



Beaver Creek Dam Fish Passage Restoration

Completion Report – June 2017 to August 2018

City of La Grande

BPA project #1992-026-01, Contract #75989

Project Summary:

The Beaver Creek Dam Fish Passage Restoration project has removed fish barriers at five diversion structures and opened up approximately 12 miles of native habitat to aquatic species. Completed in three phases, the project addressed fish passage and screening at the main intake (Phase 1), the upper diversion (Phase 2), and two small intakes located on Cove and West Beaver Creek (Phase 3). In conjunction with addressing the fish passage barriers, the project has provided continued protection of the City of La Grande's drinking water source, which was constructed in 1915.

Project Objectives:

The main objective of this project is to provide fish passage for the threatened Snake River ESU summer steelhead and spring Chinook salmon through the project area. Other objectives that are associated with this project are the inclusion of fish screening at the various intake structures as well as providing connectivity and improving stream morphology in anticipation of restoring native fish populations. The successful completion of these objectives was directly tied to the execution of four (4) specific tasks. Those tasks were:

1. Project coordination between the project's key stakeholders including the City of La Grande, USFS, Oregon Watershed Enhancement Board (OWEB), Confederated Tribes of the Umatilla Indian Reservation, Bonneville Power Administration (BPA), U.S. Fish and Wildlife Service (USFWS), and ODFW to develop a design and implementation process that meets fish passage criteria, while remaining economical and functional.
2. Obtain final design approval from the appropriate regulatory agencies.
3. Secure all of the required permits, with the USFS working as the lead agency.
4. Implementation of the final design, to remove the existing barriers and provide sufficient fish passage through the project site.
5. Develop a Monitoring Plan based on the implementation of the project and identified compliance monitoring, as well as effectiveness monitoring.

The Project deliverables that were identified for successful completion of this project and the level of completion are detailed below:

- Obtain all required permits to construct the project. **Deliverable 100% complete.**
- Contractor mobilizing to the site, and completing the clearing and grubbing the work area, removing the concrete spillway and excavating the fish way. **Deliverable 100% complete.**
- Complete successful administration of the construction contract. Specifically, setting up contract documents, reviewing contractor billings, provide billing to BPA and prepare progress reports as required. **Deliverable 100% complete.**
- Develop and submit completion report. **Deliverable in progress.**

Problems Encountered:

The project was completed without any major problems encountered. Some of the minor hurdles that were encountered during the project were attributed to the use of new construction techniques. The pre-fabricated vortex weirs used on the fish passage structure were found difficult to seal off during the early stages of the project. The contractor made some adjustments to the fabrication the weirs, which resulted in a superior final product. Additionally, as was anticipated at the beginning of the project, winter weather resulted in the construction project being shut down for a period until the spring thaw. The project team did a superior job of preparing the site for the winter months, and had very little preparation to finish up the project the following construction season.

Lessons Learned:

This project was an exceptional example of how a well thought out design and a high functioning project team can lead to the successful completion of a project. A high level of communication resulted in minimal time being lost during construction as site conditions and new construction techniques were implemented. Beaver Creek Dam Fish Passage Project was a project that was in the planning stages for approximately 20 years. All involved parties were excited to get the opportunity to construct this project, and it was apparent in the effort put forth to construct a successful project.



























