OREGON WATER RESOURCES DEPARTMENT

2019-21 BUDGET PRESENTATION

OREGON

WATER RESOURCES DEPARTMENT

SUPPLEMENTAL WRITTEN MATERIALS

Contents

OREGON WATER RESOURCES DEPARTMENT

Chapter 1: Agency Overview

A HISTORICAL PERSPECTIVE

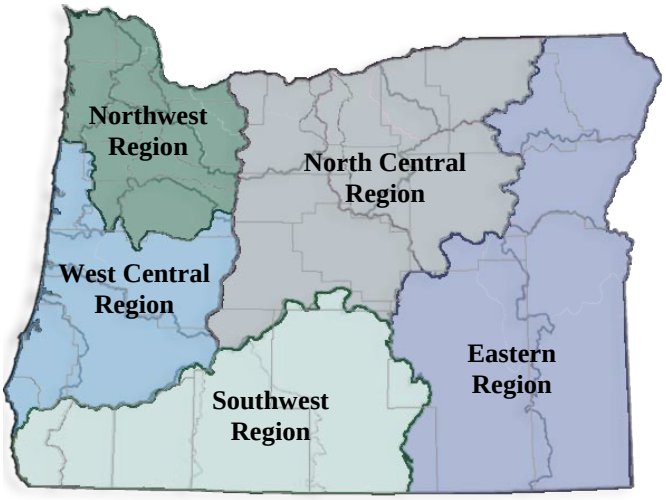
Agency Structure

The Oregon Water Resources Department is Oregon's *water quantity* agency. Unlike many state natural resource agencies, *there is no federal counterpart to the OWRD.*

The agency's structure has changed over the years, since adoption of the Water Code, with various iterations preceding the modern structure of the agency. In 1975, the Legislative Assembly created the Water Policy Review Board and merged the State Engineer's Office and the State Water Resources Board to create the Water Resources Department. Policy responsibilities were transferred to the Water Policy Review Board. In 1985, the Water Policy Review Board was renamed the Water Resources Commission.

Today, the Water Resources Commission, a seven-member citizen board, oversees the activities of the Water Resources Department. The Commission is responsible for setting statewide water policy, consistent with state law.

Commission members are appointed by the Governor for four-year terms, subject to confirmation by the Oregon Senate. The Commission includes a citizen appointed from each of five regions of the state (as shown in the map), as well as the east-side and a west-side at large.



Director Tom Byler (left) with members of the Commission from left to right: Kathy Kihara, East-Side at Large; Vice-Chair Bruce Corn, Eastern Region; Chair Meg Reeves, West-Side at Large; Mike Faught, Southwest Region; Eric Quaempts, North Central Region; Joe Moll, West Central Region; and Bob Baumgartner, Northwest Region.

As shown in the chart below, the Commission and Department seek to understand Oregon's water resources, needs, and coming pressures and meet instream and out-of-stream needs by:

- Collecting and providing crucial data about groundwater, streamflows, and water needs throughout Oregon.
- Understanding changing conditions and modernizing our systems.
- Protecting public safety and water supplies through proper well construction and dam safety.
- Distributing water based on the system of prior appropriation and upholding Oregon water law.
- Providing technical assistance and funding for planning, assessing, and implementing water resources projects to help meet instream and out-of-stream needs.
- Processing water rights, permits, transfers, and certificates in a timely manner.
- Adjudicating water right claims.

Oregon Water Laws

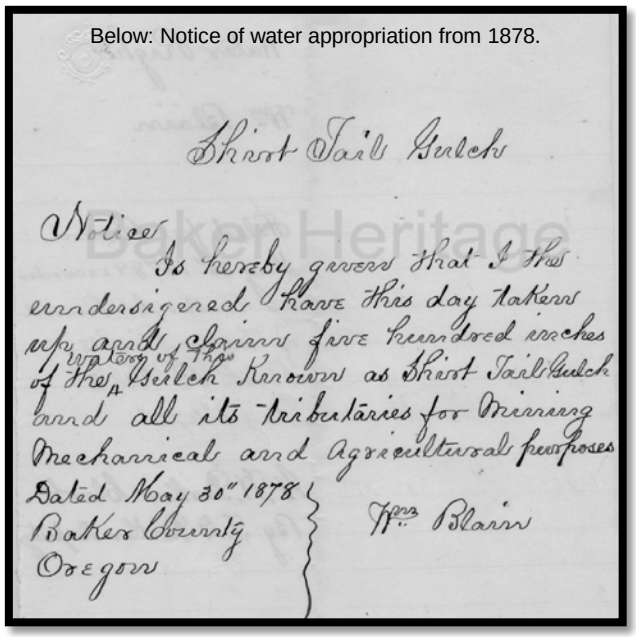
Oregon's water laws have roots tracing back to Oregon's early history, because the availability of water has been integral to Oregon's development. Before 1909, water claims were staked like mining claims and recorded in the county courthouse.

On February 24, 1909, the Oregon Legislature passed Senate Bill 77, commonly referred to as the 1909 Oregon Water Code. House Bill 192 passed in the same session, declaring that "all water within the State from all sources of water belong to the public." With some exceptions, water users must obtain a permit or water right to use water from any source. Like most states west of the Mississippi, Oregon uses the Doctrine of "Prior Appropriation," meaning the first person to obtain a water right on a stream is the last to be shut off in times of scarcity. This provides greater certainty to senior water users that there will be a source of water to support their needs.

Oregon water law has continued to evolve. For example, in 1955, the Legislative Assembly adopted the Oregon Ground Water Act, placing management of groundwater resources under the purview of the state. The 1987 Instream Water Right Act recognized water instream as a beneficial use, allowing for the establishment of instream water rights.

In 2009, the Oregon Legislature passed House Bill 3369, directing state agencies to develop a state-wide, Integrated Water Resources Strategy (IWRS) to help Oregon understand and meet its water quantity, water quality, and ecosystem needs, while taking into account coming pressures, such as population growth, changes in land use, and future climate conditions. In 2012, the Water Resources Commission adopted the state's first Integrated Water Resources Strategy. The IWRS is updated every five years. The most recent update was adopted by the Commission in the fall of 2017, identifying 18 critical issues Oregon faces and providing over

Below: Notice of water appropriation from 1878.


Shirt Tail Gulch

Notice

Is hereby given that I the undersigned have this day taken up and claim five hundred inches of the water of the Gulch known as Shirt Tail Gulch and all its tributaries for Mining Mechanical and Agricultural purposes

Dated May 30th 1878

Baker County Oregon

Wm Blain

Image Courtesy of Baker Heritage Museum. William Blain, Shirttail Gulch, May 30, 1878. G. W. Parker, clerk, by I. D. Parker, deputy. www.bakerheritagemuseum.com

50 recommended actions for how to address those issues. These actions are outlined in the next section below.

In November 2018, the Water Resources Commission ratified the Water Resources Department's five-year Strategic Plan. This document describes the Department's strategic direction as it works to achieve its mission and implement Oregon's Integrated Water Resources Strategy. More information on the Strategic Plan is provided at the end of this chapter.

OUR MISSION

To serve the public by practicing and promoting responsible water management.

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.

Oregon's Integrated Water Resources Strategy

Objective 1: Understand Water Resources Today

Understanding Water Resources / Supplies / Institutions
1.A Conduct additional groundwater investigations
1.B Improve water resource data collection & monitoring
1.C Coordinate inter-agency data collection, processing, and use in decision-making

Objective 2: Understand Instream and Out-of-Stream Needs

Understanding Oregon's Out-of-Stream Needs/Demands
2.A Regularly update long-term water demand forecasts
2.B Improve water-use measurement & reporting
2.C Determine unadjudicated water right claims
2.D Authorize the update of water right records with contact information
2.E Regularly update Oregon's water-related permitting guide

Understanding Oregon's Instream Needs/Demands
3.A Determine flows needed (quality & quantity) to support instream needs
3.B Determine needs of groundwater dependent ecosystems

Objective 3: Understand the Coming Pressures that Affect Our Needs and Supplies

Water & Energy
4.A Analyze the effects on water from energy development projects & policies
4.B Take advantage of existing infrastructure to develop non-traditional hydroelectric power
4.C Promote strategies that increase/integrate energy & water savings

Climate Change
5.A Support continued basin-scale climate change research efforts
5.B Assist with climate change adaptation & resiliency strategies

Extreme Events
5.5A Plan and prepare for drought resiliency
5.5B Plan and prepare for flood events
5.5C Plan and prepare for a Cascadia subduction earthquake event

Economic Development & Population Growth - See Actions 2A and 3A

Water & Land Use
6.A Improve integration of water information into land use planning (and vice versa)
6.B Improve state agency coordination
6.C Encourage low-impact development practices and green infrastructure

Water-Related Infrastructure
7.A Develop and upgrade water and wastewater infrastructure
7.B Encourage regional (sub-basin) approaches
to water and wastewater systems
7.C Ensure public safety/dam safety

Education and Outreach
8.A Support Oregon's K-12 environmental literacy plan
8.B Provide education and training for Oregon's next generation of water experts
8.C Promote community education and training opportunities
8.D Identify ongoing water-related research needs

Objective 4: Meet Oregon's Instream and Out-of-Stream Needs

Place-Based Efforts
9.A Continue to undertake place-based integrated, water resources planning
9.B Coordinate implementation of existing natural resource plans
9.C Partner with federal agencies, tribes, and neighboring states in long-term water resources management

Water Management & Development
10.A Improve water-use efficiency and water conservation
10.B Improve access to built storage
10.C Encourage additional water reuse projects
10.D Reach environmental outcomes with non-regulatory alternatives
10.E Continue the water resources development program
10.F Provide an adequate presence in the field
10.G Strengthen water quantity & water quality permitting programs

Healthy Ecosystems
11.A Improve watershed health, resiliency, and capacity for natural storage
11.B Develop additional instream protections
11.C Prevent and eradicate invasive species
11.D Protect and restore instream habitat and habitat access for fish and wildlife
11.E Develop additional groundwater protections

Public Health
12.A Ensure the safety of Oregon's drinking water
12.B Reduce the use of and exposure to toxics and other pollutants
12.C Implement water quality pollution control plans

Funding
13.A Fund development and implementation of Oregon's IWRS
13.B Fund water resources management activities at state agencies
13.C Invest in local or regional water planning efforts
13.D Invest in feasibility studies for water resources projects
13.E Invest in implementation of water resources projects

2019-24 Strategic Plan

This section identifies the Department's strategic priorities and objectives, presenting areas of focus for development and improvement as we provide our usual products and services. They follow the theme of modernizing the Department to tackle the water resource issues of today and tomorrow.

Priority: Modernize our management of Oregon's surface water and groundwater resources to meet instream and out-of-stream uses

Objectives

- Advance responsible groundwater and surface water management (IWRS Recommended Actions 1.A, 1.B, 1.C, 2.B, and 10.F)
- Modernize water transactions systems and processes (IWRS Recommended Actions 2.E and 10.G)
- Increase protection of public safety and health (IWRS Recommended Actions 5.5 and 7.C)
- Improve instream protections and increase water conservation (IWRS Recommended Actions 10.A and 11.B)

Priority: Work to secure Oregon's instream and out-of-stream water future in the face of increased water scarcity

Objectives

- Understand Oregon's expected future water supply (IWRS Recommended Actions 1.A, 1.B, 1.C, and 5.5A)
- Equip basins to plan for their water future (IWRS Recommended Actions 9.A, 9.B, 9.C, and 13.C)
- Invest in Oregon's build and natural water infrastructure (IWRS Recommended Actions 10.E, 11.A, 13.D, 13.E)

Priority: Foster a forward-looking team dedicated to serving Oregonians with integrity and excellence

Objectives

- Maintain technical excellence and improve customer service by investing in training for staff
- Improve agency communications

OREGON WATER RESOURCES DEPARTMENT

Chapter 2: Performance Summary

Overview

The Water Resources Department has 14 active Key Performance Measures (KPMs). These performance measures cover agency programs related to: streamflow restoration, protection, and measurement; groundwater monitoring; and regulatory and outreach actions. A brief overview of the Department's KPM's are included in the following pages. The Department's most recent Annual Performance Progress Report is provided in the Appendix.

Use of Performance Measures, including KPMs

Metrics are an important tool for managing both daily and long-term performance and identifying areas in need of process improvements. Performance measures and indicators, as well as recommended actions in the Integrated Water Resources Strategy (IWRS) are also important to identify needed agency actions and policy option packages.

At the program level, both key performance measures and other internal performance indicators help managers adjust processes and priorities to prevent bottlenecks and to strategically focus resources. Performance measures and indicators are used at the individual staff level to focus workloads. For example, the Water Rights Services Division runs monthly reports to track water rights processing activities, so that accomplishments as well as potential problem areas can be highlighted early and workload priorities shifted as necessary.

Many of the Department's KPM's have been in place since the early 2000s; therefore, the Department has begun efforts to review the existing KPMs to ensure they remain relevant. As part of this process, the Department solicited feedback from staff and stakeholders, as well as the Water Resources Commission. The Department is proposing modifications to some of the KPMs for consideration during the 2019 Legislative Session, and anticipates further changes will be proposed in future sessions as the Department works to implement its recently adopted Strategic Plan.

In all of the graphs below, the target is the blue line with boxes, and the actual is shown by the columns and bold numbers.

KPM Snapshot

Meeting Target

- KPM 4 Streamflow Gaging
- KPM 5 Assessing Ground Water Resources
- KPM 6 Equip Citizens with Information [*Propose to delete]*
- KPM 7 Equip Citizens with Information
- KPM 9 Promote Efficiency in Water Management & Conservation Plan Reviews

Not Meeting Target

- KPM 1 Flow Restoration
- KPM 2 Protection of Instream *[Propose to modify]*
- KPM 3 Monitor Compliance Rights
- KPM 8 Water Measurement – Significant Points of Diversion
- KPM 10 Promote Efficiency in Water Right Application Processing
- KPM 11 Promote Efficiency in Transfer Application Processing
- KPM 12 Promote Efficiency in Field Staff Regulatory Activities
- KPM 13 Increase Water Use Reporting
- KPM 14 Customer Service

KPM 1 - Flow Restoration

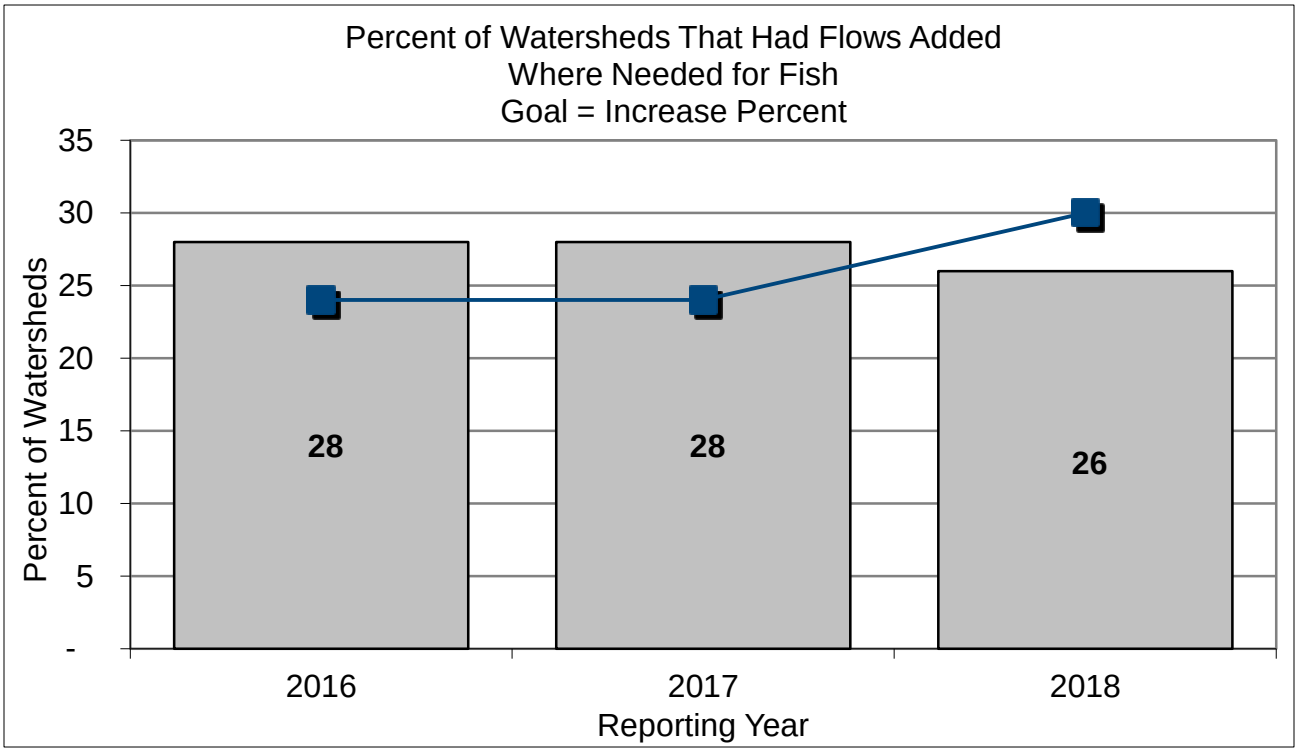
Measured by the percent of watersheds that had flows added where needed for fish

Strategy:

- Voluntary streamflow restoration through instream leases, transfers, and allocations of conserved water programs.
- Capitalize on opportunities to benefit farmers and ranchers as well as watersheds.
- Work with conservation partners and willing water right holders.
- Continue to streamline application processing while ensuring protection of existing water rights.

Trends:

- Roughly half of Oregon's flow restoration work involves a third party such as The Freshwater Trust, Deschutes River Conservancy, Trout Unlimited and Klamath Basin Rangeland Trust.
- About half of flow restoration activities are directly between water right holders and WRD.
- The reduction in the percent from the prior reporting year is due to a decline in the amount of water put instream via temporary instream leases, which can fluctuate from year to year based on water user interest in leasing water instream.



KPM 2 - Protection of Instream Water Rights

Measured by the ratio of the streams regulated to protect instream water rights to all streams regulated

Strategies:

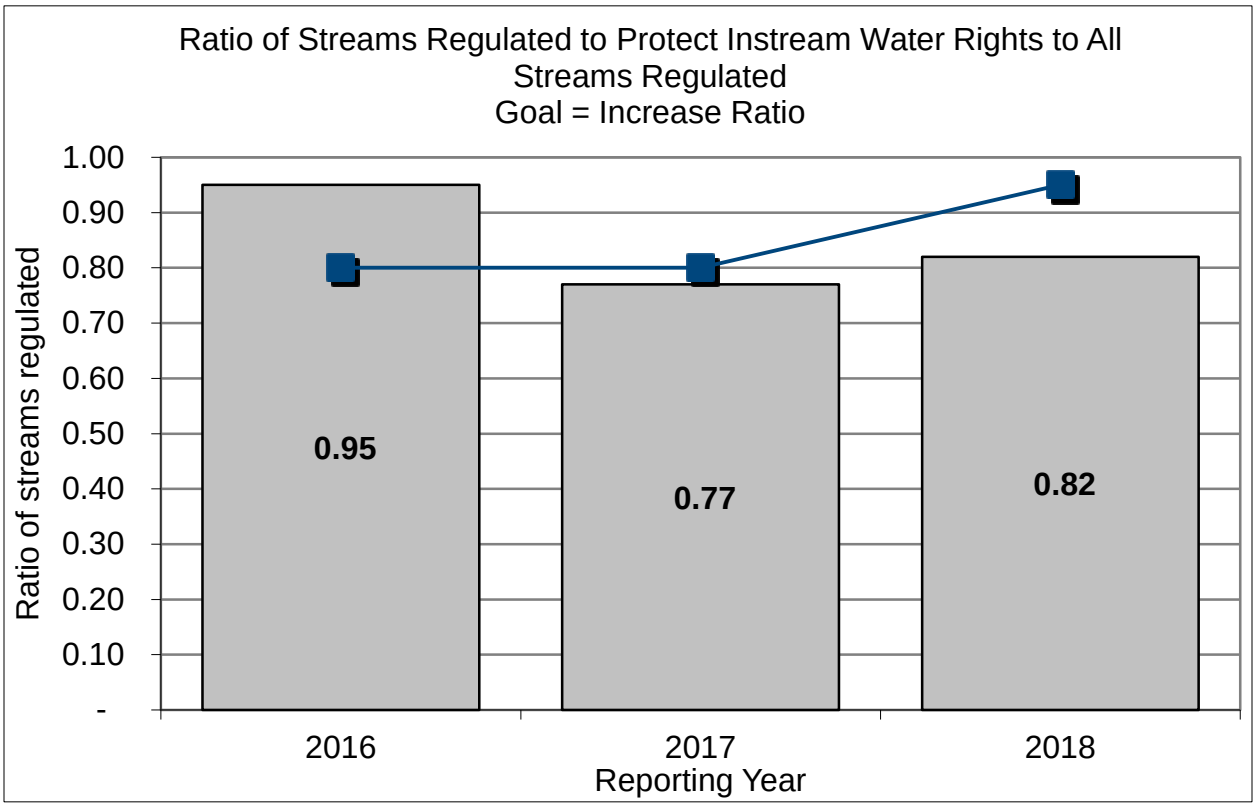
- Monitor streamflows.
- Distribute water to protect instream water rights according to priority date.
- Adding near real-time access to gaging stations improves monitoring for instream water rights.
- Ensuring adequate field presence.

Trends:

- Adequate field presence is key to instream protection.
- Ratio varies based on water supply conditions. During the 2018 reporting year (2017 calendar year), 370 streams were regulated, compared to 431 in the 2017 report, and 586 in the 2016 report. This decrease is due to improved water conditions across Oregon, and less regulation of junior rights to meet the needs of senior rights. The total number of regulatory actions for instream water rights was 304, resulting in a ratio of 82 percent, higher than in the 2017 reporting period.

Proposal to Modify

Staff have determined that the method for calculating the results and the corresponding target need to be revised, or this KPM needs to be removed or replaced. The current KPM is calculated in a manner that does not provide accurate or meaningful results. The Department proposes to replace this KPM with the number of regulatory orders issued to protect instream water rights.



KPM 3 - Monitor Compliance

Measured by the percent of total regulatory actions that found water right holders to be in compliance with water rights and regulations

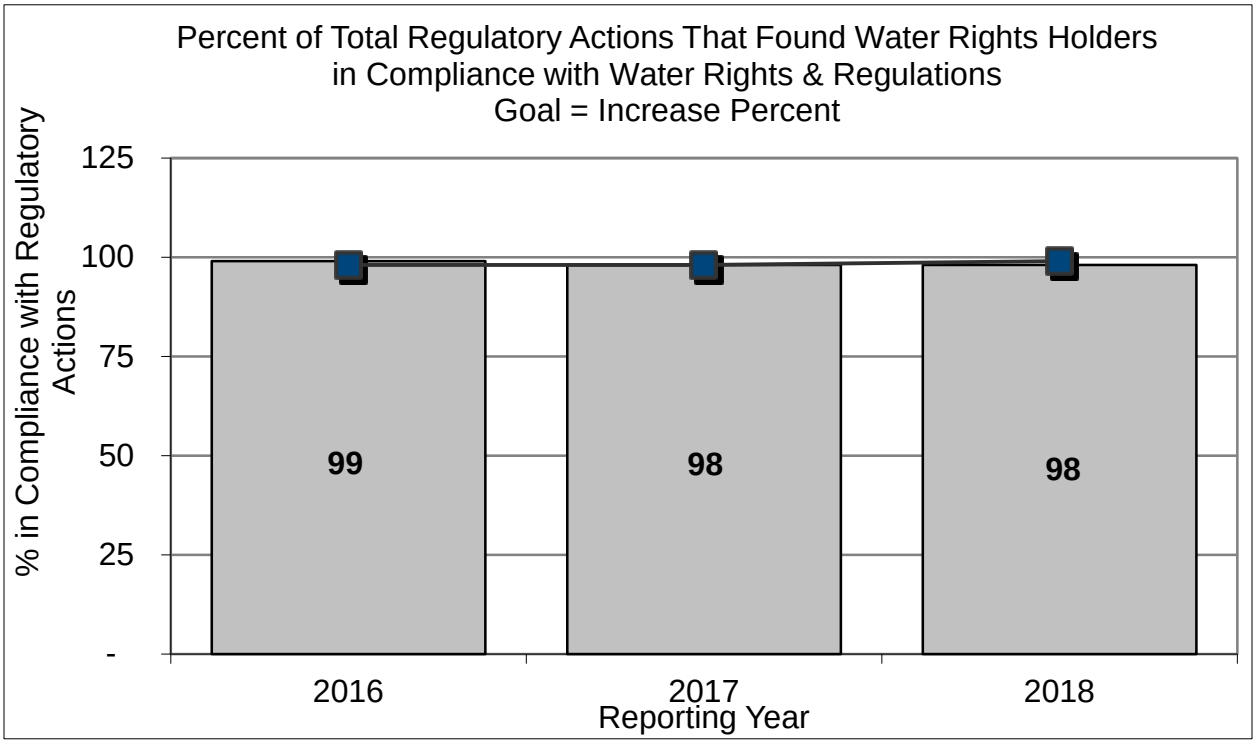
Regulatory activities include any action that causes a change in use, or maintenance, or a field inspection that confirms that no change is needed to comply with water right permit conditions, statutes, or orders of the Department.

Strategy:

- Distribute water according to the Doctrine of Prior Appropriation and enforce against illegal use of water.
- Educate water users about water regulations to achieve voluntary compliance.
- Continue to develop distribution maps and water rights databases.
- Ensure an adequate field presence to maintain a high level of compliance.
- Assess watermaster workloads and priorities

Trends:

- Compliance rate varies based on water supply conditions; watermasters are likely to have more regulatory actions regarding water use during times of shortage.
- During the 2018 reporting period (2017 calendar year), watermasters had 14,656 regulatory actions and water rights holders were in compliance with 98 percent of these actions.
- A high percentage indicates that water users understand and support the distribution of limited water supplies under Oregon's water code. It indicates that water users trust the watermasters' knowledge, consistency, and integrity.



KPM 4 - Increase Understanding of Water Resources, Streamflow Gaging

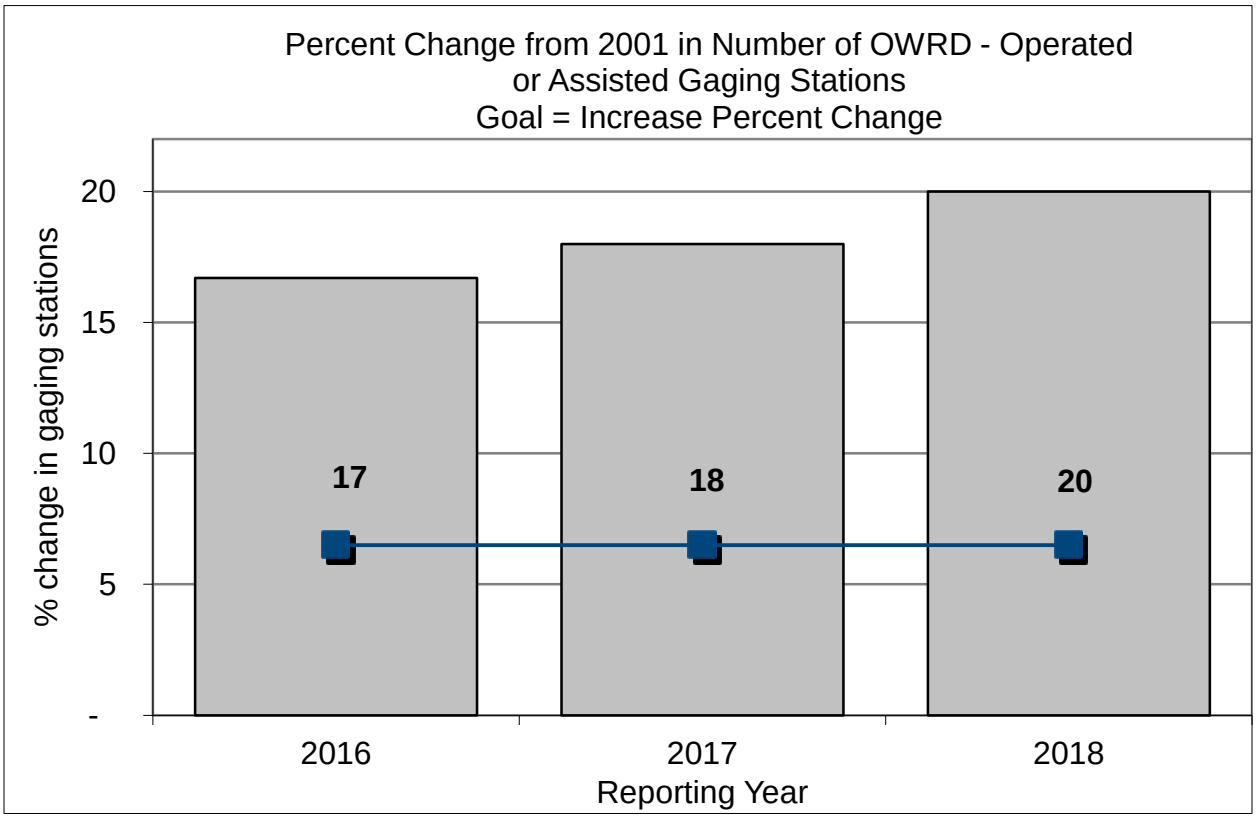
Measured by the percent change from 2001 in the number of WRD operated or assisted gaging stations

Strategy:

- Use watermasters, hydrotechs, and other field staff to collect data and maintain gaging stations.
- Cooperate with the U.S. Geological Survey, U.S. Bureau of Reclamation and others in collecting and sharing data.
- Pursue funding and partnerships to increase monitoring.
- Provide data online.
- Ensure adequate staff to maintain the stations and provide quality assurance of the data.

Trends:

- Number of gages has continued to increase with funding resources provided by the Legislature since 2013.
- During the 2018 reporting period, the Department added 12 gages and dropped 4, for a net gain of 8 gages compared to the previous reporting year. This brings the total number of gages operated during this period to 259, a 20 percent increase over the 2001 benchmark.



KPM 5 - Increase Understanding of Water Resources: Assessing Groundwater

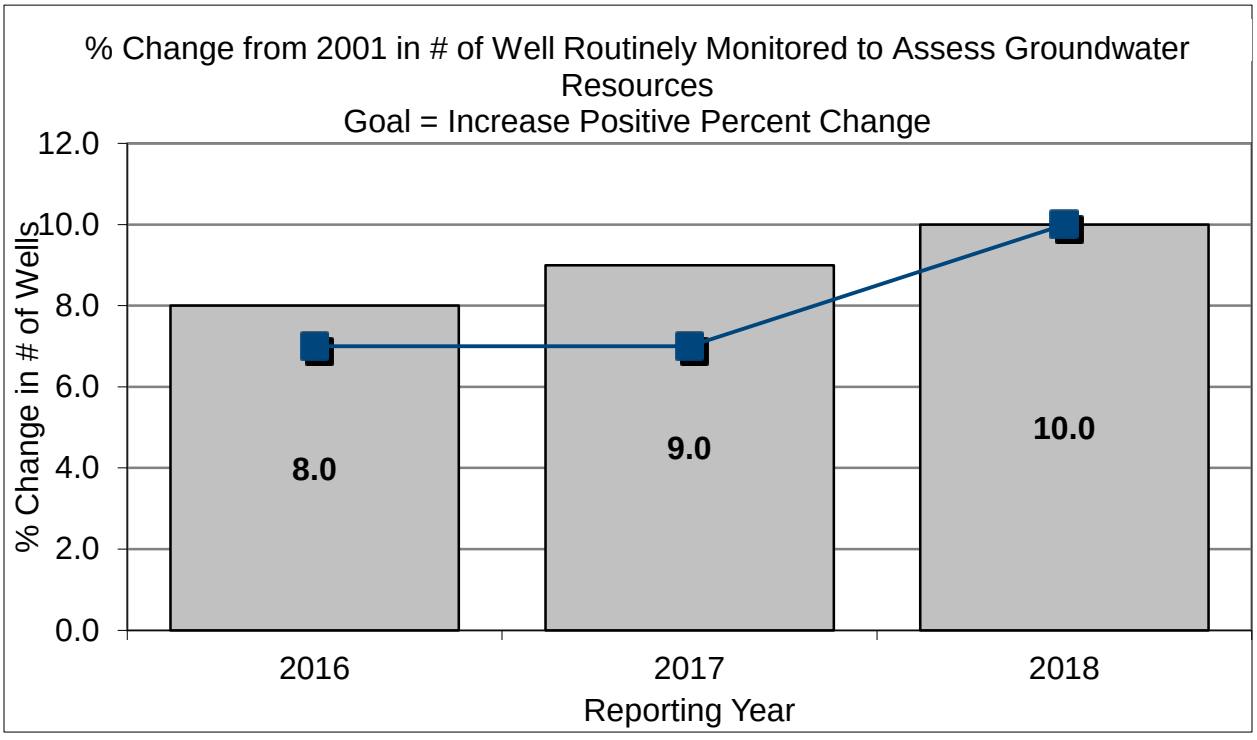
Measured by the percent change from 2001 in the number of wells routinely monitored to assess ground water resources

Strategy:

- Use watermasters and other field staff to take measurements and maintain well network.
- Work with the U.S. Geological Survey, U.S. Bureau of Reclamation, and other entities to collect and share data from these monitoring networks.
- Request permission from landowners to gain access to wells and well data.
- Pursue funding and partnerships to increase monitoring.
- Provide data online through the State Observation Well Net.
- Maintain adequate staff to establish, maintain, collect, archive, and analyze data.

Trends:

- Since 2013, the legislature has provided resources to drill new state observation wells. During the 2018 reporting cycle, staff routinely monitored 384 wells in the State's Observation Well Network, compared to 350 in 2001. This is an increase of approximately 10 percent and keeps pace with more recent efforts.
- Increasing demands on groundwater is making data on long-term water level trends more essential in the Department's ability to manage and allocate the resource.
- Many wells are privately owned; therefore, the number of wells fluctuates each year, based on landowner participation.
- As aging wells are abandoned, access to the well is lost and new measuring sites must be secured.



KPM 6 - Equip Citizens with Information

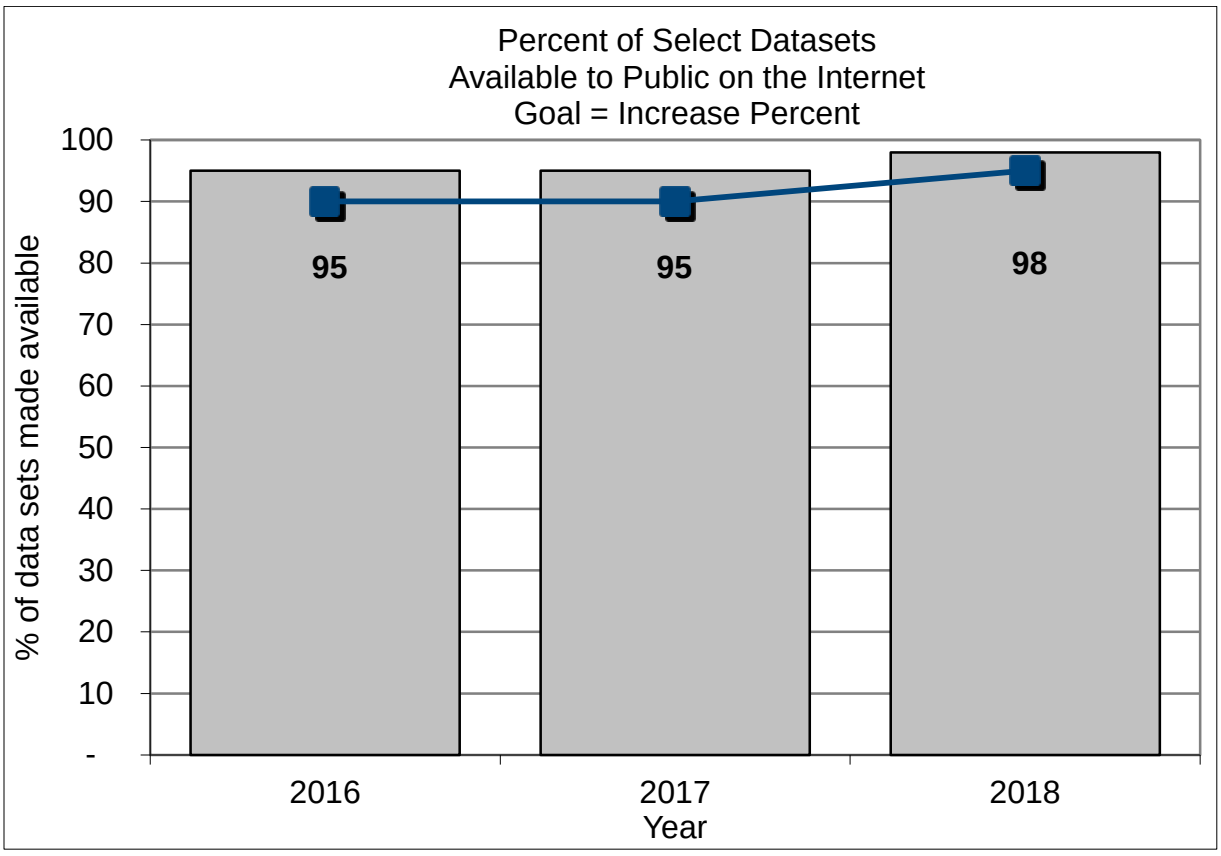
Percent of select water management related datasets collected by WRD that are available to the public on the internet

Strategy:

- Develop databases and increase the ability to provide information to the public.
- Provide data in accessible and user friendly format.
- Streamline data collection and management
- Make water management datasets readily available for use by water users, water managers, and consultants.
- The Department's ability to maintain and update databases continues to be dependent on resources.

Trends:

- Exceeding target. The Department remains committed to increasing public access to data.
- Propose to delete, as the initial set of datasets to be made available that are part of the KPM goal are nearly complete.



KPM 7 - Equip Citizens with Information

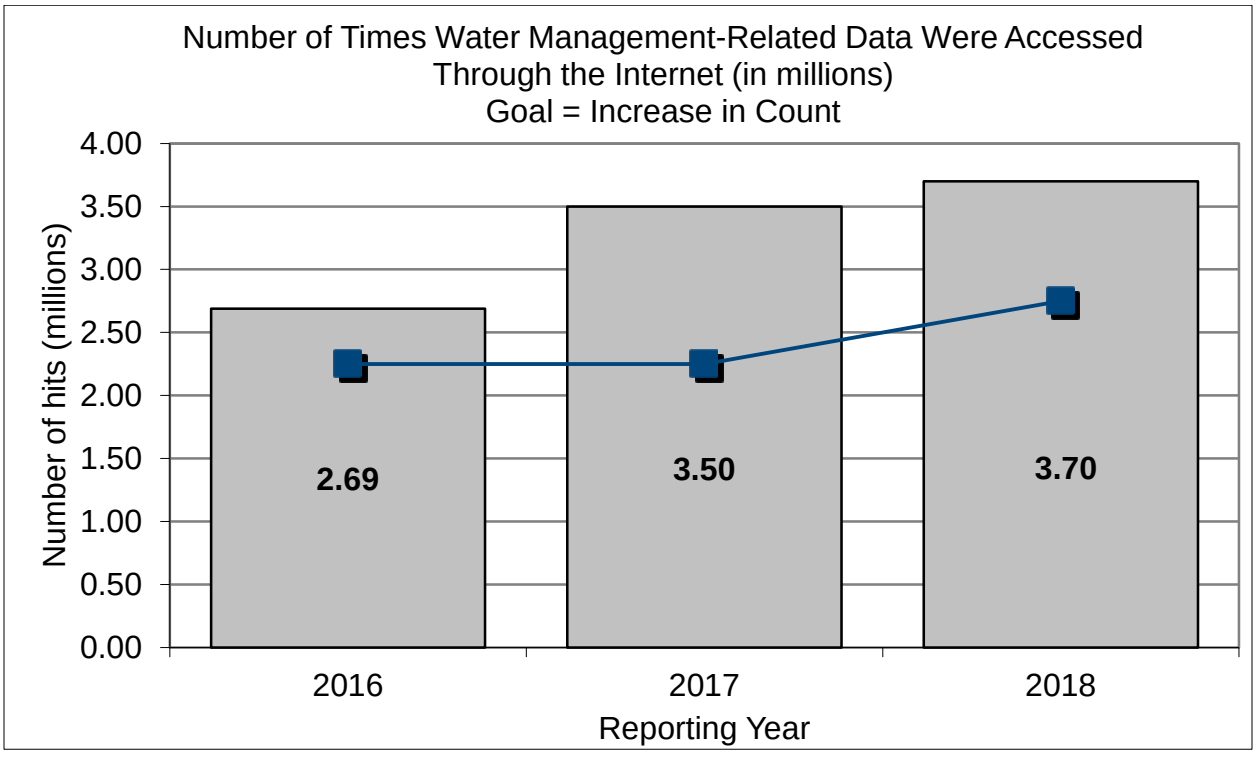
The number of times water management related data is accessed through WRD's website

Strategy:

- Provide data in an accessible and user friendly format.
- Make water management datasets readily available for use by water users, water managers, and consultants.
- New web applications have been released, but have not been included in this KPM to ensure continuity and parity with historical information

Trends:

- The Department collects information from computer system logs to determine the number of hits received on our website, such as well log transactions, hydrographic records, water availability, water rights and the document vault.
- In the 2018 reporting period, the Department experienced approximately 3.7 million hits to its website. In September, the Department updated its website, which may affect performance on this KPM in the future.



KPM 8 – Fully Implement the Water Resources Commission's 2000 Water Measurement Strategy

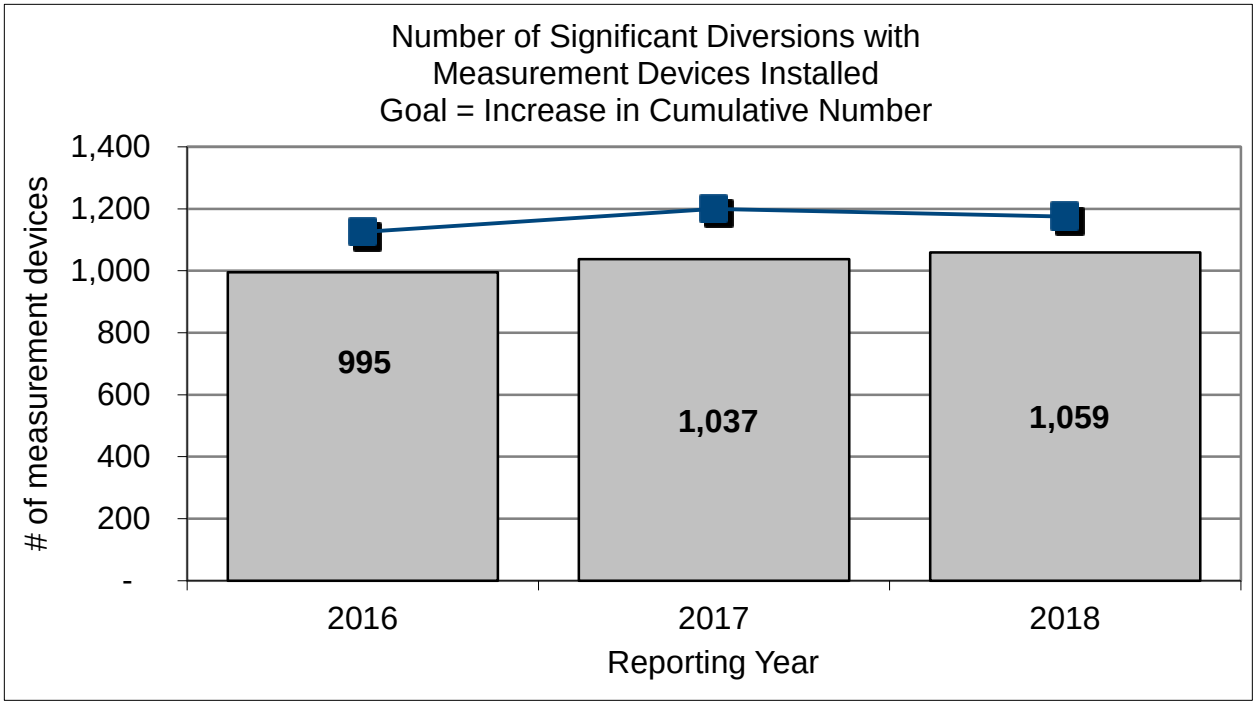
Measured by the number of significant diversions with measurement devices installed

Strategy:

- Pursuant to current law, require measuring devices, where needed, as part of Department permitting process and water management responsibilities.
- Implement the Water Resources Commission's 2000 Strategic Measurement Plan to improve water measurement statewide and by installing measuring devices on 2,300 significant diversions that represent about 10 percent of the overall number of diversions in high priority watersheds, and account for about 50 percent of the volume of water diverted.
- Work with landowners to install water measuring devices (e.g. weirs, flumes, and meters).
- Provide cost-share funding. Since 2013, the Legislature has recapitalized a cost-share fund to facilitate the installation of devices through a dollar match program.

Trends:

- This KPM was created in 2009. Staff efforts, underway since 2000, have resulted in 1,059 measuring devices installed by the 2018 reporting period
- It takes significant outreach to bring a landowner onboard with the installation of a measuring device. Success is directly related to time spent by Department field staff working with the landowner.
- Staff have field checked 673 significant diversions that are either abandoned or currently not in use.
- Approximately 653 of the original 2,385 significant diversions still need measuring devices installed. It is important to note that this KPM does not account for all of the measuring devices installed annually.
- As resources allow, the Department intends to work on a new plan for increasing water use measurement, which may result in proposed changes to this KPM in the future.



KPM 9 - Promote Efficiency in Water Management and Conservation Plan Reviews

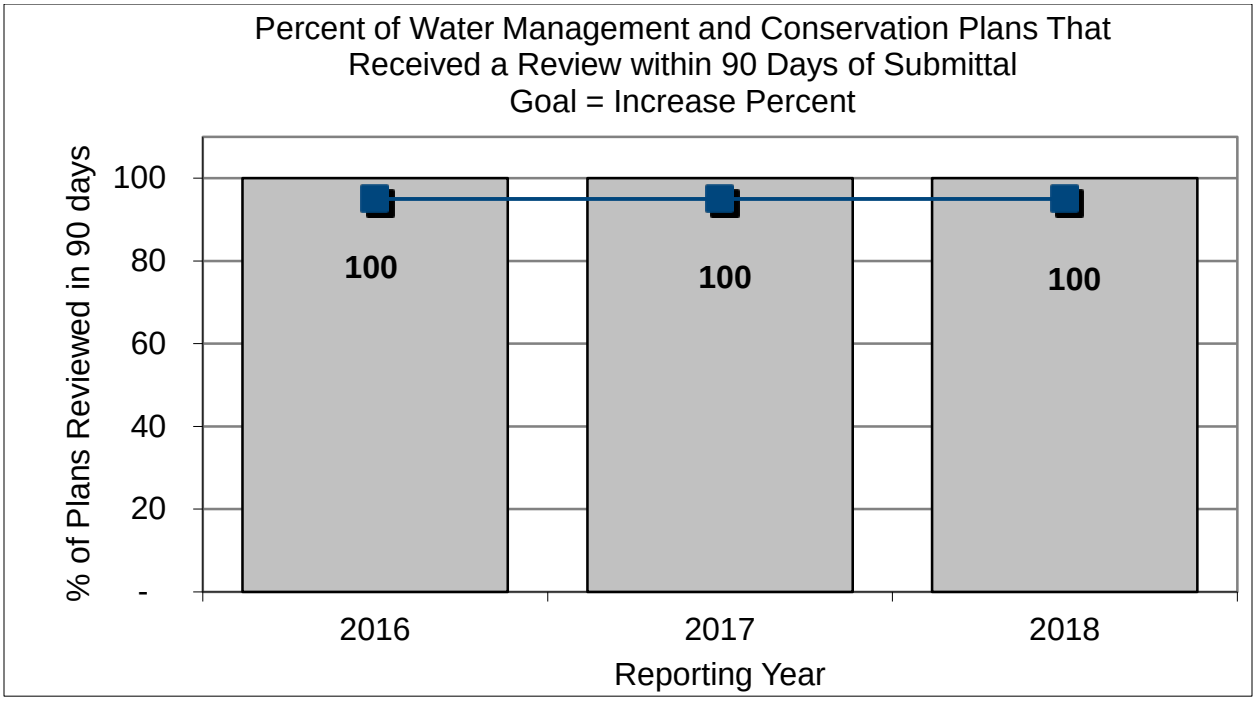
Percent of Water Management and Conservation Plans that received review within 90 days of submittal

Strategy:

- Plans linked to ability of certain municipalities to grow into existing water rights and other conditions.
- Review plans in a timely fashion.
- Conduct outreach and education to improve submission quality and reduce time it takes to review plans.
- Work with key partners to develop tools and educational materials, and conduct workshops.
- Support Water Resources Commission policies on conservation and efficient water use.
- Adopted rules in 2018 to address some of the challenges faced by small water providers in developing these plans.

Trends:

- Exceeding target. Every year since 2014, the Department has reviewed 100 percent of plans within 90 days of submittal. Staffing resources and outreach to valued stakeholders are key to meeting target.
- In the past decade, the Department has been working with its partners to publish guides, provide tools, and offer educational presentations to aid in the preparation of water management and conservation plans. As a result, Municipal Water Management and Conservation Plans continue to improve in quality, showing increased efficiencies in managing water, preparing for emergencies (curtailment plans), and long-term water supply planning.



KPM 10 - Promote Efficiency in Water Right Application Processing

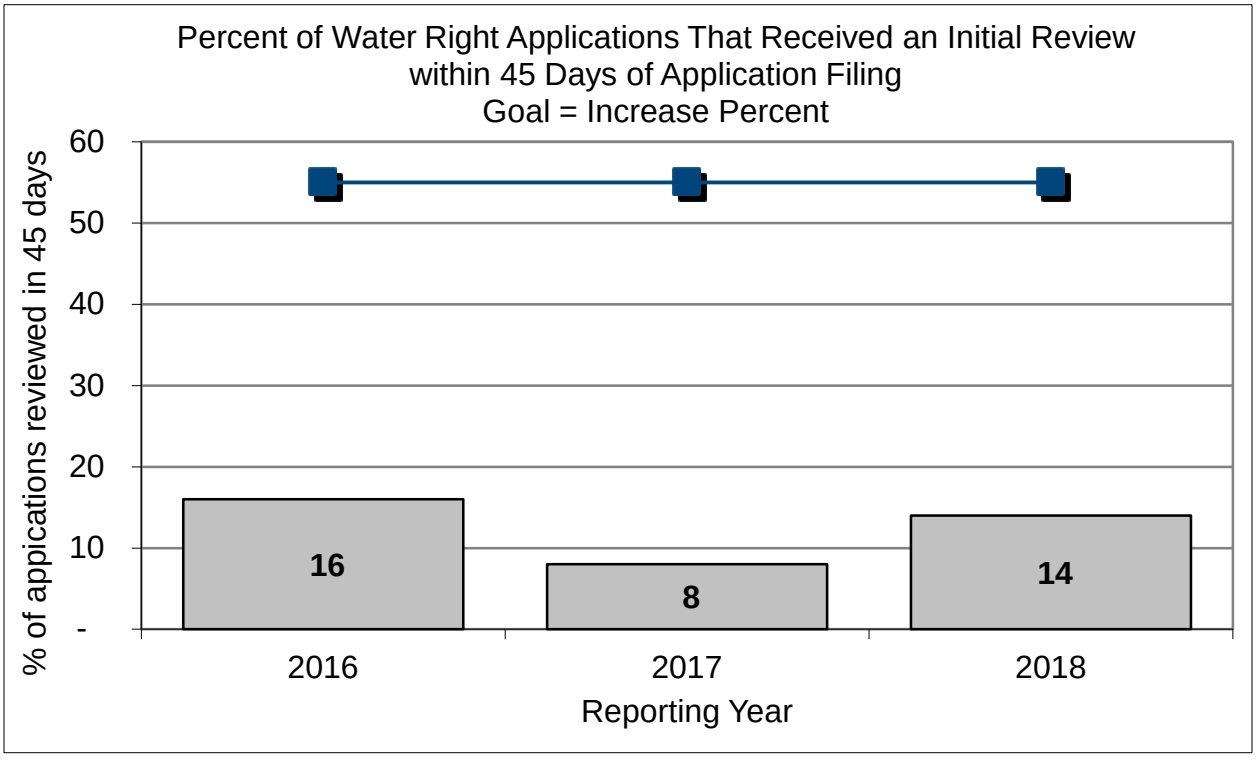
Percent of Water Right applications that receive an initial review within 45 days of application filing

Strategy:

- Utilize technology and streamlining processes to reduce application processing times.
- Reduce backlog of water right applications.
- Pursue adequate groundwater staff to conduct reviews, while not jeopardizing other activities such as basin studies.

Trends:

- The percentage for storage-and surface- water applications increased in 2017-18; the total for these types of was 51 percent, almost meeting the target.
- Completing groundwater reviews remains a challenge. Groundwater application reviews represent 75 percent of all incoming application requiring an initial review. Groundwater reviews completed within 45 days was 2 percent.
- High demands on the Groundwater Section are related to 1) persistent drought (increased requests for drought permits and increased well-to-well interference complaints), 2) staff turnover, 3) involvement in legal challenges and regulation, 4) increasing complexity of permit reviews, 5) a greater number of applications submitted (likely due to marijuana), and 6) a number of local projects (Mosier Well Repairs, Harney Basin Study).



KPM 11 - Promote Efficiency in Transfer Application Processing

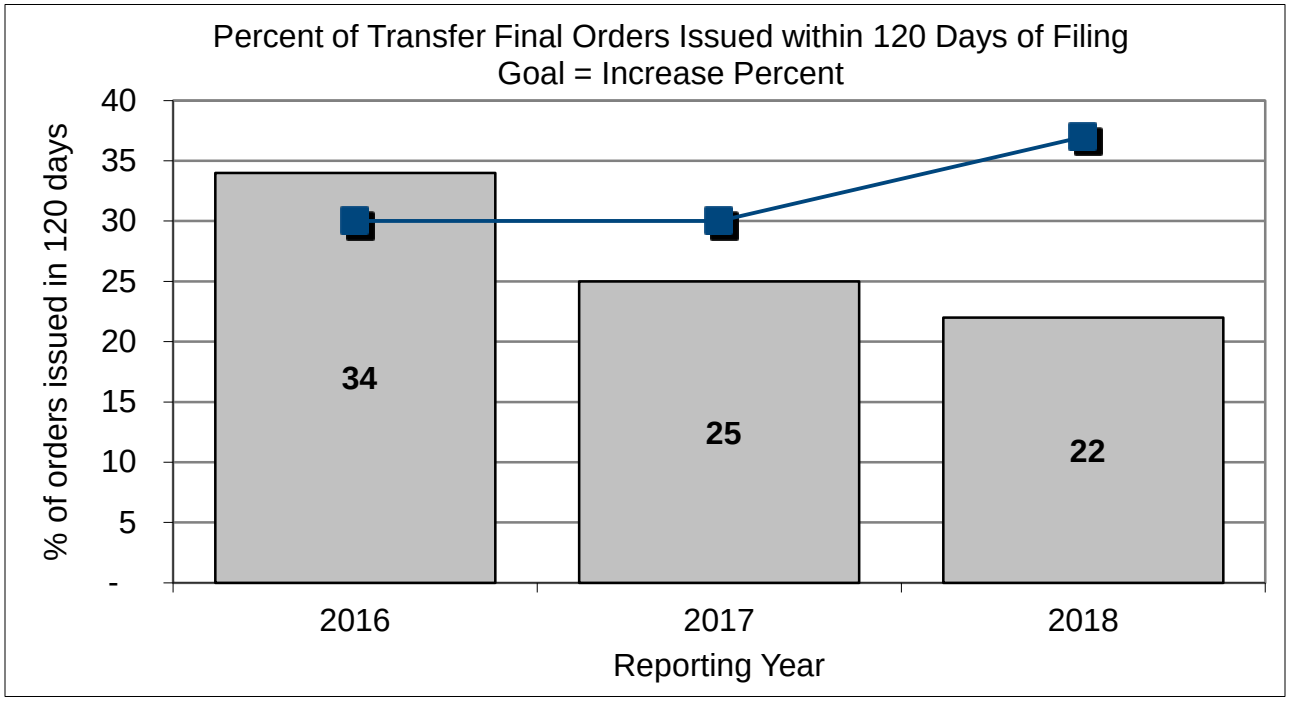
Percent of transfer final orders issued within 120 days of application filing

Strategy:

- Utilize technology to provide more timely and accurate processing.
- Provide assistance to applicants in completing and submitting applications.
- Expedite processing under Reimbursement Authority Program.
- Eliminate backlog. Reduce the number of pending applications to less than 200, at which point applications can be processed as soon as they are filed.
- Educate consultants and certified water right examiners about transfer map and application requirements; identify and remedy application deficiencies at the time of filing.

Trends:

- Declines in this KPM are likely associated with: 1) transfer staff working on older, more difficult transfers that can take more time to process; 2) pending groundwater reviews (see KPM 10); and 3) staff turnover. It is likely this KPM will increase as positions are filled and new staff are trained.



KPM 12 - Promote Efficiency in Field Staff Regulatory Activities

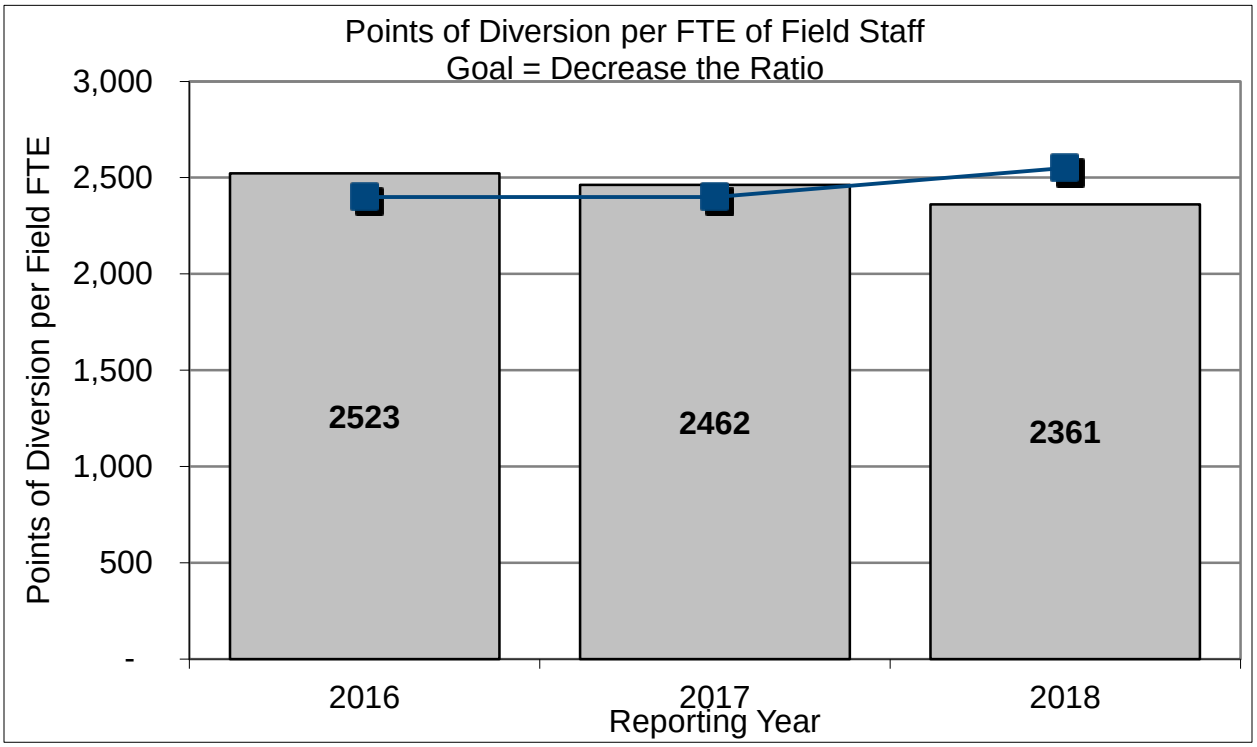
Measured by the number of places where water is legally taken out of stream and used (points of diversion) per FTE of field staff

Strategy:

- Maintain adequate field presence - Staffing resources are key to making continued progress towards target.
- Promote voluntary compliance.
- Work with local governments and other partners to secure funding for additional field staff.
- Evaluate field staff workloads.

Trends:

- The goal is to *reduce* the number of points of diversion administered by field staff. A lower number indicates a higher probability of being able to manage the state's water resources effectively.
- The target is 2,500 PD's per FTE. The number of staff increased by 4 when Umatilla County employees transferred to the Department. This means there are 2,361 PODS per field staff. Yet water rights and related applications continue to increase. At the current staffing level, it is not possible for field staff to visit all water rights within their respective district.
- Recent improvement in this KPM was due to staff converting from county staff to State.



KPM 13 – Increase Water Use Reporting

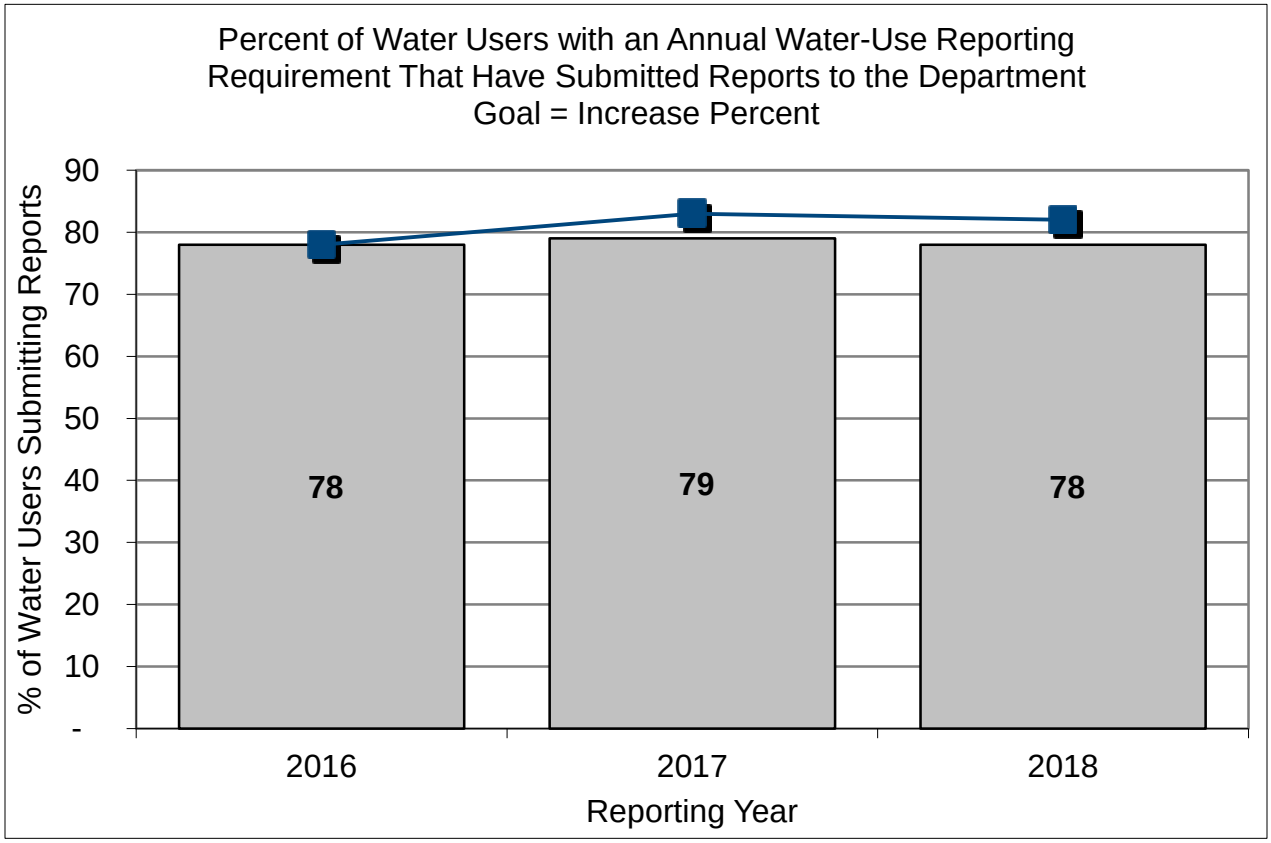
Measured by the percent of water users with an annual water-use reporting requirement that have submitted their reports to the Department

Strategy:

- Water-use reporting by public entities is required by statute and as a condition on newer water right permits.
- Maintain an online reporting form and encourage water-use reporters to enter their data on-line.
- Since the Department's water-use reporting position was funded and filled in September 2013, staff mail an annual reminder with the appropriate forms and instructions for recording and entering water use information, and then follow up with a personal phone call when necessary.

Trends:

- The Department's success with reporting compliance is dependent on having staff to conduct outreach and follow up. Since re-establishment of the Water Use Reporting Coordinator in 2013, the percent of water users submitting water-use reports as required has continued to increase, achieving 78 percent compliance for the 2018 reporting period.



KPM 14 - Customer Service Satisfaction

Measured by the percent of customers rating their satisfaction with the Department's customer service as "good" or "excellent" in overall service, timeliness, accuracy, helpfulness, expertise, and availability of information

Strategy:

- Establish a culture of customer service throughout the agency.
- Survey random selection of water users who received final decisions from WRD (including transfer, permit amendment, instream lease, water right permit, permit extension, and water right certificates).
- Look at other options for conducting survey to improve response rates and obtain feedback more timely.
- Based on latest survey data, the Department should take actions to: help applicants understand the water rights process and how long the processing may take; allow the applicant to better understand where their application is in the process; and identify methods to address applications that are taking longer than usual.

Trends:

- The Department conducted a customer service survey July- August 2018. The Department received more timely responses to the survey this year after providing more specific information and direction to participants up front. The Department emailed surveys to 530 participants and received 139 survey responses.
- The Department saw improvements across all categories since the prior survey, with expertise seeing the largest increase. This is likely due to training and growing expertise in new staff, after a significant amount of turnover. Timeliness continues to be the greatest challenge, with 64 percent of respondents ranking this as good or excellent.

OREGON WATER RESOURCES DEPARTMENT

Chapter 3: Programs and Organizational Information

AGENCY SNAPSHOT

Summary of Legislatively Adopted Budget (LAB) and Governor's Recommended Budget (GRB) by Division.

		FTE	Total Fund
Water Rights Services Division	17-19 LAB:	37.42	$8,377,081
	19-21 GRB:	36.17	$8,524,183

This division processes incoming applications for new water use permits and extensions; issues water right permits and certificates; processes applications for instream leases, reservations of water, and water right transfers; and coordinates hydroelectric relicensing. This Division serves as a record-keeping body for the existing water rights in Oregon and it reviews water management and conservation plans in addition to adjudicating pre-water law vested and federal reserved water rights.

Field Services Division	17-19 LAB:	60.42	$15,447,462
	19-21 GRB:	61.23	$15,246,088

This division enforces Oregon's water law in the field, regulating water uses with a newer priority date for the protection of older rights. The division collects water resources data, and performs dam and well inspections.

Technical Services Division	17-19 LAB:	46.00	$13,210,992
	19-21 GRB:	52.92	$16,523,428

The division performs surface water and groundwater analyses, dam safety evaluations, conducts enforcement actions, and oversees well construction. This division also provides information services support for the Department including mapping, database management, and website development.

Administrative Services Division	17-19 LAB:	12.75	$63,841,803
	19-21 GRB:	12.50	$61,436,521

The division supports the day-to-day operations of the agency through human resources, payroll, accounting, budgeting, facilities management, and support services functions. This division also helps administer water resources grant and loan programs.

Director's Office	17-19 LAB:	11.00	$3,998,395
	19-21 GRB:	14.77	$6,252,376

The Director's Office coordinates Water Resources Commission activities, tribal interactions, policy, legislation, public information, media, legal services provided by the Attorney General's office, water resources development, and contested case hearings.

Total	**17-19 LAB:**	**167.59**	**$104,875,733**
	19-21 GRB:	**177.59**	**$107,982,596**

GOVERNOR'S BUDGET POLICY OPTION PACKAGES

Package 101 – Place Based Planning Community Support

Provides $750k for supporting current planning groups in Harney-Malheur Lake, Lower John Day, Mid-Coast, and Upper Grande Ronde, as well as conducting an evaluation of the place-based approach to water planning. Continues existing NRS 4 planning coordinator ($230k). Total: $979,950 General Fund; 1 position. *IWRS Recommended Action: 9.A*

Package 102 – Groundwater Data, Management, and Protection

Increases the state's understanding of water supplies by allowing the Department to conduct one additional groundwater study at a time, while also preparing other basins for study and conducting more timely groundwater right reviews. The next basin intended for study is the Walla Walla Subbasin. Adds nine positions: OPA 3 public engagement coordinator, NRS 3 well construction specialist, NRS 3 hydrogeologist, NRS 4 hydrogeologist, NRS 3 hydrogeologist groundwater reviewer, NRS 4 hydrologist, ISS 6 database application developer, NRS 2 hydrographer, and a NRS 3 hydrographer. Provides cost-share funding for groundwater study ($300k), geologic mapping ($100k), and observation wells ($400k). Total: $2,837,027 General Fund; 9 positions. *IWRS Recommended Actions: 1.A and 1.B*

Package 104 – Protecting the Public Through Dam Safety

Increases the State's understanding of the safety and condition of dams. Funds assessments of dams and a dam safety task force ($500k). Include for a business case for investment in water infrastructure ($100k). Includes projected revenue from a fee for review of new dams and modifications to existing dams, as proposed in HB 2085. Total: $600,000 General Fund; $46,975 Fee Revenue. *IWRS Recommended Action: 7.C*

Package 105 – Addressing Increasing Legal Expenses

Adds additional resources to assist the Department in addressing ongoing legal costs, primarily driven by increased litigation in the Klamath Basin. Total: $1,000,000 General Fund.

Package 106 – Supporting Water Management in the Field

Adds two watermasters (Willamette and Crooked River) and two regional assistant watermasters (East Region and South Central Region) to support timely water management and distribution. Total: $754,248 General Fund; 4 positions. *IWRS Recommended Actions: 10.F, 2.B, and 1.B*

Package 107 – Investing in Projects to Meet Water Needs

Provides $15 million in Lottery Revenue Bond proceeds, plus $278k for cost of issuance, to provide grants and loans for water supply projects to meet instream and out-of-stream water needs. Total: $15,278,251 Lottery Revenue Bonds. *IWRS Recommended Actions: 10.E, 10.A, 10.B, 10.C, 3.A, 11.B, and 13.E.*

Package 112 – Continuing Payroll Shared Services

Makes permanent an existing shared services payroll accounting technician who is a member of the team that provides payroll and benefit services to over 500 staff in six different agencies. Total: $146,808 Other Fund; 1 position.

Package 113 – Supporting Agency Functions – Internal Auditing

Adds an internal auditor in the Director's Office to help the Department identify opportunities for improvement on a continuous basis and to comply with requirements for internal auditing under OAR 125-700-0125(1)(c). Total: $93,175 General Fund, $90,176 Other Fund; 1 position.

WATER RIGHTS SERVICES DIVISION

The Water Right Services Division supports the allocation of water for instream and out-of-stream purpose, supporting both the economy and a healthy environment by processing all of the water right applications for the state. This includes, but is not limited to, the following application types: new water right permits, water right transfers (changes to existing water rights), requests for extension of time to further develop existing water rights, limited licenses, leases, allocations of conserved water, adjudications, and hydroelectric licensing.

Program Contact: Dwight French
503-986-0819

Snapshot

Customers	**Funding Source**	**GRB Expends**	**Positions / FTE**	**Case/ Work Load**
Cities; Counties; Consultants; Federal Agencies; Oregon Tribes; State Agencies; Watershed Councils; Well Constructors; Well Owners; Water Right holders; Water Right Applicants; Realtors; Public Interest Organizations; Property Buyers/Sellers; General Public; Irrigation Districts; Water and Power Utilities	General Fund Other Funds Federal Funds	$3.7 M $4.8 M $0.02 M	37 / 36.17	Water Right Application, Transfer, Extension, Water Management & Conservation Plan, Allocations of Conserved Water Processing; Certificate Issuance; Adjudication Processing; Hydroelectric Licensing; Protest Program

Under Oregon law, almost all water users, including agricultural enterprises, cities, state and federal agencies, must apply for and receive a water right before initiating water use. The Water Right Services Division is responsible for evaluation of both instream and out-of-stream water right applications, water right changes, and issuance of new water right permits and certificates. The Division distributes weekly public notice of applications and responds to public inquiries. The Division receives and evaluates citizen and interest group comments and protests concerning water use applications. The Division administers the following water right-related programs and processes:

- Extensions of time
- Hydroelectric licensing
- Limited (short-term) license applications
- Protests
- Instream Lease applications
- Review Water Conservation and Management Plans
- Water right certification
- Drought-related use permits
- Customer service and record management
- Allocations of Conserved Water
- Water Right Transfer
- Adjudication of claims for pre-1909, federal reserved rights, and tribal rights

Program Description

The Water Right Services Division supports the agency mission by evaluating and acting upon water rights applications. Under Oregon law, almost all water users must apply for and receive a water right before initiating water use. The Division is responsible for the evaluation of both instream and out-of-stream water right applications and the issuance of new water right permits and certificates. In addition, the Division administers the following water right-related programs, including: water right program and policy development; limited water use licenses; drought-related water use permits; customer service and record management; protests; adjudicating water right claims based on water use that pre-dates the 1909 water code, federal reserved rights and tribal rights; hydroelectric permitting; extensions; transfers; permit amendments; instream leasing, allocations of conserved water, and approval of water management and conservation plans.

The Division is also responsible for distributing the weekly public notice of applications and responding to public inquiries. The Division receives and evaluates citizen and interest group comments, as well as protests concerning water use applications.

The Water Right Services Division's seven major programs are described in detail below.

Water Rights Section

Water Right Application Review - The focus of the water right permitting program during the 2017-19 Biennium was to maintain the timely processing of water right applications and continue efforts to systematize and automate the process. The Division also continues to focus efforts on the resolution of protests of proposed water rights. While the number of water right applications is expected to remain stable overall, the complexity of application review is increasing as less water is available for appropriation. In addition, more applications are for groundwater, which requires a more complex technical review. For these reasons, the Department expects that the number of protested applications will grow in the future.

Customer Service and Record Management - The Water Right Services Division is responsible for walk-in, telephone and e-mail customer service concerning all water right matters at the Salem office. Division staff help provide counter service to the public. Division staff receive approximately 2,500 calls per month concerning water right matters. In addition, Division staff maintains and manages all of the Department's official water right records.

The Division continues to provide a high-level of customer service including an increased amount of pre-application counseling, immediate review of applications for completeness, a maximum one day call-back policy, and improvements to an already customer-friendly environment. Additionally, the Department has improved its web page to allow the public quick access to Departmental records and other information including powerful and efficient research tools.

Certificates - After a permit is issued, the permittee generally has up to five years to develop the right unless an extension of time is applied for and approved. To perfect the right, the permittee must submit a final water-use report with a map of the use as developed. The Division receives these final reports and maps and prepares the certificate describing the use allowed.

Since the 2007-09 biennium, the Division has instituted a number of practices to more efficiently process certificates. These approaches have led to a reduction in the backlog of work in this area; from a high of 6,400 in 2004 to 1,123 as of July 1, 2018. It will take the Department approximately 3 years to eliminate the backlog entirely.

Extensions - If a permittee is not able to complete water development within the allotted time as prescribed in the permit, the permittee may request an extension of time within which to complete the work. The Division reviews these extension requests and determines, within the requirements of the law, whether or not to allow the extension. The Department received 266 extensions in 2015, an all-time high, and 179 applications in 2016, and 107 in 2017. The Department continues to improve our document generation tools which allow the extension caseworker to quickly generate proposed final orders once they have completed the review of the application. Due to staff turnover and to make the best use of available resources, extensions are currently being processed by adjudications staff.

Transfer and Conservation Section

The Transfer and Conservation Section includes staff responsible for processing changes to existing water rights and permits, flow restoration applications, water management and conservation plans, and coordination with local government, conservation partners, soil and water conservation districts, watershed councils, and others. These programs are key to meeting Oregon's long-term water supply and restoration goals.

Transfers - The transfer of an existing water right to a new use or place of use is often the best alternative for establishing a "new" water supply for economic development or streamflow restoration. Under Oregon law, water rights are issued for a specific use, to receive water from specific points of diversion, and are appurtenant to specific locations. However, Oregon water law also provides a process to change the use, place of use, or point of diversion while still retaining other characteristics, such as the water source and priority date, provided that the changes do not injure other water rights. While transfers can only be completed for specific types of rights, permit amendments and groundwater registration modifications can allow for changes to these other types of rights. The Transfer and Conservation Section is responsible for receiving and processing water right transfer, permit amendment, and groundwater registration modification applications.

The backlog in processing water right transfers in 2004 was about 760 applications, rendering transfers a somewhat inefficient management option. The Department has taken a number of steps to address this workload, starting with a Lean-Kaizen process in 2009 that led to a number of changes to the processing of transfers. These changes resulted in a significant reduction in the time required to process transfer applications to Final Order and also made the process more user-friendly. The Department has also used the Reimbursement Authority program to expedite some transfer applications. The backlog as of the end of 2017 has dropped to 358, even though the number of transfer applications filed annually has increased steadily for the past 5 years.

The Department continues to look at ways of streamlining, combining functions, and leveraging its staff resources to best serve its customers.

Flow Restoration - In addition to processing instream transfers, this section is also responsible for processing instream lease and allocations of conserved water applications. The Transfer and Conservation Section works, in coordination with the Field Services Division, with conservation groups, water right holders, irrigation districts, watershed councils, and soil and water conservation districts to complete flow restoration projects.

The Water Resources Department processes approximately 120 lease applications annually, with a goal for average processing time being 45 days. Several years ago the average processing time was near 90 days. There is no backlog for instream leases.

Approximately ten instream transfers are received annually. The number of allocations of conserved water averages six to seven per year. In the past, some applications have taken more than two years to

process, but, due to a thorough process and efficiency review in 2013, processing of these applications is now taking only 12 months.

Water Supply and Conservation Planning - Staff in this section work closely with community water suppliers (municipal and certain quasi-municipal water suppliers) and irrigation districts to assist in the development of water management and conservation plans. Many community water suppliers and districts have initiated planning efforts to identify new options and alternatives to meet future water needs. Community water supply entities are required by water right permit conditions or statutory provisions to prepare water management and conservation plans. Under the planning approach developed by the Department, a variety of water supply alternatives, including storage, conservation, and water right transfers, are considered for cost-effectiveness and feasibility. The approach is intended to help water suppliers identify least-cost options for meeting future water needs. In the most recent fiscal year, 100 percent of the plans received by the Department were reviewed within the 90-day review goal. This is the highest percent recorded since the Department started keeping records for the program.

Protests

The protest program is responsible for resolving protests filed against various Department orders, either by negotiated settlement or through a contested case hearing process. Based on past experience, the Department expects to receive approximately 100 protests during the 2019-21 biennium. The program successfully negotiates resolution of approximately 90 percent of the protests, thereby dramatically reducing the need for expensive contested case hearings, while meeting the essential water needs of the applicants, protecting existing water rights, and ensuring adequate resource protections.

Adjudication

The Adjudication Program is responsible for the adjudication of pre-1909 water rights, tribal water rights, and other federal reserved water rights. Most of Oregon's river basins east of the Cascade Mountains have been adjudicated for pre-1909 water rights. Only a few of the river basins west of the Cascades have been adjudicated. Adjudications are important for holders of claims, who are often the senior-most users in the basin, but whom the Department cannot regulate for in accordance with the doctrine of prior appropriation until such claims are adjudicated. These senior claims also cannot be transferred until adjudicated.

Adjudications can be complex, long-lasting and controversial. The Department initiated the Klamath Basin Adjudication in 1975. This adjudication was delayed by two lengthy federal lawsuits and final claims were then filed prior to April 30, 1997. The Department received 5,660 legal contests to 730 claims. The administrative phase of the Klamath Adjudication was completed in March of 2013, and the case was transferred to the Klamath County Circuit Court. The Department is providing support to the Department of Justice as the Klamath Adjudication makes its way through the Circuit Court.

Hydroelectric Program

The Hydroelectric Program has lead responsibility for Oregon's hydroelectric water right program. Program staff process all applications related to development, modification, assignment and decommissioning of hydroelectric projects. Staff are responsible for implementing a coordinated, interagency program for evaluating applications to reauthorize hydroelectric projects with state or federal licenses that are due to expire. The program is also responsible for coordinating the decommissioning of existing facilities.

Division staff conduct annual fee billing and collection for the 150 existing hydroelectric projects in Oregon. These fees support hydroelectric programs in the Departments of Water Resources, Fish and Wildlife, and Environmental Quality.

Enabling Legislation/Program Authorization

The Division prides itself in strictly adhering to the enabling statutes that authorize the water right processes that we administer. We continue to seek amendments to statutes to allow for regulatory streamlining whenever possible. The following is a list of Division programs and their enabling ORS citations.

Water Right Transfers – Processing requests for changes (i.e., leases, allocations of conserved water or transfers). Transfers can include a change in place of use, type of use, or point of diversion. Both regular and expedited processes are available. Staff = transfer staff, field water right techs	ORS 536.050; ORS 537.120 to 537.360; ORS 537.525; ORS 540.520 to 540.580; ORS 537.455 to 537.500; ORS 540.510.
Water Right Permitting – Water right records and research, processing of new water right applications, permit extensions, certificates, and limited licenses. Both regular and expedited processes are available. Staff = permit & certificate writers, and protest coordinators.	ORS 537.097; ORS 537.799; ORS 536.050; ORS 537.130; ORS 537.120 to 537.360; ORS 537.135; ORS 537.211 to 537.252; ORS 537.525; ORS 540.520 to 540.580; ORS 537.153; ORS 537.797; ORS 537.621 to 537.628
Adjudication – Confirming uses of water that pre-date Oregon's 1909 water code. Staff = adjudications staff	ORS Chapter 539; ORS 539.010; ORS 537.665 to 537.700;
Hydroelectric Program – Coordinating agency for project re-authorization and Federal Energy Regulatory Commission (FERC) licensing, review of non-FERC applications. Staff = Hydroelectric staff	Oregon Constitution Article XI-D ORS 543.015; ORS 543.017; ORS 537.283

Funding Streams

Funding for staff comes from the state General Fund and Other Fund fees. Fees are charged for various water rights permitting activity as well as for the Hydroelectric Program. The fees related to each of the Department's water right transactions are primarily set in statute.

	Water Right Services Division				
	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
2017-19 Legislatively Adopted Budget	3,647,773	4,201,608	-	-	7,849,381
2017-19 Emergency Boards	86,396	416,304	-	25,000	527,700
2017-19 Legislatively Approved Budget	3,734,169	4,617,912	-	25,000	8,377,081
2019-21 Base Budget	3,818,314	4,752,988	-	-	8,571,302
2019-21 Current Service Level	3,973,306	4,854,962	-	25,000	8,853,268
Policy Packages					
2019-21 Modified Current Service Level	3,973,306	4,854,962	-	25,000	8,853,268
Total Packages	(295,275)	(33,810)	-	-	(329,085)
2019-21 Governor's Recommended Budget	3,678,031	4,821,152	-	25,000	8,524,183

TECHNICAL SERVICES DIVISION

The Technical Services Division collects and analyzes data to provide the Department with the best available science for water management decisions to support a healthy environment and a strong economy. The Division also protects public health and safety by assessing the condition of dams and overseeing well construction standards to prevent groundwater contamination and waste.

Program Contact: Brenda Bateman

503-986-0879

Snapshot

Customers	**Funding Source**	**GRB Expends**	**Positions / FTE**	**Case/ Work Load**
Cities; Counties; Conservation Groups; Consultants; Federal Agencies; General Public; Internal WRD Staff; Public Interest Organizations; Realtors; Special Districts; State Agencies; Oregon Tribes; Water Right holders; Water Right applicants; Watershed Councils; Well Constructors; Well Owners	General Fund Other Funds Federal Funds	$11.8M $4.1M $0.6 M	54 / 52.92	Dam Inspections, Groundwater studies, Hydrologic processing, Information Services, Mapping/GIS, Well Construction / Compliance.

The Technical Services Division supports long-term water management by providing data and technical analysis. Division staff are responsible for providing data and technical analysis to interested parties, as well as providing technical expertise in water distribution, enforcement and litigation. Programs include:

- Aquifer Storage and Recovery / Artificial Recharge
- Dam safety;
- Emergency Preparedness (drought and flood projections / preparedness)
- Geographic information systems (GIS) / mapping;
- Groundwater investigations and management;
- Hydrographics – Surface water data;
- Information systems management;
- Surface water hydrologic analysis / water availability;
- Well construction, compliance and enforcement;
- Well driller licensing / continuing education; and
- Water use measurement and reporting.

Programs

Dam Safety Program

The Dam Safety Program houses the State Engineer. In 2016, the section also hired a second professional engineer to help with the technical aspects of the Dam Safety program; conducting inundation analyses, conducting inspections and helping dam owners understand their responsibilities.

In recent years, other states have suffered significant property and environmental damage as well as loss of life as a result of dam failures. As structures age and additional seismic information becomes available, proper construction and maintenance becomes even more critical. In cooperation with National Inventory of Dams Program (NID), Oregon's Dam Safety Program keeps a current inventory of dams that meet both NID and Oregon criteria. Pursuant to statute, dams that are ten feet or greater in height and also impound 9.2 acre-feet (3,000,000 gallons) or more are subject to the requirements of Oregon's Dam Safety Program.

The Dam Safety Program staff are responsible for inspecting dams, and reviewing the design/specifications of new water storage structures and existing structures undergoing major repair. The Department has lead inspection responsibility for more than 900 dams, and strives to inspect 200 each year with assistance from the Field Services Division. The more than 70 dams rated as "high hazard" are inspected annually because there are people living immediately downstream from the dam. The 2009 Legislature established a fee to help pay for the costs of this program. Staff engineers conduct inspections of existing hydraulic structures that could pose a threat to life and property, and coordinate inspection efforts by field services personnel of other structures.

The State Engineer provides engineering expertise, conducts staff training, coordinates routine dam inspections, determines actions needed on dams in less-than-satisfactory condition, and provides information on the feasibility and safety of potential new storage sites. Policy option package #104 in the Governor's Budget provides funding for dam safety. Chapter 4 discusses the condition of dams in the state in more detail.

Well Construction and Compliance Section

The Well Construction and Compliance Section includes a well constructor licensing specialist, a well construction program coordinator, an exempt use well program coordinator, two support specialists, and the section manager.

Well Construction – The Well Construction Program protects Oregon's groundwater aquifers from depletion, waste, contamination, and loss of artesian pressure. The program administers minimum well construction standards, well constructor continuing education, exempt use well recording, landowner well construction permits, geotechnical hole standards, special standard application reviews, and well constructor licensing. The program works to ensure that well constructors and landowners understand the importance of protecting aquifers using proper construction, maintenance, and abandonment techniques. In coordination with the Field Division well inspectors, staff members consult with drillers and landowners to ensure compliance with minimum well construction standards. Program staff assists the public in conducting well log research, interpreting well log data, submitting exempt use well maps, and issuing Well ID Tags. Policy option package #102 in the Governor's Budget supports the work of this section.

Compliance – The Compliance staff provides guidance to field personnel for regulatory matters that could involve formal enforcement action, and serves as the agency lead when formal enforcement

action becomes necessary. Although voluntary compliance with Oregon water law is achieved more than 98 percent of the time, there are violations of water law that require formal action. Water use violations generally involve storing water without the benefit of a water right, irrigating land not covered by existing rights, or diverting water illegally without a water right. Well construction violations typically involve construction practices that could lead to contamination, waste, or depletion of groundwater aquifers. The Compliance staff prepares formal enforcement documents, represents the Department in formal hearings or settlement negotiations, and assists in writing administrative rules.

Information Services Section

The Information Services Section provides agency and public access to information necessary for sound water management decisions through application development, data management, and technical support. The section continues to improve and streamline customer interactions through technology. Recent actions included: 1) linking together multiple groundwater related databases, 2) designing a new data collection application for field staff, 3) creating a new website for the Department, 4) accepting online payments for more programs. Policy option package #102 in the Governor's Budget supports the work of this section.

Application Development – Application development staff members streamline the processing of information for both internal (agency) and external customers. The information is displayed through web pages and maps. These applications are necessary to increase efficiency, understand complex data, and support water resource decisions. The application development team has recently updated Water Right data and applications to incorporate the National Hydrography Data standard, enabling internal staff and external customers to analyze water rights with information about their location on the stream network.

Data Management – Data management staff build and maintain databases of key information including water rights, well construction records, and hydrologic data. Quick and reliable public access to information allows the Department to better serve the public. Staff add new information when it is received by the Department and research historical paper records to improve database accuracy. The section continues to improve processes and documentation. Additional procedures have been added to ensure data standards are met to facilitate data sharing with external customers.

Technical Support – Technical support staff members ensure that hardware and communication infrastructure is operational and accessible. Reliable servers and computers are necessary for information sharing and improving staff efficiency. Recent improvements in backup services have positioned the Department to effectively recover data in the event of a disaster.

Information Technology Security – Information technology staff members take steps to avoid or mitigate risk to agency information assets. Securing information assets from unauthorized access protects the public and the Department. The section has increased efforts to educate staff on security issues.

Surface Water Hydrology

The Surface Water Hydrology Section includes three programs staffed by nine hydrologists, hydrographers, office support, and the section manager. The Section Manager chairs the State's Water Supply Availability Committee. Policy option package #102 in the Governor's Budget supports the work of this section.

Hydrographics – As of mid-2016, the Water Resources Department is operating more than 260 stream and reservoir gages throughout the state, maintaining a 100-year record for many of them. This

information is vital for water managers, scientists, planners, and policy makers to make good water management or planning decisions. The Department operates gages to serve two primary purposes: scientific evaluations and water management (for both distribution and regulatory purposes). Most of these gages are operated as near real-time, and transmit data once every hour. The Department also posts on its website information from another 250 gages operated by the U.S. Geological Survey.

Hydrographics staff provide surface water data collection oversight and guidance. Primary functions include evaluating the sufficiency of the data collection network, selecting sites and equipment, and processing streamflow, and groundwater level data for staff use and public distribution. The section works with staff in the Field Services Division to ensure that the stream gage network equipment is operating properly and to conduct regular measurements at various water elevations. The staff also provides guidance, training and technical support to field staff on stream flow measurement, as well as the location, installation, and operation of surface water stream gaging stations. In addition, staff verify and enter the data into a central database, review the data, make corrections based on field conditions (such as debris or ice), and finalize the records to meet computation standards established by the USGS.

Surface Water Availability – The Surface Water Availability Program assesses surface water availability in rivers and streams throughout the state in an effort to assess the ability to issue new water rights, while also protecting existing instream and out-of-stream water rights. Basin runoff characteristics and streamflow measurements are analyzed in a manner that allows prediction of flow in streams where gages are not available. Streamflow statistics and water availability are used for water supply and stream restoration planning. Major elements of the program include expanding and refining the streamflow records database, improving estimates of consumptive water use, improving the accuracy of predictive streamflow models, and providing surface water availability analysis for water right applications. In addition to the statewide water availability analysis, other surface water models have been developed that provide flood frequency predictions and water use impact analyses for consideration in mitigation proposals. Section hydrologists also provide technical guidance in tracking mitigation opportunities in the Deschutes Basin to protect scenic waterways. The mitigation program in the Deschutes Basin is designed to allow development of groundwater using mitigation credits to maintain or improve streamflow.

Water Use Reporting - All government entities that hold water rights in Oregon, including federal and state agencies, cities, counties, schools, irrigation districts, and other special districts, are required by Oregon Revised Statute (ORS) 537.099 to annually report their water use. Beginning in the early 1990s, some water use permits issued to nongovernmental users include a water measurement and an annual reporting requirement; under the authority of ORS 537.211, water right permits may be issued with measurement conditions from the Department. Under the Department's Water Use Reporting Program, there are more than 14,800 water rights that are required to measure and report water use in Oregon. This constitutes about 17 percent of the 89,000 water rights in the state. Water-use reporters submit their information to the Department via its website and this information is then made available to the public.

Groundwater Hydrology

The Groundwater Hydrology Section includes 12 staff hydrogeologists and a supervising hydrogeologist. The section focuses on collecting and analyzing information on the groundwater resources of the state. That information is used to formulate plans to manage groundwater within the capacity of the resource. Section activities also include technical support on groundwater permitting and management, reviewing Aquifer Storage and Recovery and Artificial Recharge proposals, conducting groundwater investigations, monitoring and administrative management of critical groundwater areas, and expansion and oversight

of the observation well network. Policy option package #102 in the Governor's Budget supports the work of this section.

Technical Support to the Agency – Significant staff time is devoted to intra-agency technical support, including reviews of groundwater permit applications and transfers, participation in contested cases, counsel on matters relating to well construction, assisting with the resolution of interference between water wells and surface water, helping to address complaints regarding well-to-well interference, assisting with enforcement matters, reviewing data collected by water users, and technical analysis of proposed groundwater-related legislation and rules.

Aquifer Storage & Recovery (ASR) and Artificial Recharge (AR) – Groundwater staff review ASR and AR proposals, provide technical assistance, consider the potential for injury to other water users and aquifer water quality, evaluate project data and reports, and issue licenses and permits.

Groundwater Investigations – Groundwater investigations characterize the water budgets of groundwater reservoirs, document the interaction between groundwater and surface water, determine annual recharge, calculate the current demands on the aquifer, and inform management plans to prevent over-drafting the resource. Investigations include assessments of critical groundwater areas, other locations where groundwater levels show decline, and areas where local geology or anticipated growth suggests the resource may soon begin to show signs of stress. These studies describe the groundwater resource, identify any problems, and suggest management options. State funding of groundwater investigations can usually be leveraged with matching federal funding through the U.S. Geological Survey.

Management of Groundwater Administrative Areas – There are 22 designated groundwater administrative areas around the state with differing levels of restriction. These include critical groundwater areas, groundwater limited areas, and areas withdrawn from further appropriation. Some areas have time-limited permit restrictions for uses requiring water rights. Other areas are closed to new appropriations or have well construction requirements to protect senior water rights. Staff monitor these areas to ensure that the restrictions adequately protect the groundwater resource and existing users without excessively curtailing water development and use.

The designated critical areas are Butter Creek, Stage Gulch and Ordinance in the Umatilla Basin; The Dalles in the Hood Basin; Cow Valley in the Malheur Basin; and Cooper Mountain-Bull Mountain in the Tualatin Basin. Within these areas, hydrogeologists monitor groundwater levels and water use and, where applicable, determine the annual allocation of groundwater available to senior water right holders.

Department hydrogeologists also provide technical input for mitigation opportunities. The mitigation program in the Deschutes Basin is designed to allow development of groundwater using mitigation credits to maintain or improve streamflow.

Observation Well Network – Section staff, in cooperation with the Field Services Division, collects and input water level data from observation wells around the state. This information is used to track the long-term aquifer response to groundwater development and climate change. There are currently about 380 state observation wells and several hundred miscellaneous and project wells that contribute data regarding ground water levels in Oregon. The data are quality-control checked and available on the Department website for access by the public and professionals who use the information to track and understand changing conditions. The Department is actively expanding this network by drilling dedicated observation wells in areas of specific groundwater interest, for example, in basins where the Department is working with the U.S. Geological Survey on cooperative groundwater studies.

Enabling Legislation/Program Authorization

Oregon water law is addressed in Oregon Revised Statutes (ORS), chapters 536 through 541. ORS 537.110 declares all waters in the state as a public resource.

Dam Safety: ORS 540.350 through 540.400 defines certain dams and other water structures as potential threats to life and property and requires review by the Water Resources Department.

Groundwater Science: ORS 537.505 through ORS 537.746 provides for the protection of groundwater to ensure a sustainable resource for the state.

Well Construction and Compliance: ORS 537.747 through ORS 537.796 and ORS 537.880 through ORS 537.895 provide the requirements for well construction.

Surface Water Hydrology and Measurement: ORS 536.440, ORS 537.099, ORS 542.060, ORS 542.750 and ORS 540.435: Water users must measure and report. The Department must establish and maintain gaging stations; publish gage records, and analyze streamflow.

Information Services: ORS 536.037 and ORS 536.040: The Department must keep records and the information must be made available to the public. ORS 291.037 through 291.038 finds information resources are a strategic asset and must be managed accordingly by agencies.

Funding Streams

Historically, the majority of funding for the Technical Services Division comes from the state General Fund. Other Funds include dam safety fees, gaging station agreements, fees for the inspection of newly constructed wells and the mapping of those wells in the Department's online databases and well driller licensing fees. Federal Funds are received primarily from the Federal Emergency Management Agency (FEMA) and the Bureau of Reclamation (BOR).

	Technical Services Division				
	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
2017-19 Legislatively Adopted Budget	8,239,439	4,926,180	-	1,263,394	14,429,013
2017-19 Emergency Boards	186,767	(1,329,788)	-	(75,000)	(1,218,021)
2017-19 Legislatively Approved Budget	8,426,206	3,596,392	-	1,188,394	13,210,992
2019-21 Base Budget	8,528,942	4,060,779	-	1,289,630	13,879,351
2019-21 Current Service Level	9,106,977	4,136,351	-	594,071	13,837,399
Policy Packages					
2019-21 Modified Current Service Level	9,106,977	4,136,351	-	594,071	13,837,399
Total Packages	2,700,070	(14,041)	-	-	2,686,029
2019-21 Governor's Recommended Budget	11,807,047	4,122,310	-	594,071	16,523,428

FIELD SERVICES DIVISION

The Field Services Division is responsible for the on-the-ground management of Oregon's water laws, distributing and managing water in the field and working with water users to enforce the system of prior appropriation. The Division also collects data and provides input on water right transactions.

Program Contact: Ivan Gall

503-986-0847

Snapshot

Customers	**Funding Source**	**GRB Expends**	**Positions / FTE**	**Case/ Work Load**
Cities; Counties; Consultants; Federal Agencies; State Agencies; Oregon Tribes; Watershed Councils; Well Owners; Water Right holders; Water Right applicants; Realtors; Property Buyers/Sellers; General Public; Irrigation Districts; Conservation Groups	General Fund Other Funds Federal Funds	$12 M $3.1 M $0.2 M	64 / 61.23	Enforcement, Water right distribution and management

The Field Services Division carries out the Department's mission by enforcing the state's water laws and implementing the Water Resources Commission's policies in the field. Staff regulate water uses based upon the water rights of record; inspect the construction and maintenance of wells for the protection of the groundwater resource; inspect the construction and maintenance of dams for the protection of the public safety and environment; collect hydrologic data, which is made available for use by staff and the public for planning purposes; and assist landowners with understanding and implementing water measurement. The Division also works with numerous watershed planning groups and local land use jurisdictions by providing technical information on surface water and groundwater. Programs include:

- Regulation/Distribution
- Well Construction Inspection
- Dam Safety Inspection
- Collection of Hydrologic Data (Surface Water & Groundwater)
- Customer Service in Field offices
- Work with/advise local planning entities on water issues

Program Description

The Field Services Division carries out the agency's mission by enforcing the state's water laws and implementing the Water Resources Commission policies in the field. Staff regulate water uses based upon the water rights of record; assist water users in developing long-term water supply and conservation plans; inspect the construction and maintenance of wells for the protection of the groundwater resource; inspect the construction and maintenance of dams for the protection of public safety and the environment; and collect surface water and groundwater data that are made available for use by staff, scientists, other agencies, and the public for planning purposes. The Division also works with numerous watershed planning groups and local land-use jurisdictions, providing technical

information on surface water and groundwater. Staff also regularly interface with the public and water users, providing information on water law, water rights, and well construction.

The Department has grouped its 21 watermaster districts into five regions for efficient management and mentoring of field personnel. Region managers, watermasters, field technicians, and locally-funded assistants carry out the field activities of the Department. Water management efforts are important for economic activities in the state, with cities, industries, recreation, and agriculture relying on proper management of water.

The ability to partner with the community and work on the ground is one area that sets Oregon apart from other states who have written policies, but no capacity to implement or enforce them out in the field. The state's ability to identify and correct problems locally is directly dependent on the number of skilled personnel in the field, the technical training they receive, the equipment (measurement, communications, and transportation) available to them, and their ability to educate and inform customers.

The Field Services Division addresses a broad range of water supply protections. The table displays two of Field Services Division's responsibilities: Regulatory Actions and Well Inspections.

Year	Regulatory Actions	Well Inspections
2009	11,493	1,245
2010	10,528	715
2011	8,182	743
2012	11,486	725
2013	17,932	950
2014	16,545	947
2015	20,336	1,296
2016	18,281	1,130
2017	14,656	1,035

The watermaster corps is the sole provider of water regulation and distribution in Oregon. Regulatory actions are either actions by the watermasters corps that cause a change in water use behavior, or field inspections that determine no change is necessary. This metric gauges the field workload and communication with water right holders and is influenced by weather (wetter years generally require less regulation, such as in 2011), availability of staff to undertake the work, and by external forces such as federal irrigation project management related to Endangered Species Act issues. The data show a sharp increase between 2014 and 2015, due to the severe drought in 2015. This increase in workload to respond to drought was a challenge for field staff, and meant that workloads had to be prioritized accordingly.

Well inspections maintain the integrity and quality of Oregon's groundwater resources. Proper well construction maintains groundwater quality and quantity, and prevents the loss of artesian pressure. The number of newly constructed wells that are inspected each year is influenced by weather (because drier years result in more wells being drilled) and the economy, which drives new construction. No other entity inspects wells in Oregon. The Department's goal is to inspect no less than 25 percent of all newly constructed wells. Of the total inspections in 2017, 1,035 were conducted on new construction, representing an inspection rate of 34 percent of all new wells.

In addition to measuring and distributing water for out-of-stream uses, the Field Services Division is also responsible for monitoring 1,858 instream water rights located throughout Oregon. These instream rights provide ecological benefits to fish and wildlife, and are also important to the recreation industry and individuals throughout Oregon. Many of the Division's regulatory actions are performed to protect instream rights.

In terms of surface water management activities, field staff operate more than 260 streamflow recording stations. In 2017, they conducted 2,619 streamflow measurements. The Field Services Division works closely with the Technical Services Division, which provides most of the data online in a real-time format. The data are an invaluable resource to Department staff working to protect existing water rights and are used by numerous entities involved in economic development and streamflow restoration activities. In 2017, field staff also made over 135 dam safety inspections, checking dams for indications of instability and water movement in order to protect downstream landowners.

In 2017, groundwater management activities of Department staff included more than 3,023 groundwater measurements in wells in partnership with the Groundwater Section. Well inspections ensure the protection of the groundwater resource from waste and contamination. Water level data is an integral part of groundwater management and permit decision-making. It is also used extensively by consultants, developers, realtors, and the general public.

Spotlight on Watermaster and Assistant Watermaster Funding

Watermasters and assistant watermasters help carry out the agency's mission by enforcing the State's water laws and implementing the Water Resources Commission's policies in the field. Watermasters generally have more decision-making authority than assistant watermasters, setting water distribution priorities, addressing more complex water disputes, and undertaking reviews of water right applications and transfers. Assistant watermasters primarily distribute water among users and collect water resources data. Our ability to successfully and timely manage water is directly dependent upon the number of skilled watermasters deployed. Currently, the State's General Fund supports 21 watermasters and 7 assistant watermasters. Watermaster workloads are increasing statewide due to water development to support growing populations and other economic growth, combined with the increase in number of water rights, wells, and changing water management needs (e.g. drought).

Management of Oregon's water relies, in part, on local entities funding staff in addition to State-funded staff. State law has recognized the role of counties in supporting water management since 1909. Historically, counties funded both watermasters and assistant watermasters, who were supervised by the State. Over time, the state took over funding of watermasters, while counties provided office space and funding for assistant watermasters (ORS 540.075 and ORS 540.080), adding volume to county-specific water management services.

As counties experienced their own budget challenges, funding from counties has declined from a high of 37 positions in the 1980s to 9 full-time county-funded assistant watermasters and 3 full-time office assistants. Small but important contributions from counties (under $5,000), also support an additional 2 seasonal assistant watermasters during summer months. The Department also relies on contracts with other partners for specific projects (e.g. Bureau of Reclamation, irrigation districts, etc.) to fund 2 full-time assistant watermasters to manage the Umatilla River, 1 full-time hydrographics technician to operate and maintain gages in the East Region, and 1 part-time field assistant in Tillamook County. The addition of more assistant watermasters is needed to meet the challenges of regulation and distribution of water. Policy option package #106 in the Governor's Budget supports the work of this section.

Enabling Legislation/Program Authorization

Oregon water law is laid out in Oregon Revised Statutes (ORS), chapters 536 through 541. With ORS 536.220, the legislature recognizes and declares that future growth and development of this state for the increased economic and general welfare of the people are in large part dependent upon a proper utilization and control of the water resources of this state, and such use and control is therefore a matter of greatest concern and highest priority.

ORS 537.110 declares all waters in the state as a public resource; 537.535 – 537.635 authorizes the water-use permitting process to develop those waters; 537.747 – 537.772 authorizes well construction standards and regulation; 540.020 – 540.045 authorizes the appointment of watermasters and regulatory duties to distribute water based upon water rights of record.

Funding Streams

The Field Services Division is primarily funded using General Fund dollars, a reflection of the long-term history of the program and the many diverse interest groups benefitting from water management and water right services. Start Card fees, authorized under ORS 537.762, are received when new wells are constructed, and support Oregon's well inspection program. Other Funds from gaging agreements and local contracts help support the Field Services Division.

	Field Services Division				
	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
2017-19 Legislatively Adopted Budget	11,210,511	2,180,344	-	616,140	14,006,995
2017-19 Emergency Boards	264,179	1,170,991	-	5,297	1,440,467
2017-19 Legislatively Approved Budget	11,474,690	3,351,335	-	621,437	15,447,462
2019-21 Base Budget	11,731,382	2,517,017	-	721,446	14,969,845
2019-21 Current Service Level	11,753,018	3,084,324	-	207,663	15,045,005
Policy Packages					
2019-21 Modified Current Service Level	11,753,018	3,084,324	-	207,663	15,045,005
Total Packages	208,093	(7,010)	-	-	201,083
2019-21 Governor's Recommended Budget	11,961,111	3,077,314	-	207,663	15,246,088

DIRECTOR'S OFFICE

The Water Resources Department is Oregon's water quantity agency, managing the system of water allocation and distribution throughout the state. The Director's Office is responsible for developing and supervising the policies and programs that ensure water is managed according to Oregon Water Law and to meet current and future instream and out-of-stream water needs.

Program Contact: Racquel Rancier

503-986-0828

Snapshot

Customers	Funding Source	GRB Expends	Positions/ FTE	Case/Work Load
Cities; Counties; Consultants; Federal Agencies; State Agencies; Watershed Councils; Tribes; Public Interest Organizations; Legislators and Congressional Offices; General Public; Irrigation Districts and Special Districts; Conservation Groups	General Fund Other Funds Federal Funds	$6.1 M $0.1M $0.02M	16 /14.77	Commission meetings & actions, Contested Case hearings, Rules, Citizen Response, IWRS, Oregon Plan, Legislation, Public Records, Communications, Water Resources Development, Complex water issues.

The Director's Office oversees policy-related functions affecting the entire Department and supports activities of the Water Resources Commission. In this role, the Director's Office ensures internal controls are in place to help improve performance in key program areas. The Director's Office centralizes responsibility for a number of major functions that serve the entire Department, including:

- Updating and implementing the Integrated Water Resources Strategy;
- Policy oversight of all Department contested case hearings and litigation;
- Intergovernmental coordination & representation in state/tribal negotiations;
- Drafting, implementing & coordinating agency policies, rules, and legislation;
- Citizen response and public information services;
- Direct support of Water Resources Commission activities;
- Oversight of Department work groups and task forces, sustainability initiatives, and process improvement;
- Principal contact with members of the Legislature, stakeholder groups, other state agencies, local and federal entities, as well as the public;
- Oversee and lead water resources development efforts to meet instream and out-of-stream needs, including efforts related to place-based planning, feasibility grants, and water project grants and loans; and
- Participation in the resolution of complex water issues.

Program Description

The Oregon Water Resources Department and its policy-making body, the Oregon Water Resources Commission, have a dual mission: to address Oregon's water supply needs and to restore and protect streamflows. As a result, the Department's stakeholder groups are quite diverse, representing both out-of-stream water users such as industry, municipalities, agriculture, and individual households, as well as instream uses, such as hydropower, fish and wildlife, water quality, scenic waterways, and recreation.

The Director's office provides oversight and support for all of the agencies' programs in order to institute policies and practices that best serve Oregonians. The Director's office works with the Water Resources Commission to provide policy direction. Other key functions of the Director's office include: participating in policy work groups, rules coordination, responding to press inquiries, conducting outreach to the public and stakeholders, fulfilling public record requests, working with tribal communities, coordinating with the environmental justice task force, updating and implementing the state's Integrated Water Resources Strategy, providing information to elected officials, and working with the Department of Justice on resolving litigation. In recent years, due to the Department's policy and science expertise, the Director's Office has increasingly become involved with addressing complex water issues, and implementing the Water Resources Development Program to help individuals and communities meet their instream and out-of-stream water needs.

Intergovernmental Coordination - The Director's Office leads the agency's formal and informal intergovernmental coordination activities as the lead contact with Oregon's tribal governments, other state-level agencies, local governments, neighboring states and federal agencies on matters of common authority, responsibility, or interest. The Legislative Assembly has authorized the Director to initiate negotiations with tribes in Oregon to define the nature and scope of tribal reserved water right claims. The need to resolve tribal claims in Oregon are real and significant.

Complex Water Issues - With Oregon's water resources fully allocated in many parts of the state, it is becoming more challenging to meet the needs of both new and existing instream and out-of-stream demands. The Director's Office is often involved in working on collaborative processes to identify solutions to complex water issues. Examples of these efforts include: addressing water supply needs in the Umatilla Basin, engaging in collaborative planning and resolving disputes in the Deschutes Basin, partnering with U.S. Army Corps of Engineers to engage with stakeholders in the study of the allocation of stored water in the Willamette Basin, working with the community in the Greater Harney Valley to address water supply needs, and engaging in discussions about water challenges in the Walla Walla subbasin. In addition, the Director's Office continues to be involved to provide policy, management, and coordination on water supply issues in the Klamath Basin.

Oversight of Contested Cases and Litigation - Water right issues can be complex and contentious. The Department's water right-related decisions, regulatory actions or scientific conclusions are sometimes challenged administratively or in court. The Director's Office works with protest staff and Department of Justice attorneys to oversee these activities. The Department has seen an increase in litigation in recent years, mostly due to regulation commencing in the Klamath Basin. Individuals that disagree with a decision of the Department can request reconsideration from the Director and may also seek judicial review before a court. Monthly expenses for general advice and water right adjudication have grown slightly; however, litigation expenses have surged over the last three biennia as new court filings have increased.

Between July 2011 and June 2013, 4 new cases were filed. In contrast, 13 new cases were filed between July 2013 and June 2015, while an additional 25 new cases were filed between July 2015 and June 2017. Between July 2017 and December 2018, 19 new cases were filed. It can take several years for litigation to be resolved, meaning that increases in new filings have significant long-term effects on the Department's budget and staff workloads across the agency. The greatest increases in litigation are occurring related to enforcement and water transactions.

The Department's base budget to cover the costs of legal services for the 2017-2019 biennium was $835,628. For the months of July 2017 through July 2018, the Department's DOJ billings totaled $1,076,917. This resulted in the Department going to the Emergency Board in September 2018 requesting an additional $1,352,526 general fund to meet the anticipated legal costs for the remainder of the biennium.

In recognition of these trends, the Governor's Recommended Budget includes policy option package #105, which provides $1,000,000 in General Funds for legal expenses. Increasing funds for legal expenses would reduce the uncertainty for the Department, and allow for work to proceed as expected and authorized.

Outreach and Coordination - The Director's Office is responsible for the Department's communication with stakeholders, partners, members of the Legislature, the public, and the media. The Director's Office communicates through a variety of means: face-to-face meetings, conference calls, web-based platforms, letters, informational listserves, fact sheets, and public meetings. These actions represent a high volume of interaction, year-round. The Director's Office supports the Water Resources Commission by coordinating meetings, developing issue reports and briefing papers, staffing work groups, and answering Commission information requests.

Integrated Water Resources Strategy (IWRS) and Strategic Planning - The Director's Office oversees development and implementation of Oregon's Integrated Water Resources Strategy, an inter-agency blueprint for understanding and meeting the state's water needs. The IWRS identifies critical water-related issues for the state and recommended actions to address them. The Water Resources Department is required to update the IWRS every five years; the first update was completed in 2017. While the IWRS provides a comprehensive, high-level framework for strategic guidance, the Secretary of State's 2016 Performance Audit suggested that the Department would also benefit from developing strategic plan that directly focuses on the agency's priorities, processes and functions. Toward that end, at the January 2017 Commission meeting, the Commission and Department agreed to embark on a strategic planning effort, which was led by staff in the Director's Office. The Commission ratified the Department's Strategic Plan in the fall of 2018.

Performance Improvement - The Director's Office has oversight responsibility for continuous improvement in all program areas, but particularly in customer service, regulation, and data and information. A variety of techniques help us identify how we fare in these areas, including key performance measures (KPMs), internal process evaluation, internal performance indicators, meetings with peer agencies, external stakeholder feedback, and the biennial budget process.

Water Law and Policy Expertise - Effective distribution and management of Oregon's water requires trained experts in the fields of law/public policy, engineering, and science. The Director's Office responsibilities require in-house institutional knowledge in order to make policy-decisions and develop strategies to communicate and implement Oregon Water Law, as well as meet instream and out-of-stream needs.

Water Resources Development Program - Identifying water supply options to meet both instream and out-of-stream water needs is essential for healthy economies, communities and ecosystems. The Director's Office oversees activities to further water resources development efforts, such as directing Department activities on specific projects, setting policy direction, and working with interested parties and stakeholders to come to consensus on project details. The Director's Office leads a team that provides technical and financial assistance to help communities meet their instream and out-of-stream water needs.

The Water Resources Development Program seeks to help individuals and communities address instream and out-of-stream water resources needs now and into the future. The program includes three components to help address Oregonian's water resources needs:

- Place-Based Planning empowers communities to work collaboratively, in partnership with the state, to understand their instream and out-of-stream water resources needs and identify potential solutions to meet those needs;
- Feasibility Study Grants cover up to 50 percent of the costs of studies to evaluate the feasibility of developing water conservation, reuse, and storage projects; and
- Water Project Grants and Loans allow the state to invest in projects that meet instream and out-of-stream needs, while providing economic, environmental, and social/cultural benefits.

Place-Based Planning

Place-based planning is one of the recommended actions from Oregon's IWRS. It provides an opportunity for communities to work collaboratively in partnership with the state to understand their water resources challenges and needs, and identify potential solutions to meet those needs.

Senate Bill 266 (2015) authorized the Department to pilot place-based integrated water resources planning. With the $750,000 provided by the Legislature in 2015, the Department has awarded funding to four planning groups as outlined below. Additional funding is proposed in policy option package #101 of the Governor's Recommended Budget. Extending the program is also proposed under HB 2084.

Key Planning Principles

- Locally-initiated and led collaborative process
- Voluntary, non-regulatory approach
- Includes a balanced representation of water interests
- Conducted in partnership with the state
- Addresses instream and out-of-stream needs, including water quantity, quality and ecosystem needs
- Utilizes an open and transparent process that fosters public participation
- Builds on and integrates existing studies and plans
- Does not infringe on existing water rights
- Adheres to IWRS principles and state laws

Lower John Day Place-Based Water Planning – The Lower John Day Sub-Basin supports a robust agriculture-based economy and important wild anadromous fish habitat, both of which depend upon reliable water resources. The lower river and its tributaries rely heavily on the watershed's ability to capture, store, and slowly release 8-20 inches of precipitation in a given year. Several years of drought and the potential impacts of climate change further threaten limited supplies. Through this place-based planning effort the Gilliam Soil and Water Conservation District, the Mid-John Day Watershed Council, and other basin interests are working to identify solutions to efficiently develop, conserve, store, and utilize water in the region to meet instream and out-of-stream needs.

Upper Grande Ronde River Watershed Partnership – The Upper Grande Ronde Sub-Basin is a vital ecosystem that supports ranchers, farmers, and urban residents as well as an array of fish and wildlife

species. Water supply shortages for instream and out-of-stream uses currently exist in this sub-basin and may be intensified by climate change and increases in future demand. Through place-based planning, Union County is bringing together a broad group of partners to understand where water needs are not being met and develop a focused plan that will help meet current and future needs. While there is a significant body of knowledge on water quality, quantity, and ecological demands in the watershed, this presents an opportunity to integrate that information.

Mid-Coast Basin Water Planning Partnership – The Mid-Coast Basin is characterized by smaller watersheds that are distributed along the coast line. These coastal watersheds support out-of-stream needs for municipal drinking water, agricultural and industrial use, and instream needs for various aquatic species, water-based tourism and commercial, recreational, and tribal fisheries.

Through this place-based planning effort the City of Newport, Gibson Farms, the Seal Rock Water District and the Mid-Coast Planning Partnership have initiated regional planning among coastal water interests. This collaborative group is working to address current and future water challenges, looking at quantity, quality and ecosystem needs while identifying ways to increase resilience. This effort may serve as a model for communities facing similar water challenges up and down the Oregon coast.

Harney Community-Based Water Planning – The Malheur Lake Basin is a large basin that supports hay and cattle industries as well as a dynamic high desert ecosystem. Recent drought years have years have contributed to declining groundwater levels in several areas of the basin and designation of a "groundwater area of concern." The citizens of Harney County have a history of successful collaborative planning efforts to address complex natural resources issues. Place-based planning presents an opportunity to develop a long-term water plan using a collaborative approach. Through this place-based planning effort the Harney County Watershed Council will bring together a broad group of partners to share their collective wisdom and develop innovative, community supported solutions that balance water supply and demand in a more integrated manner.

Feasibility Study Grants – Water Conservation, Reuse and Storage Grant Fund

First established in 2008, Feasibility Study Grants fund the qualifying costs of studies that evaluate the feasibility of a proposed conservation, reuse, or storage project that appears to have merit but is lacking important details necessary to determine whether or not to proceed with implementation.

The feasibility study focuses on helping to answer the essential question of, "should we proceed with the proposed project idea?" All activities of the study are directed toward helping answer this question.

These studies typically take a year to three years to complete. The Department offered three grant cycles in the 2015-2017 biennium, and awarded a total of approximately $2.2 million in grants. Due to limited staff resources, the Department did not award funds in 2018. The Department is in the middle of a review cycle for 2019 funding awards and anticipates a

Eligible Studies

Eligible studies examine the feasibility of water conservation, reuse, and storage projects. Studies may include, but are not limited to:

- Analyses of hydrological refill capacity, water needs, geology, or hydrology
- Engineering and water exchange studies
- Evaluation of financial feasibility;
- Fiscal analysis
- Study of instream ecological flows
- Comparative analyses of alternative means of supplying water, including costs and benefits
- Analyses of environmental impacts or public benefits
- Hydrological analyses
- Evaluation of water quality impacts

funding decision in June 2019. The Department received eight applications requesting $810,773 for 2019. A list of projects is included in Chapter 7. Funding for this grant opportunity is reduced in package #090 of the Governor's Budget.

Water Projects Grants and Loans – Water Supply Development Account

In 2013, the Oregon Legislature passed Senate Bill 839, establishing the Water Supply Development Account to provide grants and loans for water projects to evaluate, plan, and develop instream and out-of-stream water projects that have economic, environmental and social/cultural benefits. Projects must provide benefits in each of these three categories to be eligible for funding. After a conducting a series of workgroups, task forces, and rulemaking, the Department kicked off the first funding solicitation for this program in early August 2015.

Funding provided by the Legislature in 2013 and 2015 totaled $14 million. The Department received over $50 million in requests for the first funding cycle. In May 2016, the Water Resources Commission awarded $8.89 million in grants to projects; 28 projects were not funded, in part, due to a lack of resources and the need to hold a second funding cycle in 2017. The Legislature provided an additional $15 million to the funding opportunity. In the 2017 funding cycle, the Department received requests for nearly $35 million and awarded four grants totaling approximately $6.3 million. In 2018, the Department received requests totaling nearly $16 million for grants and loans. Seven grants were awarded funding for nearly $5.3 million. The Commission deferred a decision on an eighth funding award of $1,000,000 and will reconsider the project in its February 2019 meeting. A list of projects is included in Chapter 7. Additional funding for this funding opportunity is proposed in policy option package #107 of the Governor's Recommended Budget.

Enabling Legislation/Program Authorization

Water allocation and management is the responsibility of the state. There is no federal back-up for this work.

Director's Office – Policy and legal oversight, public records requests, public information / media, tribal and intergovernmental relations, staffing the Water Resources Commission, coordinating with the Oregon Legislature, rule-making, public hearings, special projects, integrated water resources strategy, integrated water resources development.	ORS 536.340; ORS 536.025; ORS 536.037; ORS 536.420; ORS 542.630; ORS 536.220; ORS 183.330; ORS 182.535; ORS 184.423/Executive Order 03-03; ORS 536.040; ORS 182.164; ORS 539.310; ORS 541.653; ORS 536.220

Funding Streams

Activities within the Director's Office are funded primarily by the General Fund.

	Director's Office				
	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
2017-19 Legislatively Adopted Budget	3,827,781	5,781	-	-	3,833,562
2017-19 Emergency Boards	90,336	49,497	-	25,000	164,833
2017-19 Legislatively Approved Budget	3,918,117	55,278	-	25,000	3,998,395
2019-21 Base Budget	4,459,454	55,278	-	-	4,514,732
2019-21 Current Service Level	4,764,006	55,247	-	25,000	4,844,253
Policy Packages					
2019-21 Modified Current Service Level	4,764,006	55,247	-	25,000	4,844,253
Total Packages	1,321,206	86,917	-	-	1,408,123
2019-21 Governor's Recommended Budget	6,085,212	142,164	-	25,000	6,252,376

ADMINISTRATIVE SERVICES DIVISION

The Administrative Services Division provides business and administrative services to the Department in support of the agency's mission. Division responsibilities include budget preparation and execution, human resource services, accounting and internal control, payroll and benefits, contracting, facilities management, risk management, training, reception and mail-room support services, transportation coordination, and telecommunication administration. The Division is divided into four sections: Water Development Loan Fund, Human Resources, Fiscal Services, and Business Services.

Program Contact: Lisa Snyder

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Snapshot

Customers	**Funding Source**	**GRB Expends**	**Positions / FTE**	**Case/ Work Load**
Cities; Counties; Consultants; Federal Agencies; State Agencies; Oregon Tribes; Public Interest Organizations; Property Buyers/Sellers; General Public; Irrigation Districts; Internal WRD staff	General Fund Other Funds Lottery Funds Federal Funds	$5.4M $47.6 M $8.5 M $0.02M	13 / 12.5	Transactions processed in Fiscal, Human Resource and Support Services

The Administrative Services Division provides business and administrative services to the Department in support of the Department's mission. Division responsibilities include budget preparation and execution, administration of human resource services, accounting and internal control, payroll and benefits, contracting, facilities management, risk management, employee development, reception and mail-room support services, transportation, telecommunication coordination and loan servicing. The division is divided into the Water Development Loan Program and four sections:

- Fiscal Services;
- Human Resources;
- Business Services; and
- Grants & Loans.

Program Description

Human Resources

The Human Resources Section provides hiring, training, safety, and other human resources services to promote integrity, diversity, and respect. A professional, empowered workforce is vital for the Department to achieve its goals and provide quality services. The Section's customers include everyone from the general public to managers and front-line employees in field offices located throughout Oregon. The Section strives to ensure that all aspects of human resources services are handled timely, accurately, and courteously.

The Section's responsibilities include the maintenance of the official personnel files, including inserting and removing documents as necessary under law. The Section generates reports on affirmative action, risk management and workers compensation. The Section also maintains and posts the required legal notices in all Water Resources Department offices located throughout Oregon.

The Human Resources Section is responsible for updating the Department's affirmative action plan, which values and embraces diversity. The affirmative action goals set by the Department are monitored by this Section as recruitments and training are considered.

The Section is also responsible for providing Department managers with human resources advice. In addition to providing guidance to management, the Section counsels staff regarding career opportunities. The Section also carries out Department-wide progressive discipline as necessary.

Risk Management activities are also coordinated in this Section. The Section works with SAIF on workers compensation claims, provides ergonomic assessments, and coordinates telecommuting and return-to-work programs.

The Human Resources Section provides many of the above-referenced services to the Oregon Watershed Enhancement Board (OWEB) under a contractual agreement.

Other responsibilities of the Human Resources Section include payroll and benefits processing and tracking for Department staff, as well as 5 other agencies, including open enrollment, under a Shared Services pilot program that the Department proposes to make permanent beginning in the 2019-21 biennium.

Spotlight on Shared Services

In October of 2014, discussions around a Payroll Shared Services model began between the Department and several other state agencies. The concept was promoted and supported by the State's Enterprise Leadership Team and its Improving Government Steering Team, with a goal of establishing projects for administrative savings and efficiencies. A team staff representing each agency met over the course of 10 months to develop concepts and a course of direction for this proposed project.

As a result, it was recommended to transition the payroll functions into a centralized work team at the Water Resources Department. The objectives included: broadening the knowledge base to respond to changing payroll laws, establishing best practices, and providing backup for payroll staff on leave. To date, the pilot project serves over 500 FTE at the Water Resources Department, the Oregon Watershed Enhancement Board, Department of State Lands, Oregon Housing and Community Services, Land Use Board of Appeals, and Department of Land Conservation and Development and employs one permanent Payroll Specialist and one limited duration Payroll Specialist.

The Department seeks to make the payroll pilot permanent effective July 1, 2019. Policy option package #112 in the Governor's Budget supports the work of this section and proposed to make the limited duration Payroll Specialist permanent.

Fiscal Services

The Fiscal Services Section's primary responsibility is accounting, including accounts payable, accounts receivable, and general ledger. The Section establishes and monitors internal controls related to safeguarding State and Department assets and is responsible for the development and preparation of the Department's Statewide Financial Report (SFR), which is combined with other agencies' SFRs to complete the Comprehensive Annual Financial Report for the State. The Section has been continuously recognized as a "Gold Star" contributor to the SFR since 1993.

Other responsibilities of the Fiscal Services Section include contract administration and budget tracking. The Section's contract administration functions ensure that the Department complies with statewide contracting rules and policy. The Section's budget tracking responsibilities include filing allotment reports with DAS.

Other Section responsibilities include travel coordination, key card access, telecommunication management, and facilities administration for the agency. The section is also responsible for coordination of facilities administration with the two other agencies with which we share the building.

The Fiscal Services Section also provides many of the above-mentioned services for the Oregon Watershed Enhancement Board (OWEB). The Section supports OWEB with general fiscal counsel, providing guidance on accounting and fiscal policy matters. The Section maintains accounts payable, accounts receivable, general accounting, and SFR and SWARM reporting for OWEB.

Biennially, the Section creates, inputs, and reconciles in excess of 210,000 accounting entries, which include over 51,000 accounts payable entries, 99,000 payroll entries, and 19,000 accounts receivable or receipt entries. The Section maintains files and controls for 300 contracts and agreements, including reimbursement authority contracts and agreements. In recent years, the Department has received additional Lottery Revenue Bond funding shifting the Department's budget from $36 million in 2009-11 to just under $108 million in the 2019-21 Governor's Recommended budget. The increase in Lottery Revenue Bond funding and grants adds a level of complexity for tracking and reporting the various bond sales, increases the number of accounts payable transactions, increases the number of accounting adjustments, and increases the volume of contracts reviewed. As the Department has received more funding, it has not received additional contracts or accounting staff.

The Division is required to pay invoices in a timely manner. These invoices are for supplies, licenses and data, services, interagency contracts, grant disbursements and more. State agencies have 45 days to pay an invoice prior to the assessment of interest for late payment. As shown in the table, a sampling of more than 4,500 invoices paid during each annual period since 2009, shows that the Department exceeds the target, paying 100 percent of invoices in less than 30 days.

Payment Timeliness	2011	2012	2013	2014	2015	2016	2017
5 days	91%	83%	91%	89%	95%	83%	66%
5-10 days	4%	12%	8%	11%	4%	11%	16%
10-15 days	4%	4%	1%	1%	0%	3%	9%
15-20 days	2%	1%	0%	0%	0%	3%	5%
20-30 days	0%	1%	0%	0%	0%	1%	3%

% within 30 days	100%	100%	100%	100%	100%	100%	100%
% within 15 days	98%	98%	100%	100%	100%	97%	92%

Business Services

The Business Services Section is responsible for the Department's biennial budget and the coordination of general agency support.

Duties include the preparation and execution of the Biennial Budget including monthly revenue and expenditure monitoring, contract monitoring, and management of the allotment.

Support Services staff provide mail processing, production copying, reception service and inventory control. They are an important part of the Department's internal control system to safeguard the assets received through the mail. During a typical year, the Support Services staff process approximately 55,000 pieces of mail and over 9,000 receipts. These staff also provide reception services, assisting walk-in customers as well as directing callers through the central phone system to the appropriate technical staff.

The Water Resources Development Program funds which include Place-Based Planning, Feasibility Study Grants and Water Project Grants and Loans are monitored in the Business Services Section. See the Director's Office Section for more information on the Water Resources Development Program.

Water Development Loan Fund

The Water Development Loan Program was enacted by the 1977 Legislature to finance irrigation and drainage projects. The legislation was referred to the voters and received approval in 1977. The 1981 Legislature amended ORS 541.700 - 541.855 to expand the use of the program to include community water supply projects as a third primary use. The addition required a constitutional amendment, which was approved by Oregon voters in 1982. The 1987 Legislature amended ORS 541.700 - 541.855 to expand the authority of the program to make loans for fish protection and watershed enhancement. In May, 1988 the constitution of the State of Oregon was further amended by a vote of the people, in order to make the changes effective. Since its inception, the Water Development Loan Program has reviewed 320 loan applications and funded 181 loans. One hundred and seventy-six of these loans were for irrigation and drainage projects and five were for development of community water supply systems.

In November 1991, the Loan Program issued state general obligation refunding bonds for $6,920,000.00. These funds were used to pay off existing outstanding bonded debt of the program, which had higher interest rates. In 1997, the Department worked with a steering committee through the Department of Administrative Services and the State Treasurer's Office, along with interest groups, to make the necessary amendments to administrative rules to establish new, clear criteria for underwriting loans. The Department also worked with the same entities to identify needed statutory changes that would make the program accessible and cost-effective to potential applicants. However, the program has not seen any significant interest from potential applicants in recent years.

Authority to issue bonds in the amounts of $10 million in 2009-11, $15 million in 2011-13, and $10 million in 2013-15 for a project in the Umatilla Basin were not used. Additional funding of $30 million was authorized for 2015-17, but was not expended. General Obligation bonds are only issued after project(s) are identified and an agreement is signed for repayment by the borrower(s). No funding was authorized for the 2017-19 biennium and no funding was requested for the 2019-21 biennium. There are no pending loans or applications for loans. The program has no state-owned property or inventory.

Enabling Legislation/Program Authorization

The Feasibility Study Grants (Water Conservation, Reuse and Storage Grant) is governed by ORS 541.561 to 541.581. The Water Project Grants and Loans funding (Water Supply Development Account) is authorized by ORS 541.651 to 541.696. The Water Development Loan Fund is governed by ORS 541.700 to 541.855.

Funding Streams

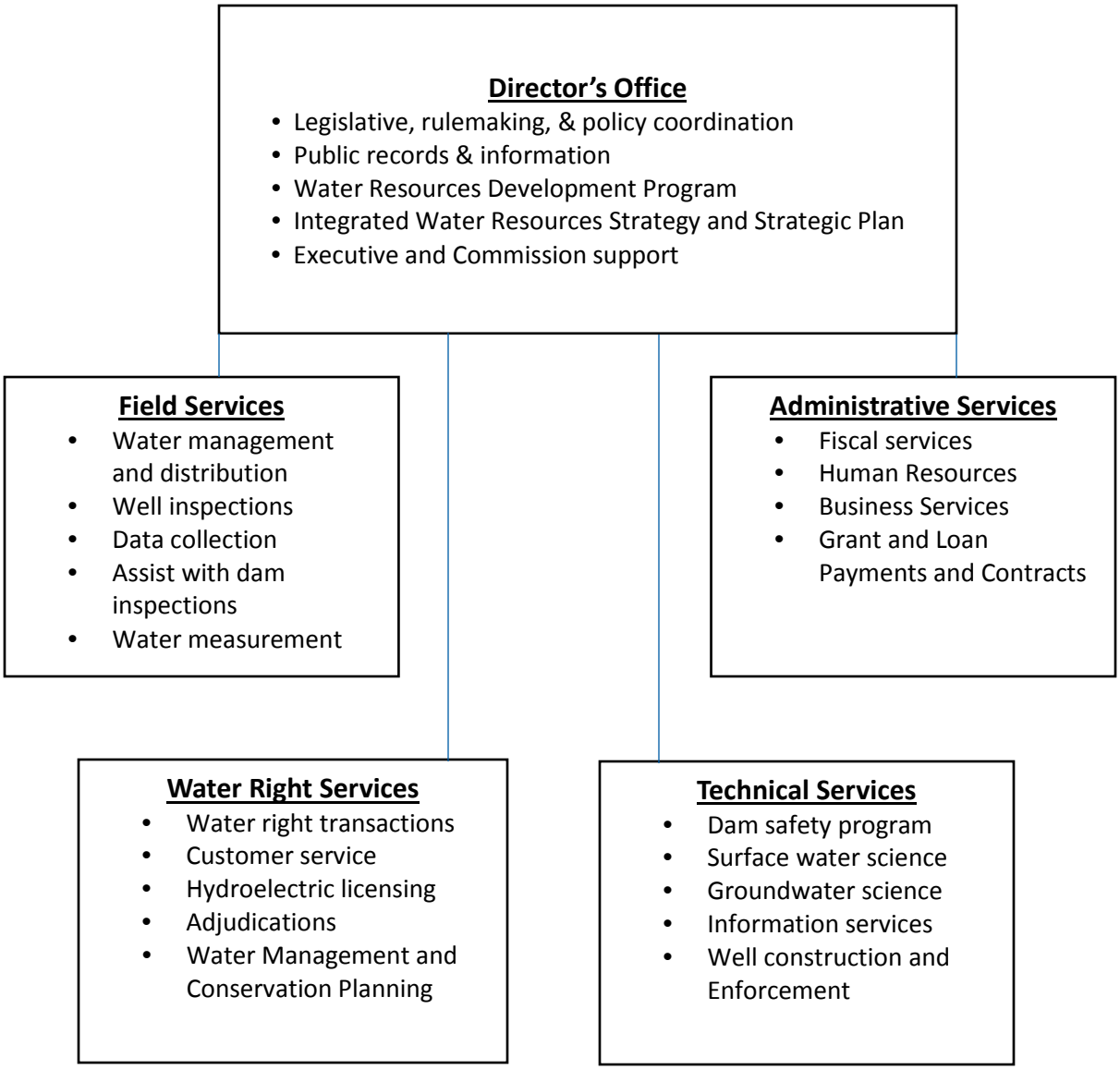
General Fund is the primary funding source that is used to provide administrative services to the Department.

Funding for the Water Project Grants and Loan Program has come from Lottery Revenue Bonds in the past, while a combination of Lottery Revenue Bonds and General Fund has supported Feasibility Study Grants. For the 2019-21 biennium, General Fund is proposed for Feasibility Study Grants and Lottery Revenue Bonds are proposed to support the Water Project Grants and Loans program.

Administrative Services Division

	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
	2017-19				
2017-19 Legislatively Adopted Budget	4,558,305	49,992,456	3,953,969	-	58,504,730
2017-19 Emergency Boards	39,499	5,251,488	-	46,086	5,337,073
2017-19 Legislatively Approved Budget	4,597,804	55,243,944	3,953,969	46,086	63,841,803
2019-21 Base Budget	4,364,116	55,251,135	8,493,320	12,820	68,121,391
2019-21 Current Service Level	5,112,899	32,138,102	8,493,320	25,000	45,769,321
Policy Packages					
2019-21 Modified Current Service Level	5,112,899	32,138,102	8,493,320	25,000	45,769,321
					-
Total Packages	250,184	15,417,016	-	-	15,667,200
2019-21 Governor's Recommended Budget	5,363,083	47,555,118	8,493,320	25,000	61,436,521

ORGANIZATIONAL STRUCTURE



OREGON WATER RESOURCES DEPARTMENT

Chapter 4: Budget Drivers to Process Improvements

OVERVIEW

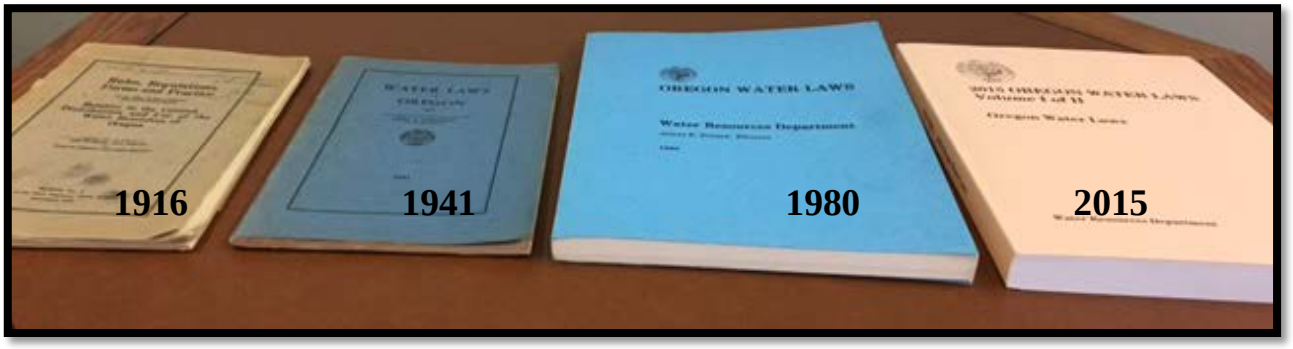
Oregon faces a number of challenges today in meeting the water needs of communities, agriculture, industry, as well as for recreation, fisheries, and other instream values. This chapter identifies a number of challenges and budget drivers for the Department, which are all influenced by the limited nature of the resource, and its importance to everything Oregonians do and care about.

19TH CENTURY LAWS TO MEET 21ST CENTURY NEEDS: AN INCREASINGLY COMPLEX SYSTEM

As outlined in Chapter 1, before the adoption of the Water Code in 1909, water was distributed in Oregon through the doctrine of prior appropriation—if you could divert it and maintain that diversion, you could use it. Water claims were staked like mining claims and recorded in the county courthouse. Rights that pre-date the water code are still in place today, meaning the Water Resources Department manages and distributes water for water rights that are in some cases over 150 years old.

Meanwhile, over time the laws have grown increasingly more complex and in some cases, difficult to understand, often times based on a whole body of case-law. As shown in the picture below of Oregon's Water Laws, the statutes have grown significantly over time. This makes administration of the laws a challenge, particularly as many of the statues age and the history behind some of the provisions is lost with time. These challenges can slow decision-making and increase the likelihood of disputes and litigation.

As new needs emerge and there is insufficient water to meet all demands, potential solutions to water challenges often stretch the limits of the existing laws.



LIMITED WATER SUPPLIES AND GROWING NEED INCREASES THE IMPORTANCE OF DATA

Surface Water Data

This network of stream gages is important in the management of Oregon's surface water and groundwater resources. The data is used by a variety of agencies and other entities, as well as the public, for making daily decisions, protecting and monitoring instream flows, forecasting floods, designing infrastructure such as bridges and culverts, planning for recreational activities, better understanding how much water is available for new uses, and tracking long-term trends such as climate and drought. The Department provides a centralized, on-line resource for this data.

With improvements in stream gaging technology in recent years, the Department has been able to add satellite telemetry to 80 percent of the 250 gages we operate, allowing water managers and the public to see data in near real-time. However, funding for maintenance, equipment updating, and data processing has not kept pace with the need. Funding for data processing related to basin studies is included in policy option package #102 of the Governor's Recommended Budget.

Groundwater Data

Groundwater is a complex resource; therefore, the Department uses a number of data sources, as available, to understand it. These include in-depth basin-scale studies, water-level measurements from observation wells, geologic maps, well logs, local and regional studies, and other technical data. Unfortunately, in some parts of the state, significant work remains to characterize groundwater resources.

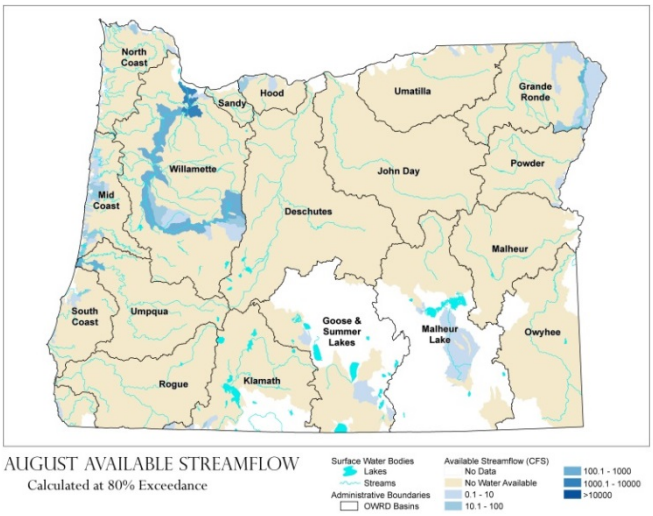
The Department seeks to evaluate groundwater supplies at the basin scale with the U.S. Geological Survey (USGS). The Department and the USGS have undertaken three basin studies in the Deschutes, Willamette, and Klamath basins. These investigations are dependent upon a groundwater science budget that matches federal dollars through the USGS Cooperative Study Program. This budget has fluctuated over the years. With funding and staff resources for groundwater data collection and studies in the Department's base budget, along with additional resources provided by the Legislature in 2016, the Department began the Greater Harney Valley Groundwater Study, which is expected to be completed in 2020.

There are twelve areas the Department has identified as a priority for groundwater basin study work. The highest priority basins are the Harney Basin (initial study in progress, management tools to follow), the upper Walla Walla Basin, and the sedimentary aquifer system of the Lower Umatilla Basin. These three basins present groundwater allocation and management challenges related to over-appropriation of water resources and declining groundwater level trends. This group is followed by subbasins or regionally important aquifer systems with documented declining groundwater level trends limiting availability of new groundwater permits or with emerging groundwater management challenges. This tier includes basalt aquifers in portions of the Hood, Lower John Day, and Umatilla basins, the Deschutes Basin aquifer system underlying the rapidly urbanizing Bend-Redmond-Prineville area, the sedimentary aquifer systems of the upper John Day Basin, and the northern Goose and Summer Lakes Subbasin. Finally, aquifer systems in the Grande Ronde Basin and the Rogue Basin are tributary to State Scenic Waterways, and local officials from the Powder Basin have asked the Department to identify potentially available groundwater. At current capacity, it will take the Department about 60 years to complete studies in these basins. Additional funding is proposed in policy option package #102 of the Governor's Recommended Budget.

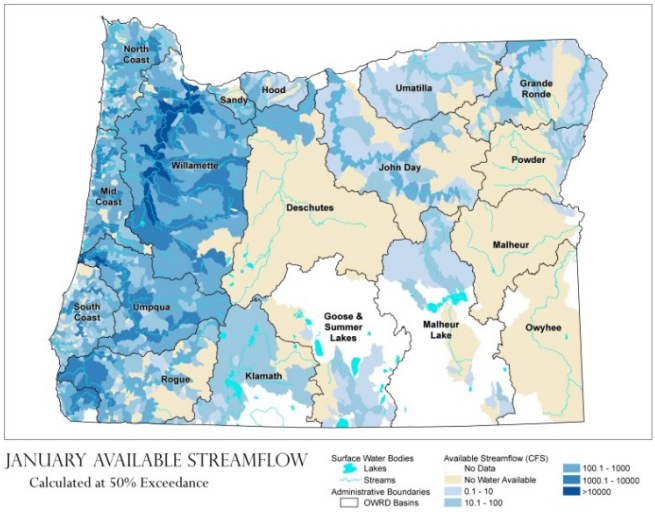
AN ALREADY LIMITED RESOURCE IMPACTED BY DROUGHT AND CLIMATE

Surface Water is Fully Appropriated

Most of the state's surface waters are fully allocated during the summer months. The top map shows where water is available for live flow allocation during the month of August (representing low summer flows). With some exceptions in the Willamette Valley, the map indicates that throughout the state very little water is available for new live flow allocations (most of the map is color coded brown, meaning no water is available).



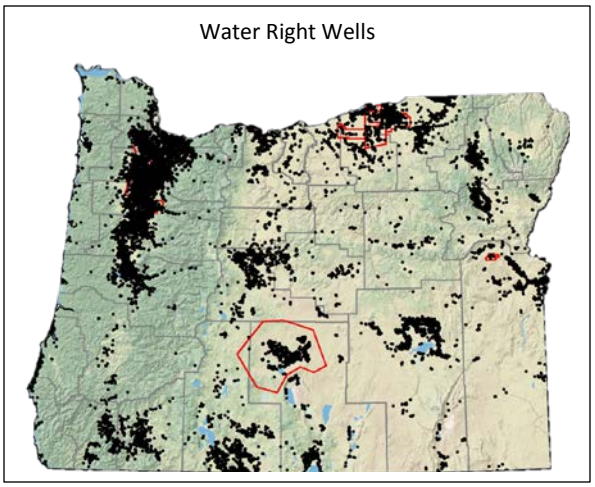
By contrast, the bottom map shows where water is available for allocation during the month of January (representing higher winter flows) and could be used for storage. Comparing the color coding in the legend with the shaded areas of the January map, there are some areas where no water is available, mostly east of the Cascades, but there is a large part of the state where water is available for allocation during winter months (shown in blue).



Surface Water and Groundwater Connection

In some instances, applicants for new groundwater applications are proposing use from groundwater aquifers that are hydraulically connected to surface water. Injury to existing senior surface water rights can impact the ability to obtain a new permit to use groundwater. In addition, junior groundwater rights may be regulated to meet the needs of a senior water right holder, as has occurred in the Klamath Basin and the Umatilla Basin.

Water Right Wells

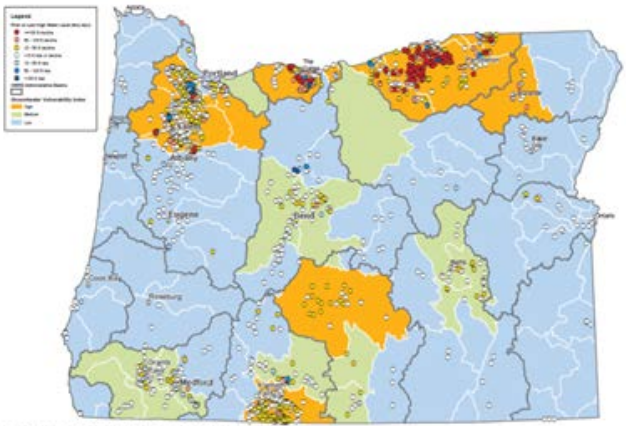


Groundwater is Fully Appropriated in Some Parts of the State

Since Oregon monitors and manages groundwater at the State level, with some exceptions, anyone seeking to use groundwater in the state must obtain a water right from the Water Resources Department. Currently, the Department has a record of approximately 260,000 wells, of which approximately 25,000 have water rights. The map at left shows the distribution of wells with water rights.

As surface water supplies have become fully allocated, Oregon has increasingly relied on groundwater resources. This has resulted in groundwater level declines in several areas of the state (see map to the right), meaning that the amount of groundwater stored in aquifers is decreasing. In some locations in the state, groundwater aquifers are no longer capable of sustaining additional development.

Groundwater Areas of Concern



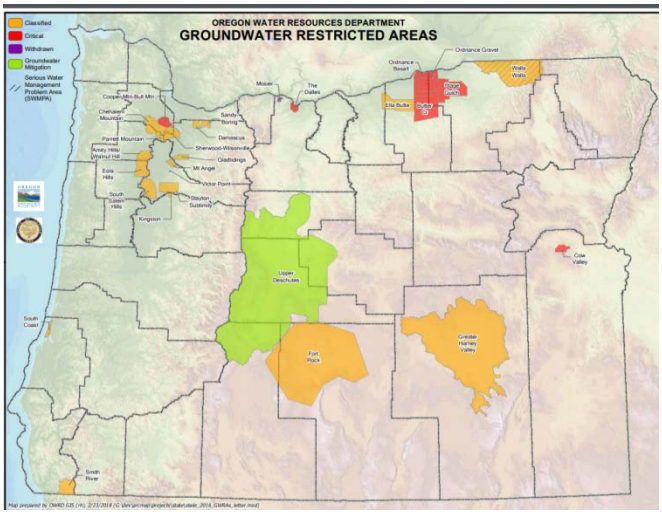
Many areas of the state show little evidence of declines. This is partly due to the lack of observation well data. However, most areas that are classified as having a low Groundwater Vulnerability Index (shown in blue) have undergone very little groundwater development or appear to have sufficient recharge from precipitation to balance current withdrawals. Areas that are classified as having a medium or high vulnerability are shown in green and orange, respectively.

Declines are generally associated with large-scale development of groundwater. Decreasing recharge from precipitation also contributes to declines, especially during multi-year cycles of lower than average precipitation (see drought on next page).

The Department has a variety of tools to limit groundwater use in areas of concern, ranging from conditions on new permits for measurement and reporting, to establishing administrative areas, or regulating existing groundwater uses.

Aquifers within the Columbia River Basalt Group are the Department's foremost "aquifers of concern" for long-term supplies, extending from Eastern Oregon, along the Columbia River through The Dalles and south into the Willamette Valley. The groundwater level declines have required the Department to curtail groundwater use from some of these aquifers. Within the Butter Creek, Stage Gulch, and Ordnance Critical Groundwater Areas in the Umatilla Basin, as much as 67 percent of the irrigable land has been regulated off to protect the senior groundwater users.

Declining groundwater levels and surface water – groundwater connection have resulted in the need for the Department to designate groundwater management areas into four categories as shown in the map below. Not all areas of known groundwater declines or areas of interaction between surface water and groundwater have been restricted in rule and, therefore, are not depicted on the map.



Map of Groundwater Management Areas:

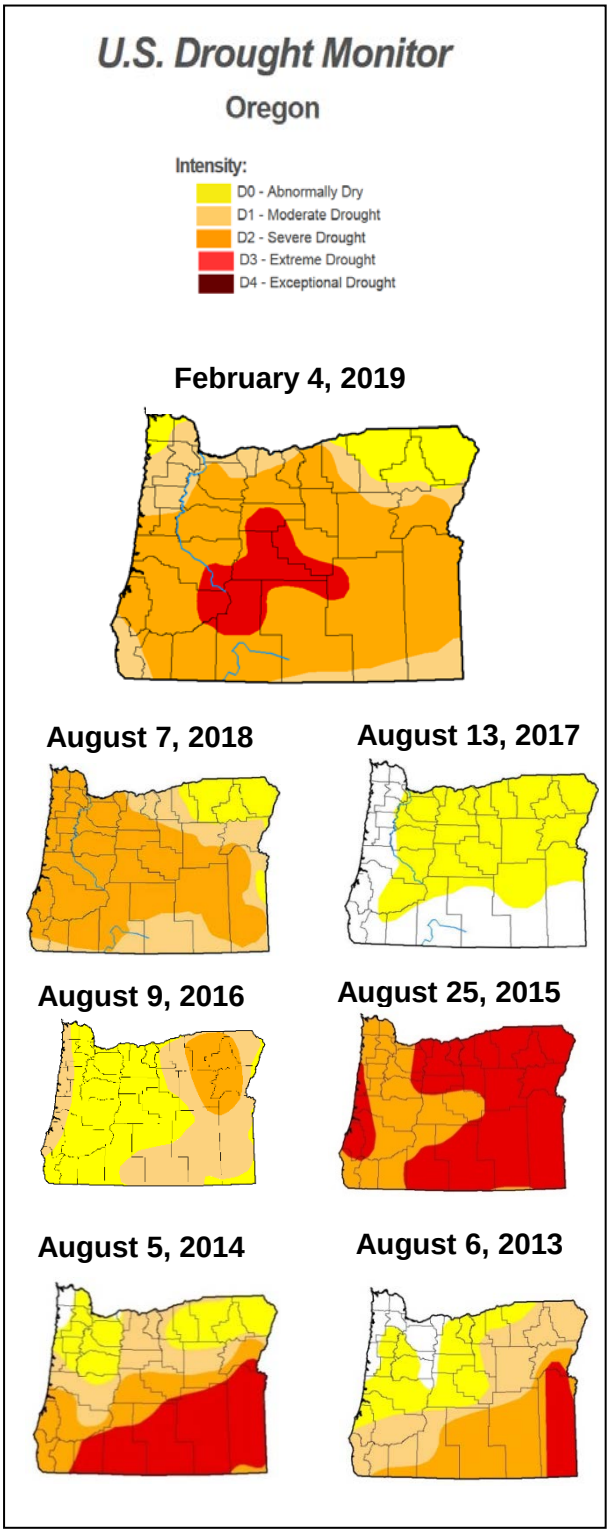
- Critical areas in red
- Classified and/or Serious Water Management Problem Areas in orange
- Withdrawn areas in purple
- Mitigation area in green.

DROUGHT

Drought Regularly Occurs in Oregon

Drought is not an abnormal occurrence in Oregon, with notable droughts in the 1930s, 1976-77, 1992, 2001-02, and 2015. In 2015, Oregon experienced severe-to-extreme drought across the entire state, resulting in 25 counties receiving a drought declaration – more than any other year since 1992, when a statewide declaration was issued.

Droughts are a slow-moving disaster, in that impacts develop over time and may persist long after rain and snowfall returns. The maps to the right show the U.S. Drought Monitor for Oregon. White areas of the map indicate no drought, with the intensity of drought indicated by increasingly darker colors.



Impacts of Drought on Workloads

During drought, Department workloads increase. Field staff receive more calls for water by senior water right holders and fewer instream water rights are met. Workloads for the Water Rights Services Division and the Groundwater Section Water increase as staff process requests for drought transfers and drought-related permits. The Groundwater Section also responds to increased dry well complaints and assertions of interference. The Technical Services Division chairs the Drought Readiness Council and Water Supply Availability Committee, which are integral to monitoring drought conditions, assessing drought declaration requests, and coordinating between agencies. The Director's Office shifts from policy, planning, and other work towards drought response efforts, including responding to public and press inquiries about drought. The 2015 drought, for example, left some staff in catch up mode, delaying other strategic priorities. Droughts are expected to occur more frequently in the future, which may pose a challenge for Department workloads.

Task Force on Drought Emergency Response

House Bill 4113 (2016) established the Task Force on Drought Emergency Response. In November 2016, the Task Force released a full report, detailing their efforts and highlighting several recommendations for addressing drought emergencies. The report is available online at: https://www.oregon.gov/owrd/WRDReports/Draft_Final_Task_Force_Report_11_1_2016_Final.pdf.

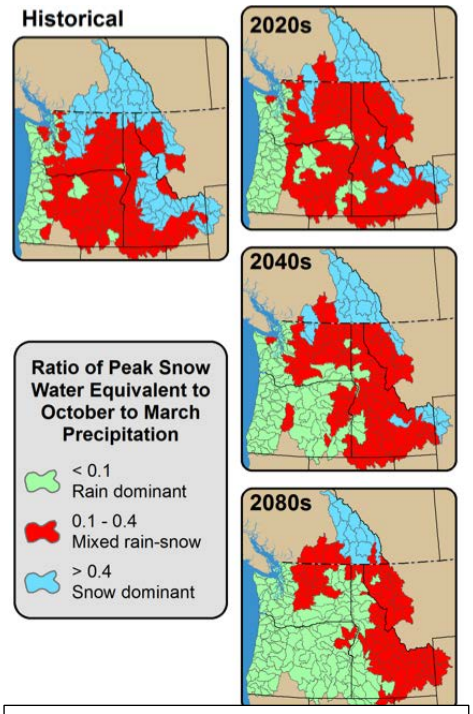
THE IMPACTS OF CLIMATE – DECLINING SPRINGTIME SNOWPACK

As discussed in *The Third Oregon Climate Assessment Report* (2017), climate models project a mean annual warming of 2 °F to 11°F for the Pacific Northwest by the 2080s. If Oregon's mean annual temperature increases, the percentage of precipitation that falls as snow will be significantly less.

The figures to the right from a 2013 report show potential shifts from mixed-snow to predominately rain-driven systems over time.

Significant declines in snow-water equivalent (the amount of water in the snowpack) in the Pacific Northwest and a shift in precipitation from snow to rain coinciding with increases in air temperature since the 1950s are all well documented. Precipitation arriving as rain instead of snow could pose several challenges to water systems, such as flashier flood-prone systems, decreased summertime run-off to surface water, and reduced recharge to groundwater aquifers. Water users who are dependent on snowpack for summertime water could see significant decreases in water when they need it most.

Oregon, like much of the Northwest, is highly dependent on temperature-sensitive springtime snowpack to meet growing and often competing water demands. A study completed by the Climate Impacts Group at the University of Washington indicates that approximately 50 percent of Oregon water users are located in areas of the state that are dependent on snowpack to meet their water needs.



Hamlet et al. 2013, as cited in Dalton, M.M., P.W. Mote, and A.K. Snover [Eds.]. 2013. *Climate Change in the Northwest: Implications for Our Landscapes, Waters, and Communities.* Washington, DC:

Island Press.

Loss of snowpack means less water will be available to meet instream and out-of-stream needs during summer and fall months. This issue will be compounded by the potential for warmer summer months and a longer growing season.

The 2015 drought is similar to these forecasted scenarios, where warm winter temperatures led to record low snowpack, poor water conditions, and widespread drought.

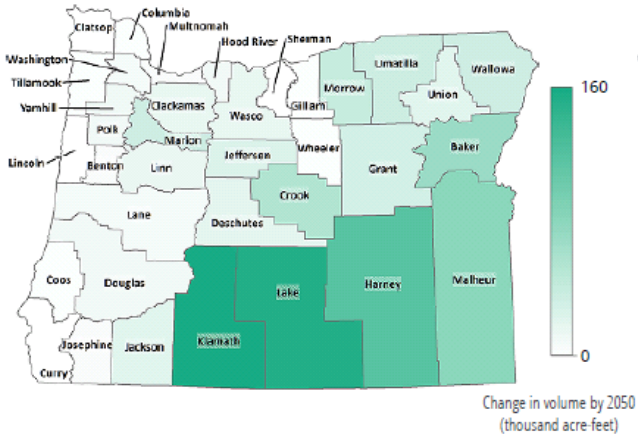
In the future, a suite of tools will need to be implemented in order to better respond to and prepare for drought. These include traditional tools such as water conservation, reuse, and storage, as well as other non-traditional means. More work is needed to understand how the loss of this natural "snowpack" storage can be mitigated through structural and non-structural means.

DEMAND FOR A LIMITED RESOURCE

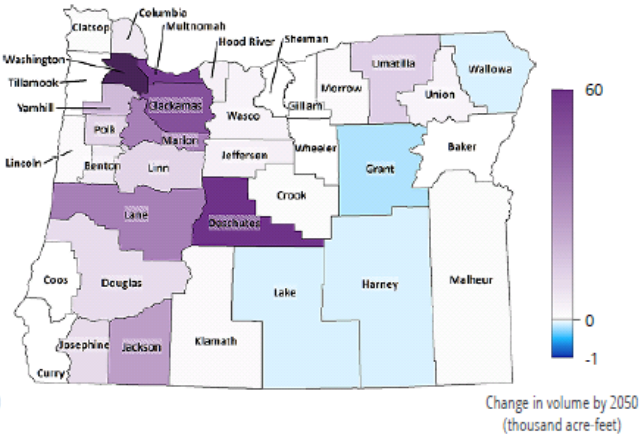
Oregon communities, along with Oregon's fish and wildlife, are already facing limited water supplies today. The 2015 Demand Forecast describes potential long-term water needs in an Oregon that may not be able to rely on historic patterns to predict future rainfall and snowpack. The estimated total change in water demand rests on numerous assumptions about the future, assumptions that communities, governments and private partners can address together.

By 2050, Oregon's statewide diversion demands may grow by approximately 1.3 million acre-feet/year

The 2015 studies, scenarios, and assumptions included a projected increase in both population and a longer, warmer growing season, leading to more demand from agricultural, commercial, residential and industrial water users by 2050. This is in addition to instream demands, which were not assessed in the Demand Forecast study. The figures below illustrate the findings of the forecast.



Change in volume by 2050 (thousand acre-feet)



Change in volume by 2050 (thousand acre-feet)

INCREASES IN AGRICULTURAL DEMANDS

UP TO 9%	UP TO 8.5°F	UP TO 14%
Increase in the total consumption of water by Oregon's crops	Increase in temperature by mid-century	Increase in statewide average irrigation demands

Changes in agricultural water demand are expected from a range of possible changes in the climate that result in: prolonged agricultural growing seasons, increased day-to-day crop water consumption, and a larger annual water demand for sustaining Oregon's current agricultural lands.

CHANGES IN MUNICIPAL & INDUSTRIAL DEMAND

20%	40%	+1.5 GALLONS PER DAY
Projected increase in M&I demands	Projected increase in population statewide (~1.5 million people)	The statewide average M&I water use is expected to increase slightly, from 150.5 to 152 gallons per day, per person.

Shifts in municipal and industrial water demands are expected to echo increases and decreases in each county's population. The areas with the largest predicted increases in population include existing major population centers of the state.

MEETING FUTURE NEEDS

Oregon communities, along with Oregon's fish and wildlife, are already facing limited water supplies today. Surface water is almost completely allocated, and as we rely increasingly on our groundwater resources, water levels have dropped precipitously in some areas of the state. Water scarcity jeopardizes health, welfare, and quality of life. The Commission and Department recognize the need to address very pressing and critical water needs in Oregon's communities, while simultaneously engaging in longer-term strategic initiatives to better understand factors affecting the resource and proactively address challenges. In recent years, funding for planning, evaluating project feasibility, and investing in water projects has been a major driver in the Department's budget. Funding associated with these efforts are proposed in the Water Resources' Department's policy option package #101 and #107. More details about the Department's grant programs are included in Chapter 3 and Chapter 7.

Oregon Water Vision

With a changing climate comes the potential for severe weather events. Oregon has already observed warmer temperatures, persistent droughts, and the resulting threat of extreme fire conditions. These changes along with population growth may result in increased demands for water during the summer. Severe weather can also bring unusual rainfall events that result in significant quantities of water that can challenge storm water systems and dam integrity.

With this backdrop, Oregon is dependent on an intricate network of pipelines, canals, water supply and wastewater treatment systems, levees and dams, all necessary for the supply, storage and conveyance of our water, and much of it aging and in need of attention and investment. In addition, natural systems are important in attenuating floods and storing water; these include groundwater recharge areas, flood plains, wetlands and natural levees. All play a part in Oregon's hydrologic system and are interconnected with our communities.

To address the need for investment in our water resources and a natural and built infrastructure, the State in partnership with water interests have begun initial work to develop an "Oregon Water Vision" that will help convey the value of water in Oregon, and how long-term financial investments in infrastructure can provide for a more secure and resilient water future for Oregonians. Strategic investments in resilient natural and built water systems across the state can support safe and healthy communities, vibrant local economies, and a healthy environment. Funding associated with this effort is proposed in the Water Resources' Department's policy option package #104 and the Department of Environmental Quality's policy option package #161 of the Governor's Recommended Budget.

Aging Dams: An Example of Infrastructure Challenges

Aging infrastructure will require a consistent and sustained effort to address. Dams represent one category of the aging infrastructure portfolio in Oregon that underscores the magnitude of investment necessary to ensure safe storage of water. A 2012 report by a subcommittee of the Association of State Dam Safety Officials estimated "that the cost to rehabilitate non-federally regulated dams in Oregon could cost $685 million. This includes dams in all hazard rating categories."

Hazard ratings are organized into three categories: high, significant, and low. Failure of a high hazard dam would likely cause fatalities. Failure of a significant hazard dam is unlikely to cause fatalities but major property damage would likely occur. A low hazard dam poses little risk to people and limited risk to property. Determination of hazard rating requires detailed inundation analysis through hydraulic modelling. Hazard ratings for dams require periodic evaluation, as low or significant hazard dams can

become high hazard dams over time as populations grow downstream. The Department has limited capacity to re-evaluate the hazard ratings of low and significant hazard dams.

There are currently 75 high hazard dams, 149 significant hazard dams, and 729 low hazard dams that are regulated by the Department. Of the high-hazard dams, there are seven in unsatisfactory condition and 10 in poor condition. In a November 2018 report, the Department estimated that costs for repairing seven of the publically owned high-hazard dams that are in poor or unsatisfactory condition could be around $100 million based on initial estimates.

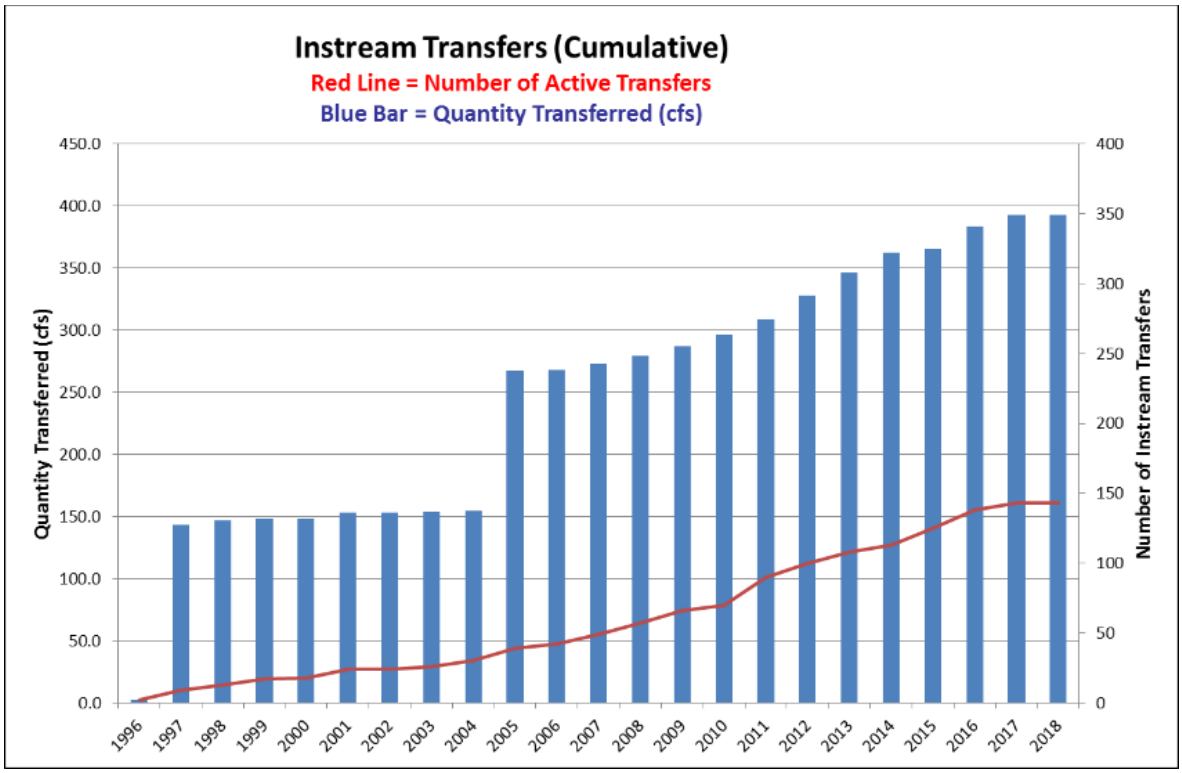
Dam safety related funding is proposed in policy option package #104 of the Governor's Recommended Budget. Modernization of the Dam Safety statutes is also proposed in HB 2085.

MEETING INSTREAM NEEDS: STREAMFLOW PROTECTION

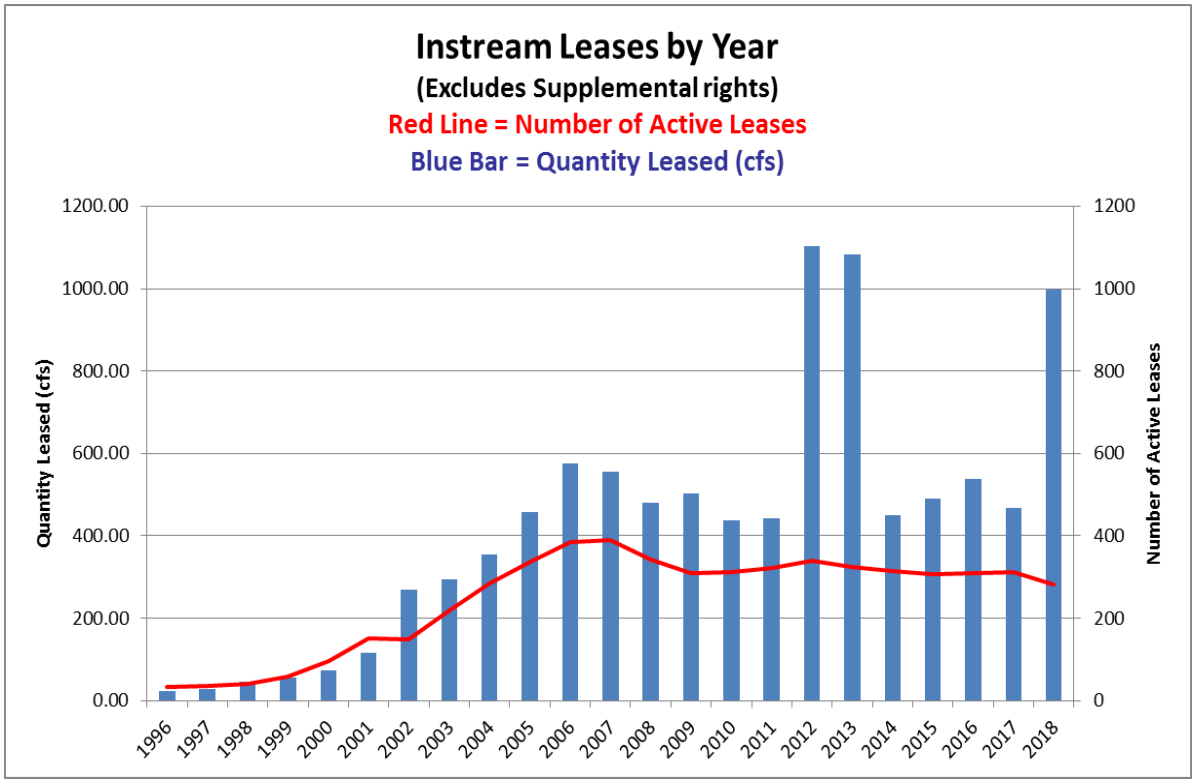
The Department has a dual mission, which includes restoring and protecting streamflows. To accomplish this, the Department processes instream leases, transfers, allocations of conserved water, new instream water right applications, and converts unused hydroelectric rights. Every year, to the extent staff resources and workloads allow, Field Staff monitor streams with instream rights and regulate junior users to protect instream water rights.

Since the adoption of Oregon's 1987 Instream Water Right Act, the Department has converted to instream rights more than 500 of the state's minimum perennial stream flows and has issued more than 900 state agency-applied instream water rights. The Oregon Department of Fish and Wildlife has recently submitted new instream water right applications for the Department to process.

As shown in the graph below, the Department has processed 146 permanent and long-term instream transfers, representing approximately 397.25 cfs.



Transfers have been increasing over the years, while leasing was initially popular but has leveled off over time (see graph below).



The majority of water put instream on a permanent basis through allocations of conserved water and instream transfers in Oregon is senior water, with certificates pre-dating Oregon's 1909 water law.

The Department has approved 92 applications for allocations of conserved water, resulting in approximately 227.834 cfs permanently protected and reserved temporarily instream. This innovative program is unique in that it allows water users to use a portion of the water conserved on new lands, while also requiring a portion of the water to be put instream.

ADDRESSING COMPLEX WATER ISSUES

The Umatilla Basin

During the 1970s through the early 1990s, the Department designated four critical groundwater areas and one limited use area in the Umatilla River Basin, one of the State's top food producing regions. These limitations became necessary because rapid development of groundwater resulted in deep declines in groundwater levels – up to 500 feet in some locations. More than 600 square miles has been designated in the Umatilla Basin where current demand for water exceeds natural availability. As a result, only about 30 percent of permitted water has actually been authorized for use in recent years. Many water right holders receive none of their permitted water each year. Since then, the state has been working with this region to identify potential solutions to their water challenges.

Most recently, in 2015, the Legislature authorized $11 million in Lottery Bonds to help finance water projects in the Umatilla Basin. In early 2016, the Department entered into a grant agreement with the Port of Morrow, who is working with two project partners on two separate projects. The projects will deliver water primarily to lands that are currently un-irrigated or under-irrigated; thereby, increasing economic development within the Umatilla Basin.

The first project is the "East Project," which intends to use $7 million of the grant funds to help construct a pump station on the Columbia River and a nine-mile long pipeline that would travel south down into the Stage Gulch Critical Groundwater Area. The maximum capacity of the new pipeline will be 200 cfs. The total cost of the project is approximately $53.7 million. The Port of Morrow and East Improvement District are working to secure the necessary permits and private financing.

The second project proposes to use $4 million in grant funds to construct a new irrigation pipeline, as well as perform other infrastructure upgrades to the system booster stations and canal. The total cost of the Columbia Improvement District's project (the "CID Project") is $28.9 million.

Both projects have encountered unforeseen challenges and delays as they have progressed, including the steel tariffs imposed in the spring of 2018 and time required for local energy infrastructure upgrades. Both projects are expected to be completed by mid-2020.

Individuals in the basin are also exploring options to stabilize groundwater in certain Critical Groundwater Areas in the basin.

The Deschutes River Basin

In the 1990s, a multi-year groundwater study between the Oregon Water Resources Department and US Geological Survey quantified the hydraulic connection between groundwater and surface water in the Deschutes Basin. Since surface water is fully allocated in the Basin, this means that new withdrawals of groundwater would negatively affect scenic waterway flows. As a result, the Department now requires mitigation before issuing new groundwater right permits.

A large portion of this mitigation is achieved through the purchase of mitigation by credits from a "bank" administered by the Deschutes Resource Conservancy, the remainder is through private interests. The program has allowed for continued economic development while protecting the resource; however, some interests in the basin have expressed a need to review the opportunity for long-term mitigation.

The Deschutes Basin continues to face challenges meeting its water needs, needing to provide water for agriculture, growing industry, endangered and threatened species, and growing cities. In 2013, the

Oregon Legislature provided funding for the *Bureau of Reclamation Deschutes Basin WaterSMART Study*, a multi-year study to focus on resolving imbalances in water supply and demand for both instream and out-of-stream needs in the upper Deschutes Basin. The Study is nearing publication and utilizes the latest science, engineering and climate change information to identify consensus-based water supply projects.

The Department also continues to work with parties in the basin to evaluate longer-term solutions to address the needs of the spotted frog in the basin, which prompted litigation in 2016. A federal Endangered Species Act-required Habitat Conservation Plan will be released in 2019 that will identify measures that provide water which will mitigate impacts to the spotted frog and other endangered species.

The Klamath Basin

There are longstanding disputes in the Klamath Basin over water, dating back to the beginning of the Klamath Basin Adjudication in 1975. In 2013, the Department issued a Final Order of Determination in the adjudication and referred the case to the Klamath County Circuit Court. With the administrative phase of the adjudication complete, the law requires the Department to enforce water rights by priority in the basin according to prior appropriation, while the adjudication proceeds through the court. Regulation of surface water rights and determined claims began in 2013. As part of the adjudication and based on court decisions, the Klamath Tribes were found to have determined claims for many of the streams in the basin, with a priority date of time immemorial.

The Klamath Basin is fully appropriated during all months, requiring extensive water use regulation. This difficult situation is made worse during times of drought, which the basin has experienced frequently in recent years. Considerable time and effort has been made over the years to address water needs and water management issues within the basin in partnership with stakeholders. Work in the basin includes adjudication, settlement negotiations, studies, data collection, and the distribution of water for senior water rights. The basin has and will continue to be an area of significant focus for the Department in the foreseeable future as water issues continue to be contentious between water users.

Much of the work to find solutions to the challenges faced in the basin date back to disputes in the early 2000s, which prompted renewed efforts to try to negotiate settlement agreements to resolve many of the water issues in the basin. These negotiations led to Klamath Basin Restoration Agreement (KBRA) and the Klamath Hydroelectric Settlement Agreement. Subsequent negotiations in the off-project area of the basin, concluded with an agreement in early 2014 called the 2014 Upper Klamath Basin Comprehensive Agreement (UKBCA).

In early 2015, the Water Commission adopted administrative rules which addressed the regulation of wells in the off-project area of the Upper Klamath Basin, based on provisions within the UKBCA. The final version included a provision that the rules would no longer apply if the UKBCA was terminated and that groundwater regulation would occur under existing statewide rules. Regulation of groundwater for senior surface water rights has led to increased litigation.

Following termination of the KBRA, in December 2017, the Secretary of the Interior published a "Negative Notice" terminating the UKBCA, finding that all of its conditions could not be achieved. Upon termination, the Department's administrative rules were no longer in effect. Regulation of wells during the 2018 irrigation season occurred under rules that apply to surface water-groundwater regulation statewide, leading to continued litigation. This approach to well regulation was also contested by impacted water users.

In late 2018, the Department proposed a two-step path forward, intended to improve understanding of the basin hydrology and result in a long-term management approach for surface water-groundwater management in the basin. The Department is working with the community to evaluate this option.

The Willamette Basin

The U.S. Army Corps of Engineers operates 13 dams and reservoirs located on the Willamette River Basin (see accompanying map). The Corps and the Department have long explored whether operational changes to the Corps projects would provide greater water supply benefits to a variety of uses in the basin.

Although Congress authorized the construction of these reservoirs for multiple purposes, including flood control, navigation, generation of hydroelectric power, irrigation, potable water supply, "and reduction of stream pollution in the interests of public health, fish conservation and public recreation," the U.S. Bureau of Reclamation filed water right applications for the entire 1.64 million acre-feet of storage for irrigation purposes only. Less than 5 percent of this water has been contracted to date. The Corps has not contracted any of this remaining storage to other uses, such as municipal, industrial, or instream purposes.

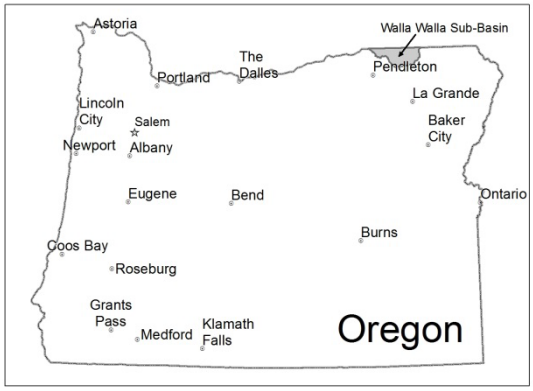
Stakeholders have been actively engaged with the Department and the U.S. Army Corps of Engineers (Corps) in the Willamette Basin Review, a 3-year feasibility study that is analyzing a full range of beneficial uses in the Willamette Basin and identifying ways to re-allocate existing stored water from the Willamette Valley Project reservoirs.

The 2013, the Oregon Legislature provided $1.5 million for this study, through the Water Supply Development Account. In February 2015, the Corps received approval and funding to re-initiate work on the study and signed a cost-share agreement in August 2015. The study has resulted in a Tentatively Selected Plan and the Corps is in Endangered Species Act consultation with the National Marine Fisheries Services on this plan. Following consultation and receipt of a biological opinion, a final Chief's Report will be sent to the Assistant Secretary of the Army and the U.S. Office of Management and Budget, later in 2019. Following this, the United States Congress provides the authorization for implementing the final recommendation for the re-allocation of water in the Willamette Reservoirs. Significant work remains for the Department to work with interested stakeholders to address water management implementation issues associated with the re-allocation of water stored in the reservoirs.

Walla-Walla Subbasin Groundwater and Surface Water Management

Groundwater levels are declining in both the alluvial and basalt aquifer systems in the Walla Walla Subbasin of Oregon. In the basalt aquifer, the decline is about three to four feet per year across the subbasin, with the total decline since 1950 exceeding 100 feet in some places. Senior basalt groundwater users have expressed concern about the stability of the resource; well yields for older wells have reportedly declined.

The State's groundwater management policy sets forth that rights to use groundwater be protected, reasonably stable groundwater levels be determined and maintained, and groundwater overdraft be prevented. Staff members are actively engaging with local water users to develop and implement a plan of action that will put the community on a more sustainable path for the use of groundwater.

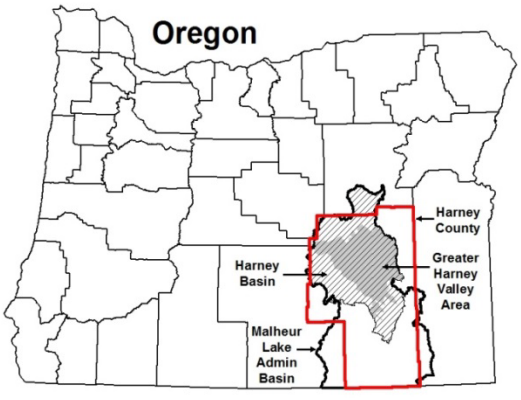


Rules were adopted by the Commission in May 2017 to reclassify groundwater use in the basin for exempt uses only and to designate a Serious Water Management Problem Area, requiring water use measurement and reporting for permitted basalt wells. The Department continues to increase data collection efforts in the basin to develop a baseline understanding of the basalt groundwater flow system. This understanding will form the scientific basis for future water management actions intended to stabilize declining basalt aquifer water levels and protect the rights of senior basalt groundwater appropriators. Package 102 would help the Department study groundwater resources in the basin.

Water management issues in the Walla Walla Basin are made more complicated by the fact that the border between the States of Oregon and Washington cuts through the area, with each state having its own laws relating to water rights and water management. The two states and the Confederated Tribes of the Umatilla Indian Reservation have initiated a collaborative dialogue about water management in the Walla Walla Basin and are committed to pursuing both near-term and long-term actions to improve water supply to meet the needs of fish, farms and communities in this region.

Greater Harney Valley Basin Groundwater Study

In 2015, initial groundwater data and aquifer recharge estimates by staff indicated that groundwater levels were declining over a broad portion of the Greater Harney Valley Area, and that as a result no new permits could be issued without harming existing water users or appropriating water beyond the capacity of the resource. Consequently, beginning in 2015, the Department stopped issuing new groundwater permits in the area pending completion of a more detailed groundwater study (see study area in the map below).



The Department then began significant outreach to the local community to build awareness of the situation, seek input and initiate efforts to address water

needs for the area in 2015. With the help of funding in its base budget, as well as additional funding and staff provided by the Legislature in 2016, the Department is undertaking a basin groundwater study in the area. Following two years of significantly expanded data collection in the basin, the study team scientists are transitioning from data collection to data analysis and synthesis. The data analysis stage of the study will continue in 2019, the peer-review and the publication process will begin in early 2020, and the final report is due to be finalized before the end of 2020.

The Department has also convened a local Groundwater Study Advisory Committee in conjunction with the County Court to foster an open exchange of information, data, and ideas between Harney County residents, interested parties, and the groundwater study team. The Committee and the study team have met in Burns quarterly since July 2016.

Mosier Well Repair Program

The Department and U.S. Geological Survey have concluded commingling water wells are contributing to the groundwater level declines in Columbia River Basalt aquifers near Mosier. The Department is working with the Mosier Watershed Council and the Wasco County Soil and Water Conservation District to assess and facilitate the repair or abandonment and replacement of commingling wells in part of the Mosier sub-basin.

The Legislature provided $1 million in Lottery Bonds in 2015-17, to help repair or replace priority commingling wells. The Department has contracted with the District to work with landowners for the well replacements. The funding will pay for 90 percent of the cost of assessing and remedying commingling wells, and will use District funds to cover the remainder of the costs.

As of January 2019, eight commingling wells have been replaced by a drilling contractor retained by the District. The funding agreement with the District has been extended until June 30, 2019, and the District anticipates that 14 wells will be repaired or replaced during the contract period based on the budget trend for the first 5 wells.

NEW INDUSTRY: CANNABIS

There are approximately 2,200 active or pending Oregon Liquor Control Commission (OLCC) producers' licenses and more than 12,400 medical marijuana registered grow sites in Oregon. Inherent with the expansion of industry comes the need for water. As a result, the Department has experienced an increase in workload associated with calls to the customer service line and front counter traffic, pre-application meetings, application processing, responding to and investigating complaints, and policy interpretation.

When recreational marijuana was first legalized, the Department worked with OLCC to adopt rules requiring applicants for producer's licenses to submit information on their authorized sources of water to use for marijuana cultivation. While neither agency has the capacity to verify the sources upfront, this has served as a critical first step in informing growers of the law and that

successful legal operations will need to be in compliance with Oregon's water laws. In addition, it also helps OLCC and the Department to investigate complaints, and allows the agencies to work together on enforcement.

While many producers are responsible water users, the Department continues to receive and investigate complaints about illegal water uses. As complaints arise, watermasters work with OLCC staff to understand the sources of water and whether they are in fact authorized uses. As a result of complaints, the Department has found instances where water rights submitted to OLCC were not appurtenant to the property, or where water uses were inconsistent with what had been claimed as the source. While the Department is the primary authority for enforcing Oregon's water laws, OLCC's rules require a legal source of water, and producers can also be penalized under OLCC's rules.

Given that many water sources were fully appropriated when marijuana was legalized, many producers have identified sources that do not require a water right. However, these sources may not provide adequate water, or may be more costly to obtain, which may incentivize the use of unauthorized sources. Investigating these issues and ascertaining whether water is being used legally is a difficult task that draws watermasters and assistant watermasters away from other duties. The Department anticipates that over time, water users' understanding of Oregon's water laws will improve, their sources of water will be vetted, and the need to investigate unauthorized uses will decline.

PROCESS IMPROVEMENTS

The Department has a history of looking for ways to improve processes and create efficiencies in the delivery of services. During this biennium, the Department has focused its process improvements in the following areas:

- *Groundwater Information System*. The Department's Information Services and Groundwater Staff completed work to redesign and integrate groundwater-related data into a centralized database system. This effort will allow internal staff and the general public to better access groundwater-related data through web-based tools and web services. Groundwater section staff will be better able to maintain and link groundwater data to centralized data sets such as water rights and well logs. Being able to access data more easily and in one place will allow the Department to make decisions more efficiently, such as conducting permit reviews. This effort will also facilitate information exchange with federal partners such as the United States Geological Survey.
- *Launching and implementing a strategic planning effort.* The Department's Strategic Plan places an emphasis on updating and modernizing the agency's processes, operations and services. The Strategic Plan is highlighted in more detail in Chapter 1.
- *Conducting a review of KPMs.* Many of the Department's 14 KPMs have been in place prior to 2005. The Department engaged staff, external stakeholders, and the Commission in reviewing and proposing updates to its Key Performance Measures (KPMs), to ensure that they provide meaningful information about the Department's performance. The Department has proposed two changes to its KPMs and intends to evaluate other changes upon implementation of its Strategic Plan.
- *Onboarding*. Onboarding is the process, within the first six months of employment, by which staff acquire the necessary knowledge, skills, and behaviors to become effective organizational

members. Early staff input in the Strategic Planning effort identified that a consistent onboarding process would greatly benefit agency operations. It would ensure the Department provides new employees the right information and training when hired into a new position, for both external and internal hires. Managers and staff recently began piloting the redesigned process for external staff hired in early 2019 and plan to officially roll-out changes later this year.

- *Contract Tracking* – The fiscal section recently participated in a process improvement session focused on the contracts tracking process. The team mapped the current process and identified areas they felt could be improved. One of the biggest changes the team has implemented is to record each contract in the Contract Tracking Module in the accounting system. Taking advantage of this technology will help the team to develop tools to better identify contracts nearing their expiration date or not to exceed (NTE) amounts, which will allow staff to manage contracts proactively.
- *Auto Data Upload* - The fiscal section has also implemented a process for entering accounting transactions into the state accounting system by using Excel and an auto-macro to upload the data directly instead of manually entering transactions. For example, paying the monthly motor pool bill used to be more than 50 lines of manual data entry. With this new process, fiscal staff can copy and paste the data into the Excel macro sheet and upload it directly to the accounting system with a push of a button. Fiscal staff are researching ways to use this process with other manual-entry intensive invoices.
- *Field Activity Database* - A new database was completed in late 2018 that field staff will use to record and archive activities to monitor and regulate for instream water rights and senior out-of-stream uses. Metrics compiled in the database will help us report on Key Performance Measures, monitor year-to-year and long-term trends, and better account for field staff workload over time.
- *Website* – The Department moved to the new State of Oregon website format, which has a more modern interface and is more user-friendly for mobile devices.
- *Macro Updates from WordPerfect to Word* –The Department has updated the document generator that is used to create documents related to processing water right transactions. The previous document generator used software that is no longer supported, and produced documents that needed significant additional editing that could be eliminated or minimized by the use of new technology.

Future Efforts

The Department has plans to work on: (1) implementing a project management approach to some of its activities, (2) accepting credit cards at the front counter for customer convenience, (3) developing actions to communicate, practice, and train employees on agency core values, and (4) improving communication to water right applicants on the status of their application.

OREGON WATER RESOURCES DEPARTMENT

Chapter 5: Budget Information and Legislation

BUDGET SNAPSHOT

	2015-17 Legislatively Adopted Budget	2017-19 Legislatively Adopted Budget	2017-19 Legislatively Approved Budget (Feb Session)	2019-21 Governor's Recommended Budget
General Fund	$ 29,622,753	$31,483,809	$ 32,150,986	$38,894,484
Other Funds (including Fees)	13,469,293	12,633,833	12,922,692	13,439,807
Other Funds (Grants and Loans)	60,476,515	48,672,536	53,942,169	*46,278,251
Lottery Funds (Debt Service)	2,511,482	3,953,969	3,953,969	8,493,320
Federal Funds	1,302,403	1,879,534	1,905,917	876,734
Total Funds	$ 107,382,446	$98,623,681	$ 104,875,733	$107,982,596
Positions/Full-Time Equivalent (FTE)	164/162.58	170/167.59	170/167.59	184/177.59

*Other Funds (Grants and Loans) includes Lottery Revenue Bond proceeds in the amount of $31 million in carry forward from the 2017-19 biennium and $15 million in new bonding (plus the cost of issuance).

RECAP OF LOTTERY BOND FUNDING

Over the last three biennia, the Legislature has authorized $58.3 million in Lottery Bond proceeds for water supply studies and projects. More detailed information on the spending of these funds is included in Chapter 7.

Description	Authorized '13-'19
Water Supply Development Account	
Upper Deschutes Basin Study	$750,000
Willamette Basin Review	$1.5 million
City of Carlton Panther Creek Reservoir	$2.5 million
City of Carlton Water Supply Project	$2 million
Santiam Mill Creek	$1.2 million
City of Carlton Water Supply Project	$5.1 million
Water Project Grants & Loans	$29 million
Water Supply Fund	
Umatilla Water Supply Grant	$11 million
Mosier Well Grants	$1 million
Place-Based Planning Pilot Grants	$750,000
Water Conservation, Reuse, and Storage Fund	
Feasibility Study Grants	$3.5 million
TOTAL	**58.3 million**

2019 DEPARTMENT LEGISLATION

HB 2084 (LC 507) – Extending Place-Based Planning

Background

Water is essential for drinking, economic growth and development, job creation, and the livelihoods of many farmers and ranchers across the state. In addition, water is necessary for fish and wildlife, recreation, and other instream purposes that are important to Oregonians. Given the importance of water, in order for a region to achieve their vision for the future, they must consider how their long-term water resources needs will be met. Planning is essential to being able to formulate solutions to water challenges that may affect communities, ecosystems, and economic development.

In 2015, the Oregon Legislature authorized the Water Resources Department to pilot the place-based approach to integrated water resources planning. Place-based integrated water resources planning provides an opportunity for communities to work collaboratively, in partnership with the state, to understand their water resources challenges and needs, and identify potential solutions to meet those needs. Building trust and developing long-term relationships are additional benefits that can be realized through place-based strategies; these are important foundations for successful implementation of tangible water resources projects.

Need for Extension of Sunset

The authority for the State to assist groups with place-based planning sunsets on July 1, 2019. The Department has been working with four places to pilot place-based planning, and all of the areas need additional time to work on plan development, as well as implementation strategies. Continuing to undertake place-based planning is Recommended Action 9.A of Oregon's Integrated Water Resources Strategy.

Work to Date

Building trust and creating a shared understanding necessary to collaboratively develop a place-based plan is time-intensive and requires investments in facilitation, process coordination, and technical analysis. To date, the communities have put forward a significant amount of time and resources, with a 2:1 match of funds. They have shown dedication to the process and many of the participants have already observed benefits from collaborative planning.

Specifically, place-based planning has allowed participants to get to know new people that share an interest in water, collaboratively work through differences, and identify opportunities to work together. It has also allowed the State to become a partner in proactively understanding and addressing complex water problems at a local scale. The planning efforts have increased local access to agency technical information and helped communities better understand existing data gaps and resource limitations. The Department anticipates that the resulting plans will help inform future strategic investments to meet current and long-term water needs, identifying solutions that are widely supported and competitive for funding opportunities.

What the bill does

Place-based integrated water resources planning is a voluntary, locally initiated and led effort in which a balanced representation of water interests within a basin or watershed, work in partnership with the state to understand their instream and out-of-stream water needs, and identify solutions to meet those needs.

This bill proposes to extend the sunset date to 2023 to allow the state to continue to pilot the place-based approach to water planning. This would allow the Department to continue to provide financial and technical assistance to the communities currently using this approach and enable them to finish their work, completing the pilot phase. Thereafter, the Department intends to conduct a review of this approach to water planning to identify potential opportunities for improvement, evaluate the benefits, and determine next steps.

Fiscal

Department Analysis

All elements of the bill are discretionary and would be conducted to the extent that existing resources allowed or new funds were made available. Therefore, the Department has deemed this a minimal fiscal impact as it will provide the department with certain authorities, but does not require the Department to undertake these activities. For example, with existing resources, the Department has one position that is tasked with providing technical assistance to the place-based planning groups.

A separate Policy Option Package would provide resources for the Department to advance place-based planning activities. Policy Option Package #101 – Place-based Planning Community Support, would allow the Department to provide funding to continue to support the development of the place-based plans, including implementation strategies in the four areas that are currently piloting this approach to water planning. This package would allow the Department to provide those existing communities with grants to support place-based planning functions. It would also continue a position that has been assisting the pilots.

Legislative Fiscal

A Fiscal Impact Statement has been issued by the Legislative Fiscal Office.

HB 2085 (LC 508) – Modernizing the Dam Safety Statutes

Background

The Oregon Water Resources Department is the state agency charged with overseeing the safety of more than 960 dams across the state that are authorized to store water for agriculture, cities, industry, recreation, fisheries, and other purposes. While dams provide benefits, the consequences of failure of a dam can be significant, potentially resulting in loss of lives and damage to property and infrastructure. As a result, states have adopted dam safety programs. With a few exceptions, Oregon's dam safety statutes have not been updated since 1929, and there is a need to modernize the statutes.

What the Bill Does

The bill proposes to:

1. Consistent with current and past practice, clarify that the State's focus is on non-federally regulated dams that store water or wastewater. Remove dikes and other hydraulic structures from regulatory oversight to a non-regulatory, technical assistance program.
2. Require plans and specifications for modifications to dams to be approved by the Department and require the Department to receive final engineering documentation that the dam was built as specified before water or wastewater can be impounded for a new or modified structure.
3. Establish a fee for reviews of plans for dams based on actual time spent on the review, but with a cap to provide certainty on the maximum that may be charged.
4. Provide clear guidance for owners that they are responsible for maintaining their dam, and taking specific actions if the structure is at risk of failure and may jeopardize life or property.
5. Clarify the Department's general authorities to implement the statutes, as well as specify actions the Department may take during a dam failure.
6. Establish a process to ensure that removal of high or significant hazard dams are done safely to protect people and property.
7. Improve the process for addressing maintenance and safety issues. Provide additional tools to work with landowners and get compliance, and to address seismic and flood risk. This includes: (a) allowing the Department to work with the owner to develop a plan and timeframe for repair, instead of having to go directly to enforcement; (b) during enforcement, requiring a hearing only if requested by the owner; (c) authorizing the Department to require action on maintenance issues if they are left unaddressed; and (d) in the event that there is an immediate risk to people or property, allowing the Department to obtain a court injunction.
8. Allow the Department to issue civil penalties for failure to address maintenance issues, failure to submit emergency action plans on high-hazard dams, and other violations of the dam safety statutes.
9. In order to improve readability and functionality of the statutes, repeals the current laws; as a result many existing authorities appear as new language.

Fiscal

Department Analysis

The bill maintains many of the existing practices of the dam safety program today, but clarifies the statute. As a result, the number of dams under the Department's jurisdiction does not increase. In addition, the department does not currently inspect or approve dikes, ditches, or other hydraulic structures, unless it is to assist after an emergency; therefore, moving this to voluntary actions of the agency does not change current practice. Actions added around emergency authorities should only

need to be exercised in rare events, and should not impact Department workloads on a regular basis. Since, these provisions do not increase workloads; they would not have an expenditure fiscal impact.

Modifications and added procedures related to inspections and enforcement are not anticipated to increase workloads, except for enforcement and compliance program staff. The number of enforcement actions is anticipated to be about 5 per biennium. Therefore, this is anticipated to be able to be done without additional resources. The bill establishes civil penalty authority. The department estimates 5 per biennium, totaling $1,250.

The bill establishes a fee for review of new dams and modifications to dams. The Department anticipates receiving 15 plans for new dams per biennium, and believes this can be accomplished within existing workloads. Review and approval work takes approximately 3 days for a low hazard dam, 2 weeks for a significant hazard dam, and one month for the in-depth review of a high hazard dam, on average. The Department has calculated the costs associated with this work, including travel costs, to develop a cap on what can be charged. The Department anticipates $46,975 revenues. Reviews of modifications to dams are expected to cost significantly less, with 2-4 per biennium. The Department estimates that these will cost $1,000 per review. Revenues due to the new fee are included in POP 104 – Protecting the Public through Dam Safety (Note: Other components of the POP are unrelated to the bill).

The bill does add to workloads by requiring approval of plans to modify existing dams; however, we anticipate only receiving 1-2 of these a year, which can be accomplished with existing staff. The bill establishes a fee for review and approval of plans, which may help the Department address any added work.

Provisions to require approval of plan for dam removal is a new workload; however, it only applies to significant and high hazard dams and removals continue to be infrequent. The Department anticipates that this can be accomplished with existing resources.

Legislative Fiscal

A Fiscal Impact Statement has not been issued by the Legislative Fiscal Office.

SB 51 (LC 509) - Transfers of the Type of Stored Water

Background

A water right is necessary to *use* or *store* water in Oregon. Rights to *use* water specify the place where the water is used, the type of use of the water, and the point that the water is diverted from a water source, such as a stream, reservoir, or well. If there is a desire to change one of these three components of a water *use* right, one must apply for a "transfer."

Similarly, rights to *store* water specify the location of the reservoir, the location of the dam (if applicable), the point where water is diverted (if applicable), and the purpose/type of use for which the water is stored. Rights to *store* water are known as "primary" rights, and act as a source of water supply for "secondary" rights that *use* the stored water for purposes such as irrigation or municipal uses.

While transfers have been common for rights to *use* water, transfers for rights to *store* water have been less common, and the Department has debated internally over the years whether there is clear authority for storage rights to be changed through the transfer process. Water law has a long history in common law, dating back to the 1800s, with the Water Code being adopted in 1909. While there have been some updates to meet societal demands for changes in how water is managed, much of the text is still very similar to the original 1909 code. As a result, determining legislative intent and interpreting the statutes can be a challenge.

Prior to 2018, the Department occasionally received and processed applications for changes in the point of diversion, location of reservoirs, and, more often, changes in the type of use identified in the right to store water (e.g. from irrigation to multi-purpose). Recent proposals to change the location of stored water and an expectation of increased interest in transfers of storage rights resulted in the Department taking a closer look at its authority. In 2018, a Department of Justice review concluded that current law, with some exceptions, did not authorize the transfer of storage rights. As a result, while the Department has attempted to conform the law to new needs, in this instance the existing authorities do not clearly provide the Department with authorization to change storage rights.

The Department recognizes the need for clear authority to make changes to storage rights, and has participated in a legislative work group in recent months to explore potential solutions.

What the Bill Does

Senate Bill 51 proposes to provide the Department with clear authority to allow for changes in the purpose for which the water is stored under a primary storage right, addressing what has been the most frequently used transfer for storage rights. The bill includes application criteria and provisions that are specific to storage rights, while honoring the existing process for transfers by pointing to current transfers statutes where possible for the processing of the rights. Without the ability to change the type of use of stored water, water right holders will not be able to manage water as necessary to meet emerging needs, opportunities, or challenges.

The Department has allowed for changes to rights to store water in the past, with changes in the purpose/type of the stored water being more common. As a result, this bill focuses only on changes in the type of stored water, as there seems to be broader recognition that this type of transfer is needed.

While there is a need for a process to change the point of diversion and location of storage, at the time of the introduction of the Department's bill, those changes required more conversation and were being discussed as part of a workgroup. The Department will continue to work with stakeholders to discuss

location and point of diversion changes for stored water; however, in the meantime, the Department believes that it is important to address the more common changes.

The Department has identified a need for technical amendments to the bill, primarily in subsections 4 and 5 of section 1, which relate to use of the term “permit,” “water uses subject to transfer,” and other technical changes in regards to the secondary rights provisions. In addition, the Department would like to add a requirement for adoption of rules to ensure injury to secondary water rights is properly addressed.

Fiscal

Department Analysis

Prior to 2018, the Department had been processing changes to the type of stored water for storage rights. A recent memo from the Department of Justice clarified that the Department does not have authority to process these types of transfers. As a result, the Department does not anticipate an increase in transfers workload that cannot be addressed within existing resources. The Department anticipates receiving zero to seven applications for these changes per year, based on prior records, which would result in zero to $16,240 (14 applications) per biennium in application fee revenue. The fee is already established in statute, and is not a new fee. The Department anticipates having to develop new forms and rules to implement the measure; however, this can be accomplished within existing resources.

Legislative Fiscal

A Fiscal Impact Statement has not been issued by the Legislative Fiscal Office.

Chapter 6: Reduction Options & Long-Term Vacancies

2019-21 GOVERNOR'S BUDGET REDUCTIONS

Package 090 – Reductions

Removes funding for a water right data tech, reduces a water right extension/adjudication processor, and also inadvertently reduces a NRS2 field water right tech – Oregon Plan position (- $497k, 2FTE). Reduces standard inflation for non-protected accounts ($134k) and increases vacancy savings targets ($724k). Reduces base budget funding for Feasibility Study Grants by $205k (leaving ~$200k), Water Use Measurement Cost Share by $9k (leaving ~$94k), Gaging Stations by $97k (leaving ~$100k), and Observation Wells by $100k (leaving ~ $270k).

Total Reduction: $1,765,953 General Fund, 2 positions.

Package 091 – Statewide Adjustments for DAS Charges

Includes changes made for Department of Administrative Services (DAS) charges and the DAS Pricelist in the Governor's Recommended Budget.

Total Reduction: $256,752 General Fund, $61,290 Other Fund.

Package 092 – Statewide Department of Justice Adjustment

Includes changes made to the Department of Justice Attorney General rate in the Governor's Recommended Budget.

Total Reduction: $57,417 General Fund, $4,873 Other Fund.

10 PERCENT REDUCTIONS LIST AS REQUESTED BY LFO

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Eliminate non-protected account inflationary increases built into the current service level budget	(133,626)		**This reduction was included as a part of the Governor's Recommended Budget in the amount of $133,626.** Eliminating package 031 inflationary increases reduces the Department's ability to keep up with inflationary increases passed on to us by our suppliers.
Increase to vacancy savings	(723,572)		**This reduction was included as a part of the Governor's Recommended Budget in the amount of $723,572.** This reduction would mean the Department would hold vacant general fund positions open for a minimum of three months. This effects productivity in programs with vacancies.
Gaging Stations	(97,200)		**This reduction was included as a part of the Governor's Recommended Budget in the amount of $97,200**. The Water Resources Department operates over 250 stream and reservoir gages throughout the state, maintaining a 100-year record for many of them. This network of stream gages is important in both the management of Oregon's surface water and groundwater resources. It is used by a variety of organizations for making daily decisions, protecting and monitoring instream flows, forecasting floods, designing infrastructure such as bridges and culverts, planning for recreational activities, understanding how much water is available for new uses, and tracking long-term trends such as climate change and drought. This action reduces funding for the installation and maintenance of gaging stations. Reductions to this funding stream reduce our ability to maintain and repair ~$3m worth of stream gage infrastructure.
Feasibility Study Grants	(205,438)		**This reduction was included as a part of the Governor's Recommended Budget in the amount of $205,438**. Local communities often find it difficult to secure feasibility study funding as part of their project development. Such studies help determine the environmental, engineering, economic, and social implications of proposed water supply projects. The Department awarded more than $2 million in grants during the 2015-2017 biennium, reducing the funding would impact the ability of the grant program to meet the need for these studies.

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Water Measurement Cost Share Program	(9,265)		**This reduction was included as a part of the Governor's Recommended Budget in the amount of $9,265**. Water-use measurement is critical to successful management of the resource. The cost to install weirs, flumes, meters, or other appropriate measurement devices can be significant, up to several thousand dollars for meters and as much as $25,000 for large flumes or weirs. Water users have refused to comply citing the expense of installation. This fund provides for a cost share on the expense of purchasing and installing water use measurement devices. This reduction would result in fewer measurement devices installed and decrease water management efficiency.
Observation Wells	(269,423)		**This reduction was included as a part of the Governor's Recommended Budget in the amount of $100,000**. Competition for groundwater increases every year. Accurate well location, impacts from climatic, seasonal, and groundwater development, and water level data are measured at state observation wells throughout the state and are critical to help assess Oregon's groundwater resources. These wells contribute to Oregon's long-term record of groundwater data. This action would reduce the general funds available for the maintenance and establishment of monitoring wells.
Groundwater Studies	(9,744)		This would reduce funding for continued scientific study of Oregon's groundwater resources, including the quantity and location of groundwater, its relationship to surface water, and how much is available for use.
Water Right Extension Processor - Adjudications	(157,807)	(1.00)	**This position's funding was included to be eliminated as a part of the Governor's Recommended Budget**. Elimination of this position jeopardizes the Department's ability to begin new adjudication proceedings in unadjudicated basins. Once begun, proceedings will be significantly delayed by having fewer staff to support the adjudication activity. This position also provides support to the Department of Justice who is working on the Klamath Adjudication as it makes its way through the Klamath County Circuit Court over the next several years. Not being able to support the DOJ activity will result in the DOJ having to do their own research and drafting which is less efficient and more expensive.

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Water Rights Data Tech 1	(132,928)	(1.00)	**The funding for this position was included to be eliminated as a part of the Governor's Recommended Budget**. This position is primarily focused around updating and fixing errors with legacy water right data. Losing this position will drastically compromise the section's ability to proactively fix errors in water right data, which benefits water right holders and staff that rely on the data. This will have a negative impact on the agency's ability to use water right data in other sections of the agency.
Regional Customer Service & Office Support	(36,046)	(0.42)	This would reduce a regional support staff resulting in a dramatic slowing of the Department's ability to provide timely customer service. Property transactions could also be hampered by the lack of timely response from the Department, related to water rights issues and water well information. This position assists the public on the phone and with office walk-ins, and many times is the only staff in the office during the summer months when other staffs are in the field responding to water use regulation. This will lead to reduced hours that the office will be open to the public during the busy summer regulation season, when water users need a lot of assistance. The Department's ability to respond to requests in a timely manner will be severely curtailed.
Regional Customer Service & Office Support	(147,070)	(1.00)	This would eliminate a regional support staff resulting in a dramatic slowing of the Department's ability to provide timely customer service. Property transactions could also be hampered by the lack of timely response from the Department, related to water rights issues and water well information. This position assists the public on the phone and with office walk-ins, and many times is the only staff in the office during the summer months when other staffs are in the field responding to water use regulation. This will lead to reduced hours that the office will be open to the public during the busy summer regulation season, when water users need a lot of assistance. The Department's ability to respond to requests in a timely manner will be severely curtailed.

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Oregon Plan for Salmon & Watershed Activities	(206,117)	(1.00)	**This position was inadvertently eliminated as a part of the Governor's Recommended Budget.** This would eliminate the agency's participation in Oregon Plan activities including being a member of the OWEB application review team. These activities include processing fish friendly water right transfers, mapping water rights, and collecting streamflow data in support of Oregon Plan efforts. This position is responsible for data base management of the Significant Diversion Inventory which tracks progress on installation of measuring devices, and coordinates progress and prepares reports on Pacific Coast Salmon Restoration Fund activities. Two similar positions removed in 2009. These is one of two positions for this activity.
Oregon Plan for Salmon & Watershed Activities	(206,117)	(1.00)	This would eliminate the agency's participation in Oregon Plan activities including being a member of the OWEB application review team. These activities include processing fish friendly water right transfers, mapping water rights, and collecting streamflow data in support of Oregon Plan efforts. This position is responsible for data base management of the Significant Diversion Inventory which tracks progress on installation of measuring devices, and coordinates progress and prepares reports on Pacific Coast Salmon Restoration Fund activities. Two similar positions removed in 2009. This is one of two positions for this activity.
Division Support	(41,715)	(0.24)	This position is solely responsible for the implementation of several programs. This includes administering the yearly dam safety fee and providing customer service to owners of all low, significant, and high hazard dams in Oregon. As the lead staff responsible for website maintenance, this position fixes broken links and posts information on-line. This position is also the only one amongst 45 Technical Services Division (TSD) staff members authorized to arrange travel and order office supplies. This position provides administrative support to the Division administrator, five TSD managers, and the entire Division. This position also provides support for the Field Services Division Administrator as needed.
Professional Engineer 1	(284,494)	(1.00)	This position provides engineering support to the Department's Water Resources Development Program for the purpose evaluating proposed projects for technical viability prior to awarding grant and loan dollars. Loss of the position would reduce the Department's ability to gauge the soundness of the State's investment.

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Hydrogeologist	(157,807)	(1.00)	Competition for groundwater increases every year, in every part of the state. This position is one of two recently approved by the Oregon Legislature to analyze groundwater systems, respond to reports of interference among users, provide for the long-term sustainable use of groundwater, assess the opportunity for new uses, and collect and enter information into a central data base that can be accessed through the Department web site. Elimination of this position would undermine the Department's efforts to reduce the backlog in terms of data collection and sharing, and permit review and processing.
Regional Transfer Application Processor	(190,503)	(1.00)	This eliminates one of two field-based transfer application processors. These positions provide local assistance to water right holders looking to make changes to their water rights, including changes of place of use or points of diversion. This work, when transferred to the Salem staff, would result in increased processing times, workload, and backlog. Currently the backlog for completing a transfer application is approximately one year on average.
Microcomputer and Network Support (Eastern Oregon)	(220,193)	(1.00)	This position is responsible for computer support for the east side of the state and management of satellite-based safety equipment for field staff (personal tracking devices). This would eliminate the only computer and technology support for the Department's North Central, South Central and Eastern Oregon field offices, technical support for more than 40 staff members. Elimination of this position would significantly reduce the staff's ability to use computers, conduct regular computer training, and keep software systems operational for internal and public use. This will have a resulting negative effect on the staff members' ability to complete their work. Elimination of this position would impair the Department's field safety program developed to protect staff working in remote locations outside of cell phone communication.

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Water Development Grant Coordinator	(262,601)	(1.00)	This position is responsible for the day-to-day coordination of the Water Development Grant and Loan program. This program provides funding for water resources projects, such as conservation, reuse, and storage projects, to meet instream and out-of-stream water needs to benefit agriculture, cities, industry, and fisheries. This position is the point of contact for applicants, conducting pre-application meetings and representing the program. This position also reviews grant applications with an inter-agency review team to score and evaluate the proposals, review and evaluate public comments on proposals, and develop and present funding recommendations to the Water Resources Commission. Elimination of this position would significantly impact the Department's ability to coordinate with applicants and sister agencies to ensure that the most qualified proposals are funded. It would also hamper the Department's ability to manage and track existing grants that have been awarded.
TOTAL	**($3,491,666)**	**(10.66)**	

LONG-TERM VACANCY REPORT

Vacancies as of 12/31/2018			
Position #	Position Title	Positon Type (Permanent)	Reason Narrative
1000023	WR Data Tech	FULL-TIME	Position held open to meet vacancy savings targets. Intend to fill this position in the 2019-21 biennium.
3000087	WCC Support	FULL-TIME	Position filled.
3000093	WR Manager	FULL-TIME	Position filled.
3000072	FSD Division Support	FULL-TIME	This position is being held open to manage the budget administratively. This FTE was used in a permanent finance package to finance a reclass request for Hydrotechs.
3000073	Well Inspector SWR	FULL-TIME	This position is an administratively managed fee revenue dependent position. Projecting to hire in March 2019.
3000075	Regional Well Inspector - NWR	PART-TIME	This position is an administratively managed fee revenue dependent position. A portion of this position was used in a permanent finance package for a reclass of the Well Inspectors.
1000038	Receptionist	FULL-TIME	The hiring manager is analyzing the needs of the Division and the work of this position and intends to fill this position in the near future.
9970028	WR Extension/Adjudication Specialist	FULL-TIME	Position held open to meet vacancy savings targets. Intend to fill this position in the 2019-21 biennium.
9909148	WR Rules Coordinator	FULL-TIME	This position is an administratively managed fee revenue dependent position.
9913127	WRDP Grant Coordinator	PART-TIME	Position held open to meet vacancy savings targets.
9913103	WR Application Analyst	FULL-TIME	Position held open to meet vacancy savings targets. The hiring manager is analyzing Division needs and anticipates hiring this position in the near future.
9915104	GW Data Chief	FULL-TIME	Position held open to meet vacancy savings targets. Projecting to hire in March 2019.

OREGON WATER RESOURCES DEPARTMENT

Chapter 7: Supplemental Information on Grants

OVERVIEW

The Commission and Department recognize the need to address very pressing and critical water needs in Oregon's communities, while simultaneously engaging in longer-term strategic initiatives to better understand factors affecting the resource and proactively address challenges. Oregon communities, along with Oregon's fish and wildlife, are already facing limited water supplies today. Surface water is almost completely allocated, and as we rely increasingly on our groundwater resources, water levels have dropped precipitously in some areas of the state. Water scarcity jeopardizes health, welfare, and quality of life.

MEETING FUTURE NEEDS: WATER RESOURCES DEVELOPMENT PROGRAM

The Water Resources Development Program seeks to help individuals and communities address instream and out-of-stream water resources needs now and into the future. The program includes three components to help address Oregonian's water resources needs:

Place-Based Planning empowers communities to work collaboratively, in partnership with the state, to understand their instream and out-of-stream water resources needs and identify potential solutions to meet those needs;

Feasibility Study Grants cover up to 50 percent of the costs of studies to evaluate the feasibility of developing water conservation, reuse, and storage projects; and

Water Project Grants and Loans allow the state to invest in projects that meet instream and out-of-stream needs, while providing economic, environmental, and social/cultural benefits.

	 Place-Based Planning	 Feasibility Studies	 Water Projects
Authorization	2015 – Place-Based Planning (SB 266)	2008 – Water Conservation, Reuse and Storage Grant Program (SB 1069)	2013 – Water Supply Development Account (SB 839)

FEASIBILITY STUDY GRANTS
WATER CONSERVATION, REUSE AND STORAGE

First established in 2008, Water Conservation, Reuse, and Storage Grants fund the qualifying costs of studies that evaluate the feasibility of a proposed conservation, reuse, or storage project that appears to have merit but is lacking important details necessary to determine whether or not to proceed with implementation.

A list of projects awarded funding in the 2015-17 biennium is below.

Feasibility Grants Awarded in November 2015

Study Name	Project Type	County	Funds Awarded	Total Cost of Study
Thief Valley Restoration Feasibility Study	Storage	Baker	$239,520	$505,260
Alder Creek Reservoir Feasibility Study	Storage	Baker	$58,747	$120,977
Bandon Off-Channel Raw Water Storage Reservoir	Storage	Coos	$39,418	$78,836
City of Echo Land Feasibility Study for Water Storage and Reuse	Reuse	Umatilla	$20,000	$40,000
Laurance Lake Reservoir Expansion and Management Study	Storage	Hood River	$81,500	$164,022
Upper Klamath Basin Irrigation Conservation Assessment	Conservation	Klamath	$58,000	$116,000
		Total	**$497,185**	**$1,025,095**

Feasibility Grants Awarded in May 2016

Study Name	Project Type	County	Funds Awarded	Total Cost of Study
Deschutes On Farm Irrigation Water Management Pilot	Conservation	Deschutes	$17,000	$34,225
Oakland Reservoir	Storage	Douglas	$10,858	$21,716
Abbie Lane Lateral Improvement	Conservation	Jackson	$8,778	$17,556
Rogue Basin Pilot Study	Conservation	Jackson	$37,000	$74,900
WISE Water Rights Evaluation	Conservation	Jackson	$162,000	$1,412,000
McMullin Creek Dam and Spillway Analysis	Storage	Josephine	$73,000	$146,000
Pine Grove Water System Improvements	Storage	Klamath	$10,000	$20,000
Roller Compacted Concrete Dam Construction at Big Creek	Storage	Lincoln	$250,000	$1,203,613

Study Name	Project Type	County	Funds Awarded	Total Cost of Study
County Line Recharge*	Storage	Umatilla	$12,500	$25,000
Umatilla Reuse	Reuse	Umatilla	$130,000	$260,000
West Extension Reuse	Reuse	Umatilla and Morrow	$40,000	$80,000
Upper Catherine Creek Conservation	Conservation	Union	$114,265	$230,120
Fifteen Mile Watershed Managed Underground Storage	Storage	Wasco	$153,185	$316,470
Juniper Flats	Conservation	Wasco	$40,000	$80,000
Banks-Green Mountain ASR	Storage	Washington	$96,459	$204,382
Sterling Park Stormwater Recharge	Reuse	Washington	$50,000	$100,000
West Fork Palmer Creek	Storage	Yamhill	$64,170	$128,340
		Total	**$1,269,215**	**$4,354,322**

*Grant award declined by applicant

Feasibility Grants Awarded in May 2017

Study Name	Project Type	County	Funds Awarded	Total Cost of Study
Baker Reuse Feasibility Study	Reuse	Baker	$30,000	$60,000
Ferry Creek Dam & Reservoir Analysis	Storage	Curry	$72,500	$145,000
John Day Feasibility Study for Wastewater Reuse	Reuse	Grant	$50,000	$110,000
Understanding Meadow Storage Capacity in the Upper John Day Basin	Storage	Grant	$40,505	$95,658
Hood River Water Bank Feasibility Study	Conservation	Hood River	$50,330	$101,980
Klamath Basin Feasibility Study to Identify Supplemental Storage	Storage	Klamath	$65,680	$145,680
Milton-Freewater ASR Assessment	Storage	Umatilla	$42,297	$127,520
Carlton Raw Water Storage Expansion Study	Storage	Yamhill	$60,000	$120,000
		Total	**$411,312**	**$905,838**

-No funding cycle in 2018 – Due to Limited Staff Capacity

Feasibility Grants Requested for 2019

Study Name	Project Type	County	Funding Requested	Total Cost of Study
Lundy Ditch Irrigation Efficiency Feasibility Study	Conservation	Deschutes	$43,857	$87,714
Tower Ditch Sleeving Feasibility Study	Conservation	Deschutes	$17,180	$35,196
Upper John Day Irrigation Water Conservation Feasibility Study	Conservation	Grant	$151,758	$303,516
Talent Irrigation District Water Conservation Study	Conservation	Jackson	$49,000	$153,000
Water & Energy Conservation with Variable Speed Drives on the Rogue River	Conservation	Josephine	$43,264	$86,527
White Ditch Sucker Creek Water Conservation Study	Conservation	Josephine	$64,000	$129,400
City of Umatilla Hydraulically Connected Wells	Conservation	Umatilla	$364,000	$728,387
Enhancing Reliability of the Alluvial Groundwater Supply in the Walla Walla Basin	Below-ground Storage	Umatilla	$77,715	$155,799
		Total	**$810,773**	**$1,679,538**

WATER PROJECT GRANTS AND LOANS
WATER SUPPLY DEVELOPMENT ACCOUNT

In 2013, the Oregon Legislature passed Senate Bill 839, establishing the Water Supply Development Account to provide grants and loans for water projects to evaluate, plan, and develop instream and out-of-stream water projects that have economic, environmental and social/cultural benefits.

Water Project Grants Awarded May 2016

Project Name	Project Type	County	Funding Requested	Total Cost of Project
Tumalo Feed Canal Conservation Phase 5	Conservation	Deschutes	$1,299,968	$3,407,155
Highline Canal Pipeline	Conservation	Hood River	$566,299	$784,699
Kingsley Reservoir Expansion and Lowline Pipeline Project	Storage/Conservation	Hood River	$3,000,000	$4,241,000
Sun Creek Restoration And Irrigation Efficiency	Flow Restoration	Klamath	$249,867	$552,734
Klamath East Side Water Recycling Project	Drainage Water Reuse	Klamath	$268,673	$358,231
Willow Creek Piping Irrigation Laterals	Conservation	Malheur	$500,355	$785,143
Beaver Creek Dam Fish Passage and Flow Restoration	Municipal Water Supply	Union	$600,000	$1,125,700
Lostine River Conservation Project	Conservation	Wallowa	$1,488,718	$2,132,575
Mosier Deep Water Supply Well	New Groundwater Supply Development	Wasco	$917,238	$1,225,013
		Total	**$8,891,118**	**$14,612,250**

Water Project Grants Awarded December 2017

Project Name	Applicant Name	County	Funding Requested	Total Cost of Project
Coe Branch Pipeline & On-Farm Irrigation Efficiency Project	Middle Fork Irrigation District	Hood	$924,000	$1,680,105
Opal Springs Fish Passage and Pool Raise	Deschutes Valley Water District	Jefferson	$1,550,486	$10,720,486
North Fork Sprague Conservation Piping and Instream Flow Restoration	Trout Unlimited	Klamath	$2,731,746	$3,875,000
Powder Valley Connector	Powder Valley Water Control District	Union	$1,076,000	$1,440,000
		Total	**$6,282,232**	**$17,715,591**

Water Project Grants Awarded November 2018

Project Name	Applicant Name	County	Funding Requested	Total Cost of Project
Tumalo Feed Canal Phase 6	Tumalo Irrigation District	Deschutes	$1,297,542	$6,744,744
Flat Creek Watershed Enhancements	South Fork John Day Watershed Council & Cascade Pacific Resource Conservation and Development	Grant	$196,029	$391,458
Dee Flat Water Conservation Project	Dee Irrigation District	Hood River	$1,600,000	$2,688,587
Galls Creek Irrigation Conversion Project	Jackson Soil & Water Conservation District and JTE Ranch	Jackson	$153,351	$213,913
Johnston Lane Conservation Project	The Freshwater Trust, Ken and Bobbie Baker, and Perry Johnston	Wallowa	$606,343	$808,458
Sterling Park Stormwater Recharge Project	Clean Water Services and the City of Beaverton	Washington	$862,500	$1,150,000
Painted Hills Reservoir Expansion	Bridge Creek Ranch, LLC	Wheeler	$581,990	$1,086,667
		Total	**$5,297,755**	**$13,083,827**

DIRECT APPROPRIATIONS - WATER SUPPLY DEVELOPMENT ACCOUNT

In 2017 and 2018, the Legislature made a number of direct appropriations to water projects and directed the Department to manage the grants. The City of Carlton was authorized $2.5 million in Lottery Revenue Bonds for its Panther Creek Reservoir Dredging Project and $2 million for its Transmission Pipe Replacement Project in 2017. In 2018, an additional $5.1 million in Lottery Revenue Bonds were authorized for the Transmission Pipe Replacement Project, bringing the total to $7.1 million. The Department has entered into grant agreements with the City for both projects which will be completed next biennium.

In 2017, Santiam Water Control District was authorized $1.2 million for its Santiam Mill Creek Project. As per the statute governing the award, the Department is awaiting submission and approval of an updated Water Management and Conservation Plan prior to entering a grant agreement and releasing funds. The project is expected to be completed in the 2019-2021 biennium.

RECAP OF THE STATUS LOTTERY BOND FUNDING

Over the last three biennia, the Legislature has authorized $58.3 million in Lottery Bond proceeds for water supply studies and projects, with $10 million authorized in 2013-2015 (bonds sold spring 2015) an additional $21 million authorized in 2015-2017 (bonds sold spring 2017). In 2017-19 additional $27.4 million authorized (bonds to be sold spring 2019). Of the $58.3 million, just over $47 million has been awarded to specific projects, with most of the funds that have been awarded expected to be spent in the next biennium. Of the funds that have not been awarded to a specific project, the Department expects to award $8.5 million of those funds for Water Project Grants by November 2019. The table below provides more details of the status of the funding.

Description	Authorized '13-'19	Awarded '13-'19	Projected to be Spent '13-'19	Projected to be Spent in '19-'21	Available for New Grants in 2019-2021
Water Supply Development Account					
Upper Deschutes Basin Study	$750,000	$750,000	$750,000	N/A	N/A
Willamette Basin Review	$1.5 million	$1.5 million	$1.5 million	N/A	N/A
City of Carlton Panther Creek Reservoir	$2.5 million	$2.5 million	N/A	$2.5 million	N/A
City of Carlton Water Supply Project	$2 million	$2 million	N/A	$2 million	N/A
Santiam Mill Creek	$1.2 million	$1.2 million	N/A	$1.2 million	N/A
City of Carlton Water Supply Project	$5.1 million	$5.1 million	N/A	$5.1 million	N/A
Water Project Grants & Loans	$29 million	$20.5 million	$11.3 million	$17.7 million	$8.5 million
Water Supply Fund					
Umatilla Water Supply Grant	$11 million	$11 million	~$10.5 million	N/A	N/A
Mosier Well Grants	$1 million	$1 million	$1 million	N/A	N/A
Place-Based Planning Pilot Grants	$750,000	$750,000	$750,000	N/A	N/A
Water Conservation, Reuse, and Storage Fund					
Feasibility Study Grants	$3.5 million	~$1 million	$1 million	~$2.5 million	$2.5 million
TOTAL	**$58.3 million**	**$47.3 million**	**$27.3 million**	**$31 million**	**$11 million**

OREGON WATER RESOURCES DEPARTMENT

Appendices

- Span of Control
- Other Funds Ending Balance

PROPOSED SUPERVISORY SPAN OF CONTROL REPORT

In accordance with the requirements of ORS 291.227, Oregon Water Resources presents this report to the Joint Ways and Means Committee regarding the agency's Proposed Maximum Supervisory Ratio for the 2019-2021 biennium.

Supervisory Ratio for the last quarter of 2017-2019 biennium for budgeted positions is 1:9.6.

The agency exempted supervisory ratio as of 12/01/2017 was 1:11. The actual supervisory ratio as of 12/01/17 was 1:9.

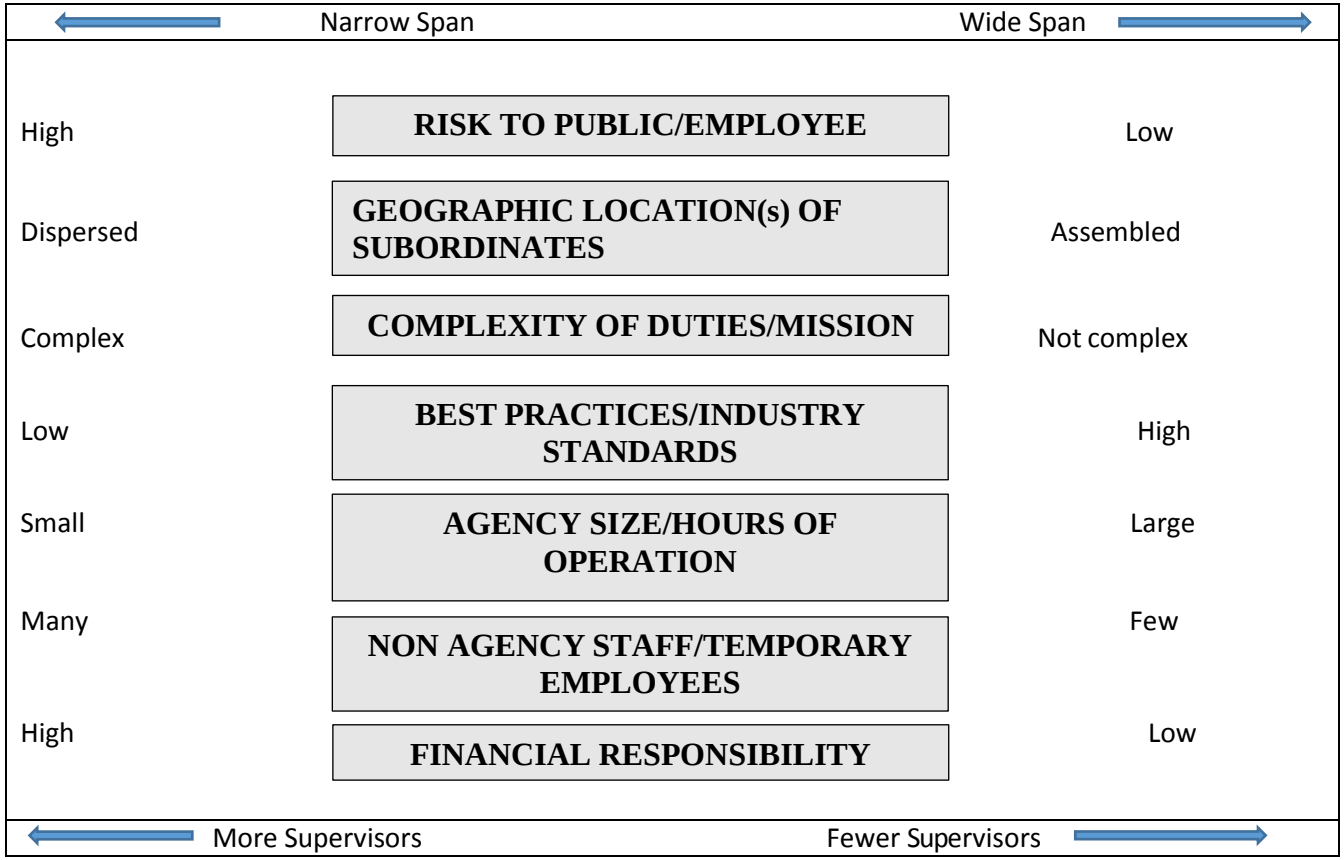
The Agency actual supervisory ratio as of Current Service Level (CSL) is calculated using the following calculation;

_____16_____ = _____17_____- (_____1_____)
(Total supervisors) (Supervisory Positions) (Agency head)

_____152_____ = _____152_____
(Total non-supervisors) (Non-Supervisory Positions)

The agency has a current service level (CSL) actual supervisory ratio of-
1:_____9.5_____ = ____152_____ / ____16_____
(Actual span of control) (Total non - Supervisors) (Total Supervisors)

When determining an agency maximum supervisory ratio all agencies shall begin of a baseline supervisory ratio of 1:11, and based upon some or all of the following factors may adjust the ratio up or down to fit the needs of the agency.


Narrow Span
Wide Span
High
RISK TO PUBLIC/EMPLOYEE
Low
Dispersed
GEOGRAPHIC LOCATION(s) OF SUBORDINATES
Assembled
Complex
COMPLEXITY OF DUTIES/MISSION
Not complex
Low
BEST PRACTICES/INDUSTRY STANDARDS
High
Small
AGENCY SIZE/HOURS OF OPERATION
Large
Many
NON AGENCY STAFF/TEMPORARY EMPLOYEES
Few
High
FINANCIAL RESPONSIBILITY
Low
More Supervisors
Fewer Supervisors

Ratio Adjustment Factors

Is safety of the public or of State employees a factor to be considered in determining the agency maximum supervisory ratio? Explain how and why this factor impacts the agency maximum ratio upwards or downwards from 1:11.

Yes, safety is a high concern. The Department houses staff in 22 offices across the state. The Department has divided the state into 21 watermaster districts, which are then rolled up into five regions. Watermasters, assistant watermasters, and other staff travel year round to remote locations, collecting field data, regulating water use and occasionally interacting with landowners or other public that are angry and threatening. Staff are frequently out of cell coverage during their field assignments. In the five field-office regions, four have one supervisor each and one has two supervisors. When a supervisor is absent from the office, local staff must work with a supervisor outside of their region, who may be a great distance away and unfamiliar with specific issues or safety matters in that region.

A concern for staff safety impacts the ratio downwards (fewer staff per supervisor). It is important that staff have reasonable access to a supervisor when conditions or circumstances warrant supervisory attention.

Is geographical location of the agency's employees a factor to be considered in determining the agency maximum supervisory ratio? Explain how and why this factor impacts the agency maximum ratio upwards or downwards from 1:11.

Yes, the agency is dispersed. Geographic location of field offices places a downward pressure on the span of control. As noted above, the Department has divided the state into 21 watermaster districts (non-supervisory staff), which are then compiled into five regions with one supervisor each in four of those regions and two in the fifth. The geographic area of these Regions is extensive and the Department feels that there should be adequate supervisory management assigned to each of these regions in order to respond to the needs of the public and department's employees.

Two examples: The East Region spans 34,251 square miles and has 14 staff distributed across seven communities. This region has two existing supervisors.

The South Central Region spans approximately 21,900 square miles. The region is comprised of 13 represented staff and one supervising manager with offices located in Bend, Klamath Falls and Lakeview. As it is currently, the Lakeview office is a three hour drive one-way, and the Klamath Falls office is a two-and a half hour drive for the Bend-located region manager. This supervisory position is already included in our base budget. The Department is proposing a policy option package to add a second supervisory manager for this region.

Prior to the supervisory limitation, the Department's span of control was 1:6. Several positions with supervisory authority were modified to non-supervisory, placing additional duties on remaining supervisors, particularly across the region offices.

Is the complexity of the agency's duties a factor to be considered in determining the agency maximum supervisory ratio? Explain how and why this factor impacts the agency maximum ratio upwards or downwards from 1:11.

Yes, highly complex. Workloads are increasing statewide due to the increasing number of water rights, wells, population, homes, and changing water management needs. The State's 21 watermasters, with the help of state and other-funded assistant watermasters, are responsible for management of more than 89,000 water rights in the state, more than 230,000 wells, dam safety inspections, injury analysis of water right transactions, participation in local planning efforts, and many other activities.

The agency is responsible for many technical aspects of water management, such as groundwater hydrology, surface water hydrology, dam safety, well construction and enforcement, etc. These technical sections may only include a handful of staff but require a manger with subject-area expertise and supervisory authority to manage the program. For example, having a HR Manager supervise Hydrology staff would be inappropriate and inefficient, as the HR Manager would not have the technical foundation to understand whether the work was being completed properly. This issue presents itself for all of these sections that are small but highly specialized.

Oregon water law statutes date to 1909 and have been amended and appended ever since. This has created a complex and sometimes conflicting body of law that requires astute interpretation. Litigation against the agency and staff is on the rise and results in more of management's attention in resolving lawsuits and other threats against agency actions. This takes attention away from manager's supervisory duties. The Department seeks to reduce the management ratio to allow for more flexibility in supervisory duties.

Are there industry best practices and standards that should be a factor when determining the agency maximum supervisory ratio? Explain how and why this factor impacts the agency maximum ratio upwards or downwards from 1:11.

Not applicable.

Is size and hours of operation of the agency a factor to be considered in determining the agency maximum supervisory ratio? Explain how and why this factor impacts the agency maximum ratio upwards or downwards from 1:11.

This is generally not applicable, as our agency commonly adheres to standard business hours. The exception is for staff conducting field assignments that require extended work hours. Supervisory managers are knowledgeable of staff work assignments and need to be available after hours in the event staff needs assistance.

Are there unique personnel needs of the agency, including the agency's use of volunteers or seasonal or temporary employees, or exercise of supervisory authority by agency supervisory employees over personnel who are not agency employees a factor to be considered in determining the agency maximum supervisory ratio? Explain how and why this factor impacts the agency maximum ratio upwards or downwards from 1:11.

Yes, many. The Water Resources Department's use of interns, temporary, and county-funded employees should be considered as a factor in determining the agency maximum supervisory ratio, as well as the use of the Department's managers to assist with other agencies.

Management of Oregon's water relies, in part, on local entities funding staff in addition to State-funded staff. These locally-funded staff are assigned to watermaster and regional offices and they support the water-management business of the agency. Counties provide much of the budget for the locally-funded positions. Under current statutes, counties may support assistant watermasters, who work under the supervision of the Department. These county-funded positions create additional field capacity to serve water management needs within specific counties. Currently there are approximately 18 locally-funded staff who are supervised by Department managers.

The Department also relies on interns during short periods of time to assist with special projects as funding allows. Currently there are three interns who are supervised by Department managers.

The Department provides Information Services, Human Resources, Payroll and Fiscal support to the Oregon Watershed Enhancement Board. While the agency is not supervising staff at OWEB, managers and staff provide support to the OWEB that represents another workload and demand on management staff.

Is the financial scope and responsibility of the agency a factor to be considered in determining the agency maximum supervisory ratio? Explain how and why this factor impacts the agency maximum ratio upwards or downwards from 1:11.

Yes, high responsibility. In recent years, the agency has seen a consistent authorization of Lottery Backed Bonds totaling at least $10 million dollars to issue grants, which has increased the financial responsibility and accounting for the agency to ensure that grants are properly administered. This additional fiscal workload takes management's attention away from supervisory duties. The Department seeks to reduce the management ratio to allow for more flexibility in supervisory duties.

Based upon the described factors above the agency proposes a Maximum Supervisory Ratio of 1:8.

UPDATED **OTHER FUNDS ENDING BALANCES FOR THE 2017-19 & 2019-21 BIENNIA**

Agency: **Water Resources Department**
Contact Person: **Lisa Snyder (503) 986-0921**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Other Fund Type	**Program Area (SCR)**	**Treasury Fund #/Name**	**Category/Description**	**Constitutional and/or Statutory reference**	**2017-19 Ending Balance In LAB**	**2017-19 Ending Balance Revised**	**2019-21 Ending Balance In CSL**	**2019-21 Ending Balance Revised**	**Comments**
Limited	010-01-00-00000: Admin Serv Div	6900000401: General Fund	Other - property liquidation	ORS 555.380					
Nonlimited	020-00-00-00000: Water Dev Loan Fund	6900000463: Water Dev Admin & Bond Sinking Fund	Loan Program	Article XI-I(1) ORS 541.750	226,871	229,084	100,000	236,784	19-21 revenue analysis was not complete as of the CSL.
Limited	010-04-01-00000: Tech Serv Div	6900000536: Water Resources Department Operating Fund (Start Card Fund)	Operations	ORS 537.763	0	391,350	0	0	Change in ending balance due to insufficient revenue to fund all of the position authority. Costs are constricted to available revenue.
Limited	010-06-00-00000: Water Rights Serivces Div	6900000607: Water Resources Dept Hydroelectric Fund	Operations	ORS 536.015	336,744	374,277	200,000	540,292	19-21 revenue analysis not complete as of the CSL.
Limited	010-03-00-00000: Field Serv Div	6900000975: Water Measurement Cost Share Pro Rev Fund	Operations	ORS 536.021	46,618	60,000		0	Change in ending balance is due to planned expenditures.
Limited	010-06-00-00000: Water Rights Serivces Div	6900001083: Water Right Operating Fund	Operations	ORS 536.009 ORS 536.050 ORS 537.747	740,574	3,198,360	236,138	2,252,568	Change in ending balance due to projection error. 19-21 revenue analysis was not complete as of the CSL.
Limited	010-01-00-00000: Admin Serv Div	6900001277 & 1729: Water Conservation Reuse Storage Invest (SB 1069)	Grant Fund	SB 1069, 2015-17 ORS 291.001; ORS 541.561	513,399	2,500,000	2,500,000	0	Change in ending balance due to Grant funds not being spent as originally projected.
Limited	010-04-00-00000: Tech Serv Division	6900001318: Geotechnical Fund	Operations	HB 2232 ORS 537.895	285,524	319,264	100,000	361,809	19-21 revenue analysis was not complete as of the CSL.
Limited	010-01-00-00000: Admin Serv Div	6900001726;1727;1728 Water Supply Fund TE	Grant Fund	ORS 291.001	119,619	0	0	0	Change in ending balance due to Grant funds not being spent as originally projected.
Limited	010-01-00-00000: Admin Serv Div	6900001351; 1325; 1445; 1730: Water Supply Fund-Taxable	Grant Fund	HB 5030, Sec 13.1 & 2 ORS 291.001	9,530	0	0	0	Change in ending balance due to projection error.
Limited	010-01-00-00000: Admin Serv Div	6900001508: Water Supply Development Account	Grant Fund	SB 839, Sec 3 ORS 541.656	1,779,150	28,500,000	28,500,000	0	Change in ending balance due to Grant funds not being spent as originally projected.
Limited	010-01-00-00000: Admin Serv Div	6900001731: Water Supply Fund Taxable PBP	Grant Fund	SB 839, Sec 3 ORS 541.656	54,319	0	0	0	Change in ending balance due to Grant funds not being spent as originally projected.
					4,112,348	35,572,335	31,636,138	3,391,453	

Objective: **Provide updated Other Funds ending balance information for potential use in the development of the 2019-21 legislatively adopted budget.**

Instructions:

Column (a): Select one of the following: Limited, Nonlimited, Capital Improvement, Capital Construction, Debt Service, or Debt Service Nonlimited.
Column (b): Select the appropriate Summary Cross Reference number and name from those included in the 2017-19 Legislatively Approved Budget. If this changed from previous structures, please note the change in Comments (Column (j)).
Column (c): Select the appropriate, statutorily established Treasury Fund name and account number where fund balance resides. If the official fund or account name is different than the commonly used reference, please include the

working title of the fund or account in Column (j).

Column (d): Select one of the following: Operations, Trust Fund, Grant Fund, Investment Pool, Loan Program, or Other. If "Other", please specify. If "Operations", in Comments (Column (j)), specify the number of months the reserve covers, the methodology used to determine the reserve amount, and the minimum need for cash flow purposes.

Column (e): List the Constitutional, Federal, or Statutory references that establishes or limits the use of the funds.

Columns (f) and (h): Use the appropriate, audited amount from the 2017-19 Legislatively Approved Budget and the 2019-21 Current Service Level at the Agency Request Budget level.

Columns (g) and (i): Provide updated ending balances based on revised expenditure patterns or revenue trends. Do not include adjustments for reduction options that have been submitted unless the options have already been implemented as part of the 2017-19 General Fund approved budget or otherwise incorporated in the 2017-19 LAB. The revised column (i) can be used for the balances included in the Governor's budget if available at the time of submittal. Provide a description of revisions in Comments (Column (j)).

Column (j): **Please note any reasons for significant changes in balances previously reported during the 2017 session.**

Additional Materials: If the revised ending balances (Columns (g) or (i)) reflect a variance greater than 5% or $50,000 from the amounts included in the LAB (Columns (f) or (h)), attach supporting memo or spreadsheet to detail the revised forecast.