Willamette Wildlife Mitigation Program
Fiscal Year 2023 Annual Report Summary

FY 2023 Fiscal Highlights

Total Program Operations Funding Allocated (7/1/22 – 6/30/23)	$2,154,307
Total Program Operations Funding Spent (by 6/30/2023)	$1,460,040

Conservation Spotlight

In 2017, the species formerly known as western pond turtle (*Emys marmorata*) was recognized and accepted as two separate species, the northwestern pond turtle (*Actinemys marmorata*) and southwestern pond turtle (*Actinemys pallida*).

A group of northwestern pond turtles basking at Muddy Valley Habitat Reserve, ft. a pair of wood ducks.

As of October 3, 2023, the U.S. Fish and Wildlife Service has proposed to list both the northwestern pond turtle and the southwestern pond turtle as threatened species under the Endangered Species Act. The current range of the northwestern pond turtle includes portions of Washington, Oregon, Nevada, and northern and central California, while the southwestern pond turtle is found in areas of central and southern California south into Baja California, Mexico.

Northwestern pond turtles have been observed on 18 WWMP Properties and 9 Legacy Properties. Notably, ODFW and Yamhill Soil and Water Conservation District have organized annual population monitoring events for northwestern pond turtles at Muddy Valley Habitat Reserve since 2021. Through September of 2023, 498 unique northwestern pond turtles have been identified at the site, distributed between 5 different ponds.

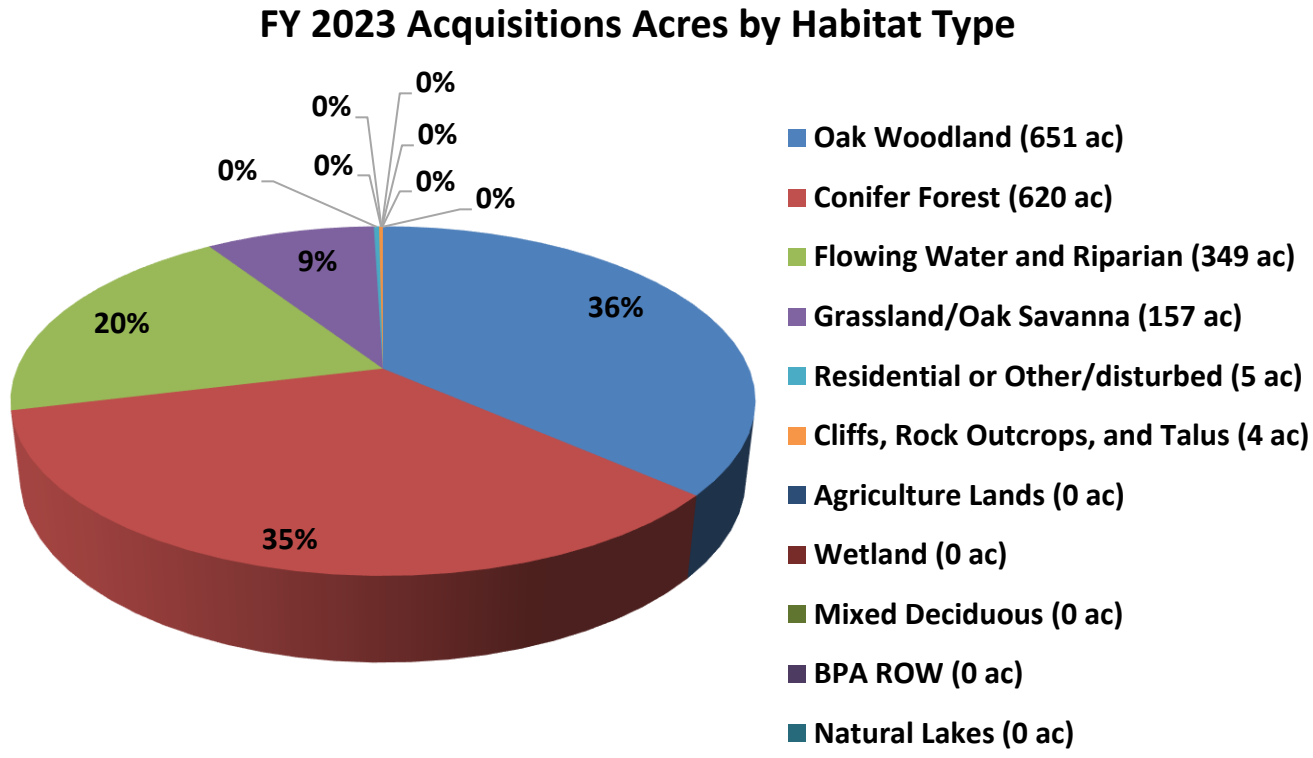
Northwestern pond turtles require sunny logs or other structures for basking, sparsely-vegetated ground nearby for digging nests, and safe movement corridors between aquatic and terrestrial shrubby or forested habitats. Threats to northwestern pond turtle populations include habitat loss, predation by introduced species, and competition with invasive turtles.

FY 2023 Acquisition Project Summary and Costs

(October 1, 2022 – September 30, 2023)

Project	Sponsor	Fee Title Acres	Cost to the WWMP
Cherryhill Ranch	Yamhill Soil and Water Conservation District	175	$1,322,968
CBow Ridge	Greenbelt Land Trust	1,583	$8,360,881
Total		**1,758**	**$9,683,849**

There were four projects (2,109 acres) recommended for FY 2023 funding for a total request of $11,796,089 and an average cost of $5,593 per acre. The Confederated Tribes of Grand Ronde's Chahalpam 4 project withdrew before closing leaving, three projects and a total funding request of $11,117,849 (2,029 acres at an average cost of $5,481/acre).



2023 Program Highlights

- ✓ WWMP hired two new staff after Ann Kreager retired and Chris Vogel accepted a promotional opportunity within ODFW. The overlapping timing of the vacancies allowed the Program to shift some position duties to improve workflow. Owen Cass joined the WWMP in July as the Restoration and Monitoring Biologist. Owen's duties include managing the Gail Achterman Wildlife Area and monitoring program. Justine Brumm joined the WWMP team in December as the South Willamette Project Biologist. Justine leads the restoration and management of the Coyote complex of WWMP properties associated with Fern Ridge Wildlife Area.

- ✓ WWMP and Bonneville Power Administration staff continued coordination on land management plan (LMP) reviews to increase efficiencies and further refine the review process. Two plans were formally acknowledged, Jefferson Farm Conservation Easement and South Yamhill River Floodplain. 13 plans are under review.

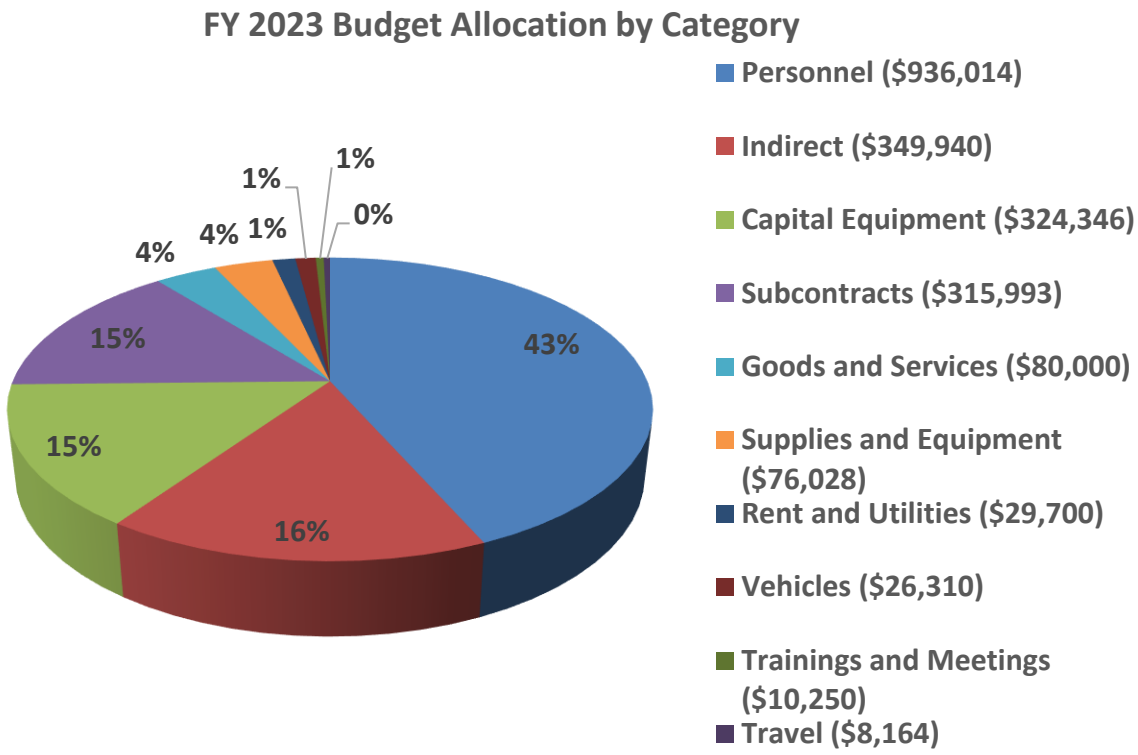
- ✓ WWMP staff worked with BPA staff to conducted 17 site visits to monitor conservation values and easement compliance on WWMP properties during the 2023 field season. 9 sites were repeats from 2017, 8 sites were new acquisitions. Staff collected monitoring data electronically this year which streamlined the data management process and enabled staff to share results quickly with interested landowners.

- ✓ WWMP Staff consolidated property boundaries, habitat polygons, photopoints, and habitat condition data then published to ArcGIS Online (AGOL). This platform allows us to harness the vast ecosystem of GIS data when managing WWMP properties. We built mobile apps to view and collect data in the field during monitoring site visits and when maintaining ODFW held properties. We built web apps to seamlessly share site monitoring information with WWMP site owners and managers.

- ✓ WWMP and BPA staff participated in a field trip of Northwest Power and Conservation Council members to Greenbelt Land Trust's Bald Hill Farm where staff shared program information and responded to questions from this regional audience. ODFW and BPA WWMP staff also presented to Portland State University's Executive Seminar Program as part of a week-long focus on "Restoring the Willamette River: From Mitigation to Stewardship."

- ✓ WWMP staff facilitated a ~ $5 million federal grant application led by Pacific Birds Habitat Joint Venture to restore over 1,800 acres of oak and prairie habitat on 22 WWMP properties, improve ecological and cultural burning capacity, and increase native plant production in the Willamette Valley. Grant award announcements are anticipated in late November 2023.

- ✓ With Friend of Buford Park and Mt. Pisgah, WWMP staff coordinated a de-escalation training for more than 20 participants on how to manage trespass issues. The trainer successfully pivoted from in-person to virtual attendance due to wildfire smoke. Despite this, training evaluations suggested the material was well-received.



Lessons Learned

- ✓ Field staff continue to learn about the timeline and planning process necessary for cultural resources review prior to conducting ground-disturbing projects, including plantings. This year we leveraged ODFW's archaeological staff time to enable a WWMP partner to use unspent ODFW habitat project funds to conduct an oak thinning project before the spending deadline.

- ✓ New staff learned about the seasonality of work and how to balance the many competing demands of the position.

Program Goals for 2024

- ✓ Working with a contractor and ODFW's Application Development Team, WWMP staff anticipate making significant progress on a web-based monitoring and reporting database that will enable staff to track land management plan implementation through improved partner Annual Reporting capabilities, identify programmatic issues, and address data requests such as those that can be used to inform landscape-scale grant applications.

- ✓ Continue to facilitate landscape-scale grant opportunities for WWMP properties.

- ✓ Further improve the Land Management Plan writing and review process by providing guidance for Forest Management Plans and for updating expired plans.

- ✓ Continue to refine the Monitoring Program using drone imagery and ground-level data

collection that can be used to generate site-specific and program-level reports.

- ✓ As the acquisition phase of the WWMP winds down, look for opportunities to assist other habitat protection efforts.

ODFW Project Highlights

Palensky Wildlife Area (PWA)

Significant progress was made towards improving and increasing available turtle nesting areas at PWA. Staff cut back vegetation that was encroaching and shading out known nesting areas. In addition, ten nesting mounds were constructed to increase the amount of habitat on the property suitable for turtle nesting. Turtles have already been observed using the new habitat.

Turtle nesting material is added and shaped at Palensky Wildlife Area.

Native plants (Wapato in foreground and Smartweed spp. in background) reestablish following chemical treatment of Ludwigia hexapetala at Palensky Wildlife Area.

As part of the multi-year contract with Ash Creek Forest Management, two chemical treatments of water primrose (*Ludwigia hexapetala*) were completed. The treatments from 2022 and 2023 have kept the plant at bay, but continued treatments and monitoring are crucial.

WWMP staff continued working with CREST, ODFW Conservation staff, and Oregon Department of Transportation staff to advance the U.S. Highway 30 amphibian underpass project. Partial funding has been secured and we are hopeful the project will go out to bid later this fall and that construction could begin in spring of 2024.

The acquisition of an excavator and cutter head allowed staff to make great progress combatting Himalayan blackberry and opening up habitat that was previously impenetrable. It also greatly improved the efficiency of access road maintenance.

WWMP staff clear Himalayan blackberry patches with newly acquired excavator.

Efforts continued with collection of annual demographic data on OCS species with a focus on Northern red-legged frogs (*Rana aurora*), Northwestern pond turtles (*Actinemys marmorata*) and Western painted turtles (*Chrysemys picta*). Fish surveys were conducted again at PWA by the ODFW fish survey staff.

At **Flight's End**, staff continued enhancing habitat by managing invasive plant species, adding brush piles for habitat complexity, and maintaining the water control structure. A ramp structure was built and added onto the dock and gangway structures that were installed last year. We now feel confident that the public can safely access this property by water. The interpretive sign project is progressing and will likely be ready to print and install in 2024.

A prescribed burn is successfully implemented at Coyote Creek South. Photo by Paul Gordon, City of Eugene.

Fern Ridge Wildlife Area (FRWA)

After a land use agreement was submitted and executed with BPA, a prescribed burn was successfully implemented at the **Coyote Creek South** unit of FRWA in September 2022 as part of the long-term maintenance and restoration of the site. This could not have been done without the collaboration and efforts of partners including Long Tom Watershed Council, Ecostudies Institute, Oregon Department of Forestry, and the Rivers to Ridges Partnership. Funding for execution of the burn was provided through an Oregon Watershed Enhancement Board (OWEB) grant. The same OWEB grant, secured and managed by the Long Tom Watershed Council, in combination with WWMP operation and maintenance funds and North American Wetlands Conservation Act (NAWCA) grant funds received by Ducks Unlimited all contributed towards the conversion of this former active ryegrass field to a restored vernal pool-wet prairie system.

Additional spot spray and mowing treatments have been conducted during Summer and Fall of 2023 to manage isolated patches of nonnative weeds. Weed monitoring and management efforts will continue in future years to prevent establishment, and it is anticipated that future prescribed burns will be implemented to maintain vegetation structure and wetland function.

A restoration seed mix is planted across the eastern 80 acres at Coyote Creek Northeast.

Coyote Creek Northeast is in active restoration during the months of August-October 2023. The process to get to this point has included finalizing designs, navigating permits, submitting budget details through ODFW's Procurement Information Exchange system, soliciting bids from contractors and awarding the contract, and the beginning of construction. The final vision for the property is a functioning seasonal wetland and 190-acre mosaic of wet prairie, upland, and native grassland habitats. Two berms no taller than 2 feet are being constructed to capture diffuse runoff and slow the movement of water across the property. Expected results upon restoration include increased efficiency of groundwater recharge, enhanced water quality, and improved habitat for wildlife.

These efforts are funded through a combination of WWMP operation and maintenance funds and outside grant funds, including a NAWCA grant received by Ducks Unlimited, and an OWEB grant received by Long Tom Watershed Council. Next steps include seeding the 190-acre site with a restoration seed mix purchased and prepared by Long Tom Watershed Council with OWEB grant funds.

Streaked horned lark (*Eremophila alpestris strigata*) surveys were conducted again this year, with most effort focused on surveys at Coyote Creek Northeast where more suitable nesting habitat is found, and more birds have been detected. With restoration seeding occurring across the site, discussion is being had around how best to manage vegetation and maintain suitable habitat for larks within the larger restoration plan.

WWMP staff has continued work to stabilize and maintain conditions at the **Coyote Creek South III** property. These activities include debris removal, acquiring a cultural resources survey on the property, cutting blackberry encroaching on fence lines and access roads, planning the replacement of the property's gate, and starting a land management plan.

A small ~4-acre brush fire was ignited at Coyote Creek South III during mowing and haying activities in July, 2023. Response to the incident was swift and minimal damage was done. As of October 2023, the burn area was stabilized, with impacted Oregon ash trees resprouting and ground cover having germinated across the area.

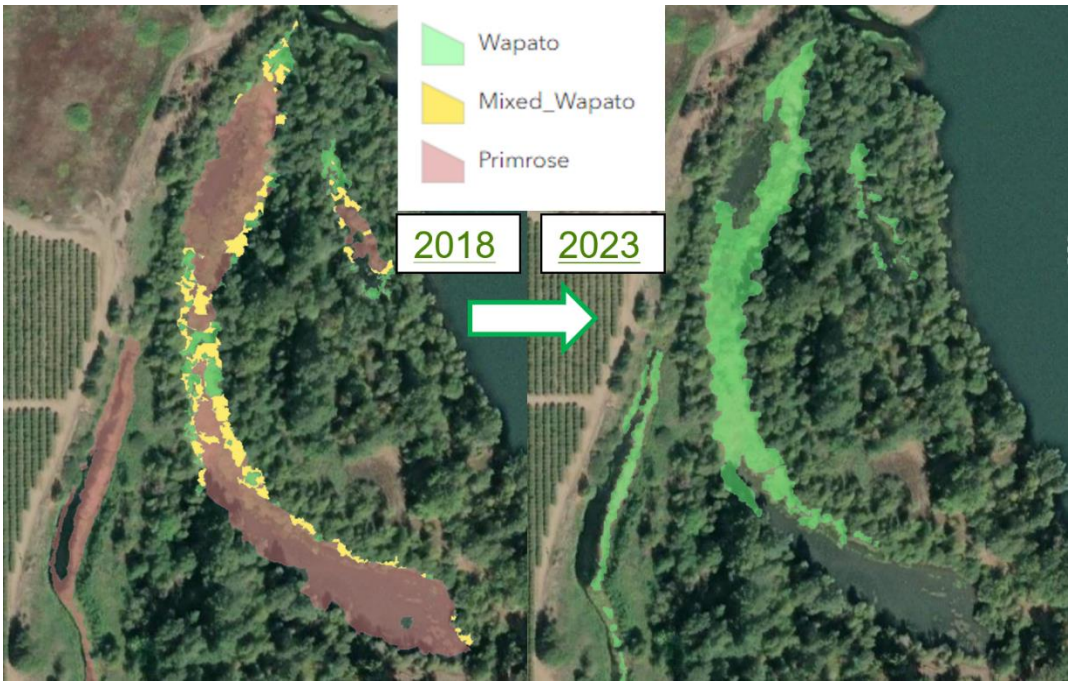
Gail Achterman Wildlife Area (GAWA).

This year we welcomed 8 volunteers from the Polk County Birders to perform post-restoration surveys of the Island. The group visited the site 7 times and added 17 new species to the bird list for this site, including 2 Oregon Conservation Strategy Species: purple martin and chipping sparrow. Additionally, we confirmed nesting activity by Bald Eagles, Red Tailed Hawk, and Hairy Woodpecker.

This was the 5th year of riparian forest restoration planting funded through the Focused Investment Partnership grant. Over 70 acres of floodplain forest is planted and has entered the maintenance phase. This grant will continue to fund maintenance through 2025. ODFW staff utilized QuickCapture to perform a survival study of individual plants. 4,174 plants were sampled. Average survival was over 70%, which amounts to a live plant every 4.3 feet. By collecting data in ArcGIS, we increased transparency and the ability to verify the data.

Wapato tuber ready to be out planted in off-channel habitat.

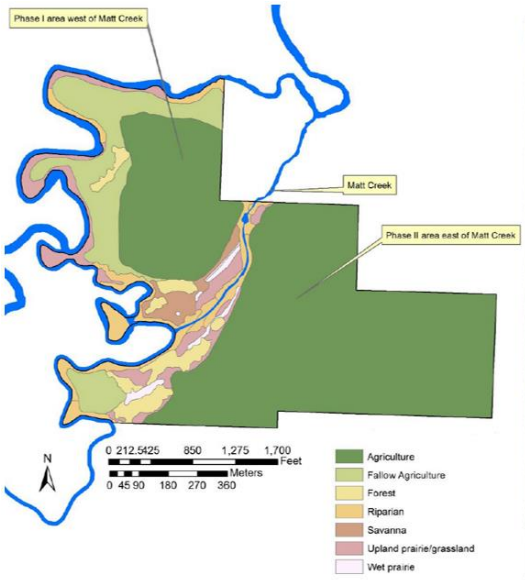
This was also the 5th year of off-channel habitat restoration through the treatment of Ludwigia. Aerial drone imagery was utilized to map Ludwigia and Wapato. Ludwigia coverage decreased from 6 acres in 2018 to “undetectable by air” in 2023. Wapato coverage increased from less than an acre in 2018 to 4 acres in 2023. ODFW staff performed an on-ground survey for invasive aquatic species using QuickCapture. We mapped 6 occurances of yellow floating heart and the sparse Ludwigia. This data was handed over to our contractor, Integrated Resource Management, who used the map to efficiently perform treatments.



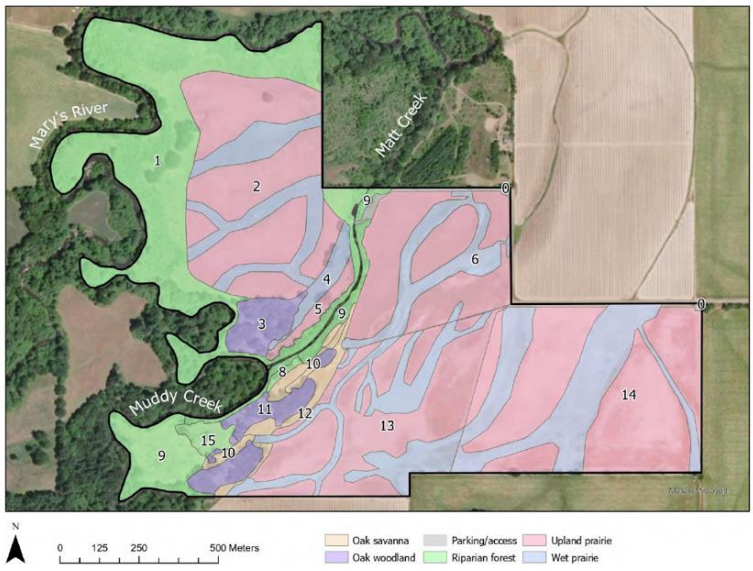
The fruits of our labor were realized during a collaborative harvest of Wapato with staff from The Confederated Tribes of Grand Ronde, ODFW, The City of Salem, and the Willamette Riverkeeper. This harvest and propagation of Wapato, and traditional plants in general, is a key goal in the GAWA LMP and FIP Grants. Now the tubers thriving at GAWA can be used as propagation material for other WWMP properties such as Minto Island Conservation Area, Chahalpam, Chankawan, and more.

In the fall of 2022 at **Herbert Farm and Natural Area (HFNA)** ODFW mowed the restoration plantings and seeded 35 acres of native grasses. In the Spring spot treatments of invasive plants were performed and Streaked Horned Lark was monitored. A nesting pair was observed in one of the swales built by USFWS.

2023 marks the completion of the Phase II restoration at HFNA and transition to long term maintenance of this site. 173 acres of agriculture was restored to 93 acres of upland prairie, 44 acres of wet prairie, and 36 acres of riparian forest. Existing habitats were treated to improve function and resilience. ODFW is working with the City of Corvallis and Institute for Applied Ecology to develop an updated 10-year LMP to prescribe maintenance of this site.



HFNA 2012 Baseline Conditions



HFNA 2023 Current Conditions