

O R E G O N



WATER RESOURCES
D E P A R T M E N T

2023 Integrated Water Resources Strategy (IWRS)

Environmental Quality Commission

July 20, 2023

Crystal Grinnell, IWRS Specialist

Agenda

- IWRS Introduction
- Project Timeline
- Outreach & Engagement
- IWRS Content
- Questions & Discussion



IWRS Introduction

- Oregon's House Bill 3369 (2009)
- Oregon Revised Statute 536.220
- Oregon Water Resources Department leads development
- Include state & federal agencies, tribes, stakeholders, public

7th OREGON LEGISLATIVE ASSEMBLY-2009 Regular Session

Enrolled
House Bill 3369

Sponsored by Representatives JENSON, J SMITH; Representatives BOONE, CANNON, CLEM, D EINWALDEN, SCHAUPLER, G SMITH, WITT, Senator MORRISSETTE

**instream and out-of-stream
...quality, quantity & ecosystem needs
...today and in the future**

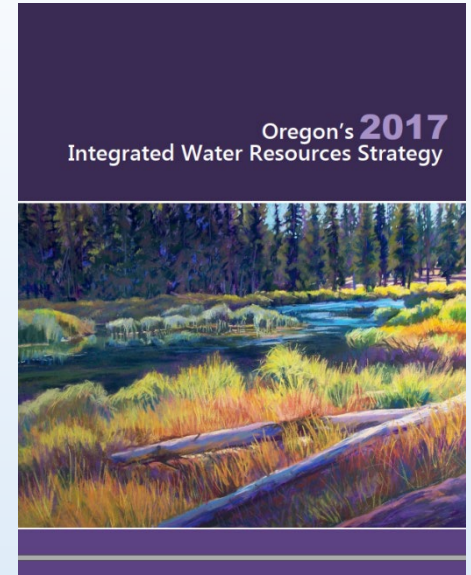
repealing ORS 541.755; appropriating money; and declaring an emergency.
Whereas the western United States is projected to experience substantial population growth this century, including an additional one million people in Oregon before 2030; and
Whereas climate change is expected to alter the timing and form of precipitation in Oregon; and
Whereas surface water is almost completely allocated across Oregon during summer months, ground water levels have declined precipitously in several areas and the hydrological connection between surface water and ground water levels is significant; and
Whereas Oregon needs to develop an integrated statewide water management plan to address existing and likely future in-stream and out-of-stream demands on Oregon's water supplies; and
Whereas having coordinated plans and programs to address in-stream and out-of-stream water needs will make Oregon a more likely recipient of federal investments and give Oregon stronger standing in interstate water disputes; and
Whereas water is a valuable economic commodity; and
Whereas water development projects can be designed to simultaneously benefit commercial development, the natural environment and the fiscal responsibilities of the state; and
Whereas it is the policy of the Water Resources Department to directly address Oregon's water supply needs and to restore and protect stream flows and watersheds; and
Whereas it is desirable that the Water Resources Department and the Water Resources Commission have greater authority to issue loans and grants to public and private bodies, Indian tribes and others for the purpose of developing projects that will ensure the availability of a sufficient and sustainable water supply to meet Oregon's current and future water needs; and
Whereas loan and grant moneys for developing projects that ensure a sufficient and sustainable water supply must be administered in a prudent and fiscally sound manner and used expeditiously; and
Whereas water development projects that deliver mutual benefits for water users, the environment and the fiscal condition of this state should be funded or financed with public dollars; and
Whereas all water within Oregon belongs to the public pursuant to law; now, therefore,

Be It Enacted by the People of the State of Oregon:

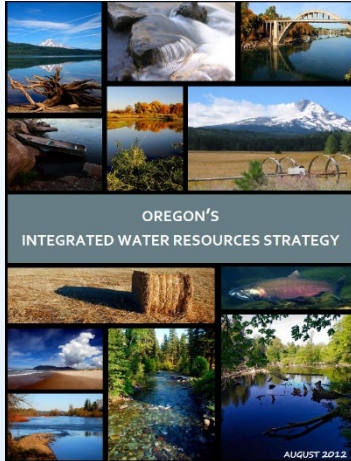
ADDING

How is the IWRS Used?

- High-level descriptions of water issues and proposed solutions
- Information about agency programs
- Agencies and stakeholders reference Recommended Actions to support funding or policy requests
- Create agency work plans

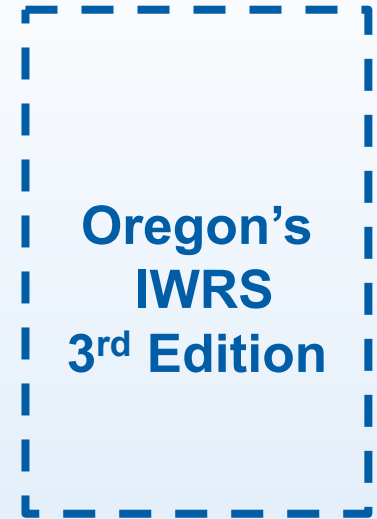


IWRS Introduction



2012

2017



2023

IWRS Update Timeline

2023

JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Public Input

Draft IWRS

Public
Review

Revise
Draft

2024

JAN FEB MAR APR

Public
Review

Final
IWRS

IWRS Project Teams

State Agency Project Team

- Dept of Agriculture
- Dept of Environmental Quality
- Dept of Fish & Wildlife
- Dept of Land Conservation & Development



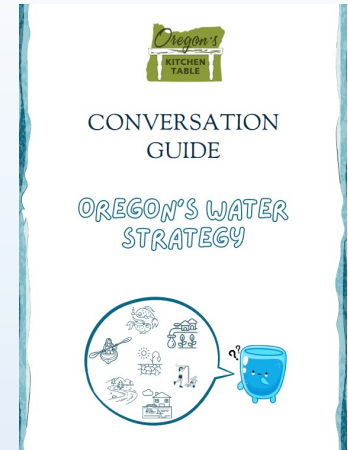
Other

- Water Core Team (15 agencies)
- Federal Liaison Team (9 agencies)

Outreach
&
Engagement

Outreach & Engagement

- 7 Public Regional Community Conversations
 - Seaside, Hermiston, John Day, Roseburg, Corvallis, Madras, Ontario
 - 1 Virtual meeting
- 8 Self-led conversations
- Online & paper public survey (9 languages)
- Culturally-specific conversations
 - Spanish speaking, Pacific Islander, Slavic, and Chinese communities
- Youth-specific events



Oregon's
Kitchen Table
Summary
Report

July 15th

Outreach & Engagement

- Interagency Survey
- Tribes
 - G2G and informal conversations
 - Natural Resource & Cultural Resource Cluster Meetings
 - Changing Currents Tribal Water Summit, June
 - Tribal Water Task Force, TBD
- State Agency Boards / Commissions
 - EQC July 20th
 - LCDC July 26th
 - ODA August 16th
 - ODFW, date TBD



7 Regional Community Conversations

Common Themes

- More communication & education
- Better access to resources (staff, funding)
- Frustration with agency administrative processes
- Appreciation for local presence (Watermasters, SWCD's, Watershed Councils)
- Uncertainty in relation to climate change



Public Survey (~1700 responses)

Themes

- More demands than water available
- Significant concerns about water quality & safety
- Concerns of availability during natural disasters
- Concerns regarding streams/rivers ability to support fish and other wildlife
- Conflict over water rights: change vs status quo
- Access to safe & sufficient water is not equitably distributed

Agency Survey Results

Findings

- Limited familiarity with the contents of the IWRS
- Underutilized for communication guidance
- Missing connection between agency programs & IWRS recommended actions
- Need for short summary or concise overview
- Request for enhanced online/digital access to IWRS



IWRS
Content
Review

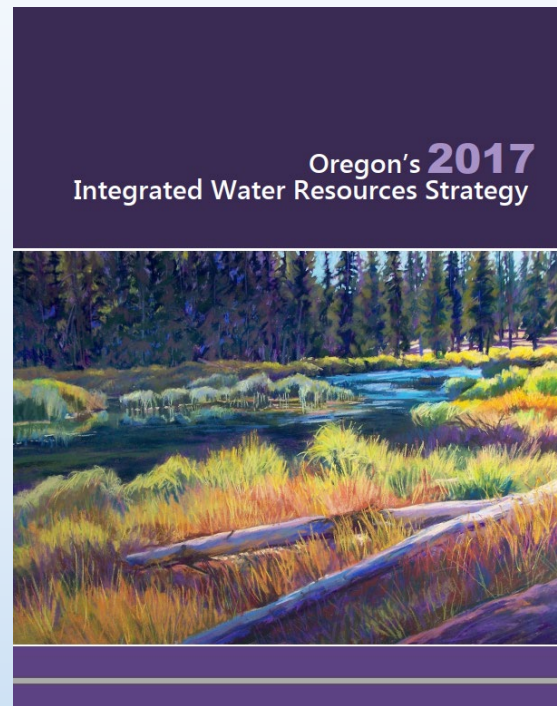
2017 IWRS Goals

Goal 1

- Improve our understanding of Oregon's water resources

Goal 2

- Meet Oregon's water resources needs (instream and out-of-stream)



Oregon's **2017**
Integrated Water Resources Strategy



2017 IWRS Framework

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

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

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)

← 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



2017 IWRS Framework

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

DATA, WATER SUPPLIES

← 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 O
2.A Regularly up
2.B Improve wat
2.C Determine u
2.D Authorize th
2.E Regularly up

DATA, WATER DEMANDS

on's Instream Needs/Demands ; needed (quality & quantity) to n needs ; of groundwater dependent

(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

PRESSURES

Water & Energy
4.A Analyze the effects on w development projects & 4.B Take advantage of existi non-traditional hydroele 4.C Promote strategies that increase integrate energy w 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-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

SOLUTIONS

Place-Based Efforts
9.A Continue to und water resources 9.B Coordinate impl natural resource 9.C Partner with federal 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

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

(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

(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

(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)

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

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

(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

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

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

What is missing?

- Historical context
- Tribal collaboration, new task force
- Climate change emphasis, including environmental justice implications
- Affordability and access
- Accountability, metrics for progress
- Reports & Initiatives since 2017 (e.g., 100-Year Water Vision, Secretary of State Water Advisory Report, OR Water Futures, etc.)



IWRS Update Timeline

2023

JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Public Input

Draft IWRS

Public
Review

Revise
Draft

2024

JAN FEB MAR APR

Public
Review

Final
IWRS

DEQ Water Quality Managers Discussion June 2023

- Integration of Land Use, Water Quantity & Quality
- Improved Inter-Agency Coordination
- Alignment of Resources with Strategies and Actions
- Climate Change will Impact the Hydrograph
- Effective Communication is Key

Discussion

Thank you!

OREGON



WATER RESOURCES
DEPARTMENT

Crystal.A.Grinnell@water.oregon.gov