

MEMORANDUM FOR: RECORD

April 22, 2008

SUBJECT: DETERMINATION REGARDING THE EXCLUSIONARY STATUS OF DREDGED MATERIAL FROM THE WILLOW GROVE BEACH BOAT LAUNCH, COLUMBIA RIVER, COWLITZ COUNTY, UNDER THE NORTHWEST REGIONAL SEDIMENT EVALUATION FRAMEWORK.

- 1. Introduction.** This memorandum 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) regarding the exclusionary status of dredged material from the Willow Grove Beach Boat Launch. Under the Northwest Regional Sediment Evaluation Framework (SEF), sediment that has less than 20% fines content (as defined by a #230 sieve), a total organic carbon (TOC) content of less than 0.5%, and which is in a location sufficiently removed from potential sources of sediment contamination, may be excluded from chemical characterization (RSET, 2006). The SEF indicates that typical locations where exclusionary status is likely to apply include the mouth and mainstem channel of the Lower Columbia River. The Willow Grove Beach Boat Launch is located on Willow Grove Island – on the mainstem channel of the Lower Columbia River – away from potential sources of contamination, and is therefore a good candidate for exclusionary status.
- 2. Background.** The Willow Grove Beach Boat Launch (see Attachments 1 and 2) was constructed in 1999 (DPW, 2008a). Maintenance dredging was first conducted in 2004, when 1,360 cubic yards of sediment were removed and disposed upland within Willow Grove Beach County Park. In January 2008, the Cowlitz County Department of Public Works notified the Army Corps of Engineers that an emergency situation had developed in which heavy shoaling in the boat basin threatened to damage boat-basin amenities and potentially shut down the boat launch.

The DMMP agencies reviewed photographs of the shoaling and agreed to allow the dredging to proceed, under the condition that sediment samples be taken prior to dredging and analyzed for grain size and TOC. If the sediment met the exclusionary criteria, then no additional testing would be necessary. However, if the exclusionary criteria were not met, then the sediment exposed by dredging would need to be sampled, tested and compared to the SEF interim freshwater sediment quality guidelines (SQGs) for compliance. Samples were collected in late January and dredging took place in March.

- 3. Project Summary.** Table 1 includes project summary and tracking information.

Table 1. Project Summary

Project ranking (after testing)	Exclusionary
Dredged volume	2,500 cubic yards
Dredged depth	0 to -10 feet NGVD
SAP received	January 16, 2008
SAP approved	January 22, 2008

Sampling date	January 28, 2008
Data report received	April 7, 2008
DAIS Tracking number	WGBBL-1-X-O-249
USACE Permit Application Number	NWS-2007-2020-CRS
Frequency Determination (10 years)	January 2018

4. **Sampling.** The DMMP agencies required sampling at two locations within the main shoaling area, at least 30 feet apart, and at two different elevations if possible. Each sample was to be tested for grain size and TOC.

Sampling took place on January 28, 2008 at low tide. Two sample pits (see Attachment 3) were dug with a clean shovel. Sample 1 was a composite of sediment taken at 6", 12", 18" and 24" from the first pit. Water was encountered at a shallower depth in the 2nd pit. Therefore, Sample 2 was a composite of sediment taken at 3", 6" and 12".

5. **Grain-size and TOC Analysis.** The approved sampling and analysis plan was followed, with one exception. The sampling and analysis plan called for use of a #230 sieve (62.5 microns) to separate fines from coarse-grained sediment. The analytical laboratory used a #200 sieve (75 microns) instead. Use of a #200 sieve provides a higher estimate of the fines content compared to a #230 sieve. However, this was inconsequential in the case of the Willow Grove samples, as the percentage of sediment passing the #200 sieve was very low. With the exception of this one deviation from the SAP, the quality control guidelines specified by the DMMP programs were met. The data were considered sufficient and acceptable for regulatory decision-making under the DMMP program.

The testing results were as follows:

Parameter	Sample 1	Sample 2
fines content (%):	1.28	1.51
TOC (%):	0.10	0.08

The grain-size analysis showed that the dredged material was predominantly medium to coarse sand, with fines content well below the 20% limit. The TOC results were also well below the 0.5% limit. Therefore the dredged material met characterization guidelines for exclusionary status.

6. **Sediment Exposed by Dredging.** Based on the exclusionary status of the dredged material, the DMMP agencies believe the probability that the sediment exposed by dredging might have concentrations of chemicals of concern that exceed the SEF interim freshwater SQGs is very low. The agencies agreed that no testing of the newly exposed sediment is necessary.
7. **Exclusionary Status Determination.** This memorandum documents the evaluation of dredged material from the Willow Grove Beach Boat Launch for exclusionary status under the Northwest Regional Sediment Evaluation Framework. Based on the results of the previously described

testing, the location of the Willow Grove Beach Boat Launch on the mainstem channel of the Lower Columbia, and lack of sources of contamination in the immediate vicinity of the boat launch, the DMMP agencies conclude that the Willow Grove Beach Boat Launch sediment meets the exclusionary criteria and does not require chemical testing.

8. References.

DPW, 2008a. *Sediment Sampling and Analysis Plan for Willow Grove Beach Boat Launch Dredging Project.* Cowlitz County Department of Public Works. January 2008.

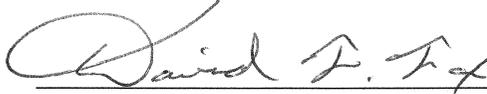
DPW, 2008b. *Sediment Evaluation Report for Willow Grove Beach Boat Launch Dredging Project.* Cowlitz County Department of Public Works. April 2008.

Ecology, 1995. *Sediment Management Standards – Chapter 173-204 WAC.* Washington State Department of Ecology, December 1995.

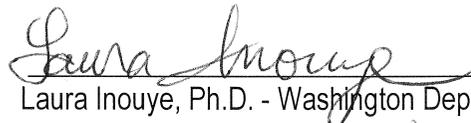
RSET, 2006. *Northwest Regional Sediment Evaluation Framework, Interim Final.* Northwest Regional Sediment Evaluation Team, September 2006.

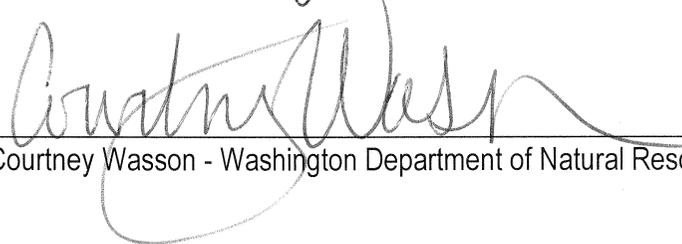
9. Agency Signatures.

Concur:

4/22/08 
Date David Fox, P.E. - Seattle District Corps of Engineers

4/24/08 
Date Erika Hoffman - Environmental Protection Agency

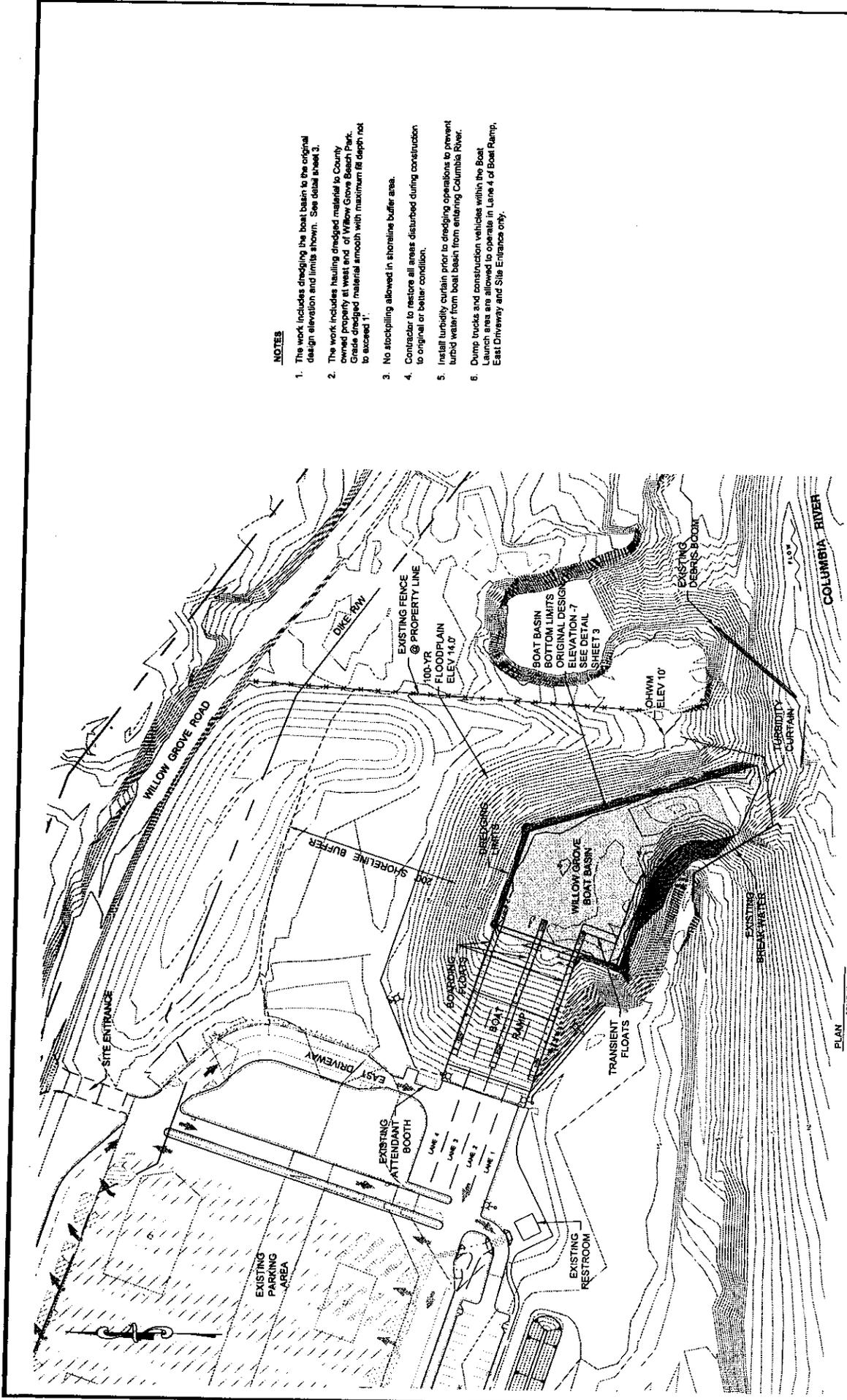
4/24/08 
Date Laura Inouye, Ph.D. - Washington Department of Ecology

04/25/08 
Date Courtney Wasson - Washington Department of Natural Resources

Copies furnished:

DMMP signatories
Danette Guy, Seattle District Regulatory
Chris Andrews, Cowlitz County Department of Public Works
Ryan Lopossa, Cowlitz County Department of Public Works

Attachment 2

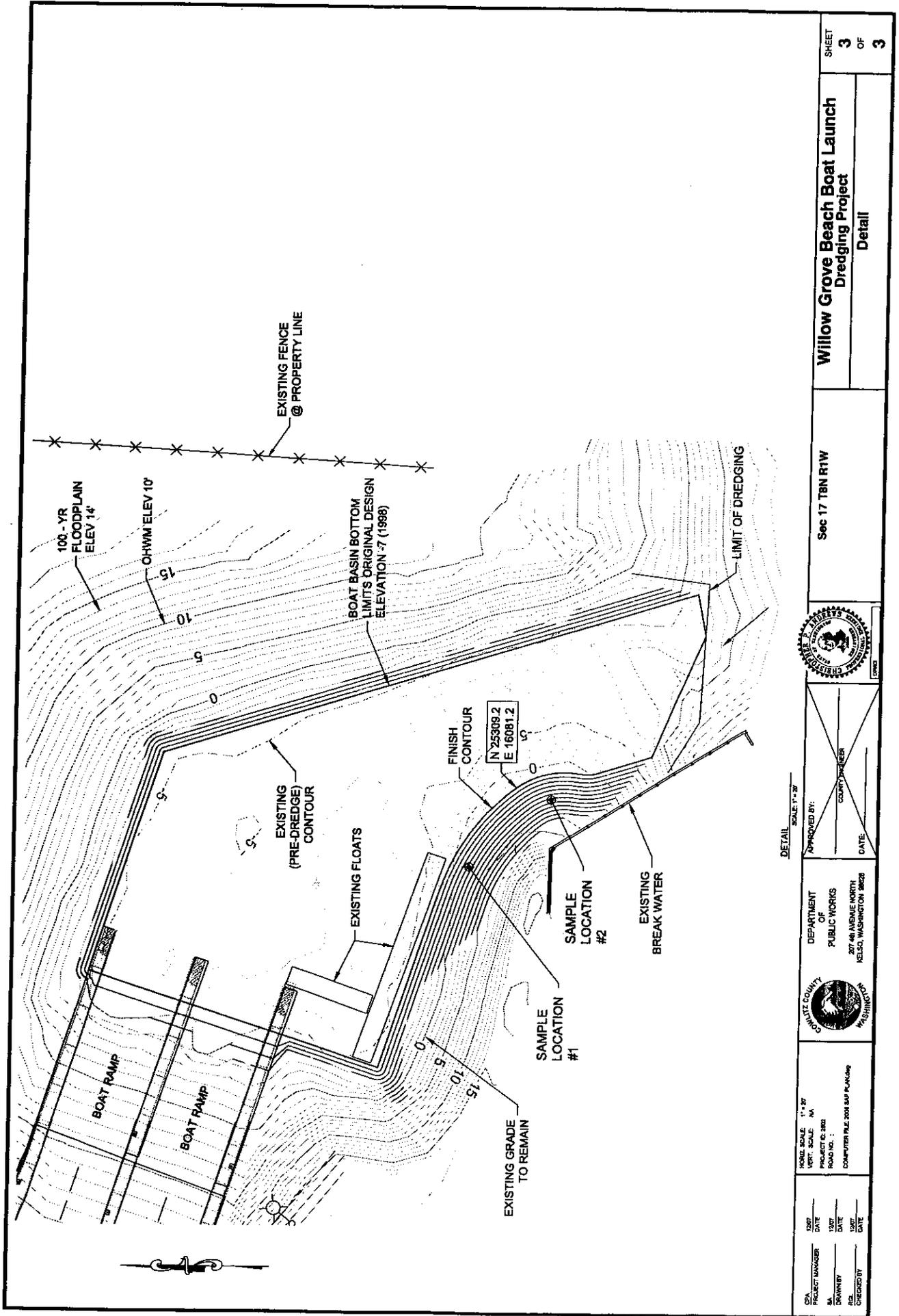


NOTES

1. The work includes dredging the boat basin to the original design elevation and limits shown. See detail sheet 3.
2. The work includes hauling dredged material to County owned property at west end of Willow Grove Beach Park. Grade dredged material smooth with maximum 18' depth not to exceed 1'.
3. No stockpiling allowed in shoreline buffer area.
4. Contractor to restore all areas disturbed during construction to original or better condition.
5. Install turbidity curtain prior to dredging operations to prevent turbid water from boat basin from entering Columbia River.
6. Dump trucks and construction vehicles within the Boat Launch area are allowed to operate in Lane 4 of Boat Ramp, East Driveway and Site Entrance only.

<p>CWA PROJECT MANAGER DATE 1/27</p> <p>SA DRAWN BY DATE 1/27</p> <p>REL CHECKED BY DATE 1/27</p>	<p>DATE SCALE 1" = 30'</p> <p>PROJECT NO. 1317</p> <p>ROAD NO.</p> <p>CONTRACT FILE 2007 DredgingCPA.dwg</p>	<p>APPROVED BY: _____</p> <p>COUNTY ENGINEER _____</p> <p>DATE: _____</p>	<p>DEPARTMENT OF PUBLIC WORKS</p> <p>207 4th AVENUE NORTH</p> <p>KELSO, WASHINGTON 98626</p>	<p>Sec 17 10N R3W</p>	<p>WILLOW GROVE BEACH BOAT LAUNCH DREDGING PROJECT</p> <p>Plan</p>	<p>SHEET 2 OF 3</p>
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Attachment 3



SHEET 3 OF 3	
Willow Grove Beach Boat Launch Dredging Project	
Detail	
Sec 17 TBN RTW	
DEPARTMENT OF PUBLIC WORKS 207 46 AVENUE NORTH KELLEYS ISLAND, WASHINGTON 98028	
COUNTY ENGINEER DATE:	
SCALE: 1" = 30' APPROVED BY:	
VERT. SCALE: 1" = 3' HORIZ. SCALE: 1" = 30' PROJECT # 2008 ROAD NO.: COMPUTER FILE 2008 SMP PLAN.dwg	
12/07 DATE PROJECT MANAGER	12/07 DATE DRAWN BY
12/07 DATE CHECKED BY	12/07 DATE CHECKED BY