

September 15-16, 2009 OWEB Board Meeting Executive Director Update #C-5: Effectiveness Monitoring Program

Background

During the September 2008 Board meeting, a reserve of \$375,000 was established for the continuation of the OWEB Effectiveness Monitoring Program. In the last three years, the program has completed effectiveness monitoring on seven large categories of OWEB restoration project investments. These are:

1. Livestock exclusion riparian work (three seasons of monitoring);
2. Western juniper removal (two years of monitoring);
3. Small dam removal (entering second year of monitoring);
4. Irrigation efficiency improvements (three seasons of monitoring in the Malheur Basin and two seasons in the Deschutes Basin);
5. Conservation Reserve Enhancement Program (CREP) evaluation (two years of monitoring);
6. Intensively Monitored Watersheds (entering third year of monitoring in the John Day Basin); and
7. Wetland restoration (entering first year of monitoring).

Staff also recently initiated work on both riparian planting and fencing projects in the Grande Ronde, Rogue, and South Coast basins to evaluate the status, condition, and performance of projects initiated more than eight years ago. Significant work remains to be done to continue existing program efforts and initiate new projects. Additional effectiveness monitoring efforts include:

1. Small dam removal monitoring continues at Marmot Dam on the Sandy River, Savage Rapids Dam on the Rogue River, and Brownsville Dam on the Calapooia River. Future monitoring will include Gold Ray dam on the Rogue River and Sodom Dam on the Calapooia River.
2. Western juniper removal continues to be a major area of project growth east of the Cascades in central and eastern Oregon, particularly as planning grows associated with climate change and forest and rangeland fires.
3. Intensively Monitored Watersheds (IMWs) continue in the coast range, southern Oregon, and eastern Oregon in the Trask and Hinkle Creek watersheds and Middle Fork John Day Basin funded through OWEB research awards and NOAA funding secured through the Pacific States Marine Fisheries Service. IMW needs remain in central and northeastern Oregon to establish a complete representation of Oregon's regions and ecosystems.
4. Continued wetland restoration effectiveness monitoring to complement the work supported by the Environmental Protection Agency (EPA) grant for the Willamette Valley (described below) as the work expands to other areas within the state where wetland restoration has occurred.

Wetland Project-Willamette Basin

OWEB and its partners, the Department of State Lands (DSL) and The Xerces Society for Invertebrate Conservation (Xerces), are wrapping up the first year of field work for the EPA Wetland Program Development Grant. Xerces, which took the lead on macroinvertebrate and water quality monitoring, completed its sampling at 50 Willamette Valley wetland sites in late May. OWEB hired a contractor who is conducting a rapid assessment and detailed effectiveness monitoring at the same 50 sites and will complete this work by early September. In addition, the contractor is completing pre-implementation monitoring at nine OWEB and DSL sites where restoration and enhancement work will occur in the near future. The project partners will convene in early fall to debrief from the field season, discuss necessary refinements, and develop a plan for data analysis and interpretation from Year 1 monitoring.

In addition to the planned monitoring, the project partners agreed to assist EPA by testing components of a Draft Field Operations Manual that has been developed for use during the 2011 National Wetland Condition Assessment. In September, OWEB and DSL will provide feedback to EPA about the proposed methods.

Other components of the project are progressing on schedule and on time as well. DSL staff completed Phases 1 and 2 of the mitigation-site mapping work, including all sites permitted by DSL between 2000 and mid-2008. Phase 3 of the compensatory wetland mitigation project mapping work focuses on projects implemented between mid-2008 and June 30, 2009 and will be completed by September 15, 2009. OWEB and DSL staff have evaluated DSL's database for mitigation projects and outlined several improvement needs to better track information about wetlands gained and lost through time. Staff are developing specifications for implementation of the database modifications and anticipate work to begin later this fall.

Other Fish Barrier Removal

OWEB staff selected Duck Creek Associates in May 2009 to sample 90 fish barrier removal projects completed in the South Coast basin between 1995 and 1998. The contractor began working with OWEB staff and grantees in early June to acquire location information on all sites and to receive permission from all project landowners to access the projects. The contractor began sampling sites in July and will complete field work by the end of September 2009. Preliminary results show that all fish passage projects are successful at providing passage for the species of concern listed in the application. A final report is scheduled to be released in January 2010.

Riparian Enhancement

OWEB staff selected Demeter Design in May 2009 to sample riparian fencing and planting projects in the South Coast and Grande Ronde basins that were completed between 1995 and 1998. The contractor began working with OWEB staff and grantees in early June to acquire location information on all sites and to receive permission from all landowners to access the projects. The contractor began sampling sites in July and will complete field work by the end of September. OWEB, in coordination with the contractor, developed a Riparian Project Landowner Survey that has been sent to all landowners whose sites are being sampled. This survey will help provide context to the contractor on the level of maintenance the site has received, whether there has been a change in landowner, and whether or not the landowner sees the project as meeting the original objectives. A final report is scheduled to be released in January 2010.

OWEB had a Portland State University intern who worked on the protocols and gathered information about historic projects. He recently developed a draft final report for his Masters Degree in Environmental Management and is expected to graduate this fall. The materials developed during this internship program proved invaluable for OWEB staff in developing the riparian monitoring program.

Staff Contact

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