

Prepared by:  
Dredged Material Management Office  
Seattle District, US Army Corps of Engineers

**MEMORANDUM FOR RECORD**

**August 8, 2019**

**SUBJECT:** TIER 1 DETERMINATION REGARDING THE SUITABILITY OF PROPOSED DREDGED MATERIAL FROM THE CITY OF LONGVIEW COWLITZ RIVER INTAKE (NWS-2012-1373), COWLITZ COUNTY, WASHINGTON, FOR FLOWLANE DISPOSAL IN THE COWLITZ RIVER.

- 1. INTRODUCTION.** This memorandum reflects the consensus determination of the Dredged Material Management Program agencies (U.S. Army Corps of Engineers, Washington Departments of Ecology and Natural Resources, and the Environmental Protection Agency) regarding the need for testing of proposed dredged material from the City of Longview Cowlitz River intake with in-water disposal in the Cowlitz River downstream of the intake structure.
- 2. PROJECT.** The City of Longview intends to remove accreted sediment from the area adjacent to its Cowlitz River intake structure inlet screens. A floating dredge (operated by City employees using waders) will be used to remove approximately 2 feet of sediment along the 35 foot length of the structure, from the base of the structure to 10 feet out into the river channel (Figure 1). This equates to about 26 cubic yards of dredged material, which will be pumped and placed in-water immediately downstream of the intake.

This work is consistent with Department of the Army permit NWS-2012-1373, which allows the City to conduct periodic maintenance dredging at the intake structure inlet and provides for dredging up to five times per year. The maximum permitted dimensions of the dredge prism are 225 feet long by 100 feet wide by 6 feet deep. The permit authorizes up to 5,000 cy of accreted sediment to be dredged per event with a maximum total of 25,000 cy per year. Proposed dredging volumes have decreased in recent years due to a repurposing of this intake, as detailed below.

- 3. BACKGROUND.** In-water disposal of maintenance dredged material was approved via a DMMP suitability determination on July 18, 2007. The Portland District Corps of Engineers conducted a sediment characterization study of the Cowlitz River in early 2007, the results of which are discussed in the 2007 suitability determination. The DMMP reviewed the project again in a memo dated August 30, 2012, finding that—in the absence of any changed conditions—all dredging through January 2014 was suitable for unconfined open-water disposal based on guidelines for low-ranked projects. That memo also stated that dredging and disposal to maintain the City of Longview Cowlitz River intake after January 2014 would require reconsideration and a new suitability determination.

This memo documents an evaluation of project status under current DMMP guidelines. The DMMP has determined that this Tier 1 evaluation is sufficient for evaluation of this material through the expiration of the current permit (July 1, 2021), and that this project is excluded from further testing.

- 4. LOCATION AND CONDITIONS.** The City of Longview Cowlitz River intake is located on the west bank of the Cowlitz River at river mile (RM) 5.17. It was previously used as a source of local drinking water, but now is operated only as a source for nearby Lake Sacajawea, a man-made recreational lake. The intake structure was rebuilt in 2016-17 to modify it for pumping raw river water to the lake (Figures 2 and 3).

The Toutle River, which originates on the west and northwest flanks of Mount St. Helens, is a tributary to the Cowlitz. After the eruption of Mount St. Helens in 1980, a sediment retention structure (SRS) on the North Fork of the Toutle River was built to prevent large quantities of sediment and ash from being transported downstream. However, the SRS has filled and sediment is now transported with the run of

the river, accumulating downstream. The sediment load has continued to accrete along the Cowlitz River, including in shoals around the intake structure. Rapid accumulations in the area of the intake contributed to discontinuing use of the Cowlitz as a source for municipal water. The proposed dredging is for material that has accumulated since the project modification was completed in 2017.

5. **PROJECT RANK.** Previous evaluations (DMMP 2007, DMMP 2012) of this project have assigned this project a “low” rank, which represented the lowest level of concern for adverse biological effects or elevated concentrations of chemicals of concern. Since then, the DMMP has adopted an additional “very low” rank for projects sufficiently removed from potential sources of contamination, subject to strong current and/or tidal energy, and comprised of coarse-grained sediment with at least 80% sand or gravel and total organic carbon (TOC) less than 0.5%. Based on these criteria, as demonstrated in previous studies and by ongoing sedimentation from a known source, this project has now been assigned a “very low” rank.
6. **TIER 1 EVALUATION.** The current proposal is for transfer of approximately 26 cy of accreted sediment via small cutterhead dredge, which would be pumped downstream a short distance past the intake structure. There are several reasons this project does not rise to a level of concern that would require chemical or biological testing, including:
  - “Very Low” ranking
  - Small volume of material (permit allows for up to 5,000 cy/year, though this proposal is for a much smaller amount, and no dredging has taken place for over 2 years).
  - This is essentially a bypass operation. The Clean Water Act (CWA) allows for exclusions from testing “where the discharge site is adjacent to the excavation site and subject to the same sources of contaminants, and materials at the two sites are substantially similar” (40 CFR 230.60(c)).
  - Recent photos (Figures 4 and 5) provide photographic evidence that accumulated sediment is physically similar to that analyzed in 2007, and continues to meet a “very low” ranking and exclusion from testing guidelines.
7. **TIER 1 DETERMINATION: EXCLUSION FROM TESTING.** This project is excluded from further testing for the remainder of the permit period (through July 1, 2021). This exclusion covers the current proposed dredging, and subsequent dredging events at the intake structure. This determination may be extended based on evidence of continued compliance with the criteria cited in Section 6. This determination memorandum does **not** constitute final agency approval of the project. During the public comment period that follows a public notice, resource agencies will provide input on the overall project. A final decision will be made after full consideration of agency input, and after an alternatives analysis is done under section 404(b)(1) of the Clean Water Act.

## 8. REFERENCES

DMMP 2007. Determination regarding the suitability of proposed dredged material from the City of Longview Regional Water Treatment Plant (#NWS-2007-862-CRS) evaluated under section 404 of the Clean Water Act for disposal in the Cowlitz River.

DMMP 2012. Determination regarding the need for testing of dredged material from the City of Longview Regional Water Treatment Plant (#NWS-2007-862-CRS), Cowlitz County, Washington.

USACE 2007. *Cowlitz River Federal Project – Sediment Quality Evaluation Report*. U.S. Army Corps of Engineers, Portland District. March 2007.

**9. AGENCY SIGNATURES**

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Concur: Signed copy available at Seattle District Corps of Engineers, DMMO.

\_\_\_\_\_  
Date Luran Cole Warner - Seattle District Corps of Engineers

\_\_\_\_\_  
Date Justine Barton - Environmental Protection Agency

\_\_\_\_\_  
Date Laura Inouye, Ph.D. - Washington Department of Ecology

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Date Shannon Soto - Washington Department of Natural Resources

Copies furnished:

DMMP signatories  
Danette Guy, Seattle District Regulatory  
Mike Ward, City of Longview

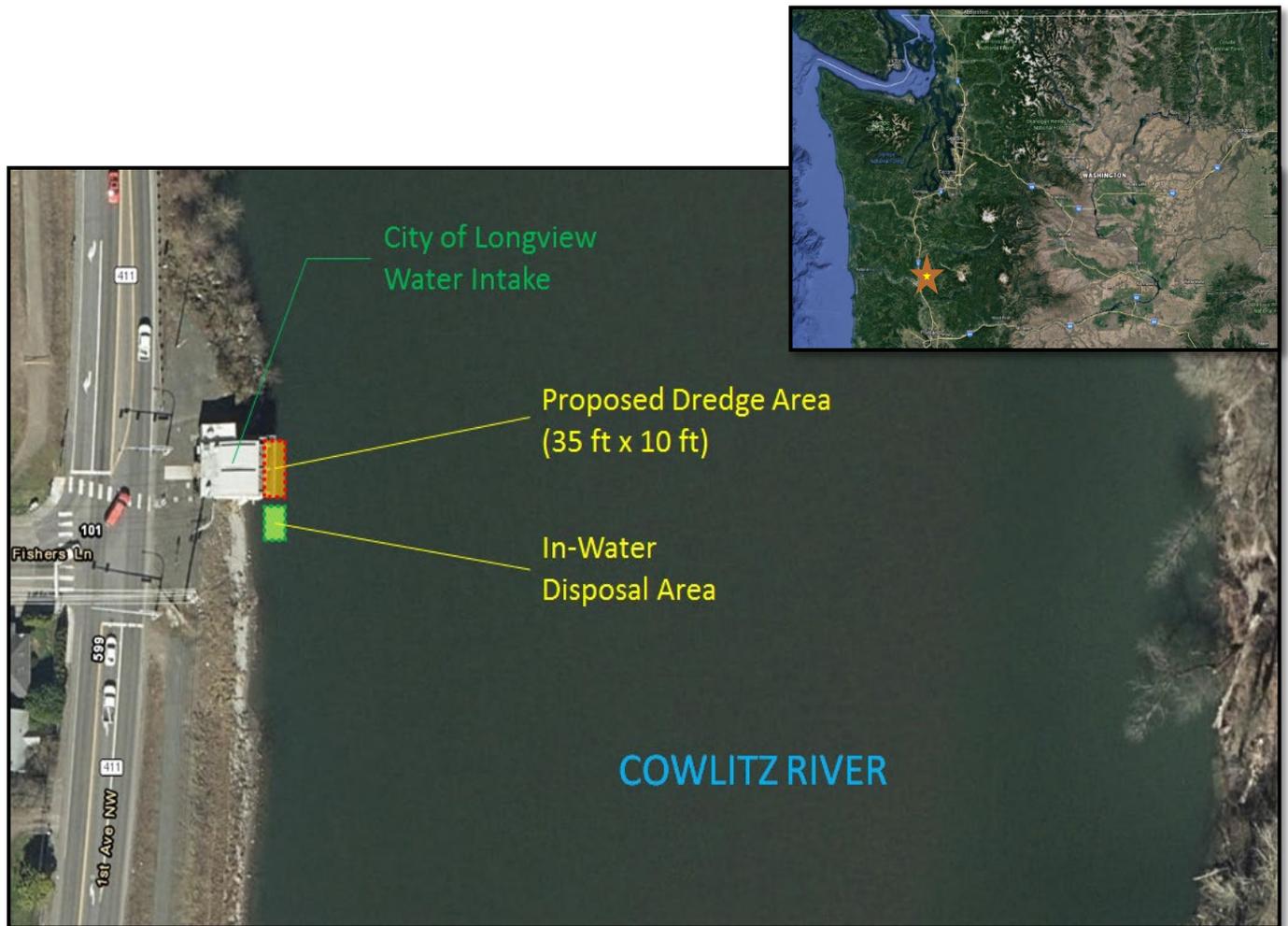


Figure 1. Vicinity and project area maps.



Figure 2. Sediment in front of water intake structure from downstream (looking north).



Figure 3. Sediment in front of the water intake structure from upstream (looking south).



*Figure 4. Images of Sample 1 from accreted sediment, showing physical characteristics of material.*



*Figure 5. Images of Sample 2 from accreted sediment, showing physical characteristics of material.*