

Restoring the Willamette Valley

Willamette Wildlife Mitigation Program 2011

Annual Report

Dec. 1, 2010 through Nov. 30, 2011



Oregon Department of Fish and Wildlife



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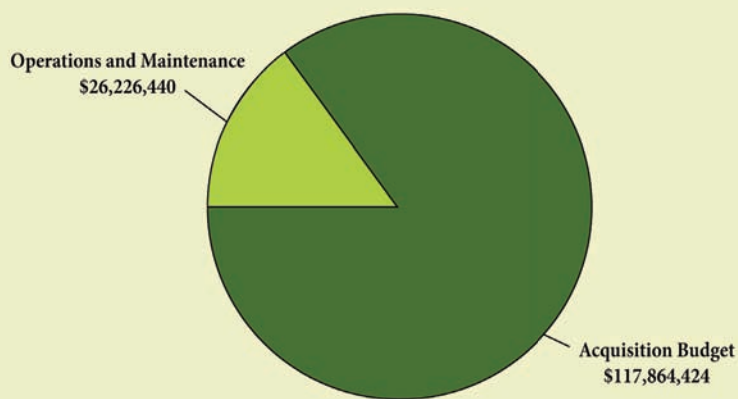
Cover photos: Northern red-legged frog, ODFW photo; Western meadowlark,
Dave Budeau photo; Bull trout, USFWS photo; Black-tailed deer, ODFW photo.

2011 Financial Highlights

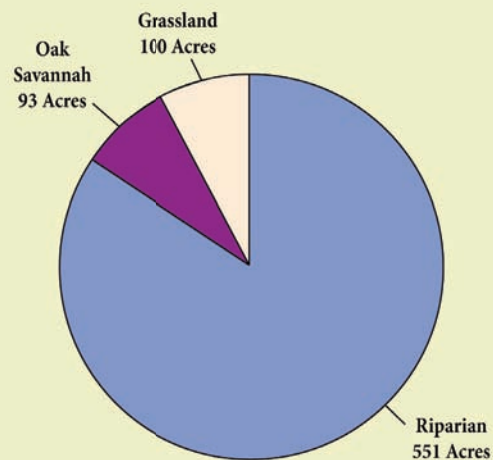
Willamette Wildlife Mitigation Program 2011

Total acquisitions	\$ 1.9 million
Total restoration, operations and maintenance.....	\$560,100
Total acres secured	744
Total acres restored, improved.....	2,000
Number of projects that provide significant habitat benefits to threatened and endangered fish species (dual credit projects)	2

BPA Willamette Valley Wildlife Mitigation 15-Year Program Budget: \$144,090,864



FY 2011 Acres of Key Habitats Acquired: 744



Major Accomplishments 2011

- Started work on submittal of draft project criteria to the Independent Scientific Review Panel
- First year of the Willamette Wildlife Mitigation Program with an official solicitation period requesting acquisition proposals from applicants: Reviewed seven proposals, recommended five of them. Of those five, three projects were completed in 2011.
- Improved coordination efforts with the OWEB Willamette Stewardship Investment Program and the Willamette Biological Opinion Habitat Technical Team funding cycles
- Created an internal review team to provide scientific review and feedback to prioritize potential acquisitions
- Initiated a Wildlife Mitigation Advisory Group to assist in creation and development of project review criteria in a public process. The Confederated Tribes of Grand Ronde, Confederated Tribes of Warm Springs and Confederated Tribes of Siletz Indians participated in these discussions.

Goals for 2012

- Finish the public input process on the project criteria and submit a draft set of review criteria to the Independent Scientific Review Panel by October 2012
- Begin development of a comprehensive application system and database
- Continue closely aligning with other project partners and funding cycles in the Willamette Valley to secure maximum leverage for properties
- Begin development of Operations and Maintenance standards and guidelines for proposed projects
- Create a monitoring program that will encompass enforcement monitoring and baseline data collection on program projects
- Continue to develop new partnerships in areas that lack established funding infrastructure, i.e. land trusts

Message from Program Manager

2011 was a groundbreaking year for The Willamette Wildlife Mitigation Program. Re-formed in December 2010 to address Bonneville Power Administration wildlife habitat mitigation obligations in the Willamette Valley, the program is funded by BPA and managed by the Oregon Department of Fish and Wildlife. Over the next 15 years, it will put more than \$140 million to work for habitat conservation, restoration and acquisition.

In 2011, we selected Laura Tesler as the program biologist. With Laura's help, we identified the first set of projects to recommend to BPA for funding under the 2010 Agreement, administered the BPA Willamette maintenance budget, set up a long-term investment fund, and established the Willamette Mitigation Advisory Group. Made up of tribes, agencies and other conservation organizations, the group worked with ODFW staff to develop project selection criteria and will help the department recommend projects to BPA for funding in the future. All projects are aligned with the goals of the Oregon Conservation Strategy and the Oregon Plan for Salmon and Watersheds.

On the project side, we evaluated and approved one important land acquisition and two conservation easements as well as allocating funds from the project maintenance budget, which supports multi-year conservation efforts. All of these projects will help restore and preserve the fish and wildlife species and habitats that make the Willamette Valley a unique and valuable landscape.

Chris Wheaton
Oregon Department of Fish
and Wildlife Northwest Region Manager

Acquisitions and Conservation Easements pave the way for long-term habitat protection

One land acquisition was made and two conservation easements purchased in important habitat areas. All three of these projects meet the habitat restoration goals of the Oregon Conservation Strategy and the Willamette Biological Opinions.



The South Eugene Meadows acquisition conserves prairie, oak woodland, oak savanna and riparian streams.
City of Eugene photo.

Acquisition conserves rare native plants, provides recreation

The City of Eugene acquired a prairie, savanna and mixed oak woodland property that will conserve rare native plant communities, protect headwater streams and add recreational and habitat connections to Eugene's 2,000-acre Ridgeline Park System, bringing the vision of connecting to the 3,000-acre nationally acclaimed West Eugene Wetlands one step closer. The 193-acre property is located in the south hills, which ring the City of Eugene in Lane County. The property supports ongoing regional efforts in watershed protection, wildlife habitat protection, open space preservation, and recreation to conserve portions of the largest remaining undeveloped oak woodland and oak savanna habitat in the Willamette Valley.

Located in the West Eugene Conservation Opportunity Area as identified in the Oregon Conservation Strategy, the South Eugene Meadows acquisition provides intact priority oak woodlands and native prairie habitats and may be suitable for future restoration for Fender's blue butterfly and Kincaid's lupine. Project sponsors are the City of Eugene, the Oregon Watershed Enhancement Board and Bonneville Power Administration.

Conservation easements protect riverfront property to benefit fish and frogs

In 2011, the Greenbelt Land Trust completed the acquisition of three conservation easements on 370 acres of Willamette River frontage property in Benton County that include Harkens Lake, a significant historic side-channel of the Willamette River, which provides critical habitat for native fish populations. The acquisition will benefit a number of species including chinook salmon, cutthroat trout, Oregon chub, Pacific lamprey, western pond turtle and the red-legged frog.



The Harkens Lake acquisition protects critical habitat for native fish populations. *GLT photo.*



Western pond turtle. *ODFW photo.*

Conservation easements are important conservation tools that allow for traditional uses of the land, such as farming, as long as important wildlife habitat is permanently protected. They also allow conversion of farmland, in this case for floodplain habitat restoration. In the Willamette Valley, where 96 percent of the land is privately owned, conservation easements are particularly effective. Other easements in the area are pending.

The conservation easement purchases were made possible through a partnership with landowners Gary, Jenny and Steve Horning and Mark and Sherie Adams, Bill Pitcher, the Greenbelt Land Trust, the Oregon Department of Fish and Wildlife and funding from the Oregon Watershed Enhancement Board, the Bonneville Power Administration and the Meyer Memorial Trust.

Multi-year conservation efforts advanced through maintenance fund



Kincaid's lupine.
Institute for Applied Ecology photo.

Prairie species come home as old military base is restored to native prairie

The Institute for Applied Ecology restored more than a hundred acres of native prairie at Camp Adair near Corvallis during 2011. Deactivated by the military in 1946, Camp Adair is in use today by the Army National Guard as a training facility. With most of the installation's use confined to rifle ranges, there is plenty of native prairie and wetlands that can be restored for the benefit of wildlife.



Fender's blue butterfly.
USFWS photo.

Camp Adair is located at the intersection of the Coast Range foothills and prairie floodplains, and is adjacent to the existing E.E. Wilson Wildlife Area operated by ODFW. It supports a number of key native habitats and species. One of the most important is Kincaid's lupine, which was federally listed as threatened in 2000. The lupine is host plant to the endangered Fender's blue butterfly, which is now found only in isolated prairies in the Willamette Valley.

To revitalize the prairie, invasive plants and shrubs were removed by mowing and controlled burning, and the area was reseeded with native plants.

"Prairie plant and animal species are dependent on open habitat," said Rachel Schwindt, IAE project manager. "The site was mowed to control nonnative grasses and remove the Douglas-fir and English hawthorn trees that had encroached."

After mowing, the prairie was seeded with native plant species to increase biological diversity and support the grassland birds, such as Western meadowlark and grasshopper sparrow that once thrived in the area.

To support long-term recovery of the Fender's blue butterfly and Kincaid's lupine, IAE staff worked with Berry Botanic Garden to collect plant seeds from the project area for a genetic repository of threatened and endangered plant species.

IAE and the Oregon Military Department will continue to work with partners, bringing back a landscape that is itself rare today.

Floodplain study helps prioritize restoration work

The Willamette Floodplain Restoration Study was designed to identify floodplain and stream restoration opportunities in the Middle and Coast Fork rivers of the Willamette Basin with the goal of reducing flood damage while restoring habitat for fish and wildlife. The work is a partnership between the U.S. Army Corps of Engineers, The Nature Conservancy, The Willamette Partnership, and the Middle Fork and Coast Fork Watershed Councils.



Willamette Confluence restoration projects will benefit salmon, northern red-legged frogs, bull trout and many other species. © Rick McEwan, *The Nature Conservancy*.

Eleven projects were selected out of more than 40 considered and partial engineering designs were developed. Three of the 11 projects designs were identified as ready to go and are in development with the landowners. One project was tabled due to current lack of landowner interest, and the remaining seven projects were updated based on technical and field evaluations. Once the study is completed, those projects should move forward to implementation.

Four of the final projects are located on Willamette Confluence property, which TNC purchased in November 2010 with major funding from BPA. The site at the confluence of the Middle and Coast Forks of the Willamette River includes 14 remnant gravel extraction ponds of varying shapes and sizes in the historic floodplain and numerous berms and levees that have disconnected the river and floodplain. Due to its position at the confluence of the two tributaries,

and the extensive historic floodplain, the property provides an excellent opportunity to restore channel and floodplain processes and to develop off-channel and side-channel habitat critical to fish and wildlife. Restoration activities will include removing portions or all of concrete revetments to reconnect the river to floodplain; excavating and shaping side channels to create off-channel habitat; contouring pond banks to decrease uniformity and increase habitat complexity; placing large wood in the channel to create scour at side channel openings and increase habitat; and restoring native riparian vegetation. These activities should result in a significant increase in floodplain and side channel habitat for fish and wildlife.

Conserving species and habitats on working landscapes

Greenbelt Land Trust used maintenance funds to protect native habitats and working lands on the conservation easements it holds.



Thinning trees at Lone Star Ranch allows remaining oak trees to develop and prairie plant populations to increase. *GLT photo.*

On the Lonestar Ranch, a 199-acre site in Philomath that contains endangered upland prairie and oak woodland habitat and operates as a working cattle ranch, six acres of overgrown Oregon white oaks were thinned. Trees that will help the area develop into an open oak savanna were retained to benefit acorn woodpeckers, western gray squirrels and chipping sparrows.

On the 200-acre Little Willamette property between Corvallis and Albany that is being managed for migratory birds, a 12-acre agricultural field was seeded to native grasses and 495 trees were planted with the help of seventh graders from Calapooia Middle School in Albany.

Nine hundred Oregon white oaks were planted at the Willamette Bluffs property, 120 acres in Polk County overlooking the Willamette River. This enlarges an upland forest on the top of a bluff that is important to black-tailed deer, osprey, white-breasted nuthatches, and western gray squirrel. Invasive reed canary grass located in wetland areas was treated intensively on the property to restore habitat for Virginia rails, waterfowl, shorebirds and American beavers.



Calapooia Middle School students helped plant trees at the Little Willamette property. *GLT photo.*

Restoring floodplains, savannas and prairies at Mt. Pisgah

The Friends of Buford Park & Mt. Pisgah continued their innovative work in the Mt. Pisgah area, which includes Lane County's 2,300-acre Howard Buford Recreation Area, the Nature Conservancy's 1,270-acre Willamette Confluence Project, and 1,000 acres of other public lands. Together, these diverse uplands and floodplains are home to hundreds of species of native plants, birds, and mammals, as well as numerous reptile and amphibian species.



Native riverbank lupine and Sitka brome grow in the restored South Meadow. *Chris Orsinger photo.*



Water now flows into a side channel in the South Meadow, providing refuge for fish.
Chris Orsinger photo.

In 2011, volunteers worked with staff across the land ownerships to restore rare habitats, including wetland prairie, upland prairie, oak savanna, oak woodland and floodplain riparian forest.

English ivy, thistles and blackberry were removed from both the 150-acre South Meadow and on a 44-acre floodplain parcel. Firebreaks were mowed, owl nest boxes cleaned, and more than four acres were seeded to increase native plants in the understory of the reforestation area.

In collaboration with Oregon

State Parks, blackberry and English ivy were removed and natives were planted on Glass Bar Island Greenway Access.

To improve and maintain prairie and savanna habitat, the Friends removed blackberry, Scotch broom and other invasives from the 265-acre Meadowlark Prairie site, as well as mowing fire breaks to prepare for a 30-acre controlled burn, which the Oregon Department of Forestry implemented in September 2011. After the burn, a seed mix of native grasses and forbs were sowed.

On Buford Park, a new 55-acre “Spring Box” oak savanna restoration project was developed in collaboration with Lane County. Funding has been secured from USFWS and OWEB for this project in 2012 through 2013.

The Friends of Buford Park worked with The Nature Conservancy on the Willamette Confluence Project by controlling invasives in oak savanna habitat and propagating native seed. They also provided technical input on the draft management plan for this new conservation site. The draft management plan envisions reconnecting the river to numerous old gravel ponds that are located within the river’s historic floodplain, as well as enhancing rare oak savanna and woodland habitats over the next 10 to 15 years. The efforts will benefit more than 30 species of at-risk fish and wildlife, including salmon, northern red-legged frogs and bull trout.

Chub and chinook rebound in restored areas of McKenzie River

The McKenzie River Trust continued productive stewardship activities on its largest property, Green Island. Located near the confluence of the McKenzie and the Willamette rivers about two miles west of Coburg, Green Island contains some of the most intact fish and wildlife habitat remaining in the Valley. It is home to spring chinook salmon, Oregon chub, western pond turtles and red-legged frogs.



The endangered Oregon chub is found only in the Willamette Valley. *McKenzie River Trust photo.*

During 2011, staff worked with Lane Council of Governments and other partners to update the island's management plan, which provides a detailed summary of the site, conservation actions that have been taken and opportunities for future restoration actions. On-the-ground restoration included more than 5,300 native trees and shrubs planted on 17 acres of former agriculture land. Monitoring and mapping were completed on the Coburg Aggregates Reclamation within the historic McKenzie River channel. Spring chinook juveniles were found in surveys of area ponds and side channels, underscoring the importance of the site. In planning for future restoration, gravel materials on the site were identified and quantified.



Four of seven known McKenzie basin Oregon chub populations reside on properties managed by the Trust. *ODFW photo.*

“The Trust has been an incredible partner in the recovery of Oregon chub,” Said Brian Bangs, ODFW Native Fish Investigations biologist. “Four of the seven known McKenzie basin Oregon chub populations reside on properties managed by the Trust, which accounts for roughly half of the estimated total of fish in that basin. “

The Trust also completed a Baseline Documentation Report and draft Farm Management Plan for its Berggren Watershed Conservation Area and Big Island complex, which includes intact and dynamic side channels, critical to the survival of many fish species. More than 30 acres of invasive plants were treated on the site and replanted with native species. Monitoring showed the number of Oregon chub in the Complex area’s ponds continued to increase, and the number of young spring chinook juveniles inventoried also increased from 2010.

All of these actions support the Trust’s vision of intact, functioning ecosystems that provide clean water, abundant fish and wildlife and productive natural landscapes throughout western Oregon.

Restoring wetlands in a wildlife area for birds and butterflies

E.E. Wilson Wildlife Area in Monmouth is home to Kincaid’s lupine and Nelson’s checkermallow, grassland plants federally listed as threatened, as well as the Fender’s blue butterfly, which was listed as endangered in 2000. In an effort to reestablish and expand existing wetlands and wet prairies to benefit these species and a host of other grassland birds, pollinators and mammals, staff is working on two restoration projects, totaling about 80 acres.



Restored grassland in the spring of 2012.

“Our biggest problem is the deeply entrenched invasive weeds,” said Kyle Martin, wildlife area manager. “We are finally making some progress, but Scotch broom and teasel have long seed lives. It has taken us several years to make headway, but last year, we were able to seed about half of the area.”

Using a new 12-foot no-till drill purchased with BPA funds, a six-species blend of native grasses was seeded. Three weeks after drilling, plant growth was occurring. The remaining acres will be seeded this fall.

“It’s very time-consuming process,” said Martin, “but when we get ahead of the invasives, we will have habitat for a number of our rare Willamette Valley plant and animal species. We may even have enough habitat for streaked horn larks.”

Work was performed by E.E. Wilson Wildlife Management Area staff with the help of the Institute for Applied Ecology.



No-till seed drill was used to seed native grasses.

About BPA and Willamette Wildlife Mitigation Program

The Bonneville Power Administration funding helps fulfill an agreement that the State of Oregon made in 2010 to protect Willamette Basin wildlife habitat. The agreement dedicates stable funding from electric ratepayers for 15 years to safeguard Willamette habitat for native species, supporting state efforts to protect the Willamette Basin and fulfilling BPA’s responsibility under the Northwest Power Act to mitigate the impacts of federal flood control and hydropower dams. Find more information in the Wildlife Habitat section of ODFW’s website, http://www.dfw.state.or.us/wildlife/willamette_wmp/index.asp

Financials

On Oct. 22, 2010 Oregon Governor Theodore Kulongoski, BPA Administrator Steven Wright, and Oregon Department of Fish and Wildlife Director Roy Elicker signed the Willamette River Basin Memorandum of Agreement Regarding Wildlife Habitat Protection and Enhancement between the State of Oregon and the Bonneville Power Administration. This agreement permanently settles BPA's wildlife mitigation responsibilities for wildlife habitat losses caused by the construction of the Willamette Valley project, as required under the Northwest Power Act of 1980 (16 U.S.C. § 839-839h, Dec. 5, 1980) by providing funding for the protection and restoration of wildlife habitat in the Willamette Valley.

BPA has agreed to fund the protection of habitat through the purchase of lands or conservation easements for the state or for third parties over the term of the Memorandum of Agreement, which runs through 2025. Funding for these purchases will start at \$2.5 million per year in the first three years, increasing to \$8 million per year in 2014 until 2025. Inflation will be added at 2.5% (compounded), starting in 2015. The total funding for acquisitions will be \$117,864,424 through 2025. These funds will be used to pay for the purchase of real property interest and the restoration of habitat that has been degraded. BPA will administer these funds and will purchase properties or easements based on recommendations from ODFW. ODFW established a trust account to pay for long term monitoring and maintenance of these properties after 2025

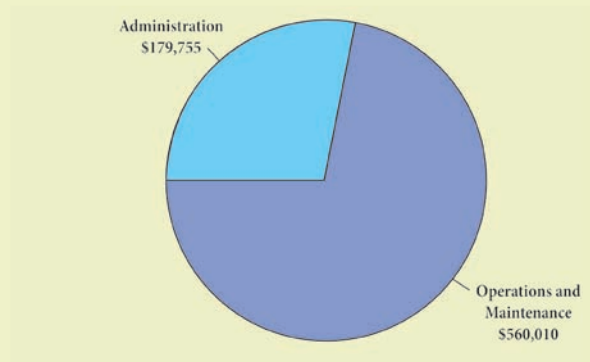
BPA also agreed to fund ODFW's implementation of the settlement including O&M for Willamette mitigation sites purchased with BPA funding prior to 2010. The total amount of this fund was \$26,226,440 (including inflation). The fund was to be dispersed in the following increments: for 2010-2013 the dispersal would be \$837,000 and in 2014 the dispersal would be \$1.1 million, and in 2014 the dispersal would be \$1.7 million per annum until 2025. These funds are used to pay ODFW keep personnel and also a large amount of these funds are directly used to fund ongoing restoration efforts on past and present acquisitions made under the Willamette Wildlife Mitigation program at ODFW.

In return for this commitment, ODFW has agreed to lead a collaborative process to develop criteria to evaluate potential habitat acquisitions. ODFW has been working with a team of conservation organizations, Tribes, local governments, and other interested parties and has produced a draft of these criteria, which will be presented to the Independent Scientific Review Panel (ISRP) for review, as required under the Northwest Power Act as amended in 1996 (839b(h)(10)(D)(iv)). Proposals will be evaluated and prioritized using the criteria, and BPA will then fund protection using the prioritized list to guide expenditures until that year's capital budget is

expended. The state will certify projects to ensure that they represent appropriate mitigation for habitat losses. Total lands protected, including all projects prior to the MOA, will meet or exceed a minimum of 26,537 acres.

ODFW believes that this program is necessary to successfully compensate the state of Oregon for the losses of wildlife habitat caused by the construction of 13 multi-purpose dams and reservoirs in the Willamette Project. ODFW has engaged the public in developing criteria for selecting the lands to be designated for habitat protection. ODFW will work only with willing sellers and will use a combination of conservation easements and purchases to protect habitat and enable local communities to guide the location of purchases to maximize community support.

2011 Operations and Maintenance Budget: \$739,765
Willamette Wildlife Mitigation Program



2011 Aquisition Budget: \$1,847,500
Willamette Wildlife Mitigation Program

Property	Conservation Easement	Fee Title Acquisition	Cost (\$)	Total Acres
Harkens Lake	300 acres	47 acres	520,500	347
Horseshoe Lake	204 acres		252,000	204
South Eugene Meadows		193 acres	1,075,000	193
Total			1,847,500	744

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Oregon Department of Fish and Wildlife

3406 Cherry Avenue NE

Salem, OR 97303-4924

Phone (503) 947-6000

www.dfw.state.or.us

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