

FISH RESTORATION AND ENHANCEMENT PROGRAM



REPORT TO THE OREGON LEGISLATURE

Prepared by the Fish Restoration and Enhancement Board
and
Oregon Department of Fish and Wildlife

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BACKGROUND

The Oregon Fisheries Restoration and Enhancement Act of 1989 authorized the Oregon Department of Fish and Wildlife (ODFW) to undertake a two-year comprehensive program to restore Oregon's fisheries. The Act was re-authorized by the 1991 legislature for an additional six-year period. The 1997 legislature again re-authorized the Act through 2003 (HB 3700).

The Fish Restoration and Enhancement (R&E) Program is funded from a surcharge on all sport fishing licenses and commercial salmon fishing licenses and ad valorem landing fees. During 1989-91, 1991-93 and 1995-97 biennia, funding was also provided by the Executive Department Economic Development Fund program revenues from the Oregon Lottery.

HOW THE PROGRAM WORKS

The mission of the R&E Program is to provide grants for projects that benefit Oregon's sport and/or commercial fisheries.

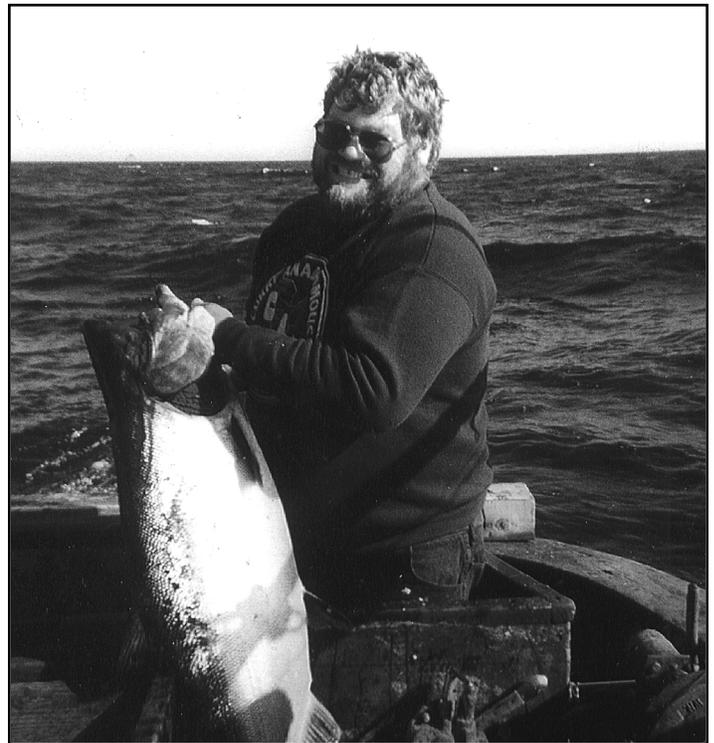
Although the R&E Program is administered by the Oregon Department of Fish and Wildlife, it is overseen by the seven-member Fish Restoration and Enhancement Program Board. The Board is made up of three commercial fishing representatives, three sport fishing representatives and one member who represents the public-at-large.

After the Oregon Department of Fish and Wildlife staff reviews grant applications for technical merit, the Board reviews project proposals for funding and forwards their recommendations to the Oregon Fish and Wildlife Commission, which makes the final decisions on which projects receive grants.

Any tax-exempt, non-profit organization may

apply for a Fish Restoration and Enhancement Program grant. An organization wishing to receive a grant must complete an application describing their project, its location, who the participants are, work schedules and implementation procedures, funding requirements including how much they would like the R&E Program to provide, other funding sources, a description of the project's benefits to Oregon's commercial or sport fishery and what arrangements have been made for long-term maintenance and monitoring. Typical applicants include:

- ✓ Sport and commercial fishing organizations
- ✓ State, federal and local government agencies
- ✓ Schools
- ✓ Port districts
- ✓ Soil and Water Conservation Districts



The R&E Program benefits sport and commercial fisheries.

HOW THE FISH RESTORATION AND ENHANCEMENT PROGRAM BENEFITS ANGLERS

The R&E Program is divided into two components — restoration and enhancement. Restoration projects are intended to repair or replace existing structures. Restoration projects generally fall into four categories: 1) hatchery repairs, including health and safety modifications required by law; 2) liberation equipment (vehicles and equipment used to transport and release fish); 3) fishways, screens and fish passage and; 4) miscellaneous projects. Enhancement projects are those not associated with restoring or replacing existing structures. They include projects for angler access, new fishways/screens, new hatchery technology and equipment, aquatic inventories / monitoring / research, public education, habitat improvement, and fish production.

Since funding for the program is paid for directly by anglers, the R&E Board and staff critically review each project proposal for angler benefit. The nature of the angler benefit varies, depending upon the type of project being funded. Examples of the types of projects funded in the 1999 - 2001 Biennium are:

- ✓ *Hatchery Repairs allow for the continued production of resident trout and anadromous salmon and steelhead.*
- ✓ *Hatchery Liberation Equipment provides the necessary transportation of hatchery fish to the appropriate stocking location.*
- ✓ *Fish Food, especially for STEP projects, eases the financial burden on volunteer groups who help provide fish to all anglers.*
- ✓ *Fish Passage and Screens allow adults and juveniles to successfully migrate upstream and downstream and prevent them from becoming stranded or misguided.*
- ✓ *Educational projects help anglers better understand fish biology and fishery management issues, giving them the opportunity to participate in a variety of activities. Educational projects also provide insight to non-anglers and serve to recruit new anglers.*
- ✓ *Access sites are often located in populated areas that provide a much needed opportunity for the beginning or urban angler.*
- ✓ *Fencing is a very cost-effective means to provide some relatively quick repair to damaged riparian habitat. As the habitat mends, fish populations expand which improves watershed health and ultimately results in improved angling.*
- ✓ *Watershed Enhancement and Instream Structure projects provide an immediate fix to damaged habitat, thereby increasing natural fish production.*
- ✓ *Monitoring and Research activities allow biologists to study and better understand the relationship between habitat restoration and salmonid populations. Smolt monitoring is an excellent way to evaluate habitat projects and establish an understanding between outmigrating smolts and adult returns. This understanding allows fishery managers to better predict acceptable harvest rates and craft meaningful angling regulations.*



The R&E Board attempts to fund a balance of projects that benefits a cross section of anglers throughout Oregon. In addition, as the 1999 - 2001 Biennium progressed, the funding emphasis of the R&E Program shifted to projects that had an immediate benefit to anglers, given that projects benefitting fish resources over the long term (e.g. habitat improvement) can be funded by other, new funding sources.

THE ROLE OF THE R&E BOARD

State law requires the Fish and Wildlife Commission to appoint a seven-member citizen review board (Restoration and Enhancement Board) to study potential projects and make recommendations for funding to the Commission. Board members meet on a regular basis to review grant applications and conduct other program business. Specifically, the Board is to:

- ✓ *Review projects submitted for funding.*
- ✓ *Seek public input concerning the project.*
- ✓ *Recommend a mix of projects that provide a balance between restoration and enhancement. The Oregon Fisheries Restoration and Enhancement Act of 1989 requires that expenditures between the restoration and enhancement portions of the program be balanced. This has been interpreted by the Board to mean that each component of the program should receive about 50 percent of available funds.*
- ✓ *Recommend funding for projects to be implemented by ODFW, other government agencies and nonprofit organizations.*

- ✓ *Encourage projects with matching funds.*
- ✓ *Recommend projects benefiting the recreational angling and commercial fishing industry in the same proportion as revenues derived from the surcharge.*

CURRENT BOARD MEMBERS

Chair *Pat Culligan* owns BCA Financial Services in Hillsboro. He represents sport anglers.

Vice Chair *Janice Green*, of Umpqua, is a retired psychologist who represents the public-at-large. She is also active with the Salmon-Trout Enhancement Program.

John Wilson of Gold Beach owns Fishermen Direct and represents the seafood industry.

Rod Brobeck represents sport anglers. He lives in Sandy and is executive director of the Oregon Wildlife Heritage Foundation.

Thomas Gilg is a research and development software engineer with Hewlett-Packard Company in Corvallis. He represents sport anglers.

Commercial fisherman and the owner of Oregon Streamside Services, *Eric Mallery* of Tillamook represents the troll fishing industry.

Warrenton commercial fisherman *K. Richard Hellberg* represents the gillnet fishing industry.

PROGRAM STAFFING

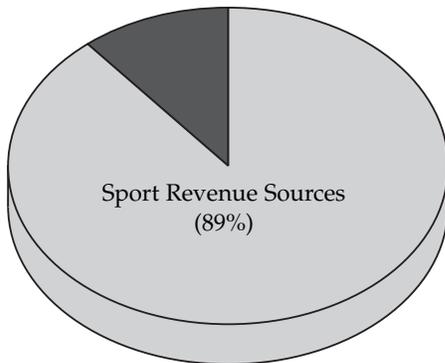
The Fish Restoration and Enhancement Program is administered by one ODFW program coordinator (half-time R&E and half-time Salmon-Trout Enhancement Program) and one full-time administrative assistant.

PROGRAM FUNDING OVERVIEW

REVENUES

1999 - 2001 Biennium

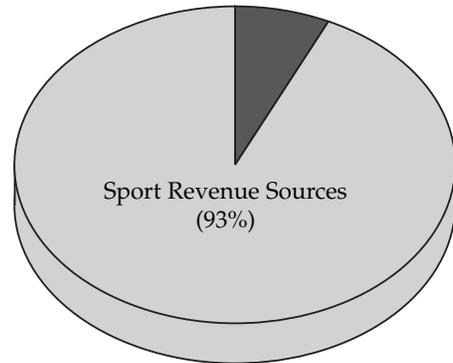
Commercial Revenue Sources (11%)



Total R&E Revenue \$3,578,099

January 1990 - June 2001

Commercial Revenue Sources (7%)

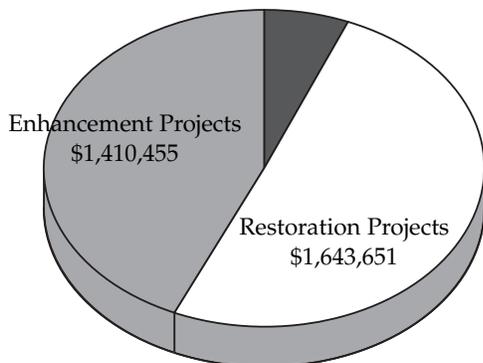


Total R&E Revenue \$23,310,376

DISTRIBUTION

1999 - 2001 Biennium

Administration \$202,280



Total R&E Distribution \$3,256,386
 Matching Funds \$5,993,848
 Total Project Expenditures \$9,250,234

January 1990 - June 2001

Administration \$791,060



Total R&E Distribution \$23,213,794
 Matching Funds \$31,767,301
 Total Project Expenditures \$54,981,095

Notes:

1. Because the 1999 - 2001 Biennium has not ended, forecasts of revenues and distributions were used for the last two month of the Biennium. These numbers represent our best estimate.
2. See County Project Summary on page 8 for numbers and locations of R&E projects.
3. Funding for the Fish Restoration and Enhancement Program began in January 1990.



PROJECT HIGHLIGHTS

Indian Creek Hatchery

As part of a STEP volunteer project, Curry Anadromous Fishermen, and others have been raising fall chinook salmon at the Indian Creek Hatchery just east of Gold Beach since 1988. The long term goal is to increase salmon fishing opportunities on the lower Rogue River.

Approximately 75,000 fall chinook are raised at Indian Creek each year then released into the lower Rogue in July, August and September. To maintain the genetic integrity of the Indian Creek chinook, 50 percent of each generation is derived from wild Rogue River fish.



The R&E Program is helping out. Last summer, volunteers marked thousands of juvenile fall chinook salmon with

adipose fin clips and coded wire tags. This will allow fishery managers to evaluate their survival and return rates. The funding to purchase the tags was provided by a \$12,000 R&E Program grant.

Chickahominy Reservoir Upgrades

A favorite eastern Oregon destination for anglers, Chickahominy Reservoir, about 32 miles west of Burns, is known for its lunker trout.

The reservoir sports a campground, fish cleaning station, boat ramp and a number of primi-

tive roads along its shoreline. But with close to 100,000 visitors each year, those facilities have lately been stretched pretty thin.

Increasing use is overburdening existing facilities as well as causing resource damage to the surrounding area. To combat this, ODFW, which owns land in the area, along with the Bureau of Land Management, and Harney County have teamed together to upgrade angler facilities and protect the shoreline and surrounding area from resource damage.

The R&E Program contributed a grant for \$25,000 to help with the costs of a new gate system and fence, and to build a new road to three favorite fishing spots.

Miller Creek Fish Habitat Restoration

With help from a \$35,549 R&E Program grant, a little re-engineering of 1.5 miles of Miller Creek in the Eliot State Forest is going a long way to open up more habitat for coho salmon.

The creek is an excellent coho salmon stream, but the fish were not spawning there because the creek would dry up into riffles in the summer and the fish would swim off to another tributary.

To remedy this, 60 logs and 25 root wads were flown in by helicopter to the creek and placed at strategic locations. The wood was put in the stream in such a way that natural streamflow creates additional habitat. As the water flows against and around this newly placed debris, it scours out the stream bottom, creating deep pools, collects gravel for spawning and increases stream meandering, carving out side channels and alcoves. Together this creates many new habitat areas for fish to utilize. In addition to coho salmon, the creek's steelhead and cutthroat trout are expected to benefit from the project.

Crystal Springs Stream/Lake Restoration

It's the largest fish restoration project ever undertaken in the Portland area, right under the noses of golfers along Crystal Springs Creek at the Eastmoreland Golf Course in the southeast part of the city. When the work is done, this small urban stream will provide spawning habitat for cutthroat trout, coho salmon, chinook salmon and steelhead, as it did historically.

Once home to trout and salmon, urban development resulted in the destruction of much of the creek's habitat.



A dam constructed without a fish ladder on its north fork blocked historical steelhead and salmon spawning runs.

A \$33,700 R&E Program grant is helping the Johnson Creek Watershed Council restore Crystal Springs Creek for sustainable fish populations by constructing a fishway over the eight-foot high dam at Crystal Springs Lake, placing in-stream structures in the creek for fish habitat, stabilizing eroding lake and streambanks by planting native trees and shrubs and restoring the stream, lakeside and adjacent wetlands.

Youngs Bay Net Pens

Beginning with 24 net pens in 1990, the Clatsop County Economic Development Council's Fisheries Project has been developing a chinook and coho salmon fishery in Youngs Bay at Astoria that has grown to 130 net pens.

Known as a "select fishery" fingerlings are

raised in pens in the bay until they are ready to be released into the ocean where they provide an important component to the bay's sport and commercial fishing industry that has been valued at up to \$1.5 million annually. Because the fish released from the Youngs Bay net pens travel up and down the Oregon coast, the program also contributes to the economies of many other coastal communities as well as to sport and commercial ocean fisheries.

The R&E Program is a regular contributor to this effort and provided the seed money for the program's first net pens in 1990. The program contributed \$105,000 in 1999 and nearly \$130,000 in 2000 dedicated to raising chinook and coho salmon in the net pens.

Hatchery Alarm System Upgrades

Funding upgrades and repairs for state fish hatcheries is an important function of the R&E Program.

Using a \$110,000 R&E grant, the Oregon Department of Fish and Wildlife is continuing to upgrade its hatcheries with state-of-the-art alarm systems which will make responding to emergencies quicker and more effective.

This alarm system uses a series of sensors which are placed at critical locations throughout a hatchery, such as places where pipes might become clogged, where maintaining water temperature is critical, or by water pumps that keep fish ponds and incubation trays filled. The hand-held devices also function as two-way radios, so hatchery staff can keep in contact with each other throughout the day.

Responding quickly to hatchery emergencies is critical because tens of thousands of fish may be lost due to a sudden water loss when a pump fails or if water temperatures reach extremes.

TYPES OF R&E ENHANCEMENT PROJECTS BY COUNTY, 1990-2001

County	Project Type								Total
	Habitat Restoration	Fish Passage	Hatchery Production	Education	Surveys & Monitoring	Access	Marine	Misc.	
Baker	2					4			6
Benton	1	1	2		3				7
Clackamas	4	1	8		1	2			16
Clatsop	3		17		7	1			29
Columbia	2	2				1		1	5
Coos	16	5	18	1	4	6			50
Crook	16				4	1			21
Curry	9		13	2	5	2			31
Deschutes	19		6						25
Douglas	23	3	13	1	3	3			46
Gilliam	1	2							3
Grant	11	1	1			2			15
Harney	5	1	4	1		3			14
Hood River	1								1
Jackson	5	1	2			2			10
Jefferson	5		3			2			10
Josephine	2	1	1		1	3			8
Klamath	13	5	1		1	1			21
Lake	6	2	1						9
Lane	12	1	11	1	2	5	1		33
Lincoln	10		8	10	4	1			33
Linn	1		8			2			11
Malheur						1			1
Marion	4			2	1	2			9
Morrow	2		1						3
Multnomah	3		3	1	1	2		1	11
Polk	1								1
Tillamook	24	2	19	3	2	5	1		56
Umatilla	7	1	1		2	10			21
Union	3					1			4
Wallowa	8					1			10
Wasco	5		3		1				9
Washington						1			1
Wheeler	1								1
Yamhill					1				1
Statewide	2								2
Totals	225	29	144	22	42	65	2	2	531

PROJECT GRANTEES AND COOPERATORS

Numerous non-profit organizations have applied for and received R&E Program grants. These include, but are not limited to, Oregon Parks and Recreation Department, Oregon Department of Forestry, Bonneville Power Administration, U.S. Forest Service, Bureau of Land Management, Oregon Trout, Trout Unlimited, Governor's Watershed Enhancement Board, Association of Northwest Steelheaders, Nature Conservancy, Oregon Paralyzed Veterans of America and Oregon Wildlife Heritage Foundation.

Many cooperators have participated in projects as well, assisting grantees with additional funding, labor and donations of project material and other supplies. These include, but are not limited to, Starker Forest Products, Northwest Natural Gas, Lone Rock Timber Company, the Warm Springs and Umatilla tribes, James River Corporation, GI Joe's and many private landowners.

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