

MEMORANDUM FOR RECORD

February 13, 2020

SUBJECT: TIER 1 ANTIDegradation EVALUATION FOR THE ROZA DIVERSION DAM FISHWAY SEDIMENT REMOVAL (NWS-2020-067) ON THE YAKIMA RIVER IN YAKIMA, WASHINGTON.

1. Introduction. This memorandum documents the Tier 1 antidegradation evaluation by the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Washington Departments of Ecology and Natural Resources, and the U.S. Environmental Protection Agency) of the United States Department of the Interior, Bureau of Reclamation (BoR) maintenance dredging project. This evaluation resulted in a no-test antidegradation determination, and the DMMP does not require further testing.

2. Project. This project is located at the Roza Diversion Dam on the Yakima River at River Mile 128 in Yakima, Washington (Figure 1). The Dam, which is owned and maintained by the BoR, consists of a channel-spanning concrete sill with two adjustable 110-foot long roller gates that are used to control the water level in Roza Pool and surface flow downstream of the dam. Also located at the dam are two fish ladders, a primary and secondary fish screening facility, a pumpback facility that is used periodically to capture fish bypass water for delivery in the Roza Canal, and a fish counting facility that is operated by the Yakima Nation. When the Roza forebay is drawn down to its minimum pool elevation each year to facilitate routine maintenance of the fish screens at Roza Dam, a large depositional area is exposed on the left (east) bank of the Roza pool. This sediment deposition area interferes with operation of the low-flow left bank fish ladder exit which is located on the left bank of the Roza Pool. The BoR proposes to remove up to 1500 cubic yards (CY) of material that has accumulated in this area. Sediment accumulates at the project location during high river flows, and periodic maintenance dredging is required to keep the canal functioning. All material removed from the high spot will be placed at a nearby upland location, also owned by BoR. Figure 2 shows the depositional area that will be dredged and the nearby upland disposal area.

Maintenance dredging has occurred in the past. The last time it was dredged was approximately 10 years ago. The date and volume dredged were not provided.

3. Evaluation. The volume proposed for dredging is 1500 CY. There is no project-specific ranking for this area, so low-moderate is assumed given the relatively rural/remote nature of the project location with few or no known sources of concern but insufficient data to confirm the ranking. Because the proposed dredging volume exceeds the “no test” small project volume of “less than 1,000 CY” (low-moderate or moderate-ranked projects), the DMMP small project exclusionary guidelines based on volume do not apply. Under DMMP guidelines, projects for which upland disposal is planned do not ordinarily require testing of the dredged material if they are ranked moderate or less, but they do require evaluation under the Department of Ecology’s antidegradation standard. An EIM query revealed three sediment samples, six water samples, and one tissue sample near (within 0.5 mile) the project area. The tissue sample was part of a fish study in the Yakima River Basin and was not evaluated for dredged sediment quality.

One surface sediment sample was collected in 1985 and analyzed for total organic carbon (TOC), grain size distribution, pesticides, mercury and PCB Aroclors. This sample had TOC at 3.1%, consisted of 61% fines, and had one freshwater SL1 exceedance (dieldrin at 8.2 µg/kg). Two other sediment samples were collected during one event at one location in 2016 by centrifuging surface water and analyzing the suspended particulate matter. These samples were analyzed for PCB congeners and PBDEs. The total

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PCB congeners (U=0) were 0.4 µg/kg and 0.658 µg/kg, both well below the Freshwater SL1. There is no interpretive criteria for PBDEs so these results were not evaluated.

One water sample was collected in 2007 and analyzed for basic water quality parameters such as turbidity, conductivity, TOC, dissolved organic carbon, and total suspended solids. The other five water samples were collected during one event at one location in 2016 and analyzed for basic water quality parameters, PCB congeners and PBDEs. PCB congeners were mostly non-detect or detected at low concentrations. Total PCB congeners (U=0) in all five samples were below 110 pg/L. PBDEs were not evaluated.

A review of EPA's Cleanups in My Community database and Ecology's Integrated Site Information System revealed a former LUST (diesel fuel) on the west bank that was cleaned up in 2011. Ecology issued a No Further Action in 2012.

4. Tier 1 Antidegradation Determination. The project is located in a remote area with no cleanup sites nearby. Based on the site evaluation, the potential for contamination to be present is low. Only one compound (dieldrin from 1985 sample) exceeded freshwater SL1 guidance. Based on this information, the DMMP agencies have determined that the sediment exposed by dredging will likely meet the State of Washington antidegradation standard, and therefore, no DMMP testing of the leave surface is required for this project.

Since all dredged material will be going to an upland disposal location, a suitability determination for open-water disposal is not needed for this project.

This antidegradation determination 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.

5. References.

DMMP 2018. *Dredged Material Evaluation and Disposal Procedures (User Manual)*. Dredged Material Management Program, updated December 2018.

Signed Copy at DMMO - USACE Seattle District

6. Agency Signatures.

Date Joy Dunay – U.S. Army Corps of Engineers, Seattle District

Date Justine Barton – U.S. Environmental Protection Agency, Region 10

Date Laura Inouye, PhD. – Washington State Department of Ecology

Date Shannon Soto – Washington State Department of Natural Resources

Copies Furnished:

DMMP agencies
David Moore, USACE Regulatory Project Manager
DMMO File

Figure 1. Project Location



Figure 2. Proposed dredge and placement area

