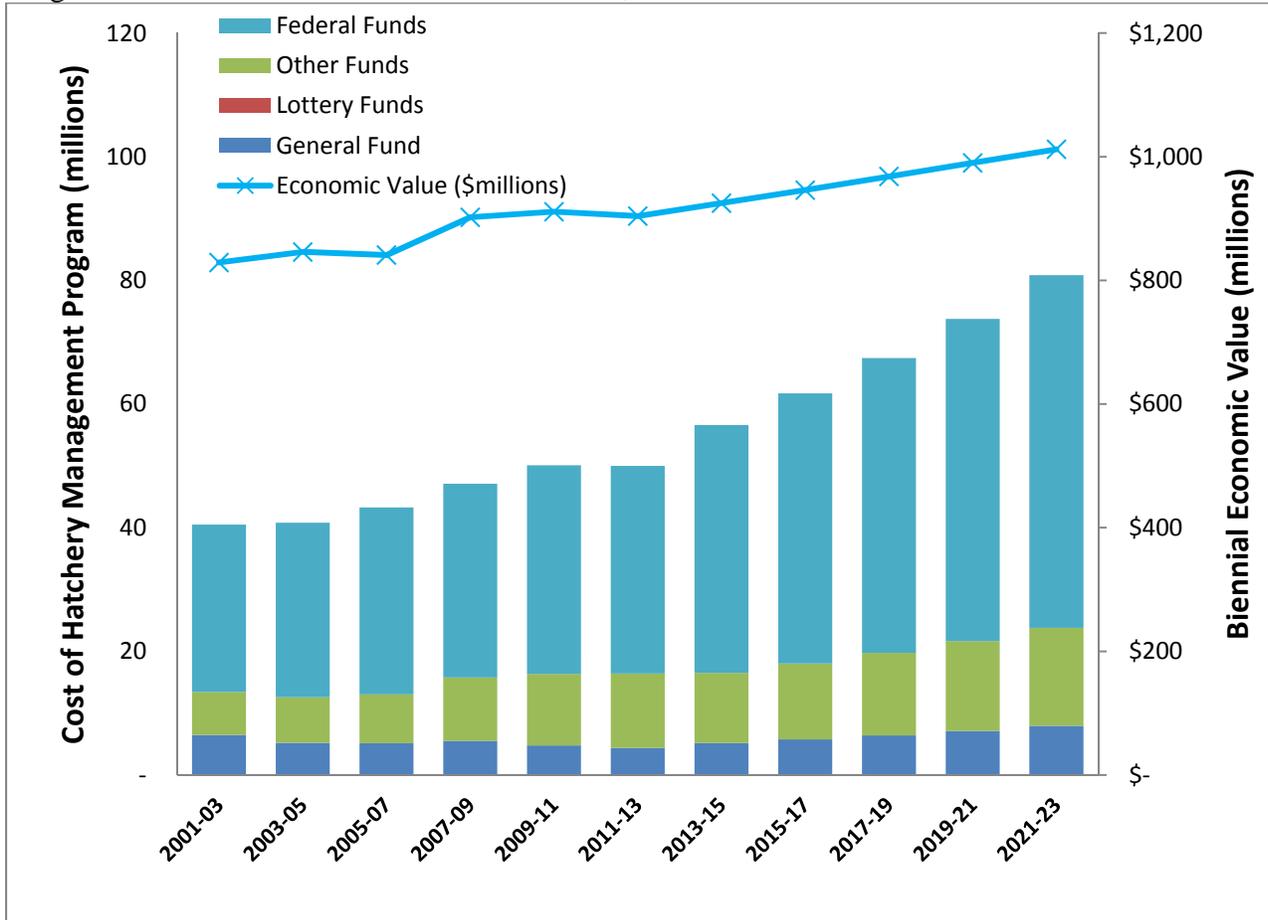


Oregon Department of Fish and Wildlife: Inland Fisheries - Hatchery Management

Primary Outcome Area: Economy & Jobs
 Secondary Outcome Area: Healthy Environments
 Program Contact: Ed Bowles, 503-947-6206



Executive Summary

ODFW’s Hatchery Management Program generates jobs and is a vital part of the State’s economy, particularly in rural areas. The Program produces 44 million salmon, steelhead and trout annually that are released into Oregon’s rivers and lakes. ODFW hatcheries provide more than 70 percent of the fish harvested in the state’s sport and commercial salmon, steelhead, and trout fisheries. Anglers fish more than 8 million days per year and generate \$904 million of economic value to the Oregon economy biennially (Runyan, 2009). For every dollar invested in the Program, \$17 is returned to the state’s economy, providing 16,500 jobs annually, largely in rural areas of the state. For every state dollar invested in the Program, \$54 is returned to Oregon’s economy.

Program Funding Request

2013-15 Requested Resource Amount

Fund Type	11-13	13-15	13-15	13-15
	LAB	Existing Services	POPs	ARB
GF	4,131,502	5,126,309	55,023	5,181,332
LF				
OF	12,022,305	10,895,348	439,000	11,334,348
FF	33,585,978	34,525,611	5,579,000	40,104,611
Total	49,739,785	50,547,268	6,073,023	56,620,291

ODFW proposes to continue this program at its current level of activity and output. Resources required in 2013-15 biennium include \$5.2 million General Fund as well as expenditure limitation for \$11.3 million Other Funds and \$40.1 million Federal Funds. The program would be staffed by 253 positions (235.55 FTE). This level of funding and staff will allow the production and release of 45 million hatchery-produced fish per year to support the commercial and recreational fisheries while selected runs of naturally produced fish are protected.

It is important to note that the projected budget for all funds in the leading graph assumes an inflation rate of 13% for personal services and a 2.4% to 2.7% inflation on services and supplies. This is based on direction from Department of Administrative Services and does not anticipate any loss of Federal Funds or statewide shortfalls in Lottery or General Funds.

Program Description

The Hatchery Management Program has four important sections:

1. Hatchery Production grows fish at the state's 32 fish hatcheries to be stocked in Oregon's rivers and lakes.
2. Fish Identification evaluates the success of individual programs through tagging, collecting, and analyzing samples from hatchery-produced fish that are caught.
3. Fish Health Services runs laboratories in Corvallis, Clackamas, Madras, and La Grande. The section works to minimize the impact of fish diseases by ensuring healthy growing environments at ODFW hatcheries and monitoring private aquaculture facilities.
4. Hatchery Operations oversees and administers the Hatchery Management Program and provides biological and technical services as well as engineering support and construction management services.

The purpose of the Program is to produce and release fish in support of Oregon's sport and commercial fisheries, along with providing additional fish for lost habitat associated with dams. ODFW releases about 44 million salmon, steelhead, and trout annually to meet the program's purpose. Hatchery fish are managed to minimize the impacts to native fish while maximizing returns to anglers. Our customers are Oregon's sport and commercial anglers and Columbia River Treaty Tribes. Oregon hatcheries provide fish for tribal ceremonial programs and tribal

harvest. Our customers receive services year-round with the release and return of juvenile and adult salmon and steelhead, and trout are stocked in many of the state's waterbodies as well.

The Program relies heavily on partnerships with the federal government. As mitigation for lost habitat and natural production due to federal dams, the federal government provides two out every three dollars the state spends on the program. In addition to license-buying sport anglers, funding also comes from power producers and water users such as Portland General Electric and the City of Portland. Another partner is the Clatsop County Fisheries Economic Development Program which utilizes General Fund dollars to leverage Federal Funds to enhance commercial fisheries in the Columbia River. Also, private trout producers grow trout for local lakes and reservoirs. Only 25 percent of the Program is funded with license dollars and state General Funds. The major costs of the program are personnel, fish food, and hatchery maintenance.

Program Justification and Link to 10-Year Outcome

ODFW's Fish Hatchery Program contributes directly to the **Economy and Jobs 10-Year outcome of ensuring, "Oregon has a diverse and dynamic economy that provides jobs and prosperity for all Oregonians"** by being a significant economic engine for one of Oregon's **key natural resource industries, fishing**. For every dollar invested in the Hatchery Management Program, \$17 is returned directly to Oregon's economy, providing 16,500 jobs annually, largely in rural areas of the state. For every state dollar invested in the Program, \$54 is returned to Oregon's economy.

Since the first public hatchery was constructed on the Clackamas River in 1877, hatcheries have been built to compensate for past practices of over-fishing and, more recently, to mitigate for the reduction or elimination of natural fish populations due to hydropower dams.

The program directly amplifies local and state economic effects (**Strategy 1.2**) by maintaining viable sport and commercial fisheries while mitigating for the negative environmental impacts of the dams. The result is a productive economic environment in rural Oregon for outfitters and fishing guides, sporting goods stores, gas stations, hotels, diners, and grocery stores among others.

The Program supports its **Secondary Outcome Area, Healthy Environments**, by reducing impacts of hatcheries on **keystone species such as salmon and steelhead**, while getting the most out of returns for sport and commercial fisheries. Oregon is recognized as a regional leader in efforts to reform hatchery practices to ensure hatchery fish are good neighbors to wild fish and our facilities are good residents in their watersheds. ODFW has completed federal Endangered Species Act Recovery Plans throughout the ranges of listed salmon and steelhead which set explicit expectations for how hatchery programs will be managed consistent with the recovery of wild fish.

Considering that for every dollar invested in the hatchery program \$19 is returned to the state's economy, it is clear this program is meeting the intent of HB 3000. This bill allows the state to give a preference to locally produced goods and services, encouraging state dollars to stay in Oregon.

This program also supports the **10-Year Plan for Oregon Project Outcome Area of Building Great Communities (Strategy 4)**. Oregon hatcheries are woven into local communities in respect to providing youth educational experiences, supporting community-based events, and being a destination tourist site for 1.4 million people per year. For example, Bonneville Hatchery hosts nearly 400,000 annual visitors, which is comparable to the 482,000 annual visitors at Crater Lake National Park. The outcome is funding investment of recreational facilities that preserve the special landscapes that are threatened by development.

Program Performance

The leading graph demonstrates the strong return on investment to Oregon from the Hatchery Management Program. In the 2011-2013 biennium, the expected return on investment is \$19 for every dollar invested and \$76 for every state dollar invested. Customers are served daily with angling opportunities available year-round. This measure has been met for the last 10 years and is expected to continue for the foreseeable future.

Other performance metrics, number of fish produced, number of anglers, and the cost benefit ratios for the last decade are listed in Table 1.

Table 1. ODFW program metrics for program performance, 2001-2011

Biennium	2001-03	2003-05	2005-07	2007-09	2009-2011	2011-13*
Fish Produced (millions)	100.2	78.0	80.3	81.3	88.4	83.8
Anglers (thousands)	1,391	1,351	1,274	1,295	1,275	1,206
Cost: benefit ratio (\$)	19	19	18	18	17	17
*projected for full biennium						

- Number of people served — 650,000 people purchasing fishing licenses annually
- Quality of the services provided—8,400,000 days fishing (12.9 fishing days/angler)
- Timeliness of services provided—angling opportunity is provided 365 days per year
- Cost per unit service—The cost benefit ratio of program to economic value is 1:17

Enabling Legislation/Program Authorization

The Hatchery Management Program is established by Wildlife codes in Oregon Revised Statutes (ORS) Chapter 496 and Commercial Fishing codes in ORS Chapters 506, 507, 508, 509, 511, and 513. Operation of ODFW’s hatcheries is governed by the agency’s Native Fish Conservation, Fish Hatchery Management, and Fish Health Management policies, along with federal and state Endangered Species Acts. The Program collaborates with federal and tribal co-managers of fish resources, along with local interests. Hatchery operations are also regulated by Oregon Department of Environmental Quality, with quarterly reporting on effluent water quality, temperature, and chemical use at each hatchery. ODFW’s outstanding record managing water discharges at hatcheries make them good residents in the watersheds they reside in.

Funding Streams

Total funding for the program in the 2011-2013 biennium is \$49,993,289. The program is funded by Federal Funds (67 percent), Other Funds (24 percent), and General Fund (9 percent). Other Funds are derived primarily from sales of fishing licenses, tags and validations, and contractual agreements with non-federal agencies. Federal Funds come from the U.S. Department of Energy (BPA), the U.S. Army Corps of Engineers, the U.S. Department of Commerce (NOAA Fisheries – Mitchell Act), and the U.S. Department of Interior (Sports Fish Restoration Act and Lower Snake River Compensation Plan) and often carry a state cost share of 10 to 50 percent.

Significant Proposed Program Changes from 2011-13

The Hatchery Management Program has several requests for increased limitation in 2013-15. The majority of these changes are funded with federal and other contracts and grants revenues.

Mitchell Act Funding for Hatcheries: \$5,480,000 Federal Fund

Continue funding hatchery reform actions to implement Lower Columbia River Recovery Action and Mitchell Act Environmental Impact Statement (EIS) hatchery actions.

Idaho Power Company Fall Chinook Production: \$359,000 Other Fund (dedicated contract dollars)

Produce 800,000 fall chinook for release in the Snake River in accordance with Tribal, Federal, and state US v Oregon agreement

Marion Forks Hatchery Complex: \$56,000 Federal Fund; \$650 General Fund

Operate newly constructed rebuild of Minto adult trap and acclimation facility to implement recovery actions of the Willamette Valley Biological Opinion.

Oregon Hatcheries Pelleted Fish Feed: \$80,000 Other Fund (dedicated funds)

Hatchery information signs, education, and other hatchery outreach activities from revenue generated from the sale of fish pellets sold to tourist visiting Oregon hatcheries.

Inflationary Exemptions for Fish Feed

- \$869,262 Federal Fund
- \$451,075 Other Fund

Fish feed prices continue to rise faster than the obligatory inflationary rate. During the last two biennia, fish feed prices have risen 15 to 20%.

Inflationary Exemptions for Electricity

- \$87,956 Other Fund

Electricity cost per kilowatt continues to rise faster than the obligatory inflationary rate. In the last biennium, electrical rates have raised 10-15% (average 12.6%).