMP documentation, confusion regarding current site locations may exist within the dredging community as a result of their familiarity with older documents.

Several recent dredging projects highlight the concern that dredging proponents are using the out-dated or inaccurate coordinates for several DNR managed disposal sites. Since the DNR's Site Use Authorization (SUA) requires the dredging applicant to dispose all dredged material accurately within the target zone specified for each disposal site, the DMMP agencies are hereby providing clarification on the disposal site characteristics and coordinates for all DNR managed sites to ensure that there is no further confusion on this issue.

## PROPOSED CLARIFICATION

Table 1 (Puget Sound disposal sites) and Table 2 (Grays Harbor and Willapa Bay disposal sites) provide complete site descriptions , center point coordinates (where relevant) , and a description of the disposal site boundaries for the disposal of all dredged material managed by the DMMP.

## REFERENCES

DMMP. 1995. Dredged Material Evaluation Procedures and Disposal Site Management Manual – Grays Harbor and Willapa Bay, WA. U.S. Army Corps of Engineers – Seattle District; U.S. Environmental Protection Agency - Region X; Washington State Department of Natural Resources; Washington State Department of Ecology.

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PSDDA. 1988. Disposal Site Selection Technical Appendix - Phase I. U.S. Army Corps of Engineers – Seattle District; U.S. Environmental Protection Agency - Region X; Washington State Department of Natural Resources; Washington State Department of Ecology.

PSDDA. 1988. Evaluation Procedures Technical Appendix (EPTA) - Phase I. U.S. Army Corps of Engineers – Seattle District; U.S. Environmental Protection Agency - Region X; Washington State Department of Natural Resources; Washington State Department of Ecology.

PSDDA. 1988. Final Environmental Impact Statement (FEIS) - Phase I. U.S. Army Corps of Engineers – Seattle District; U.S. Environmental Protection Agency - Region X; Washington State Department of Natural Resources; Washington State Department of Ecology.

PSDDA. 1988. Management Plan Report (MPR) - Phase I, U.S. Army Corps of Engineers - Seattle District; U.S. Environmental Protection Agency - Region X; Washington State Department of Natural Resources; Washington State Department of Ecology.

PSDDA. 1988. Management Plan Technical Appendix (MPTA) – Phase I, U.S. Army Corps of Engineers - Seattle District; U.S. Environmental Protection Agency - Region X; Washington State Department of Natural Resources; Washington State Department of Ecology.

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PSDDA. 1989. Final Environmental Impact Statement (FEIS) - Phase II. U.S. Army Corps of Engineers – Seattle District; U.S. Environmental Protection Agency - Region X; Washington State Department of Natural Resources; Washington State Department of Ecology.

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**Table 1. DMMP: PUGET SOUND DISPOSAL SITE CHARACTERISTICS**

Site	Area (acres)	Depth (ft)	Disposal Zone diameter (ft)	Target Area diameter (ft)	Disposal Site Dimensions (ft)	Site Coordinates (NAD83: Lat/Long)	Positioning VTS/DGPS
Anderson Island (nondispersive site)	318	442	1,800 (circle)	1,200 (circle)	4,400 x 3,600 (ellipsoid)	Lat: 47° 09.42' Long: 122° 39.47'	DGPS
Bellingham Bay (nondispersive site)	260	96	1,800 (circle)	1,200 (circle)	3,800 x 3,800 (circular)	Lat: 48° 42.82' Long: 122° 33.11'	DGPS
Commencement Bay (nondispersive site)	310	540-560	1,800 (circle)	1,200 (circle)	4,600 x 3,800 (ellipsoid)	Lat: 47° 18.21' Long: 122° 27.91'	VTS
Elliott Bay <sup>1</sup> (nondispersive site)	415	300-360	1,800 (circle)	1,200 (circle)	6,200 x 4,000 (Tear drop shape)	Lat: 47° 35.91' Long: 122° 21.45'	VTS
Port Gardner (nondispersive site)	318	420	1,800 (circle)	1,200 (circle)	4,200 x 4,200 (circular)	Lat: 47° 58.85' Long: 122° 16.74'	DGPS
Port Angeles (dispersive site)	884	435	3,000 (circle)	none	7,000 x 7,000 (circular)	Lat: 48° 11.67' Long: 123° 24.94'	VTS
Port Townsend (dispersive site)	884	361	3,000 (circle)	none	7,000 x 7,000 (circular)	Lat: 48° 13.61' Long: 122° 59.03'	VTS
Rosario Strait (dispersive site)	650	97-142	3,000 (circle)	none	6,000 x 6,000 (circular)	Lat: 48° 30.87' Long: 122° 43.56'	VTS

**Legend:** VTS = USCG Vessel Traffic Service; DGPS = Differential Global Positioning System

<sup>1</sup> Note that the original disposal site coordinates were shifted 300 ft to the south by the PSDDA agencies in 1991 following disposal site monitoring. The disposal zone was not changed, so the coordinates plotted within the disposal zone will show the target zone center coordinates are off center to the south relative to the disposal zone.

**Table 2. GRAYS HARBOR AND WILLAPA BAY DISPOSAL SITE CHARACTERISTICS**

Site (Dispersive)	Area (acres)	Depth (ft)	Disposal Zone	Disposal Site Dimensions (ft)	Site Coordinates (NAD83: Latitude/Longitude)	Positioning
<b>Grays Harbor</b>						
Point Chehalis (Estuarine)	229.6	>50 ft	Within rectangle, partitioned into 3 cells (2,000 x 5,000 ft)	2,000 x 5,000 ft. (rectangle)	Lat: 46°55'00.51 46°55'04.49 46°55'10.46 46°55'17.09 Long: 124°08'06.94 124°07'50.66 124° 07'26.23 124°06'59.10  Lat: 46°54'41.91 46°54'45.90 46°54'51.87 46°54'58.50 Long: 124°07'57.26 124°07'40.98 124° 07'16.55 124°06'49.42 (Corners of 3 cells within rectangle)	DGPS
South Jetty (Estuarine)	55.1	>50 ft	Within rectangle (800 X 3,000 ft)	800 X 3,000 ft. (rectangle)	Lat: 46°54'34.82 46°54'32.06 46°54'26.96 46°54'24.20 Long: 124°09'30.67 124°08'47.65 124° 09'31.74 124°08'48.72 (4 corners of rectangle)	DGPS
Half Moon Bay (beneficial use)	2.9 (1A) 52.6 (1) 37.3 (2)	15.5 ft (1A) 10-15 ft (1) 11-26 ft (2)	Variable within each subarea, see Figure	Variable within each subarea (Area 1A, Area 1, Area 2), see Figure	Variable within each subarea	DGPS
South Beach (beneficial use)	1,223.4	17-46 ft	Within Quadrilateral (6,400 x 7,700 ft x 6,200 x 9,500 ft)	6,400 x 7,700 ft x 6,200 x 9,500 ft (Quadrilateral)	Lat: 46°54'23.23 46°54'29.23 46°52'51.62 46°53'05.60 Long: 124°10'14.39 124°08'42.22 124° 09'41.30 124°08'14.60 (4 corners of Quadrilateral)	DGPS
3.9-Mile SW Ocean Site	58.4 (circle)  1,056.6 (parallel.)	>120 ft	1,800 ft diameter circle within parallelogram	6,000 x 8,000 ft. (parallelogram)	Lat: 46°51'55.68 Long: 124°14'40.53 (center of circle)  Lat: 46°51'56.19 46°52'57.51 46°52'08.67 46°51'07.35 Long: 124°15'03.91 124°13'51.34 124° 13'02.50 124°14'15.06 (4 corners of parallelogram)	DGPS
8.0 Mile Ocean Site	58.4	140-160 ft	1,800 ft diameter circle	1,800 ft diameter circle	Site presently inactive. Used only once for the Federal Grays harbor deepening project material	DGPS
<b>Willapa Bay</b>						
Cape Shoalwater (Estuarine)	178.9	5-19 ft	USCG buoy G "13"	3,000 x 5,196 x 6,000 ft. triangle	Lat: 46°42'05.34 Long: 124°01'21.50 (coordinates for USCG buoy G "13")	USCG Buoy G13
Goose Point (Estuarine)	58.4	30-48 ft	1,800 ft diameter circle	1,800 ft diameter circle	Lat: 46°39'27.60 Long: 123°59'46.04 (center of circle)	DGPS