

Project Title: Oil Water Separation

Dam and Reservoir Project: Ice Harbor

Estimated Total Cost: \$1-\$3 million

Estimated Schedule for Completion of the Project: Phase 1a: None for this Project
Phase 1: FY2015-2017
Phase 2: FY2017-2020
Expected Physical Completion: FY2020
Current Status as of 6/8/2017: Phase 2 (contract bid solicitation)

Summary

This project will reduce the amount of oil that enters the Lower Snake River from the powerhouse at Ice Harbor Dam and Reservoir Project, improving water quality and benefitting fish and other aquatic biota. This will be accomplished by installing an oil water separation system at the main hydropower generating unit turbine pits (i.e., the open space in the generating unit between the turbine head cover and the generator), and modifying the drainage sumps, which are basins that collect liquid drainage from the operation of a turbine, to allow for operation of a surface (oil) skimmer, a device that removes non-emulsified oil from the surface of the water collected in the sump basin. Once installed, validation testing of the turbine pit oil water separators and drainage sump system will be performed to ensure they work properly. A similar surface (oil) skimmer design has already been deployed successfully at Lower Granite Dam and Reservoir Project. Lessons learned from similar projects will inform the design and construction of this project, recognizing each facility is unique with regard to river inflow and issues related to oil.