

# **1999 Oregon Plan Implementation Report For State and Federal Agency Measures Executive Summary August 2000**

## **Overview**

During 1999 state and federal agencies continued to implement Oregon Plan for Salmon and Watershed measures across the state. Governor Kitzhaber signed Executive Order 99-01 in January 1999, expanding the geographic scope of the Oregon Plan to the entire state. Agencies were asked to review and prioritize their measures based on the Order by June 1, 1999.

Thanks to voter approval of Measure 66 in November 1998, funding for implementation of the Oregon Plan increased in 1999. For the 1999-01 biennium state resources total \$53 million for agency staff and grants to local entities and landowners. In addition Congress approved \$9 million in FY 00 federal funds from National Marine Fisheries Service for the state of Oregon to help implement the Plan.

The Oregon Legislature passed, and the Governor signed, new legislation (House Bill 3225) to implement Measure 66. The bill created the Oregon Watershed Enhancement Board (OWEB, formerly GWEB), with a larger citizen based Board, as an independent agency. OWEB was also given expanded responsibilities related to the Plan. OWEB staff was increased to handle a significantly larger grant fund and additional tasks associated with HB 3225. In addition, OWEB received authority to fund land and water acquisitions through the existing grant program.

The Oregon Plan was recognized nationally as a finalist in the Innovations in American Government competition. It was one of 25 finalists selected from over 400 nominated programs. The state was awarded a \$20,000 Ford Foundation grant to use for outreach and education efforts related to the plan.

Below you will find highlights of reports submitted by each of the state and federal agencies on 1999 implementation activities. The full 1999 Implementation Report can be found on the Oregon Plan website at <http://www.oregon-plan.org>.

## **Implementation**

### **Water Quality**

- 27 of 41 Water Quality Management Plans (SB 1010 Plans) were adopted or underway by ODA.
- DEQ completed the first temperature TMDL, on federal lands of the Sucker-Grayback watershed in the Rogue Basin, which was approved by the EPA. In addition, draft TMDLs were completed for the Grande Ronde and Umatilla. 15 additional TMDLs were under development.
- The BLM worked to develop TMDLs for BLM lands in Oregon in cooperation with EPA/DEQ.

- DEQ implemented the Tenmile Lakes on-site system survey and evaluation for compliance and technical assistance. This effort will help identify potential sources of nutrient loading in the Lakes.
- The Lower Columbia River & Tillamook Bay Estuary Plans were both completed and signed in 1999. Implementation committees are in place and plan implementation is underway. EPA provides over \$300,000 annually to each program for implementation.
- 573 river miles were adopted under the Adopt a River program, administered by the OMB. 96,098 pounds of litter refuse was removed from these streams during 1999 clean up events involving 1,620 volunteers.
- Down by the Riverside, a one day clean up event held annually in May, resulted in 123,100 pounds of debris removed in one day by 1,791 volunteers.
- ODOT completed 10 projects to improve erosion control including seeding, ditch restoration and slope stability projects.
- The NRCS assisted 1,429 landowners to develop Resource Management System Plans for 430,073 acres in Oregon and assisted 435 customers treat 93,911 acres of highly erodible land resulting in 2,622,880 tons/yr. soil saved.
- DEQ, NMFS, USFWS, EPA, BLM, USFS worked collaboratively to develop water quality standards that clearly match salmon life history needs and are attainable.
- EPA approved Oregon water quality standards with the exception of temperature on the Columbia and Willamette, USFWS and NMFS issued a no jeopardy opinion on the approved standards.
- EPA endorsed the process Oregon is using to develop and implement TMDLs statewide.
- The USFS monitored water quality at 887 sites on National Forest lands.

### **Water Quantity**

- ODFW & WRD worked cooperatively in 1999 to establish priorities for flow restoration in the Willamette, Sandy, Hood, Deschutes, John Day, Umatilla, and Grande Ronde Basins.
- Over 200 cfs were converted to instream use, 150 through permanent or long term transfers approved by WRD.
- The ACOE prepared a Biological Assessment for Section 7 consultations with NMFS/USFWS on Willamette Basin operations in light of ESA listings in the basin.

### **Fish Management**

- ODFW reduced Coho smolt releases from 6.4 million in 1990 to less than the Oregon Plan target of 2 million in 1999.
- ODFW continued externally marking all Oregon coho and steelhead hatchery smolts and expanded marking to all Willamette chinook to distinguish them from wild fish in fisheries, hatcheries, counting facilities and spawning grounds.
- NMFS provided \$540,000 to ODFW to mark fish in the Clackamas and Columbia rivers.
- A limited hatchery-only recreational coho fishery occurred for the first time since 1993.
- ODFW found the mortality rate on wild coho less than 1% in the small selective fishery off the central Oregon coast, with around 100 wild coho dying in a fishery that harvested over 6,000 hatchery coho.
- ODFW generated the Introduced Fish Management Strategies Report in 1999 that assessed the potential impacts of predation, competition, and other impacts of introduced fishes and provided management recommendations. The report is the basis for proposals

to remove protective angling regulations for introduced fishes in specific locations beginning in 2001, but few feasible options to reduce impacts exist.

- NMFS provided \$50,000 for a two-year creel study in the Rogue. The results of the study are being used to help manage fisheries on the coast in a manner compatible with recovery of listed coho salmon.

### **Fish Passage**

- ODFW continued to pursue removal of artificial fish passage barriers or the establishment of adequate fish passage at these barriers, including those at ODFW fish hatcheries. Modifications were made at Rock Creek, Alsea, and Butte Falls hatcheries. A small dam was removed from a steelhead stream in the Willamette basin in cooperation with the landowner and funding provided by NMFS and ODFW's R&E Board.
- Forest landowners upgraded 212 road crossings to provide adult/juvenile fish passage.
- Road surveys to identify projects for stream crossings to allow passage of adult and juvenile fish are nearly completed on all state forests.
- ODOT completed 9 projects to improve fish passage, involving culvert modification, jump pool establishment, and installation of fish barbs, weirs and ladders.
- The BLM invested \$4,227,300 to complete 130 projects resulting in 122 culvert replacements, and 66 miles of roads decommissioned.
- The USFS decommissioned 388 miles of roads and removed associated culverts.
- With landowner cooperation, an irrigation dam that impeded migration of winter steelhead and resident trout to more than 17 miles of habitat in a Willamette Basin stream was removed using an ODFW Restoration & Enhancement Board grant and funding from NMFS's Community-Based Restoration Program.

### **Habitat Protection and Restoration**

- The Forest Practices Advisory Committee met throughout 1999 to determine how well the forest practice rules meet water quality standards and protect and restore fish. The committee is expected to provide recommendations to the Board of Forestry during 2000.
- In 1999, ODF continued development of the Northwest Forest Management Plan and Western Oregon Habitat Conservation Plan (HCP) strategies. These strategies describe how state forest landscapes will be managed to maintain aquatic and riparian functions. These functions include maintenance and recruitment of large wood through development or protection of riparian areas, sediment routing and storage, protection of sensitive aquatic sites and temperature control through shading. The plan is to be presented to the Board of Forestry in 2000.
- Private forest landowners completed 48 instream projects to restore habitat, with an additional 14 projects completed by state forests.
- Forest landowners completed 165 projects retaining additional trees in harvest units above current FPA requirements on 62.9 miles of stream and additional snags and downed wood were retained along 19.7 miles of Type N stream.
- DSL expanded essential habitat protections to include streams where there are steelhead and coho listings.
- OPRD planted 65 acres of riparian forest at 2 locations on the Willamette.
- The NRCS assisted 59 landowners to create or restore 3,214 acres of wetlands.

- DLCD distributed 14 grants to local jurisdictions to implement Goal 5 rules for wetland & riparian area protection.
- OECDD awarded \$384,306 in FEMA Funds and \$153,000 in Old Growth Funds to local organizations for habitat restoration on the Oregon Coast.
- USFWS Jobs-in-the-Woods Program, in partnership with 30 private, commercial timber, and tribal landowners, funded 18 restoration projects totaling \$688,200; Partners for Fish and Wildlife Program funded 11 restoration projects in partnership with landowners, totaling \$155,000.
- The USFWS acquired over 2,000 acres for National Wildlife Refuges.
- The USFS completed 222 miles of stream restoration and 4,165 acres of soil and water restoration.
- USFS acquired 2,330 acres of land to benefit riparian resources.
- ODFW expanded its program of placing hatchery salmon carcasses in upper reaches of streams to partially replace nutrient benefits to juvenile salmonids that have been reduced as wild spawner numbers have declined. DEQ worked cooperatively with ODFW to issue necessary permits and assist with water quality monitoring.

### **Compliance/Enforcement**

- ODA completed 499 inspections of 610 CAFOs operating in Oregon.
- DOGAMI completed 967 field inspections of mine sites to ensure permit compliance.
- A stormwater partnership between DEQ and DOGAMI has resulted in a 64% increase in general stormwater permits at mine sites. Most of the increase was the result of additional field presence.
- Storm water permits require twice yearly sampling. DOGAMI received sampling results from 61% of permittees, up from 15% in 98. The goal is 90% for 2000.
- OSP continued to work with several agencies on violations involving fill and removal, illegal dumping/discharges, and angling regulations.
- ODF has completed a pilot study to assess best management practice compliance monitoring (ODF Technical Report #5). Fifty-two sites were selected to examine compliance with water-quality and fish habitat protection rules.

### **Support for Local Efforts**

- ODA supported 37 watershed technical specialists at SWCDs across the state funded through OWEB. These specialists are working with landowners to develop farm plans consistent with 1010 water quality plans. 300 farm plans were completed in 1999.
- NMFS, USFWS, BLM, USFS, ACOE provided funds and/or FTE to support the Willamette Restoration Initiative.
- The BLM participated in 58 watershed councils providing \$181,550 in technical support and \$533,900 through their Wyden Amendment authority for cooperative projects.
- The USFS provided \$771,965 to local partners through their Wyden Amendment authority for cooperative projects
- USFS allocated \$130,000 to help fund agency participation in watershed councils.

- The USFS created an Oregon Plan Liaison position to increase agency participation in statewide and local efforts.
- ODFW provided technical assistance to watershed councils, SWCDs, and landowners across the state.
- DOGAMI worked with the McKenzie Watershed Council Confluence Partnership to identify ways to reduce flooding of aggregate sites and improve salmonid habitat.
- WRD worked with the Little Butte Creek Watershed Council on a basin wide water efficiency project with willing landowners.
- DSL began work on statewide Programmatic General Permit to streamline permitting for removal/fill activities.
- OWEB awarded over \$15 million in grants across the state for assessment, monitoring, council support, education/outreach, and watershed restoration projects.
- USFWS provided funds for a watershed engineer in Rogue to work with watershed councils, SWCDs on the push up dam removal plan.

## **Outreach, Education and Technical Assistance**

- OWEB develop and distributed the *Oregon Watershed Assessment Manual* for use by watershed councils and others in assessing historical and current watershed health.
- The Oregon Plan Monitoring Team completed and distributed the *Water Quality Monitoring Technical Guide Book* for use by watershed councils, SWCDs, landowners, volunteers and others. The Guide provides protocols for monitoring stream temperature, dissolved oxygen, pH, conductivity, nitrogen/phosphorus concentration, turbidity, macroinvertebrates and pesticides and toxic chemicals.
- A federal/state interagency team, led by ODF, developed and distributed the *Oregon Aquatic Habitat Restoration and Enhancement Guide* providing guidelines for a range of restoration activities conducted in Oregon.
- OSU published *A Snapshot of Salmon in Oregon* providing information on the range of factors affecting the decline of salmonids in Oregon. This newspaper insert was distributed statewide.
- OSU developed and implemented the Watershed Steward Educational Program (WSEP) running three pilot projects on the coast consisting of 8 workshops attended by 400 individuals.
- OSU sponsored the first annual Watershed Weeks which included participation by 30 organizations hosting 75 watershed events in the late summer.
- OSU produced a video entitled *Life Cycle of the Salmon*, which was distributed broadly.
- The Oregon Plan Outreach Team sponsored a booth at the Oregon State Fair. Volunteers from several state and federal agencies staffed the booth. Adults completed surveys testing their watershed and salmon knowledge. The Fair display was made available to local groups for use at County Fairs and other local events.
- DOGAMI held two workshops for aggregate miners, county staff and consultants on Best Management Practices for controlling storm water at mine sites.
- OPRD provided over 375 interpretative programs at state parks, which provide both direct and indirect messages about how water quality, forest ecology and other environmental factors affect salmon and their habitat.

- DLCD and ODOT developed a “Model Development Code and User’s Guide for Small Cities,” a “Smart Development Code Handbook” and “The Infill and Redevelopment Code Handbook,” all of which emphasize the efficient use of land for urbanization. DLCD and DEQ neared completion of a “Water Quality Model Code” component, which is designed to assist small cities in integrating water quality considerations into their development codes.
- ODOT, ODFW and OSU jointly sponsored a Culvert Retrofit Class which consisted of five 8-hour classes attended by local government, agency staff, consultants.
- ODF provided training for operator installation of culverts to provide fish passage.
- ODF, in coordination with OFIC, ODFW, DEQ, and OSU, led the development of the Forest Road Management Guidebook which will be published in early 2000.
- The National Ocean Service’s Coastal Services Center has provided staff to develop a GIS-based estuary information system, and modules have been completed for the Nehalem, Siletz, Siuslaw, Coos and Coquille estuaries.
- ODFW published brochures and posters explaining selective fisheries and showing anglers how to identify coho, chinook and finclipped hatchery fish.
- USFWS provided technical assistance for implementation of the Conservation Reserve Enhancement Program, sponsored booths at the Oregon State Fair and the Salmon Festival, and assisted planning and outreach activities in the Portland metro area.

### **Research/Science**

- The Independent Multidisciplinary Science Team issued two technical reports in 1999-1999-1, *Recovery of Wild Salmonids in Western Oregon Forests: Oregon Forest Practices Act Rules and the Measures in the Oregon Plan for Salmon and Watersheds* and 1999-2, *Defining and Evaluating Recovery of OCN Coho Salmon Stocks: Implication for rebuilding stocks under the Oregon Plan*.
- ODFW and NMFS co-sponsored a workshop on exotic fishes to examine the effects these species have on anadromous and resident salmonids. The proceedings were published in April 1999.
- DOGAMI completed a white paper on the potential positive and negative effects of floodplain sand and gravel mining on salmonids. The paper was published in the proceedings of the Society of Mining Engineers annual meeting in March 1999.
- ODF completed a Storm Monitoring Study which evaluates the effects of the February and November 1996 storms on landslide density and channel impacts, particularly as they relate to forest management. The final report is available (ODF Technical Report #4).

## **Monitoring and Assessment**

- Throughout coastal basins, coordinated monitoring based on a statistically rigorous plan was fully implemented by ODFW and DEQ. Status and trends in adult salmon returns, stream habitat condition, juvenile coho and steelhead abundance, and water quality indicators are being measured in 500, 300, 250, and 90 sites per year respectively. The same sampling template has been modified so that local monitoring efforts can coordinate with the coast wide work.
- The Monitoring Team provided scientific review of proposals to OWEB for a variety of monitoring and assessments. Monitoring Team review helped improve the quality of many proposals and ensured higher levels of coordination with state efforts.
- The Department of Environmental Quality (DEQ) provided equipment and training for water quality assessments to 35 watershed councils. DEQ created a position for a Volunteer Monitoring Coordinator to provide full time support for local efforts.
- ODFW provided summaries and analysis of stream channel and riparian monitoring results to the Forest Practices Advisory Committee showing that while many habitat parameters of private forestland streams indicate good conditions, there is a significant deficit in the amount of large wood in channels and large trees growing in riparian areas.
- ODF monitored 26 sites during the Fall and Spring of 1997 and 1999 to assess whether forest practice rules are effective at protecting water quality from drift contamination during aerial application of herbicides and fungicides. A final report is available (ODF technical Report #7).
- ODF completed a Storm Monitoring Study which evaluates the effects of the February and November 1996 storms on landslide density and channel impacts, particularly as they relate to forest management. The final report is available (ODF Technical Report #4).
- ODF has been monitoring stream temperature at a sub-basin scale at four sites and seven reach-level sites. Preliminary results have been completed which indicate the rules are generally effective at preventing increases in stream temperature on Type F streams beyond background variability.
- The Monitoring Team coordinated input to the Independent Multidisciplinary Science Team's Escapement Workshop. Information from Oregon Plan monitoring activities supported understanding and interpretation of trends in coho salmon returns, hatchery/wild ratios on spawning grounds, estimates of survival rates, distribution of highly productive stocks, and the ability to model future declines or recovery.
- Subcommittees of the Monitoring Team develop and published a set of protocols for assessing stream temperature, dissolved oxygen, macro-invertebrate populations, and other water quality measures. Reaching agreement and obtaining peer review of the methods and protocols, then making the protocols widely available, provides a stronger basis for local monitoring efforts.
- Oregon Plan funds for monitoring activities were leveraged with federal, local government, foundation, and private industry funds and matching efforts to more fully implement the monitoring plan. Notable contributions were made by the BLM for inventories of stream habitat (\$285,000) and by the Oregon Forest Industries Council to do additional investigations into trends in habitat condition across multiple ownerships (\$130,000).

- Although leveraged funds create the opportunities, they also illustrate an example of the challenge that the OPSW faces when attempting to fund a long term monitoring effort. When monitoring activities are funded through multiple sources of state and federal funds, grants, and contracts, they become vulnerable to changes in support or shortfalls in any of these sources. This creates a direct impact on the number of sample sites that can be evaluated, the quality of information, and the ability of managers to act based on good information.
- ODF and partners surveyed and mapped approximately 5.5 percent to eleven percent of Oregon's streams for fish use creating a baseline of fish distribution that can be evaluated over time.
- USFS conducted 429 miles of fish habitat surveys and completed 15 watershed assessments on National Forests.
- Watershed councils began using the OWEB Watershed Assessment protocols to develop assessments and interpret conditions at the local level. Approximately 40-60 assessments are underway and about 9 assessments are complete with the councils now working on restoration action plans.