OREGON



DEPARTMENT

2024 Integrated Water Resources Strategy (IWRS)

Morrow County Water Advisory Committee

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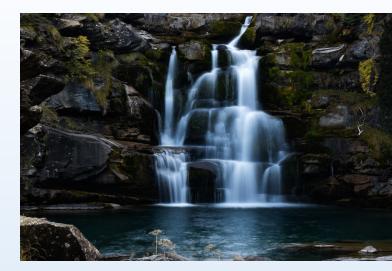
IWRS Specialist

March 11, 2024



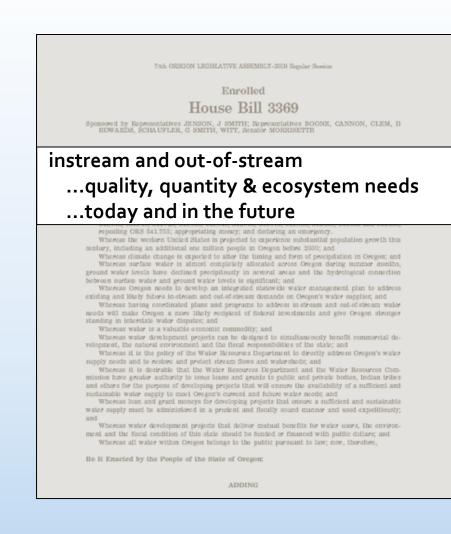


- IWRS Introduction
- Project Timeline
- Proposed Draft
- Questions & Discussion





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





Oregon's

2024

2024 IWRS

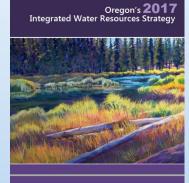


INTEGRATED WATER RESOURCES STRATEGY



2012

2017





How is the IWRS Used?

- Audience: public, stakeholders, agencies, Legislature
- High-level descriptions of water issues and proposed solutions
- Information about agency programs
- Agencies and stakeholders reference Strategy Actions to support funding or policy requests



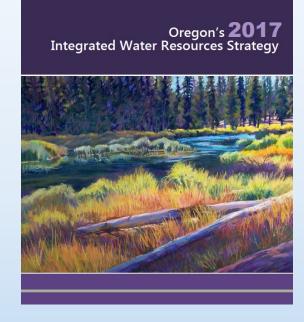


Goal 1

 Improve our understanding of Oregon's water resources

Goal 2

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





Objectives

- 1. Understand our water resources
- 2. Understand instream and out-of-stream needs
- 3. Understand the pressures that affect our needs and supplies
- 4. Meet instream and out-of-stream needs



Project Timeline



2024 IWRS Draft Timeline





Project Teams



IWRS Project Teams

State Agency Project Team

- Water Resources Dept (lead)
- 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)



Draft 2024 IWRS



Draft 2024 IWRS

- Minimal additions / deletions
- Make it easier to find actions
- Locate similar actions closer to one another
- Add one new critical issue: Coordination & Collaboration
- Re-organize by "types" of actions
 - Funding
 - Partnerships & Planning
 - Data & Analysis
 - Stewardship



Oregon's 2024 Integrated Water Resources Strategy Framework and Actions - Draft 1, March 2024

Focusing on: Climate change, population growth, land use change, economic impacts, and energy demand

Goal 1: Improve Understanding of Oregon's Water Resources

Objective 1: Understand Water Resources Objective 2: Understand Instream and Out-of-Stream Needs Objective 3: Understand the Pressures that Affect Our Needs and Supplies

Goal 2: Meet Oregon's Water Resources Needs Objective 4: Meet Oregon's Instream and Out-of-Stream Needs

Chapter 1: Funding

Funding

1A [13A] – Fund Development and Implementation of Oregon's Integrated Water Resources Strategy 1B [13B] - Fund Water Resources Management Activities at State Agencies 1C [13C-13E] – Invest in Planning, Feasibility Studies, and Water Resource Project Implementation

Chapter 2: Partnerships and Planning

Chapter 3: Data and Analysis

Water Resource/Supply Information

7A [1B] - Improve Water Resource Data Collection and Monitoring

- 7B [1A] Conduct Additional Groundwater Basin Studies
- 7C [1C] Enhance Interagency Data Coordination
- 7D [5A] Support Basin-Scale Climate Change Research

8A [4A] - Analyze the Effects on Water from Energy Development Projects and Policies

8C [3B] - Determine Needs of Groundwater-Dependent Ecosystems

Out-of-Stream Water Needs

9A [2B] - Improve Water-Use Measurement and Reporting 9B [2A] - Regularly Update Out-of-Stream Water Demand Forecasts

Chapter 4: Stewardship

Healthy Ecosystems

10A [11A] – Improve Watershed Health, Resiliency, and Capacity for Natural Storage 10B [11D] – Protect and Restore Instream Habitat and Fish Passage/Screening 10C [11B] – Develop Additional Instream Protections 10D [11C] – Prevent and Eradicate Invasive Species

10E [11E] – Develop Additional Groundwater Protections

Clean Water

11A [12A] – Ensure the Safety of Oregon's Drinking Water 11B [12B] - Reduce the Use of and Exposure to Toxics and Other Pollutants 11C [12C] - Implement Water Quality Pollution Controls

Water Use & Management

12A [2C] – Determine Unadjudicated Water Right Claims 12B [10A] – Improve Water-Use Efficiency and Water Conservation 12C [10C] - Encourage Water Reuse Projects 12D [10B] - Improve Access to Storage 12E [10D] - Reach Environmental Outcomes with Non-Regulatory Alternatives 12F [10F] - Provide an Adequate Field Presence 12G [10G] – Strengthen Water Quantity and Water Quality Permitting Programs

Water Infrastructure

13A [7A] – Maintain, Upgrade, Decommission Water and Wastewater Infrastructure 13B [7B] – Encourage Regional (Sub-Basin) Water and Wastewater Systems 13C [7C] – Support Dam and Levee Safety

Water & Energy

14A [4B] – Develop Non-Traditional Hydroelectric Power 14B [4C] – Promote Strategies that Increase/Integrate Energy and Water Savings

6A [5.5A] - Plan and Prepare for Drought & Wildfire Resiliency 6B [5.5B] - Plan and Prepare for Flood Events 6C [5.5C] - Plan and Prepare for a Cascadia Earthquake & Tsunami Event

Note: 2017 IWRS numbering is shown in [brackets].



Education & Outreach 2A [8C] - Promote Community Education and Outreach

2B [8A] – Support Implementation of K-12 Environmental Literacy Plan 2C [8B] - Provide Career Training for the Next Generation of Water Professionals 2D [8D] – Identify Water Research Needs & Partnerships

Coordination & Collaboration [new]

3A [9C] – Partner with Tribes, Federal Agencies, and Neighboring States in Long-Term Water Resources Management 3B [6B] – Improve State Interagency Coordination 3C [new] - Lead Meaningful Community Engagement

Water Planning

4A [9A] - Support Integrated Place-Based Planning and Other Water Planning Efforts 4B [9B] - Coordinate State and Local Natural Resource Plans

Land Use Planning

5A [6A] - Improve Integration of Water Information and Land Use Planning 5B [6C] – Encourage Low Impact Development Practices and Green Infrastructure

Natural Hazard Mitigation Planning & Extreme Events

8B [3A] - Determine Instream Flow Needs (Quality and Quantity)

8D [new] - Develop Instream & Ecosystem Water Demand Forecasts

Instream & Ecosystem Water Needs



Funding



1A - Fund Development and Implementation of Oregon's Integrated Water Resources Strategy

- **1B** Fund Water Resources Management Activities at State Agencies
- *1C Invest in Planning, Feasibility Studies, and Water Resource Project Implementation



SWCD's

& WC's

Partnerships & Planning

Education & Outreach

- *** 2A** Promote Community Education and Outreach
 - 2B Support Implementation of K-12 Environmental Literacy Plan
 - **2C** Provide Career Training for the Next Generation of Water
 - Professionals
 - 2D Identify Water Research Needs & Partnerships

Coordination & Collaboration

3A - Partner with Tribes, Federal Agencies, and Neighboring States in Long-Term Water Resources Management

- **3B** Improve State Interagency Coordination
- ***3C** [new] Lead Meaningful Community Engagement





Partnerships & Planning



Water Planning

- *4A Support Place-Based Integrated Planning & Other Planning efforts
 - 4B Coordinate State and Local Natural Resource Plans

Land Use Planning

- * 5A Improve Integration of Water Information and Land Use Planning
 - **5B** Encourage Low Impact Development Practices and Green Infrastructure

Natural Hazard Mitigation Planning & Extreme Events

- 6A Plan and Prepare for Drought & Wildfire Resiliency
- **6B** Plan and Prepare for Flood Events
- 6C Plan and Prepare for a Cascadia Earthquake & Tsunami Event

Local & State Coordination



Data & Analysis

Water Resource/Supply Information

- 7A Improve Water Resource Data Collection and Monitoring
- 7B Conduct Additional Groundwater Basin Studies
- 7C Enhance Interagency Data Coordination
- 7D Support Basin-Scale Climate Change Research

Instream & Ecosystem Water Needs

- **8A** Analyze the Effects on Water from Energy Development Projects and Policies
- 8B Determine Instream Flow Needs (Quality and Quantity)
- 8C Determine Needs of Groundwater-Dependent Ecosystems
- 8D [new] Develop Instream & Ecosystem Demand Forecasts







Data & Analysis

Out-of-Stream Water Needs

- **9A** Improve Water-Use Measurement and Reporting
- 9B Regularly Update Out-of-Stream Water Demand Forecasts





Stewardship



Healthy Ecosystems

- 10A Improve Watershed Health, Resiliency, and Capacity for Natural Storage
- **10B** Protect and Restore Instream Habitat and Fish Passage/Screening
- **10C** Develop Additional Instream Protections
- **10D** Prevent and Eradicate Invasive Species
- *** 10E** Develop Additional Groundwater Protections

* Clean Water

- **11A** Ensure the Safety of Oregon's Drinking Water
- 11B Reduce the Use of and Exposure to Toxics and Other Pollutants
- **11C** Implement Water Quality Pollution Controls



Stewardship



Water Use & Management

- 12A Determine Unadjudicated Water Right Claims
- * 12B Improve Water-Use Efficiency and Water Conservation
- *** 12C** Encourage Water Reuse Projects
- * 12D Improve Access to Storage
 - **12E** Reach Environmental Outcomes with Non-Regulatory Alternatives
 - 12F Provide an Adequate Field Presence
 - **12G** Strengthen Water Quantity and Water Quality Permitting Programs



Stewardship





Water Infrastructure

- * 13A Maintain, Upgrade, Decommission Water and Wastewater Infrastructure
- *** 13B** Encourage Regional (Sub-Basin) Water and Wastewater Systems
 - 13C Support Dam and Levee Safety



Water and Energy

14A – Use Existing Infrastructure to Develop Non-Traditional Hydroelectric Power

* 14B - Promote Strategies that Increase/Integrate Energy and Water Savings



One-page Action Summaries



Draft IWRS Action Summaries

2017 IWRS Recommended Action and Example Actions Recommended Action 3.A Determine Flows Needed (Quality and Quantity) to Support Instream Needs

Examples of how to implement this action:

- Prioritize and install gages in additional locations to monitor the status of instream flows and water rights
- Identify basins with listed species and install monitoring equipment to help characterize the suite of flows through these basins
- Conduct instream needs studies, such as base flow studies and elevated flow requirements or prescriptions
- Pursue a consistent, model-based framework for characterizing long-term instream demand and integrate projections of future climate for planning purposes
- Develop models/studies to quantify the economic, social, and cultural value of instream uses
- Support state agency instream flow efforts and programs (e.g., ODFW, ODEQ, OPRD)



Draft IWRS Action Summaries

2024 IWRS Proposed Action Summary

- Who
- Why
- Example actions
- Equity/Justice considerations
- Resources

Healthy Ecosystems		Action 10C Prevent and Eradicate Invasive Species
Lead Agencies	Supporting Agencies	Partners
ODA, ODF, ODFW, OSMB	USDA, USFS	Tribes, OSU Extension Service

Background

According to the Oregon Invasive Species Council, an invasive species is a non-native species that can cause economic or environmental harm or cause harm to human health. It can be a plant, animal, or any other microorganism that enters an ecosystem beyond its native range. Invasive species disrupt the natural function of an ecosystem by competing and replacing native species and disrupting the natural habitat.

Oregon experiences threats from invasive species in both aquatic and terrestrial ecosystems. Aquatic invasive species can flourish in waterways, reducing water quality, choking out native plants, and clogging boat, hydropower, and irrigation infrastructure. Native plants species in riparian and wetland areas adjacent to waterways are also under threat, limiting their capacity to provide benefits such as shade, shelter, and food. Invasive species can also impact the health of uplands, where well-managed forests are critical to protecting source water quality. Both agriculture and forestry industries require ongoing, consistent program support to identify and eradicate invasive species.

Example Actions

- Support and continue funding for the Aquatic Invasive Species Prevention Program
- Identify and implement projects to support the Oregon Conservation Strategy's seven statewide actions to prevent new introductions, and decrease the scale and spread of infestations
- · Continue to implement and enforce ballast water management regulations
- Provide technical assistance for invasive species detection and eradication on agricultural and forestlands
- Continue funding for invasive species eradication and native species restoration efforts (also see 10A)

Equity & Justice Considerations and Actions

Consider impacts of invasive species on culturally significant plants, animals and <u>ecosystems</u>

Resources Agency Programs

ODA's Insect Pest Prevention and Management Program, ODF's Conservation Program, ODFW & OSMB's Aquatic Invasive Species (AIS) Prevention Program, ODF's Bark Beetle Mitigation Program

Workgroups Oregon Invasive Species Council

Websites

ODA Noxious Weed Profiles ODA Insect Pest Alerts USDA National Invasive Species Information Center

Documents Oregon Conservation Strategy



2024 IWRS Draft Timeline





Thank you!



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