



# R & E Grant Application 05-07 Biennium

Project #:  
05-151

## *Angling and Fisheries Enhancement in NWWD*

### ***Project Information***

---

**R&E Project Request:** \$23,100.00  
**Match Funding:** \$50,000.00  
**Total Project:** \$73,100.00  
**Start Date:** 1/15/2007  
**End Date:** 6/30/2007  
**Project Email:** tom.murtagh@state.or.us  
**Project Biennium:** 05-07 Biennium  
**Organization:** ODFW - North Willamette Watershed

### ***Applicant Information***

---

**Name:** Tom Murtagh  
**Address:** ODFW - 17330 SE Evelyn St  
Clackamas, OR 97015  
**Telephone:** 971-673-6021  
**Fax:** 971-673-6074  
**Email:** tom.murtagh@state.or.us

### ***Past Recommended or Completed Projects***

---

This applicant has no previous projects that match criteria.

### ***Project Summary***

---

This project is NOT part of ODFW's 25 Year Angling Plan.

**Activity Type:** Miscellaneous (Restoration)

**Summary:** The Oregon Department of Fish and Wildlife has created a new Fish Management District within the North Willamette Watershed District (NWWD), referred to as the Coast Range Unit, that covers fish management duties primarily on the west-side of the Willamette basin from the Columbia River south to the upper reaches of the Yamhill River. This new district was established to better manage the fisheries resources, improve angling opportunities and access throughout the NWWD, and to provide better public service in an important area that unfortunately has not received the appropriate level of attention in many years. To achieve these goals the new District, and its staff, will need field equipment to assess fish population status, abundance and fisheries potential, particularly in areas on the west-side of the Willamette River where fish population information is most limiting. The information gathered will significantly improve ODFW's knowledge and understanding of migratory and resident native

fish, and warmwater fish abundance and distribution in the NWWD, and will be useful in both effective fish management and in developing or enhancing angling opportunities.

**Objectives:**

Objectives are: 1) Sample and monitor fish populations in the NWWD to improve understanding of native and warmwater fish species abundance, distribution and population health across the entire District, particularly in the lower Willamette River tributaries, reservoirs and lakes, 2) collect and assess data to effectively manage all fish species, and to develop existing and new angling opportunities consistent with ODFW management goals and objectives and guidelines established in the ESA Recovery Planning process, 3) use data to determine fish population health and distribution to effectively develop additional angler access to District water bodies, 4) use data to enhance knowledge of fish population dynamics and ecology to educate both the general and angling public and elevate public interest in angling, and 5) identify habitat restoration opportunities to improve fish population health and abundance throughout the district.

**Fishery Benefits:**

Sampling fish populations throughout the District is integral to understanding fish species presence, distribution within a watershed and, importantly, population health and productivity. This information can then be used to appropriately manage specific fish populations in a way that can both provide enhanced angling opportunities where feasible while also reducing impacts on fish populations that need additional protection. There is a tremendous opportunity to fish for a wide variety of fish species in the west-side District streams, but at this time information is very limited. In addition, migratory salmonids produced in some east-side tributaries within the district (Molalla, Clackamas, and Sandy) contribute to commercial and sports fisheries outside the basin. The Grant will be used to secure equipment that will have useful application in assessing status and managing fish populations across both the Cascade and Coast Range Units of the NWWD.

**Watershed Benefits:**

The project will evaluate the abundance, distribution and population health of native and warmwater fish species in both the east and west-side District units of the NWWD. Equipment needed includes water quality measuring devices, and fish sampling gear needed to compare fish population status with water quality and habitat limiting factors in all major watersheds in the NWWD. These assessments will benefit the watershed by improving ODFW's understanding of habitat quality and quantity and how these factors affect fish abundance and distribution, allowing biologists to more efficiently target priority areas in specific watersheds.

**Current Situation:**

The project site includes the entire North Willamette Watershed District, with particular emphasis on water bodies on the west-side of the Willamette valley. This is a large District area serving the greatest overall population base in Oregon, and host to some of the most robust migratory fish runs and warmwater angling opportunities in the state. However, fish population

information is limiting in several areas in the district, primarily in the long, low-elevation meandering reaches of the lower Tualatin and Yamhill rivers and their respective confluence reaches with the Willamette River. There are literally miles of warmwater angling opportunities in these systems but access is not well developed and fish population distribution is poorly defined. Warmwater fish population dynamics in several valley floor ponds and lakes is also not well understood. This lack of knowledge on fish population status, abundance and distribution effectively precludes ODFW from promoting and managing additional high quality angling opportunities, both for experienced bass anglers and entry level youth anglers as well. In addition to warmwater fish management, more information is needed to better understand migratory salmonid use of west-side streams like the Yamhill and Tualatin river basins.

<b>Alternatives:</b>	No good alternative is currently available that will provide the new Coast Range and Cascade Range District with the equipment needed to best manage fish, monitor fish population status, identify potential habitat restoration projects, and develop additional angler opportunities.
<b>Designer:</b>	Both the East and West-side District Fish Biologists, with the assistance of staff and participating angler clubs and groups will contribute to project design and implementation.
<b>Methods:</b>	Mark-Recapture and Pass-Removal techniques will be implemented to assess population abundance and species density distribution in specific basins. Snorkel surveys will be used to better define fish population distribution within certain basins. Length-Weight frequencies will be taken to assess population health and productivity. Scale analysis will be used to identify age-classes and confirm life history status of certain fish species. Angler access sites will be identified and developed based on land-use, accessibility and availability of cooperative funding sources through the Counties, State Parks, State Marine Board, and others
<b>Inspector:</b>	NWWD District Fish Biologists will monitor the ongoing and completed project(s) with cooperation and input from angler clubs, watershed councils and other groups engaged and overseen by ODFW.
<b>Funding Elements:</b>	The R+E funds will be used exclusively for purchasing equipment needed to complete the tasks and projects described above. Assistance will be solicited from volunteers from a variety of angler groups, watershed councils and other volunteer type organizations.
<b>Partners:</b>	<p>Yes</p> <p>Though the equipment will be purchased specifically by ODFW, other groups and volunteers will be used where possible to both improve data collecting and to build stronger cooperative relationships with a long-term vision of increasing fish and wildlife resource awareness in a climate of</p>

high growth and demographic change. Partners include Northwest Steelheaders (all Regional chapters), Oregon Bass and Panfish Club, Native Fish Society, and local watershed councils. These groups will provide volunteer and technical assistance with implementing a variety of angling and habitat restoration opportunities.

**Existing Plan:** Yes

It is the mission of ODFW to preserve and protect fish and wildlife resources for present and future generations. As such, it is ODFW's mandate to effectively manage the fish and wildlife resources under its purview. To do this knowledge and information of Oregon's varied fish and wildlife populations is essential to good stewardship of these resources. Therefore, equipment will be needed to collect the information necessary to meet the guiding principles of the agency.

**Affected Contacted:** Yes

**Affected Supportive:** Yes

**Affected Comments:** The Oregon Bass and Panfish Club has been contacted and is very enthused with the possibilities that the equipment once secured will provide the ODFW District to better understand and manage the warmwater fish resources in this area. The Sandy Chapter of NW Steelheaders is supportive of our efforts to obtain equipment that will assist in better managing fishery resources in the area. The Oregon Wildlife Heritage Foundation also supports our effort to obtain equipment that will assist the District in monitoring projects that are supported by the Foundation as well as other funding organizations.

### ***Project Schedule/Participants/Funding***

This project has no Schedule/Participants/Funding.

**Affected Species:**

Chinook Salmon  
Chum Salmon  
Coho Salmon  
Rainbow Trout  
Steelhead  
Warmwater

### ***Project Permits***

Name	Issued By	Secured?	Date Secured	Date Expected
NOAA Fisheries 4(d) sampling permit	NOAA	No	1/1/0001	1/1/2007

### ***Project Monitoring***

Organization	Address	Activity	Frequency
Oregon Department of Fish and Wildlife Project #: 05-151 Angling and Fisheries Enhancement in NWWD	17330 SE Evelyn Clackamas, OR 97015	Fish population monitoring across both the new "West-side" District and the existing "East-side" District will be implemented during all four seasons to better understand fish population dynamics, distribution and overall population health to improve fisheries management and develop angling opportunities for all native and warmwater fish populations.	Continuously and as needed to gather the appropriate biological information

### ***Project Maintenance***

Organization	Address	Activity	Frequency
Oregon Department of Fish and Wildlife	17330 SE Evelyn St Clackamas, OR 97015	Fish population monitoring and assessment, angling opportunity development, angler access enhancements, education.	All year and as needed

### ***Project Match Funding***

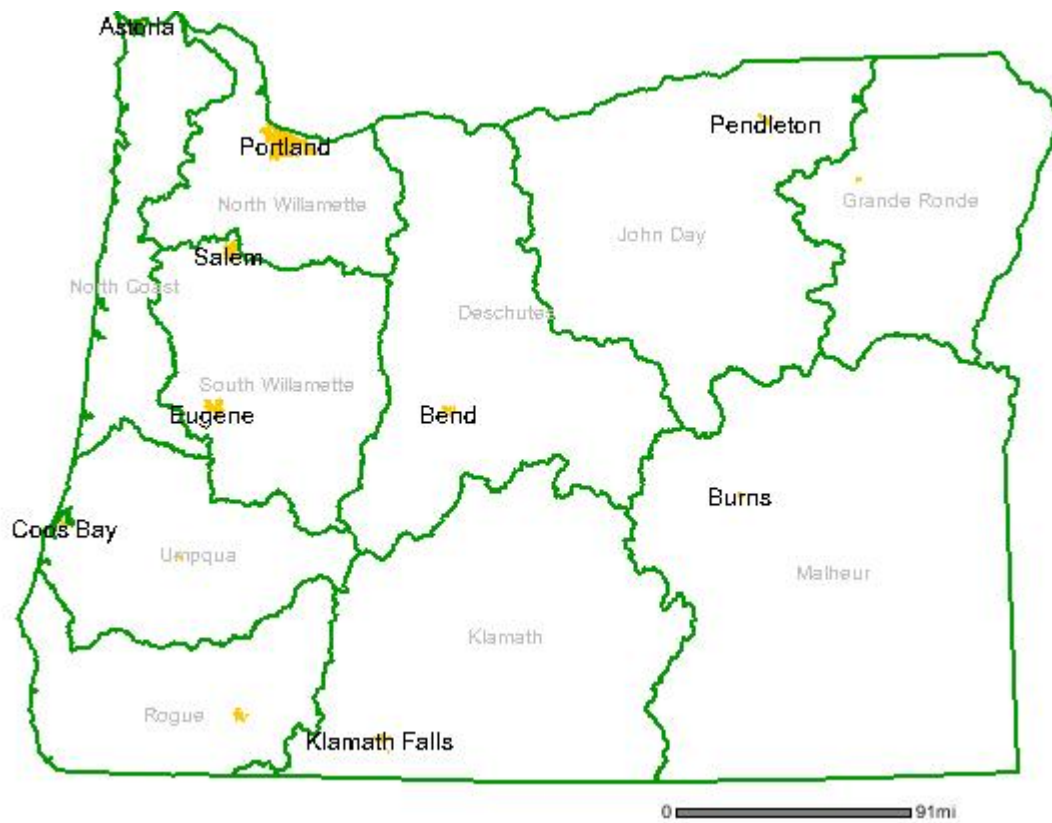
Funding Source	Cash	In-Kind	Other	Description	Total	Secured?	Conditions?	Comments
R&E Request	\$23,100.00	\$0.00	\$0.00		\$23,100.00	No	No	
ODFW	\$0.00	\$50,000.00	\$0.00	Staff time to complete projects using equipment	\$50,000.00	Yes	Yes	Staff time has been secured.
				Total Match Funding:	\$73,100.00			

## Project Budget

Item	Item Type	Units	Unit Cost	R&E Funds	Match Funds	Total
3 inch pump	Equipment	1	\$2,000.00	\$2,000.00	\$0.00	\$2,000.00
Dive masks and snorkels	Equipment	2	\$100.00	\$200.00	\$0.00	\$200.00
DO meter Conductivity Meter Flow meter	Equipment	1	\$1,000.00	\$1,000.00	\$0.00	\$1,000.00
drift boat	Equipment	1	\$7,000.00	\$7,000.00	\$0.00	\$7,000.00
GPS units	Equipment	2	\$250.00	\$500.00	\$0.00	\$500.00
Live Well	Equipment	1	\$500.00	\$500.00	\$0.00	\$500.00
Smith Root Electro-Fisher and accessories	Equipment	1	\$7,200.00	\$7,200.00	\$0.00	\$7,200.00
Trap Net and accessories (rope, anchors + floats)	Equipment	2	\$1,700.00	\$3,400.00	\$0.00	\$3,400.00
Two Dry Suits and cover boots	Equipment	2	\$650.00	\$1,300.00	\$0.00	\$1,300.00
Staff Time to complete projects using equipment	Personnel	2	\$25,000.00	\$0.00	\$50,000.00	\$50,000.00
					Total Budget:	\$73,100.00

## Project Map

---





### ***Additional Files***

---

Click a link to view that particular file.

[signature page](#)