

## MEMORANDUM FOR: RECORD

June 15, 2016

**SUBJECT:** SUITABILITY SUPPLEMENT EVALUATING DEBRIS MANAGEMENT FOR PROPOSED DREDGED MATERIAL FROM THE PORT OF GRAYS HARBOR TERMINALS 1, 2, 3 AND 4, ABERDEEN, GRAYS HARBOR COUNTY

- 1. Introduction.** The Port of Grays Harbor owns four terminals in the vicinity of Aberdeen, Washington. Terminals 1 and 2 operate as liquid bulk commodity import and export terminals. Terminal 3 is used for shipping wood and wood products. Terminal 4 operates as a cargo shipping facility for automobiles, break bulk cargo, and logs. This memorandum is a supplemental determination for the duration of the suitability of the subject project, as summarized in Table 1. See the suitability determination dated February 20, 2015 for further details (DMMP 2015).

**Table 1. Port of Grays Harbor, Terminals 1, 2, 3 & 4 - Project Details**

Project Volume	159,000 cy annually
Disposal Sites	Point Chehalis or South Jetty dispersive disposal sites, or separately-approved in-water beneficial use
DMMP Tracking number	PGHTE-1-A-F-363
EIM Project number	PGHTE14
USACE Permit Numbers	T-1: NWS-2009-601 T-2: NWS-2007-1789-SO T-3: NWS-2008-997 T-4: NWS-2007-1789-SO
Recency Expiration Date	December 2021

- 2. Debris Management Clarification.** Debris management has been required by the Dredged Material Management Program since its inception (PSDDA 1988). In general, debris may not be disposed at DMMP open-water disposal sites. This includes all floatable debris, large non-floatable debris such as logs, piling, rip rap and concrete, and all solid waste (e.g., tires, rebar and garbage). As described in the *2015 DMMP Clarification on Debris Screening Requirements* (Hoffman et al. 2015), all projects must use a 12-inch x 12-inch screen to remove debris unless it can be demonstrated that debris is unlikely to be present, or that the debris present is large woody debris that can be easily observed and removed by other means during dredging. It is the applicant's responsibility to provide adequate information to the DMMP to support a screening exemption determination. This policy is effective starting Dredging Year 2017 (DY17) (June 16, 2016 – June 15, 2017). All future suitability determinations will include a specific statement documenting debris management requirements, including whether debris screening is required. For those projects characterized prior to, but dredging after the DY17 implementation, a suitability supplement may be prepared to address project-specific debris management.
- 3. Debris Management Evaluation.** The Port of Grays Harbor submitted a letter on May 13, 2016 (Lewis 2016) requesting exemption from debris screening requirements for annual maintenance dredging at four Port terminals. The Port's letter presented information on site conditions, past dredging, and surveys to demonstrate that debris is unlikely to be present in sediments from these terminals, and that large woody debris has been and will continue to be managed using methods other than screening. The DMMP used the following categories to evaluate this exemption request:

- a. Facility/Terminal Operational Use.** The Port terminals operate as commodity import and export terminals. The terminals are located within the Port secured area and are accessible only by authorized personnel. Terminals 1 and 2 are not considered high risk for contributing debris to the dredge prism due to their use for only liquid bulk handling. However, the risk of encountering debris is higher at Terminals 3 and 4, where commodities including dry bulk and logs are handled at the wharf face.
  - b. Frequency of Maintenance Dredging.** Terminals 1 through 4 are regularly dredged, occurring on an annual basis through 2014. Beginning in 2015, the Port began maintenance dredging even more frequently (semi-annually) to improve efficiency. In addition, the USACE conducts annual maintenance dredging in the Federal navigation channel in the vicinity of the terminals.
  - c. Dredge Location Characteristics Affecting Debris Presence.** Geographically, the terminals are located between the confluence of the Hoquiam and Wishkah Rivers and adjacent to the North Channel of the Chehalis River. The extremely strong currents experienced during the winter months on the Chehalis River prevent potential debris from upstream sources collecting in the project area.
  - d. Evidence Based on Previous Dredging and Surveys.** Pre-dredge side scan sonar surveys are conducted for every dredge event to determine sediment build-up prior to dredging, and to identify any potential debris (Figure 1). The Port has also frequently used divers to inspect the terminal structures. No debris, other than large woody debris apparently conveyed from the watershed, has previously been identified via these surveys. USACE dredgers, which dredge the federal navigation channel immediately adjacent to the Port terminals, use a dredge-mounted camera to monitor dredge activities. No debris other than that identified by the Port has ever been reported.
  - e. Current Debris Management Practices.** For previous dredge events, identified large woody debris has been removed prior to dredging (Figure 2). Port contracting requires the dredger to identify any additional debris during dredging, and to remove it from the barge prior to disposal.
- 4. DMMP Analysis.** Multiple lines of evidence have been considered. Operational use alone is not considered sufficient evidence for a grid use exemption. Frequent maintenance dredging makes it more likely that any accumulated debris would be on the surface and visible to sonar or diver surveys. Past dredging by the Port and USACE contractors has not identified the presence of debris other than large woody debris originating from the upper watershed. Only the largest debris appears to collect in the project area, most likely due to strong downstream currents. Finally, the Port's debris monitoring and identification has proved successful in past dredge events, and identified debris has been successfully removed with current practices.
- 5. Debris Grid Exemption.** Based on consideration of the above information, the DMMP concurs that there is a low likelihood that non-woody debris will be present in sediments at Terminals 1, 2, 3 and 4 and, therefore, no debris screen is required for the subject project. However, the Port must continue to require their contractor to identify and remove large woody debris with existing methods. The process for removal and disposal must be documented in the contractor's Dredging Quality Control Plan. This exemption covers the same period as the initial suitability determination, and thus expires in December 2021 (Table 1). However, based on field inspection or changed conditions at one or more of the terminals, the decision to exempt terminal dredging from debris grid use may be revisited prior to the expiration date.

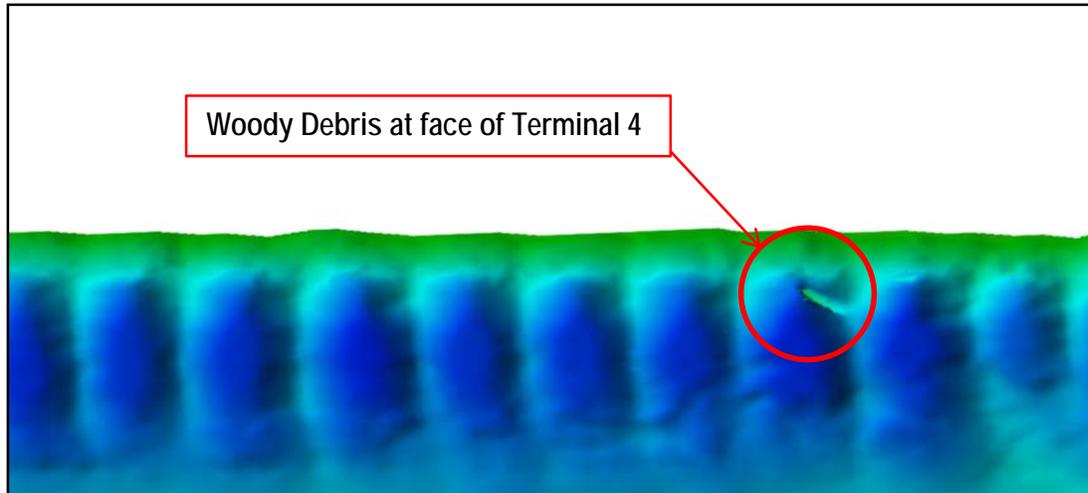


Figure 1. Side-scan sonar from Terminal 4, Port of Grays Harbor (from Lewis 2016).



Figure 2. Large woody debris removal during previous round of dredging (from Lewis 2016).

## 5. References.

- DMMP 2015. Determination regarding the suitability of proposed dredged material from the Port of Grays Harbor Terminals 1, 2, 3 And 4, Aberdeen, Grays Harbor County, for open-water disposal at the South Jetty or Point Chehalis dispersive sites or for in-water beneficial use. 20 February 2015.
- Hoffman *et al* 2015. Debris Screening Requirements for Dredged Material Disposed at Open-Water Sites. FINAL DMMP Clarification Paper – October 2, 2015. Prepared by Erika Hoffman (U.S. Environmental Protection Agency), Celia Barton (Washington State Department of Natural Resources), and David Fox (U.S. Army Corps of Engineers) for the DMMP agencies.
- Lewis, Randy 2016. Request for Exemption from Dredge Screening Requirements for Annual Terminal Maintenance Dredging. Letter to the Dredged Material Management Office on behalf of the Port of Grays Harbor, May 13, 2016.
- PSDDA 1988. Management Plan Report: Unconfined Open-Water Disposal of Dredged Material – Phase I (Central Puget Sound).

signed copy on file in DMMP office

6. Signatures.

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_____	_____
Date	Lauran Cole Warner - Seattle District Corps of Engineers
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Date	Justine Barton - Environmental Protection Agency
_____	_____
Date	Laura Inouye, Ph.D. - Washington Department of Ecology
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Date	Celia Barton - Washington Department of Natural Resources

**Copies Furnished:**

- DMMP signatories
- Kiley Zaubi, USACE Regulatory
- Randy Lewis, Port of Grays Harbor
- Joe Schumacker, Quinault Tribe