

Project Title: Powerhouse Roof Replacement

Dam and Reservoir Project: Little Goose

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

Estimated Schedule for Completion of the Project:

Phase 1a: None for this Project

Phase 1: FY2016-2017

Phase 2: Unknown

Expected Physical Completion: Unknown

Current Status as of 6/8/2017:

Phase 1 (design)

### **Summary**

In June 2015, Walla Walla District's (NWW) Engineering Division staff assessed leakage issues as well as the overall condition of the Little Goose Dam and Reservoir powerhouse roof, which was installed in 1991. The roof is a built up roof (BUR) system, composed of alternating layers of asphalt and reinforcing glass felt that create a finished membrane. These are commonly referred to as "tar and gravel" roofs. The roof at Little Goose was designed to last 20 years. The BUR system is generally in good condition, but the top coating, glass felt, and asphalt display signs of cracking, erosion, and general deterioration. Although the Corps considered an alternative involving the application of a new combination top coating, that alternative would not fix the failures affecting the glass felt and asphalt layers. The inspection of the powerhouse roof revealed blistering, splitting, ridging, wrinkling, and slippage of the asphalt layers, indicating they are in poor condition. NWW's Engineering Division has recommended that the roof be replaced, but due to reprioritization of projects related to necessary sequencing of work at Little Goose, the roof replacement is currently delayed and there is no estimated date of completion.