



In 2010, the Willamette Valley Project (WVP) received a Handshake Partnership award in support of the Dexter Wetland restoration. The goal of the project is to improve the quality of wetland habitat for shorebirds, neotropical migratory birds, and amphibians.

Dexter wetland lies along the shoreline of Dexter Lake. Located in Lane County, Oregon, it is within the city limits of Lowell; a small community located about 22 miles southeast of Eugene. The wetland is degraded as a result of historic land use, disturbance related to the construction of Lookout Point dam, and subsequent dominance of non-native invasive plants.

In 2009, the City of Lowell sought a suitable location for compensatory wetland mitigation. The WVP wetland presented an opportunity for the Corps to partner with the city. In 2010, the Corps and the city signed a Challenge Cost Share agreement to collaborate in the restoration of the 6 acre wetland. The City of Lowell agreed to construct a dike around the wetland and the Corps would allow the city to fulfill its wetland mitigation within the larger wetland.

The dike was designed to withstand and pass flows above the 25-year storm flow using a riser-pipe outlet culvert. The crown elevation of the dike remains constant; however, the



Nearing completion in this photo, the dike is comprised of clay excavated during the construction of the City's nearby housing development.



Riser-pipe outlet culvert.

cross section and height vary with the topography at the site. In the event that the primary outflow is overtopped, a spillway was installed along the embankment. Dike construction was completed in July 2010.

The wetland ranges from very wet to very dry depending on the season; between July and September, the basin is dry. During the fall and winter rainy season, storm water runoff captured by the dike fills the basin quickly.

For at least six months of the year, the wetland stores up to about 6 surface acres of standing water. Knowledge of the distribution patterns of standing water is essential to a successful wetland planting design. Over the first winter of flooding, we observed and documented hydrologic changes.

During early summer the wetland dried down completely. Some invasive species drowned over the months of inundation, others were able to tolerate the flooding. Resilient species that persist are those that will be most challenging to manage (reed canary grass (*Phalaris arundinacea*; tall fescue, *Festuca arundinacea*; teasel, *Dipsacus fullonum*; and non-native blackberries, *Rubus armeniacus*.. We treat persistent invasives through prescribed burning, mowing, hand grubbing, and judicious application of herbicides.

The Handshake Partnership funding was dedicated to purchasing materials used for the construction of a public boardwalk and observation platform at the wetland. The fully accessible boardwalk and footpath from the parking area were completed in October 2011.



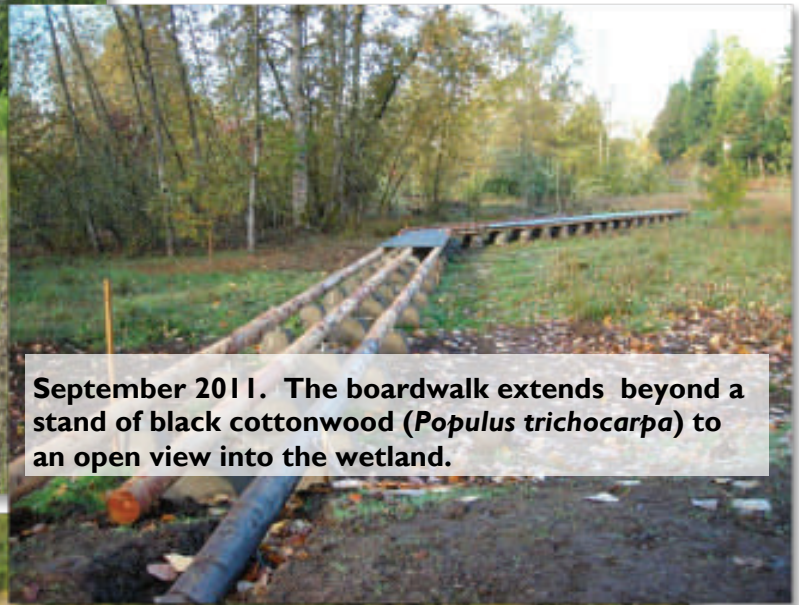
The fully flooded basin in early January 2010.

The boardwalk is designed to minimize maintenance and repair. We selected western juniper for the stringers because it is extremely durable and more decay resistant than western red-cedar. To prevent water damage, pre-cast pier blocks elevate the wood stringers above the surface of standing water.

We explored a number of alternative materials for the tread of the deck and ultimately selected modular panels of aluminum “planks”. These 4 ft. square panels are hard-wearing, textured for safety, stronger than wood, and will not degrade or require replacement for decades.



The location for the boardwalk. August 2011, a month before construction.



September 2011. The boardwalk extends beyond a stand of black cottonwood (*Populus trichocarpa*) to an open view into the wetland.



The completed boardwalk, inviting a casual stroll to the overlook.

Extensive planting of wetland species took place over the fall and early winter of 2011. Over 6,000 plugs of emergent forb species and hundreds of shrubs were planted. In addition, we hand broadcast 10 pounds of seeds. Seed of most Willamette Valley native plant species is not commercially available, therefore, many species are hand collected and cleaned by Corps specialists and local youth crews. A thicket of willows and spirea were planted along the edge of the boardwalk to screen the view of the nearby road.

Although the boardwalk is complete, the WVP and its partners will continue plant and monitor the success of the restoration. Future partners in the project include the local high school to give students a chance to learn about wetland ecosystems, participate in restoration activities, and to provide the artwork for our interpretive displays.



The boardwalk and the basin at full capacity after a major storm event in December 2011. Spanning 215 feet, the low profile boardwalk angles slightly northwest to an octagonal overlook.

Handshake Partnership Program Report - FY 2010 Recipients

1. Name of Corps Project/Lake: Willamette Valley Project, Dexter Lake

2. Handshake Project Name: Dexter Wetland Restoration

3. What has been accomplished? Please provide photographs; before, during, and after!:
See attached narrative

	Total
Handshake Program Funding Amount	\$25,000
Local Corps Office Funds (total expended on labor, materials, contracts, etc.)?	\$29,000
Partner's Contributions (total value of funds, goods, services, volunteer hours, etc.)	
Partners Name	Total Value of Contributions
1 City of Lowell, Oregon	\$33,500
2	\$
3	\$
4	\$
5	\$
6	\$

4. Handshake Program Recipient Feedback

Please take this opportunity to provide feedback on all aspects of the Handshake Program and the Challenge Partnership Agreement authority. Your productive comments are important to the ongoing improvement of the program. Make sure to let us know how the Handshake funds have benefited your efforts to initiate and/or strengthen your partnerships.

A. Comments About Handshake Program: The Handshake Program encourages creativity to work with local partners to help accomplish habitat restoration, recreation and stewardship projects. The ability to carry the funding over for a second year can be essential to meeting the implementation schedule and completion of project work. Further, all options that permit flexibility enable us to cooperate more fully within our partners' potential constraints.

The construction of the boardwalk offers WVP the opportunity to partner with the Lowell schools. We envision local students involved in the production of interpretive signs along the boardwalk. Students will be able to visit and learn about their local wetland and will gain a sense of ownership and participation in the project. For the students, the most exciting part is likely to be experiencing the permanent public display of their artwork at the wetland.

B. Comments About Challenge Partnership Agreement: This has proven both a strong and successful agreement. The City (and its partners in the mitigation related project) have worked closely with Corps specialists meeting regularly and sharing technical knowledge. We continue to work closely with the City of Lowell

C. Recommendations: _____