OREGON WATER RESOURCES DEPARTMENT

2021-23 BUDGET PRESENTATION

OREGON

WATER RESOURCES DEPARTMENT

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OREGON WATER RESOURCES DEPARTMENT

Chapter 1: Agency Overview

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

Oregon's Integrated Water Resources Strategy (IWRS) identifies actions Oregon needs to undertake to 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 a changing climate. 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 50 recommended actions for how to address those issues. The recommended actions are outlined in brief below.

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 & green infrastructure

Water-Related Infrastructure
7.A Develop & upgrade water and wastewater infrastructure
7.B Encourage regional (sub-basin) approaches to water & 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 & training for Oregon's next generation of water experts
8.C Promote community education & 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, & capacity for natural storage
11.B Develop additional instream protections
11.C Prevent & eradicate invasive species
11.D Protect & restore instream habitat & 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 & exposure to toxics & other pollutants
12.C Implement water quality pollution control plans

Funding
13.A Fund development & 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

The 2017 IWRS identifies 18 critical issues Oregon faces and provides over 50 recommended actions for how to address those issues. These issues and actions span multiple agencies and jurisdictions. The IWRS is the umbrella document that spells out "what" generally needs to happen to understand our water resources and meet Oregon's water needs, but it does not provide the finer details of implementation.

In November 2018, the Water Resources Commission ratified the Water Resources Department's five-year Strategic Plan. The Oregon Water Resources Department Strategic Plan is a supporting document to the IWRS and identifies the strategic direction of the Department over the next five years. The plan identifies the Department's strategic priorities and objectives, presenting areas of focus for development and improvement as we serve the public. Priorities and objectives follow the theme of modernizing the Department to tackle the water resource issues of today and tomorrow. Specifically, the plan includes the following priorities and objectives for the agency:

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

A HISTORICAL PERSPECTIVE

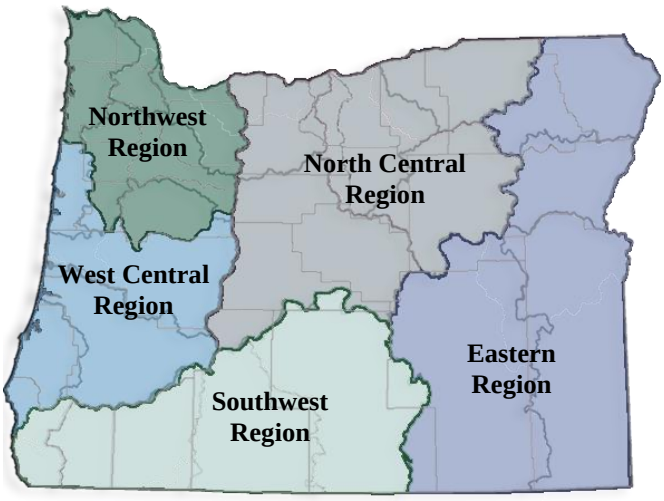
Agency Structure

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; former Commissioner Mike Faught (replacement pending confirmation), Southwest Region; Eric Quaempts, North Central Region; Joe Moll, West Central Region; and Bob Baumgartner, Northwest Region.

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

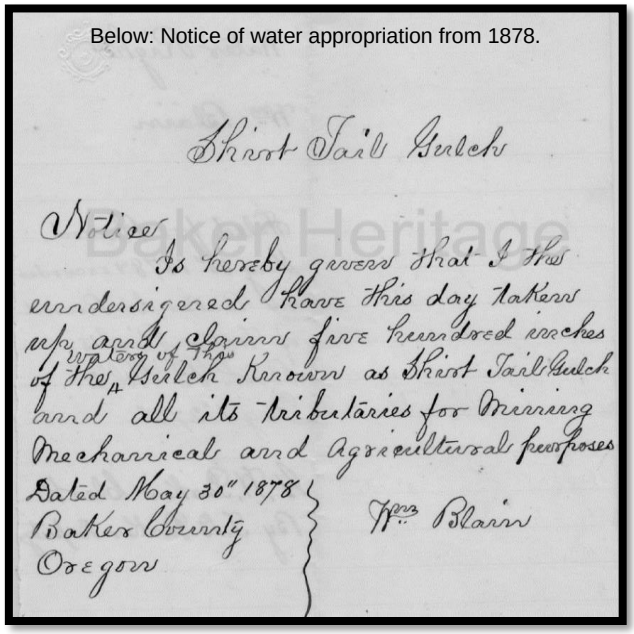
Oregon's water laws have roots tracing back to Oregon's early history because the availability of water has been integral to Oregon's development. Before 1909, water claims were staked like mining claims and recorded in the county courthouse.

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. 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

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

providing over 50 recommended actions for how to address those issues. These actions are outlined in the section above.

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 beginning of this chapter.

OREGON WATER RESOURCES DEPARTMENT

Chapter 2: Performance Summary

Overview

The Water Resources Department has 12 active Key Performance Measures (KPMs). These performance measures cover agency programs related to: streamflow restoration, protection, and measurement; groundwater monitoring; and regulatory actions, and customer service. A brief overview of the Department's KPMs are included in the following pages. The Department's most recent Annual Performance Progress Report is provided in the Appendix.

Many of the Department's KPMs have been in place since the early 2000s; therefore, the Department has begun efforts to review the existing KPMs to ensure they remain relevant. KPM's 6 and 12 were deleted in 2019. KPM 2 was revised in 2019.

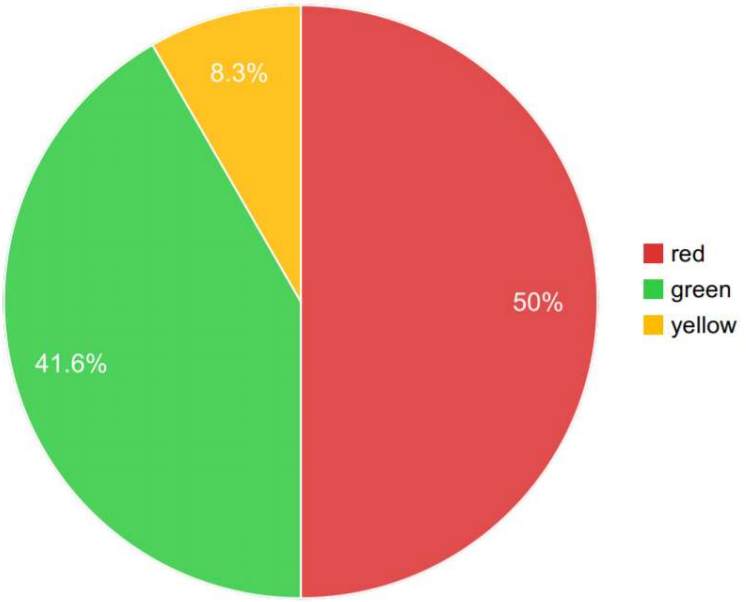
Use of Performance Measures, including KPMs

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.

Key Performance Measures Compared to Target

Percent of KPMs within a certain percent of target



Green	Yellow	Red
Measure is meeting target or within -5 % of target	Measure is between less than -5 % of target and -15 % of target	Measure is less than -15 % of target

In all of the graphs for each KPM on the pages 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 2 Protection of Water Instream
- KPM 7 Equip Citizens with Information
- KPM 9 Promote Efficiency in Water Management & Conservation Plan Reviews

Not Meeting Target

- KPM 1 Flow Restoration
- KPM 3 Monitor Compliance
- KPM 4 Streamflow Gaging
- KPM 5 Assessing Ground Water Resources
- 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 13 Increase Water Use Reporting
- KPM 14 Customer Service

KPM 1 - Flow Restoration

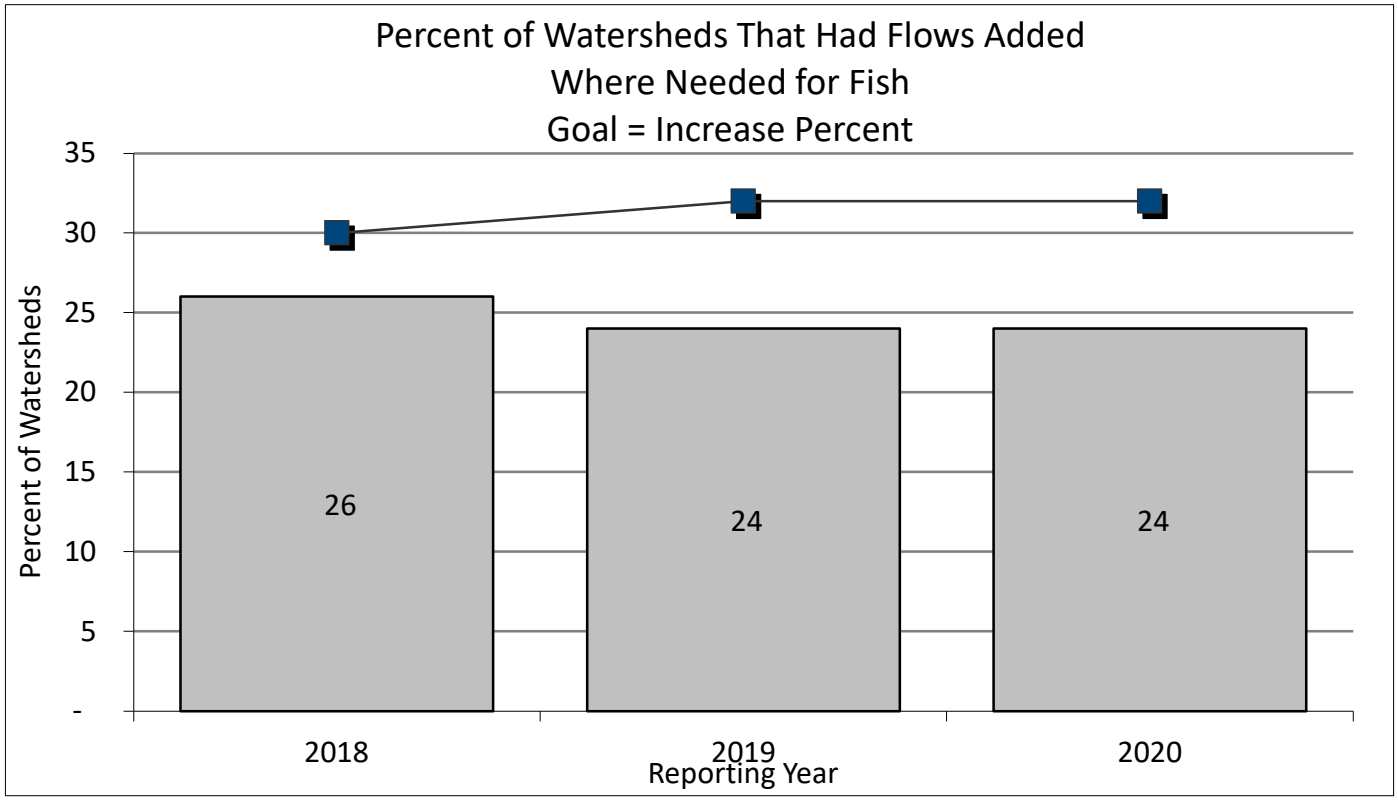
Measured by the percent of watersheds that had flows added where needed for fish

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.
- Almost half of flow restoration activities are directly between water right holders and WRD.
- The reduction in the percent from the 2018 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.
- While the percent of high priority watersheds that had water voluntarily protected instream remained the same in the 2020 report, the total amount of water put instream statewide (within and outside of the high priority watersheds) during the 2020 reporting period increased from the prior report.



KPM 2 - Protection of Instream Water Rights

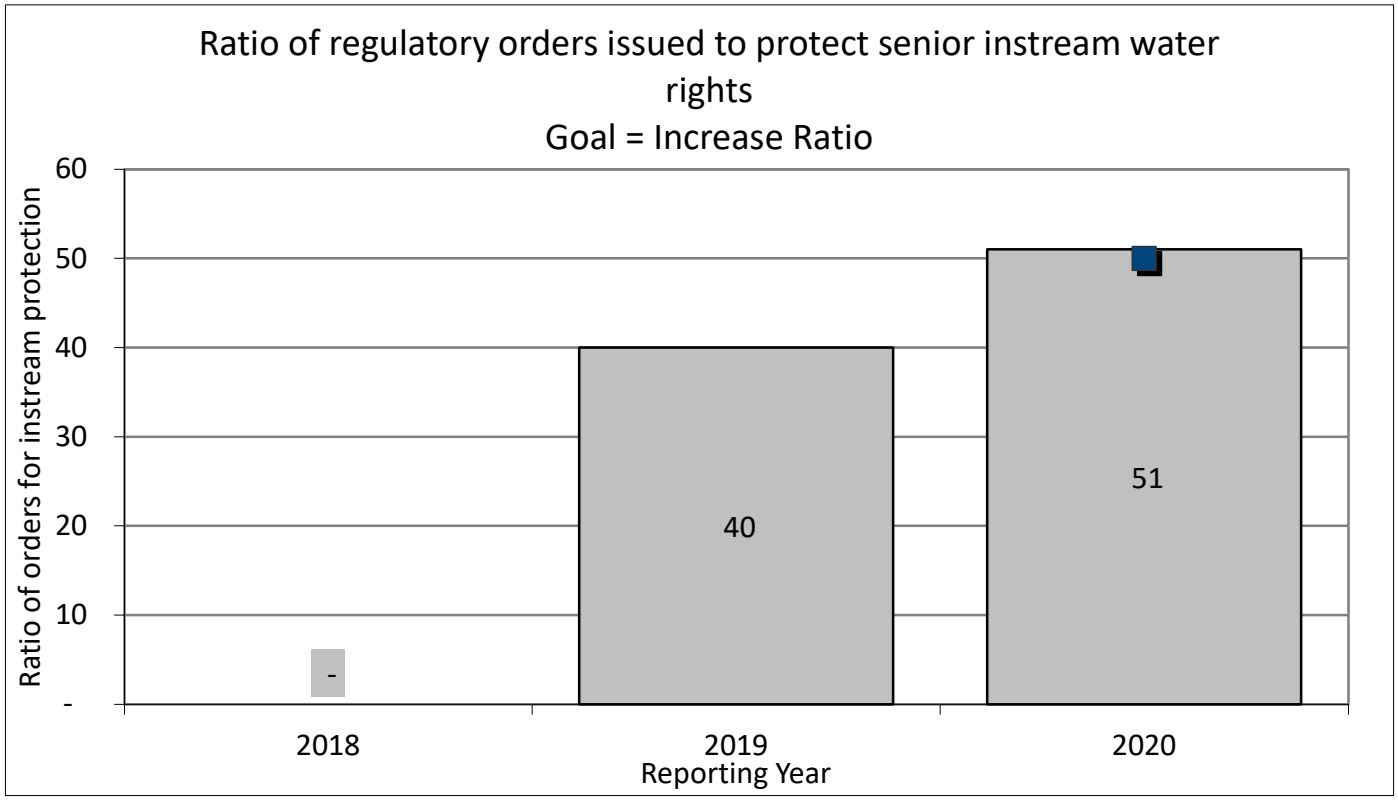
Measured by the ratio regulatory orders issued to protect senior water rights when the senior water right is an instream right to all regulatory orders issued to protect senior water rights.

Strategies:

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

Trends:

- The number of streams regulated varies with the amount and timing of rainfall in any given year, water conditions, temperatures, as well as staff resources.
- Department is protecting instream and out of stream uses, as roughly half of the regulatory actions undertaken were for instream water rights, while the other half were for consumptive uses.
- In calendar year 2019, staff reported a total of 4,891 regulatory actions, 2,487 were to regulate for 180 instream water rights. Regulatory actions are actions by staff that cause a change in water use behavior.
- This KPM was modified in 2019, so calendar year 2018 data (report year 2019) are the first data to be reported under the new KPM and the target was not set until the 2020 report.



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

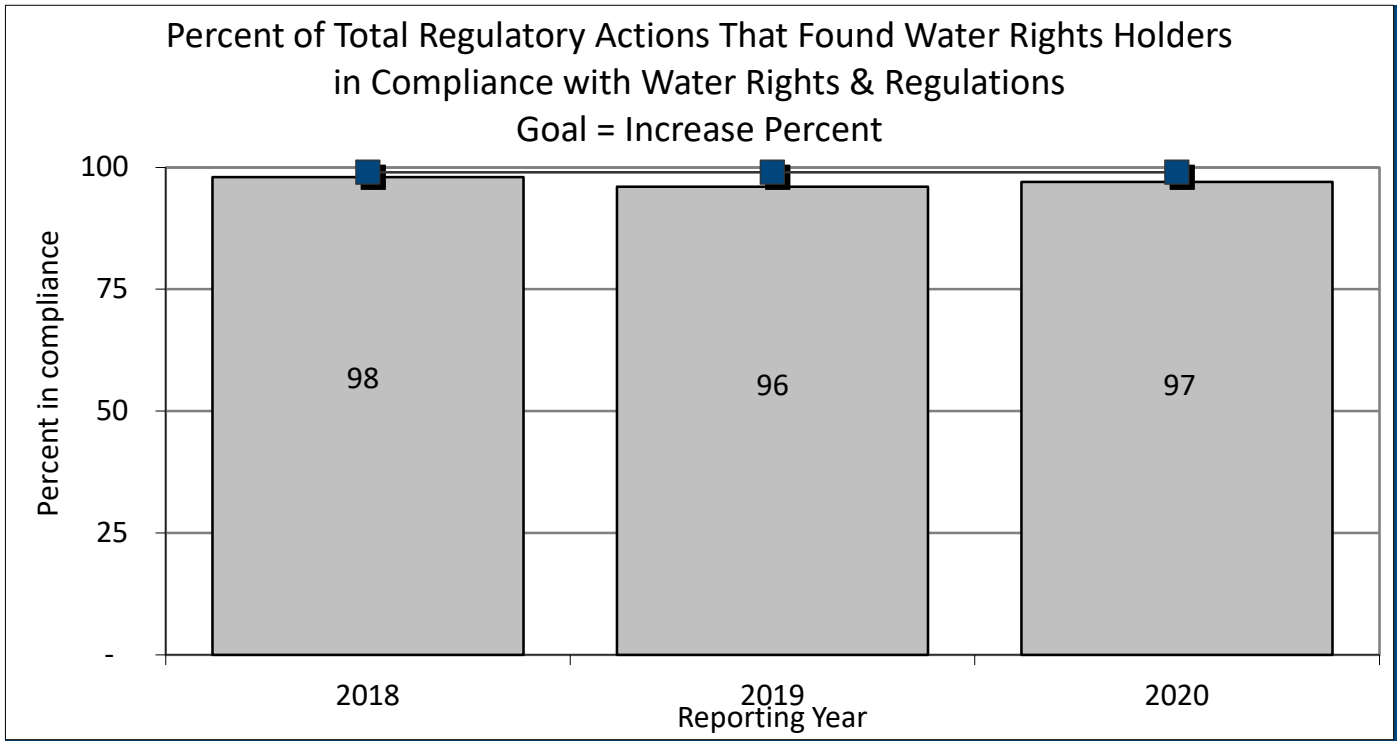
Regulatory activities include any action that causes a change in use, or maintenance, or a field inspection that confirms that no change is needed to comply with water right permit conditions, statutes, or orders of the Department.

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 2020 reporting period (2019 calendar year), watermasters had 4,891 regulatory actions, and 13,769 compliance checks.
- 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.
- This metric does not necessarily reflect compliance with water right conditions or reflect compliance with Oregon water laws - as this only reflects known and tracked activities.



KPM 4 - Increase Understanding of Water Resources: Streamflow Gaging

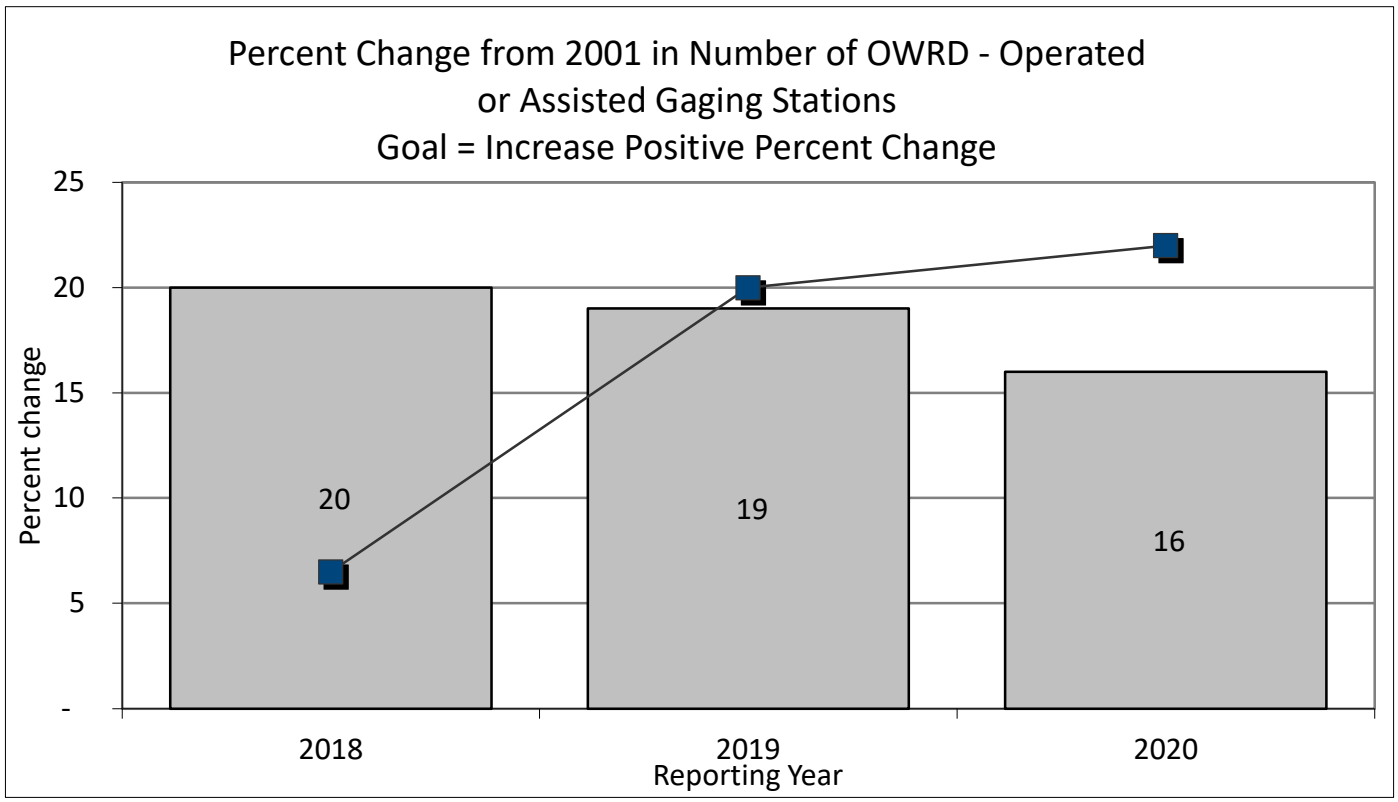
Measured by the percent change from 2001 in the number of WRD operated or assisted gaging stations

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 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:

- Since 2013, the Legislature has provided funding for the installation of additional stream gages, however, this funding resource was reduced by 20 percent during the 2017 Legislative Session
- During the 2020 reporting period, the Department added 1 gage and dropped 8, for a net loss of 7 gages compared to the previous reporting year. This brings the total number of gages operated during this period to 250, a 16 percent increase over the 2001 benchmark.
- Staffing levels have not been commensurate with the continuous workload associated with collecting, maintaining, processing, and analyzing the data from these stations. Some gages have been discontinued due to other workload priorities.



KPM 5 - Increase Understanding of Water Resources: Assessing Groundwater

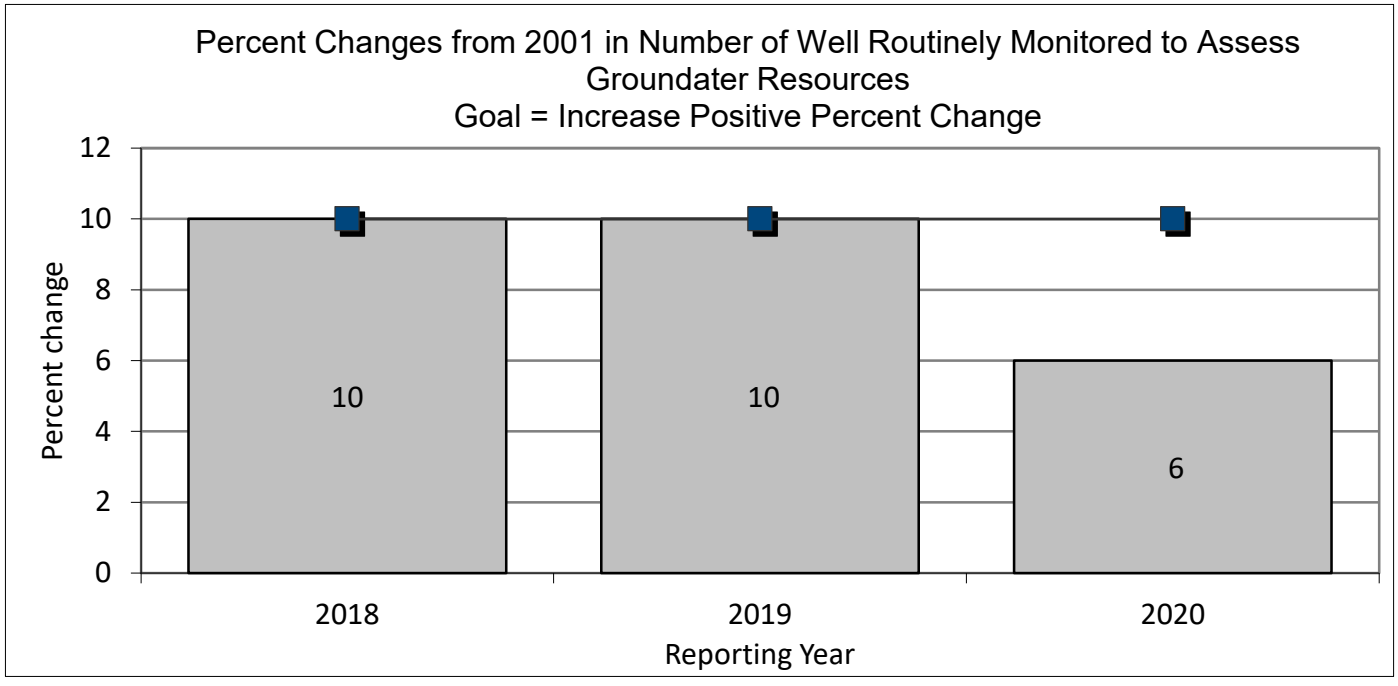
Measured by the percent change from 2001 in the number of wells routinely monitored to assess ground water resources

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 data.
- 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:

- The Department's capacity to measure wells has been reduced due to travel restrictions and safety considerations related to COVID-19.
- Since 2013, the legislature has provided resources to drill new state observation wells. During the 2020 reporting cycle, staff routinely monitored 370 wells in the State's Observation Well Network, compared to 350 in 2001. This is an increase of approximately 6 percent over 2001. This KPM does not track all wells and measurements: The Department collected 2,913 water level measurements from 1,315 observation wells.
- 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 7 - Equip Citizens with Information

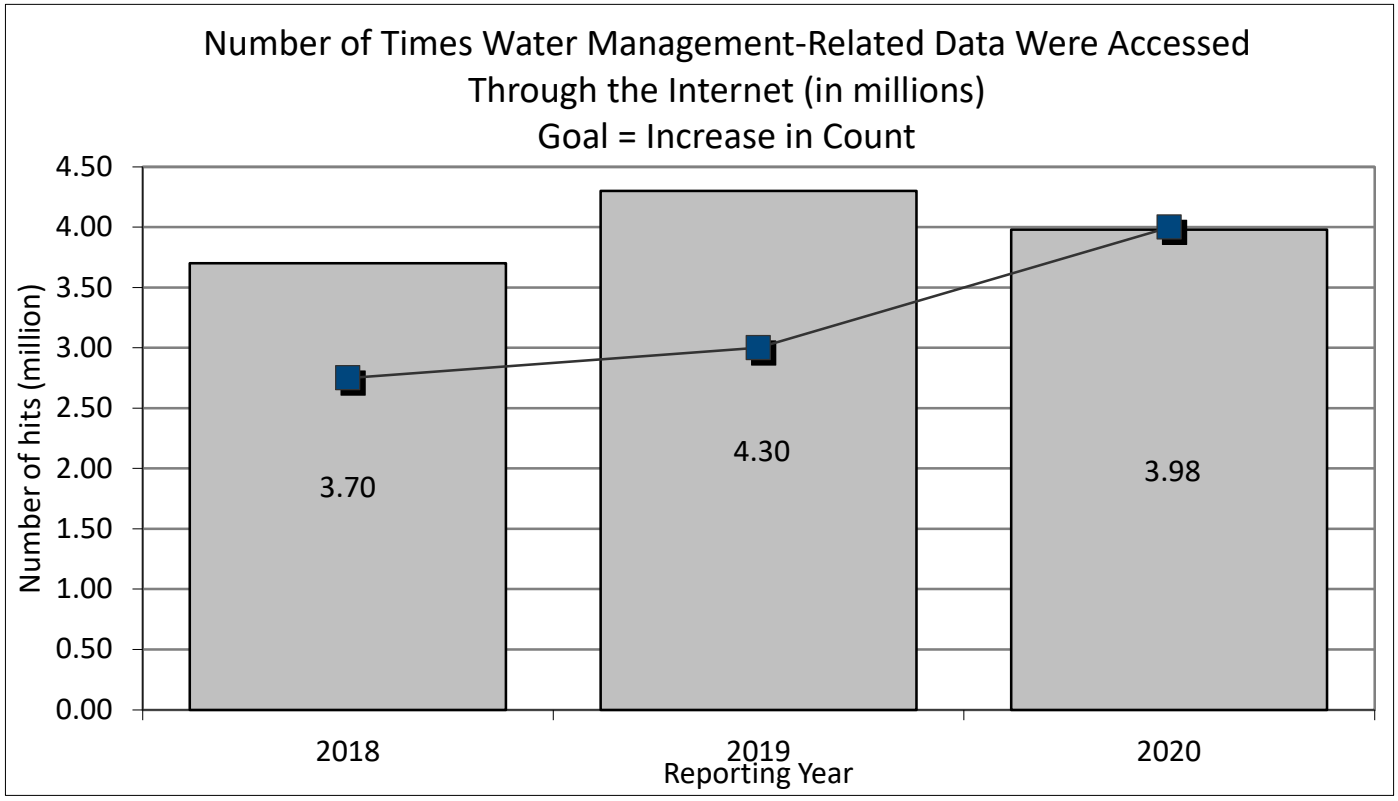
The number of times water management related data is accessed through WRD's website

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 2020 reporting period, the Department experienced approximately 3.98 million hits to its website.
- The Department launched an updated website in September 2018, which was focused on making data easier for the public to find - although individuals accustomed to the Department's prior website are adjusting to the new format, which may account for some of the reduction in hits.
- Calculations for this KPM exclude new web applications for continuity.



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

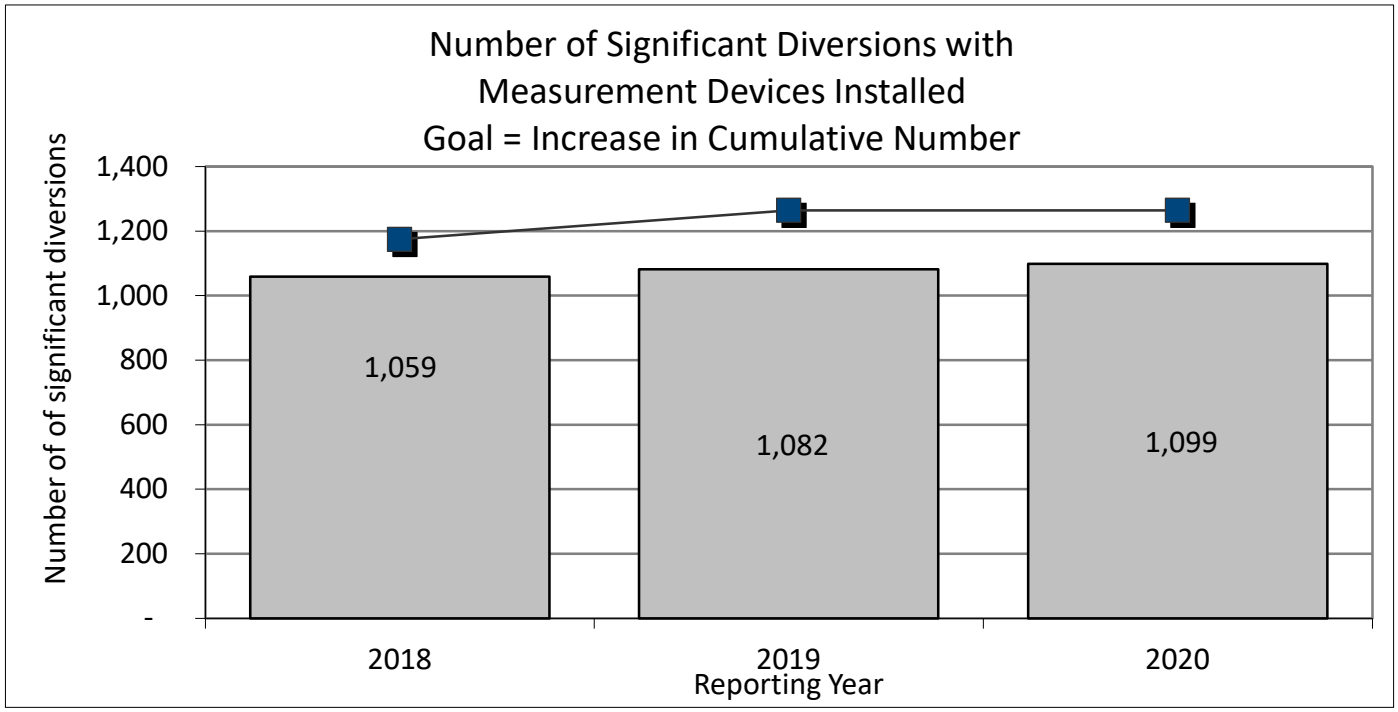
Measured by the number of significant diversions with measurement devices installed

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.
- 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. Work with landowners to install water measuring devices (e.g. weirs, flumes, and meters).
- Provide cost-share funding.

Trends:

- This KPM was created in 2009. Staff efforts, underway since 2000, have resulted in 1,099 measuring devices installed by the 2020 reporting period. In addition, 699 significant diversions are abandoned or not in use. Approximately 511 of the original 2,385 significant diversions still need measuring devices installed.
- 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.
- This KPM does not account for all of the measuring devices installed annually.
- As more watermaster districts complete the work monitored by this KPM, the number of additional devices installed under this KPM will decline reflecting the fewer staff working on it.



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

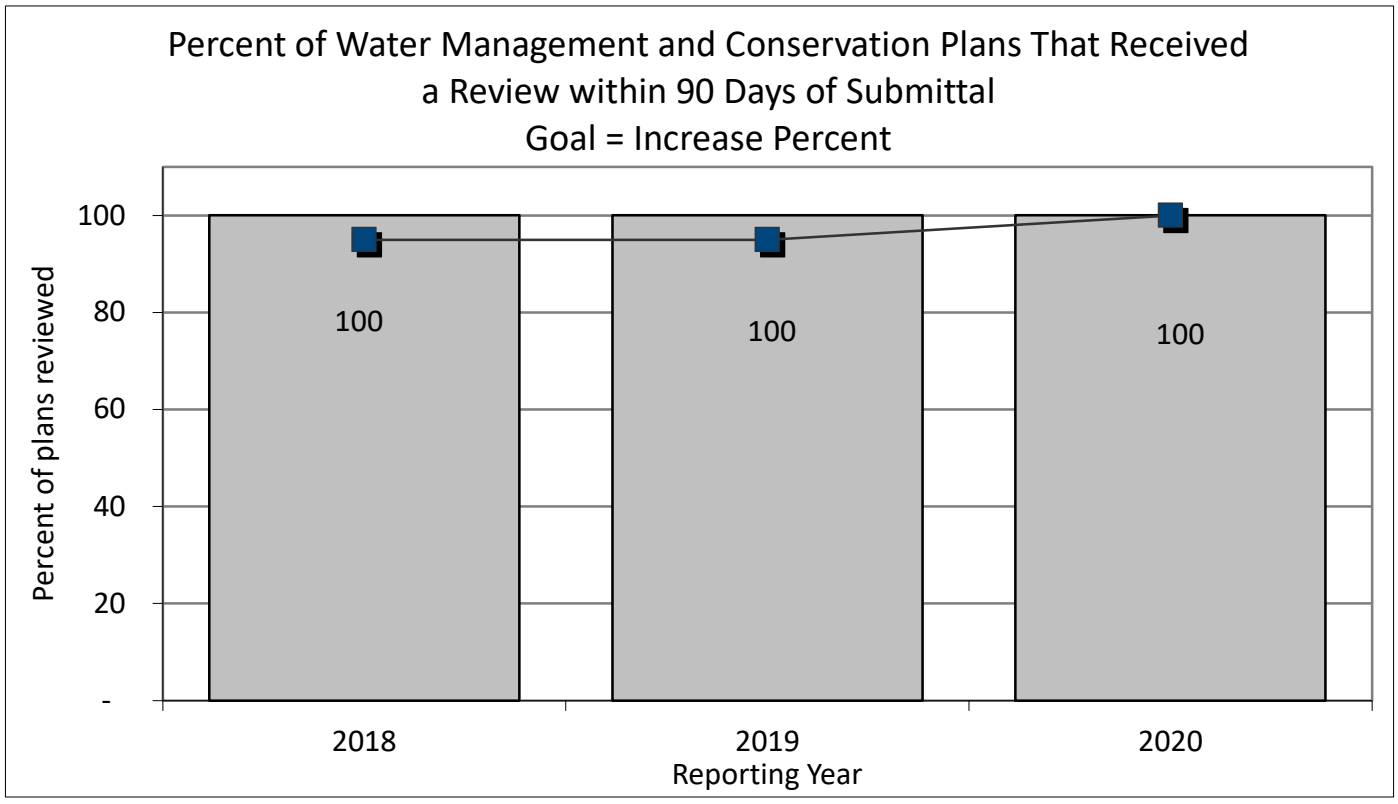
Percent of Water Management and Conservation Plans that received review within 90 days of submittal

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:

- 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.
- 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

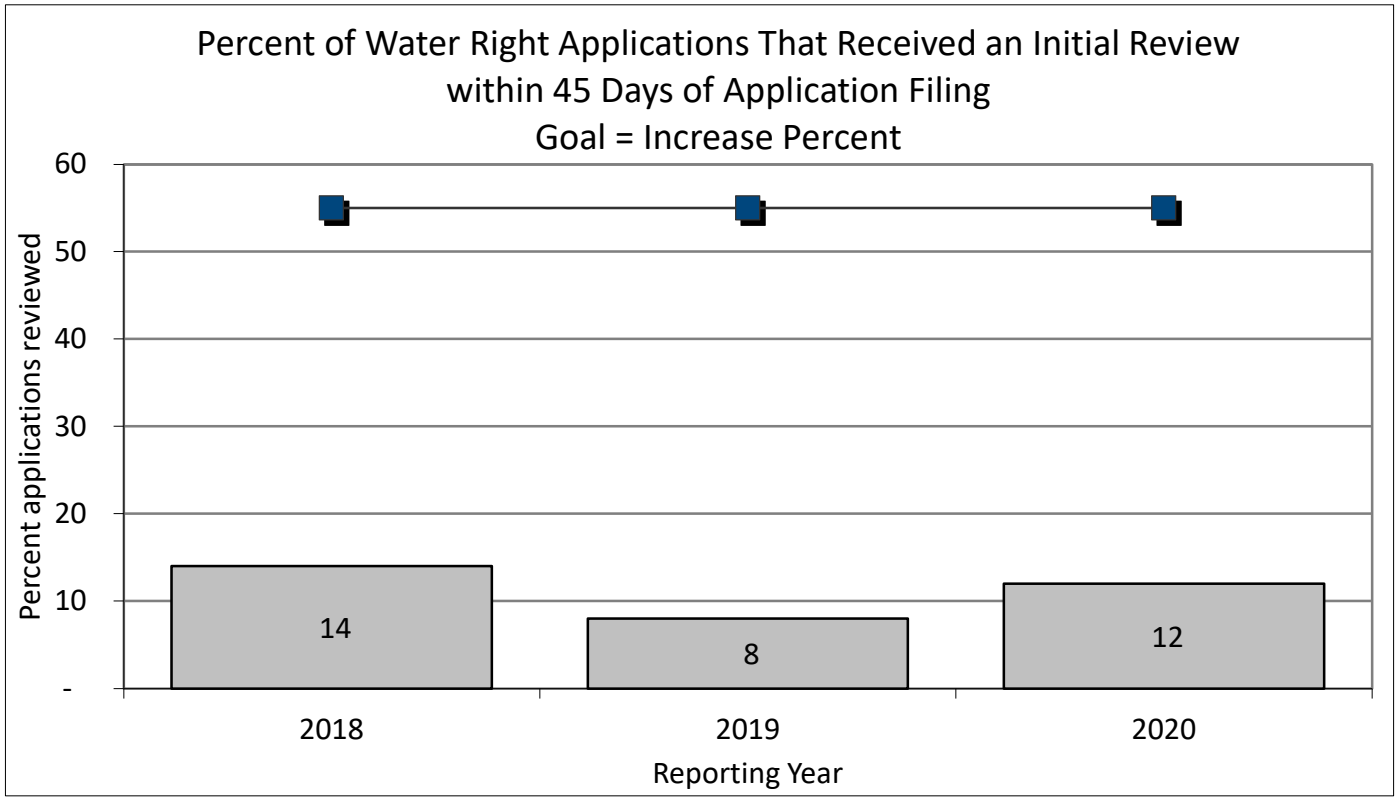
Percent of Water Right applications that receive an initial review within 45 days of application filing

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.
- Ensure adequate staff resources to process applications.

Trends:

- The Department's processing times for surface water applications increased from seven percent in 2018-2019 to 50 percent for this current reporting period.
- Completing groundwater reviews remains a challenge. Groundwater application reviews represent 86 percent of all incoming application requiring an initial review. Groundwater reviews completed within 45 days was 6 percent.
- Budget challenges requiring vacancies, as well as a lack of IT resources pose challenges to success and modernization.
- Demands on Groundwater Section staff include: 1) persistent drought resulting in 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, and 5) participation in local projects.



KPM 11 - Promote Efficiency in Transfer Application Processing

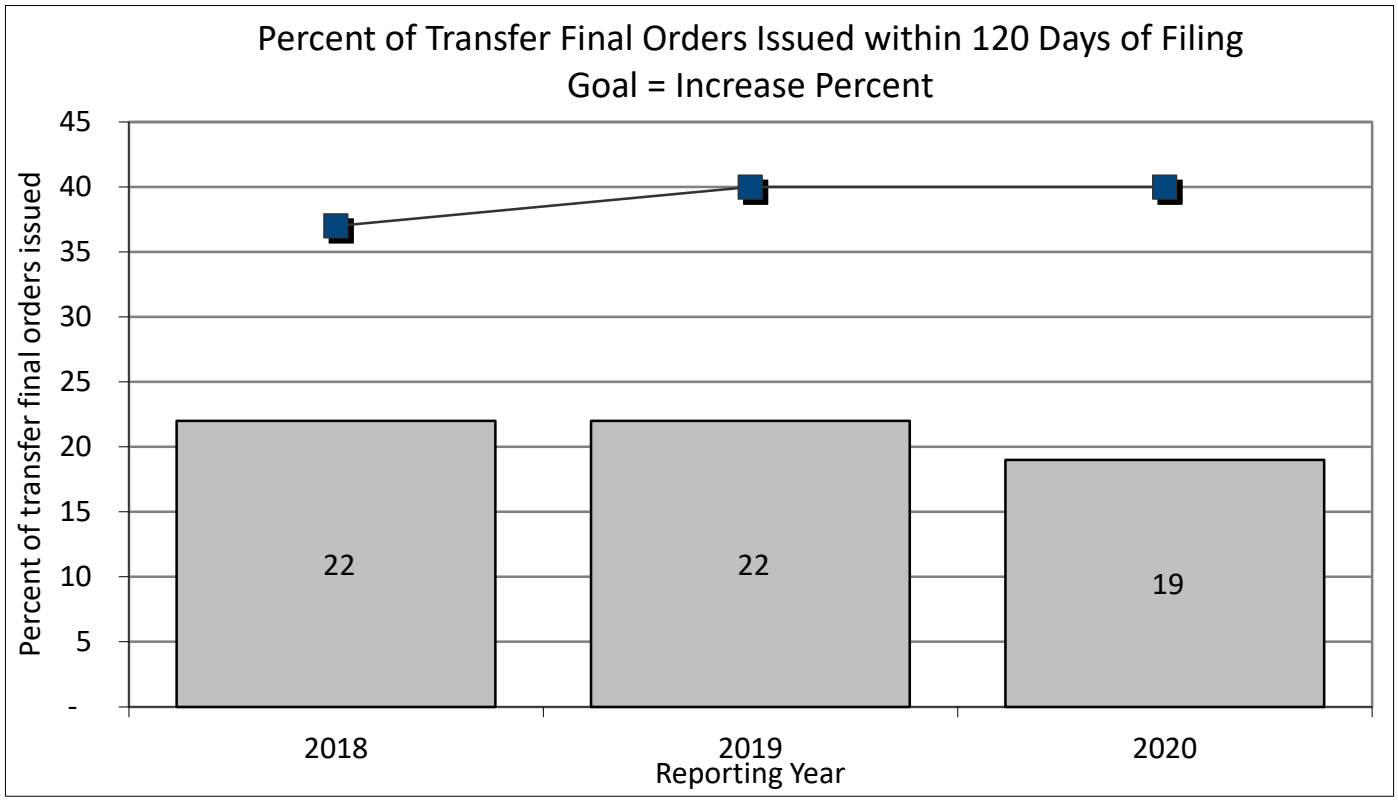
Percent of transfer final orders issued within 120 days of application filing

Strategy:

- Utilize technology to provide more timely and accurate processing.
- Aid applicants in completing and submitting applications.
- Expedite processing under Reimbursement Authority Program.
- Eliminate backlog. Reduce the number of pending applications to less than 212, 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; and 2) the time it takes to conduct groundwater reviews (see KPM 10).



KPM 13 – Increase Water Use Reporting

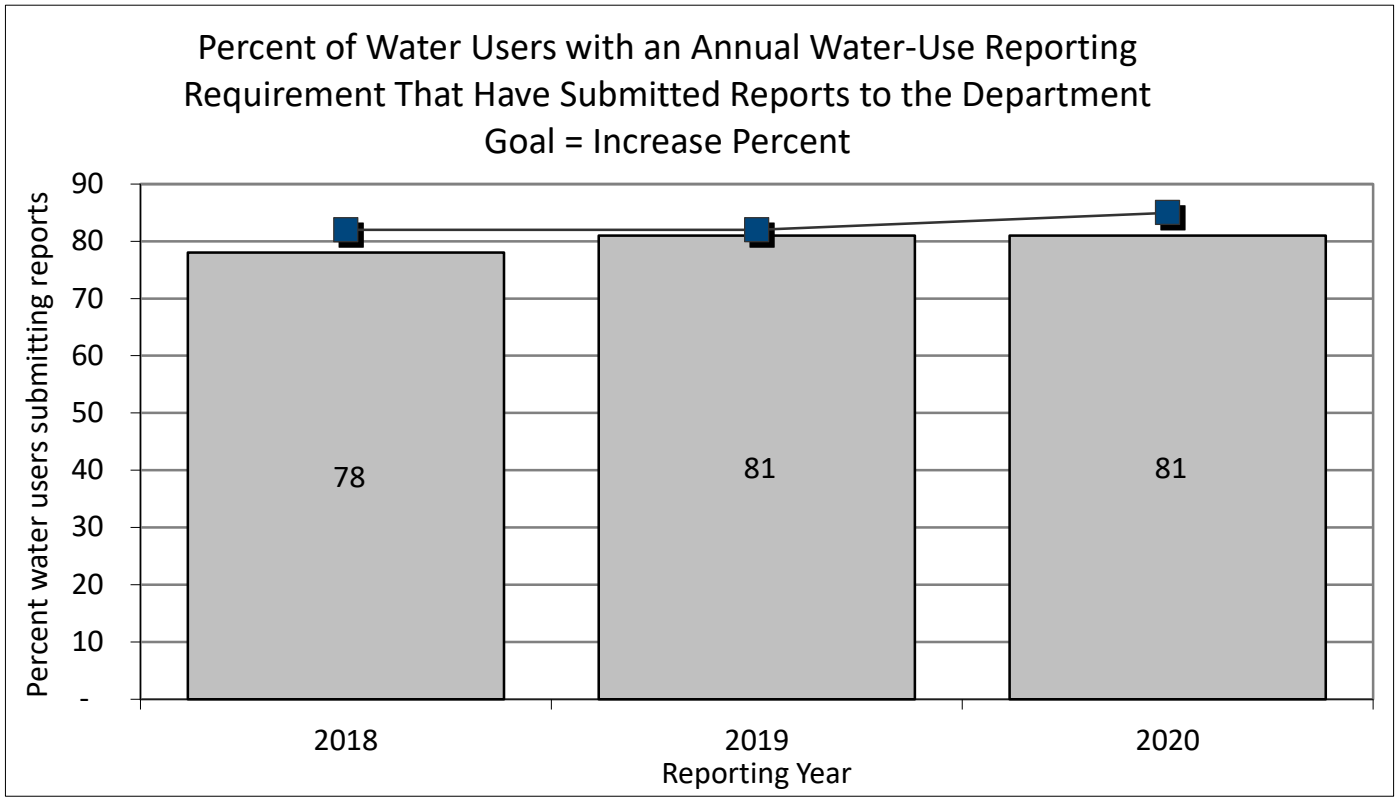
Measured by the percent of water users with an annual water-use reporting requirement that have submitted their reports to the Department

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 online.
- Mail an annual reminder with the appropriate forms and instructions for recording and entering water use information.

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 81 percent compliance for the 2020 reporting period.
- Of the 19 percent not in compliance, 20 percent were government entities, while the remainder were private permit holders. Some that are not in compliance either do not have the equipment or staff resources, or do not have a system to pass on knowledge of the requirement when personnel changes, leading to a lapse in compliance.
- In recent years, each additional percent increase in compliance is more difficult to obtain.



KPM 14 - Customer Service Satisfaction

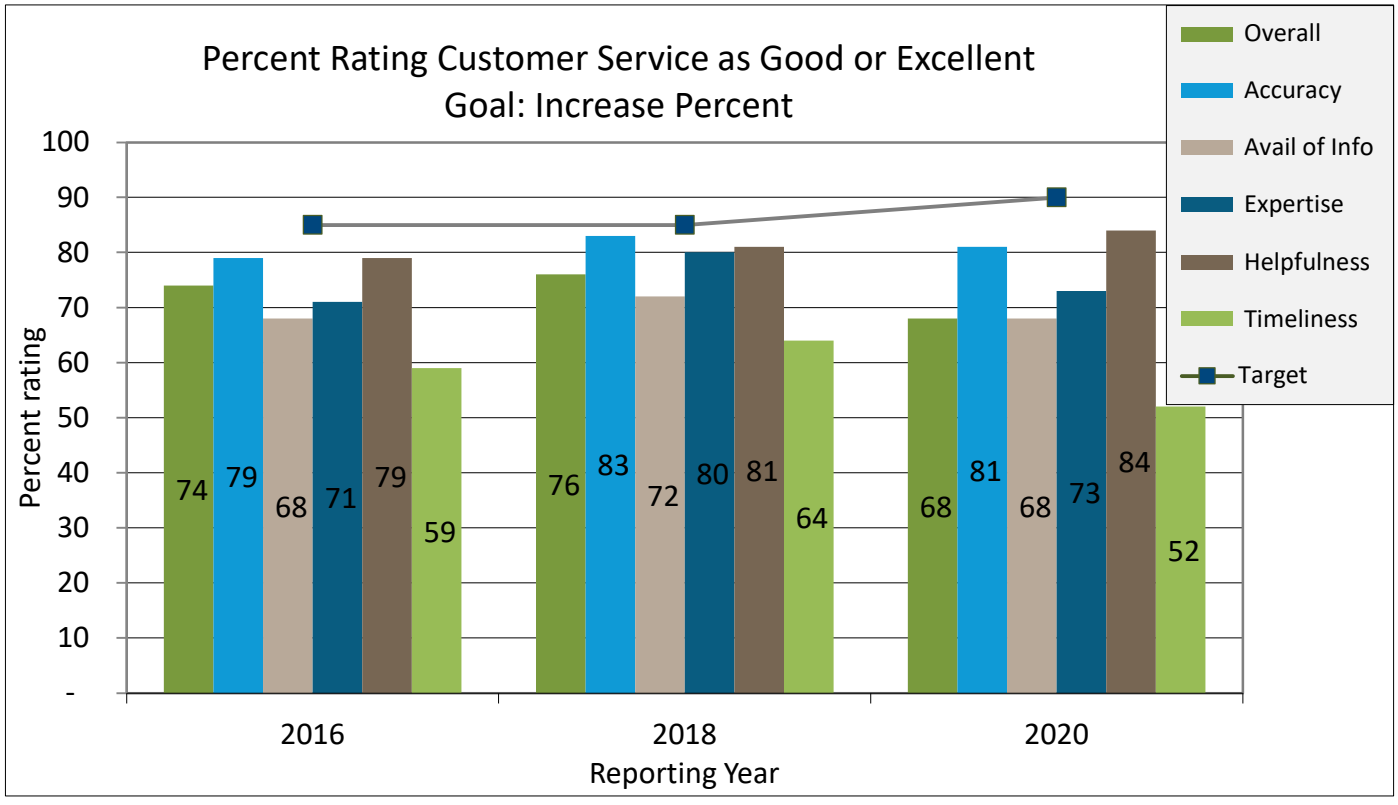
Measured by the percent of customers rating their satisfaction with the Department's customer service as "good" or "excellent" in overall service, timeliness, accuracy, helpfulness, expertise, and availability of information

Strategy:

- Establish a culture of customer service throughout the agency.
- Survey 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 timelier.
- General areas for the Department to work on include: (1) improving processing time and helping applicants realistically understand processing timeframes; (2) developing information to simplify and help applicants better understand the process, criteria and rationale for application criteria and processing times; and (3) identify methods to address applications that are taking longer than usual.

Trends:

- Timeliness continues to be the Department's greatest challenge and influences ratings within other categories. The Department saw declines in rankings of "good" or "excellent" for timeliness (declined by 12 percent), overall performance (eight percent), and expertise (seven percent).
- Leaving positions vacant to manage the Department's budget can affect results, as can other workloads within the Groundwater Section. Groundwater applications account for a significant portion of the transactions processed and take longer to process.
- Helpfulness was the only category showing an increase, which was four percent. Many respondents identified specific staff that were helpful, and helpfulness continues to be a strength of our agency culture.



OREGON WATER RESOURCES DEPARTMENT

Chapter 3: Programs and Organizational Information

AGENCY SNAPSHOT

Summary of Legislatively Adopted Budget, as of February 2020, the Legislatively Approved Budget, as of January 2021, and Governor's Recommended Budget (GRB) by Division.

		FTE	Total Fund
Water Rights Services Division	19-21 Legislatively Approved	37.17	$8,749,247
	19-21 Legislatively Adopted	37.17	$8,783,440
	21-23 GRB	30.84	$8,179,061

The 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	19-21 Legislatively Approved	58.71	$14,886,063
	19-21 Legislatively Adopted	58.71	$14,727,410
	21-23 GRB	56.58	$16,885,088

The division enforces Oregon's water law in the field, and regulates water uses with a newer priority date for the protection of older rights. The division collects water resources data and performs well inspections, as well as inspections of low and significant hazard dams.

Technical Services Division	19-21 Legislatively Approved	49.40	$15,393,850
	19-21 Legislatively Adopted	50.28	$14,991,702
	21-23 GRB:	42.76	$95,776,827

The division performs surface water and groundwater analyses, manages the dam safety program, inspects high hazard dams, conducts enforcement actions, and oversees well construction. This Division also oversees and leads planning, funding, and other water resources development efforts to meet instream and out-of-stream needs.

Administrative Services Division	19-21 Legislatively Approved	12.50	$100,273,074
	19-21 Legislatively Adopted	12.50	$100,056,362
	21-23 GRB:	26.38	$23,113,821

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 and provides information services support for the Department including mapping, database management, and website development.

		FTE	Total Fund
Director's Office	19-21 Legislatively Approved	14.01	$5,013,674
	19-21 Legislatively Adopted	14.01	$5,633,212
	21-23 GRB:	8.88	$4,519,742

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

Total	**19-21 Legislatively Approved**	**171.79**	**$144,315,908**
	19-21 Legislatively Adopted	**172.67**	**$144,192,126**
	21-23 GRB:	**165.44**	**$148,474,539**

GOVERNOR'S BUDGET POLICY OPTION PACKAGES - ADDITIONS

Package 087- State Data Center - $215k GF

Provides $215k of the $340k estimated ongoing information technology costs associated with the Department's migration to Data Center Services.

Package 090- Equitable Water Access and Indigenous Energy Resiliency - $1.5 million GF

Provides funding for equitable water access and Indigenous energy resiliency as recommended by the Racial Justice Council. Investments focus on exploring water needs of Black, Indigenous, Tribal, rural and communities of color, addressing Indigenous treaty water rights, water scarcity, hydropower, and ecosystem services. Funding to conduct community led assessments of water needs of Black, Indigenous, Latino, Latina, Latinx, Asian, Pacific Islander, Native American, and Tribal communities; convene a Justice, Equity, Diversity, and Inclusion Advisory Group as part of the Integrated Water Resources Strategy; and to assess and facilitate implementation of best practices to advance diversity, equity and inclusion within the Department's programs and processes.

Package 101 – Protecting Public Safety and Water Supplies - $1.9 million GF; 3.52 FTE

Protects public safety through the evaluation of dams and improves agency preparedness for emergencies, resiliency to natural hazards and climate change, and employee health and safety. Provides two engineers to assess dams for seismic, flood and other safety risks; $400k for an Oregon flood methodology for dams, and $600k for engineering analyses on dams. Includes one position for coordination, planning and outreach on earthquakes, drought, floods, climate change, and dam failures, and work on Natural Hazards Mitigation, Climate Adaptation, the Governor's Climate Executive Order, the Continuity of Operations Plan, and planning for and responding to potential dam failures. Includes a position for a safety and training program to support statewide initiatives and to comply with ORS 654.010, the Governor's EO on Employee Wellness, and Oregon OSHA regulations. Integrated Water Resources Strategy (IWRS) Actions: 5.A, 5.B, 5.5A, 5.5B, 5.5C, 7C, 8C, 13.B.

Package 103 – Fund Legal Expenses to Prevent Service Impacts - $800k GF

Provides funding to address sustained increased costs for DOJ services and to prevent impacts on Department services due to budget shortfalls, as experienced in prior biennia. See Budget Note Report on Contested Cases and Litigation. IWRS Recommended Action: 13.B.

Package 104 – Maintain Water Rights & Dam Safety Services -$565k OF Revenue, $527k OF limitation; 2.50 FTE

The current fee schedule provides ~$300k to support 0.95 FTE in the Dam Safety program and ~$2.4 million to fund 21.42 FTE: 17.93 FTE in the Water Right Services Division, 0.5 FTE in the Groundwater Section, 2.0 FTE Water Right Data Techs, and 1.0 Field Water Right Processing position. Consistent with its past approach, proposes to increase fees by approximately 17.39 percent for the 2021-2025 biennias, per the Department of Administrative Services estimates of cost inflation for state agencies. The fee

increase will allow the Department to continue to serve farmers, water supply providers, entities seeking to restore streamflows, and others on their water rights proposals at a reduced staffing level, and to support the dam safety program. Retains 2.50 of the 8.83 FTE reduced in POP 070. IWRS Actions 13.B.

Package 105 – Maintain Hydroelectric Services at Agencies - $1.3 million OF Revenue

This package and associated legislation will change the hydroelectric project fees that support hydroelectric programs at Department of Environmental Quality, Department of Fish & Wildlife, and the Water Resources Department. The proposal will address disparities in fees paid among projects and address agency revenue shortfalls at all three agencies due to increased costs. IWRS Actions 13.B.

Package 108 – Fund Feasibility Studies & Projects - $21.7 million OF

Provides a $500,000 in Lottery Revenue Bond proceeds for Feasibility Study Grants to provide funds to investigate the viability of water conservation, storage, and reuse projects. Recapitalizes the Water Supply Development Account with $20 million in Lottery Revenue Bond proceeds in order to fund for Water Projects Grants & Loans for water projects that provide economic, environmental, and social benefits to meet Oregon's ongoing instream and out-of-stream water needs. Includes cost of issuance. IWRS Actions 10.E, 13.D, 13.E.

WATER RIGHTS SERVICES DIVISION

The Water Right Services Division supports the allocation of water for instream and out-of-stream purposes, 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, instream water rights including transfers and leases, water right transfers (changes to existing water rights), requests for extension of time to further develop existing water rights and transfers, water management and conservation plans, allocations of conserved water, limited licenses, determinations of pre-law water uses through adjudications, and hydroelectric licensing.

Program Contact: Dwight French
503-986-0819

Snapshot

Customers	Funding Source	Mod CSL Expend w/o Pkgs	GRB Expend	Case / Workload
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 Positions/FTE	$ 4.4 M $ 3.6 M $ 0.02M 30/28.34	$4.2 M $ 3.9 M $ 0.02 M 33/30.84	Water Right Application, Transfer, Extension, Water Management and Conservation Plan, Allocations of Conserved Water Processing; Certificate Issuance; Adjudication Processing; Hydroelectric Licensing; Protests; Cancellations

Under Oregon law, almost all water users, including agriculture, 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 comments and protests from water right holders, citizens and interest groups concerning water use applications.

The Division administers the following water right-related programs and processes:

- New Water Right Applications – Instream and Consumptive
- Extensions of time
- Hydroelectric licensing
- Limited (short-term) license applications
- Protests
- Water conservation and management plans
- Customer service and record management
- Drought-related use permits
- Water right certification
- Water right transfers
- Allocations of conserved water
- Adjudication of water right claims based on water use that pre-dates the 1909 Water Code, federal reserved rights, and tribal rights

Program Description

The Division supports the agency's mission by evaluating and acting upon various water right applications and working with certain cities and irrigation districts to promote conservation and efficient water use. Under Oregon law, almost all water users must apply for and receive a water right before initiating water use. The Water Right Services 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. The Division also administers the following related programs and functions: limited licenses; emergency drought-related authorizations and water right transfers; customer service and record management; protests and cancellations; 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, allocation of conserved water projects, and review of water management and conservation plans.

The Division is also responsible for developing the weekly public notice of applications and responding to public comments. The Division receives and evaluates comments from interest groups and the public, as well as protests concerning water use applications.

Seven major programs are administered by this Division and described below.

Water Rights Section

Water Right Application Review - Generally, in order to use water in Oregon an individual must obtain a water right permit. During the 2019-2021 biennium, the focus of the water right application program was to maintain the timely processing of water right applications and continue efforts to systematize and automate processes. The Division also continues to focus efforts on the resolution of protests filed on new water right applications. The complexity of application review is increasing as less water is available for appropriation while demands for competing needs continues to grow. Frequently, water right applications are for groundwater use, which involves a more complex technical review, compared to other application types. For these reasons, the Department expects that the number of protested applications will grow in the future.

Customer Service and Record Management - Based out of the Department's Salem office, the Water Right Services Division is responsible for assisting customers with a wide variety of water right matters. Division staff maintain a customer service counter that provides services to the public, which includes assisting with applications, locating water rights on a property, and directing customers to other appropriate staff within the Department. The Division also maintains and manages all of the Department's official water right records.

The Division works to provide a high-level of customer service through pre-application conferences, timely reviews of applications for completeness, striving for a one-day call-back policy, and making refinements to improve the customer service experience. The Department continues to upgrade its website, application guidance materials, and research tools, creating greater public access to information, water right records, and associated data.

Certificates

After a permit is issued, the permittee generally has up to five years to develop the water use 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 1,208 as of July 1, 2020, including new requests the Department continues to receive each year. It will take the Department approximately 2 years to eliminate the backlog entirely provided that staffing levels in the Certificate section do not change, receipt of new requests remains relatively stable.

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. More recently the division received 134 in 2017, 119 in 2018 and 111 in 2019. 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 obtaining water for new purposes 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 existing water rights.

While transfers can only be completed for specific types of water rights, permit amendments and groundwater registration modifications can allow for changes to other types of rights that are not eligible for transfer. The Transfer and Conservation Section is responsible for receiving and processing water right transfer, permit amendment, and groundwater registration modification applications. Water right transfer applications include not only standard transfers, but also district transfers, temporary transfers, emergency drought transfers, and instream transfers.

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. As of June 2020, the backlog has dropped to 302, meaning the Department has reduced the backlog while still receiving and processing new transfer applications. 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, 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 between 100 and 120 lease applications annually, with a goal for average processing time being 45 days. Several years ago the processing time was near 90 days. There is no backlog for instream lease processing.

Since 2016, the Department has received an average of four instream transfers annually. In recent years, the Department has trained additional staff to process instream transfers resulting in shorter processing timelines; as compared to more lengthy processing timelines when only one staff person was trained and available to process these applications.

In addition, the number of allocations of conserved water averages six to seven per year. In the past, some applications took more than two years to process, but, due to a thorough process and efficiency review in 2013, processing of these applications is now taking about six months.

Water Supply and Conservation Planning - Staff 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 are considered for cost-effectiveness and feasibility. The approach is intended to help water suppliers improve their water use efficiency over time and identify least-cost options for meeting future water needs. In the most recent four fiscal years, 100 percent of the plans received by the Department were reviewed within the 90-day review goal.

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, represented by the Department of Justice, continues its involvement 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 approximately 160 existing hydroelectric projects in Oregon. These fees support hydroelectric programs to the Department as well as the Departments of 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.	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.	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.	ORS Chapter 539; ORS 539.010; ORS 537.665 to 537.700;

Hydroelectric Program: Coordinating agency for project re-authorization and FERC licensing, review of non-FERC applications.	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 set in statute.

	Water Right Services Division				
	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
2019-21 Legislatively Adopted Budget	3,921,241	4,803,532	-	24,474	8,749,247
2019-21 Emergency Boards	-	-	-	-	-
2019-21 Legislatively Approved Budget	3,921,241	4,803,532	-	24,474	8,749,247
2021-23 Base Budget	4,263,617	5,168,509	-	25,000	9,457,126
2021-23 Current Service Level	4,355,764	5,246,276	-	25,000	9,627,040
2021-23 Modified Current Service Level	4,355,764	3,557,283	-	25,000	7,938,047
2021-23 Governor's Recomended Budget	4,203,657	3,950,404	-	25,000	8,179,061

TECHNICAL SERVICES DIVISION

The Technical Services Division collects, analyzes, and publishes surface water and groundwater data to provide the Department with the best available science for water management decisions to support a healthy environment and communities and a strong economy. The Division supports long-term water management by providing data and technical analysis. 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. This Division also oversees and leads water resources development efforts to meet instream and out-of-stream needs.

Program Contact: Doug Woodcock
(503) 986-0878

Snapshot

Customers	**Funding Source**	**Mod CSL Expend w/o Pkgs**	**GRB Expend**	**Case/ Workload**
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 Lottery Funds Federal Funds Positions/FTE	$ 10.4 M $ 63.6 M - $ 0.6 M 42/41.13	$ 9.9 M $ 84.5 M $ .8 M $ .6 M 43/42.76	Dam Inspections and Reviews, Groundwater studies and data, Surface Water Hydrologic Records, Technical Water Right Reviews, Water Resources Planning and Development, Well Construction / Compliance.

The Technical Services Division supports long-term water management by providing data and technical analysis, water planning and grant support of for water projects, as well as protecting public safety through dam safety and well construction programs. Programs include:

- Aquifer Storage and Recovery / Artificial Recharge
- Dam safety program
- Emergency Preparedness (drought and flood projections / preparedness)
- Groundwater science, investigations, and management
- Surface water data and analysis / water availability / hydrographics
- Well construction, compliance, and enforcement
- Well driller licensing / continuing education
- 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
- Water use measurement and reporting

Programs

The five sections of the Technical Services Divisions are discussed in more detail below.

Dam Safety Program

The Dam Safety Program is responsible for inspecting dams, and reviewing the designs of new water storage structures and existing structures undergoing major repair. 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 Department has lead inspection responsibility for more than 900 dams, and strives to inspect more than 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, and failure is likely to result in damage to life and property. Approximately 150 dams are rated significant hazard, meaning that failure is likely to result in damage to property or infrastructure, but is not likely to result in loss of life. All other dams are considered low hazard.

The 2009 Legislature established a fee to help pay for the costs of this program. Staff engineers conduct inspections of high hazard dams and work with field services staff to complete inspections of significant and low hazard dams.

The Dam Safety Program houses the State Engineer. 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. In addition to providing technical oversight of the Dam Safety Program, the State Engineer also provides technical support for the agency's water resources development initiatives. 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 responsibilites. The amount of program staff and funding resources has historically been inadequate to inspect and assess dams across the state, especially as these structures age and require more maintenance and repairs, and in light of new information about floods, earthquakes, design deficiencies, and climate change. 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.

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 – There are more than 250,000 wells in Oregon, with approximately 3,000 new wells drilled each year on average. These wells provide a variety of benefits, from domestic drinking water to water for irrigation, cities, nurseries, industry, and other uses. The Water Resources Department is responsible for helping protect these uses and the people, ecosystems, economies, and communities that rely on aquifers to meet their water needs. The Department's Well Construction Program seeks to ensure that well constructors and landowners use proper well construction,

maintenance, and abandonment techniques to protect aquifers and sustain water supplies from depletion, waste, contamination, and loss of artesian pressure.

The section administers minimum well construction standards, well constructor continuing education, well inspector training, exempt use well recording, landowner well construction permits, geotechnical hole standards, special standard application reviews, well identification label issuance, and well constructor licensing. The section works to ensure that well constructors and landowners understand the importance of protecting aquifers using proper construction, maintenance, and abandonment techniques. Staff members advise drillers and landowners to ensure compliance with minimum well construction standards, and coordinate with Field Service Division well inspectors to follow up on issues found during inspections. Section staff assists the public in conducting well log research, interpreting well log data, submitting exempt use well maps, obtaining landowner well construction permits, and issuing Well ID labels.

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 99 percent of the time, there are violations of water law that require formal action. Water use violations generally involve diverting or storing water 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.

Water Resources Development Program

Identifying, investigating, and implementing water supply options to meet both instream and out-of-stream water needs is essential for healthy economies, communities, and ecosystems. The Water Resources Development Program partners with communities, individuals, and basins to provide planning, technical, and financial assistance to help meet instream and out-of-stream water needs. These efforts include financial and technical support for communities to engage in place-based planning to understand water needs and identify potential solutions, grants for feasibility studies to assess the viability of a project idea, and finally grants to implement projects. The Program also engages in strategic partnerships to connect communities to additional resources, such as private funding and additional technical assistance.

Place-Based Planning- Place-based integrated water resources planning (also known as place-based water planning) is a voluntary, locally initiated and led effort, in which a balanced representation of water interests work in partnership with the state to understand and meet their instream and out-of-stream water supply needs. In 2015 the Department developed guidelines that provide a framework for planning. The Department is a partner in these planning efforts and provides financial, technical, and planning assistance to the communities testing the guidelines. There are currently four places that are piloting the place-based, collaborative, and integrated approach to water planning.

Feasibility Study Grants- Feasibility Study Grants reimburse up to 50 percent of the costs of studies to evaluate the feasibility of developing water conservation, reuse, and storage projects. This competitive funding opportunity helps individuals and communities investigate whether a project is worth pursuing. Grants are offered on an annual basis, with applications due each fall.

Water Projects Grants and Loans- Water Project Grants and Loans provides funding for projects that help Oregon meet its in stream and out-of-stream water supply needs and produce economic, environmental, and social/cultural benefits. This is a competitive funding opportunity that is meant for implementation-ready projects. Grants and loans are offered on an annual basis, with the applications due each spring.

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 and co-chairs the Drought Readiness Council

Hydrographics – The Surface Water Section coordinates with the Field Services Division to operate and process data from approximately 260 surface water 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—particularly in light of the need to understand climate change impacts on hydrological systems to better anticipate and prepare for anticipated challenges for those who rely on water for their lives and livelihoods. The Department operates gages to serve two primary purposes: scientific evaluations and water management (for both distribution and regulatory purposes). Most of the gages are operated as near real-time and transmit data once every hour.

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, reservoir, 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 United States Geological Survey (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, considering existing instream and out-of-stream water rights. Basin runoff characteristics and streamflow measurements are analyzed to estimate flow in streams where gages are not available. Streamflow statistics and water availability are also used for water supply and stream restoration planning. In addition to the statewide water availability analysis, other surface water models have been developed that provide flood frequency predictions, estimate consumptive use, and water use impact analyses for consideration in mitigation proposals. Section hydrologists provide flow recommendations for newly designated scenic waterways. They also provide technical guidance in tracking mitigation opportunities in the Deschutes Basin to allow development of groundwater using mitigation credits to maintain or improve streamflow and protect scenic waterways.

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 537.099 to annually report their water use. Beginning in the early 1990s, some water use permits issued to nongovernmental users included a water measurement and annual

reporting requirement under the authority of ORS 537.211. 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 supports the agency's mission through implementation of the Groundwater Act of 1955 (ORS 537.505 to 537.795 and 537.992) and related administrative rules. Groundwater section staff participate in all facets of the agency's core work as described in its 2019-24 strategic plan. They are the primary entity responsible for collecting groundwater data statewide, organizing and interpreting that data, and applying that data and information to support analysis of groundwater right transactions, distribution and regulation of groundwater, and planning efforts to meet future groundwater needs.

Data and Information- Groundwater investigations characterize the water budgets of groundwater aquifers, 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.

Section staff, in cooperation with the Field Services Division, collect 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. The data are quality-control checked and entered into a database that is available through the Department's 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.

Water Right Transactions- 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, reviewing data collected by water users, and technical analysis of proposed groundwater-related legislation and rules. Department hydrogeologists also provide technical input for mitigation opportunities. The mitigation program in the Deschutes Basin is designed to allow development of groundwater while offsetting impacts through mitigation credits to maintain or improve streamflow.

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

Allocation and Management of Groundwater- There are 22 designated groundwater administrative areas around the state with differing levels of restriction. These include critical groundwater areas,

groundwater limited areas, groundwater mitigation areas, significant groundwater management problem areas, and areas withdrawn from further appropriation. Some areas are closed to new appropriations, restrict existing uses, or have well construction or water use measurement and reporting 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 and, where applicable, determine the annual allocation of groundwater available to senior water right holders.

Department hydrogeologists work with other sections of the agency to provide technical expertise to assist with the resolution of interference between water wells and surface water, help to address complaints regarding well-to-well interference, and assist with other groundwater enforcement matters.

Meeting Future Needs- Section staff support the Department's Place Based Planning program by responding to technical information requests, participating in PBP pilot-project meetings, and providing technical review of the groundwater aspects of Water Resource Development Program grant funding applications.

Enabling Legislation/Program Authorization

Oregon water law is addressed in Oregon Revised Statutes (ORS), chapters 536 through 541.

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

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

Well Construction and Enforcement: ORS 537.747 through ORS 537.796 and ORS 537.880 through ORS 537.895 provides 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 provides that certain water users must measure and report water use, directs the Department to establish and maintain gaging stations; publish gage records, and analyze surface water.

Water Resources Development Program: ORS 541.561 to 541.581; ORS 541.651 to 541.696 provides requirements for feasibility study grants and water projects grants and loans. 2015 Oregon Laws Chapter 780 provides authorization for grants for place-based planning.

Funding Streams

Funding for the Technical Services Division operations comes primarily from the state General Fund. Other Funds include dam safety fees, gaging station agreements, fees for newly constructed wells and the mapping of those wells in the Department's online databases, and Lottery Revenue Bond proceeds supporting the Water Resources Development funding opportunities. Federal Funds are received from the Federal Emergency Management Agency (FEMA), the Bureau of Reclamation (BOR) and United States Geological Survey (USGS).

	Technical Services Division				
	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
2019-21 Legislatively Adopted Budget	7,794,158	3,529,998	-	594,071	11,918,227
2019-21 Emergency Boards	-	-	-	-	-
2019-21 Legislatively Approved Budget	7,794,158	3,529,998	-	594,071	11,918,227
2021-23 Base Budget	9,635,035	3,895,306	-	613,777	14,144,118
2021-23 Current Service Level	10,421,013	63,617,887	-	575,000	74,613,899
2021-23 Modified Current Service Level	10,421,013	63,617,887	-	575,000	74,613,899
2021-23 Governor's Recomended Budget	9,929,622	84,461,119	819,246	566,840	95,776,826

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 prior appropriation system and protect against illegal use and waste. The Division collects surface water and groundwater data, conducts dam safety inspections, responds to complaints, and provides input on water right transactions.

Program Contact: Ivan Gall
971-283-6010

Snapshot

Customers	Funding Source	Mod CSL Expend w/o Pkgs	GRB Expend	Case/Workload
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 and Other Public Interest Organizations	General Fund Other Funds Federal Funds Positions/FTE	$ 13.1 M $ 3.2 M $ 0.08 M 61/58.71	$ 13.8 M $ 3.1 M $ 0.08 M 58/56.58	Enforcement, Water right distribution and management, Inspection of Low and Significant Hazard Dams, Inspection of Wells, Collection of Data, Technical Assistance

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 of Water
- Well Construction Inspection
- Assisting Technical Services Division with Dam Safety Inspections, primarily for low and significant hazard dams
- Collection of Hydrologic Data (Surface Water and Groundwater)
- Customer Service in Field offices
- Working with/advising 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's policies in the field. Staff regulate water uses based upon the water rights of record; inspect wells in coordination with the Well Construction and Compliance section for the protection of the groundwater resource; inspect the construction and maintenance of low or significant hazard dams in coordination with the Dam Safety Program for the protection of public safety and the environment; and collect water resources data that are made available for use by staff, scientists, other agencies, and the public for water management and planning purposes. The Division also works with numerous watershed planning groups and local land-use jurisdictions, providing technical assistance to understand water resources data and management, and support the place-based planning effort within the Director's office. Staff also regularly interface with the public and water users, providing information on water law, water rights, and well construction. The Field Services Division contributes to IWRS recommended actions 1.B (Improve water resources data collection and monitoring), 2.B (Improve water use measurement and reporting), 10.A (Improve Water-Use Efficiency and Water Conservation), 10.F (Provide an Adequate Presence in the Field), and 11.B (Develop Additional Instream Protections).

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. During 2019, the Field Services Division reorganized, which resulted in watermaster district 19 being abololished on the South Coast and split between the Roseburg (taking Coos County) and Grants Pass (taking Curry County) offices. Staff from district 19 moved to Salem and a new watermaster district (district 22) was formed in the Willamette Valley and staffed out of the Salem office. The reorganization was implemented to balance workloads and strategically handle complex water issues.

In terms of surface water management activities, field staff operate between 250-260 streamflow recording stations each year; in 2019 there were 252 active gaging stations. In 2019, field staff conducted 2,722 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 collected by Field Staff are processed and analyzed by the Surface Water Section. 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 2019, field staff also made 106 dam safety inspections of low and significant hazard dams in coordination with the Dam Safety Program, checking dams for indications of instability and water movement in order to protect downstream landowners.

In 2019, groundwater management activities of Department staff included 823 well inspections of new wells and 2,946 groundwater measurements in wells. Well inspections ensure that wells are properly constructed in order to protect groundwater supplies from waste and contamination, and to preserve the use of the aquifer for those that rely on it. 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.

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. Counties provide much of the budget for the locally funded positions. State law has recognized the role of counties in

supporting water management since 1909. Under current statutes, counties may fund and 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. As of 2020, the number of locally funded part time and full time assistant watermasters and office assistants had declined from a total of 37 in the 1980's to 11.5 statewide, with several other counties providing funds for seasonal temporary assistants. Over this period, the loss of county funded positions has not been directly replaced with new state-funded positions, resulting in a net loss of field capacity. The number of locally funded staff continues to be a challenge as counties face reduced revenues.

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
2018	7,541*	947
2019	5,757	932

The watermaster corps is the sole provider of water regulation and distribution in Oregon. In 2018(*), a new Field Activities Database (FAD) was brought online, resulting in more detailed tracking of field staff activity and improved location of actions. Prior to 2018, regulatory actions were defined prior to 2018 as either actions by the watermasters corps that caused a change in water use behavior, or field inspections that determine no change is necessary. With the new FAD, a regulatory action is now defined as an action by staff that causes a change in water use behavior. Compliance checks, now tracked separately and in more detail, confirm that the water use is as it should be, or additional regulatory actions are taken by the watermaster. The number of regulatory actions and compliance checks gages the field workload and the number of communications with water right holders. This workload 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. A part of the increase in regulatory actions beginning in 2013 resulted from regulation for determined claims in the Klamath Basin. The data show an increase between 2014 and 2015, due to a severe drought in 2015, and the legalization of cannabis in 2015. Increases in workload responding to droughts are a challenge for field staff, and mean that workloads are prioritized accordingly. Both the cannabis and hemp industries have increased complaints and regulatory actions, particularly in Southwestern Oregon.

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. The Department's goal is to inspect no less than 25 percent of all newly constructed wells. Of the total

inspections in 2019, 823 were conducted on new construction, representing an inspection rate of 27 percent of all new wells.

The number of personnel in the field has dwindled over the years. Department field staff have historically been supplemented by as many as 37 (1980s) county-funded staff to augment services for water users within specific counties. Counties now support only 11.5 field-related full and part time staff, with several counties providing some funding for temporary seasonal help. This reduction in field presence has been significant, given the large responsibilities involved, the need for more management of the resource as the system becomes fully allocated, and the ever increasing number of water rights and new responsibilities. In south central and southeast Oregon, for example, watermaster Districts 10 and 11 regulate and distribute water across 11,716 and 11,727 square miles of land. In northwest Oregon, the District 22 watermaster is responsible for 119 dams that need routine inspection and site visits.

There is a strong need to increase the field presence at the Water Resources Department to support the wide range of activities needed for effective wate management. These staff members include watermasters, well inspectors, and field technicians. Field personnel manage and distribute water; ensure compliance with permit conditions; guard against waste, contamination, and loss of artesian pressure; inspect for hazards; and collect critical data. Strengthening Oregon's field-based work requires financial investments and a continued partnership with other agencies to carry out our shared responsibilities.

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 9 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 (ranging from $5,000 to $25,000), 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.

Enabling Legislation/Program Authorization

Oregon water law is laid out in Oregon Revised Statutes (ORS), chapters 536 through 543. 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 field inspections and data collection. 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 work of the Field Services Division.

Field Services Division

	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
2019-21 Legislatively Adopted Budget	11,616,792	3,062,297	-	206,974	14,886,063
2019-21 Emergency Boards	-	-	-	-	-
2019-21 Legislatively Approved Budget	11,616,792	3,062,297	-	206,974	14,886,063
2021-23 Base Budget	12,762,630	3,231,820	-	225,929	16,220,379
2021-23 Current Service Level	13,141,554	3,155,230	-	75,000	16,371,784
2021-23 Modified Current Service Level	13,141,554	3,155,230	-	75,000	16,371,784
2021-23 Governor's Recomended Budget	13,751,465	3,058,623	-	75,000	16,885,088

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. The Director's Office includes the Director, Deputy Director, Executive and Commission Assistant, and Policy Section staff.

Program Contact: Racquel Rancier
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Snapshot

Customers	Funding Source	Mod CSL Expend w/o Pkgs	GRB Expend	Case/Workload
Cities; Counties; Consultants; Federal Agencies; State Agencies; Watershed Councils; Tribes; Water Right Holders; Public Interest Organizations; Legislators and Congressional Offices; General Public; Irrigation Districts and Special Districts; Conservation Groups; Media	General Fund Other Funds Federal Funds Positions/FTE	$ 3.6 M $ 0.01 M $ 0.02 M 8 / 8.00	$4.5 M $0.01 M $ 0.02 M 9 / 8.88	Commission meetings and actions, Contested Case hearings, Rules, Citizen Response, IWRS, Legislation, Public Records, Communications, 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 and representation in state/tribal negotiations
- Drafting, implementing, and coordinating agency policies, rules, and legislation
- Citizen response, public records requests, and public information
- Response to press inquiries and issuance of press releases
- Support Water Resources Commission activities
- Oversight of Department work groups and task forces, sustainability, and climate initiatives
- Process improvement, key performance measures, and implementation of the Integrated Water Resources Strategy and Strategic Plan
- Principal contact with members of the Legislature, stakeholder groups, other state agencies, local and federal entities, as well as the public
- Integration of equity, diversity, and inclusion into agency programs, policies, and communications
- 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 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. The Director's Office also addresses complex water issues and provides leadership and direction to staff across the agency to help resolve water challenges and 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. The Director's office also participates in regular meetings with other state agency Directors and Deputy Directors to coordinate items of multi-agency interest.

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 in conjunction with other sections of the agency. 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 management 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. As discussed below, the Department has seen an increase in litigation in recent years, mostly due to disputes in the Klamath Basin.

Outreach and Coordination - The Director's Office is responsible for communicating with and responding to inquiries from 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, news releases, 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 (IWRS), 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 Strategy every five years; the first update was completed in 2017. While the Integrated Water Resources Strategy 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. The Department has since adopted a 2019-2024 Strategic Plan.

Climate Coordination- The Director's Office staffs efforts to coordianate with other agencies on climate efforts, such as the Governor's Executive Order 20-04, as well as the Climate Adaptation Framework, and the Global Warming Commission.

Diversity, Equity and Inclusion and Environmental Justice - The Director's Office is expanding its work in this area, leading the agency's efforts to consider diversity, equity, and inclusion in policy and law development, internal and external communications and outreach, as well as in the administration of its programs and through internal procedures.

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. The Director's Office Policy Section staff work with the Water Resources Commission, other staff, stakeholders, and the general public to update Oregon's statutes, rules, and policies.

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.

Public Records Requests - The Director's Office manages the responses to all public records requests received by the agency and coordinates with staff to review and respond to those requests.

Enabling Legislation/Program Authorization

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

Policy and legal oversight, public records requests, public information / media, tribal and intergovernmental relations, staffing the Water Resources Commission, coordinate with the Oregon Legislature, rulemaking, public hearings, special projects, environmental justice, sustainability, key performance measures.	ORS 536.025; ORS 536.037; ORS 536.220; ORS 536.340; ORS 536.420; ORS 542.630; ORS 183.330; ORS 182.535; ORS 184.423/Executive Order 03-03; ORS 536.040; ORS 182.164; ORS 539.310; Water Laws ORS 536-543

Funding Streams

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

	Director's Office				
	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
2019-21 Legislatively Adopted Budget	4,935,640	53,034	-	25,000	5,013,674
2019-21 Emergency Boards	-	-	-	-	-
2019-21 Legislatively Approved Budget	4,935,640	53,034	-	25,000	5,013,674
2021-23 Base Budget	3,556,178	53,034	-	25,000	3,634,212
2021-23 Current Service Level	3,617,258	13,607	-	25,000	3,655,865
2021-23 Modified Current Service Level	3,617,258	13,607	-	25,000	3,655,865
2021-23 Governor's Recomended Budget	4,481,982	12,760	-	25,000	4,519,742

ADMINISTRATIVE SERVICES DIVISION

The Administrative Services Division provides business, information, and administrative services to the Department in support of the agency's mission. Division responsibilities include budget preparation and execution, human resource services, information technology services, accounting and internal control, payroll and benefits, contracting, facilities management, risk management, training, mailroom support services, transportation coordination, and telecommunication administration. The Division is divided into three sections: Employee Services, Information Services, and Business Services.

Program Contact: Lisa Snyder

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Snapshot

Customers	Funding Source	Mod CSL Expend w/o Pkgs	GRB Expend	Case / Workload
Internal WRD staff; Cities; Counties; Consultants; Federal Agencies; State Agencies; Oregon Tribes; Public Interest Organizations; Property Buyers/Sellers; Water Right Holders; General Public; Irrigation Districts	General Fund Other Funds Lottery Funds Federal Funds Positions/FTE	$ 8.6 M $ 1.9 M $ 13.5 M $ 0.02 M 27 / 26.5	$ 7.7 M $ 1.9 M $ 13.5 M $ 0.02 M 27 / 26.38	Transactions processed in Fiscal, Human Resource and Support Services. Information Services, Mapping/GIS

The Administrative Services Division provides information, 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, information systems management, Geographic Information Systems (GIS) / mapping, contracting, facilities management, risk management, employee development, mail-room support services, transportation, telecommunication coordination and Water Development Loan Program. The division is divided into three sections:

- Business Services
- Employee Services
- Information Services

Program Description

Employee Services

The Employee Services 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 responsibilities include the maintenance of the official personnel files, as well as generating reports on affirmative action, risk management and workers compensation. 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 progressive discipline as necessary. The Section also maintains and posts the required legal notices in all Water Resources Department offices located throughout Oregon. Staff update 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 strives to ensure that all aspects of employee services are handled timely, accurately, and courteously.

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.

Many of the above-referenced services are provided 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 four other agencies, including open enrollment, under a Shared Services program that the Department made permanent beginning in the 2019-21 biennium.

Spotlight on Shared Services

In October of 2014, discussions around a Human Resources and Payroll shared services model began between the Department, the Oregon Watershed Enhancement Board, Department of State Lands, Oregon Housing and Community Services, Oregon Department of Energy, and Department of Land Conservation and Development. 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 made up of Human Resource and Payroll 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 (ultimately to be located in the Department's Administrative Services Division), while maintaining the human resource presence in each agency. The overall vision for this structure was to build a quality partnership between the agencies to utilize the human resource (HR) and payroll staff effectively and efficiently in a collaborative manner to support the agencies. The objectives included: improving efficiency and effectiveness in the work HR performs, broadening the knowledge base to respond to changing human resource and payroll laws, establishing best practices, and providing backup for HR and payroll staff on leave. The Department made the pilot permanent effective July 1, 2019 and continues to serve over 500 FTE in five different agencies with two payroll specialists.

The Division has also entered into shared services agreements with the Department of Land Conservation and Development for procurement and contracting assistance, budget assistance and year end reporting activities assistance.

Business Services

The Business 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.

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 budget including monthly revenue and expenditure monitoring, contract monitoring, and management of the allotment and budget tracking.

Other Section responsibilities include contract administration, travel coordination, key card access, mail processing, receipting, inventory control, telecommunication management, and facilities administration for the agency. The Section's contract administration functions ensure that the Department complies with statewide contracting rules and policy. The section is also responsible for coordination of facilities administration with the two other agencies with which we share the building.

The Business Services Section also provides 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, preparation of statewide financial reporting, and enters the allotment for OWEB.

Biennially, the Section processes over 100,000 pieces of mail, creates, inputs, and reconciles in excess of 250,000 accounting entries, which includes accounts payable entries, payroll entries, and accounts receivable or receipt entries. The Section maintains files and controls for over 400 contracts and agreements, including reimbursement authority contracts and agreements.

The Water Resources Development Program funds which include Place-Based Planning, Feasibility Study Grants, and Water Project Grants and Loans are monitored by the Fiscal Services Section. See the Technical Services Division for more information on the Water Resources Development Program.

Water Development Loan Fund

The Water Development Loan Program (not to be confused with a separate program called the Water Resources Development Program housed in the Technical Services Division) 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.

The Water Development Loan Program historically 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. The program has no state-owned property or inventory.

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.

HB 3369 (2009) made changes to the loan program which were then modified by SB 839 (2013). 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, or 2019-2021 biennium. There are no pending loans, or applications for loans. No requests for additional bonding authority have been received or submitted.

Information Services

The Information Services Section develops and manages critical information technology infrastructure and solutions used to support the mission of the agency by program areas. Additionally, the IS Section also manages and facilitates public access to a vast array of scientific data used by the agency, partners, and stakeholders to make decisions regarding the use of Oregon's water supply. Information Services achieves this work through four distinct sections including Application Development, Network Support, Geographic Information Systems (GIS) and Data Management.

During the 19-21 biennium, the IS section started a migration to the state's combined data center (SDC). This is an important effort that will have far reaching implications around reduced risk, information security and future efforts to modernize agency information systems.

Application Development- The Application Development team analyzes, designs, builds, and deploys custom in-house solutions to support the business functions of department program areas. The application development team meets often with business units within the agency to gather requirements for new system development, product enhancements and to provide fixes for discovered problems.

Data Management- The Data Management team touches nearly every element of data at the agency and acts as a nexus for program area data by entering new data and performing quality assurance on existing data. They work with all program areas within the agency and must understand how nearly all data within the agency flows in and out of business units in support of the agency mission. They perform this work using a variety of in-house developed and COTS (Commercial Off the Shelf) solutions.

Network Support- The Network Support team manages all agency network, desktop and server infrastructure for the agency. This critical infrastructure supports the operations of every business unit

within the agency. This team works closely with the state data center and cyber security services to ensure that operations fall within acceptable guidelines and provide a secure network environment for staff to operate in. Additionally, the Network Support teams provides customer support to agency staff who rely upon our critical network, desktop and server resources to do their jobs daily. Support is provided both electronically and in person.

Geospatial Information Systems- The Geographic Information Systems (GIS) team builds the infrastructure for maintaining the locations of water rights, wells, dams, stream gauges, and other related data of the agency. They use this data in the mapping, reporting, and analysis of water related science performed by the agency. The data are also made available to agency staff, partners, and the public through static and web-based interactive maps, and other tools.

Enabling Legislation/Program Authorization

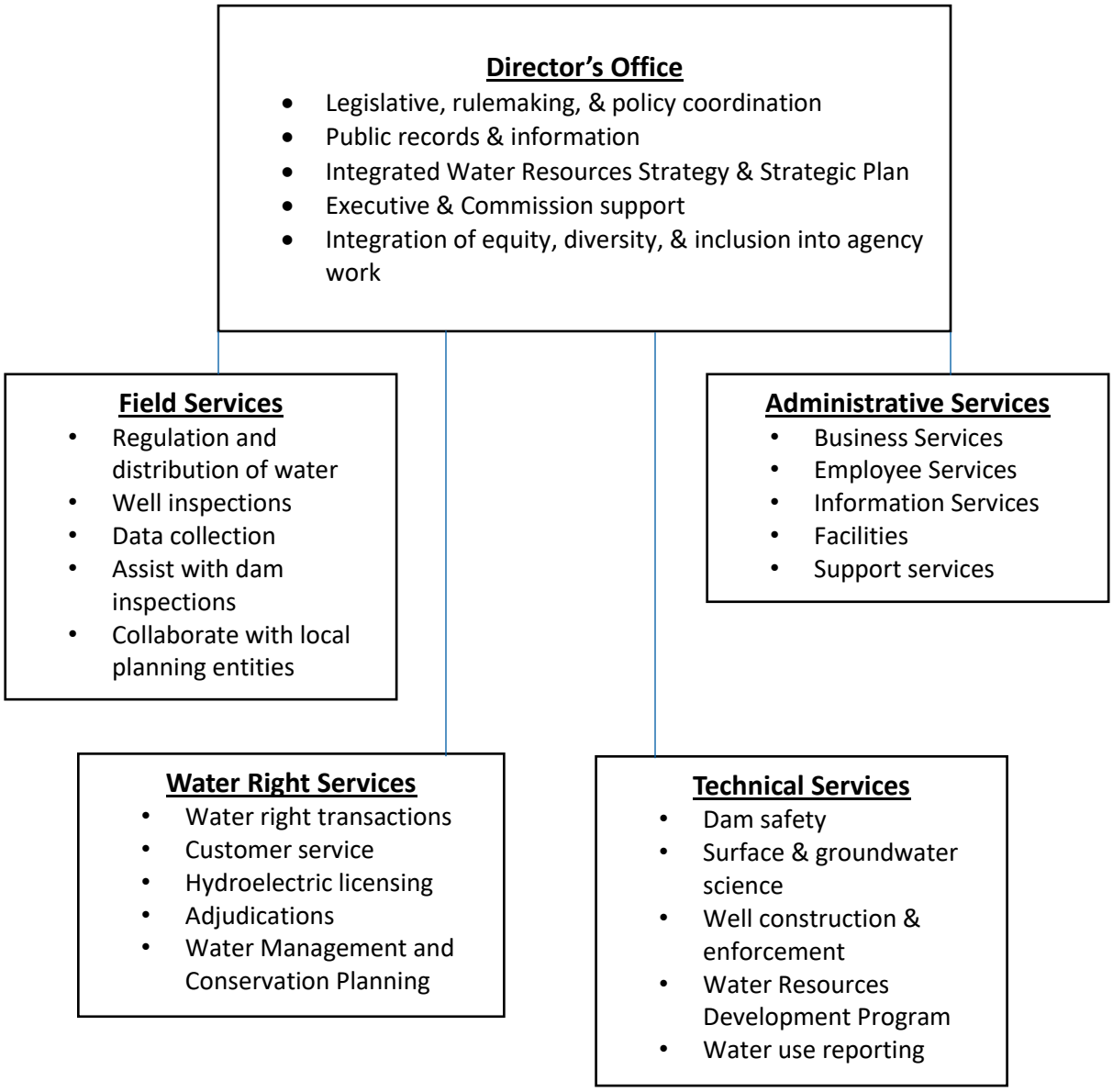
The Feasibility Study Grants (Water Conservation, Reuse and Storage Grant) is governed by ORS 541.561 to 541.581. The Water Project Grants and Loans funding (Water Supply Development Account) is authorized by ORS 541.651 to 541.696. The Water Development Loan Fund is governed by ORS 541.700 to 541.855.

Funding Streams

General Fund is the primary funding source that is used to provide administrative services to the Department. Lottery Fund support the debt service related to the Lottery Revenue Bonds issued for the Water Resources Development Program, housed in the Technical Services Division. Other Fund sources include shared services agreements with other agencies for payroll, contracting assistance, accounting, and information technology services.

	Administrative Services Division				
	General Fund	Other Funds	Lottery Funds	Federal Funds	Total Funds
2019-21 Legislatively Adopted Budget	8,454,963	87,702,232	7,566,502	25,000	103,748,697
2019-21 Emergency Boards	-	-	-	-	-
2019-21 Legislatively Approved Budget	8,454,963	87,702,232	7,566,502	25,000	103,748,697
2021-23 Base Budget	8,909,969	87,839,375	13,470,490	25,000	110,244,834
2021-23 Current Service Level	8,338,406	1,923,617	13,470,490	25,000	23,757,512
2021-23 Modified Current Service Level	8,338,406	1,923,617	13,470,490	25,000	23,757,512
2021-23 Governor's Recomended Budget	7,737,616	1,880,716	13,470,490	25,000	23,113,821

ORGANIZATIONAL STRUCTURE



Chapter 4: Budget Drivers to Process Improvements

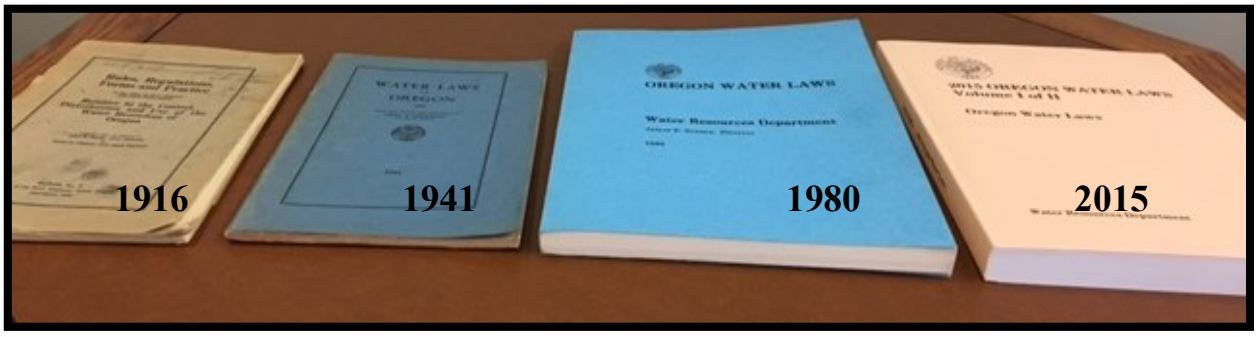
OVERVIEW

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 those 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

Water law is an old body of law that is complex. 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.

Over time the laws have grown increasingly more complex and, in some cases, difficult to understand, often times based on an extensive 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 explaining the original purposes behind some of the provisions is lost with time. 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. These challenges can slow decision-making and increase the likelihood of disputes and litigation.



LIMITED WATER SUPPLIES AND GROWING NEED INCREASES THE IMPORTANCE OF DATA

Surface Water Data

The Oregon Water Resources Department runs a network of stream gages to measure streamflows, which are important in the management of Oregon's surface water and groundwater resources. The data is used by a variety of agencies, water users, the public, and other entities for activities such as 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 publishes the data online in a centralized database accessible to the public.

With improvements in stream gaging technology in recent years, the Department has been able to add satellite telemetry to 97 percent of the 247 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.

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. Conducting additional groundwater investigations and improving water resources data collection are Recommended Actions 1A and 1B of the state's 2017 Integrated Water Resources Strategy.

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 five basin studies in the Deschutes, Willamette, Klamath, Harney (pending completion in 2021), and Walla Walla basins (initiated in 2021). 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. In recent years, there has been broad support for this work, with the legislature most recently providing funding in 2019 through Policy Option Package (POP) #102, which included six new positions and $500,000 of general fund to conduct two concurrent cooperative studies.

Unfortunately, the state budget situation has deteriorated significantly since approval of POP #102. In order to achieve required budget savings only one of the six positions have been filled to date.

The Governor's Recommended Budget for the 2021-23 biennium proposes to reduce general funds for groundwater data collection and assessment state-wide from a total of approximately $1.2M in the 2019-21 biennium to $200,000 in the 2021-23 biennium. One hydrogeologist position would also be reduced. This will result in the Department only being able to conduct the Walla Walla basin study and the study may take longer to complete. The Department would not have the resources to begin additional studies.

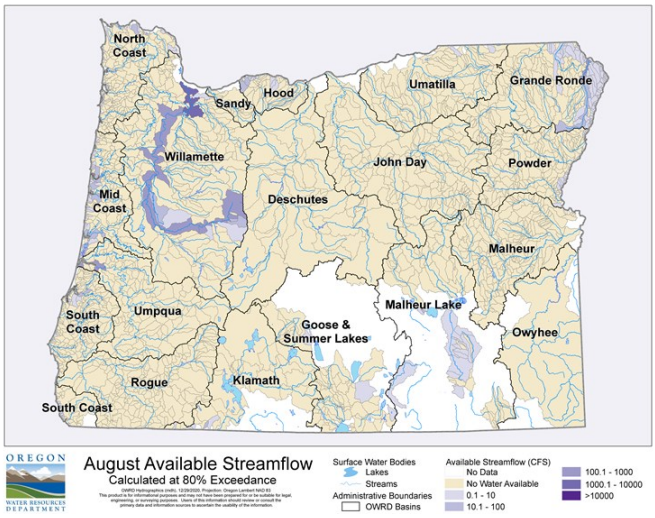
There are twelve areas the Department has identified as a priority for groundwater basin study work. The highest priority basins are the Harney Basin (initial study nearing completion, management tools to follow), the upper Walla Walla Basin (study initiated in 2021), and the sedimentary aquifer system 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. The final tier includes aquifer systems in the Grande Ronde Basin and the Rogue Basin that are tributary to State Scenic Waterways, and the Powder Basin where local officials have asked the Department to identify potentially available groundwater. At the current pace, it will take decades to complete this work.

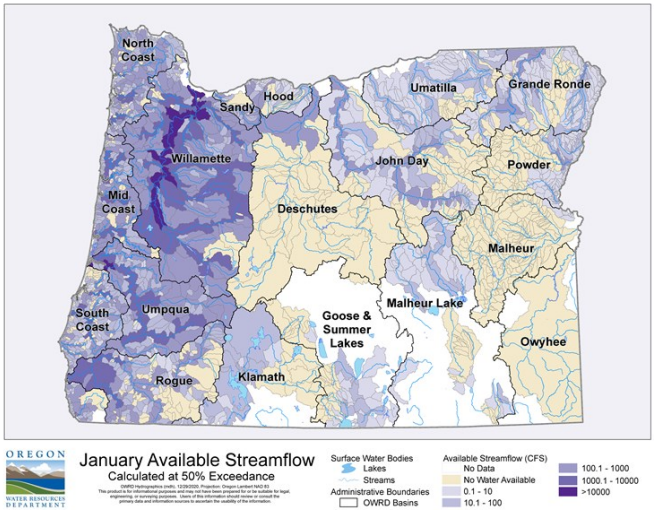
AN ALREADY LIMITED RESOURCE IMPACTED BY DROUGHT AND CLIMATE

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).

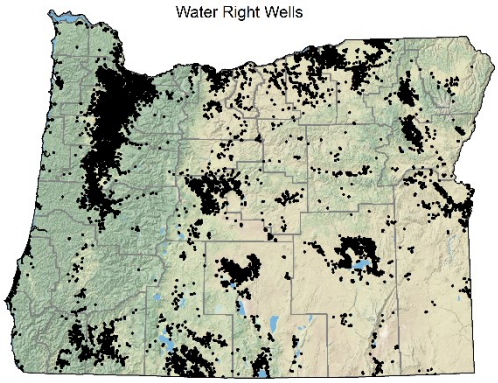


By contrast, the bottom map shows where water is available for allocation during the month of January (representing higher winter flows) and could be used for storage. Comparing the color coding in the legend with the shaded areas of the January map, there are some areas where no water is available, 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.



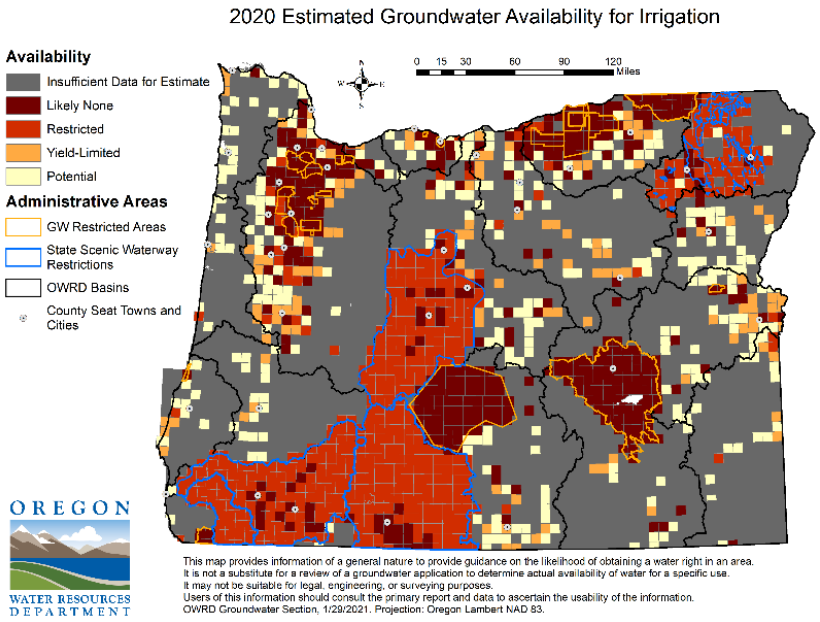
Groundwater is Fully Appropriated in Some Parts of the State

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 250,000 wells, of which approximately 25,000 have water rights. The map at left shows the distribution of wells with water rights.

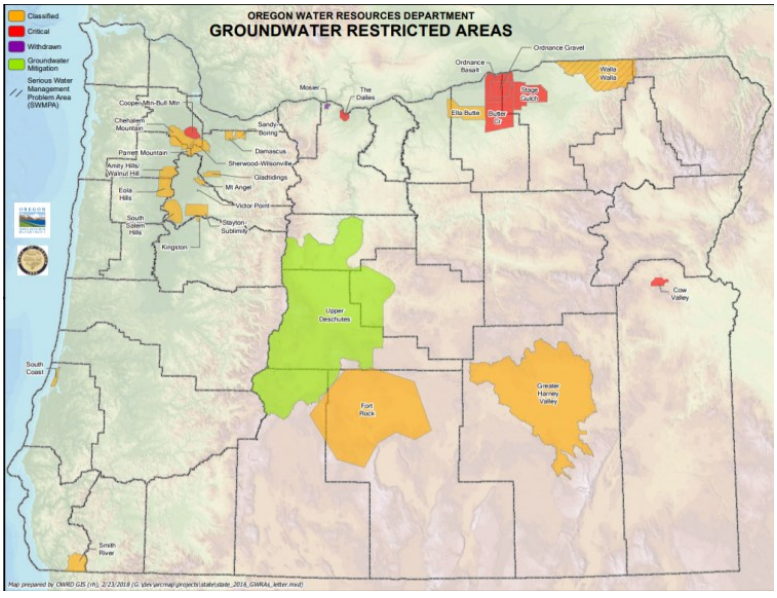
As surface water supplies have become fully

allocated, Oregon has increasingly relied on groundwater resources. This has resulted in groundwater level declines in several areas of the state, 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. As shown in the map below, water is unlikely to be available for new groundwater permits for irrigation in the areas in red, while areas in orange have generally poor yielding aquifers for larger uses such as irrigation.

Observed long-term groundwater level declines indicate that water is being used faster than it is being replenished and that the aquifer is unlikely to be able to sustain new development, and in some areas requires the Department to curtail existing groundwater uses. 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. 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).



Declining groundwater levels and groundwater connection with surface water 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.



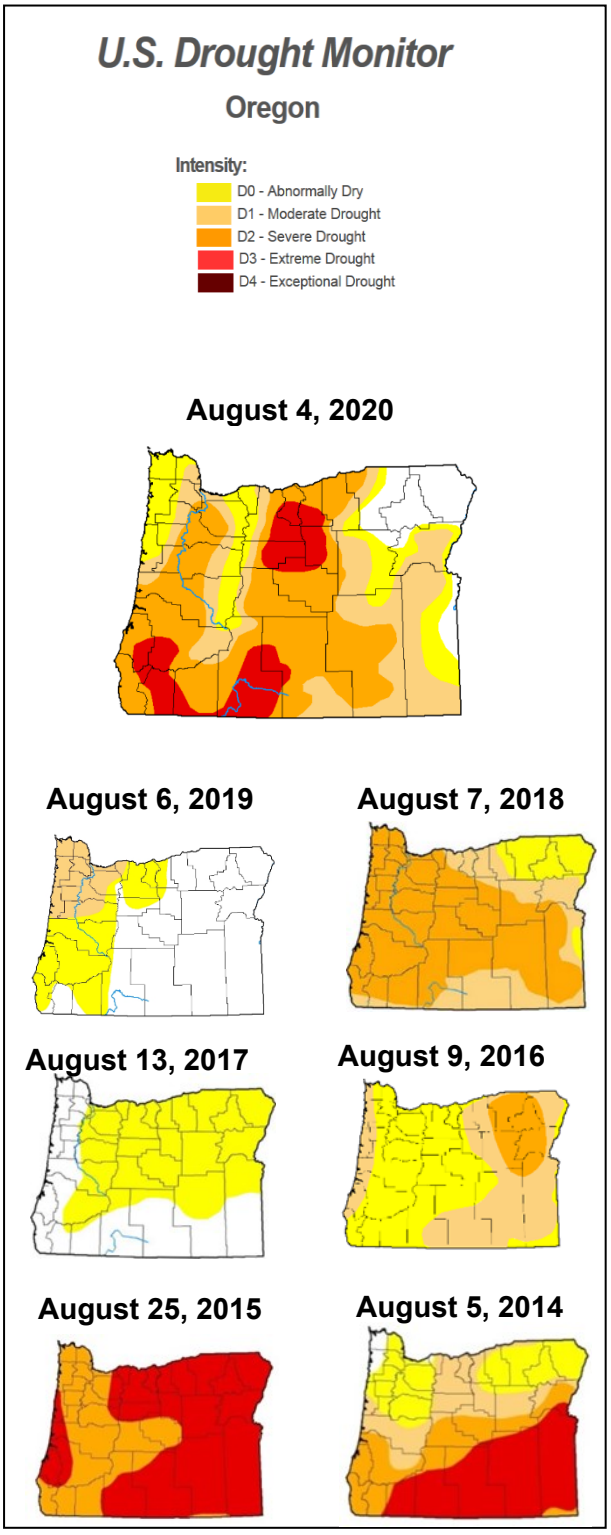
The map shows Groundwater Management Areas: (1) Critical areas in red; (2) Classified and/or Serious Water Management Problem Areas are in orange; (3) Withdrawn areas in purple; (4) Mitigation program area is in green.

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 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 with climate change, 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

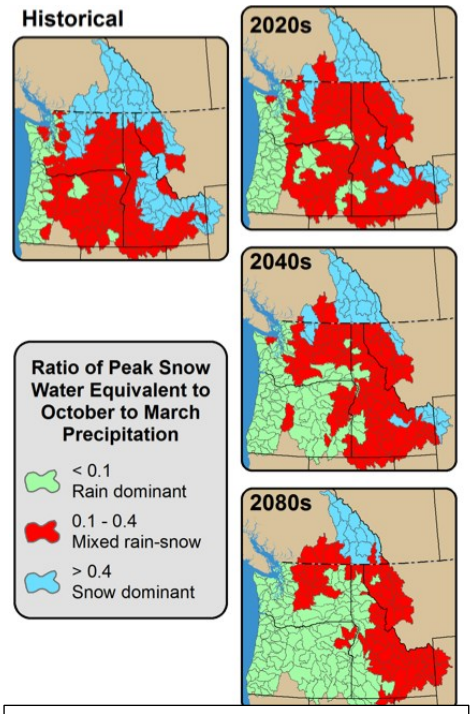
As discussed in *The Fifth Oregon Climate Assessment Report* (2021), climate models project Oregon's temperature on average to increase 8.2°F by the 2080s at current greenhouse gas emission levels. As Oregon's temperature increases, the percentage of precipitation that falls as snow will be significantly 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 for water supplies, as well as water managers and instream and out-of-stream water uses, such as flashier flood-prone rivers, decreased summertime run-off to surface water, and reduced recharge to groundwater aquifers.

Areas dependent on snowpack for summertime water could see significant decreases in water when it is most needed. 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.



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:

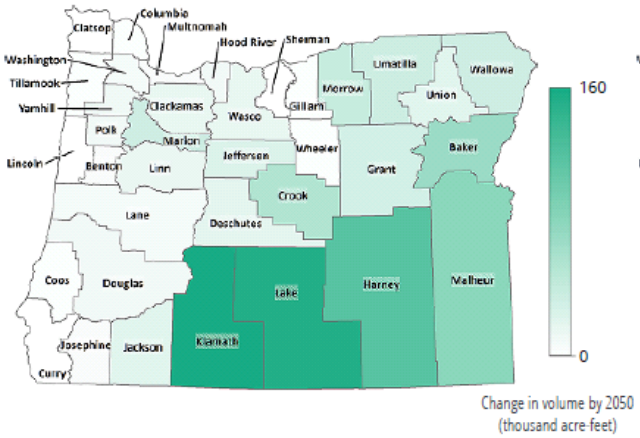
In the future, a suite of tools will need to be implemented in order to better respond to and prepare for drought. These include traditional tools such as water conservation, reuse, and storage, as well as other non-traditional means. More work is needed to understand how the loss of this natural "snowpack"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

DEMAND FOR A LIMITED RESOURCE

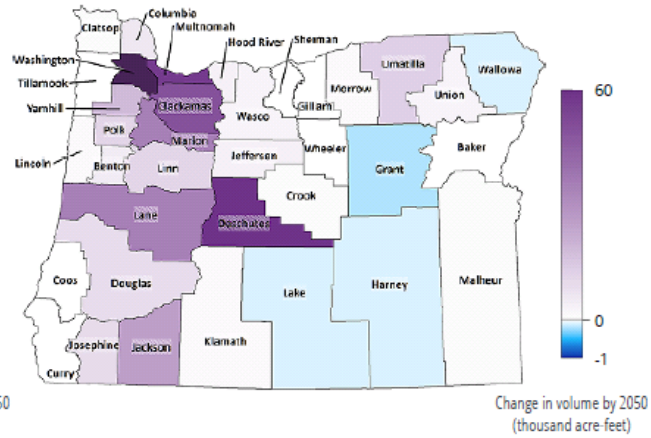
Oregon communities, along with Oregon's fish and wildlife, are already facing limited water supplies today. The 2015 Demand Forecast describes potential long-term water needs in an Oregon that may not be able to rely on historic patterns to predict future rainfall and snowpack. The estimated total change 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.

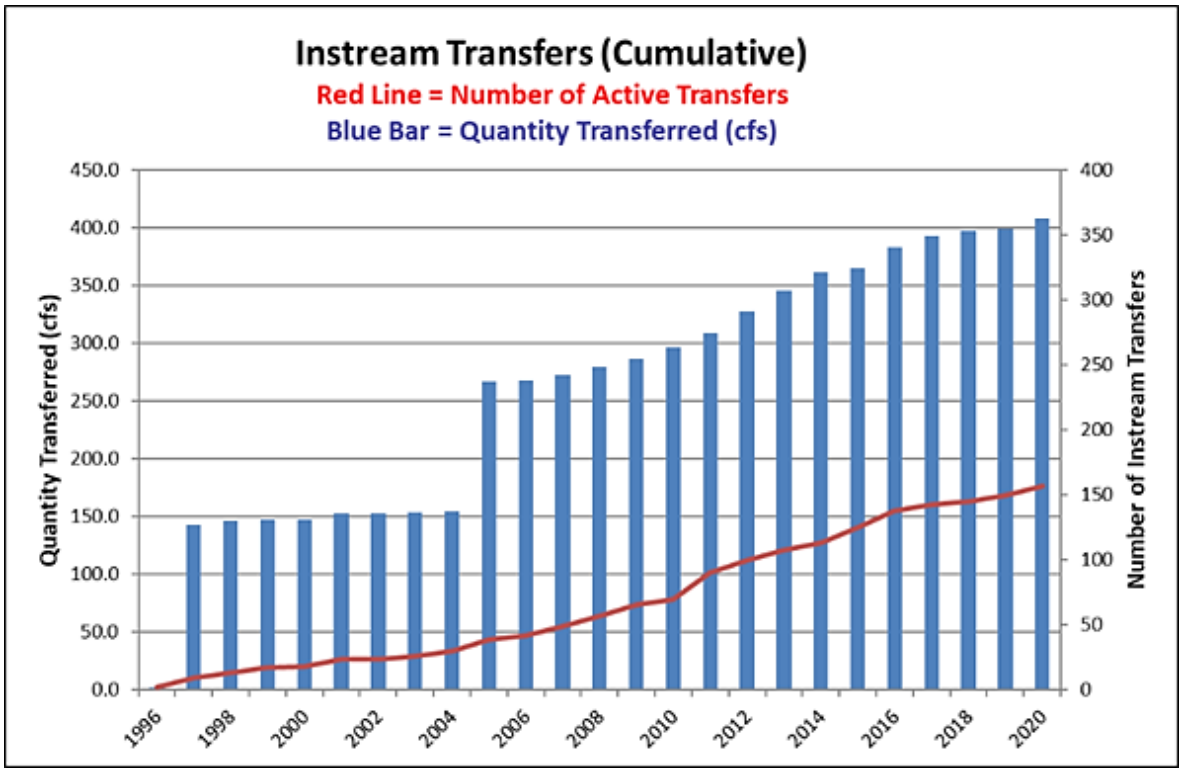
MEETING INSTREAM NEEDS: STREAMFLOW PROTECTION

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.

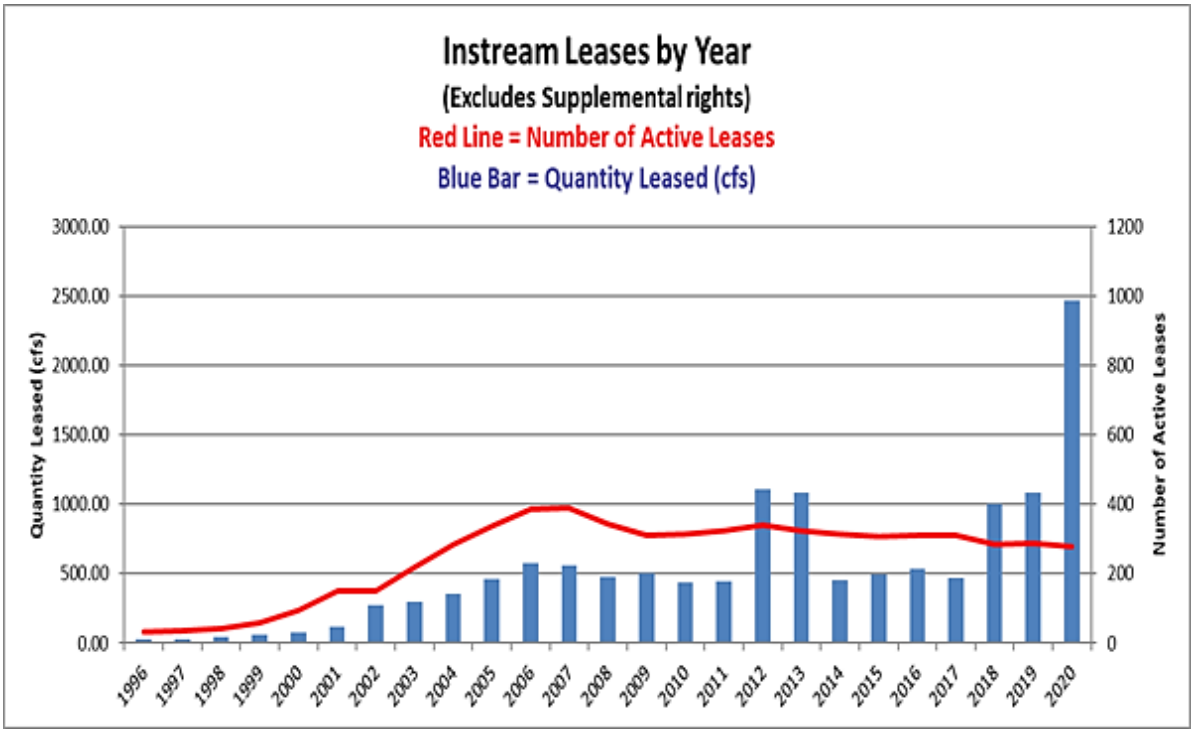
Since the adoption of Oregon's 1987 Instream Water Right Act, the Department has converted to instream rights more than 500 of the state's minimum perennial stream flows and has issued more than 1,000 state agency-applied instream water rights.

The Oregon Department of Fish and Wildlife has recently submitted new instream water right applications for the Department to process. In 2019, the Water Resources Department issued 80 final orders on instream water right application that had been pending between 1.5 and 2 years. In 2020, Oregon Department of Fish and Wildlife filed 150 new instream water right applications, which are depending Department processing.

As shown in the graph below, the Department has processed 157 permanent and long-term instream transfers, representing approximately 409 cfs.



During 2020, there were 278 active instream leases totaling 2,468 cfs. Two of those leases were power rights protecting 1355 cfs instream. The instream leasing program also benefits greatly from active partnerships with The Freshwater Trust, Deschutes River Conservancy, and Trout Unlimited (see graph below).



The Department has approved 102 applications for allocations of conserved water, resulting in approximately 251 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.

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 increasingly rely on our groundwater resources, water levels are dropping in some areas of the state. 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 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 and is a critical component to meeting Oregon's water needs. More details about the Department's grant programs are included in Chapter 3 and Chapter 7.

Oregon Water Vision

In the Fall 2019, the State in partnership with water interests worked to conduct outreach to develop Oregon's Water Vision. A summary of the State's efforts and lessons learned are included online at www.OregonWaterVision.org. The effort resulted in a modified Water Vision for Oregon and a call to action. Excerpts from the Water Vision follow:

Vision Statement - To address changes in climate and population dynamics, Oregonians will take care of our water to ensure we have enough clean water for our people, our economy, and our environment, now and for future generations. Oregonians will invest strategically in infrastructure and ecosystems across all regions to support resilient communities, vibrant local economies, and a healthy environment for all who live here.

Goals - Each goal below is important. No single goal can be fully realized independent of the others. Recognizing that tension, we need to invest in a range of innovative solutions that work in balance for our shared water future.

Health: Clean water for all who live in Oregon Water should be fishable, swimmable, and drinkable. Investments in ecosystem health and built and natural infrastructure will provide reliable access to clean water.

Economy: Sustainable and clean water to support local economic vitality Diverse and resilient agricultural, timber, fishing, hi-tech, energy, and recreation economies require a reliable and clean water supply. Investments in built and natural water infrastructure will support high quality jobs across all Oregon communities.

Environment: Adequate cool, clean water to sustain Oregon's ecosystems for healthy fish and wildlife Cool, clean water and healthy forests, wetlands, riparian areas, streams, and estuaries provide essential natural processes that maintain and enhance water quality for fish and wildlife. Investments in ecosystems also provide recreational opportunities for those who live in and visit Oregon.

Safety: Resilient water supplies and flood protection systems for Oregon's communities Natural and built water systems designed to protect communities, and increase their resiliency to disasters like earthquakes, wildfires, floods, drought, and sea level rise, are important for all Oregon communities. Investments in those systems will help create safer communities and healthier ecosystems.

Call to Action - Oregon's limited water supplies are already being shaped by climate and population changes. We must both act now and plan for the long term. How we choose to care for our water will determine if we pass a legacy of clean and sustainable water to future generations.

Infrastructure Challenges: Aging Dams

Aging infrastructure will require a consistent and sustained effort to address, requiring both investments in Department staff to evaluate aging dams and require owners to address deficiencies, as well as funding to help owners address deficient dams. Dams represent one category of the aging infrastructure portfolio in Oregon that underscores the magnitude of investment necessary. 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."

The Department regulates dams across the state and ranks dams based on hazard ratings. There are 78 high hazard dams, 151 significant hazard dams, and 716 low hazard dams that are regulated by the Department. 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 dams. The table below provides a summary of the condition high hazard dams.

Due to the potentially significant costs and limited funding, the Department works to understand the consequences of failure and the risks to dams that could result in failure or a serious safety incident. Better understanding the risks to dams and the impacts of failure can help prioritize repairs and funding. As a result, the Department has in recent years sought resources to evaluate dams across the state. With climate change and increased risks of flood events, as well as a better understanding of the risks posed by a Cascadia earthquake, this work is increasingly important. With limited resources, much work remains to be done. Dam safety related funding is proposed in policy option package #101 and #104 of the Governor's Recommended Budget.

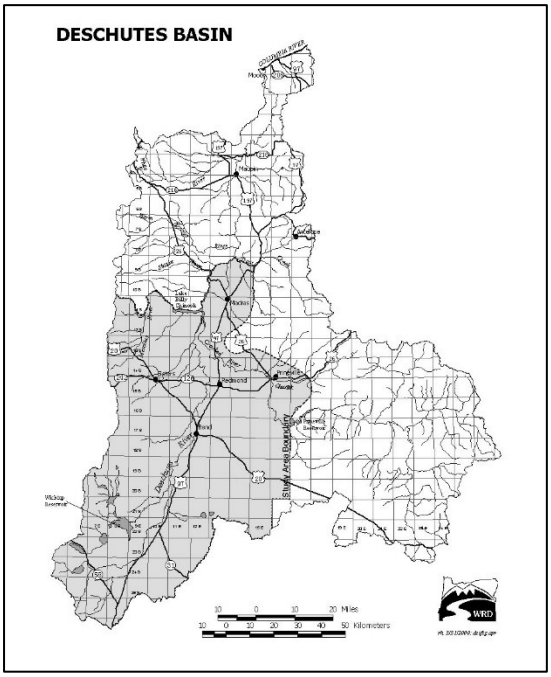
Dam Name	Owner Name	County	Condition
Barnes Butte	Debaca Land & Cattle LLC	Crook	Poor
Bear Creek	City of Astoria	Clatsop	Poor
Duggan	Randall G and Agela Lomonaco	Jackson	Poor
Jubilee Lake	Oregon Department of Fish and Wildlife	Union	Poor
Morgan Lake	City of La Grande	Union	Poor
Osborne Creek	Cascade Ranches	Jackson	Poor
Pole Creek	Orchards Water Co.	Malheur	Poor
Pony Creek - Lower	Coos Bay - North Bend Water Board	Coos	Poor
Wageman	Howard Paul Buchhelm	Douglas	Poor
Walch Dam	Snattlerake Hills, LLC	Jackson	Poor
Wallowa Lake	Wallowa Lake Irrigation District	Wallowa	Poor
Winchester	Winchester Water Control District	Douglas	Poor
Big Creek #1 (lower)	City of Newport	Lincoln	Unsatisfactory
Big Creek #2 (upper)*	City of Newport	Lincoln	Unsatisfactory
Crowley	Katarina Sutphin	Malheur	Unsatisfactory
Ferry Creek	City of Brookings	Curry	Unsatisfactory
McMullen Creek	Josephine County	Josephine	Unsatisfactory
Willow Creek 3 (Malheur)	Orchards Water	Malheur	Unsatisfactory
Woodrat Knob	Cascade ranch	Jackson	Unsatisfactory

*Department has notified owner dam is unsafe as defined in ORS 540.443(9).

ADDRESSING COMPLEX WATER ISSUES

The Deschutes River Basin

In the 1990s, a multi-year groundwater study conducted by the Oregon Water Resources Department and U.S. 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 state scenic waterway flows. As a result, the Department now requires mitigation before issuing new groundwater right permits. The USGS groundwater model was updated in 2017.



A large portion of this mitigation is achieved through the purchase of mitigation by credits from a "bank" administered by the Deschutes River 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 mitigation program. The Department is currently conducting a review of the program and a report to the legislature will be provided to the legislature by the end of the year.

The Deschutes Basin continues to face challenges meeting its water needs 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 understand imbalances in water supply and demand for both instream and out-of-stream needs in the upper Deschutes Basin and explore different strategies to address these imbalances. The $1.5 million dollar study was completed in 2019 with the support of over 37 diverse stakeholders and significant technical assistance from the Department.

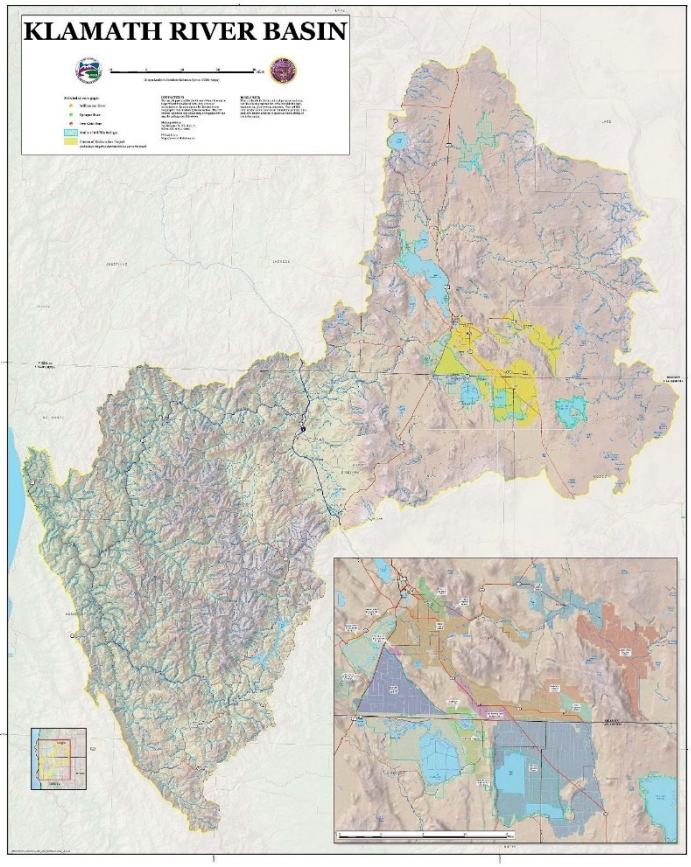
The newly formed Deschutes Basin Water Collaborative is building on past investments, including the Basin Study, to identify and implement broadly supported projects and actions while also developing a basin-wide water management plan. The Department is a partner in this planning effort and is also providing modest technical assistance as resources allow. Due to limited staffing and the complex nature of the work, the Department has been unable to work on some of the issues of interest to the basin or has done so at a pace that is slower than desired by all parties.

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 was released in 2019 and identified measures to provide water to mitigate impacts to the spotted frog and other endangered species.

The Department has noted groundwater declines in some portions of the basin. As such, some stakeholders have also expressed an interest in reviewing groundwater issues more generally beyond the scope of the mitigation program.

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 for 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. 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).

Groundwater in the Klamath Basin

In response to increased groundwater pumping in the Upper Klamath Basin in the 1990s and 2000s, the U.S. Geologic Survey (USGS) in cooperation with the Department began a comprehensive study and analyses of the basin hydrogeology. As shown in the table below, the investigations have found significant hydraulic connection between groundwater and surface water in the Klamath Basin. These two reports represent the best available information on the hydrogeology of the Upper Klamath Basin and form the basis for the Department's understanding of the groundwater system and groundwater-surface water interaction in the basin. Both reports were peer reviewed following the fundamental scientific practices of the USGS.

Report Title	Foundational Inputs	Key Conclusions
USGS SIR 2007-5050 – Ground-water hydrology of the upper Klamath Basin, Oregon, and California	• Geologic maps • Geochemistry data • Field reconnaissance • Data from over 1,000 well logs in the basin • Over 80 references from published and unpublished reports	• 1.8 million acre-feet of groundwater are discharged annually to surface water • More than 60% of the total inflow to Upper Klamath Lake can be attributed directly to groundwater discharge
USGS SIR 2012-5062 - Groundwater simulation and management models for the upper Klamath Basin, Oregon, and California	• Information from USGS SIR 2007-505 • Updated geologic data • Calibrated to groundwater level data from over 500 individual wells and estimates of groundwater discharge to streams at over 50 locations	• Simulated hydrologic responses to pumping wells • Estimated significant impacts to surface water (stream depletion) in all documented simulations

In early 2015, the Water Commission adopted Division 25 (2015) 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 led to increased litigation. From 2015 to 2017 50 wells were regulated pursuant to the 2015 Division 25 rules and six lawsuits were filed challenging regulation. At the end of 2015, the KBRA expired as federal legislation was not passed approving and implementing the agreement.

A trial was held in Marion County Circuit Court on the Department's regulation of groundwater in the Klamath Basin. In 2017, the Marion County Circuit Court found that the State followed the process required by the 2015 Division 25 rules and relied on the best information available at the time. The Court also found that the State's findings of hydraulic connection and its stream relief calculations were supported by substantial evidence. The judgement was appealed by the landowners to Oregon Court of Appeals. The Court of Appeals affirmed lower court ruling.

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 2015 Division 25 administrative rules were no longer in effect. Regulation of wells during the 2018 irrigation season occurred under Division 9 rules that apply to surface water-groundwater regulation statewide. This resulted in regulation of 140 wells. Fourteen lawsuits were filed challenging the regulation.

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 first step would be to adopt temporary rules that would be in place while a longer solution was developed, working with the community to develop permanent rules.

In 2019, the Department adopted interim 2019 Division 25 rules (expire March 2021) to regulate groundwater in favor of senior surface water rights. For the 2019 irrigation season, using the interim 2019 Division 25 rules, the Department regulated 5 wells. One groundwater user filed a petition for judicial review challenging the regulation order and underlying statutory authority.

In 2020, the Marion Circuit Court ruled in favor of the petitioner/groundwater user, making findings regarding due process requirements to regulate groundwater. Based on the Court's order, a critical groundwater proceeding is required before regulation of groundwater in the basin can begin again. The

Department does not have staff resources to dedicate to such an effort at this time; however, the Department is exploring interim measures such as establishing a serious water management problem area, which would require measurement and reporting.

2020 Dispute Between Klamath Irrigation District and the Bureau of Reclamation

In April 3, 2020, the Klamath Irrigation District (KID) sent a letter to the Watermaster stating there is a dispute between KID and the U.S. Bureau of Reclamation (BOR) regarding distribution of water from Upper Klamath Lake. The letter requested that the Watermaster "immediately take charge of Upper Klamath Lake reservoir (UKL) and ensure that stored water is not released out of Upper Klamath Lake reservoir through the Link River Dam except to meet the needs of secondary water right holders calling upon the source" until the end of the irrigation season. The KID also filed a mandamus action in the Marion Circuit Court seeking the court to order the Department to immediately take charge of UKL to prohibit the release of "flushing flows" by BOR.

The Department took charge of Upper Klamath Lake (UKL) for the purpose of dividing or distributing the water from the reservoir in accordance with the respective and relative rights of the various users from the reservoir and began an investigation in aid of performing its duties. The services requested by KID have and will continue to require a substantial commitment of Department staff time and resources to continue a timely investigation in aid of taking charge of the UKL reservoir to fully understand the water budget and use of water pursuant to water rights of record. The Department is undertaking actions to quantify the inflows to UKL, including requiring the installation of gaging stations to measure inflows, and the installation of measuring devices to measure all the diversions from UKL.

The Department anticipates the work to be completed in three phases. Phase 1 of the investigation includes work done to date, as well as a survey of available measuring devices, installation of measuring devices at points of diversion (PODs) where needed, and a determination of which POD serves which water right(s) and determined claim(s). Phase 2 will involve working with the BOR to improve inflow measurement to Upper Klamath Lake. Phase 3 will include regulation and distribution as needed, and year-round monitoring.

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 analyzed a full range of beneficial uses in the Willamette Basin and identified ways to re-allocate existing stored water from the Willamette Valley Project reservoirs.

In 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 resulted in a Tentatively Selected Plan and the Corps consulted under the Endangered Species Act with the National Marine Fisheries Services. Following consultation and receipt of the biological opinion, a final Chief's Report was sent to the Assistant Secretary of the Army and the U.S. Office of Management and Budget. In 2020, the United States Congress provides the authorization for implementing the final recommendation for the re-allocation of water in the Willamette Reservoirs.

Now that Congressional authorization has occurred, significant work remains for the Department to work with interested stakeholders to address water management implementation issues associated with the reallocation of water stored in the reservoirs. Today, water supply management below the Willamette reservoirs is fairly straightforward because the federal reservoirs release unallocated water that largely satisfy downstream demands and contribute to current fish and wildlife biological opinion targets. This will change with the reallocation of the reservoir water and issuance of new water rights.

Following reallocation implementation, it will be necessary to quantify and track both live-flow and stored-water releases for new instream rights for fish and wildlife and out-of-stream rights for municipal and agriculture users, and manage who gets access to water during times of shortage. This complexity is compounded by the length of the Willamette River and tributaries (roughly 200 miles from the

uppermost reservoir to the confluence with the Columbia River), the significant number of water rights, and that there are 13 reservoirs to manage.

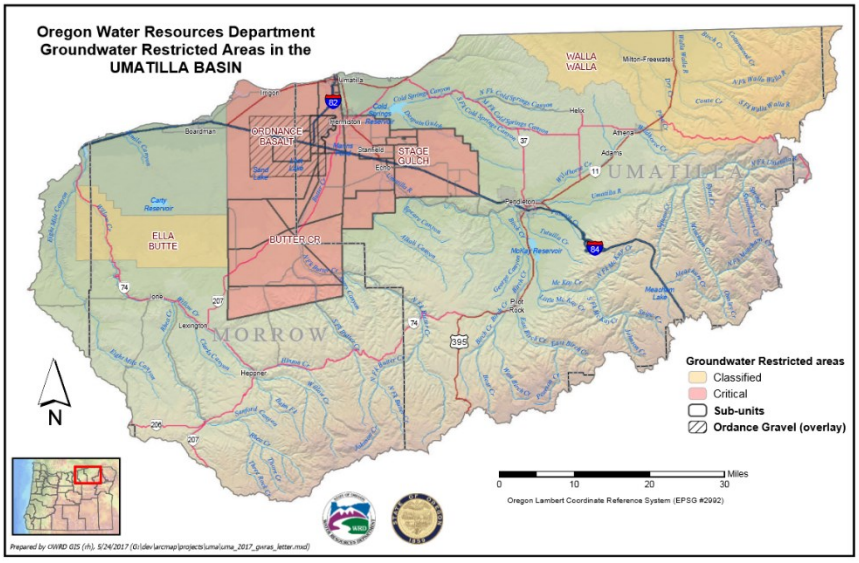
There are several very large tasks that must be completed prior to managing the reservoirs under the new reallocation scheme. The Department needs to secure statutory authority to change (transfer) the character of use of stored water and the two water right certificates in Reclamation's name must be transferred to expand the uses on the certificates to those described above. In addition, the State of Oregon must enter into a contract with the reservoir owner or the state is statutorily precluded from protecting the instream flow releases. Concurrently, Department staff will need to work with the Oregon Department of Fish and Wildlife (ODFW) to develop and quantify the appropriate target fish flows below the reservoirs; that is, how much water is necessary and at what time of year and over what reach of stream. This work will inform the potentially most difficult task, converting the twenty-four minimum perennial streamflows within the Willamette Basin into instream water rights.

At the conclusion of these tasks, full reallocation of the reservoir water will be realized, and it will be the Department Watermaster's responsibility to shepherd the stored water releases downstream to the appropriate users.

No funding to facilitate implementation has been identified at this time. Without funding, Oregon agencies will not be able to timely implement the Willamette Basin Reservoir Reallocation to provide stored water supplies for municipal and industrial water users, secure water for agriculture irrigation, and provide for instream flow protections. Additionally, without implementation, the performance standards identified in the National Marine Fisheries Services' Biological Opinion tied to this reallocation will not be met. This could limit all users (both instream and out of stream) access to stored water, and result in non-compliance with the Biological Opinion, increasing the likelihood of litigation.

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. In the Stage Gulch and Butter Creek Critical Groundwater Areas, only about 30 percent of permitted groundwater has been authorized for use in recent decades. 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.



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 worked with two project partners on two separate projects. These projects seek to address water supply deficiencies for local irrigators and demonstrate that investments in water supply projects can help Oregon secure its water future, while producing various public benefits.

The Port of Morrow and East Improvement District (EID) partnered on the East Project, which used $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 into the Stage Gulch Critical Groundwater Area (CGWA). The total project cost was nearly $45 million. The East Project completed construction in the fall of 2020. In the short-term, this project created approximately 80 jobs during construction. Now complete, the pipeline will provide water to fully irrigate up to 20,000 acres, 3,000 of which were previously unirrigated and 17,000 which were under-irrigated. The project partners estimate that the ability to grow high-value irrigated crops could result in a gross increase in business activity by roughly $116 million annually. The East Project also required upgrades to local power infrastructure. EID contributed $9.6 million which was matched by $14.4 million of additional investments by the Umatilla Electric Cooperative. These upgrades mean a more dependable power grid for the region with potential for future expansion to meet growing local electric demands.

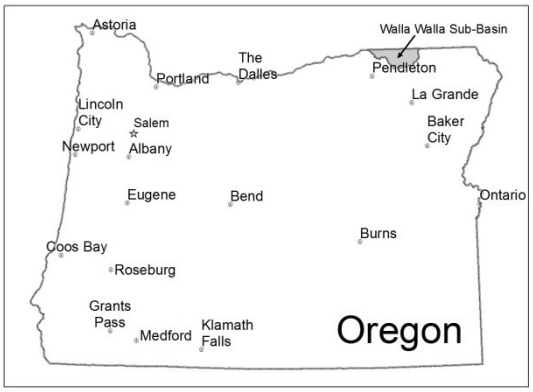
The Columbia Irrigation District (CID) partnered with the Port of Morrow on the CID Project or "West Project". They used $4 million in grant funds to construct a new irrigation pipeline parallel to CID's existing pipeline, as well as perform other infrastructure upgrades to the system booster stations and canal. The total cost of the projects was roughly $31.3 million. The CID Project completed construction and started delivering Columbia River water in spring of 2020. Over the course of construction, the project produced 20-60 jobs. The system can deliver water to approximately 60,580 acres, serving roughly 2,000 previously un-irrigated acres and 16,000 under-irrigated acres. As part of this project, CID worked with Morrow County to make improvements to a bridge that allowed both increases in canal capacity and improved bridge safety.

These projects encountered unforeseen challenges and delays as they progressed, including the steel tariffs imposed in the spring of 2018, time required for local energy infrastructure upgrades, and materials delays associated with the coronavirus pandemic in 2020. These challenges demonstrate that solutions to complex issues, such as large infrastructure projects, require sustained commitment, time, and resources from both the local partners and state. Such infrastructure projects also often require time to obtain permits and comply with applicable regulations. In this instance, the Department worked closely with the project partners and others to negotiate and issue new, mitigated surface water rights out of the Columbia River.

The agency continues its work with the Confederated Tribes of the Umatilla Indian Reservation and local interests to resolve issues associated with the ongoing Indian water rights settlement negotiations. The Department is also in regular communication with representatives from the State of Washington's Department of Ecology to discuss water management challenges and opportunities along the states' border and explore more coordinated water management approaches.

Looking to the future, individuals in the basin are continuing to explore options to help stabilize groundwater levels in certain Critical Groundwater Areas in the basin.

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.

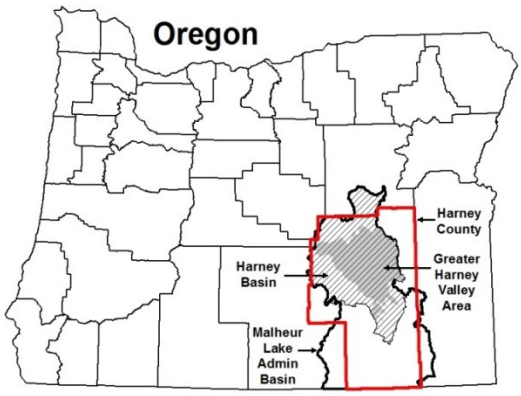
Rules were adopted by the Commission in May 2017 to reclassify groundwater use in the basin for exempt uses only and to designate a Serious Water Management Problem Area, requiring water use measurement and reporting for permitted basalt wells. The Department continues to increase data collection efforts 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.

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.

Further, the two states are working with the USGS to scope a groundwater basin study that will investigate the groundwater resources of the entire Walla Walla basin on both sides of the state line. This cooperative cost-share groundwater basin study is expected to be contracted in early 2021. Due to budget reductions in 2020, the Department has left positions vacant that would otherwise be able to help on the groundwater study or take on other work as other staff shift to working on the study. As a result, the Department has shifted workloads to prioritize this work, which may impact other services. In addition, the Department anticipates that it will not be able to sustain the level of public engagement that had been initially anticipated, due to budget constraints.

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 transitioned from data collection to data analysis and synthesis. The data analysis stage of the study continued into 2019, and the peer-review and the publication process began in early 2020. The final report is anticipated in 2021.

The Department 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 met in Burns quarterly from July 2016 to December 2019.

The groundwater basin study findings will be peer reviewed and published later this year; however, preliminary results from the study confirm that groundwater pumping is depleting groundwater storage and has resulted in declining groundwater levels across the basin. The rate and magnitude of groundwater level declines in some areas of the basin with more intensive groundwater use are worse than anticipated. The Weaver Springs area presents the most extreme example, where groundwater levels have declined 8 to 12 feet per year for the past several years, with total declines since the 1960s in excess of 100 feet. However, several other areas of the basin show groundwater level declines of 2 to 4 feet per year with total observed declines between approximately 10 and 40 feet.

Department regulatory action and/or voluntary reductions in groundwater use are necessary to achieve reasonably stable groundwater levels in many of these areas; however, remediating current groundwater level trends will take years. The Department has a strong interest in working with and supporting the community in identifying and implementing solutions that address water needs and declining groundwater levels in the Harney Basin. The Harney Basin was selected as one of the four areas to pilot the place-based approach and receive support and funding from the Department. The Harney County Community-based Water Planning Collaborative (Collaborative) is working to collaboratively develop a local integrated water resources plan that will help secure the basin's water future. Approximately 40 to 45 diverse stakeholders engage in the Collaborative's regular meetings. These stakeholders have come together to understand Harney County's critical water issues, including declining aquifer water levels, and to explore a variety of potential solutions.

Mosier Well Repair Program

The Department and U.S. Geological Survey have concluded that commingling water wells are contributing to the groundwater level declines in Columbia River Basalt aquifers near Mosier. The Department worked 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 contracted with the District to work with landowners for the well replacements. The funding paid for 90 percent of the cost of assessing and remedying commingling wells and using District funds to cover the remainder of the costs. The project resulted in 2 well alterations, 11 well abandonments, and 12 newly constructed wells between 2018 and 2019. The Department continues to monitor water levels in the area to assess the impacts of the program on water level trends in the area.

NEW INDUSTRY: CANNABIS AND HEMP

Inherent with the expansion of industry comes the need for water. As cannabis and hemp production have become legal in Oregon, 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, and responding to and investigating complaints. While inquiries related to cannabis have declined, likely due the Oregon Liquor Control Commission's moratorium on new applications, the Department has seen an increase in activity related to hemp production.

While many producers are responsible water users, the Department continues to receive and investigate complaints about illegal water uses related to cannabis and hemp. As complaints arise, watermasters work to understand the sources of water and whether they are in fact authorized uses. 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; however, with existing staff resources this will likely take some time.

2020 Hemp Audit of Southwest Region Hemp Production Sites

In the fall of 2019, facing increasing complaint volume due the exponential increase in hemp production in Oregon, the Oregon Department of Agriculture and the Department partnered to launch an audit of hemp production sites in Oregon's southwest region. With funding provided by ODA for the Department to hire an assistant watermaster, during 2020, department staff made 187 site visits to slightly over 19% of the registered ODA hemp sites in the Southwest Region. Water law violations were

found at roughly 32% of the sites visited. The Department and ODA are currently exploring options to continue this partnership.

INCREASED LEGAL EXPENSES AND POTENTIAL IMPACTS ON AGENCY SERVICES

Increased Legal Expenses

Water scarcity and increasing competing demands for the resource, when combined with the complexity of water law, has led to increased Department costs for legal services provided by the Oregon Department of Justice for nearly a decade. The Department's legal costs have exceeded the allotted budget since the 2011-13 biennium. Initially, the Department addressed legal services expenses administratively, primarily by holding vacant General Fund positions open longer. However, as the expenses increased, the impacts on the Department's programs and services have also increased and the Department has sought assistance from the legislature. For the 2017-2019 biennium and the 2019-21 biennium, the Department requested and received funds from the Emergency Board. Details of the Department's legal expenses are shown in the table below.

	Average Monthly		Biennial as of January 2021		
Biennium	**Budget**	**Expenses**	**Budget**	**Expenses**	**Budget Shortfall**
2011-2013	$31,942	$39,332	$766,606	$943,958	($177,352)
2013-2015	$30,815	$50,721	$739,561	$1,217,297	($477,736)
2015-2017	$33,479	$75,203	$803,502	$1,804,872	($1,001,370)
2017-2019	$91,173	$71,717	$2,188,154*	$1,769,218	$418,936**
2019-2021	$67,013	$64,251	$1,608,317*	$1,542,016	$66,301***

*Includes Emergency Board funding. Base budget was 17-19=$835,628 and 19-21=$952,038.
**Reverted to General Fund. Without E-Board funding, shortfall would have been $933,590.
***Expenses and shortfall for 19-21 are projected. Anticipate reverting some funds from E-Board back to the General Fund. Without E-Board funding would have shortfall.

Budget Note Report

In 2019, the Water Resources Department was directed by the Oregon Legislature to submit a report on contested cases and litigation actions from 2015, including past, current, and pending items as of July 1, 2019. A summary of the 2019 Budget Note Report is included below. The full 2019 Budget Note Report on Contested Cases and Litigation is available online:
https://www.oregon.gov/owrd/wrdreports/2019_Report_on_Contested_Cases_and_Litigation.pdf

Cross-cutting issues are summarized in brief below and include:

Number of Contested or Litigated Decisions are Small in Comparison to the Number of Actions Taken. For context, between January 2015 and June 1, 2019, the Department issued 107 proposed final orders for regular new surface water applications, 556 proposed final orders for regular new groundwater right applications, 446 regular transfer preliminary determinations, 264 alternate reservoir final orders, and 598 proposed final orders on permit extensions. In 2018 alone, watermasters and their assistants conducted over 7,500 regulatory actions to protect senior out-of-stream uses and instream water rights.

Water is a Limited Resource. Surface water and groundwater are fully appropriated in some parts of the state. As both become fully appropriated, it is harder to find water for new uses, which can increase the likelihood of disputes over Department actions.

Surface Water and Groundwater Connection Increases Management Challenges and Exacerbates Scarcity. While science has long recognized the connection between groundwater and surface water, managing this reality can be difficult. Some groundwater applications propose new uses that are connected to surface water, which, if approved, could injure senior surface water rights. This makes it more difficult to obtain new groundwater permits. Similarly, to protect senior surface water right holders, junior groundwater users that impact surface water may be regulated off to provide water for the senior surface water use.

Shifting from Abundance to Limited Supply: The Difficulty of Change. Issuing additional water rights in areas where there is insufficient supply, increases the number of junior users that watermasters must regulate annually in managing and distributing water to senior users. There has been increased interest in data to inform how much water is available and to manage water resources more sustainably, particularly in regard to groundwater, where new allocations can have long-term implications for senior groundwater users.

Scarcity Increases Management Challenges: The Easy Solutions are Gone. The demand for water continues to rise, causing individuals to seek creative solutions to address their needs, including untested interpretations or modifications to the law. As a result, water management decisions are becoming more complicated and subject to interpretation.

Increased outreach and communication tools to help people understand the limited nature of the resource and potential solutions may help to prevent and reduce challenges associated with unauthorized uses of water.

Water Laws are Numerous, Complex, and Often Built on Case Law. Over time, water laws have grown increasingly more complex and sometimes difficult to understand, often based on a whole body of case-law. This slows decision-making and increases the likelihood of disputes.

Collaborative, Innovative, and Proactive Solutions Take Time, Data, and Resources to Develop and Implement. The State needs to proactively invest in data, innovation, collaboration, and planning, as well as the staff needed to understand and negotiate complex water issues to support identification and implementation of solutions and seek to prevent or reduce litigation.

Klamath Basin Conflicts

Aside from the statewide themes, a major driver of legal expenses has arisen out of disputes in the Klamath Basin. More information on issues in the Klamath Basin are included in prior sections of this Chapter. A detailed summary of disputes are also included in our Budget Note Report on pages 12-16 and 59-66.

In short, litigation increased in that basin once the Department was required to begin regulating determined claims in accordance with the prior appropriation system starting in 2013, upon filing the Final Order of Determination with the Klamath County Circuit Court. This prompted some litigation over surface water regulation initially and then a number of cases over groundwater regulation to benefit the tribe's senior surface water rights.

More recently, disputes have arisen between the Klamath Irrigation District and the Bureau of Reclamation. These disputes have resulted in the Klamath Irrigation District asking the Department to take the rare move to step in to take control of Upper Klamath Lake – something the Department has not done before (see page 67 of the Budget Note Report).

ENVIRONMENTAL FACTORS

The Department credits its highly skilled staff and strong working relationships with other agencies and stakeholders for the Department's achievements; however, numerous environmental factors affect the Department's ability to carry out its mission. Many of these factors are discussed above.

Drought conditions, climate, population growth, changing demands and increasingly limited water supplies increase the challenges faced by staff in permitting, distributing and managing water across the state. Further, budget constraints limit the Department's ability to study, measure and analyze the state's water resources—key information needed to support responsible water management. Staff resources are also limited, thereby constraining the Department's ability to protect existing water rights through regulation, to support communities and expeditiously address complex policy questions, to provide water resource data to the public, and to process requests for water right changes to meet new and changing water demands. Responding to increased water conflicts and legal disputes in recent years has taken significant staff time and resources.

MAJOR CHANGES TO THE AGENCY

2019-2021

Oregon 100-Year Water Vision – The Department is participating in Oregon's Water Vision work and continues to coordinate with other state agencies.

Executive Order 20-04 & Climate Adaptation Framework – The Department is engaged in the State's efforts to address climate change, both through the Climate Adaptation Framework as well as Governor's Executive Order 20-04 processes.

Diversity, Equity, & Inclusion – The agency is working to formulate a team to further integrate and consider equity, inclusion, and diversity in the Departments programs, processes, and policies.

2022 Integrated Water Resources Strategy update – Efforts to update the IWRS in 2022 are underway.

Walla Walla Basin Groundwater Study – Work continues to improve our understanding of surface water and groundwater supplies and uses. Groundwater staff worked with the USGS and Washington Department of Ecology to develop a scope of work for the Walla Basin Groundwater Study, and cost share agreements are expected to be formalized in early 2021 along with a plan for public participation.

Confederated Tribes of the Umatilla Indian Reservation Water Rights Settlement Negotiations – The agency continues its work with the Confederated Tribes of the Umatilla Indian Reservation and local interests to resolve issues associated with the ongoing Indian water rights settlement negotiations. The Department is also in regular communication with representatives from the State of Washington's Department of Ecology to discuss water management challenges and opportunities along the states' border and explore more coordinated water management approaches.

Dam Safety Modernization – The agency has prioritized dam safety – working to modernize the program as well as obtain resources to advance our understanding of risks to dams. Significant updates to the statutes were made in 2019. Prior to that, the statutes had been relatively unchanged since 1929.

Organizational Structure – The Water Resources Development Program was moved from the Director's Office to the Technical Series Division. Information Services was moved from the Technical Services Division to the Administrative Services Division.

Willamette Feasibility Study Complete – The feasibility study explored how the Willamette Valley Project reservoirs can help meet current and future water demands in the valley and if changes to federal and state authorizations are necessary to meet those needs.

COVID 19 Agency Actions – The agency transitioned most office staff to telecommute, closed offices to public, moved public engagement efforts online, and modified in-person necessary operations to comply with facial coverings and social distancing requirements.

2020 Budget Reductions – Though temporary in nature, the 2020 budget reductions coupled with increased legal expenses were temporary though significant challenges for the agency due to numerous positions in different agency sections and programs being left vacant for extended periods of time. Importantly, the reductions in 2020 mean that agency work on increasing our understanding of groundwater and surface water resources has been delayed.

2017-2019

2017 IWRS update – Oregon's IWRS provides a framework for understanding and meeting Oregon's current and future instream and out-of-stream water needs. Key IWRS recommended actions focus on creating additional capacity within the Department's existing programs to improve public safety, water management and decision-making, while also providing resources to meet future instream and out-of-stream water needs.

5 Year Strategic Plan – The Strategic Plan was established to guide the Department as we work to carry out the IWRS and update and improve our practices to ensure that Oregon has healthy waters able to sustain a healthy economy, environment, and cultures and communities across the state.

Klamath Agreements Terminated – The Upper Klamath Basin Comprehensive Agreement was terminated, increasing conflict within the Basin and resulted in the agency modifying its approach to groundwater management in the basin.

2015-2017

Walla Walla Serious Water Management Problem Area – The Basin Program rules were updated to designate a SWMPA, which requires water-use measurement and reporting for the basalt aquifer.

Initiation of Groundwater Study in Greater Harney Valley – Study launched to characterize and quantify the groundwater system in the Harney Basin to address gaps in our present understanding.

Formation of Water Resources Development Program and First Cycle of Water Project Grants and Loans – The Water Resources Development Program helps Oregonians address instream and out-of-stream water supply needs now and into the future. The Program includes funding opportunities and other resources through three program components: Planning Grants, Feasibility Study Grants, and Water Project Grants and Loans.

SB 266- Place-based Integrated Water Resources Planning – Place-based integrated water resources planning (also known as place-based water planning) is a voluntary, locally initiated and led effort, in which a balanced representation of water interests work in partnership with the state to understand and meet their instream and out-of-stream water supply needs.

2015 Statewide Drought, 2016 Drought Task Force – In 2015, Oregon experienced severe to extreme drought conditions across the entire state, according to the U.S. Drought Monitor. House Bill 4113 (2016) established the Task Force on Drought Emergency Response and directed the Task Force to research and evaluate potential tools to prepare for or deal with drought emergencies.

Demand Forecast Monitoring Strategy – The Demand Forecast Monitoring Strategy 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.

PROCESS IMPROVEMENTS

Measuring performance is 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 in prioritizing work and identifying problem areas to manage workloads. Many of the Department's process improvement efforts require the Information Services staff to implement. Information Technology will continue to be a critical component for modernization and process improvement efforts. Over the past several years the Departments process improvement efforts have included the following:

- *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. Internal staff and the general public now have better access to groundwater-related data through web-based tools and web services.
- *Developing and implementing a strategic planning effort:* The Department's 2019-2024 Strategic Plan places an emphasis on updating and modernizing the agency's processes, operations, and services. The Strategic Plan is a continued lens through which the agency seeks to conduct and prioritize its work. Budget packages were also formulated with consideration for the Strategic Plan priorities and objectives. Some of the work to implement the Strategic Plan has been delayed due to COVID-19; however, the Department looks forward to continuing to implement the 2019-2024 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. Staff input in the Strategic Planning effort identified that a consistent onboarding process would greatly benefit agency operations, ensuring staff have the right information and training. In 2019, managers and staff began piloting a redesigned process. More work needs to be completed to roll the effort out more broadly; however, due to COVID-19 and mass teleworking the project has experienced delays and will need to be reshaped.

- *Contract Tracking:* The fiscal section conducted a process improvement session focused on the contracts tracking process. Staff mapped the current process and identified areas they felt could be improved. One of the biggest changes staff have 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 use to record and archive field activities to monitor and regulate for instream water rights, senior out-of-stream uses, and illegal uses. Metrics compiled in the database help us report on Key Performance Measures (KPM), monitor year-to-year and long-term trends, and better account for field staff workload over time. Field staff enter data every other week compared to once per year in the old database, allowing for more frequent data queries as needed.

- *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. This supports our key KPMs to make our data more accessible to the public.

- *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 using new technology.

The above efforts began and were reported on during the last biennium. Recent efforts this biennium include:

- *Maximization of Limited Watermaster Resources:* Increased water distribution and regulation in some parts of the state along with COVID-19, has led watermasters to distribute regulation orders for junior water right holders by mail. This has increased Field Staff's ability to provide water to the senior water rights timelier when large groups of junior users are involved. Field staff then conduct field surveys to confirm compliance with the orders.

- *Alignment of Field Services Division Workloads:* The 2016 Secretary of State Audit recommended better aligning the Field Services Division's staff resources with the workload needs. With limited resources and high workloads, the Department began to evaluate workloads across the division and considered how changes could provide better support, coordination, and training

for staff. The Division implemented a number of changes to positions, locations, and watermaster districts following the evaluation.

- *Tracking of Groundwater and Well Construction Technical Reviews:* The Department's Information Services, Groundwater Section, and Well Construction and Compliance staff completed work to redesign and integrate the tracking of groundwater and well construction technical reviews into a centralized database system. The Groundwater and Well Construction Review Tracking System is now linked to the water rights workflow tracking system used by the Water Rights Service Division. The system has provided several benefits including: automating the process of coordinating completion of technical reviews between staff in various sections; allowing improved management of workflows and identification of staff working on reviews; tracking the amount of time required for each stage of the review process; and tracking critical findings of technical reviews.

- *Well Inspection Entry*: The Department is in the process of updating the data entry portal that the Department's well inspectors use in the field to enter and track their well inspections. This updated portal will give inspectors the ability to capture more information related to the specific wells being inspected and will assist the Department in ensuring that accurate and complete information is recorded.

- *Well Report Search Tool*: The Well Construction and Compliance Section worked with Information Services to develop a new tool to assist landowners, realtors, well constructors, consultants, and others, to locate wells throughout the state by simply zooming in to an area on a map and selecting the well reports that they are interested in. The tool uses a hierarchy of available location data to display the best available information for the public. The location data set includes information provided by the driller, the landowner, or Department staff. This tool eliminates the need for the public to decipher map coordinates and instead gives them the ability to simply zoom into their neighborhood and select the wells that they are interested in reviewing.

- *Start Card Mapping Feature*: A new mapping tool integrated directly into the start card e-filing application allows well constructors to locate a property on a map, mark the proposed location of the well, and then convert that location to GPS coordinates and/or the Township, Range, and Section location. The previous start card application offered a tool to find location, but because that program was outdated, the information was not always accurate—especially in rural parts of Oregon. The goal of the newly updated start card application is to boost the integrity of the location information in the well report query database.

- *New Exam Study Materials and Practice Exams*: The Well Construction and Compliance Section (WCC) has created a new study guide for people interested in becoming a licensed well constructor. In addition, staff created two new practice exams—one for monitoring well construction and one for water supply well construction. The practice exams were designed to demonstrate the type and format of questions that a potential well constructor should expect on the regular exam.

- *Increasing Accessibility to Surface Water Data*: Staff are working to allow surface water data for up to 25 gages to be downloaded from the Department's website at the same time. Currently, a person can only download data from one gage at a time, which can be a cumbersome process.
- *Oregon Irrigation Consumptive Use Project*: Satellite optical and thermal imagery can be combined with climate data to estimate actual evapotranspiration and consumptive use for large regions. Staff have begun work on the first phase of this project to develop the necessary datasets for estimating irrigation withdrawals at the sub-basin watershed scale. The successful completion of this project will enable the Department and U.S. Geological Survey (USGS) to better quantify agricultural water use, irrigation withdrawals, and irrigation efficiency in Oregon's agricultural areas.
- *Funding Opportunity Assessment and Continuous Improvement Plan*: The Water Resources Development Program conducted a comprehensive assessment of the Water Projects Grants and Loans funding opportunity and the Feasibility Study Grants funding opportunity. The purpose of the assessment was to determine what is working, what is not working, and where improvements can be made. The assessment resulted in a prioritized list of recommended actions. A Continuous Improvement Plan was developed to make progress on the prioritized list in a manner that makes meaningful progress, is reasonable based on available capacity, and has the flexibility to adapt to changing conditions.
- *Planning Assessment and Evaluation of the Pilot Phase of Place-Based Integrated Water Resources Planning*: The Water Resources Development Program is currently conducting a planning assessment with the goal of answering the question: Given the importance of planning, how can we structure and support future planning to meet instream and out-of-stream water needs and strategically guide investments? The planning assessment includes 1) understanding the framework for water supply planning in Oregon, 2) learning from others within and outside of Oregon, 3) evaluating past and current approaches to water supply planning (including an independent evaluation of the pilot-phase of place-based planning), 4) assessing the status, assets, and needs of the state and places/basins, and 5) working together to chart a path forward. The Department is developing an intergovernmental agreement with Portland State University to conduct the independent evaluation of place-based planning. This work is expected to extend into the 2021-2023 biennium.
- *IT Help Desk Ticketing System*: The Information Services Section deployed a ticketing system for the Department's IT Help Desk. This has allowed staff to better track the problems that are impacting Department work, prioritize and assign work to ensure issues are resolved, and to record larger modernization ideas in a central location for future discussion/prioritization.
- *Transition to Workday*: With the implementation of Workday, Human Resources processes are now mostly electronic, reducing paperwork.
- *Accepting Credit Cards at the Salem Office*: Prior to COVID-19, the Department was seeking to offer payment by credit card at the Salem office customer service counter. After exploring various products, the Department determined that the transaction fee was too high for the product that met the Department's needs. This project has been put on hold since COVID-19 resulted in closures of the Salem office.

- *Fiscal and Payroll Modernization*: While COVID-19 greatly disrupted operations, it also created a unique opportunity and need for Fiscal and Payroll staff to modernize to serve a shift to a primarily teleworking staff. New electronic processes, file structures, approval paths, and electronic signatures were set up within a week to meet the immediate need of social distancing and teleworking. This has reduced paperwork within the section.
- *Dam Safety Statute and Rule Modernization*: In 2019, the Department passed legislation that modernized the State's dam safety statutes, which had been relatively unchanged since 1929. In late 2019 through mid-2020, the Department worked to revise its rules to implement the statutory changes. This work represents a significant step towards implementing many of the recommendations of the Model State Dam Safety Program and help the Department to improve the safety of dams to protect the public.

The efforts described above demonstrate the Department's commitment to continuous process improvements and the need for continued investment in information technology. Department staff will continue to identify opportunities to improve performance, increase efficiencies, and better serve customers through continued tracking of performance indicators, tracking of progress in implementing recommended actions in the Integrated Water Resources Strategy and Strategic Plan, meeting with other agencies to identify best practices, and feedback provided by staff, customers, and stakeholders.

OREGON WATER RESOURCES DEPARTMENT

Chapter 5: Budget Information and Legislation

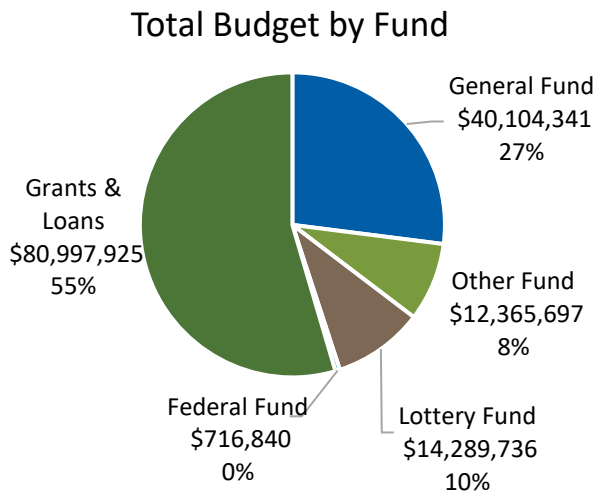
BUDGET SNAPSHOT

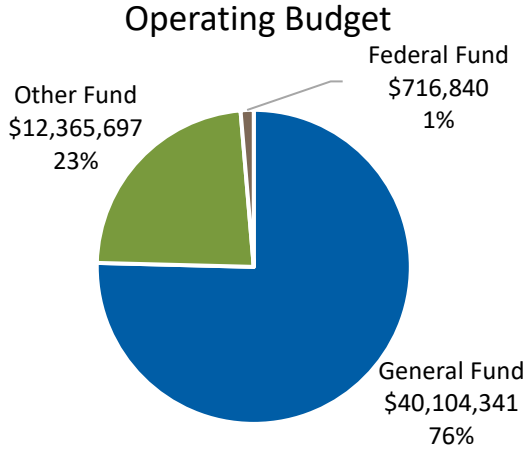
	2017-19 Legislatively Approved	2019-21 Legislatively Adopted	2019-21 Legislatively Approved 1/21	2021-23 Modified Current Service Level	2021-23 Governor's Recommended
General Fund (GF)	$32,150,986	$36,722,794	$35,217,839	$40,088,994	$40,104,341
Other Funds (OF) including Fees	$12,922,692	$13,301,841	$14,413,830	$12,167,624	$12,365,697
Other Funds - Grants/Loans	$53,942,169	$85,849,252	$85,849,252	$60,100,000	*$80,997,925
Lottery Funds - Debt Service	$3,953,969	$7,566,502	$7,563,194	$13,470,490	$14,289,736
Federal Funds	$1,905,917	$875,519	$1,148,011	$725,000	$716,840
Total Funds	$104,875,733	$144,315,908	$144,192,126	$126,552,108	$148,474,539
Positions / Full-Time Equivalent (FTE)	170/167.59	177/171.79	178/172.67	168/162.68	170/165.44

*Other Finds – Grants and Loans includes Lottery Revenue proceeds in the amount of $60.1 million in carry forward from the 2019-21 biennium and $20.5 million in new bonding (plus the cost of issuance)

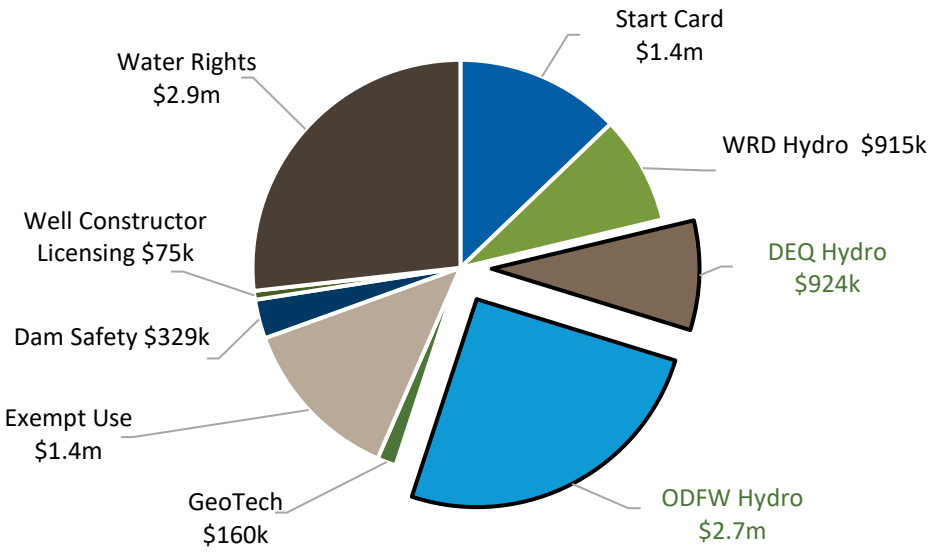
Total Budget and Operating Budget

The Department receives funding from four primary funding sources: General Fund; Other Funds; Lottery Funds; and Federal Funds. The General Fund provides the largest portion of the Department's operating budget. The Other Funds component can be broken out into funding from fee revenue and various contracts for work performed, as well as Lottery Revenue Bond proceeds for Grants and Loans. Lottery Funds are transferred in from the Department of Administrative Services (DAS) to pay Debt Service obligations. Federal Funds are generally received through the Federal Emergency Management Agency (FEMA), the United States Geological Survey (USGS), or other federal agencies.





Recap of Fee Revenues



Start Card Fees are submitted by well constructors to begin work on a well. Funds are spent on costs associated with the well construction and compliance program and for the well inspection program. Statute prescribes spending percentages as follows: administrative costs – not more than 5%; technical costs - not more than 20%; and field and enforcement costs – not less than 75%.

Hydroelectric Fees are used to fund work done by three state agencies on hydroelectric project authorizations and oversight. Funds are disbursed through interagency transfer to the Department of Fish and Wildlife (ODFW) and the Department of Environmental Quality (DEQ) based on the project status as outlined in the Oregon Revised Statutes or, when the statute does not specify, the Memorandum of Understanding between the agencies. The remaining funds are used for operation of the Water Resources Department's Hydroelectric Program.

Water Right Fees are collected and used to support the activities and staff associated with the processing of water rights transactions.

Exempt Use Well Fees are collected and used for the purposes of evaluating groundwater supplies, conducting groundwater studies, carrying out groundwater monitoring, and processing groundwater data.

Geotechnical Hole Fees are collected and used for activities related to geotechnical duties, functions and powers of the Department.

Dam Safety Fees are assessed to dam owners and are used for activities related to the Dam Safety program including supporting staff that inspect and evaluate dams across the state to protect public safety.

Water Well Constructor License Fees are collected and used for activities related to the Well Constructor Licensing Program.

All fees, charges, payments, and interest received by the Water Development Loan Program are dedicated to that program. There are no pending loans, applications, or bonding activity for the program.

Recap of Lottery Bond Funding

Description	Authorized '15 - '21
Water Supply Development Account	
Deschutes Basin Board of Control irrigation piping projects	**BOND SALE CANCELLED** $10 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	$5.15 million
Water Project Grants & Loans	$36.25 million
Water Supply Fund	
Umatilla Water Supply Grant	$11 million
Mosier Well Grants	$1 million
Place-Based Planning Grants	$750,000
Wallowa Lake Dam	**BOND SALE CANCELLED** $14 million
Big Creek Dam	**BOND SALE CANCELLED** $4 million
Water Conservation, Reuse, and Storage Fund	
Feasibility Study Grants	$3.5 million
TOTAL	**$91.35 million**

Over the last three biennia, the Legislature has authorized $91.35 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.

New Revenue Sources or Increases

The Department's has legislation and budget packages that propose to increase fees and establish new fees as outlined below:

Water Rights Transactions and Dam Safety Fee Schedule Increase - The Department's water right transactions and dam safety fee schedule are typically revised on a four-year schedule, with the last increase approved by the legislature in 2017. The Department of Administrative Services estimates that the costs of doing business will increase by approximately 17.39 percent averaged over the next two biennia (Fiscal Years 2021 to 2025). The Department is proposing to increase these existing fees by approximately 17.39 percent above the current fee level for the next four-year fee schedule. The amount of anticipated new revenue is projected to be $509,894 in Water Right Fee Revenue and $54,700 in Dam Safety Annual Fees. The Department is also proposing a new fee to add a fee per well for transfer applications that propose to make changes for more than one well. [See budget packages 070 and 104 and House Bill 2142].

Hydroelectric Fee Increase and Restructure - This revenue increase is associated with Policy Option Package 105 and House Bill 2143. Annual Hydroelectric Fees support programs at the Department as

well as the Departments of Fish and Wildlife, and Environmental Quality. Agencies are projecting shortfalls and the structure of the hydroelectric fees has not been reviewed by the legislature since the late 1990s. The Department is proposing to equalize the fees among projects and increase the fees. Projected revenue is $1,287,004, which will be distributed among the three agencies.

Programs Shared with Other Agencies

New water rights and hydroelectric – coordination with Oregon Department of Fish and Wildlife and Oregon Department of Environmental Quality. Fee revenue in hydroelectric program shared with ODFW and DEQ.

Groundwater studies – coordination with the Oregon Department of Geology and Mineral Industries and the U.S. Geological Survey.

Payroll, IT, Human Resources, Fiscal and Contracting support – shared services with Oregon Watershed Enhancement Board, Oregon Department of State Lands, Oregon Housing and Community Services and Oregon Department of Land Conservation and Development.

State Scenic Waterways – coordination with Oregon Parks and Recreation Department.

Integrated Water Resources Strategy, Planning, and Evaluation of Grants – coordination with multiple state and federal agencies.

Drought, Climate, and Natural Hazards – coordination with multiple state and federal agencies.

2021 DEPARTMENT LEGISLATION

HB 2142 – Water Rights and Dam Safety Fees

Background

The Department's current fee schedule supports staff involved in the processing of water rights. It also supports staff and engineering contracts in the Dam Safety Section.

In 2009, the legislature restructured many of the Department's water right fees and since then the Department has brought forward modifications to the water right transactions fee schedule every four years, based on Department of Administrative Services projected inflationary cost increases and with a 50/50 split between fees and General Fund. The fee schedule was last modified in 2017.

Despite the water rights fee increase in 2017, in recent years the Department has kept seven positions, three funded by general fund and four funded by water right fees, unfilled as natural vacancies have occurred in an effort to administratively manage the budget. The shortfalls are in part due to the number of water right applications and other transactions being less than anticipated, leading to reduced revenues to support positions. Looking to the future, the Department of Administrative Services projects inflationary costs to increase by 17.39 percent for 2021-2025. As a result of these factors, package 070 in the Governor's Budget eliminates 8.83 FTE funded by water rights fees.

With the reductions in staff, it will take longer to process water right transactions as backlogs build, causing farmers, water providers, and others to wait longer to receive decisions on water supply proposals. This will also reduce the Department's ability to provide quality customer service and timely processing (Key Performance Measures #9, 10, 11, and 14), as well as to work towards modernization of its water right transactions programs.

What the bill does

This bill proposes a 2021-2025 fee schedule to support water right processing and dam safety by increasing fees by approximately 17.39 percent averaged over the four-year period. The legislation would be effective July 1, 2021 – the start of the fiscal year.

The fee increase for water rights is based on past practice of a 50/50 split between General Fund and fees, and recent practices to increase the fees by the cost inflation estimates provided by the Department of Administrative Services. However, the fee increase as proposed will only allow the Department to retain 2.5 FTE of the 8.83 FTE reduced in package 070 due to revenue shortfalls. These increased revenues and staff retained are included in package 104 of the Governor's Recommended Budget. The increase will also provide services and supplies to support the Dam Safety Program.

HB 2142 also adds a fee per well for transfer applications that propose to make changes for more than one well. This change better reflects the increased work associated with evaluating the potential injury, interference, and well construction standards for each well that is proposed for a transfer. It also matches with how fees are already calculated for new water right permit applications.

This proposal is consistent with Integrated Water Resources Strategy recommended action 13.B to fund water resources management activities at state agencies.

Fiscal

Department Analysis
These fees are projected to result in a $564,594 revenue increase between 2021-2025.

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

HB 2143 – Hydroelectric Program Fee Structure

Background

Annual fees for non-federal hydroelectric projects were first established in 1911 and last updated in statute in 1999. The annual fees are necessary to ensure that current staffing levels, activities and funding are appropriate to fulfill the objectives of the hydroelectric programs of the Oregon Department of Environmental Quality (ODEQ), Oregon Department of Fish and Wildlife (ODFW), and the Oregon Water Resources Department (OWRD).

Hydroelectric projects are owned by public and private utilities, municipalities, and private citizens. Currently, large projects pay annual fees based on the theoretical horsepower capacity (THP) of the project. Once a project has been relicensed, fees increase based on an established inflation factor and are adjusted by the Hydroelectric Fee Review Panel, which meets every eight years. Annual fees for relicensed projects were $0.605/THP for the year 2020. Annual fees for projects that have not been relicensed are generally $0.28/THP and can only be modified through legislation. Finally, smaller projects generally pay between $15 and $50 year, depending on relicensing status and size.

The current fee structure is complicated and leads to a large fee increase after a project undergoes the relicensing process. Some projects have not experienced a fee increase since 1999, and others have seen increases annually, leading to disparities between fee payers. DEQ is already facing a shortfall of revenue to support program services in 2019-2021. ODFW and OWRD project a shortfall at the end of the 2021-2023 biennium.

What the bill does

The agencies propose to simplify annual fees paid by hydroelectric projects in order to maintain current service levels at OWRD, ODFW, and DEQ. This bill proposes to equalize the annual fee rates for large projects with all projects paying the same fee, starting at 2020 base rate of $0.687/THP. Fees for large projects are adjusted by an inflation factor. The bill requires that a Fee Review Panel convene at least once every eight years in order to reduce or increase the annual fee for large projects based on programmatic needs and as the agencies' hydroelectric project portfolio shifts over time. The bill will also standardize fees for small projects less than 15 THP at $15/year and for projects between 15 THP and 123.5 THP at $50/year.

Fiscal

Department Analysis
These fees are projected to result in a $1,287,004 revenue increase for the 2021-2023 biennium.

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

HB 2144 - 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/use for which the water is stored. The Water Resources Department has long debated about its authority to make changes to storage rights. In light of a lack of clarity in its existing laws, prior to 2018, the Department had occasionally allowed changes in the location of reservoirs and, more commonly, processed changes in the purpose of use.

Recent proposals to change the location of stored water resulted in the Department taking a closer look at its authorities. In 2018, the Department of Justice issued a memo determining that, with some exceptions, the statutes do not provide the Water Resources Department with the authority to allow changes to storage rights.

Without the ability to change primary storage rights, water right holders will not be able to manage water as necessary to meet emerging needs, opportunities, or challenges.

What the bill does

Work on this bill has been delayed due to demands on staff time related to COVID, budget challenges, and wildfires. This bill is a placeholder in the event that a solution is identified during the session. The placeholder proposes the Department study the laws related to transfers and changes to water storage rights, with findings and recommendations submitted to an interim legislative committee no later than September 15, 2022. A solution would provide the Department with clear authority and criteria to allow for changes in a primary storage right.

Fiscal

Department Analysis

Minimal fiscal impact.

Legislative Fiscal

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

HB 2145 – Well Construction Program Modernization

Background

The purpose of Oregon's well construction program is to protect public health and safety by preventing wells from serving as a conduit for groundwater contamination and to protect groundwater resources for existing and future uses by preventing the draining of aquifers and groundwater declines from improperly constructed wells. Activities of the well construction program include licensing well drillers, administering a continuing education program, enforcing well construction standards and issuing special standards, accepting "start cards" from drillers for beginning work and receiving "well logs" once work is complete, inspecting wells and work on wells for deficiencies, and other activities.

The 2016 Secretary of State Audit identified a need for the Department to "enhance its well regulation efforts, including driller licensing and education, and inspections of new, abandoned, and known wells," stating that "Limited well inspections and drilling requirements jeopardize groundwater quality." Oregon's 2017 Integrated Water Resources Strategy and the Department's 2019 Strategic Plan also calls for protections of groundwater through the well construction program and identifies the need for updates.

Objectives of Modernization

There are more than 250,000 wells in Oregon, with approximately 3,000 new water wells drilled each year on average. For new wells, the Department typically only has resources to inspect around 30 percent, which means that deficiencies on uninspected wells are left unaddressed. In 2019, 10 percent of the newly constructed wells that were inspected had a deficiency. Owners of deficient, damaged, or aging wells, or a well impacted by declining groundwater levels, may not be able to afford to pay the costs to abandon, repair, or replace a well, which may serve as their source of water for household and drinking purposes.

Since OWRD is unable to inspect all new wells across the state, it is critical that the Department: (1) Prevent Deficiencies: ensure that licensed well drillers have the necessary knowledge of best practices to prevent well construction deficiencies; (2) Address Deficiencies: maximize limited resources by improving the Department's ability to plan and efficiently conduct inspections; (3) Timely Corrective Action: facilitate timely voluntary correction of issues, and when warranted, more timely enforcement; (4) Driller Responsibility: address driller concerns about time responsible for deficiencies, while considering the Department's limited resources and the burden on landowners; and (5) Provide Assistance: establish a program to help well owners address well issues.

What the bill does

The current bill, which is likely to change with further stakeholder feedback and engagement, proposes the following updates to modernize and increase efficiency within the well construction program to better protect groundwater resources for Oregonians.

Well constructor skills (Operative July 1, 2023): Requires evidence of welding skill to obtain new license. Allows Department to require an existing driller to provide proof of welding ability or undertake training if a deficiency is found. Requires existing licensee to place seals on at least two wells in the presence of the Department for license renewal. Requirement may be waived by the Department. Allows the Department to establish alternate schedule based on resources or licensee's ability.

Continuing education (Effective January 1, 2022): Modifies representation on the Continuing Education Committee to include one person with expertise in groundwater quality, public health, or employee safety. Provides that the fee for one continuing education credit for Department sponsored courses may "not exceed" $40 and extends the continuing education program sunset date from 2022 to 2030.

Documentation and Notice to Allow Timely Inspections and Tracking of Work (Operative July 1, 2023 unless noted): Requires start cards to be submitted between 60 days to no later than 72 hours before work begins on wells. Provides that start card expires if work does not begin within 60 days of submission. Requires drillers to provide the GPS location of the well, owner information, and proposed construction start and end dates on start cards. Requires drillers to provide notification to the Department the day that work begins and to provide estimate of day on which seal placement will occur. Requires notification to Department if seal placement date is different. Requires electronic submission of start cards and well logs by July 2024, unless waived.

Injunction for Timely Enforcement (Operative July 1, 2023): Allows Department to apply to a court for an injunction if a person has engaged or is engaging in an activity that violates well construction laws.

Driller Responsibility (Operative July 1, 2024): Reduces the length of time the Department may hold a driller responsible for well deficiencies from the life of the driller's license to a time following submittal of the well report based upon the level of review a well receives: 3 years if Department observes seal placement, reviews well log, and determines standards are met and 10 years if well log is reviewed and the Department determines standards are met. If no review occurs, driller liability shall not extend beyond 15 years. Limitation on driller responsibility does not apply in instances of fraud or negligence, misrepresentation, or misstatements of fact. Applies to wells with logs submitted and fees paid on or after July 1, 2024.

Well Repair, Replacement, and Abandonment Fund (Effective January 1, 2022): Establishes a program to provide funding assistance to repair, replace, or abandon deficient wells; repair or replace wells used for household purposes by persons of lower or moderate income, or in areas of declining groundwater levels; or to abandon, repair, or replace wells as specified in rule to address water management purposes.

Fiscal

Department Analysis

No staff resources are requested at this time. Operative dates for most provisions in the bill are either July 1, 2023 or July 1, 2024 to allow time for the Department to update databases, forms, rules, and procedures, and to communicate with the well driller community. As such, the Department believes that the regulatory portions of the bill can be implemented within existing resources, assuming that the program performs similar to how it has in the past. The bill would establish the authority for a well repair, replacement, and abandonment funding program; however, no funding for the Well Repair, Replacement, and Abandonment Fund is included in the Governor's Budget. If funding were included and depending on the amount of funding, the Department may also need staff to support the new program.

Legislative Fiscal

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

SB 130 (LC 659) – Extending the Irrigation District Pilot Project

Background

In 2003, the Legislative Assembly authorized a pilot project allowing three irrigation districts to make annual place of use changes to water rights within their legal boundaries without making application to the Water Resources Department for a temporary transfer.

Between the 2003 and 2007 legislative sessions, only a small number of transfers were completed and there was insufficient data to assess the pilot. The program was extended in 2007, providing an additional two years for the three districts to test the approach. After showing some success, in 2009, the program was extended to 2016 and expanded to include 15 districts. In 2015, Senate Bill 267 made some adjustments to the program, extended the sunset to January 2, 2022, and required a report to the Legislature by January 31, 2021.

The pilot project is intended to provide increased flexibility for irrigation districts to temporarily change the place of use of water rights without reducing protections for existing water users. To temporarily change the place of use of water rights under the pilot program, districts are required to satisfy standard water right transfer criteria and maintain records. This includes ensuring that there is no injury to other water rights or an expansion of the authorized irrigated acres.

What the bill does

The Department proposes to extend the program to January 2, 2030. Current information shows the pilot project is providing the districts with more management flexibility, while also ensuring that other water users are protected. The Department is recommending continuation of the pilot project to further assess its implementation.

Fiscal

Department Analysis

This bill has a minimal fiscal impact.

Legislative Fiscal

A Fiscal Impact Statement has been issued by the Legislative Fiscal Office: minimal expenditure impact.

OREGON WATER RESOURCES DEPARTMENT

Chapter 6: Reduction Options & Long-Term Vacancies

2021-23 GOVERNOR'S BUDGET REDUCTIONS

Package 070 – Water Right Revenue Shortfalls Reductions – $1.7 million Other Fund; 8.83 FTE

Reduces 8.83 FTE of 17.93 fee funded FTE in the Water Right Services Division due to anticipated revenue shortfalls. The number of water right applications and other transactions has been less than anticipated, and has declined instead of increasing, leading to reduced revenues to support positions. See POP 104. Reductions will lead to longer processing times and reduce capacity to work on much needed modernization efforts.

Package 090 – Reductions – $2.46million General Fund, 6k Other Fund; 3.26 FTE

Reduces three positions (3 FTE): a water data technician, an assistant watermaster, and a NRS 2 groundwater hydrogeologist. Reduces 2 partial positions (0.26 FTE): Grant Coordinator and Field Services Executive Support. Reduces agency budget for rent expenses by $275k to permanently reduce Department's office space with increased teleworking, removes $165k GF for gaging stations, $382k GF for feasibility study grants, $301k for groundwater studies, and $778k for observation wells.

Package 092 – 5% Vacancy Savings Reduction – $909k General Fund, $241k Other Fund, $6k Federal Fund

Requires agency to leave positions open to achieve vacancy savings.

Other Adjustments – Package 091, 096, 097 099 –$821k GF, 83k Other Fund, $2k Federal Fund Reductions

Includes statewide adjustments for elimination of inflation in non-protected accounts, DAS Pricelist adjustments and Sate Government Service Charges, Department of Justice Attorney General rates, and Enterprise Microsoft 365 Consolidation. Total reductions: $821k General Fund, $83k Other Fund, $2k Federal Fund.

10 PERCENT REDUCTIONS LIST AS REQUESTED BY LFO 2021-23

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Eliminate non-protected account inflationary increases built into the current service level budget	(184,218)		Eliminating package 030 inflationary increases reduces the Department's ability to keep up with inflationary increases passed on to us by our suppliers. **Reduction included in GRB.**
Increase to vacancy savings	(908,702)		Increasing vacancy savings targets to 5%. This reduction would mean the Department would need to hold vacant general fund positions open for a longer period of time. This effects productivity in programs with vacancies. **Reduction included in GRB.**
Feasibility Study Grants	(382,467)		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, $446,000 in 2017-19, and over $1 million so far in 2019-21. Funding for these grants have historically been a combination of General Fund and Lottery Bond Funds. Reducing the General Fund would reduce the amount of funds available to support studies to help communities meet their water needs. **Reduction included in GRB.** Reduction leaves $40k.

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Gaging Stations	(164,694)		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. Some gaging stations may not be able to be repaired reducing the amount of data collected and streams monitored. **Reduction included in GRB.** Reduction leaves $40k.
Water Measurement Cost Share Program	(101,914)		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. Some water users have refused to install measurement 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. Reduction not included in GRB. Reduction leaves $5k in general fund and projected $50-$60k in other funds.

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Observation Wells	(778,416)		Competition for groundwater increases every year. Water level data are measured at state observation wells around state and are critical to help assess Oregon's groundwater resources and to understand climatic, seasonal, and groundwater development impacts. 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, reducing the amount of new data collected and the ability for the Department to install observation wells to answer specific scientific needs. **Reduction included in GRB.** Reduction leaves $5k.
Groundwater Studies	(300,928)		This reduces funding for continued scientific study of Oregon's groundwater resources, including the location and extent of groundwater aquifers, hydraulic connection between aquifers and streams, annual recharge to the aquifers, and how much is available for use by wells. Insufficient information about groundwater supplies can lead to overallocation of the resource, impacting people that rely on groundwater as well as streams. Study funds are used to leverage Federal dollars to pay for the studies. Over the past few decades, study funds have been limited and insufficient to meet the demand and need for studies. In the 1990's the Department's budget for groundwater studies was $1.2 million. **Reduction included in GRB.** Reduction leaves $200k.
Grant Specialist	(26,227)	(0.13)	The Water Resources Development Program manages two grant opportunities. One allows applicants to test the feasibility of projects and one for grants to develop projects. This position, when it was a full FTE, provided support for grant processing. **Reduction included in GRB.**

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Field Services Executive Support	(5,528)	(0.13)	Removing the remaining months of this position would reduce the Department's ability to address organizational needs and administratively manage its budget through future permanent finance packages. This position, when it was a full FTE, provided support to the Field Services Division. **Reduction included in GRB.**
Water Resources Data Tech 1	(141,175)	(1.00)	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. **Reduction included in GRB.**
Assistant Watermaster	(187,293)	(1.00)	This assistant watermaster position (NRS2) in the North Central Region contributes to streamflow measurements, operation and maintenance of gaging stations, and assists with regulation and distribution of water for senior users and responds to complaints and illegal uses. Loss of this position will result in 10-15 gaging stations no longer being operated, and online data availability will cease. Response time for regulation to protect senior rights and respond to complaints will increase. **Reduction included in GRB.**
Hydrogeologist (NRS2)	(194,301)	(1.00)	Department hydrogeologists are responsible for groundwater data collection, review of applications for new groundwater rights and transfers of existing rights, well interference investigations, basin study support, and responding to complaints between well users. Each staff person develops expertise in the geology and hydrogeology of one or more basins in Oregon, where they focus their efforts. Removal of this position will increase the backlog and processing time of groundwater applications and transfers, reduce collection of groundwater data, and increase the response time for questions and complaints from groundwater users and policy makers. **Reduction included in GRB.**

Description	General Fund	FTE	Impact of Reduction on Services and Outcomes
Miscellaneous Services and Supplies Reductions	(196,905)		Reduce spending on miscellaneous services and supplies. Categories yet to be determined however reductions could include office supplies, travel, office rent or training. This item appears in the GRB as $275k in a footprint reduction. **Reduction included in GRB.**
Basin Study Hydrographer 3– NRS3	(202,293)	(1.00)	Includes Personal Services & Services & Supplies. The Department is charged with undertaking basin studies that evaluate groundwater and surface water supplies around the state. Each study takes approximately five years to complete. This position provides surface water support for these studies and allows for concurrent investigations to be conducted. Removing this position eliminates the ability to undertake concurrent studies and extends the time to complete a study. Insufficient information about groundwater supplies can lead to overallocation of the resource, impacting people that rely on groundwater as well as streams. Reduction not included in GRB.
Basin Study Hydrogeologist – NRS3	(212,293)	(1.00)	Includes Personal Services and Services & Supplies. The Department is charged with undertaking basin studies that evaluate groundwater and surface water supplies around the state. Each study takes approximately five years to complete. This position provides groundwater support for these studies and allows for concurrent investigations to be conducted. Removing this position eliminates the ability to undertake concurrent studies and extends the time to complete a study. This position would also contribute to the processing of water right and transfer applications, which can lead to longer review times. Insufficient information about groundwater supplies can lead to overallocation of the resource, impacting people that rely on groundwater as well as streams. Reduction not included in GRB.
TOTAL	**($3,987,399)**	**(5.26)**	

LONG-TERM VACANCY REPORT

Vacancies as of 2/01/2021			
Position #	**Position Title**	**Type**	**Reason Narrative**
Vacancies Pending Organizational Restructures			
3000119	Office Specialist 2	Full-Time	This GF position is being held open to manage the budget administratively. This FTE is to be used for FSD restructure.
3000067	Office Specialist 2	Part-Time	This GF position is being held open to manage the budget administratively. This FTE is to be used for FSD restructure.
1000015	Executive Support Specialist 1	Full-Time	The hiring manager is analyzing the needs of the Division and the work of this position and intends to fill this position soon.
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 soon.
Vacancies Due to Fee Revenue Shortfalls			
3000055	Water Right App Processor	Full-Time	This position is a fee revenue dependent position in the Water Rights program.
9970035	Water Data Technician 1	Full-Time	This position in the Information Services Section is a fee revenue dependent position funded by start card fees.
3000075	Regional Well Inspector - NWR	Part-Time	This position in the Field Services Division is a fee revenue dependent position funded by start card fees.
3000056	Certificate Specialist	Full-Time	This position is a fee revenue dependent position in the Water Rights program.
9970025	Transfer and Conservation Specialist	Full-Time	This position is a fee revenue dependent position in the Water Rights program.
9909148	Water Right Analyst	Full-Time	This position is a fee revenue dependent position in the Water Rights program.
Vacancies to Meet August 2020 Special Session Reductions through Vacancy Savings			
9913127	WRDP Grant Coordinator	Part-Time	Partial position included in first year of the biennium vacancy savings for August 2020 Special Session.
9970028	WR Extension/ Adjudication Specialist	Full-Time	GF Position held open to meet August 2020 Special Session reductions through vacancy savings targets.
9913103	WR Application Analyst	Full-Time	GF Position held open to meet August 2020 Special Session reductions through vacancy savings targets.
9919002	Public Engagement Coordinator	Full-Time	Position held open to meet August 2020 Special Session reductions through vacancy savings targets.
9919012	Hydrologist 4	Full-Time	Position held open to meet August 2020 Special Session reductions through vacancy

			savings targets.
9919013	Hydrographer	Full-Time	Position held open to meet August 2020 Special Session reductions through vacancy savings targets.
9919008	Senior Hydrogeologist 4	Full-Time	Position held open to meet August 2020 Special Session reductions through vacancy savings targets.
9919009	Hydrogeologist 3 GW Reviewer	Full-time	Position held open to meet August 2020 Special Session reductions through vacancy savings targets.
1000023	Water Resource Data Technician	Full-Time	Position held open to meet August 2020 Special Session reductions through vacancy savings targets.
3000072	Executive Support Specialist 1	Part-Time	Partial position included in first year of the biennium vacancy savings for August 2020 Special Session.
Other Vacancies			
3000090	Water Right Application Caseworker	Full-Time	This GF position is being held open to manage the budget administratively.

2020 AUGUST BUDGET ADJUSTMENTS RESULTING FROM COVID-19

COVID-19 has had a significant impact on the daily lives of all Oregonians, with many facing severe economic hardships. State government revenues that support services declined, resulting in subsequent budget reductions. During the August 2020 Special Legislative Session, actions were taken adjust OWRD's budget. These adjustments added 125k General Fund for Migration to State Data Center and $260k Federal Funds for FEMA High Hazard Potential Dams Grants and one limited duration position (0.88 FTE). Reductions included $3.6 million in General Funds, and also included leaving 11 positions vacant for the remainder of the biennium and reducing funds for water use measurement, streamflow monitoring, and other reductions.

Item	General Fund	Description and Impact of Reduction on Services and Outcomes
Feasibility Study Grants	$422,467	This reduction eliminated the general fund dollars associated with the program and reduced the amount of funding available to evaluate a potential water conservation, reuse, or storage project. $2.2 million in lottery bond dollars remained to support these grants.
Place-based Planning	$49,684	This reduced the amount of support the Department was able to provide to the place-based planning groups.
Observation Wells	$50,000	This reduced unobligated observation well funding.
Water Measurement Cost Share Program	$106,914	This reduced funding for the cost-share measurement program, reducing the Department's ability to partner with water right holders to measure their water use.
Gaging stations	$27,186	Reduced capacity to maintain streamflow gaging stations.
Vacancy and Services & Supplies Savings	$2,429,186	These vacancies include two hydrotechnicians, one assistant watermaster, one data technician, one water rights adjudications/extensions processor, and one water rights application analyst. The vacancies also include five positions previously included the 2019 groundwater basin studies package: two hydrogeologists, two hydrographers, one public engagement coordinator as well as vacancy savings incurred in the first year of the biennium.
Other Fund in lieu of GF	$552,262	Directed the Department to use Other Fund balances in lieu of General Fund.
Total	**$3,637,699**	

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 future 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, groundwater levels have been dropping in some areas of the state. Water scarcity jeopardizes Oregonian's health, welfare, and quality of life.

MEETING FUTURE NEEDS: WATER RESOURCES DEVELOPMENT PROGRAM

The Water Resources Development Program seeks to promote and catalyze integrated and responsible water management through effective strategies, partnerships, and investments. The program helps individuals and communities address instream and out-of-stream water resources needs now and into the future through:

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 provide 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 provides funding for instream and out-of-stream water supply projects that achieve 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)

Place-based Planning Grants

Undertaking place-based planning is Recommended Action 9.A of Oregon's Integrated Water Resources Strategy. In 2015, the Oregon Legislature authorized and provided funding for the Department to pilot the place-based approach to integrated water resources planning. 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. Planning is essential to being able to formulate solutions to water challenges that may affect communities, ecosystems, and economic development.

The Department has been working with four places – Harney Basin, Upper Grande Ronde Sub-Basin, Lower John Day Sub-Basin, and the Mid-Coast Region – to pilot place-based planning. Three of the four planning groups anticipate completing development of their integrated water resources plans in 2021.

Place-Based Water Planning Grants (initial award in 2016, additional funds awarded 2019)

Planning Group (Fiscal Agent)	Grant Funds	Match Funds (secured through Dec 2020)
Harney Community-Based Water Planning Collaborative (Harney County Watershed Council)	$300,000	$336,234
Mid-Coast Water Planning Partnership (Seal Rock Water District)	$300,000	$430,000
Lower John Day Place-Based Planning Partnership (Gillam SWCD)	$275,000	$157,000
Upper Grande Ronde River Basin Planning Partnership (Union County)	$275,000	$110,000

Each community has shown dedication to the process and many of the participants have already observed benefits from collaborative planning. 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 be a partner in 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.

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 grants awarded funding in the 2017-19 biennium is below, as well as those funded in 2020. There was no funding cycle in 2018 due to limited staff resources to run a cycle.

Feasibility Grants Awarded in June 2019

Study Name	Project Type	County	Funding Awarded	Total Cost of Study
Lundy Ditch Irrigation Efficiency	Conservation	Deschutes	$43,857	$87,714
Tower Ditch Sleeving	Conservation	Deschutes	$17,180	$35,196
Upper John Day Irrigation Water Conservation	Conservation	Grant	$151,758	$303,516
Talent Irrigation District Water Conservation	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	Conservation	Josephine	$64,000	$129,400
Enhancing Reliability of the Alluvial Groundwater Supply in the Walla Walla Basin	Below-ground Storage	Umatilla	$77,715	$155,799
		Total	**$446,773**	**$951,151**

Feasibility Grants Awarded in June 2020

Study Name	Project Type	County	Funding Awarded	Total Cost of Study
City of Umatilla Feasibility Study for Hydraulically Connected Wells	Conservation	Umatilla	$370,000	$777,800
Drewsey Reclamation Ditch: Can we pipe it?	Conservation	Harney	$24,750	$57,060
Gordon Creek Aquifer Storage and Recovery	Storage	Multnomah	$284,300	$586,400
Harney Basin Groundwater Market	Conservation	Harney	$41,168	$87,112
Pine Creek Reservoir	Storage	Umatilla	$105,976	$304,826
Stayton Aquifer Storage and Recovery	Storage	Marion	$154,000	$308,000
Westland Irrigation District Water Conservation	Conservation	Umatilla, Morrow	$79,000	$204,000
		Total	**$1,059,194**	**$2,325,198**

Feasibility Grants Requested for June 2021

Study Name	Project Type	County	Funding Requested	Total Cost of Study
Dry River Canyon Water Conservation Study	Conservation	Deschutes Crook	$27,760	$55,520
Fifteenmile Watershed Managed Underground Storage Facilities Feasibility Study Phase II	Below Ground Storage	Wasco	$185,000	$370,000
Klamath Irrigation District C-G Drop Hydropower	Conservation	Klamath	$80,000	$160,000
Silverton / Mt. Angel ASR	Below-ground Storage	Marion	$15,000	$30,000
Smith Rock-King Way Water Conservation	Conservation	Deschutes Crook	$171,072	$375,712
Upper Grande Ronde River Watershed Storage	Above-ground Storage	Union	$114,000	$228,000
Upper John Day ASR Feasibility	Below-ground Storage	Grant	$293,895	$589,645
Upper Klamath Lake Water Storage	Above Ground Storage	Klamath	$26,400	$58,600
Walla Walla River Irrigation District Water Conservation	Conservation	Umatilla	$75,000	$170,000
		Total	**$988,127**	**$2,037,477**

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 November 2018

Project Name	Applicant Name	County	Funding Awarded	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	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	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
The Dalles Municipal Dog River Pipeline Replacement Project*	The City of the Dalles	Hood River	$1,000,000	$8,097,700
		Total	**$6,297,755**	**$21,181,527**

*Commission deferred its decision on this project in November 2018 and awarded funding in February 2019

Water Project Grants Awarded November 2019

Project Name	Applicant Name	County	Funding Awarded	Total Cost of Project
Calapooya Creek Conservation Project	Green Valley Farms and Logistics, LLC	Douglas	$155,106	$206,808
Upper Phillips Fish Passage and Irrigation Efficiency Project	Applegate Partnership, Inc.	Jackson	$983,290	$1,357,267
Chiloquin New Well And Meter Replacement Project	City of Chiloquin	Klamath	$661,000	$4,025,500
Mosier Deep Water Supply Well 2	Wasco County Soil and Water Conservation District and Wade Root	Wasco	$671,724	$906,910
		Total	**$2,471,120**	**$6,496,485**

Water Project Grants Awarded November 2020

Project Name	Applicant Name	County	Funding Awarded	Total Cost of Project
Lone Pine Irrigation Modernization Project	Lone Pine Irrigation District	Crook, Deschutes, Jefferson	$1,600,000	$9,200,259
Deschutes Basin Flow Restoration - Group 3	Tumalo Irrigation District	Deschutes	$1,200,000	$5,871,548
Eastside Lateral Pipeline & Water Conservation Project	East Fork Irrigation District	Hood River	$2,000,000	$7,654,594
		Total	**$4,800,000**	**$22,726,401**

DIRECT APPROPRIATIONS - WATER SUPPLY DEVELOPMENT ACCOUNT

In 2017, 2018 and 2019, 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 2021-2023 biennium.

In 2019, the Legislature awarded $10 million to the Deschutes Basin Board of Control for irrigation piping projects in the Deschutes Basin, $14 million to the Wallowa Lake Irrigation District for Wallowa Lake Dam, and $4 million to the City of Newport for Big Creek Dam. The Department pursued grant agreements for each project until the bond-sale was cancelled due to insufficient revenues as a result of the coronavirus pandemic. These projects remain in need of funding.

RECAP OF THE STATUS LOTTERY BOND FUNDING

Over the last three biennia, the Legislature has authorized $91.35 million in Lottery Bond proceeds for water supply studies and projects, with, $21 million authorized in 2015-2017 (bonds sold spring 2017), $27.4 million authorized in 2017-2019 (bonds sold spring 2019), and $43 million authorized for 2019-2021 (spring 2021 bond sale cancelled due to the ongoing pandemic).

OREGON WATER RESOURCES DEPARTMENT

Other Requested Materials

- Governor's Recommended Budget for the Oregon Water Resources Department
- WRD Annual Performance Measure Report (KPM): Fiscal Year 2019-2020
- Program prioritization for 2021-23 (form 107BF23)
- Span of Control
- Other Funds Ending Balance

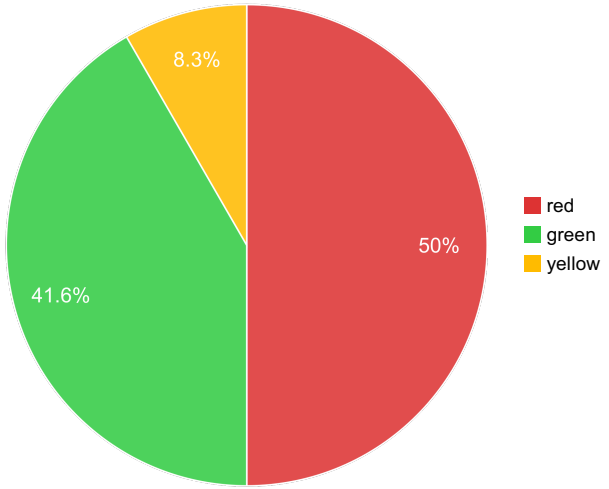
Water Resources Department

Annual Performance Progress Report

Reporting Year 2020

Published: 9/29/2020 2:39:03 PM

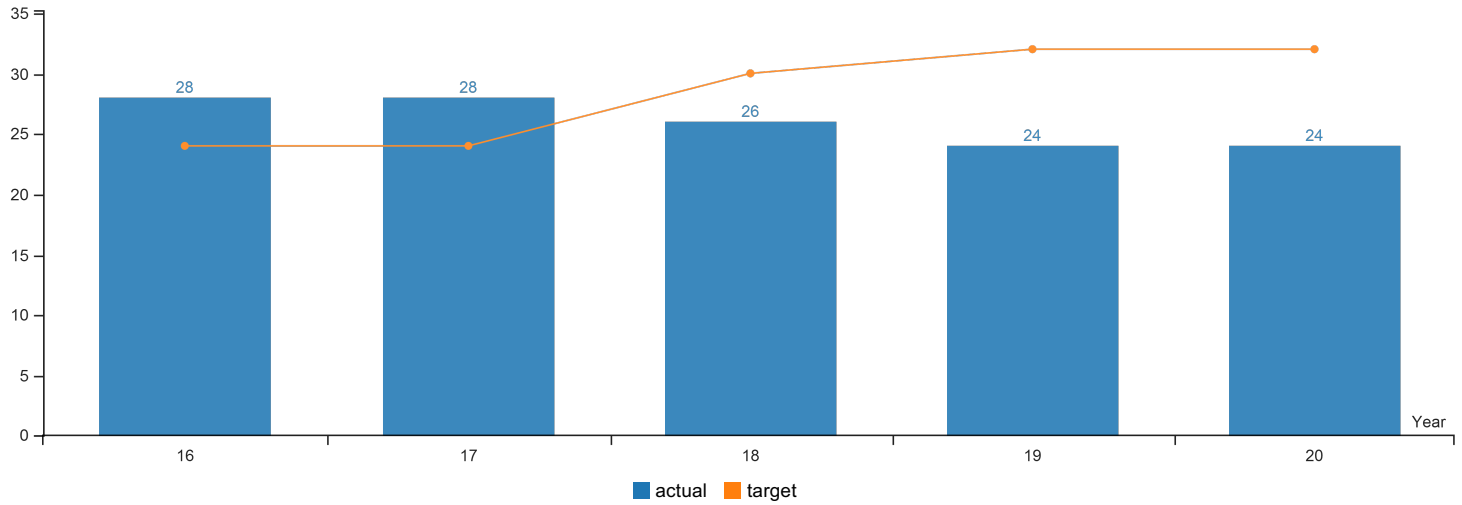
KPM #	Approved Key Performance Measures (KPMs)
1	FLOW RESTORATION - Percent of watersheds that need flow restoration for fish that had a significant quantity of water put instream through WRD administered programs.
2	PROTECTION OF INSTREAM WATER RIGHTS - Ratio of regulatory orders issued to protect senior water rights when the senior water right is an instream right to all regulatory orders issued to protect senior water rights.
3	MONITOR COMPLIANCE - Percent of total regulatory actions that found water right holders in compliance with water rights and regulations.
4	STREAM FLOW GAGING - Percent change from 2001 in the number of WRD operated or assisted gauging stations.
5	ASSESSING GROUND WATER RESOURCES - Percent change from 2001 in the number of wells routinely monitored to assess ground water resources.
7	EQUIP CITIZENS WITH INFORMATION - Number of times water management related data was accessed through the WRD's Internet site.
8	NUMBER OF SIGNIFICANT DIVERSIONS WITH MEASUREMENT DEVICES INSTALLED - To fully implement the Water Resources Commission's 2000 Water Measurement Strategy
9	PROMOTE EFFICIENCY IN WATER MANAGEMENT AND CONSERVATION PLAN REVIEWS - Percent of water management and conservation plans that received a preliminary review within 90 days of plan submittal.
10	PROMOTE EFFICIENCY IN WATER RIGHT APPLICATION PROCESSING - Percent of water right applications that receive an initial review within 45 days of application filing.
11	PROMOTE EFFICIENCY IN TRANSFER APPLICATION PROCESSING - Percent of transfer final orders issued within 120 days of application filing.
13	INCREASE WATER USE REPORTING - the percent of water users with an annual water-use reporting requirement that have submitted their reports to the Department.
14	CUSTOMER SERVICE - Percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent" in overall customer service, timeliness, accuracy, helpfulness, expertise, and availability of information.



Performance Summary	Green	Yellow	Red
	= Target to -5%	= Target -5% to -15%	= Target > -15%
Summary Stats:	41.67%	8.33%	50%

KPM #1	FLOW RESTORATION - Percent of watersheds that need flow restoration for fish that had a significant quantity of water put instream through WRD administered programs.
	Data Collection Period: Jan 01 - Dec 31

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent of Watersheds That Had Flows Added Where Needed for Fish					
Actual	28%	28%	26%	24%	24%
Target	24%	24%	30%	32%	32%

How Are We Doing

During the 2020 reporting period, 24 percent of high priority watersheds had flows added, where needed, for fish. The slight downward trend in the percentage over the past five years is due to a decline in the amount of water voluntarily put instream in the 342 high priority watersheds. The amount of water placed instream can fluctuate from year to year based on water user interest in leasing water instream.

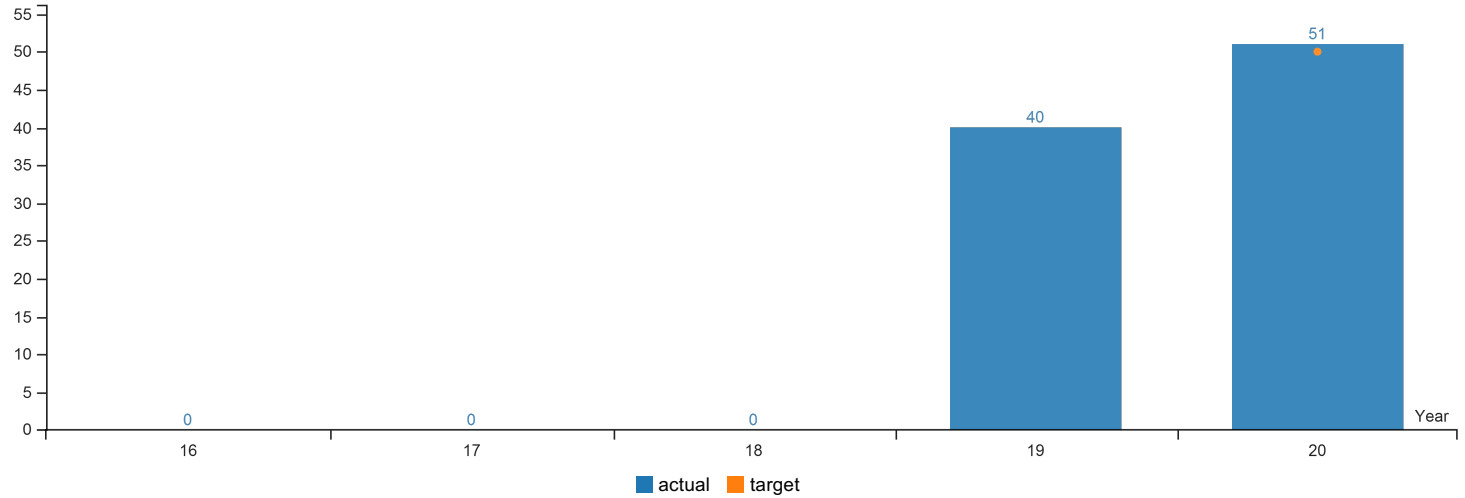
While the percent of high priority watersheds that had water voluntarily protected instream remained the same, the total amount of water put instream statewide (within and outside of the high priority watersheds) during the 2020 reporting period increased from the prior report. Since this KPM was created in 2002, the Department has permanently protected a total of 1,431.301 cubic feet per second (cfs) of water instream. This total is comprised of the following: 1) instream transfers at 399.57 cfs; 2) allocations of conserved water at 231.73 cfs; and 3) converted hydroelectric rights at 800.0 cfs. An additional 1,081.26 cfs was protected instream through temporary instream leases in 2019.

Factors Affecting Results

The 2020 reporting period was the calendar year 2019. Streamflow restoration efforts rely on the voluntary actions of water right holders to place water instream. Success on this measure relies on the hard work of our conservation partners, our staff, and a general increased comfort level with dedicating water instream among water right holders. Streamflow restoration benefits from well-established, active conservation partners - 42 percent of Oregon's flow restoration transactions involve a third party such as The Freshwater Trust, Deschutes River Conservancy, or Trout Unlimited; while the remaining 58 percent of flow restoration activities occur directly between the water right holder and the Department.

KPM #2	PROTECTION OF INSTREAM WATER RIGHTS - Ratio of regulatory orders issued to protect senior water rights when the senior water right is an instream right to all regulatory orders issued to protect senior water rights.
	Data Collection Period: Jan 01 - Dec 31

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
PROTECTION OF INSTREAM WATER RIGHTS					
Actual	No Data	No Data	No Data	40%	51%
Target	TBD	TBD	TBD	TBD	50%

How Are We Doing

In calendar year 2019, staff reported a total of 4,891 regulatory actions. Regulatory actions are actions by staff that cause a change in water use behavior. Of the 4,891 total regulatory actions, 2,487 – 51 percent of the total – were conducted to regulate for 180 instream water rights. This KPM was modified in 2019, so calendar year 2018 data (report year 2019) are the first data to be reported under the new KPM. As a result, no target was set for the 2019 report. The 2020 target is 50 percent, which was slightly exceeded.

Factors Affecting Results

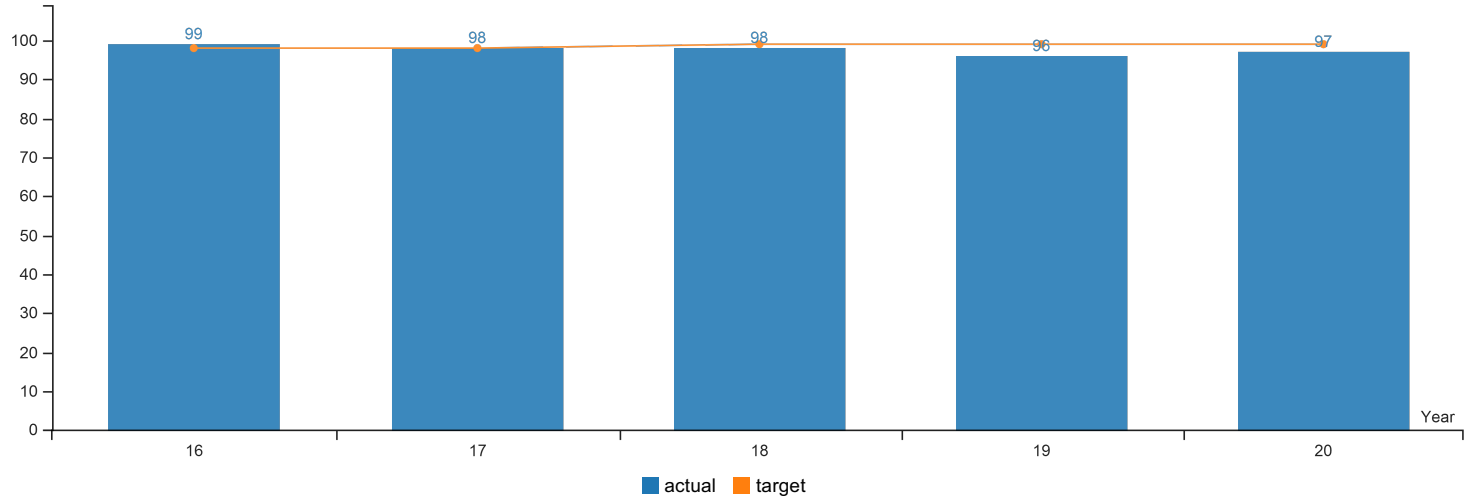
The Field Services Division includes 21 watermasters and 7 regional assistant watermasters; these state-funded staff are also supported by part-time and full-time county-funded assistant watermasters. Watermasters and assistant watermasters are responsible for monitoring and protecting instream water rights. These staff are also assisted by 5 regional hydrographic technicians, who conduct numerous streamflow measurements in support of instream water right monitoring. Watermasters report monitoring and regulatory actions taken each calendar year for each stream into the Field Activity Database (FAD), beginning in calendar year 2018. The 2020 report year results contain data collected from January 1, 2019 to December 31, 2019.

Instream water rights are often junior to other surface water rights, but many are regularly monitored by the Water Resources Department. Flows for some streams with instream water rights are met throughout the season and do not require regulation on their behalf. In years with high stream flows the total number of streams regulated is likely to go down, while in years with lower stream flows the total number of streams regulated is likely to go up because of greater demand and less supply. The number of streams regulated varies with the amount and timing of rainfall in any given year, temperatures, as well as staff resources. The KPM is specific to regulation for instream water rights.

In addition, the fact that half of the regulatory actions undertaken were for instream water rights, while the other half were for consumptive uses, shows that the Department is carrying out its mission to serve both instream and out-of-stream interests; as the other 49 percent of regulatory actions were undertaken to benefit out-of-stream consumptive uses or to address unauthorized uses of water.

KPM #3	MONITOR COMPLIANCE - Percent of total regulatory actions that found water right holders in compliance with water rights and regulations.
	Data Collection Period: Jan 01 - Dec 31

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent of Total Regulatory Actions That Found Water Rights Holders in Compliance with Water Rights and Regulations					
Actual	99%	98%	98%	96%	97%
Target	98%	98%	99%	99%	99%

How Are We Doing

During the 2020 reporting period (2019 calendar year), Department Watermasters and assistant watermasters reported 4,891 regulatory actions. Regulatory actions are actions by staff that cause a change in water use behavior. Staff also reported 13,679 compliance checks to determine if water right holders were in compliance with the law or a regulatory action. Ninety-seven percent of the compliance checks undertaken found water use occurring consistent with a regulatory order or water laws. This metric does not necessarily reflect compliance with water right conditions or reflect compliance with Oregon water laws - as this only reflects known and tracked activities. With approximately 89,000 water rights and several hundred thousand wells, plus an unknown amount of unauthorized uses, it is not possible to assess overall compliance. Since staff cannot and do not cover all of the area within their district, there may be users that are not in compliance or individuals using water without authorization which have not been identified by the watermasters and captured in this metric. Obtaining proof of unauthorized use can be difficult, especially with limited staff. The Department continues to look for ways to increase field capacity, education and outreach, and build clarity around Oregon's water laws. In addition, a significant challenge is addressing unauthorized uses of wells where individuals claim to be trucking water.

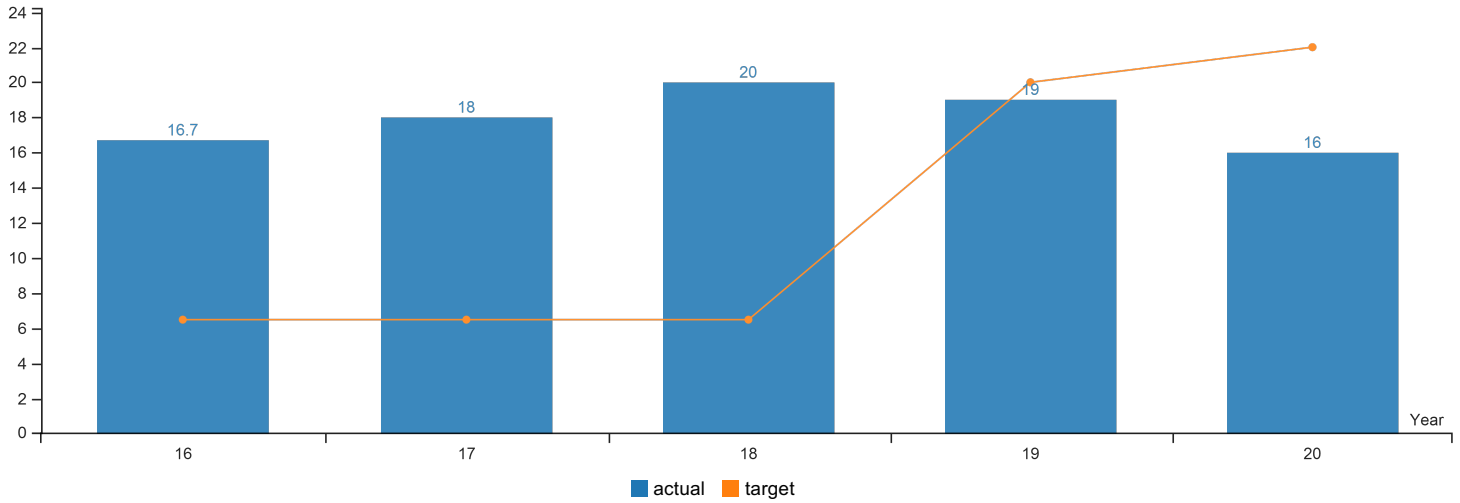
Factors Affecting Results

Beginning in 2018, watermasters and assistant watermasters entered data into a new Field Activity Database (FAD), which replaced the 20-year old Surface Water Summary database. The new database allows activity tracking in more detail. The Department continues to improve the FAD and staff training to improve data capture and reporting. The percentage can vary by a few points from year-to-year, based on water supply conditions, staffing resources, or economic factors. Weather can have a significant effect on the compliance ratio, since it can affect the intensity of water distribution efforts on a stream. Watermasters are likely to have more regulatory actions during times of water shortage. In years with high streamflows, the total number of streams regulated is likely to go down. Field presence (adequate staffing) affects this measure through greater opportunity to monitor compliance, conduct outreach, and ultimately educate individuals about water laws. Litigation reduces the time some watermasters spend in the field. The Department continues to receive high volumes of complaints in western Oregon regarding marijuana

and hemp operations, particularly as it pertains to trucking water and unauthorized use of wells or diversions of water.

KPM #4	STREAM FLOW GAGING - Percent change from 2001 in the number of WRD operated or assisted gauging stations.
	Data Collection Period: Jul 01 - Jun 30

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent Change from 2001 in Number of OWRD-Operated or Assisted Gaging Stations					
Actual	16.70%	18%	20%	19%	16%
Target	6.50%	6.50%	6.50%	20%	22%

How Are We Doing

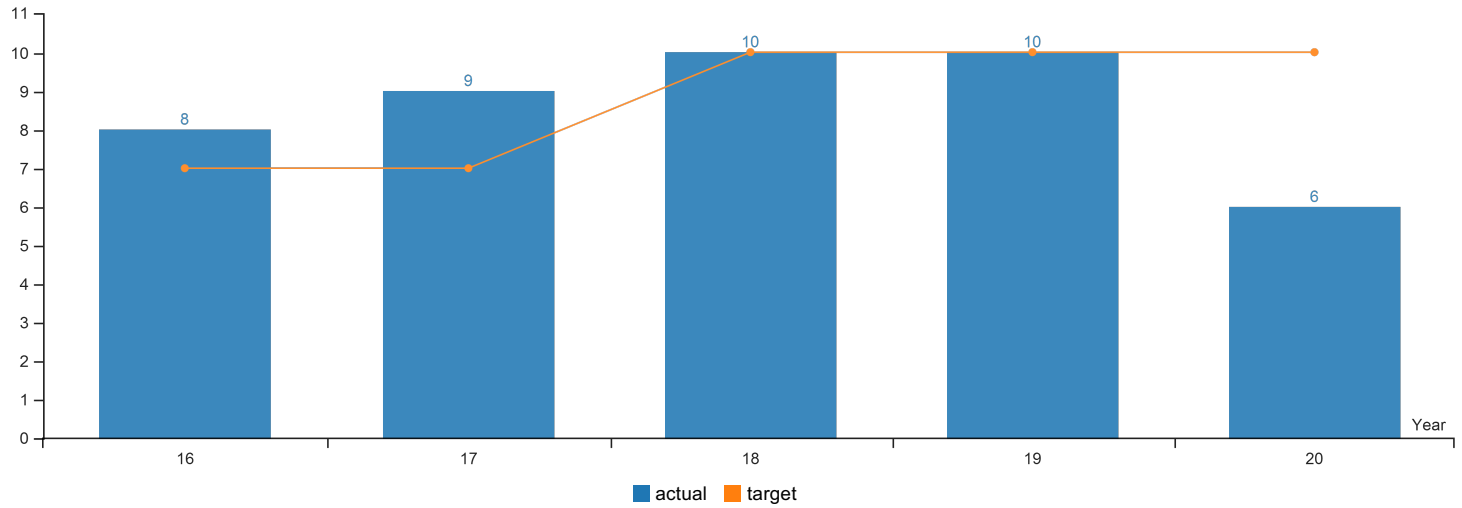
During the 2020 reporting period, the Department added one gage and discontinued eight, for a net loss of seven compared to the previous reporting year. In addition, in the previous year's report, four gages were mistakenly included. This has been adjusted for the 2020 reporting year. The Department operated a total of 250 gages during these periods, a 16 percent increase over the 2001 benchmark. The 2001 benchmark was 215 gaging stations. The 2020 data are from the reporting period of July 1, 2019 through June 30, 2020.

Factors Affecting Results

Since 2013, the Legislature has provided funding for the installation of additional stream gages, however, this funding resource was reduced by 20 percent during the 2017 Legislative Session. The Department faces challenges in ensuring that it has a sufficient number of hydrographers and hydrographic technicians to provide quality assurance of the data and to maintain the statewide gage network. Staffing levels have not been commensurate with the continuous workload associated with collecting, maintaining, processing and analyzing the data from these stations. Some gages have been discontinued due to other workload priorities.

KPM #5	ASSESSING GROUND WATER RESOURCES - Percent change from 2001 in the number of wells routinely monitored to assess ground water resources.
	Data Collection Period: Jul 01 - Jun 30

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent Change from 2001 in Number of Wells Routinely Monitored to Assess Groundwater Resources					
Actual	8%	9%	10%	10%	6%
Target	7%	7%	10%	10%	10%

How Are We Doing

During the 2020 reporting cycle (July 1, 2019 to June 30, 2020), WRD staff routinely monitored 370 wells in the State Observation Well Network, compared to 350 in 2001 and 384 in the 2019 report. This is an increase of 6 percent over 2001. WRD installed one dedicated observation well during the first half of the 2019-2021 biennium. The reduction in the percent is due to the Department evaluating existing wells within the network to identify ones that were not being regularly measured and determining that they were no longer appropriate for inclusion in the network. Staff are working to identify suitable replacement wells to include in the network, which the Department anticipates will occur by next year. The State Observation Well Program includes designated observation wells that measure various aquifers across the state and for which the Department strives to maintain long-term water level records.

In addition to those wells that are tracked by this KPM, the Department also collects data from observation wells associated with special projects (e.g., the Harney Basin Groundwater Study), groundwater administrative areas (e.g., the Stage Gulch Critical Groundwater Area), permit condition wells, and wells monitored by other science and regulatory partners. In the same reporting period, the Department collected 2,913 water level measurements from 1,315 observation wells across the state, including 142 observation wells equipped with automated data-logging pressure transducers that collect water level data several times per day and produce high-frequency time-series data sets. Other licensed professionals collected 2,152 water level measurements at another 1,891 wells during the spring of 2019, which were reported to the Department as required by various water right permit conditions. An additional 853 water level measurements were collected at an additional 154 wells by other science and regulatory partners such as the USGS, DEQ, Watershed Councils and Municipalities. The Department archives and provides this and other groundwater-related data to the public via the Groundwater Information System database and web interface.

Factors Affecting Results

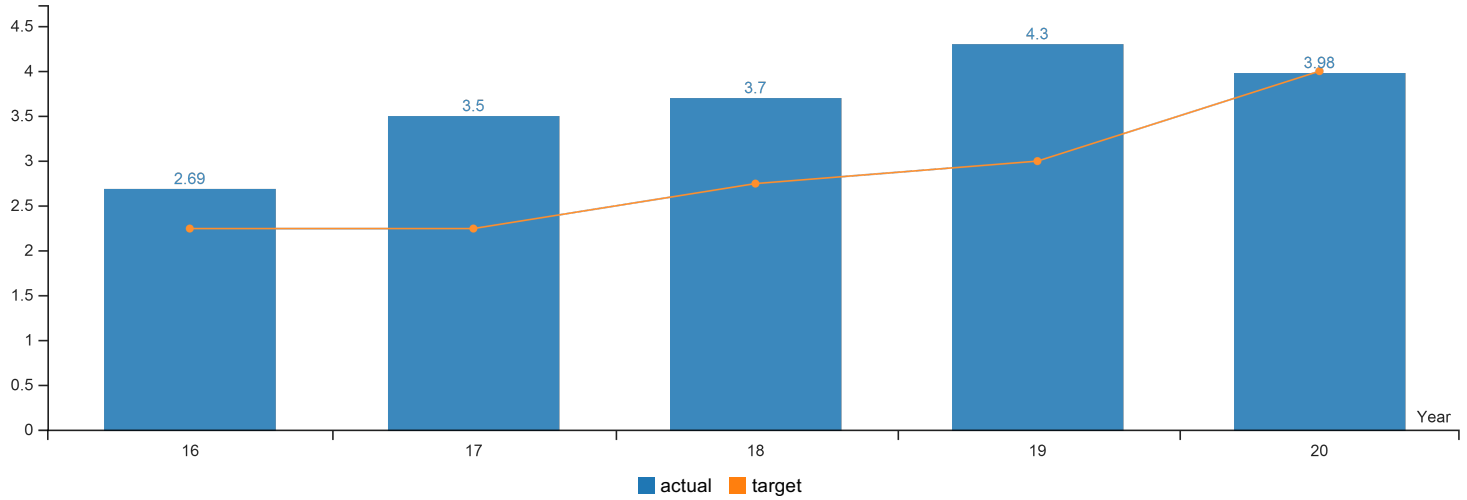
The Department's capacity to measure wells has been reduced due to travel restrictions and safety considerations related to COVID-19. However, the majority of the critical monitoring of groundwater

resources is able to continue, and the total number of wells measured at least once by Department staff increased nine percent over the previous year.

Since 2013, the Legislature has included funding for dedicated observation wells in the Department's budget. With the exception of the 23 new observation wells drilled by the Department since 2013, the State Observation Wells monitored by the Department were installed by private and other public entities. Long-term access to wells is commonly an issue, as the Department must rely on well owners for access to the wells. As property changes hands, some owners discontinue their participation in the network, or wells fall into disrepair. In some cases, the Department tries to find or drill a suitable replacement well in the same general area targeting the same aquifer. As a result, the number and location of State Observation Wells varies somewhat from year-to-year. Continuing to expand the network of dedicated observation wells drilled and owned by the State of Oregon will help ensure continued access to long-term groundwater level data. While the 2019 Legislature provided funding for drilling new observation wells, the remainder of this funding has been eliminated to accommodate COVID-19 related budget reductions, and previously available budget to drill dedicated observation wells may be reduced to near-zero next biennium. Nonetheless, the Department is currently conducting a comprehensive analysis and optimization of its observation well network network and expects the number of State Observation Wells to rebound to levels in line with the targeted 10 percent above 2001 levels within the coming year.

KPM #7	EQUIP CITIZENS WITH INFORMATION - Number of times water management related data was accessed through the WRD's Internet site.
	Data Collection Period: Jul 01 - Jun 30

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Number of Times Water Management-Related Data Were Accessed Through the Internet (in millions)					
Actual	2.69	3.50	3.70	4.30	3.98
Target	2.25	2.25	2.75	3	4

How Are We Doing

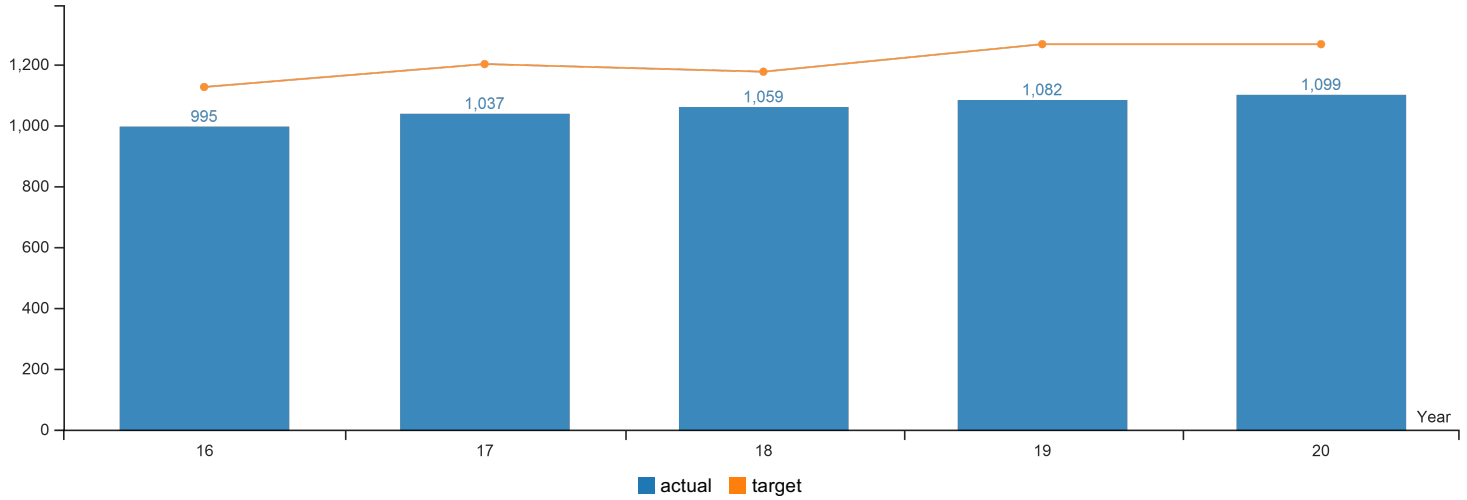
The agency was close to hitting its targets for the number of hits on our website with the applications selected for monitoring. For the 2020 reporting period, containing data from July 1, 2019 to June 30, 2020, we had 3.98 million hits.

Factors Affecting Results

The Department collects information from computer system logs to determine the number of "hits" received on our web page. This includes well log transactions, hydrographic records, water availability, water rights, and the document vault. Every attempt is made to identify and count each unique transaction; for example, web bot hits and page navigation hits are removed. There have been a number of new web applications that have been released but are not monitored in this KPM to ensure continuity and parity with historical information. The Department launched an updated website in September 2018, which was focused on making data easier for the public to find - although individuals accustomed to the Department's prior website are adjusting to the new format, which may account for some of the reduction in hits.

KPM #8	NUMBER OF SIGNIFICANT DIVERSIONS WITH MEASUREMENT DEVICES INSTALLED - To fully implement the Water Resources Commission's 2000 Water Measurement Strategy
	Data Collection Period: Jan 01 - Dec 31

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Number of Significant Diversions with Measurement Devices Installed					
Actual	995	1,037	1,059	1,082	1,099
Target	1,125	1,200	1,175	1,265	1,265

How Are We Doing

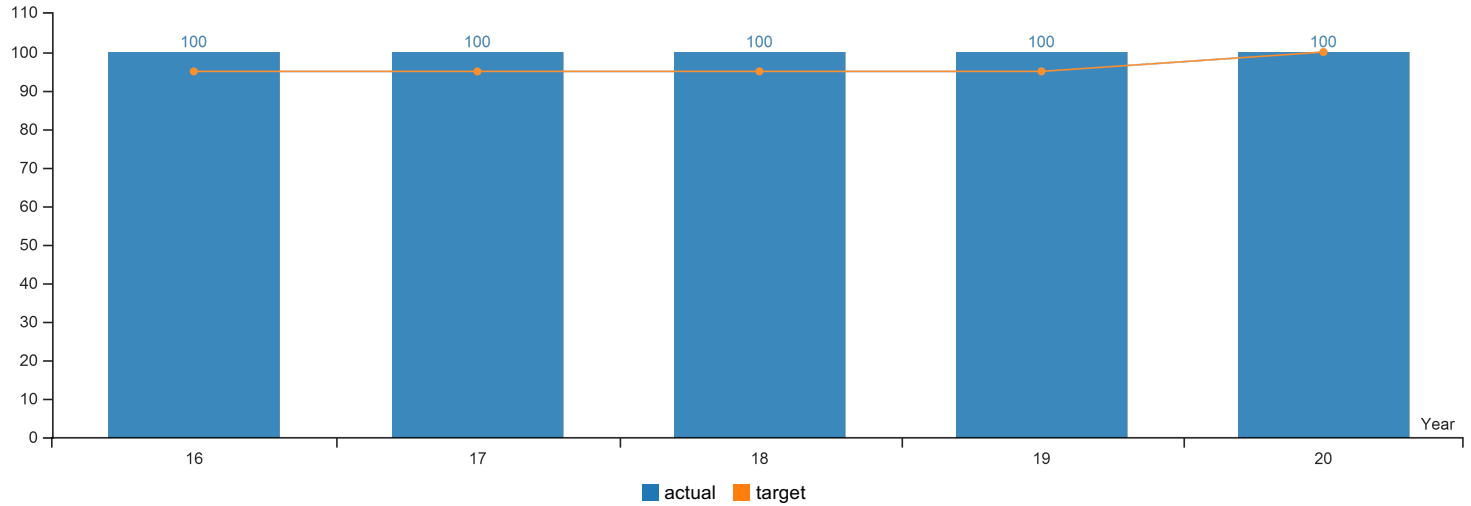
Staff efforts, underway since 2000, have resulted in 1,099 measuring devices installed on significant points of diversion, which includes 17 devices installed or confirmed installed in the 2019 calendar year (report year 2020). In addition to the measurement devices installed on significant diversions, staff have field checked another 699 significant diversions that are currently not in use. This number will change with time, because a water user may go several years without using water and then irrigate for a season to preserve the water right. To do so may require the installation of a measuring device. As a result, one significant diversion will move from the "not in use" category to the "devices installed" category. Approximately 511 of the original 2,385 significant diversions still need measuring devices installed.

Factors Affecting Results

The 2020 KPM reporting cycle includes progress through calendar year 2019. Some water users have balked at the direction to install measuring devices, citing an average cost of $1,000 per device. The Department's cost-share measurement fund facilitates the installation of measuring devices and progress on this KPM. Installation of measuring devices typically occurs before or after the irrigation season, and is also dependent on weather, particularly freezing conditions. Significant outreach and education are needed to help bring the landowner into compliance with measuring device installation. Success with measuring device installation is directly related to time spent by Department field staff, primarily watermasters and assistant watermasters, working with landowners. In addition, as more watermaster districts complete the work monitored by this KPM, the number of additional devices installed under this KPM will decline reflecting the fewer staff working on it. This KPM does not account for all of the measuring devices installed annually as a result of Department actions, as the significant points of diversion are a subset. The Department is interested in working on a new plan for increasing water use measurement, which may result in proposed changes to this KPM in the future to more broadly reflect the work of the agency on water use measurement.

KPM #9	PROMOTE EFFICIENCY IN WATER MANAGEMENT AND CONSERVATION PLAN REVIEWS - Percent of water management and conservation plans that received a preliminary review within 90 days of plan submittal.
	Data Collection Period: Jul 01 - Jun 30

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent of Water Management and Conservation Plans That Received a Review within 90 Days of Submittal					
Actual	100%	100%	100%	100%	100%
Target	95%	95%	95%	95%	100%

How Are We Doing

For water management and conservation plans received by the Department with target dates for preliminary review between July 2019 and June 2020, 100 percent of the plans were reviewed within the 90-day goal. This is a continuation of the accomplishments achieved since 2014, when staff first reached a 100 percent success rate with the KPM. In addition, water management and conservation plan updates from municipalities continue to improve in quality, and are showing increased efficiencies in managing water, preparing for emergencies (curtailment plans), and planning for long-term water supply consistent with their comprehensive plan

Factors Affecting Results

Outreach to municipalities and others has significantly helped the Department meet its performance goals for this program. In the past decade, the state has worked with key partners to publish guides, provide tools, and offer educational presentations to aid in the preparation of water management and conservation plans. Since 2008, the Department has been collaborating with the League of Oregon Cities (LOC) on a recurring feature called “The Conservation Corner” for LOC’s newsletter. These articles highlight outstanding conservation activities by Oregon cities, wise water management practices, and guidance on preparing for emergency water shortage situations.

Guidebooks providing direction and aid in the preparation of agricultural and municipal water management and conservation plans are available on the Department’s website. Staff regularly communicate with and assist entities that are in the process of developing a new or updated water management and conservation plan.

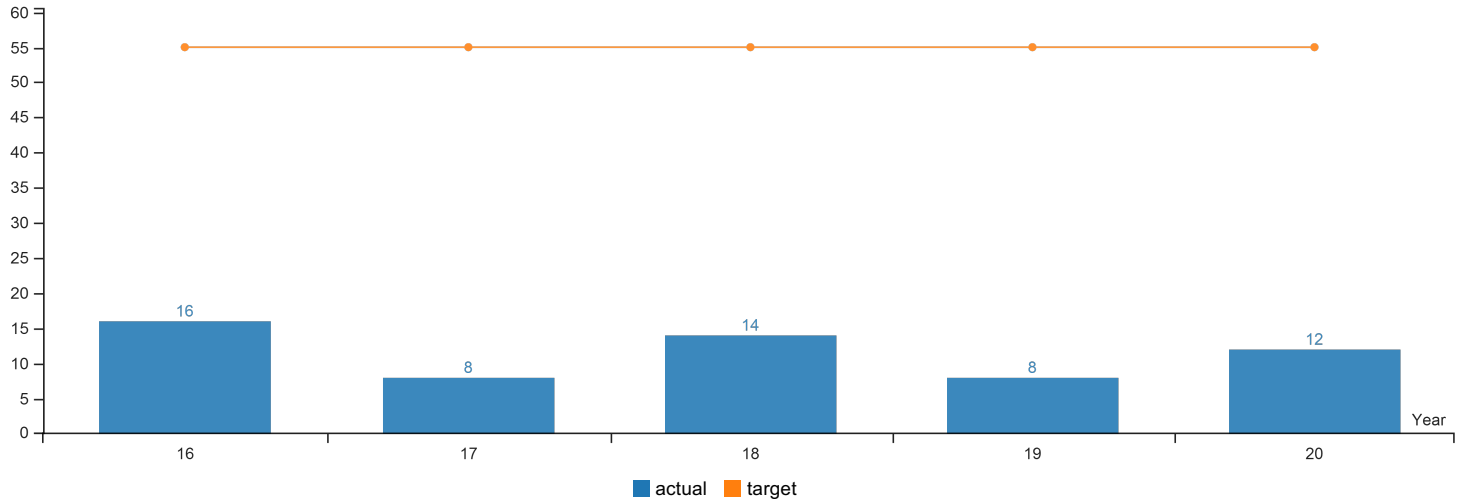
On December 21, 2018, the Water Resources Commission adopted amendments to the water management and conservation plan rules under OAR Chapter 690, Division 086. The rule

changes addressed some of the challenges faced by small water suppliers in developing a water management and conservation plan, while still encouraging implementation of water conservation activities to help meet existing and future water demands.

These actions demonstrate the Department’s continued efforts to improve water management and conservation in the state.

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.
	Data Collection Period: Jul 01 - Jun 30

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent of Water Right Applications That Receive an Initial Review within 45 Days of Application Filing					
Actual	16%	8%	14%	8%	12%
Target	55%	55%	55%	55%	55%

How Are We Doing

For reporting period of July 2019 through June 2020, 12 percent of water right applications received an Initial Review within 45 days, which is a four percent increase from the previous year. The target for this KPM is 55 percent.

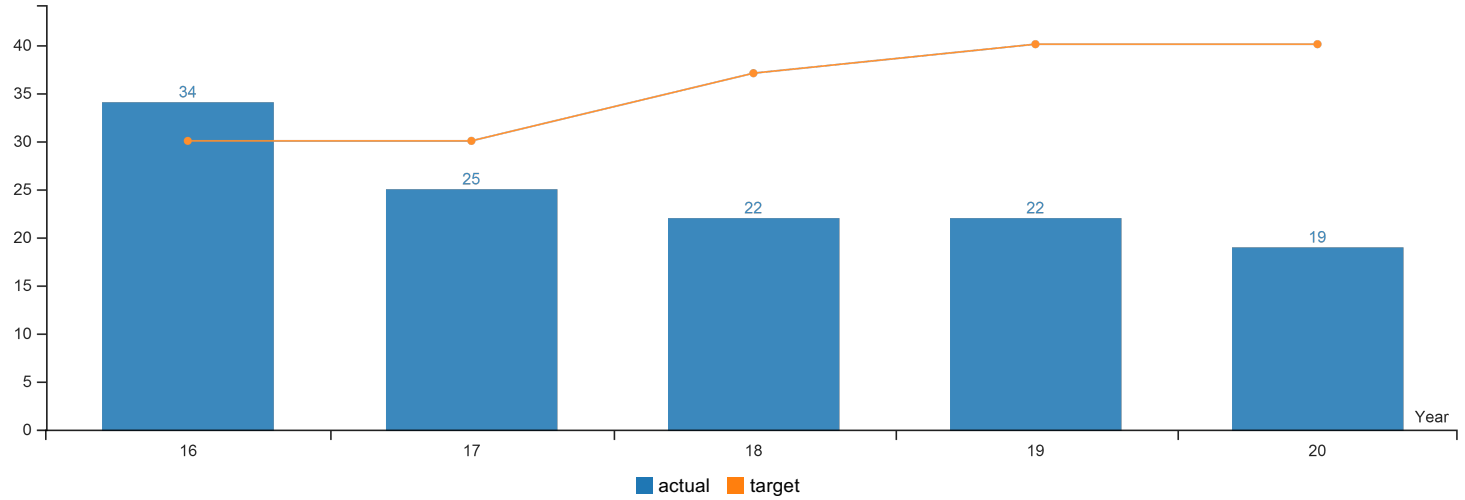
Factors Affecting Results

This slight increase in performance is in part due to the types of applications received during the reporting period. Instream applications involve additional data analysis and water availability modeling for certain watersheds that typically take longer than 45 days to complete. The Department did not receive any instream water right applications for the 2020 reporting period, compared to 80 applications received the previous year. The Department's processing times for surface water applications increased from seven percent in 2018-2019 to 50 percent for this current reporting period.

Another factor affecting results is the number of groundwater applications received by the Department. From July 2019 through June 2020, 86 percent of the Initial Reviews completed were for groundwater applications. Groundwater applications involve an additional technical review that is unique for each application, and typically takes longer than the 45 days established for this KPM. During the reporting period, six percent of groundwater applications received an Initial Review within 45 days, the same percentage rate as the previous year. In addition, this reflects the challenge the Groundwater Section faces in ensuring that it is collecting and analyzing groundwater data to understand the groundwater supplies, responding to groundwater interference complaints, and providing technical input to various planning activities, while also balancing the need to perform reviews of groundwater permit applications.

KPM #11	PROMOTE EFFICIENCY IN TRANSFER APPLICATION PROCESSING - Percent of transfer final orders issued within 120 days of application filing.
	Data Collection Period: Jul 01 - Jun 30

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent of Transfer Final Orders Issued within 120 Days of Filing					
Actual	34%	25%	22%	22%	19%
Target	30%	30%	37%	40%	40%

How Are We Doing

A total of 280 transfer final orders were issued during the time period July 1, 2019 through June 30, 2020, 54 of which were issued within 120 days of the transfer application being filed. This equates to 19 percent. The Department has had a large, but shrinking backlog of transfer applications, dating as far back as 1993. A focus on reducing the number of pending applications (310 as of July 1, 2020, compared to 339 as of July 1, 2019) is a key component to help make progress on this KPM. Our goal is to reduce the number of pending applications to less than 212, at which point staff will be able to take on processing of new applications as soon as they are filed.

Factors Affecting Results

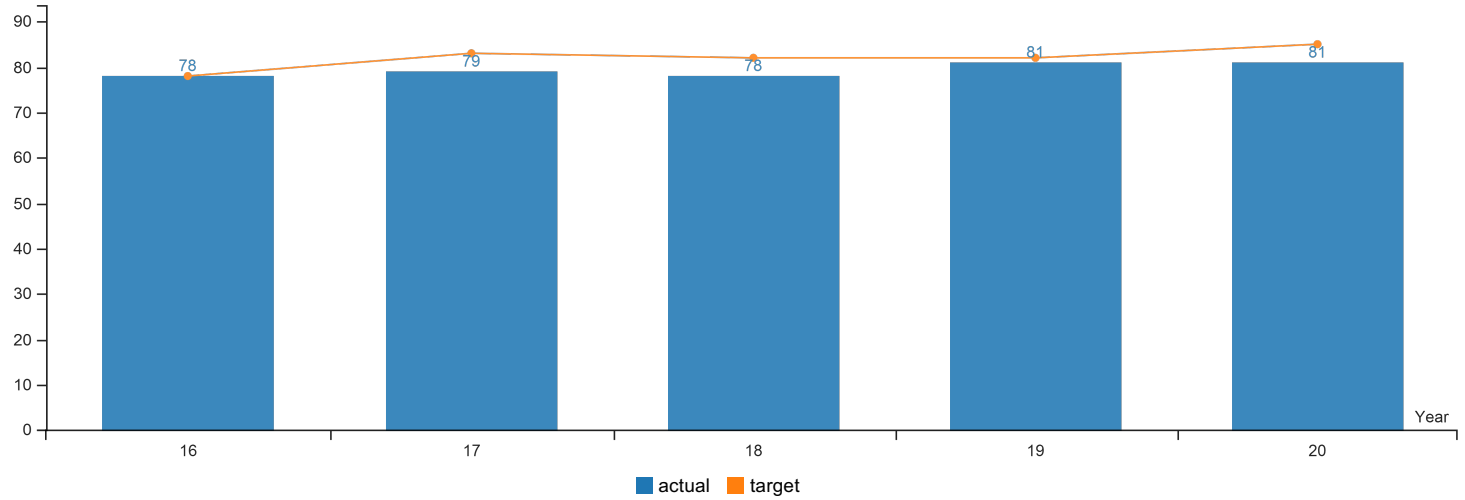
During the 1990s, the Department developed a significant backlog of pending transfer applications (reaching a high of 760), partly due to the number of incomplete and incorrect applications that were filed. During that time period, the Department focused efforts on reviewing the more straightforward applications, with the more complex transfers falling behind. This caused the average time from receipt of an application to issuance of the final order to increase. In 2009-2010, the Department analyzed the causes of delay in transfer processing, and as a result, streamlined the work process and re-designed the application forms to make the forms more user-friendly. This resulted in fewer application deficiencies, which increases the chances that a new application can be processed within 120 days. The Department continues to adjust procedures as additional efficiencies are identified. As the backlog is reduced, the percentage of final orders that can be issued within 120 days of filing will increase.

The efforts of transfer staff to focus on reducing the number of applications pending for more than three years (32 as of July 1, 2020, compared to 41 as of July 1, 2019) has played a role in the reduced percentage for this KPM over the past few reporting periods. Typically, transfer applications that are still pending after three years contain more difficult and complicated proposals which take more time to evaluate and process. Other factors causing a reduction in the KPM percentage are longer processing times for groundwater reviews for groundwater transfer applications due

to workloads within the Groundwater Section, and the more technical nature of groundwater reviews.

KPM #13	INCREASE WATER USE REPORTING - the percent of water users with an annual water-use reporting requirement that have submitted their reports to the Department.
	Data Collection Period: Oct 01 - Sep 30

** Upward Trend = positive result*



Report Year	2016	2017	2018	2019	2020
Percent of water users with an annual water-use reporting requirement that have submitted reports to the Dept.					
Actual	78%	79%	78%	81%	81%
Target	78%	83%	82%	82%	85%

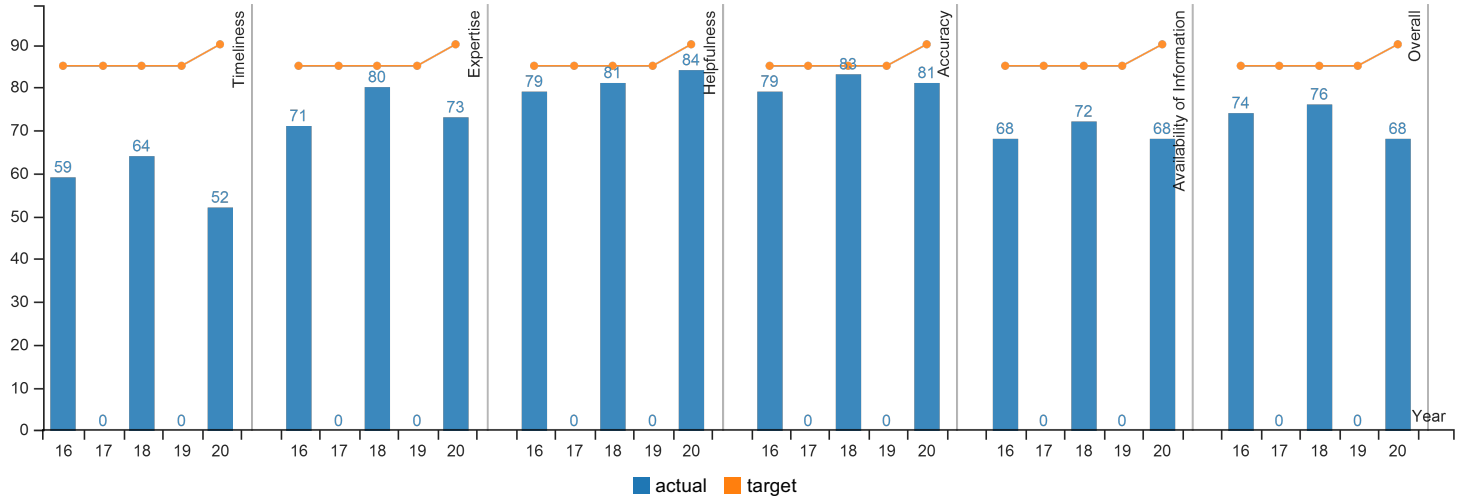
How Are We Doing

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 81 percent compliance for the 2020 reporting period and within four percent of the target. In recent years, the Department has noticed that each additional percent increase in compliance is more difficult to obtain.

Factors Affecting Results

The 2020 reporting period contains results from the water year (October 2018 - September 2019) with reports due to the Department by the end of the 2019 calendar year. Success on this metric is directly tied to the Water Use Reporting Coordinator. During 2007, the Department had no Water Use Reporting Coordinator because of budget constraints and received only 20 percent of the required reports. In 2008, the Program Coordinator position was re-authorized and raised reporting results to 65 percent. In the 2009-11 Budget, the Water Use Reporting Coordinator position was again eliminated. The percent of reports received subsequently ranged from 17 to 27 percent during the 2009-2012 water years. Re-establishing the position in 2013 has allowed customers to receive reminders, technical assistance, and prompt customer service responses, which has again driven up the rate of compliance. Agency staff continues to evaluate and improve the online reporting program and user interface, which helps customers who are trying to submit or use the data and may help the Department achieve additional increases in compliance. Of the 19 percent not in compliance, 20 percent were government entities, while the remainder were private permit holders. Some water right holders either do not have the resources (equipment, staff time, etc.) or do not have a system to pass on knowledge of the requirement when personnel changes, leading to a lapse in compliance.

KPM #14	CUSTOMER SERVICE - Percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent" in overall customer service, timeliness, accuracy, helpfulness, expertise, and availability of information.
	Data Collection Period: Jul 01 - Jun 30



Report Year	2016	2017	2018	2019	2020
Timeliness					
Actual	59%	No Data	64%	No Data	52%
Target	85%	85%	85%	85%	90%
Expertise					
Actual	71%	No Data	80%	No Data	73%
Target	85%	85%	85%	85%	90%
Helpfulness					
Actual	79%	No Data	81%	No Data	84%
Target	85%	85%	85%	85%	90%
Accuracy					
Actual	79%	No Data	83%	No Data	81%
Target	85%	85%	85%	85%	90%
Availability of Information					
Actual	68%	No Data	72%	No Data	68%
Target	85%	85%	85%	85%	90%
Overall					
Actual	74%	No Data	76%	No Data	68%
Target	85%	85%	85%	85%	90%

How Are We Doing

For the 2020 reporting period, the Department saw declines in rankings of “good” or “excellent” for timeliness (declined by 12 percent), overall performance (eight percent), and expertise (seven percent). Availability of Information and Accuracy were relatively stable showing declines of four percent and two percent, respectively. Helpfulness was the only category showing an increase, which was four percent. Most respondents did not submit comments to provide further understanding and context for their answers; however, many respondents provided feedback on how the Department could better serve them. General areas for the Department to work on include: (1) improving processing time and helping applicants realistically understand processing timeframes; and (2) developing information to simplify and help applicants better understand the process, criteria and rationale for application criteria and processing times. Many respondents identified specific staff that were helpful, and helpfulness continues to be a strength of our agency culture.

Factors Affecting Results

Timeliness continues to be the Department’s greatest challenge and influences ratings within other categories. To understand whether processing times had actually slowed, the Department compared the time it took to obtain a final order on surface water applications, groundwater applications, permanent transfers and temporary transfers for July 1, 2019-June 30, 2020 and July 1, 2017-June 30, 2018, which are the time periods consistent with the survey periods.

The average processing time for surface water applications and temporary transfers improved (shorter), while the average processing time increased for groundwater applications and regular transfers from the last survey period to the most recent survey period. Groundwater rights, followed by regular transfers, account for more of the Department’s workloads – meaning that longer processing times within these categories impact more applicants. Leaving positions vacant to manage the Department’s budget can affect results. In addition, the groundwater section, which conducts technical reviews of groundwater rights has a number of workload demands in addition to reviewing groundwater applications including collecting and analyzing groundwater data, responding to groundwater interference complaints, and providing technical assistance on local planning and management activities.

In prior surveys, some comments suggested that the Department needs to provide better information on how much time water right processing may take. This is an action that the Department has undertaken some work on as part of its process improvements and anticipates more work on the near future. In 2019, the Department worked to institute a system for water right and transfer applicants to receive an automated email that provides status updates on their application and includes contact information to easily contact the Department if they have questions or concerns about the process.

The Department conducts the customer service survey once a biennium. The survey for this 2020 report was conducted in July and August of 2020. The survey was emailed to individuals that had received a final order from the Water Rights Services Division between July 1, 2019 to June 30, 2020. The Department sent out surveys to 459 emails and received 160_ survey responses. The next survey will be completed in 2022. The Department is also considering other options for conducting the survey on a continuous basis, and for reaching more Oregonians served by the Department.

Program Prioritization for 2021-23 (107BF23)

Agency Name: Water Resources Department

2021-23 **Agency Number: 69000**

1	2	5	8	9	10	12	14	15.00	16	17	19	20	21	22
Priority (ranked with highest priority first)		**Program Unit/Activity Description**	**GF**	**LF**	**OF**	**FF**	**TOTAL FUNDS**	**Pos.**	**FTE**	**New or Enhanced Program (Y/N)**	**Legal Req. Code (C, D, FM, FO, S)**	**Legal Citation**	**Explain What is Mandatory (for C, FM, and FO Only)**	**Packages included in Agency Request**
Agcy	**Prgm/ Div**													
1	FSD	**Water Distribution** - Field investigations, outreach to water right holders, distribution of surface water and groundwater according to rights of record, and protection of senior water rights, both instream and out-of-stream. Includes watermasters, assistant watermasters, region managers, and other field staff.	10,468,922	0	1,208,331	0	$ 11,677,253	41.42	42	N	S	536, 537, 538, 539, 540, 542		109
2	TSD	**Public Safety in Water-Related Infrastructure** - Dam safety and well construction programs, development of well construction standards, well driller licensing, and general enforcement. Well protections include prevention of waste, contamination, and loss of artesian pressure. Includes dam safety inspectors, well construction specialists, well inspectors, and enforcement staff.	694,564	0	2,816,560	0	$ 3,511,124	13.21	14	N	S	536, 537, 540		070, 101 & 104
3	WRSD	**Water Right Transactions** - Processing of new water right applications, permit extensions, certificates, limited licenses, and water right records and research. Also includes protest coordinator, Water Management and Conservation Plans, and 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. Transactions include both instream and out-of-stream.	4,031,229	0	4,807,166	25,000	$ 8,863,395	36.00	36	N	S	536, 537, 538, 540, 541, 542		070 & 104
4	TSD/ASD/FSD	**Hydrologic Data Development, Analysis, and Publication** - Measuring the physical water resources of the state, including streamflow (surface water), water levels in wells (groundwater), and reservoir elevations (storage). Analysis includes reporting of water diverted and used, development of groundwater studies, groundwater-surface water interaction, surface water analysis, and water availability. Publication includes electronic platforms and portals for surface water and groundwater data, water right information management,and Geographic Information Systems (GIS) mapping. Includes water measurement analyst, hydrographers, hydrotechs, hydrologists, and hydrogeologists.	11,362,489	0	3,086,119	650,000	$ 15,098,608	44.00	44	N	S	536, 537, 540, 541, 542		110, 112
5	TSD	**Water Resource Conservation, Development, and Solutions**- Programs to assist individuals and communities to address instream and out-of-stream water needs now and into the future through place-based planning, feasibility studies, and water projects (such as conservation, efficiency, storage, water re-use). Includes Water Resources Development Program staff.	2,115,614	0	60,100,000	0	$ 62,215,614	5.13	6	N	S	541		108

Priority (ranked with highest priority first)		Program Unit/Activity Description	GF	LF	OF	FF	TOTAL FUNDS	Pos.	FTE	New or Enhanced Program (Y/N)	Legal Req. Code (C, D, FM, FO, S)	Legal Citation	Explain What is Mandatory (for C, FM, and FO Only)	Packages included in Agency Request
Agcy	Prgm/ Div													
6	DO	**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, rulemaking, public hearings, special projects, and Integrated Water Resources Strategy implementation and updates.	3,617,258	0	0	25,000	$ 3,642,258	8.00	8	N	S	182, 183, 184, 536, 537, 538, 540, 541, 542, 543, 543A		101, 103, 111, 113 & 114
7	WRSD	**Hydroelectric Program** - Coordinating on hydroelectric project re-authorization and FERC licensing, reviews non-FERC applications.	0	0	747,922	0	$ 747,922	2.17	3	N	C, S	536, 537, 541, 543,543A, Art XI-D	Hydroelectric Power Plants	105
8	WRSD	**Adjudication** - Undertakes the processes to confirm pre-1909 surface water rights, as well as federal and tribal reserved water right claims.	849,455	0	0	25,000	$ 874,455	2.00	2	N	S	537, 539		
NR	ASD/FSD	**Central Administrative Costs** - Accounting, Budgeting, Human Resources, Support Services, Contracts, Facilities, front counter assistance, system administration (information technology, application developers, webmaster, risk management and firewalls, and business continuity). Includes fixed S&S costs.	6,734,462	0	1,190,519	0	$ 7,924,981	19.58	21	N	C, S	541, Art XI-I(1)		101, 102,106
NR	ASD	**Debt Service**	0	13,470,490	0	0	$ 13,470,490	0.00	0	N	D			
			39,873,994	13,470,490	73,956,617	725,000	$ 128,026,101	171.51	176					

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.

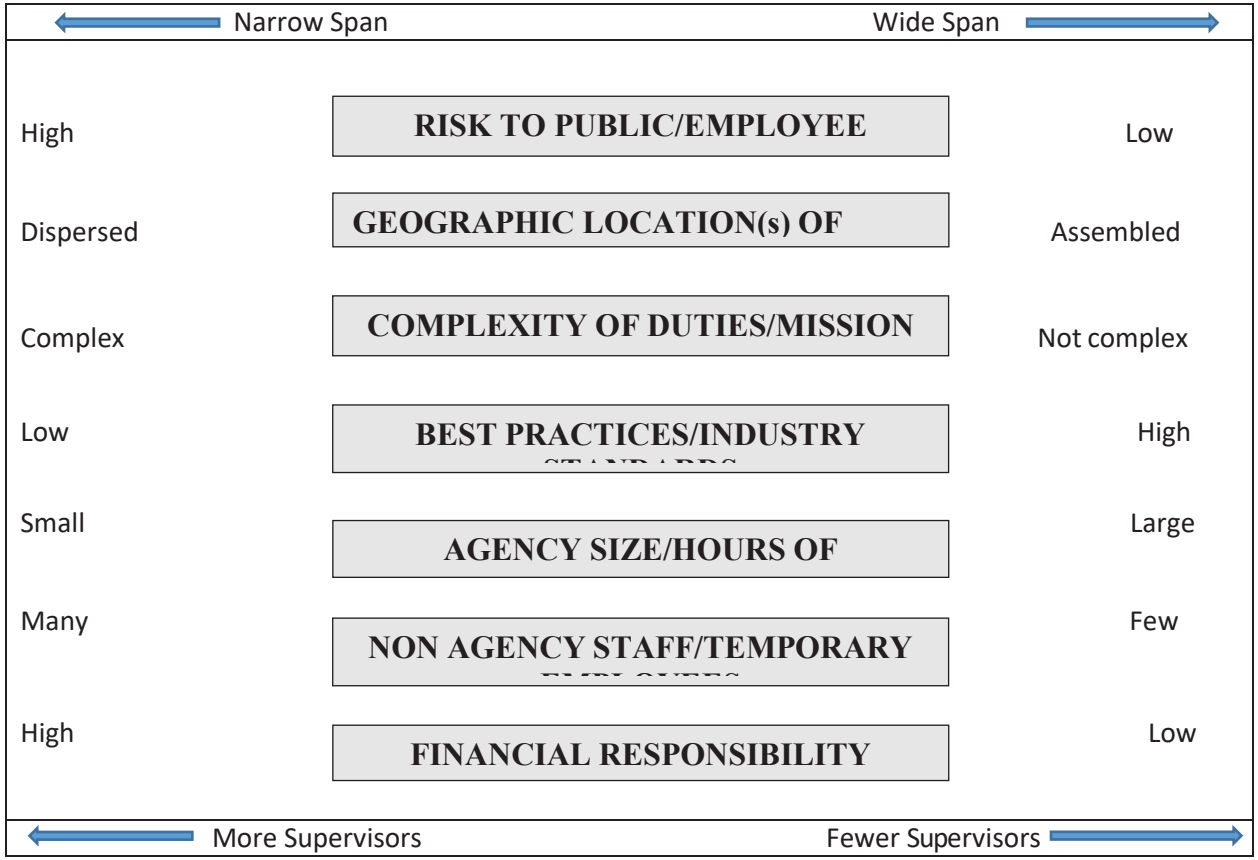
The Agency actual supervisory ratio as of Current Service Level (CSL) is calculated using the following calculation;

_____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
Assembled
Complex
COMPLEXITY OF DUTIES/MISSION
Not complex
Low
BEST PRACTICES/INDUSTRY
High
Small
AGENCY SIZE/HOURS OF
Large
Many
NON AGENCY STAFF/TEMPORARY
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.

BUDGET NARRATIVE

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 2019-21 & 2021-23 BIENNIA**

Agency: **690- Water Resources Department**
Contact Person (Name & Phone #): **Mishelle Sumption or Lisa Snyder**
(503) 586-6184 or (503) 983-5801

(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**	**2019-21 Ending Balance In LAB**	**2019-21 Ending Balance Revised**	**2021-23 Ending Balance In CSL**	**2021-23 Ending Balance Revised**	**Comments**
Nonlimited	010-01-00-00000: Water Dev Loan Fund	6900000463: Water Dev Admin & Bond Sinking Fund	Loan Program - Inactive	Article XI-I(1) ORS 541.750	250,000	239,000	245,000	245,000	The only activity in this account is interest and Treasury Fees. No WDLP activity.
Limited	010-04-00-00000: Tech Serv Div	6900000536: Water Resources Department Operating Fund (Start Card Fund)	Operations	ORS 537.763	700,000	530,000	(281,000)	(146,000)	Administratively managed funding for cash flow and contingencies. Goal is to have a 3-5 month EFB. Projecting a potential revenue shortfall in the 21-23 biennium if all positions are filled for the entire biennium.
Limited	010-06-00-00000: Water Rights Services Div	6900000607: Water Resources Dept Hydroelectric Fund	Operations	ORS 536.015	200,000	292,000	(10,000)	372,000	Administratively managed funding for cash flow and contingencies. Goal is to have a 6-9 month EFB. Department submitting fee increase LC/POP in 2021-23 budget cycle (LC 69000-002) included in revised numbers.
Limited	010-03-00-00000: Field Serv Div	6900000975: Water Measurement Cost Share Prog Rev Fund	Other - Incentive funding for water measurement devices (recipient match required)	ORS 536.021	0	0	0	0	Assumption is that all other fund will be spent in the 2019-21 biennium.
Limited	010-06-00-00000: Water Rights Services Div	6900001083: Water Right Operating Fund	Operations	ORS 536.009 ORS 536.050 ORS 537.747	1,750,000	1,625,000	1,075,000	850,000	Administratively managed funding for cash flow and contingencies. Goal is to have a 4-8 month EFB. Department submitted revenue shortfall package for Water Right and Dam Safety fees and accompanying fee increase LC/POP in 2021-23 budget cycle (LC 69000-001).
Limited	010-01-00-00000: Admin Serv Div	6900001277 & 1729: Water Conservation Reuse Storage Invest (SB 1069) Feasibility Study Grants	Grant Funds	SB 1069, 2015-17 ORS 291.001; ORS 541.561	244,092	700,000	0	0	Difference is due to timing of funding cycles and decreased utilization of the program. Assumption is all will be spent by the close of the 21-23 biennium.
Limited	010-04-00-00000: Tech Serv Division	6900001318: Geotechnical Fund	Operations	HB 2232 ORS 537.895	410,000	423,000	438,000	428,000	Administratively managed funding for cash flow and contingencies.
Limited	010-01-00-00000: Admin Serv Div	6900001726;1727;1728 Water Supply Fund - Tax Exempt	Grant Fund	ORS 291.001	3,000,000	0	0	0	Assumption is all will be spent in the 19-21 biennium.
Limited	010-01-00-00000: Admin Serv Div	6900001912; 1909; 1910 Water Supply Fund - Tax Exempt	Grant Fund	ORS 291.001	0	14,900,000	0	0	Difference is due to timing of grantee request for release of funds. Assumption is all will be spent by the close of 21-23 biennium.
Limited	010-01-00-00000: Admin Serv Div	6900001914: Water Conservation Reuse Storage Invest (SB 1069) Feasibility Study Grants	Grant Fund	SB 1069, 2015-17 ORS 291.001; ORS 541.561	0	1,500,000	0	0	Difference is due to timing of funding cycles and decreased utilization of the program. Assumption is all will be spent by the close of the 21-23 biennium.
Limited	010-01-00-00000: Admin Serv Div	690000 Spring 2021 sale - Water Supply Fund - Tax Exempt	Grant Fund	ORS 291.001	0	43,000,000	0	0	Bonds were to be sold in the Spring of 2021. Estimate is that no funds will be disbursed in 2019-21 biennium but will be partially disbursed if sold in the 2021-23 biennium. No estimate assumed for this exercise.
					6,554,092	63,209,000	1,467,000	1,749,000	

Objective: **Provide updated Other Funds ending balance information for potential use in the development of the 2021-23 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 2019-21 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 2019-21 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 2019-21 General Fund approved budget or otherwise incorporated in the 2019-21 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 2019 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.