Lost Creek Riparian Corridor Enhancement Project Phase I

Post-Implementation Status Report #1 for OWEB Grant #212-3999-9840
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Project Background:

The Lost Creek Riparian Corridor Enhancement Project Phase I was designed to improve and enhance the riparian corridor of Lost Creek, a tributary to the Middle Fork Willamette River near Dexter, OR. Restoration efforts along Lost Creek are important because it is one of two free-flowing tributaries to the Middle Fork Willamette River and thus provides key habitat for fish and wildlife species. However, conditions along the lower reaches of Lost Creek have been significantly altered over the last century due to various kinds of development in and degradation of the floodplain and riparian areas. Therefore, through this project, the Middle Fork Willamette Watershed Council (MFWWC) and private landowners sought to plant native trees and shrubs across much of the historically active floodplain and remove invasive species in order to improve terrestrial wildlife habitat, water storage and dissipation of energy during high flow events, and instream habitat via shading and reduced erosion. Species targeted to benefit from this project include spring Chinook salmon, Oregon chub, steelhead, lamprey, bald eagles, migratory birds, western pond turtles, and northern red-legged frogs, among others. MFWWC also worked to educate landowners on the importance of this type of work. Ultimately, revegetation of the Lost Creek riparian corridor with native species occurred on 16.06 acres, spanning 12 private properties. This report describes the status of the sites and maintenance efforts since the Project Completion Report was submitted (23 May 2015).

Project Maintenance:

MFWWC hired contract crews to perform project maintenance, including weed control via mowing and herbicide application, as well as interplanting. Post-implementation site maintenance has been ongoing at five sites since planting occurred in the winter/spring of 2013 and 2014:

- *Gerbrandt*: knotweed control project (2015-16); maintenance (2015, 2016); interplanting (2016)
- Hatton-Longobardo: maintenance (2015); then bank began to erode significantly, so maintenance work has been abandoned
- *Tyler*: maintenance (2015, 2016); interplanting (2016)
- *Richer*: limited maintenance by landowner
- *McVey*: knotweed control project (2015); ongoing maintenance by landowner

MFWWC did not perform maintenance at the other seven sites because sufficient project maintenance funds were not budgeted into the plant establishment grant proposal, and staff transitions resulted in maintenance gaps across all sites in 2014. Additionally, because former staff didn't follow accepted revegetation methods (e.g., R3), initial planting and/or weed control were in some cases not done as well as they could or should have been. Current MFWWC staff are working with all willing landowners involved in the original project to determine the status of their plantings and if they have further interest in working with MFWWC to maintain their sites.

Maintenance and Reporting Costs:

Maintenance costs have been funded through the OWEB Plant Establishment grant 212-3999-9913. To date, $21,399.08 have been requested. Meyer Memorial Trust is providing matching funds to cover the costs of writing the Post-Implementation Status Report (12 hours @ $28/hr = $336; 17 miles of travel @ $0.535/mi. = $9.10).

Current Conditions and Assessment of Goals:

The original goals of the project were to remove invasive species (primarily Himalayan blackberries, reed canary grass, knotweed, teasel, and others) and replant with native riparian vegetation on 16 acres across 12 private properties. According to the Project Completion Report, those goals were achieved. Since the project completion report was submitted in May 2015, a qualitative assessment of the state of these 12 properties suggests that goals continue to be met on only select properties where post-implementation maintenance has occurred either by MFWWC and its contractors or by the landowners.

- *Gerbrandt (4.46 acres)*: Interplanting and maintenance have occurred at this site which has led to low plant mortality and low recolonization by invasive species in many areas. Invasive have reemerged in some areas of the site, namely thistle, which has been and will continue to be targeted during project maintenance. Interplanting needs to occur where significant gaps in native plantings exist. Overall, this site is doing well and the landowner and renter are eager to continue with the project.
- *Hatton-Longobardo (0.92 acres)*: Project maintenance initially occurred at this site until the creek cut into a significant portion of the bank and riparian plantings. Because of that, project maintenance has been stopped at this site. We intend to re-contact the landowner and determine if there are any viable areas to continue working.
- *Tyler (0.45 acres)*: Plant mortality and invasive recolonization are both quite low at this site. The landowner credited this to watering, spraying and mowing by himself and the contract crews; he is quite happy with the work that has been done. Many plants have reached free-to-grow status. Continued project maintenance needs to include seeding bare ground with native grasses. The creek is significantly undercutting the bank in a few locations near the neighbor's access road. We will continue to observe that and assist if possible.
- *Richer (1.39 acres)*: Upon contacting Mr. Richer for photo points for this report, he was not happy with the past communication and project follow-through by MFWWC. I visited his property and assured him that we will now be committed to better communication and, as funds are available, will work with him to maintain the project that was started. Currently, blackberry has significantly recolonized the area; despite that, several of the native plantings

have survived, especially pine and fir trees. Previously, Mr. Richer was not interested in herbicide treatments, but is potentially open to limited applications. He used to help maintain the area by mowing the blackberries, but has not recently done that. Despite past issues, he is eager to work with us again.

- *McVey (0.35 acres)*: Knotweed control work was done here, but no other project maintenance besides that by the landowner. We have not recently visited the site but plan to do so soon to determine the current state of the project and what future work needs to be done.
- *Backes (1.59 acres), Ballard (1.14 acres), Davis/Richmond (1.60 acres), Doak (0.9 acres), Edwards (0.44 acres), Holmes (0.63 acres), O'Connor (0.79 acres)*: No project maintenance or interplanting has occurred since the project completion report; MFWWC Project Manager will contact landowners and visit sites to build relationships with landowners, determine site conditions, and identify potential future work.

Overall, the project continues to meet the goals specified in the Grant Agreement on approximately five acres of the originally planted sites where MFWWC continues to contract crews to complete the work.

As stated in the Project Completion Report, effectiveness monitoring of several parameters (canopy closure, riparian condition, bank stability, and water temperature) will be occurring for several years post-project. This monitoring is part of the Willamette Model Watershed Regional Monitoring Framework and Implementation Strategy. The lag time in observing results in these parameters is several years and, therefore, results will be available after monitoring concludes in 2022.

Outreach activities related to project:

Because this project occurred entirely on private property, outreach activities related to the work were limited. A project tour with the MFWWC Board of Directors occurred in summer 2015. Short synopses of the work were also written up in the MFWWC monthly eNews and the Annual Report.

Lessons learned:

- Continued, thorough maintenance of riparian plantings until they achieve free-to-grow state is important.
- It's important to begin a project using an accepted restoration methodology (e.g., R3). This helps ensure project success through adequate pre-project planning during the budgeting state, as well as proper site preparation and planting.
- Follow-through on monitoring efforts is difficult during staff turnovers. Therefore, it is important to clearly outline monitoring plans and pass this knowledge on to subsequent employees. Detailed documentation of photo point locations is extremely helpful.
- Good communication with private landowners is extremely important in building lasting relationships and successful projects.
- We would like to better utilize relationships built with private landowners in the future to use their projects sites as showcases to engage other landowners in restoration work.

Photo Point Monitoring

The following photo points were selected to match those used in the Project Completion Report.

Gerbrandt Site

Spring 2012, Pre-Project

Spring 2012, Pre-Project

Winter 2017, Post-Project

Winter 2017, Post-Project

Some native plants have reached free-to-grow state while maintenance of invasive species and interplanting need to continue.

Hatton-Longobardo Site

Winter 2012, Pre-Project

Summer 2015, Post-Project

Winter 2017, Post-Project

Lost Creek is actively eroding project site.

Tyler Site

Winter 2012, Pre-Project ***Summer 2015, Post-Project***

Winter 2017, Post-Project

Many native plants have reached free-to-grow state.

Richer Site:

Winter 2012, Pre-Project

Summer 2015, Post-Project

Winter 2017, Post-Project

Project site recolonized by Himalayan blackberry; maintenance needs to resume.