

FISH RESTORATION AND ENHANCEMENT PROGRAM

2003 - 2005 REPORT TO THE OREGON LEGISLATURE



Restoring Oregon's Fisheries

Prepared by the Oregon Department of Fish and Wildlife

Fish Restoration and Enhancement Program

March 2005



BACKGROUND

The Oregon Fisheries Restoration and Enhancement Act, adopted in 1989 and reauthorized in 1991, 1997, and 2003 through 2009, directs the Oregon Department of Fish and Wildlife (ODFW) to undertake a comprehensive program to restore Oregon's fisheries.

The Fish Restoration and Enhancement (R&E) Program is funded from a surcharge on all sport fishing licenses and commercial salmon permit and poundage fees. During 1989-91 and 1995-97, funding also was 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 ODFW, it is overseen by the R&E Board.

Any governmental unit or tax-exempt, non-profit organization may apply for an R&E Program grant. An organization wishing to receive a grant must complete an application describing the project, its location, the participants, work schedules, budget, and implementation procedures. A short description of the project's benefits to Oregon's sport or commercial fisheries and long-term maintenance and monitoring is also requested.

Typical applicants include:

- ❖ Educational Institutions
- ❖ Fishing Organizations
- ❖ Government Agencies
- ❖ Port Districts
- ❖ Soil and Water Conservation Districts
- ❖ The ODFW Salmon Trout Enhancement Program (STEP)
- ❖ Watershed Councils

After ODFW staff reviews the grant applications for technical merit and the potential benefit to fisheries, the R&E Board reviews the applications and forwards their funding recommendations to the Oregon Fish and Wildlife Commission. The Commission then makes the final decisions on which projects receive funding.



An angler fishes for winter steelhead on the North Fork Nehalem River. The R&E Program benefits sport and commercial fisheries.



THE ROLE OF THE R&E BOARD

The Fish and Wildlife Commission appoints a seven-member citizen review board to study potential projects and make funding recommendations to the Commission. The Board is made up of one public-at-large, three commercial fishing, and three sport fishing representatives.

R&E Board members meet on a regular basis to review grant applications and conduct other program business. Specifically, the R&E Board does the following:

- ❖ Reviews and makes funding recommendations on projects submitted for funding by various organizations.
- ❖ Seeks public input concerning projects.
- ❖ Recommends a mix of projects that provide a balance between restoration and enhancement. The Oregon Fisheries Restoration and Enhancement Act of 1989 directs expenditures between the restoration and enhancement portions of the program be balanced. The Board has interpreted this to mean each component of the program should be allocated about 50 percent of available funds.
- ❖ Encourages projects with matching funds.
- ❖ Recommends projects benefiting recreational anglers and the commercial fishing industry in the same proportion as revenues received from sport fishing license and commercial salmon permit and poundage fees.

CURRENT BOARD MEMBERS

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

Darlene Kline-Dolby, vice chair, represents sport anglers. She is retired from U.S. West and lives in Eugene.

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

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

Commercial fisherman *Terry Learned*, of Cloverdale, represents the troll fishing industry.

Charles Lang, of Salem, is an information systems manager for the Oregon State Police. He represents sport anglers.

Bob Mullong, of Bend, is retired. He represents the public-at-large.

PROGRAM STAFFING

The R&E Program is administered by one half-time ODFW program coordinator, one half-time program specialist, and one full-time administrative assistant.



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. Enhancement projects are intended to benefit fisheries and fish populations.

Restoration projects generally fall into four categories: hatchery repairs, including health and safety modifications; fish liberation equipment; fishways, screens and fish passageways; and miscellaneous projects. Examples of the types of projects funded in the 2003 - 2005 biennium include:

- ❖ Hatchery maintenance and repair allows for the continued production of resident trout and anadromous salmon and steelhead.
- ❖ Hatchery liberation equipment provides the vehicles and equipment necessary for transportation and release of hatchery fish to the appropriate stocking locations.

Enhancement projects include projects for angler access, fish production, research and monitoring, public education, habitat improvement, new hatchery technology and equipment, and new fishways or screens. Examples of the types of projects funded in the 2003 - 2005 biennium include:

- ❖ Access sites provide places for anglers to go fishing. Important access issues include providing opportunities for disabled,

beginning, and urban anglers and strategically locating sites within river stretches.

- ❖ Education projects help youth and anglers better understand fish biology and fishery management issues through a variety of educational activities. Education projects also provide insight to non-anglers and can recruit new anglers. These projects include a variety of activities.
- ❖ Habitat projects enhance, restore, and protect valuable fish habitat.
- ❖ Hatchery production projects allow for supplies and services necessary to rear fish and establish or maintain hatchery stocks.
- ❖ Research and monitoring activities allow biologists to study and better understand fish populations. Fishery managers use this information to determine acceptable harvest rates and develop angling regulations.

Since funding for the program is paid for directly by anglers, staff and the R&E Board review each project proposal for benefits to fisheries. The nature of the benefit varies depending on the type of project being funded. Many projects may fall into several categories and have multiple objectives and outcomes. The R&E Board attempts to fund a balance of projects that benefit a diversity of anglers throughout Oregon.



PROJECT HIGHLIGHTS

Hatchery Research Center Repair of Intake, Ladder and Trap

The R&E Program made a significant contribution to fund the planning, design and construction, or repair of an intake, fish ladder, and fish trap at the new Hatchery Research Center near Alsea.

Total Project Cost: \$957,119

R&E Program Contribution: \$867,832

Partners: ODFW, Oregon State University

Project Benefits: This project ensures proper functioning of important Hatchery Research Center infrastructure.



Artist's rendition of the Hatchery Research Center, currently under construction

Narrows Weir Fish Passage

This extensive project provides passage for redband trout over an irrigation weir on the Chewaucan River, near Paisley.

Total Project Cost: \$178,875

R&E Program Contribution: \$106,305

Partners: ODFW, ZX Ranch, Bureau of Land Management (BLM), Bagley Ditch Company, Upper Chewaucan Watershed Council, City of Paisley, US Forest Service

Project Benefits: Increasing populations of wild trout and improving watershed health.



Narrows Weir Fish Passage Project

Umatilla National Forest Fishing Pond Improvement



Umatilla Trout Pond Project

A grant from the R&E Program funded the deepening of three trout fishing ponds in the Umatilla National Forest in response to public desire for more fishing opportunities in the area.

Total Project Cost: \$6,300

R&E Program Contribution: \$6,291

Partners: ODFW, US Forest Service

Project Benefits: The deeper water in the ponds allows the stocked trout to now survive through the winter. The fish can also grow, giving anglers an opportunity to catch larger fish.

Alsea Hatchery Angler Parking Area



Alsea Hatchery Angler Parking Area

The R&E Program funded a new 40-parking space angler parking lot and information kiosk at the Alsea Hatchery, just west of Alsea.

Total Project Cost: \$20,358

R&E Program Contribution: \$20,358

Partners: ODFW

Project Benefits: The upper North Fork of the Alsea River, at the hatchery, offers excellent angling opportunities and is a favorite location for many winter steelhead anglers. Limited parking resulted in an occasional overflow of vehicles onto an adjacent county road and a potential safety concern. The new parking lot has addressed this concern.



Bycatch Mortality Reduction in Nearshore Rockfish Fisheries

Funding contributed by the R&E Program helped researchers build a pressurized aquarium system at the ODFW Marine Sciences Lab in Newport to test the effects of different water pressures on the air bladders of rockfish.

Total Project Cost: \$74,104

R&E Program Contribution: \$34,231

Partners: ODFW

Project Benefits: The study will help determine the mortality rates of rockfish caught and then released in sport and commercial fisheries off the Oregon coast. This information is needed to manage rockfish populations that can continue to provide for these important fisheries.



Pressurized Aquarium System



Kokanee Karnival

Kokanee Karnival Youth Education Program

The Kokanee Karnival is a “hands on” educational program sponsored by the Central Oregon Flyfishers that involves more than 1,000 elementary school students teachers and parents in Deschutes, Crook, and Jefferson counties.

Total Project Cost: \$130,458

R&E Program Contribution: \$10,000

Partners: ODFW, Central Oregon Flyfishers, Local STEP Volunteers

Project Benefits: Students learn about the importance of clean water, healthy watersheds, fish habitat, and community involvement through a variety of classroom and field activities.

STAC Mini-Grant Program

The R&E Program provides funding for the STEP Advisory Committee (STAC) Mini-Grant Program. This program awards grants up to \$750 for small conservation and education projects.

Total Project Cost: \$25,000

R&E Program Contribution: \$25,000

Partners: ODFW, STEP and Other Volunteers, Various Private and Public Organizations

Project Benefits: The STAC Mini-Grant Program allows STEP volunteers to successfully complete small community-based fish conservation and education projects. These grants have a simplified application process which makes them easier for small volunteer groups to apply for.



A \$500 STAC Mini-Grant was awarded to Central Oregon Flyfishers to survey and study the macroinvertebrates of the Crooked River just below Bowman Dam, one of Oregon's best tailwater trout fisheries. The study will provide valuable insight into the feeding habits of the river's rainbow trout and mountain whitefish.

Boat Access Projects

The R&E Program typically funds a number of boat ramp construction projects each year. Most recently, it funded ramps at Waterloo Park (South Santiam River), Greenwaters Rest Area (Middle Fork Willamette), and along Highway 58 (Coast Fork Willamette).

Total Projects Cost: \$74,895

R&E Program Contributions: \$16,832

Partners: ODFW, Volunteers, Various Agencies

Project Benefits: Provides safe and reliable boat access for anglers where there was previously no or inadequate access.



Greenwaters Rest Area boat ramp, before
after





Willow Valley Reservoir Warmwater Habitat Project

ODFW and BLM teamed up to improve warmwater fish habitat at Willow Valley Reservoir in Klamath County. Bass and crappie populations will increase with the assistance of juniper logs placed in the reservoir and the logs will eventually provide excellent habitat. This will provide more warmwater angling opportunity.

Total Project Cost: \$97,816

R&E Program Contribution: \$43,132

Partners: ODFW, BLM, Klamath Bassmasters

Project Benefits: Juniper logs were placed in the reservoir to enhance cover habitat, increase bass and crappie populations, and improve warmwater angling.



Willow Valley Reservoir
Warmwater Habitat Project

Statistical Creel of Siltcoos and Tahkenitch Lakes Coho Fishery

Two projects were funded to conduct creel surveys of anglers fishing for wild coho salmon on Siltcoos and Tahkenitch lakes in Douglas and Lane counties.

Total Project Cost: \$22,121

R&E Program Contribution: \$14,621

Partners: ODFW

Project Benefits: Due to recent strong returns, this wild coho fishery was opened to sport angling in 2003. It was the first sport angling season authorized for wild coho salmon on the Oregon coast since 1993. The projects' objectives were to quantify angler success and monitor the impact of angling on the lakes' wild coho.



Tahkenitch and Siltcoos Lakes Statistical Creel Survey Project

Nehalem Hatchery Fishing Platform

An R&E grant helped pay for the expansion of the disabled-only fishing platform at the Nehalem Hatchery.

Total Project Cost: \$95,500

R&E Program Contribution: \$15,719

Partners: ODFW, Oregon Wildlife Heritage Foundation, Businesses, Association of Northwest Steelheaders

Project Benefits: The larger platform allows for use by more anglers and has reduced crowding. Anglers from throughout northwest Oregon and the Portland metropolitan area come to this popular salmon and steelhead fishing destination.



An angler fishes from the Nehalem Fishing Platform

Umpqua Basin Riparian Fencing

The R&E Program contributed funding to an ODFW effort to provide fencing material for landowners who want to protect riparian areas. This program has existed for more than 10 years.

Total Project Cost: \$85,000

R&E Program Contribution: \$20,000

Partners: ODFW, Oregon Watershed Enhancement Board, BLM, Volunteers

Project Benefits: Fencing rivers, streams and other environmentally sensitive riparian areas from livestock is a proven technique for protecting them. This voluntary program encourages landowners to protect streams on their property by providing free materials if the landowner agrees to build and maintain a fence.



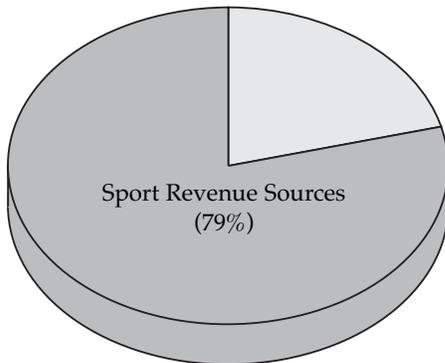
An Umpqua Riparian Fence Project

PROGRAM FUNDING OVERVIEW

REVENUES

2003 - 2005 Biennium

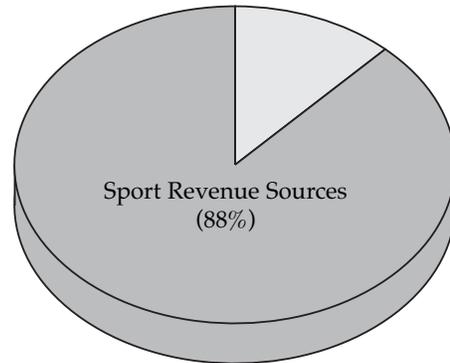
Commercial Revenue Sources (21%)



Total R&E Revenue: \$3,158,379

January 1990 - June 2005

Commercial Revenue Sources (12%)

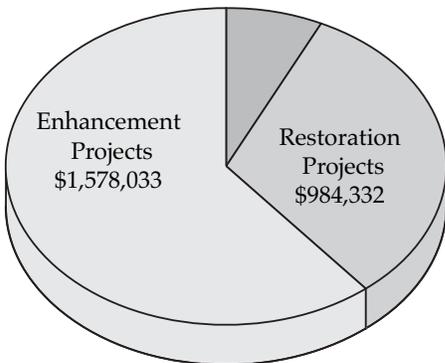


Total R&E Revenue: \$30,348,580

DISTRIBUTION

2003 - 2005 Biennium

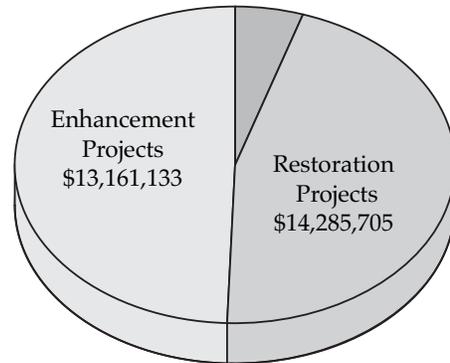
Administration \$215,976



New 03-05 Projects: \$2,778,341
 Matching Funds: \$2,341,976
 Total Project Expenditures: \$5,120,317

January 1990 - June 2005

Administration \$1,450,832



Total R&E Distribution: \$28,897,670
 Matching Funds: \$36,361,820
 Total Project Expenditures: \$65,280,202

Notes:

1. Because the 2003 - 2005 biennium has not ended, estimates of revenues and distributions through the end of the biennium are used.
2. See County Project Summary on page 14 for numbers and locations of R&E Enhancement projects.
3. Funding for the R&E Program began in January 1990.



2003-2005 R&E PROGRAM PROJECTS

<u>SPORT OR COMMERCIAL</u>	<u>PROJECT NUMBER</u>	<u>PROJECT TITLE</u>	<u>TOTAL PROJECT COST</u>	<u>2003-2005 R&E FUNDS</u>	
ADMINISTRATION					
N/A	940000	2003- 2005 R&E Administration	\$215,976	\$215,976	
RESTORATION					
Hatchery Maintenance					
S	Hatch Maint	941123	Emergency Hatchery Repair Fund	1,590	1,590
S	Hatch Maint	941166	Wizard Falls-Building Modification	30,500	28,943
S	Hatch Maint	941167	Wizard Falls-Main Supply Valve	1,400	1,400
S	Hatch Maint	941181	Oak Springs-Electrical Work	16,270	14,624
S	Hatch Maint	941183	Bandon-Incubation Isolation System	6,100	1,785
S	Hatch Maint	941184	Nehalem-Install Releasing Pipeline	3,000	1,373
S	Hatch Maint	941187	Klamath-Electrical Work	11,900	11,900
S	Hatch Maint	941188	Nehalem-Adult Trap Area Expansion	68,650	64,092
S	Hatch Maint	941191	Elk River-Install Freezer Door	13,750	13,049
S	Hatch Maint	941192	Bandon-Chiller Unit	15,250	5,890
S	Hatch Maint	941196	Butte Falls-Alarm System	90,000	1,770
S	Hatch Maint	941198	Butte Falls-Pond 13 Modifications	242,000	210,119
S	Hatch Maint	941199	Butte Falls-Pollution Abatement System Design	50,000	48,513
S	Hatch Maint	941200	Butte Falls-Ponds 11 & 12 Repairs	24,000	23,681
S	Hatch Maint	941204	Butte Falls-Intake and Smolt Bypass-Phase 2	390,000	13,169
S	Hatch Maint	03-026	HHRC-Planning for Repair of Intake, Ladder & Trap	27,832	27,832
S	Hatch Maint	03-046	Hatchery Research Center-Repair of Ladder & Trap	526,000	526,000
C	Hatch Maint	03-049	Hatchery Research Center-Repair of Intake	314,000	314,000
C	Hatch Maint	03-051	Trask-Plumbing Installation	13,300	8,500
Passage					
S	Passage	03-060	Smith-Bybee Water Control Structure Refinements	36,500	8,000
Miscellaneous					
S	Misc	941203	Farmer Creek (Nestucca) Boat Ramp	65,000	61,005
S	Misc	941208	Restoration Project Emergency Account	100,000	100,000
Total Restoration			\$2,047,042	\$1,487,235	
ENHANCEMENT					
Access					
S	Access	01-018	Highway 58 - Coast Fork Willamette Boat Ramp	22,000	10,625
S	Access	01-033	Nehalem Hatchery-ADA Angling Platform/Restroom	95,500	15,719
S	Access	01-042	Southwestern Empire Lake Enhancement Project	132,257	63,400
S	Access	01-047	Powers Pond Weed Removal	16,766	4,750
S	Access	01-055	Nearshore Fishery Management Plan Development	60,857	32,863
S	Access	03-005	Waterloo Park Cox (West) Boat Ramp	15,270	6,270
S	Access	03-007	Greenwaters Rest Area Boat Ramp	37,625	9,500
S	Access	03-014	Brandon's Pond Accessible Fishing Dock	46,383	41,633
S	Access	03-024	Flat Creek Bridge Replacement	55,000	15,000
S	Access	03-052	Alsea Hatchery Angler Parking Area	20,358	20,358
Education					
S	Education	01-011	Winchester Dam Viewing Area	128,000	9,790
S	Education	01-048	Kokanee Karnival Youth Education Program	130,458	10,000
S	Education	01-054	Lane County Fair "Fish N' Kids" Exhibit	54,667	1,443
S	Education	03-003	Willamette Hatchery Educational Display Building	24,500	4,500



S	Education	03-020	"Fish 'N' Fun" Kids' Exhibit, 2003 Oregon State Fair	203,149	36,635
S	Education	03-036	Enhancing the Oregon Fish Finder Web Site	53,680	28,370
Habitat Improvement					
S	Habitat	03-001	Umpqua Basin Riparian Fencing	85,000	20,000
S	Habitat	03-004	McIntyre Creek Channel Restoration Project	138,405	15,000
S	Habitat	03-013	Port of Brookings Piling Replacement Project	200,000	79,522
S	Habitat	03-015	Salmon River Riparian Restoration Project	13,878	9,135
S	Habitat	03-029	Tillamook Boat Ramps-Riparian Enhancement & Education	42,338	16,000
S	Habitat	03-030	Tillamook Streamside Planting	28,342	15,871
S	Habitat	03-032	Indian Creek Fencing	60,727	20,000
S	Habitat	03-048	Willow Valley Reservoir Warmwater Habitat Improvement	97,816	43,132
S	Habitat	03-055	Green Peter Reservoir Vegetation Restoration	22,970	6,450
Fish Passage					
S	Passage	03-043	Smith Creek Fish Passage Improvement	130,200	8,500
S	Passage	03-047	Narrows Weir Fish Passage	178,875	106,305
S	Passage	03-061	Camp Creek Fish Passage	21,690	14,770
Propagation					
S	Propagation	01-014	STEP Fish Food	544,537	60,447
S	Propagation	01-016	Yaquina Bay Fall Chinook Hatchery Program	173,414	19,912
S	Propagation	01-036	MHCC Fish Rearing Upgrade	67,320	4,819
S	Propagation	03-002	Youngs Bay Net Pens/Coho Acclimation	52,174	31,380
C	Propagation	03-010	Youngs Bay Net Pens/SAB Fall Chinook	692,255	438,244
C	Propagation	03-017	Calapooya Creek Fall Chinook Coded Wire Tagging	41,790	25,000
S	Propagation	03-019	Yaquina Bay Chinook Hatchery Program	158,109	35,729
S	Propagation	03-025	Upgrade of Existing Hatchery Supply & Operating System	105,168	21,558
S	Propagation	03-034	Oak Springs Hatchery Ice Maker	4,658	3,500
S	Propagation	03-039	Fin-marking Rainbow Trout at Hills Creek Reservoir	5,200	2,729
S	Propagation	03-053	Construct Portable Anesthetic Tank	7,500	6,500
Research					
S	Research	01-027	Study for Optimal Fisheries Management-Crane Pr. Reservoir	59,120	15,560
C	Research	01-044	Bycatch Mortality Reduction in Nearshore Rockfish Fisheries	74,104	34,231
S	Research	03-009	Downstream Migrant Traps - Clackamas River Basin	84,000	20,000
S	Research	03-016	Statistical Creel of Siltcoos and Tahkenitch Lakes Coho Fishery	5,255	1,311
C	Research	03-022	Estuarine Migration of Net-Pen Spring Chinook in Columbia	302,193	100,000
S	Research	03-027	Nestucca Winter Steelhead Broodstock Evaluation	187,809	90,098
S	Research	03-037	Rogue Basin Fish Presence/Absence Surveys	107,233	34,784
S	Research	03-038	Rogue Basin Smolt Traps	124,715	23,256
S	Research	03-041	Multnomah Channel Fish Passage at Wetland Restoration Site	216,020	85,000
S	Research	03-044	Prineville Reservoir Revegetation Pilot Study	4,080	1,750
S	Research	03-050	Statistical Creel of Siltcoos and Tahkenitch Lakes Coho Fishery	20,810	13,310
S	Research	03-059	Big Creek Monitoring and Assessment Project	185,366	50,000
Miscellaneous					
S	Misc	01-041	Equipment for Crane Prairie Res. Broodstock Development	22,316	5,275
S	Misc	01-045	Full Time R&E and STEP Coordinators	114,625	58,675
S	Misc	01-051	St. Louis Ponds Fishery Enhancement	34,231	24,058
S	Misc	03-006	Umatilla National Forest Fishing Pond Improvement	6,300	6,291
S	Misc	03-011	STAC Mini-Grant Program	25,000	25,000
S	Misc	03-023	Enhancement Project Emergency Account	25,000	25,000
Total Enhancement				\$5,567,013	\$1,928,958
2003-2005 PROJECT TOTAL				\$7,830,031	\$3,632,169

TYPES OF R&E ENHANCEMENT PROJECTS BY COUNTY, 1990-2005

Project Type

COUNTY	HABITAT IMPROVEMENT	FISH PASSAGE	HATCHERY PROPAGATION	EDUCATION	RESEARCH & MONITORING	ACCESS	MISC	TOTAL
Baker	2					4		6
Benton	2	1	2	1	4	1		12
Clackamas	4	1	9		2	2		18
Clatsop	3		23		9	2	1	38
Columbia	2	2			1	1		6
Coos	17	5	19	2	4	8	1	56
Crook	16				4	1		21
Curry	11		13	2	5	2		33
Deschutes	21		6	1	2		1	31
Douglas	24	3	16	2	4	3		52
Gilliam	1	2						3
Grant	13	1	1			4		19
Harney	5	1	4	1		3		14
Hood River	1							1
Jackson	5	1	2		2	2		12
Jefferson	5		3			2		10
Josephine	2	1	1		1	3		8
Klamath	13	5	1		1	1		21
Lake	6	3	1					10
Lane	12	1	12	3	4	7	1	40
Lincoln	11		10	10	6	1	3	41
Linn	1		8			3		12
Malheur						1		1
Marion	4			3	1	2		10
Morrow	2		1					3
Multnomah	3	1	4	1	5	2	3	19
Polk	1							1
Tillamook	26	3	22	3	3	5	1	63
Umatilla	7	1	1		2	10	1	22
Union	4					1		5
Wallowa	8	1				2		11
Wasco	5		4		1			10
Washington						1		1
Wheeler	1					1		2
Yamhill					1			1
Statewide	2		2	1			3	8
Total	241	33	165	30	62	75	15	621

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