Excerpt From:
Oregon Conservation Plan for the Oregon Coast Coho
Agency Contributions Section

FULL TEXT OF ONGOING OREGON PLAN EFFORTS AND NEW COMMITMENTS

Oregon Water Resources Department (OWRD)

The Oregon Water Resources Department is the primary agency responsible for determining the availability of water for beneficial uses, monitoring, distributing and regulating water use, and promoting responsible water management. The Department's mission is to serve the public by practicing and promoting responsible water management through two key goals: To directly address Oregon's water supply needs, and to restore and protect streamflows and watersheds in order to ensure the long-term sustainability of Oregon's ecosystems, economy, and quality of life.

Existing Legal Framework
Oregon water law determines which water rights are legally entitled to water based on the doctrine of prior appropriation. This doctrine operates on the "first in time, first in right" principle meaning that, in water-short times, the appropriator with the oldest, or most "senior" water right, can demand the water specified under the right regardless of the needs of other users. If there is water in excess of the needs of this senior right holder, the person with the next oldest priority date can take as much as necessary to satisfy needs under that right, and so on down the line until all needs are met, or until no water is available. Junior water right holders are protected by laws that prohibit senior users from making changes in use through water right transfers that injure junior users.

Water management in Oregon has historically emphasized consumptive water uses. The growing concern for and recognition of the need to protect instream values such as fish and wildlife and their associated aquatic habitat has required new approaches that consider the public interest and instream needs and values. New statutory authorities were created to reflect these changing values. These include authority for state agencies (Environmental Quality, Parks and Recreation, and Fish and Wildlife) to apply for instream water rights, the ability to move existing consumptive rights instream via leases, transfers and allocations of conserved water, and public interest evaluations of new water use applications.

Conservation Plan Framework
With respect to watersheds and salmon recovery, OWRD has focused its limited staff capability in areas that have the greatest opportunities to benefit fish. In 2002 OWRD and ODFW jointly identified priority areas for streamflow restoration throughout the state. These priority areas represent watersheds in which there is a combination of need and opportunity for flow restoration to support fish recovery efforts. Within the Oregon Coastal Coho ESU, 153 high priority flow restoration watersheds have been identified.

Of these, 49 are in the North Coast population monitoring unit, 41 in the Mid-Coast, 34 in the Mid-South Coast, and 29 in the Umpqua monitoring unit.

The assessment of factors limiting Coastal Coho populations included an analysis of the consumptive use of water as a percent of August natural flow. While generally not a cause for concern across the ESU, low flow conditions in the Umpqua Monitoring Unit were identified as a primary limiting factor. The need for streamflow restoration was also identified in the Mid-South Coast monitoring unit, although flow was not a primary limiting factor. Consistent with this assessment, since 1997 streamflow restoration efforts in the Coastal Coho ESU have been focused in the Umpqua and Mid-South Coast monitoring units, the areas with the greatest flow restoration needs for coho.

Restoration efforts in these priority areas have been guided by strategies with specific actions designed to address a variety of human influences that may contribute to low flow conditions. OWRD has identified a number of new statewide concepts that may also contribute to Coho recovery. Both existing agency actions and new concepts are described here in detail.

Existing Agency Actions

OWRD has a number of ongoing actions targeted in priority flow restoration watersheds and streams that incrementally aid in improving salmonid habitat. Within the existing legal framework, the actions are intended to support recovery efforts by encouraging voluntary efforts by water users to preserve and enhance streamflows and by ensuring that the use of water is consistent with state water law and the terms and conditions of water rights. Programs and specific actions are described below.

Water Distribution and Regulation

Water distribution and regulation includes OWRD regulatory authority to prevent illegal use and to distribute water according the water rights of record. The relationship between this regulatory authority and instream benefits are described in the following actions.

<u>Perform distribution to provide water rights, including Instream Water Rights, with the water to which they are entitled</u>

One of OWRD's primary functions is the distribution and regulation of water use based on the system of prior appropriation and rights of record. Watermasters are responsible for the protection of senior water rights, including instream water rights. Watermasters and their assistants work with water users to protect existing instream water rights from junior and illegal uses in streams of the Oregon Coastal Coho ESU. The authority to regulate water use is set forth in Oregon statute (ORS 540.045) and rules (OAR Chapter 690, Division 250) and is the primary mechanism for providing certainty of implementation and effectiveness of streamflow protection and restoration efforts.

When streamflow measurements indicate the quantity of water in a stream is less than the instream water rights, the Department requires junior water right holders to stop or curtail their use. Depending on the priority date of the instream water right, flows may be stabilized or may improve. In many instances, the instream water right is junior relative to other rights on the stream. Under Oregon law, an instream water right cannot affect a use of water with a senior priority date. Therefore, instream water rights do not guarantee minimum streamflows in stream reaches. In the Umpqua monitoring area, low

streamflow has been identified as a limiting factor in some areas. Protection of existing instream water rights and increasing flow through voluntary flow restoration will be key to addressing this limiting factor.

OWRD has established performance measures and targets related to regulating water use on behalf of instream water rights. One performance measure is the ratio of streams regulated to protect instream water rights to all streams regulated. The Department's goal is for 35% of all streams regulated to be regulated on behalf of instream water rights. The Department does not currently track this performance measure at the Coastal Coho ESU scale. However, within the four Watermaster districts that include the Coastal Coho ESU, 54% of all streams regulated in 2004 were regulated on behalf of instream water rights.

Maintaining Streamflows through Compliance and Enforcement

It is a priority for OWRD to reduce or eliminate illegal water use. Illegal water use may be any one of the following:

a) Use of water without a water right or other legal water use authorization;
b) Use of water is in excess of or contrary to the terms and conditions of a water right;
c) Continued use of water after use has been denied by OWRD.

Reducing and eliminating illegal water use increases streamflows and allows other users, including instream users, to benefit from the flows. Since many instream water rights are junior in priority to older out-of-stream uses, elimination of illegal water use increases the likelihood that an instream water right will be met.

OWRD has a strong regulatory role in the coastal basins. The primary responsibility for enforcing water law resides with OWRD Watermasters and their county assistants. There are currently four Watermaster districts within the Oregon Coastal coho ESU, including a coastal office opened in 1996. Enforcement or compliance monitoring of water rights is initiated either by Watermaster investigation or by investigation of a complaint. Voluntary compliance within the four Watermaster districts of the Coastal Coho ESU averaged 95% in 2004.

Water Use Measurement

As part of their regulatory function, Watermasters monitor streamflows and instream water right usage. These efforts create the base information necessary to determine the flows that are present, and to shepherd water past junior users to the senior users, both instream and out-of-stream.

Watermasters and their assistants regularly monitor streams within their districts, particularly those with instream water rights or minimum streamflows. Under the Oregon Plan, Watermasters have also trained volunteers to perform streamflow measurements on coastal streams. Volunteer flow measurements aid Watermasters in distributing water as necessary to protect instream water rights.

There have been up to 35 continuous recording streamflow gages operated by OWRD or the US Geological Survey that measure streamflows at instream water right locations within the Oregon Coastal coho ESU. Of this total, up to 18 gages have been operational

within the Umpqua population monitoring unit. Due to budgetary constraints, not all gages within the Coastal Coho ESU remain operational.

ORS 537.099 requires that government entities holding water rights report water use on an annual basis. This requirement applies to OWRD as the holder in trust of instream water rights. OWRD monitors and reports "water use" by instream water rights to the Water Resources Commission on an approximately annual basis. However, the water use measurement and reporting position which was responsible for analyzing and synthesizing instream measurements collected by Watermasters was eliminated in the 2005-2007 legislatively adopted budget. OWRD has requested restoration of this position with its 2007-2009 Agency Requested Budget.

Inventory of Significant Diversions

As part of the Water Resources Commission strategy for increasing water measurement statewide, OWRD has been completing an inventory and field inspection of significant diversions in high priority flow restoration watersheds. Significant diversions are defined as all diversions of permitted and certificated water rights with conditions requiring measurement and reporting and diversions greater than 5 cfs or greater than 10% of the lowest monthly 50% exceedance flow on a stream. The inventory of significant diversions within high priority watersheds in the Coastal Coho ESU is mostly complete.

With the inventory complete, Watermasters and their assistants will complete the field inspection phase of this effort. During this phase, assessments of headgates and measuring devices are conducted to assure compliance with permit conditions, including conditions requiring screening and fish passage.

Fish and Fish Habitat Protection

Actions associated with fish and fish habitat protection are designed to maintain and restore streamflow and improve fish passage and habitat.

Instream Water Rights

Instream water rights (ISWRs) were established by Oregon statute in 1987. The Instream Water Right law allows ODFW, DEQ, and OPRD to apply for ISWRs for the purpose of fish protection, minimizing the effects of pollution, or maintaining recreational uses (ORS 537.332). The law gives ISWRs the same status as other water rights. Once issued, ISWRs are held by OWRD as trustee for the people of the State of Oregon.

Within the Oregon Coastal coho ESU, over 3,700 miles of stream are protected by an ISWR, including 888 miles in the Umpqua monitoring unit and 909 in the Mid-South Coast. ISWRs establish flow levels to stay in a stream on a monthly or half-month basis and are usually set for a certain stream reach. ISWRs can be issued for up to the estimated average natural flow of the stream even if this flow is not currently present – or at even higher flows if there is a documented reason such as addressing a fish passage barrier. Since ISWRs are based on natural streamflow rather than existing or actual flows, they may appropriate all of the remaining water in a stream and result in limited opportunity for additional out-of-stream uses of water. Depending on the priority date of

the instream water right, flows are either stabilized or may improve where ISWRs are in place. In many instances, the ISWR is junior relative to other rights on the stream. Under Oregon law, an ISWR cannot affect a use of water with a senior priority date. Therefore, ISWRs do not guarantee minimum streamflows in stream reaches.

Since ISWRs are treated like other water rights, they are protected from injury. Water right holders must obtain approval from OWRD to change the type of water use, place of use, or point of diversion on a stream. Water rights statutes do not allow a water right change, or "transfer," if the proposed change results in injury to another existing water right, including ISWRs.

Evaluation and Issuance of New Water Rights

New appropriations of surface water or hydraulically connected ground water are evaluated using the Water Resources Commission's Water Allocation Policy under OAR Chapter 690, Division 410. The Water Allocation Policy sets standards for evaluating whether water is available for new appropriations from Oregon streams. Direct appropriations from streams are evaluated on an 80% exceedance basis. This means that before a new water right may be issued OWRD must conclude that water is available for appropriation 80% of the time. The amount of available water is calculated by subtracting consumptive uses, scenic waterway flows, and ISWRs from natural flow. Use of the 80% exceedance standard helps ensure that new appropriations will not further diminish water available to satisfy instream water rights and scenic waterway flows. As part of its Oregon Plan efforts, the Department updated its water availability model in 1997 to ensure that instream water right flows were included in the model.

Issuance of new surface water rights in the Oregon Coast coho ESU is further constrained by additional public interest standards to protect the habitat of sensitive, threatened, and endangered species (OAR Chapter 690, Division 033). These rules were adopted in 1996 and require that all new water right applications in the coastal basins must undergo a review by an interagency team for adverse impacts to fish habitat. The purpose of this review is to only grant applications that can be conditioned to protect the habitat of sensitive, threatened, or endangered fish species. As a result, all new permits in coastal areas require barrier-free fish passage where there are fish present, to the specifications requested by ODFW. All new permits in coastal areas also require fish screening where fish are present, to the specifications requested by ODFW.

Enclosed Livestock Water Delivery

Livestock owners with legal access to use of surface waters are exempt from the requirement to obtain a permit or certificate if the water is diverted to a trough or tank through an enclosed water delivery system and the delivery system is equipped with an automatic shutoff or flow mechanism or includes a means for returning water to the surface water source. Watermasters and their assistants provide technical support to livestock owners to facilitate implementation of enclosed livestock water delivery systems. When coupled with riparian fencing programs, this program is particularly effective in the restoration and protection of habitat.

Flow Restoration Programs
These agency actions promote flow restoration and conservation through a variety of voluntary programs.

In 1987, Oregon passed legislation (ORS 537.348) allowing any person to purchase, lease, or receive as a gift any existing water right or portion thereof for conversion to an instream water right. Water rights may be transferred to instream uses, either permanently by an instream transfer or an allocation of conserved water or temporarily by a lease agreement or temporary transfer. These transferred rights become ISWRs with the priority date of the original right. Instream transfers and leases provide a method for the State to incrementally increase streamflows. Transfers and leases also provide the opportunity to strategically address flow problems on specific stream reaches. Existing water rights can be acquired and converted to ISWRs on stream reaches that are in need of additional flows for salmon restoration. Watermasters and OWRD technical staff regularly provide assistance to those completing the application process for voluntary flow restoration programs.

OWRD works in partnership with interested landowners and other entities to facilitate protection and enhancement of instream flows by transferring and leasing senior, out-of-stream rights. One group working to restore flows is the Oregon Water Trust, a private nonprofit organization formed in 1993. The Trust takes a free-market approach to restoring and protecting critical stream habitat for fish and wildlife, and works with water right holders who are willing to sell, lease, or gift all or a portion of their water right for instream flows. OWRD Watermasters and staff provide significant technical assistance to these types of conservation groups and to landowners working on lease, transfer, and conserved water applications.

Since the onset of the Oregon Plan in 1997, 66 voluntary streamflow restoration projects have occurred in the Oregon Coastal Coho ESU through 2004. These projects have occurred in the Mid-South Coast and Umpqua management units and have totaled 25 cubic feet per second (CFS) of water instream, with 16 CFS returned to instream uses in the Umpqua monitoring unit. Additional research monitoring and evaluation will be necessary to determine specific improvements to coho populations brought by incremental flow restoration. Regardless of this uncertainty, OWRD continues to work with landowners and other partners to seek these incremental flow improvements in areas where they are most needed for fish. Participation in voluntary flow restoration programs continues to increase statewide.

<u>Voluntary Instream Leases</u>
Oregon's Instream Leasing program provides a voluntary means to aid the restoration and protection of streamflows. This arrangement provides benefits to both water right holders and to instream values by providing water users with options that protect their water rights while leasing water for instream benefits. Water users who are at risk of forfeiture of their water rights due to non-use may find instream leases to be a good management option.

OWRD has streamlined the instream leasing process, so that most coastal leases are processed in one month. The length of term of an instream use lease cannot exceed five years or, in the case of irrigation rights, five irrigation seasons. However, leases may be renewed an unlimited number of times. Additionally, the Oregon Watershed Enhancement Board has funded instream leases on the coast during drought years. These leases of older consumptive use rights for instream use provide greater certainty that water will be instream to meet fish needs.

Voluntary Water Right Transfers

Water rights are appurtenant to the land and generally are conveyed with the land when it is sold from one landowner to another. A water right may only be used for the purposes authorized under the right at the location identified in the right unless a change in the use is authorized by OWRD through a water right transfer. A transfer may approve changes in the place of use, point of diversion, or character of use of a water right. In reviewing applications to transfer water rights, OWRD is responsible for ensuring that other water right holders will not be injured by the change. There is growing interest in the state in the use of the water right transfer process as a tool to secure water to support streamflow restoration.

Allocations of Conserved Water

The Allocation of Conserved Water program is a voluntary activity that provides benefits to both water right holders and instream values. The law allows a water user who conserves water to use a portion of the conserved water on additional lands, lease or sell the water, or dedicate the water to instream use. The primary intent of the law is to promote the efficient use of water to satisfy current and future needs--both out-of-stream and instream. The law provides a certainty that after mitigating the effects on any other water rights, a minimum of 25% of the conserved water is allocated to the state for an instream water right. The applicant receives 75 % of the conserved water, unless the applicant proposes a higher allocation to the state or more than 25% of the project costs come from federal or state non-reimbursable sources. In many cases, 100 % of the conserved water is permanently protected instream. The conserved water has either the same priority date as the originating water right, or is one-minute junior to the originating right.

Conservation Reserve Enhancement Program

Water rights are generally subject to forfeiture after five years of non-use. However, by statute, water rights appurtenant to lands enrolled in the Conservation Reserve Enhancement Program (CREP) are not subject to forfeiture due to non-use during the time these lands are enrolled in the program. While water rights appurtenant to lands enrolled in CREP are not subject to forfeiture during the enrollment period, landowners are encouraged to lease or temporarily transfer their water rights for instream use during CREP enrollment. A water right that is leased or temporarily transferred instream is considered to be beneficially used during the term of the lease. OWRD will continue to work cooperatively with other agencies to promote this program.

Agricultural Water Management and Conservation Planning Program

This largely voluntary program helps irrigation districts and other agricultural water suppliers examine their supply, demand, future needs, and water conservation tools. Analysis and application of appropriate conservation tools may lead to an increase in available water supplies. Conservation options include promotion of energy audits, conversion to a metered pressurized system, piping or lining of canals, increased flexibility of deliveries and modifications of distribution facilities. The goal of this program includes promoting effective and responsible water management and conservation within irrigation districts. OWRD is committed to reviewing each Water Management and Conservation Plan within 90 days of receipt.

Municipal Water Management and Conservation Planning Program

Within the Coastal Coho ESU, water development was identified through the stakeholder process as important to ESU recovery efforts. The Municipal Water Management and Conservation Planning program provides a process for municipal water suppliers to develop plans to meet future water needs. Many municipal water suppliers are required to prepare plans under water right permit conditions. In addition, with the revision of the permit extension rules in fall 2002, communities seeking long-term permit extensions are required to prepare plans. These plans quantify the communities' needs for increased diversions of water under the permits as their demands grow. The plan also provides a description of the water system, identifies the sources of water used by the community, and explains how the water supplier will manage and conserve supplies to meet future needs. Preparation of a plan is intended to represent a pro-active evaluation of the management and conservation measures that suppliers can undertake. The planning program requires municipal water suppliers to consider water that can be saved through conservation practices as a source of supply to meet growing demands if the saved water is less expensive that developing new supplies. As such, a plan represents an integrated resource management approach to securing a community's long-term water supply.

Public Outreach and Education

Watermasters and field services staff provide ongoing public outreach and education to water users and conservation interests. In addition, Watermasters provide technical support and information to watershed councils and others involved in streamflow and habitat restoration. OWRD is committed to continuing this effort within the Coastal Coho ESU.

OWRD recently partnered with the League of Oregon Cities and other groups to complete a guidebook to assist municipalities with the preparation of Municipal Water Management Plans. Release of the guidebook has resulted in improvements in the quality of submitted plans and a decrease in time required for their review and approval.

OWRD is also committed to maintaining and providing accurate streamflow data to researchers and interested parties, and to make data supportive of watershed and fish restoration activities readily accessible via the OWRD website within its existing capabilities.

A significant amount of data is now available through the OWRD website. Annual reports of regulatory activity by stream reach and Watermaster are available following the close of each water year (October 1 through September 30). Key performance measures are also available, including high priority flow restoration transactions and ratio of streams regulated for instream uses compared to all streams regulated. Additional data includes the Water Availability Reporting System (WARS). This database provides water available for new out-of-stream consumptive uses from a given point. The Oregon Water Resources Web Mapping Program allows interactive mapping and querying of data associated with the OWRD water rights information system (WRIS), water availability basins (WABs), points of diversion and use, and ground water limited areas, for example.

Improvement of Resource Understanding

OWRD continues to work to improve our understanding of the State's surface and ground water resources. In addition to surface water measurements and analysis, ground water investigations are key to assessing stream-aquifer interactions, aquifer hydraulic properties and aquifer recharge and discharge relationships. General funding for these investigations has been reduced over the last several biennia and was eliminated in 2005-2007. However, OWRD continues to look for ways and partnerships to complete these important investigations.

New Concepts

OWRD has identified a number of new statewide concepts which may also support the Coho Conservation Plan. The majority of these concepts are dependent on securing additional funding through grants or policy option packages (POP) proposed in the 2007-2009 Agency Request Budget. These concepts are described below as they relate to existing agency programs and actions.

Water Distribution and Regulation

OWRD is proposing a 2007-2009 Policy Option Package (POP 401, 1 FTE) to restore the Water Measurement and Reporting Specialist, eliminated in the 2005-2007 biennium. Restoration of this position will improve statewide instream water rights "water use" reporting. In turn, this will help inform Coastal Coho research monitoring and evaluation. The Department is also proposing a 2007-2009 Budget Concept (POP 304) for $100,000 in statewide funding for flow monitoring and restoration equipment. In addition to this POP, the Department is continuing to seek alternate funding sources for monitoring instream flows and to install and maintain continuous monitoring gages. OWRD is also interested in further partnerships with OWEB to secure funding for watershed groups to provide volunteer streamflow monitoring within population management units for which flow is a limiting factor. OWRD is also proposing a 2007-2009 POP (303) to add one FTE in each of its five regions statewide. These Field Service Technicians will help to counter declining funding for Assistant Watermasters at the county level.

Flow Restoration Programs
OWRD and OWEB are developing a Memorandum of Understanding (MOU) to provide funding to cover the application fees for enrolled CREP participants who wish to temporarily lease or transfer their water rights to instream uses.

Public Outreach and Education
OWRD continues to investigate potential enhancements to our reporting capabilities and accessibility of data to assist in outreach, education, monitoring, and adaptive management efforts under the Conservation Plan. In particular, OWRD is going to assess opportunities to report regulation activities and other relevant data at the ESU or other scale in support of adaptive management.

New in June 2006, our on-line Interactive Mapper was updated to include Instream Water Rights mapping capability similar to mapping of other water rights. OWRD is also seeking funding from the National Fish and Wildlife Foundation's Columbia Transactions Program to assist in the migration of instream leasing, transfer and allocations of conserved water data to our on-line water right information system (Funding Awarded September 2006). Migrating this data to the OWRD website would provide information critical to the evaluation of current conservation measures and adaptive management.

OWRD is currently developing a guidebook to assist irrigation districts and other agricultural water suppliers to prepare Water Management and Conservation Plans that meet Oregon and Federal requirements. This guidebook will help agricultural water suppliers describe their water systems and needs, identify their sources of water, and identify ways to manage and conserve those supplies to meet present and future needs. A series of workshops will be conducted to introduce the guidebook and describe how it can aid them in meeting water supply and regulatory demands (Bureau of Reclamation Funding Awarded July 2006).

Improvement of Resource Understanding
OWRD is proposing a number of 2007-2009 budget concepts that would advance our understanding of our water resources and the demands on them. One such concept (POP 403) would fund the Oregon Water Supply and Conservation Initiative, a comprehensive overview of future supply needs. This POP would assess existing and future water needs, including instream water needs; inventory potential storage sites; and analyze potential conservation opportunities. The initiative also proposes match funding for community-based and regional water supply planning.

Research Monitoring & Evaluation
The Water Resources Department will continue to incorporate adaptive management principles through the development of annual action plans for high priority watersheds. To facilitate research monitoring and evaluation of coastal coho recovery efforts, OWRD will assess opportunities to report regulation activities and other relevant data at the ESU or other scale in support of adaptive management under the Conservation Plan.