OREGON WATER RESOURCES DEPARTMENT

2021-23 Budget Presentation

Before the Joint Ways & Means Natural Resources Subcommittee

Presented by: Tom Byler, Director

March 15 & 17, 2021

OREGON WATER RESOURCES DEPARTMENT

Agency Overview

Overview

- Mission
- Goals
  - Integrated Water Resources Strategy
  - Strategic Plan
- Historical Perspective
  - Agency Structure
  - Water Law

OREGON WATER RESOURCES DEPARTMENT

Mission and Goals

Mission

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

Goals

- Restore and protect streamflow to ensure the sustainability of Oregon's ecosystem, economy, and quality of life
- Directly address Oregon's water supply needs

OREGON WATER RESOURCES DEPARTMENT

Integrated Water Resources Strategy

Oregon's 2017 Integrated Water Resources Strategy

A framework for improving our understanding of Oregon's water resources and meeting our instream and out-of-stream needs, including water quantity, water quality, and ecosystem needs

(1) Understand Water Resources Today

Further Understand Limited Water Supplies & Systems
(groundwater, surface water, and their interaction)

Improve Water Quality & Quantity Information

Further Understand Our Water Management Institutions

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

OBJECTIVES

CRITICAL ISSUES

RECOMMENDED ACTIONS

(2) Understand Instream and Out-of-Stream Needs

Further Define Out-of-Stream Needs / Demands
(i.e., diverted water)

Further Define Instream Needs / Demands
(i.e., left-in-place water)

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

(3) Understand the Coming Pressures That Affect Our Needs and Supplies

Economic Development | **Water & Energy** | **Climate Change** | **Extreme Events**

Population Growth | **Water & Land Use** | **Water-Related Infrastructure** | **Education & Outreach**

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

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

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

Economic Development & Population Growth
(See Actions 2A and 3A)

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

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

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

OBJECTIVES

CRITICAL ISSUES

RECOMMENDED ACTIONS

(4) Meet Oregon's Instream and Out-of-Stream Needs

Place-Based Efforts | **Water Management & Development**

Healthy Ecosystems | **Public Health** | **Funding**

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

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

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

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

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

Download: www.oregon.gov/OWRD/programs/Planning/IWRS/Pages/default.aspx

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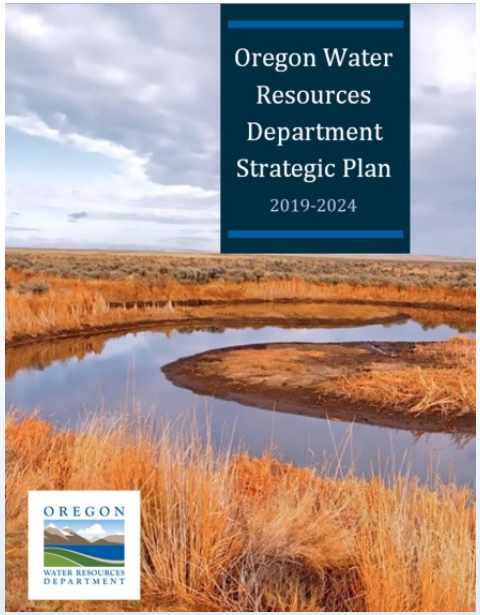
Strategic Plan



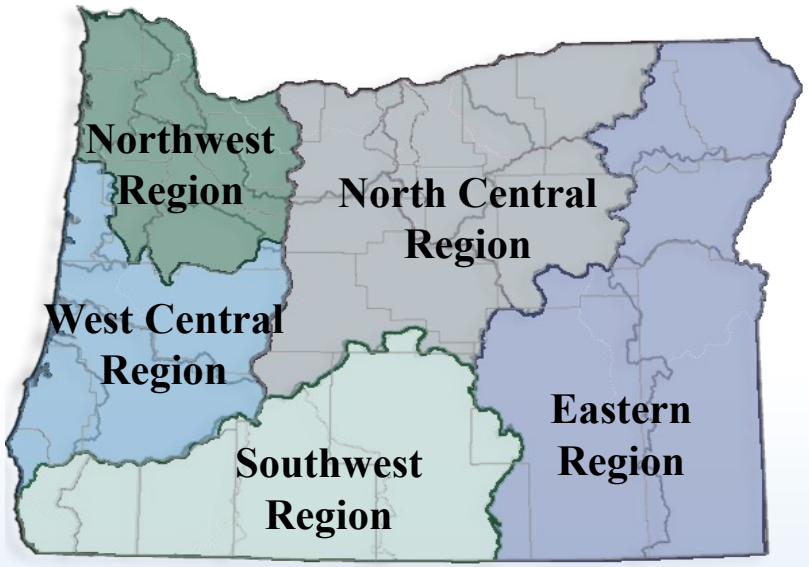
- Modernize policies and program practices
- Work to secure Oregon's water future
- Foster a forward-looking team

Water Resources Commission

Governor's Office

Oregon Water Resources Commission

Oregon Water Resources Department



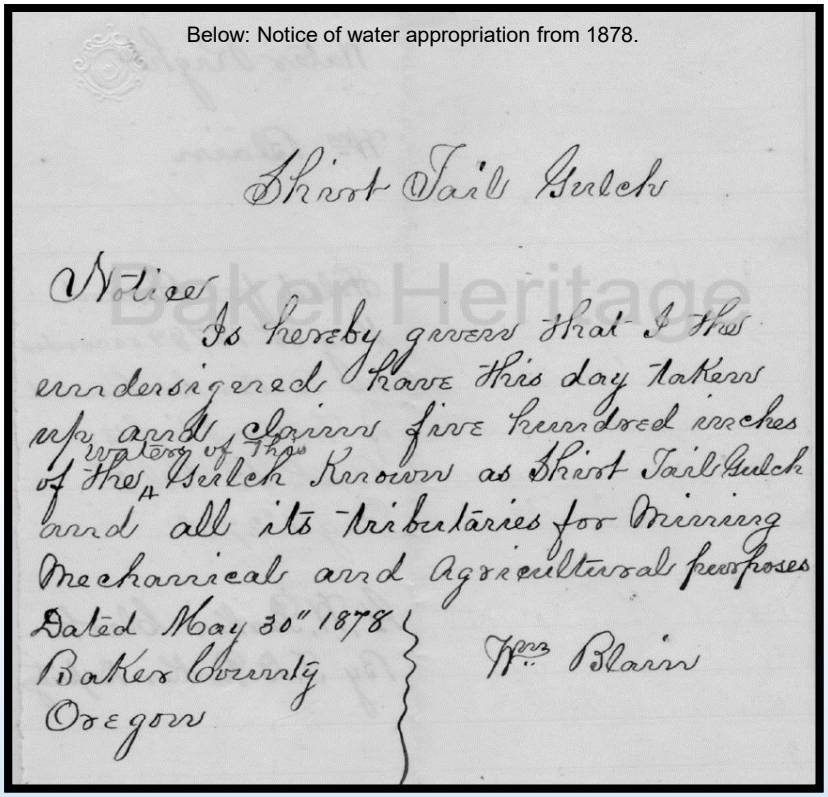
- Kathy Kihara - East-Side at Large
- Vice-Chair Bruce Corn - Eastern Region
- Chair Meg Reeves - West-Side at Large

- Pending Confirmation - Southwest Region
- Eric Quaempts - North Central Region
- Joe Moll - West Central
- Bob Baumgartner - Northwest Region

Historical Perspective
Agency Structure

- Common Law Doctrine
- 1909 Water Code
- Oregon's Water Use Agency
  - No federal counterpart

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 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

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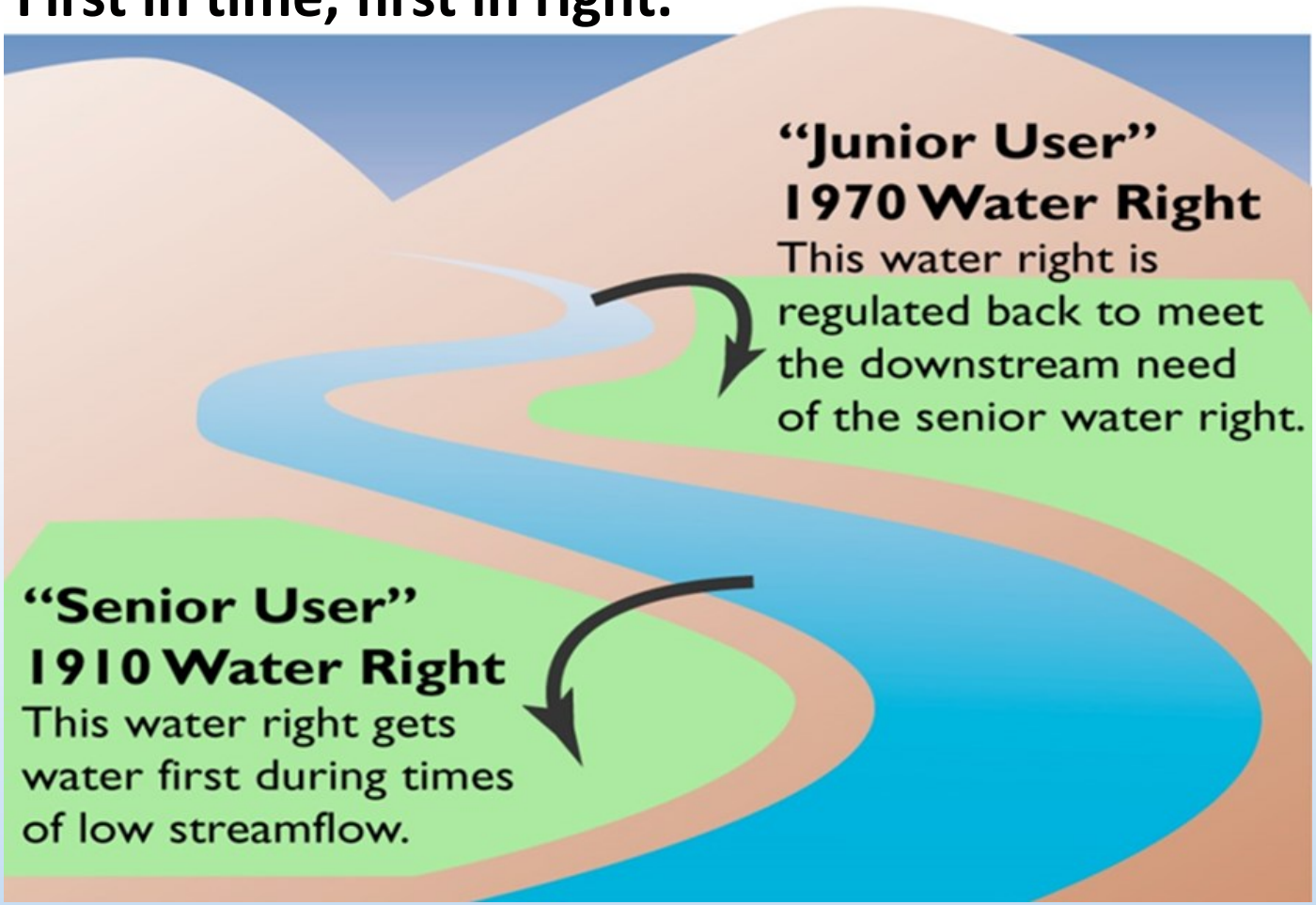
1909 Water Code
Prior Appropriation Doctrine

First in time, first in right.



Advancements in Water Law

1909: Oregon Water Code

1955: Ground Water Act

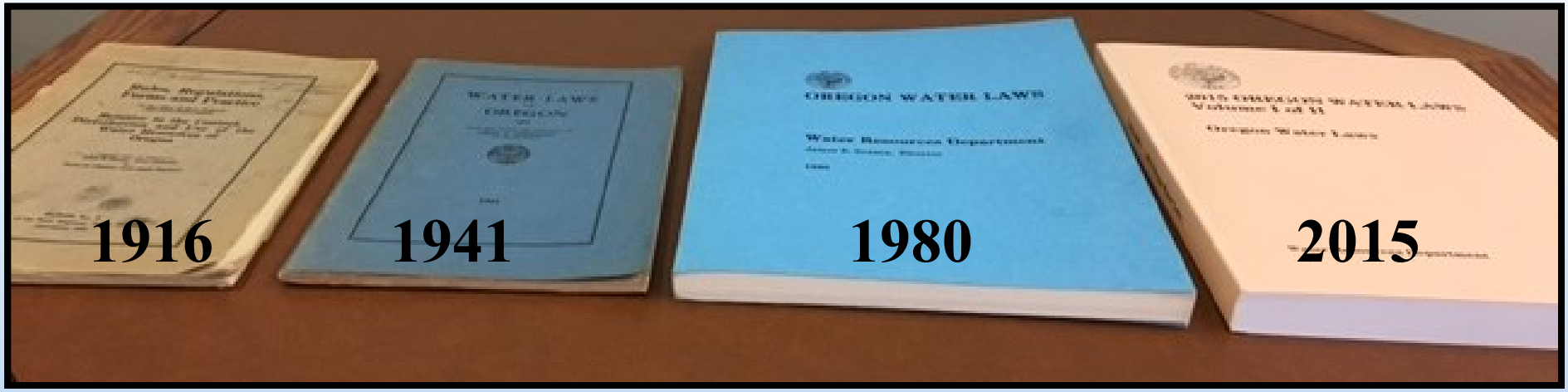
1987: Instream Water Rights Act

1989: Water Allocation Policy

2009: Integrated Water Resources Strategy

2015: Water Resources Development Program

2019: Dam Safety Modernization



OREGON WATER RESOURCES DEPARTMENT

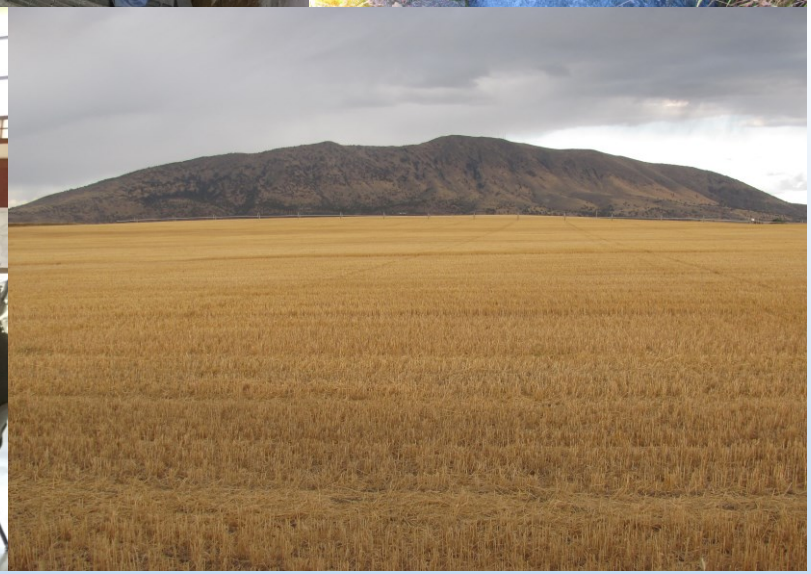
Programs and Organizational Structure

Overview

- Who We Serve
- Divisions and Programs
- Organizational Chart
- Delivery of Services

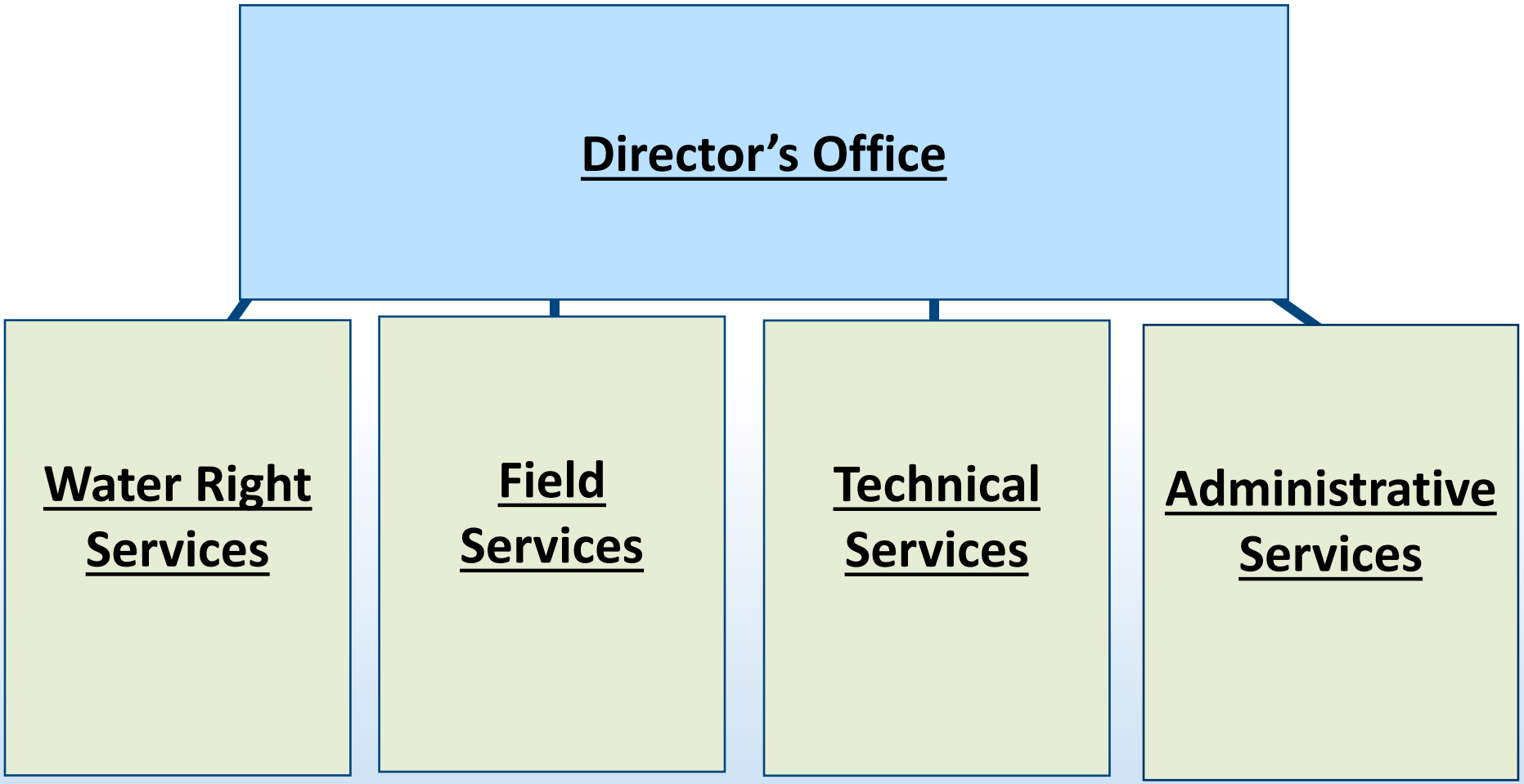
OREGON WATER RESOURCES DEPARTMENT

Who We Serve



OREGON WATER RESOURCES DEPARTMENT

Divisions and Programs



Water Rights Services Division

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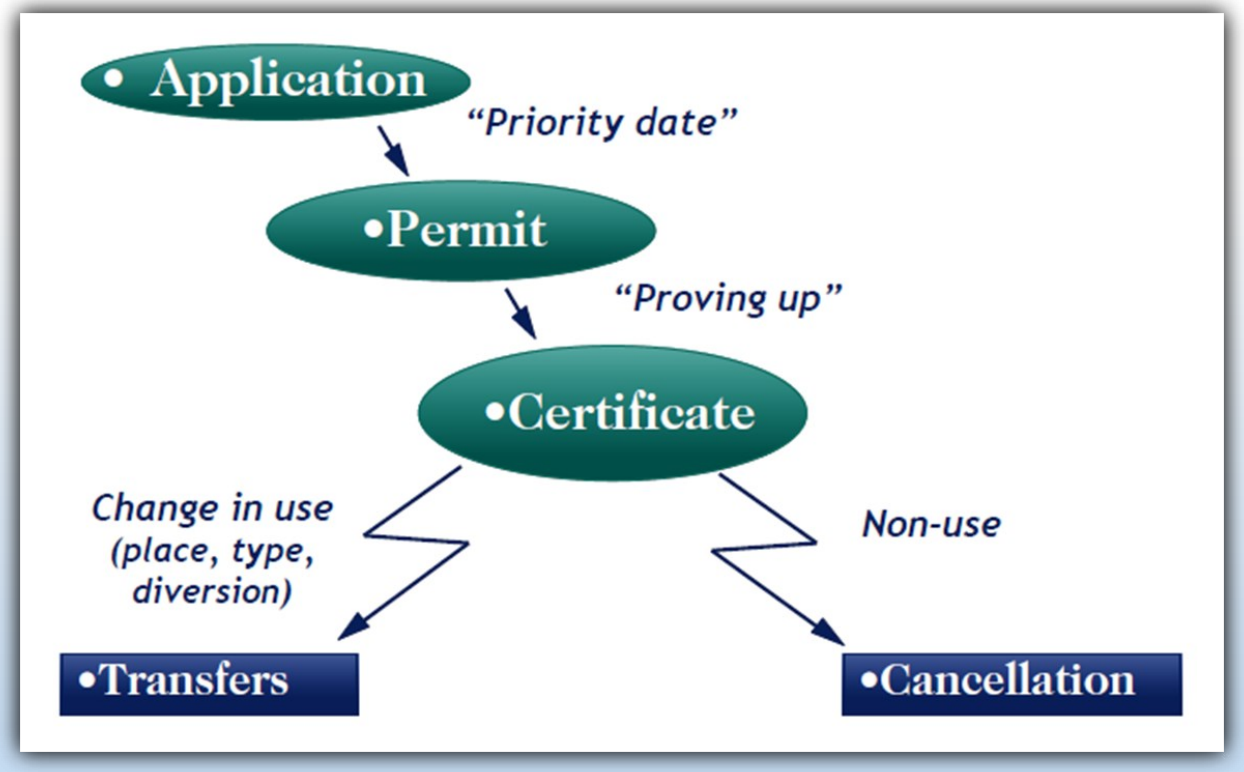
Water Right Services Division

Processing water rights transactions from application to certification or decree and providing customer service

- Water right applications
- Permits
- Extensions
- Protests
- Certificates
- Transfers
- Adjudication



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Water Right Services Division

Hydroelectric Program

- Managing Oregon's hydroelectric licensing and reauthorization

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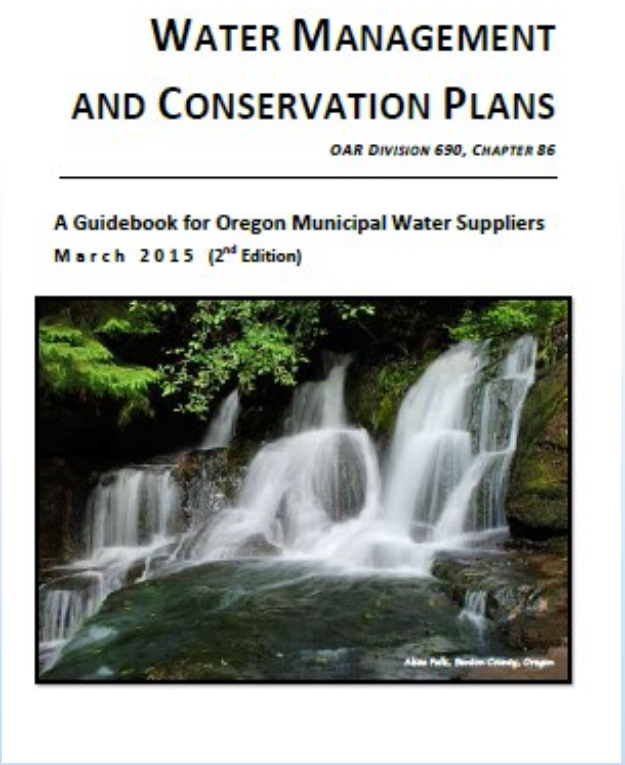
Water Right Services Division

Conservation

- Protecting and conserving flows for instream purposes
- Helping municipalities conserve water
- Allocation of conserved water



OREGON WATER RESOURCES DEPARTMENT

Divisions and Programs

Field Services Division

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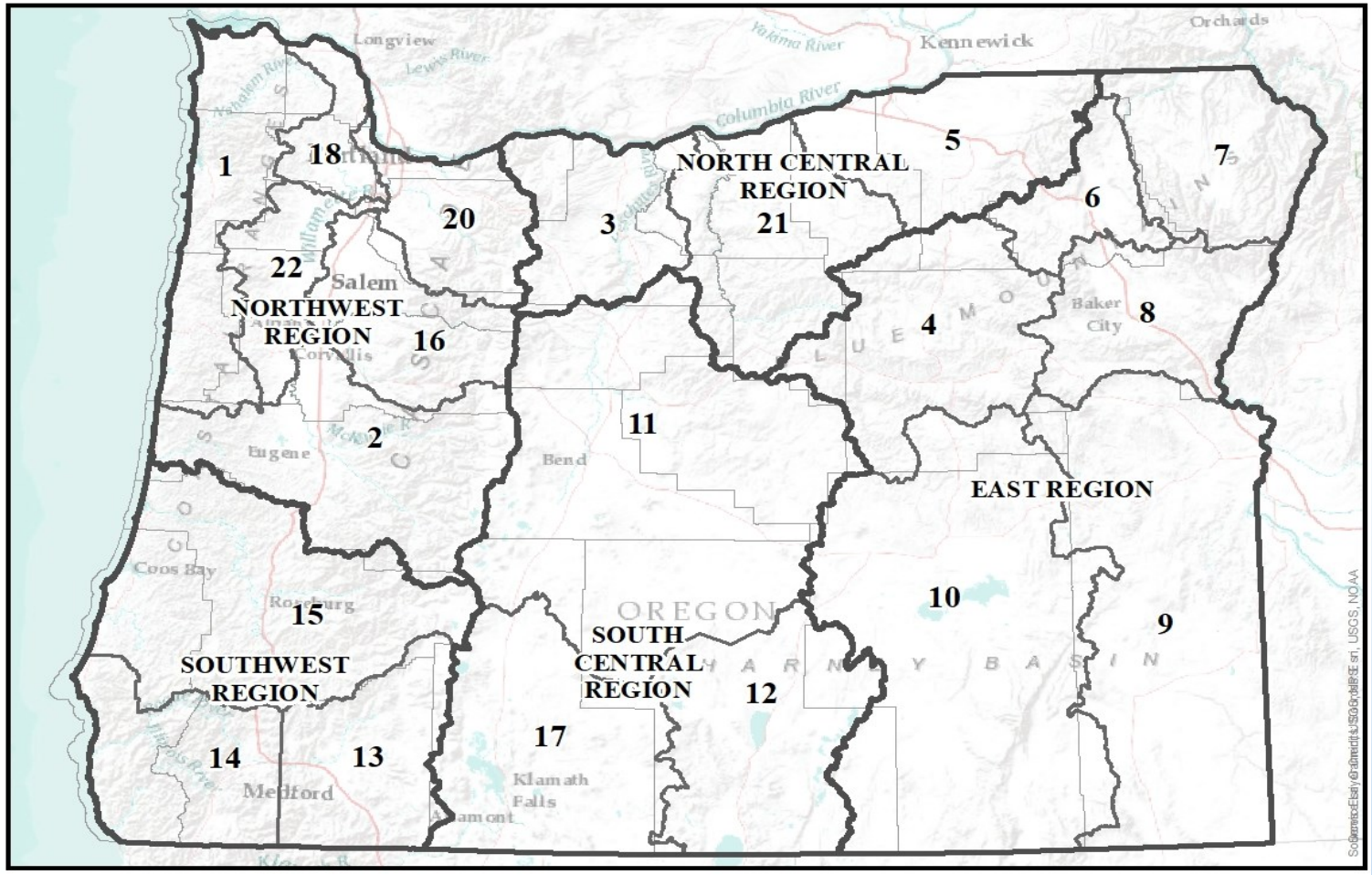
Field Services Division

Watermaster Districts



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Field Services Division

- Distribution and Regulation to satisfy senior water rights
- Hydrologic measurements
- Community outreach, education, and customer service

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Field Services Division

Water well and dam safety inspections

- Ensuring proper construction and maintenance of wells and dams to protect the public and groundwater resources

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Divisions and Programs

Technical Services Division

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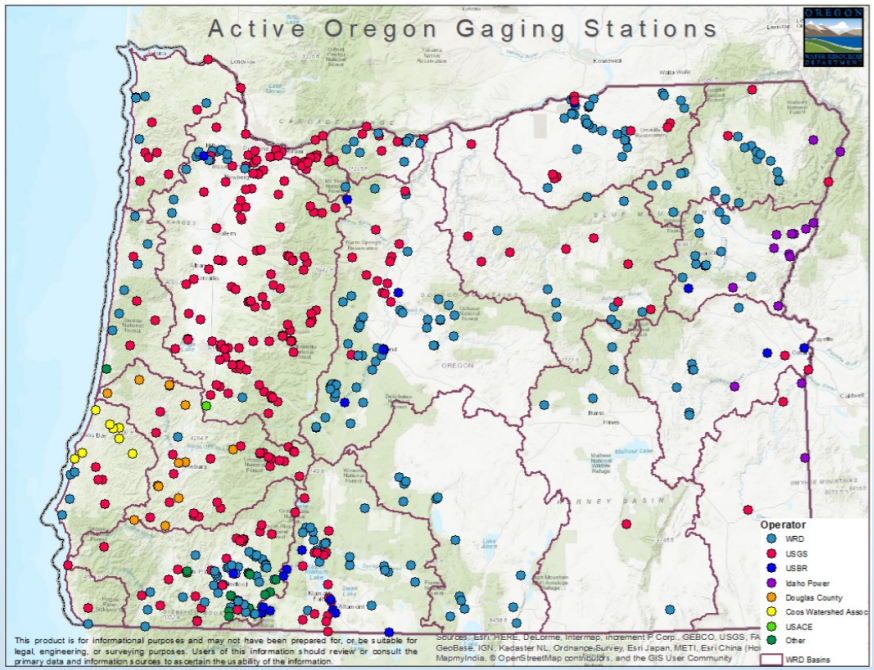
Technical Services Division

Surface and Groundwater Science

- Analyzing surface and groundwater data vital to understanding and managing water resources



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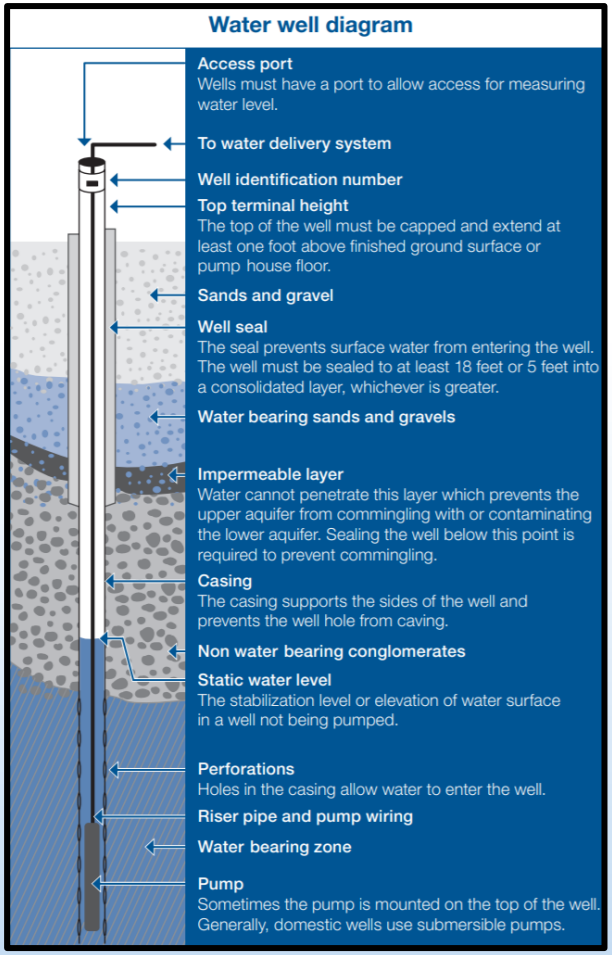
Technical Services Division

Well Construction Compliance & Enforcement



- Ensuring proper well construction, alteration, maintenance, & abandonment
- Managing well construction & water right enforcements

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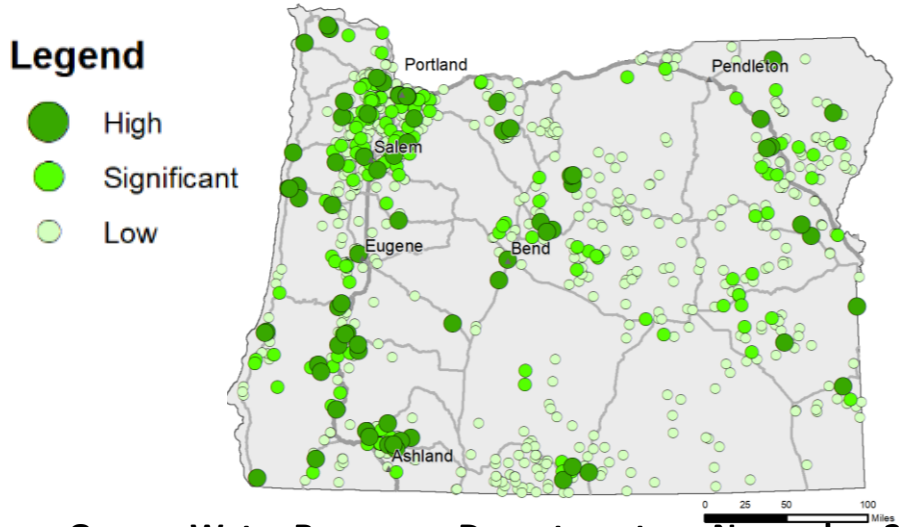
Technical Services Division

Dam Safety Program

- Working to protect people, property, & public infrastructure while preserving the benefits of dams

OWRD Regulated Dams



Source: Oregon Water Resources Department **November 2020**

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Technical Services Division

Water Resources Development Program

- Helping Oregonians plan for and address instream and out-of-stream water supply needs now and into the future

Place-Based Planning

Plan and identify actions

Feasibility Study Grants

Investigate feasibility

Water Project Grants and Loans

Implement actions

Administrative Services Division

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Administrative Services Division

Business Services

- Managing agency financials, facilities, and support services

Employee Services

- Supporting a professional workforce and promoting integrity, diversity, and respect.

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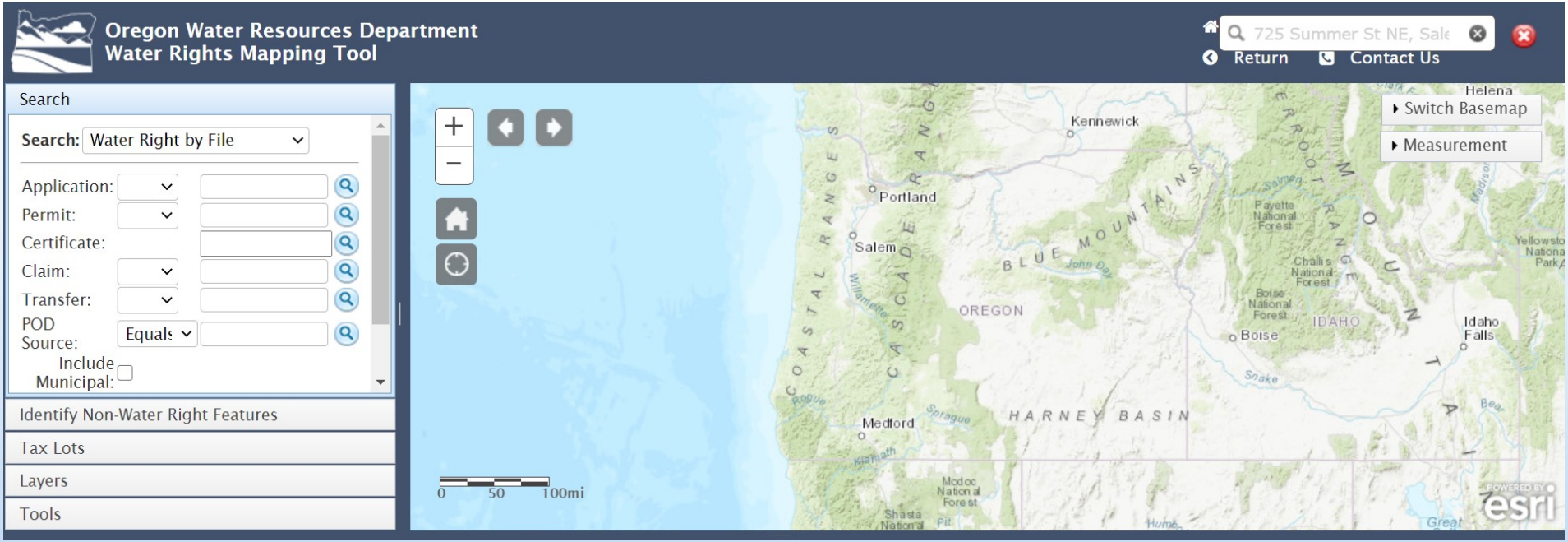
Administrative Services Division

Information Services

- Developing & managing critical information technology foundational for decisions on water allocation, distribution, & planning
- Making data accessible to the agency, water users, and the public



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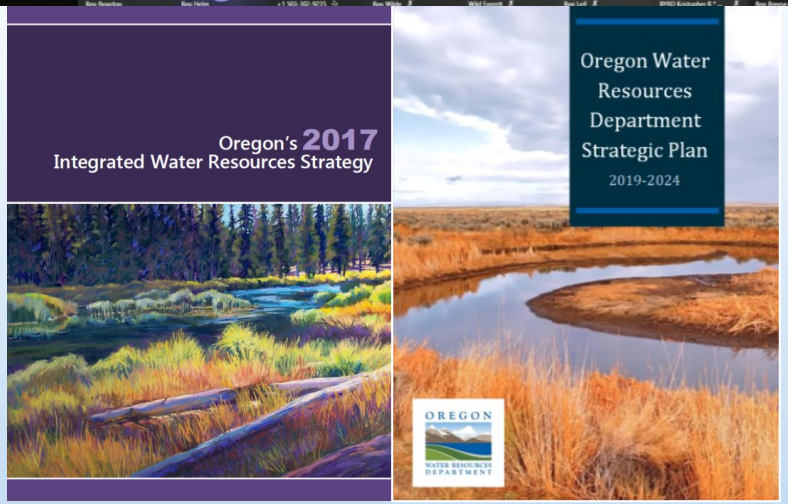
Divisions and Programs

Director's Office

Director's Office

Overseeing the management of the agency as well as policy & strategic direction

- Commission
- Legislative Liaison
- Rulemaking
- Integrated Water Resources Strategy and Strategic Plan



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Director's Office

- Tribal Relations
- Intergovernmental relations
- External Communications
- Public Records
- Special projects
- Diversity, Equity, and Inclusion
- Climate change coordination

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Maintaining Your Well After Wildfire

Water Well Issues After Wildfire

This handout identifies a number of issues that may occur with water well systems following a wildfire and provides a list of contacts and resources.

Electrical Hazards

Exposed electrical wiring to the well poses a significant safety hazard due to the potential for electric shock. There is the potential for an electrical short to the metal casing or other infrastructure at the wellhead.

Drilled Wells and Water System Damage

Some drilled wells may be damaged by wildfire. For example, most domestic wells have steel casing that rises at least one-foot above land surface. Within the well, PVC liners, a sanitary seal with rubber gasket, or PVC pipes may be melted or damaged. Outside of the well casing is the well seal. The seal may be damaged by the fire and could allow surface contaminants to flow into the groundwater. Well houses, pipes, pressure tanks, and storage tanks should also be inspected for damage.

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Programs and Other Agencies

- New water rights and extensions
- Hydroelectric
- Planning
- Evaluation of Grants
- Integrated Water Resources Strategy
- Drought, Climate, Natural Hazards
- Data collection, including groundwater studies
- State Scenic Waterways
- Shared Services: Payroll, IT, Human Resources, Fiscal, Contracts

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Organizational Chart

Director's Office

- Legislative, rulemaking, & policy coordination
- Public records & information
- Integrated Water Resources Strategy & Strategic Plan
- Executive & Commission support
- Integration of equity, diversity, & inclusion into agency work

Field Services

- Regulation and distribution of water
- Well inspections
- Data collection
- Assist with dam inspections
- Collaborate with local planning entities

Water Right Services

- Water right transactions
- Customer service
- Hydroelectric licensing
- Adjudications
- Water Management and Conservation Planning

Administrative Services

- Business Services
- Employee Services
- Information Services
- Facilities
- Support services

Technical Services

- Dam safety
- Surface & groundwater science
- Well construction & enforcement
- Water Resources Development Program
- Water use reporting

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Agency Performance

Overview

- Key Performance Measures

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Key Performance Measures

KPMs not being met

#	Description	Target	Actual
1	Flow restoration	32%	24%
3	Monitor compliance	99%	97%
4	Streamflow gaging (since 2001)	22%	16%
5	Assessing groundwater (since 2001)	10%	6%
8	Significant diversions with measurement devices	1,265	1,099
10	Water right application processing	55%	12%
11	Transfer application processing	40%	19%
13	Water use reporting	85%	81%

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Key Performance Measures

KPMs not being met

KPM #	Customer Service KPMs - % rating service as "good" or "excellent"	Target %	Actual %
14	Overall	90	68
14	Accuracy	90	81
14	Availability of Information	90	68
14	Expertise	90	73
14	Helpfulness	90	84
14	Timeliness	90	52

Budget Drivers, Agency Improvements, and Policy Option Packages

Overview

- Changes in the past six years
- Process improvements
- Budget Drivers
- Policy Option Packages

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Major Changes to Agency

- 2022 IWRS update
- 2019-24 Strategic Plan
- Executive Order 20-04 & Climate Adaptation Framework
- Klamath agreements terminated: increased conflict
- Confederated Tribes of the Umatilla Indian Reservation water rights settlement negotiations
- Groundwater challenges in Greater Harney Valley
- Organizational structure: Water Resources Development Program, Informational Services, Watermaster Districts

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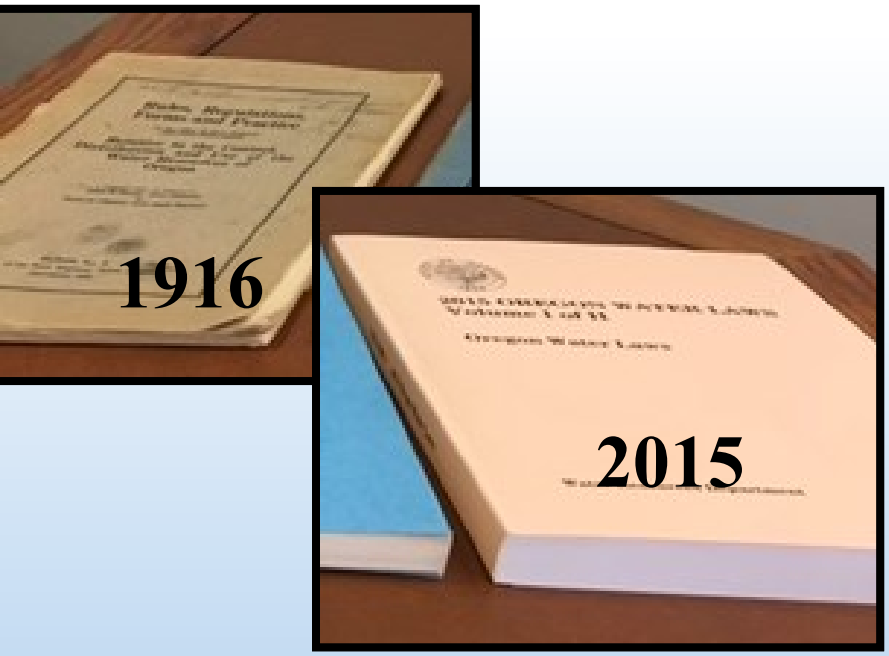
Process Improvements

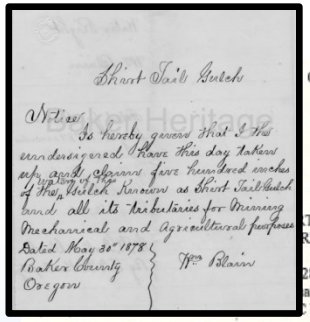
Improving to serve Oregonians

- Dam safety and well construction modernization
- IT and software modernization
- Strategic plan implementation efforts
- Maximization of limited watermaster resources

Increasingly Complex System

- Water rights more than 150 years old; Old laws and case law
- Complex technically, legally, and socially





CERTIFICATE OF WATER RIGHT

TH UMPQUA RIVER, A TRIBUTARY OF UMPQUA RIVER for DOMESTIC
RIGATION OF 1.5 ACRES.

282. The date of priority is APRIL 27, 2005. The amount of water to which this
ally used beneficially, and shall not exceed 0.029 CUBIC FOOT PER SECOND
USE, AND 0.019 CFS FOR IRRIGATION, measured at the point of diversion.

The period of use is year round for domestic use; March 1 through October 31 for irrigation.

The point of diversion is located as follows:

Twp	Rng	Mer	Sec	Q-Q	DLC	Measured Distances
26 S	6 W	WM	23	NW SE	47	POD 2 – 400 FEET SOUTH AND 1150 FEET EAST FROM C1/4 CORNER, SECTION 23

The amount of water used for irrigation under this right, together with the amount secured under any other right existing for the same lands, is limited to a diversion of ONE-EIGHTIETH of one cubic foot per second and 2.5 acre-feet for each acre irrigated during the irrigation season of each year.

A description of the place of use is as follows:

Twp	Rng	Mer	Sec	Q-Q	DLC	Acres
26 S	6 W	WM	23	NW SE	47	1.5

Measurement, recording and reporting conditions:

A. The Director may require the water user to install a meter or other suitable measuring device as approved by the Director. If the Director notifies the water user to install a meter or other measuring device, the water user shall install such device within the period stated in the notice. Such installation period shall not be less than 90 days unless special circumstances warrant a shorter installation period. Once installed, the water user shall maintain the meter or measuring device in good working order and shall allow the watermaster access to the meter or measuring device. The Director may provide an opportunity for the water user to submit alternative measuring procedures for review and approval.

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Finite Supply: Drives Need for Data

- Limited supplies and increased demands results in the desire for more innovative and precise management

- Data necessary for:
  - Planning
  - Water management
  - Infrastructure design
  - Identifying solutions

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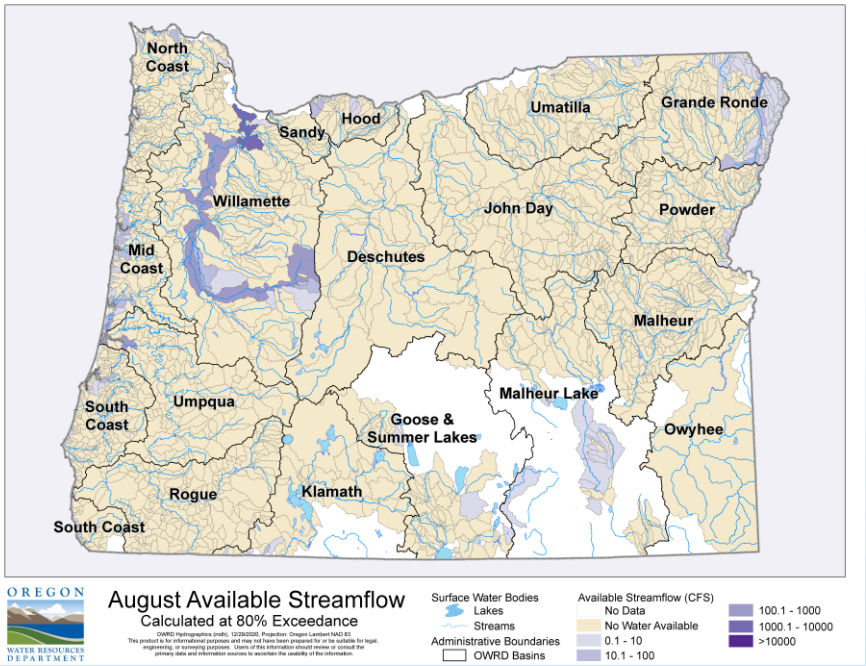
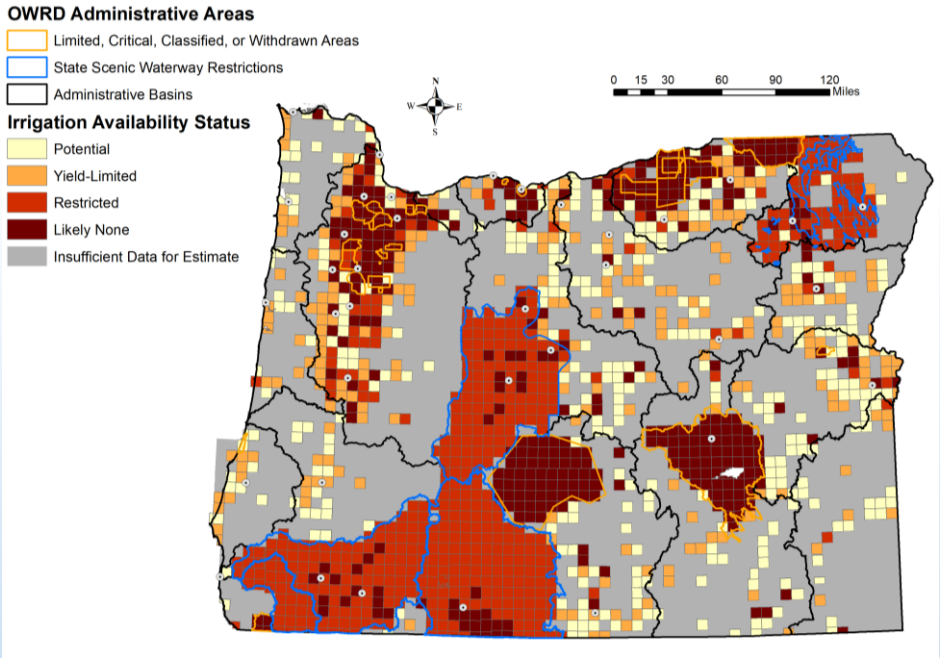
Surface and Groundwater Availability

Surface water availability for allocation in August



Estimated groundwater availability for irrigation



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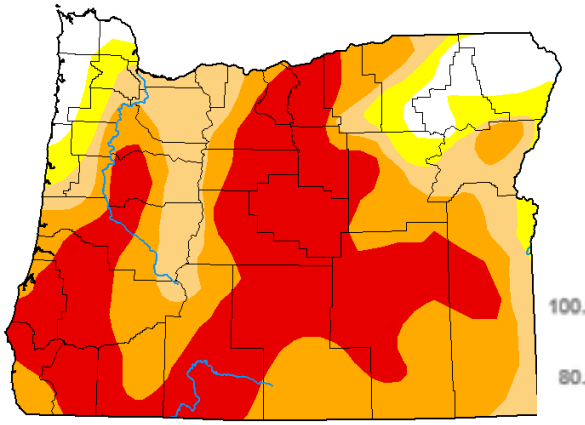
Drought Trends

Drought is not an abnormal occurrence

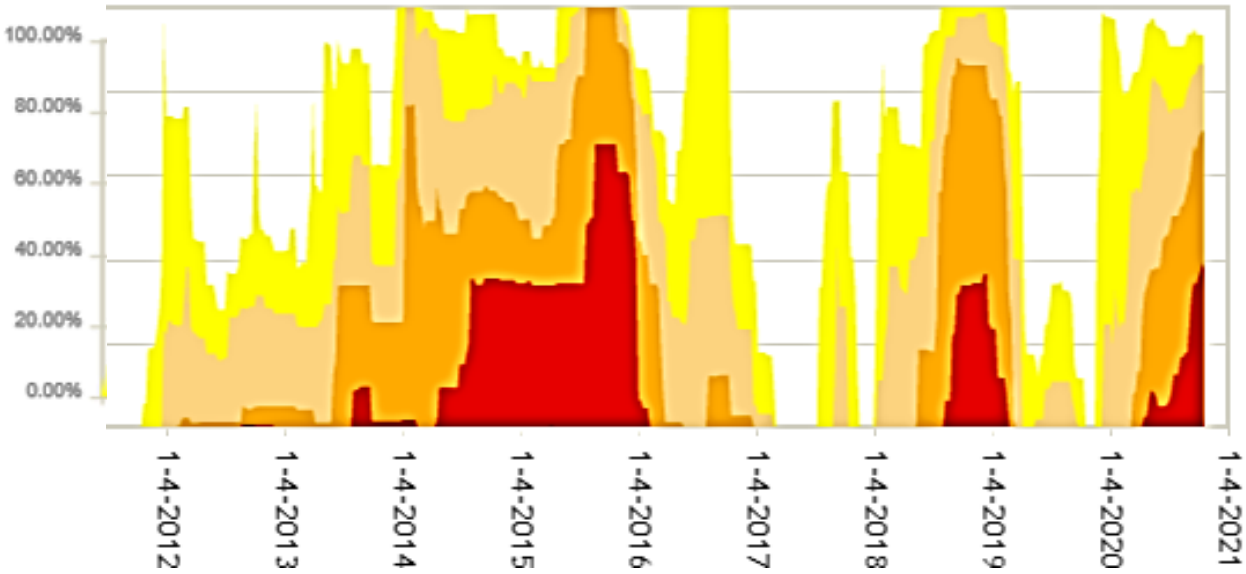
Oregon Drought Monitor - October 20, 2020



Intensity:

- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought
- D3 - Extreme Drought
- D4 - Exceptional Drought

Percent Oregon area in Drought since 2012



http://droughtmonitor.unl.edu

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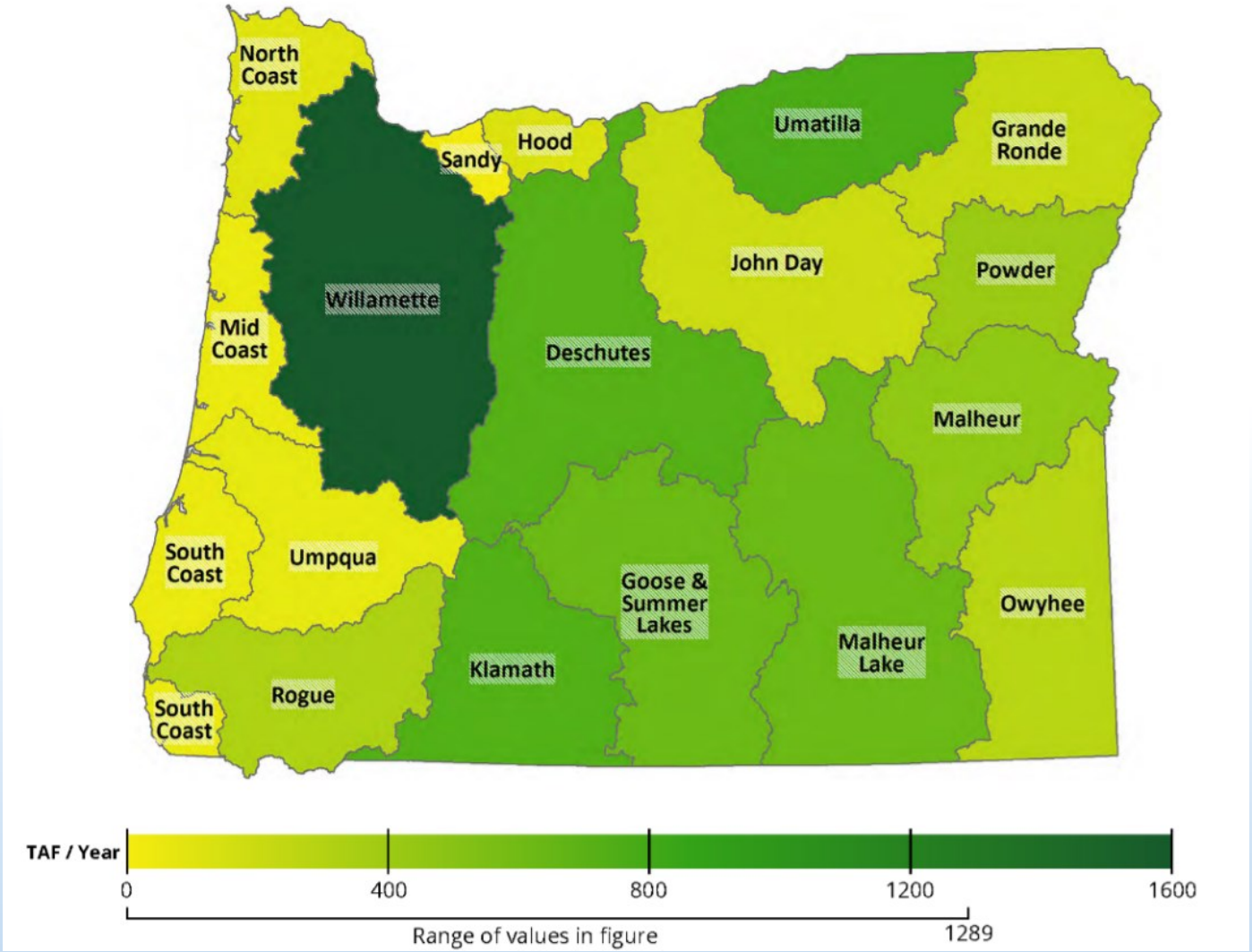
2015 Water Diversion Demand



https://www.oregon.gov/owrd/LAW/docs/IWRS/OWRD_2015_Statewide_LongTerm_Water_Demand_Forecast.pdf

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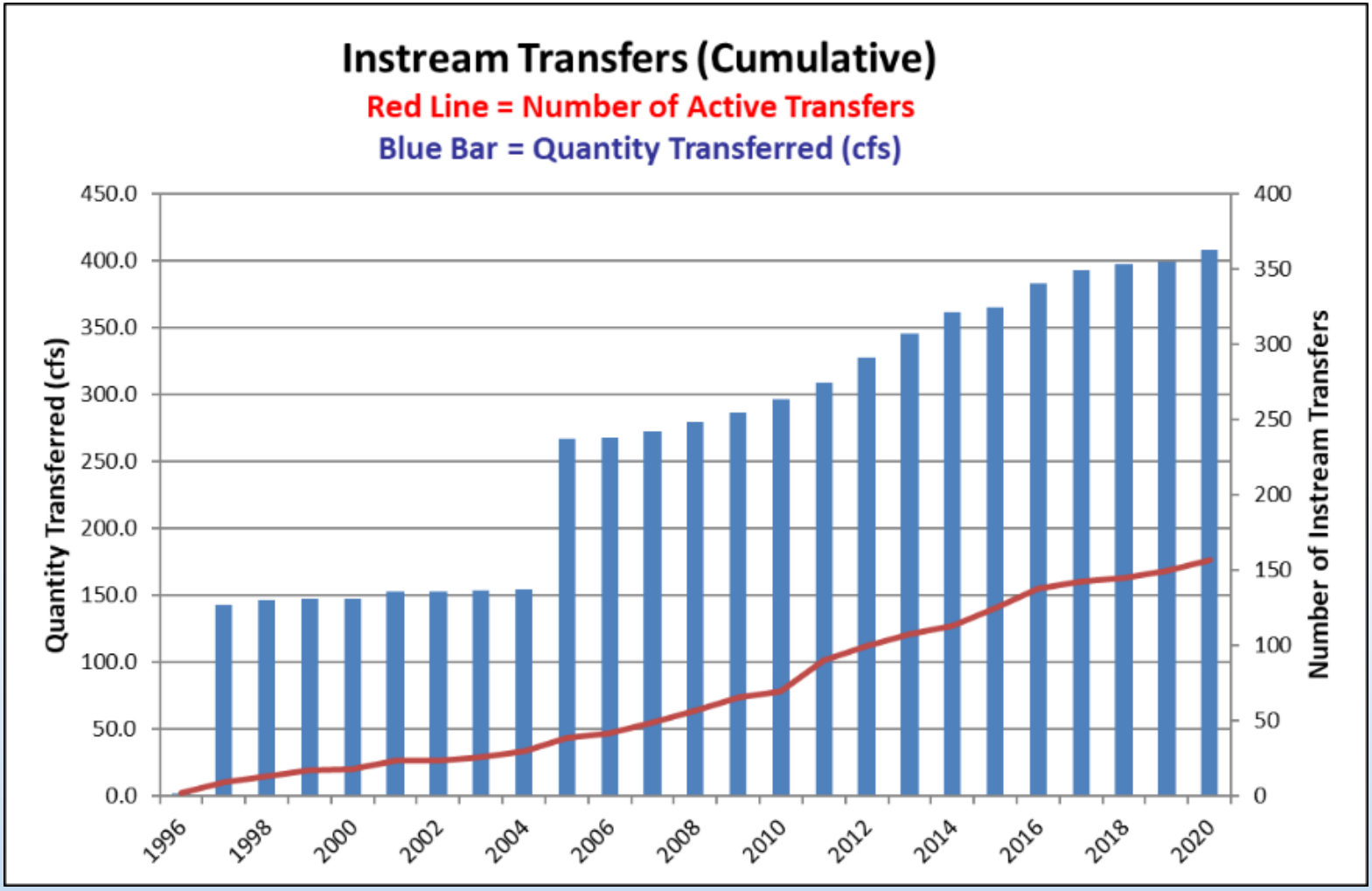
Streamflow Protection



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Need to Invest in Water: Water Vision

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Aging Water Infrastructure

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Addressing Complex Water Issues

- Deschutes Basin
- Klamath Basin
- Willamette Basin
- Umatilla Basin
- Walla-Walla Sub basin
- Greater Harney Valley
- Mosier

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Increasing Legal Expenses

- Legal costs have exceeded the allotted budget since the 2011-13 biennium
- Vacancy savings and impact on services
- 2019 Budget Note Report
- December 2020 Emergency Board
  - $656k to fill 2019-2021 budgetary gap

2021-2023 Policy Option Packages - Additions

Transition to statewide data center	Equitable water access and energy resiliency	Public Safety and Resiliency	Addressing Ongoing Legal Expenses
POP 087	**POP 090**	**POP 101**	**POP 103**

Water Rights and Dam Safety	Hydroelectric Power	Funding Feasibility Studies and Projects
POP 104	**POP 105**	**POP 108**

Package 087: August 2020 Special Session

- *Purpose:* Provides $215k of the $340k estimated ongoing costs for migrating to Data Center Services with DAS
- *Total:* $215k GF

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Package 090: Additions

- *Purpose*: Provide funding for equitable water access and Indigenous energy resiliency as recommended by the Racial Justice Council.
  - Recommended by the Racial Justice Council
  - 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
  - Assess and facilitate implementation of best practices to advance diversity, equity and inclusion within the Department's programs and processes
- *Total*: $1.5 million GF; 1.0 FTE
- *Integrated Water Resources Strategy Recommended Actions*: 4.A, 9.C

OREGON WATER RESOURCES DEPARTMENT

Package 101: Protecting Public Safety and Water Supplies

- *Purpose:* Protect public safety through the evaluation of dams. Improve agency preparedness for emergencies, resiliency to natural hazards and climate change, and employee health and safety.

- *Total*: $1.9 million GF
  - $900k staffing; 4 positions (3.52 FTE)
  - $1 million contracting

- *Integrated Water Resources Strategy Recommended Action*: 5.A, 5.B, 5.5A, 5.5B, 5.5C, 7.C, 8C, 13.B

Package 103: Legal Expenses

- *Purpose*: Provide funding to address sustained increased costs for DOJ services and to prevent impacts on Department services due to budget shortfalls.

- *Total*: $800k GF

Package 104: Maintaining Water Rights & Dam Safety Services

- *Purpose*: Maintaining Water Right and Dam Safety Services

- *Total*: $565k Fee Revenue Increase
  - Retains 3 positions (2.5 FTE)

- *Integrated Water Resources Strategy Recommended Actions*: 7.C, 10.G, 13.B

Package 105: Maintain Hydroelectric Services

- *Purpose*: Increase and simplify hydroelectric fees to support joint agency services provided by OWRD, ODFW, and ODEQ.

- *Total*: $1.28 million revenue increase

- *Integrated Water Resources Strategy Recommended Action*: 13.B

Package 108: Fund Feasibility Studies & Projects

- *Purpose*: Provide funding for Feasibility Study Grants to investigate the viability of water projects and Water Projects Grants & Loans to implement water projects that provide economic, environmental, and social benefits.

- *Total*: $21.7 million Total Funds
  - $20.9 million Other Funds (lottery bond proceeds)
  - $820k Lottery Funds (debt service)

- *Integrated Water Resources Strategy Recommended Actions*: 9.A, 10.E, 13.C, 13.D, 13.E

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Carry Over Limitation

Reauthorization of Projects Previously Authorized in 2019

- $14 million for Wallowa Lake Dam
- $4 million Newport Big Creek Dams
- $10 million Deschutes Basin Board of Control piping projects to conserve water
- $15 million previously authorized for Water Projects Grants & Loans

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Proposed Legislation

- HB 2142 – Water Rights Transactions and Dam Safety
  - Revenue: $565k and positions in POP 104.
- HB 2143 – Update Hydroelectric Fee Structure
  - Revenue: $1.28 million in POP 105.
- HB 2145 – Well Construction Program Modernization

OREGON WATER RESOURCES DEPARTMENT

Agency Budget Information

Overview

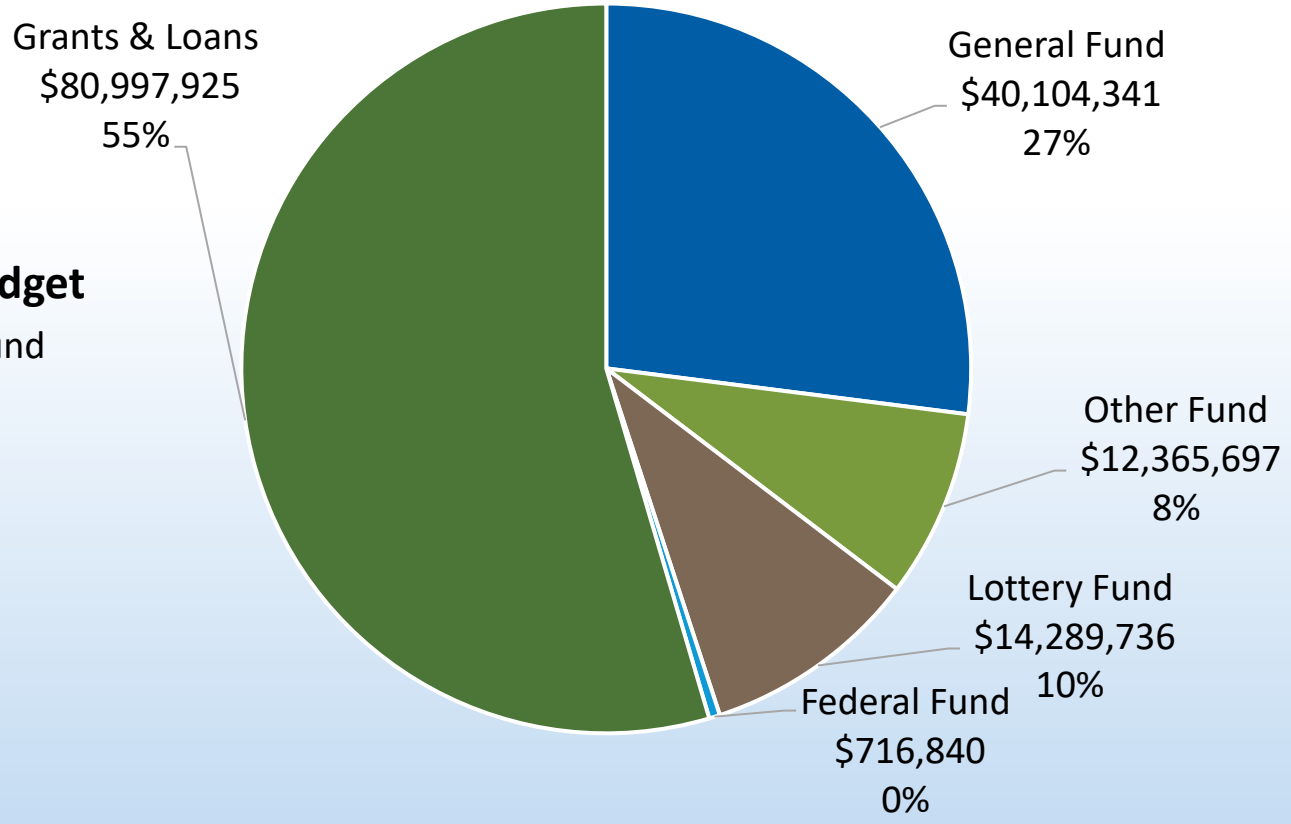
- Budget Information
- Agency Reductions

OREGON WATER RESOURCES DEPARTMENT

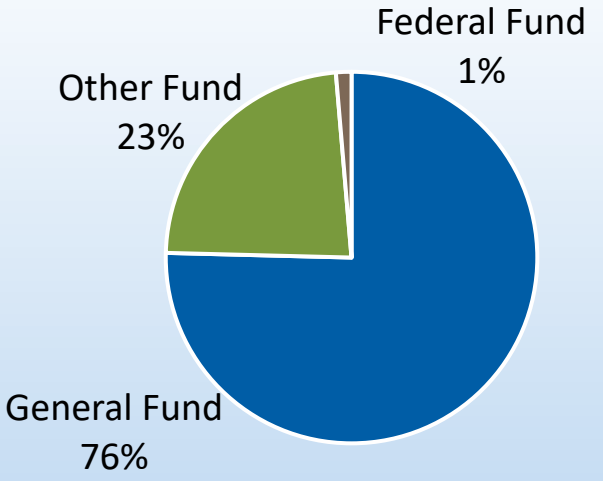
Budget Information

2021-2023 Budget by Fund

Total: $148,474,539
Positions: 170/165.44 FTE



2021-2023 Operating Budget



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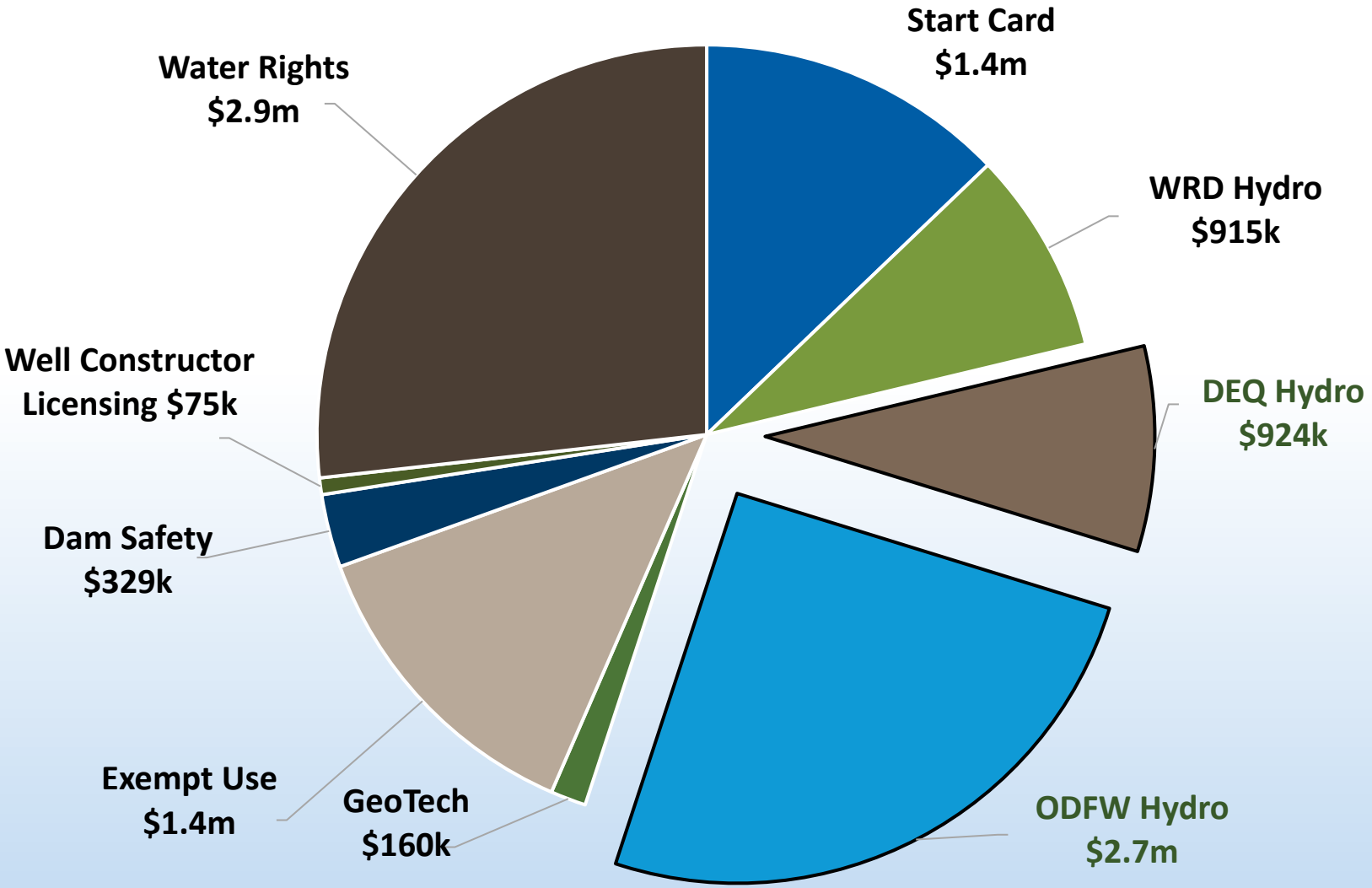
Fee Revenues



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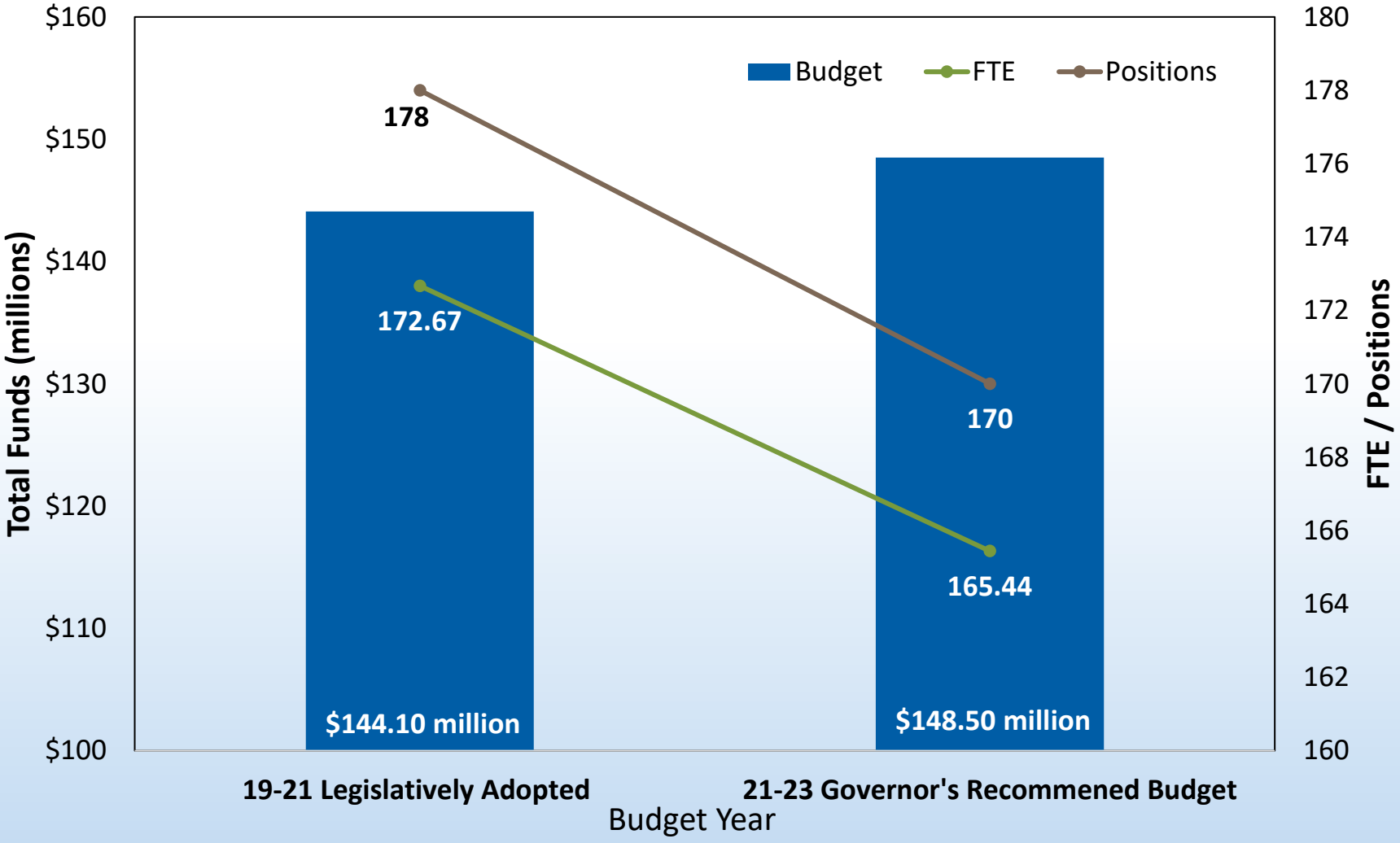
Budget Comparison



Reductions: 070 Water Right Revenue Shortfalls

Staff: $1.69 million / 8.83 FTE Other Funds

- Reduction in services and capacity
  - Longer water right and transfer application processing timelines
  - Increases in backlogs

OREGON WATER RESOURCES DEPARTMENT

Other Reductions

Package 090 - Technical and Field Services Reductions

$2.18 million GF; 3.26 FTE

- Gaging stations: $165k
- Feasibility study grants: $382k
- Groundwater studies: $301k
- Observation wells: $778k
- Staff: water right data technician, hydrogeologist, assistant watermaster, grant coordinator, and field services executive support: $556k

Package 092

$5% vacancy savings: $909k GF / $241k OF

Other Adjustments

- **Other statewide adjustments: $821k GF / $83k OF**
- **Footprint reduction: $275k GF**

OREGON WATER RESOURCES DEPARTMENT

Budget Adjustments in August 2020

Service and Funding Reductions: $3.5 million GF

- Feasibility studies
- Placed Based Planning
- Observation Wells
- Measurement Cost Share
- Installation, maintenance, and repair of stream gage network
- Vacancy Savings Incurred and Projected
- Delay hiring Basin Study Team
- Use Other Fund in lieu of GF

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Reduction Options

10% Budget Reduction Options

Included in GRB	Removes Inflationary Adjustments
	Increases Vacancy Savings Target
	Feasibility studies
	Observation wells, gaging stations, and groundwater studies
	3.26 FTE: field and technical services staff
	Services and supplies reductions
10% not in GRB	Water measurement cost share
	2 FTE: Basin study staff

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Questions?