

OREGON



WATER RESOURCES
DEPARTMENT

Integrated Water Resources Strategy (IWRS) Update & Workshop

Water Resources Commission

Crystal Grinnell, IWRS Specialist

Agenda

- Project Timeline
- Draft 1 Comments
- 2024 IWRS Development
- 2024 Framework
- Break
- Agency Priorities



Timeline

2022

Hire Limited
Duration position



2017-22 Progress
Report

2023

Agency
Survey



Public
Engagement



10+ Agency
Edits

2024

10+ Agency
Edits



March 2024
Draft 1



Agency
Priorities



OREGON
WATER
RESOURCES
DEPARTMENT

Draft 1 Comments

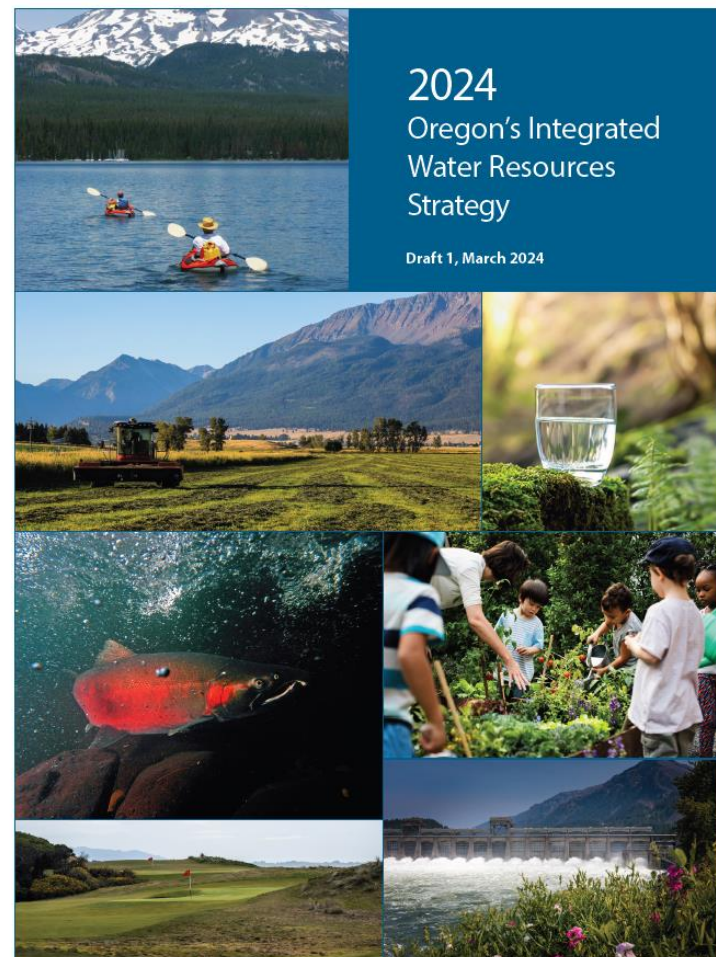
2024 IWRS Draft 1

Draft 1

Public review

March 5 – April 5, 2024

www.oregon.gov/owrd/programs/Planning/IWRS



Draft 1 Comments

- Received 45 sets of comments
- Combination of individuals, governmental entities, and organizations
- Email and survey submittals



Organizations / Governmental Entities

- Applegate Partnership & Watershed Council
- Baker County
- Confederated Tribes of the Umatilla Indian Reservation, Department of Natural Resources
- Lincoln County Water Systems Alliance
- Metropolitan Wastewater Management Commission
- Oregon Association of Conservation Districts
- Oregon Association of Clean Water Agencies
- Oregon Council of Trout Unlimited
- Oregon Department of Environmental Quality, Water Program
- Oregon Water Partnership
- Oregon Wild
- Portland Water Bureau
- U.S. Fish & Wildlife Service
- Water League
- WaterWatch

2024 IWRS Draft 1 Comments

Support For:

- Increased attention on funding
- New actions that advance instream, ecosystem, water quality, climate change, and equity initiatives
- Interagency scope of the document
- Inclusion of climate adaptation strategies amongst many actions
- Comprehensive nature of the document
- Planning



Changes Requested:

- Restore standalone section for climate change
- Address affordability throughout
- Additional attention on place-based planning
- Address “in-ground” water as well as “instream”
- More emphasis on water management (including monitoring, regulation, and enforcement)
- Balance instream needs with out-of-stream interests
- Call for further engagement
- Address climate mitigation



Opposing Viewpoints:

- Document structure: new structure vs. 2017 structure
- Importance of voluntary actions vs. voluntary actions won't result in action
- Importance of planning vs. unnecessary elevation of planning
- Opposition to dam removal and increase in reservoirs/storage vs. calling for review of dams regarding environmental harm

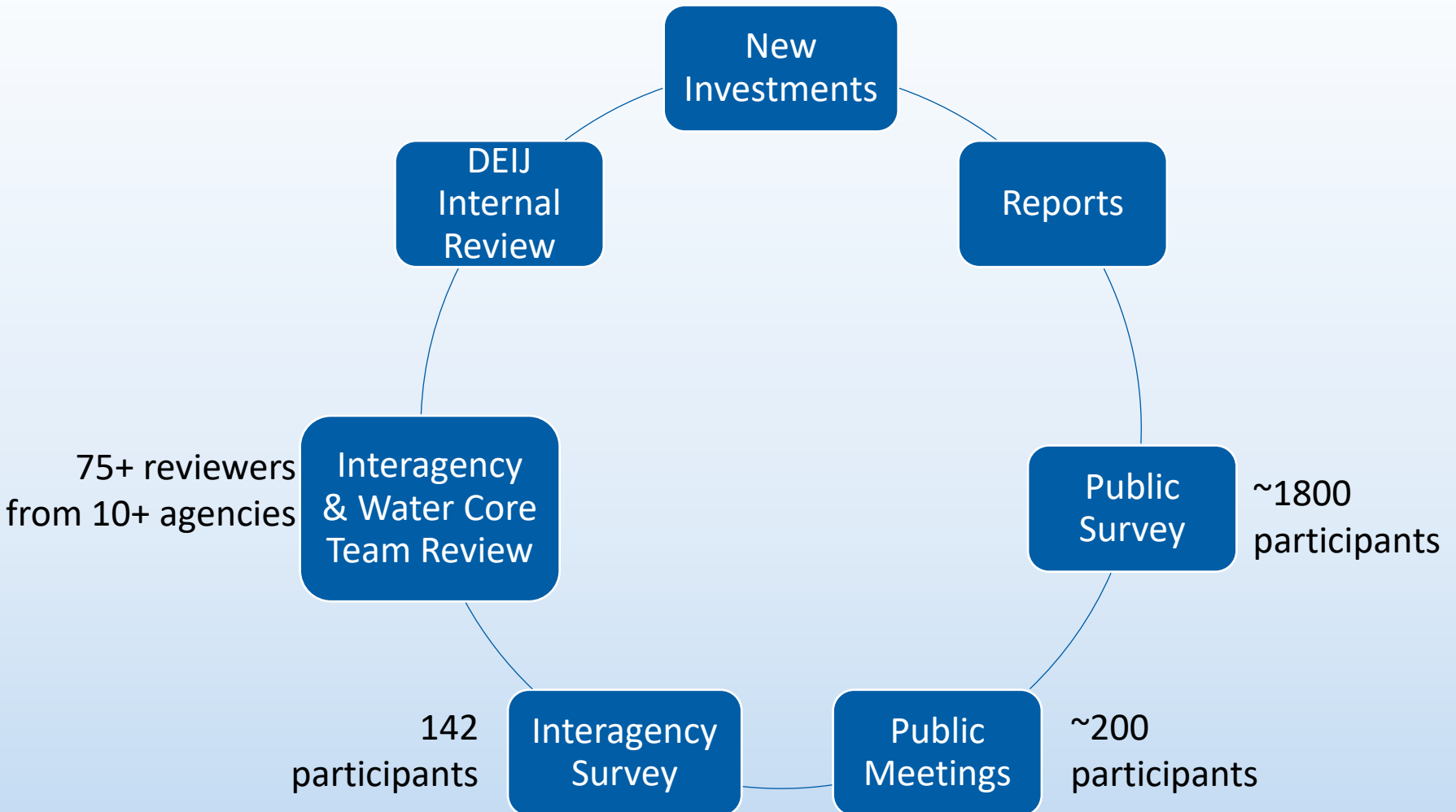
Additional Requests

- Prioritization
- Cost to implement the IWRS
- Progress dates
- Reference Oregon Revised Statutes (ORS) and Oregon Administrative Rule (OAR) on all action summaries
- Incorporate “Adaptive Planning”
- Modify 2017 “Guiding Principles”
- Minor edits, additional descriptions, modify wording, etc.



2024 IWRS Development

Changes for 2024 IWRS



Changes for 2024 IWRS

Interagency Project Team

- Department of Agriculture
- Department of Environmental Quality
- Department of Fish & Wildlife
- Department of Land Conservation and Development*
- Oregon Water Resources Department

*2012 and 2017 IWRS Teams did not include DLCD

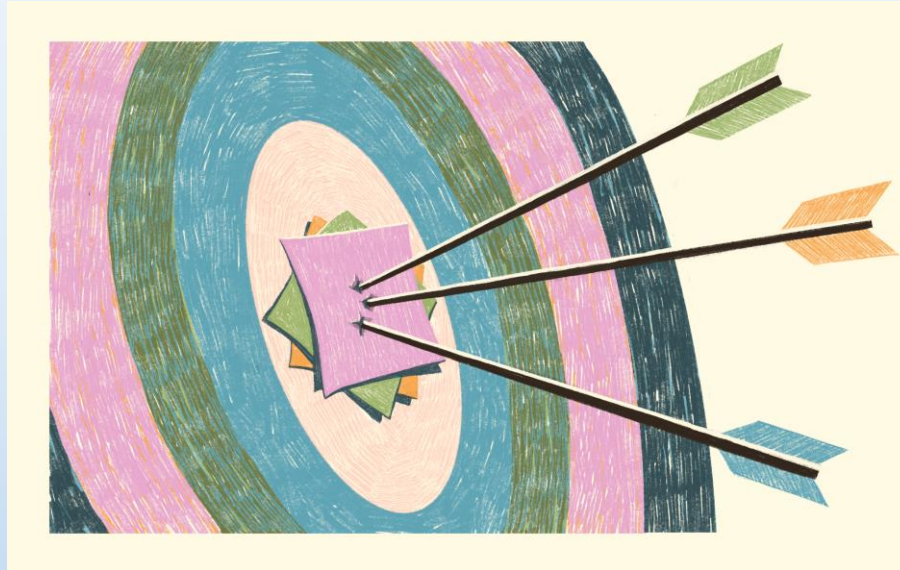
Water Core Team

- BizOR, DoGaMI, DLCD, DSL, ODA, DEQ, ODF, ODFW, ODOE, OHA, OPRD, OSMB, OWEB, OWRD

Changes for 2024 IWRS

Early Focus - Reflect Changes Since 2017

- Apply an Equity lens
- Address climate change throughout
- Incorporate the 100-Year Water Vision



Changes for 2024 IWRS

Equity Lens

- Collaboration with tribes
 - Discuss sooner in the Strategy
- Equity and Environmental Justice
 - Incorporate community engagement
 - New action to reflect Climate Equity Blueprint (2020) and HB 3293 (2021)
 - Public health impacts beyond drinking water
 - Affordability
- New example actions throughout

Changes for 2024 IWRS

Climate Change

- Reflect current experience, public acceptance, and integration across actions
- Many actions already address adaption and resiliency, call it out
- Convey urgency



Changes for 2024 IWRS

100-Year Water Vision

- Not moving forward as a separate planning process
- Participants wanted input included in the next IWRS
- Consistent themes from 2023 IWRS engagement
 - Inadequate funding for water
 - More coordination and collaboration
 - More inclusive engagement
 - More education, awareness about water issues
 - More attention on green/natural infrastructure
 - Urgency to act

Changes for 2024 IWRS

Reports Supporting the Need for Change...

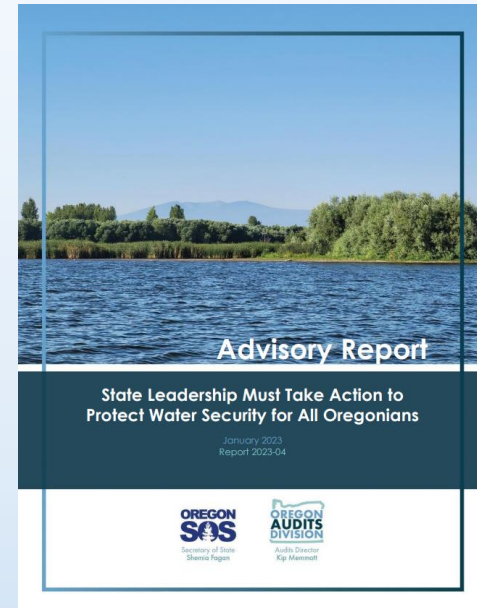
- Secretary of State Water Advisory Report (2023)
- Tribal Water Task Force Report (2023)
- The Business Case for Investing in Water in Oregon (2023)
- State of Water Justice in Oregon (2022)
- Oregon Water Justice Framework (2022)
- 100-Year Water Vision (2021)
- Oregon DEI Action Plan (2021)
- Oregon Water Futures Report (2021)

*Many more reports were referenced for program and topic specific information to update the IWRS narrative

Changes for 2024 IWRS

Secretary of State Water Advisory Report

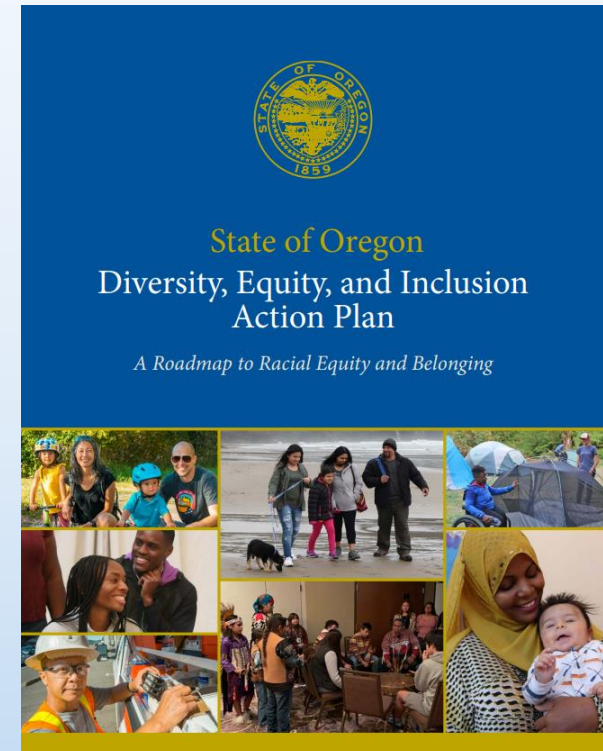
- Lacking an “actionable water plan”
- Enhance public awareness and understanding of urgent water challenges
- Increase public engagement in state and regional water management decisions
- Define and clearly establish roles and responsibilities in state and regional water plan development and implementation
- Address water equity and affordability issues
- Improve water data
- Integrate tribes as full and equal partners



Changes for 2024 IWRS

Oregon DEI Action Plan Strategies Relevant to the IWRS

- Inclusive communications
- Community engagement
- Disaggregated data as lever for change
- Equitable budget, inclusive budget process, and investing in target communities
- Urgency, transparency, and accountability in all operations

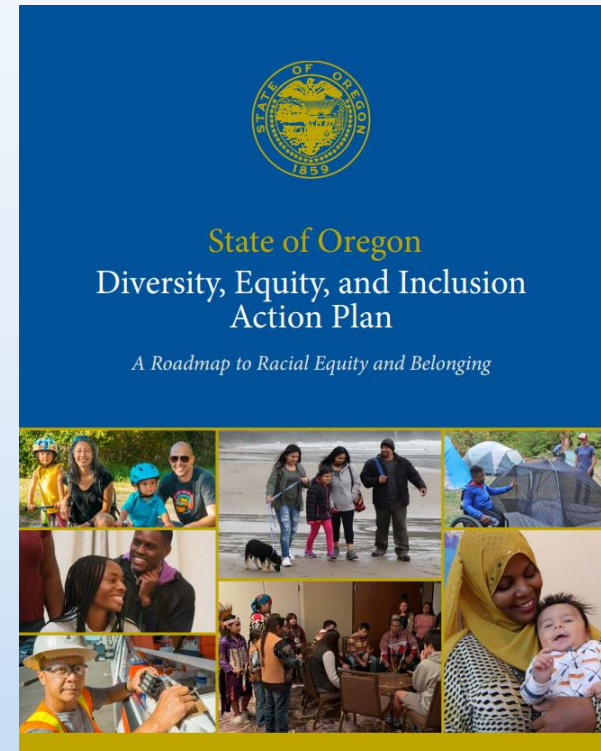


Changes for 2024 IWRS

Oregon DEI Action Plan

Page 19:

“Data is an entry point into a larger picture and set of actions. Trust building often must precede our efforts to collect, communicate, and use data. That’s why it is so important to be in conversation with communities to interpret data, and not use data to interpret and define people, because data tells us about the systems we are working with”



Changes for 2024 IWRS

April 2023 Interagency Survey

- “Making it more interpretable and accessible”
- “Be more specific as it currently has a strange, vague, unapproachable, and broad language. You get lost in the document.”
- “It isn't known about to the public. It isn't provided in a way that is easy to read and understand by people of different learning levels.”
- “I'm sure there's a wealth of information in there, but I don't have time to read it.”
- “Carefully crafted, succinct, and targeted information”

Bringing it Together

Changes for 2024 IWRS

Key Changes to Increase Implementation

Expand Accessibility

- New headings above objectives (not replacing objectives)
- Headings relate to legislative investments, public engagement findings, and agency roles
- Some re-location of critical issues to different objective (e.g., infrastructure)



Changes for 2024 IWRS

Key Changes to Increase Implementation

Elevate Role of Funding

- Funding is needed to accomplish all IWRS objectives
- Locate funding at the beginning
- 2017 IWRS placed funding in objective 4

Elevate Coordination and Engagement to Support DEIJ

- Describe vital tribal – state relationship early in the Strategy
- New critical issue “Coordination & Collaboration”
- Co-locate planning actions
- Describe climate change early in the Strategy

Changes for 2024 IWRS

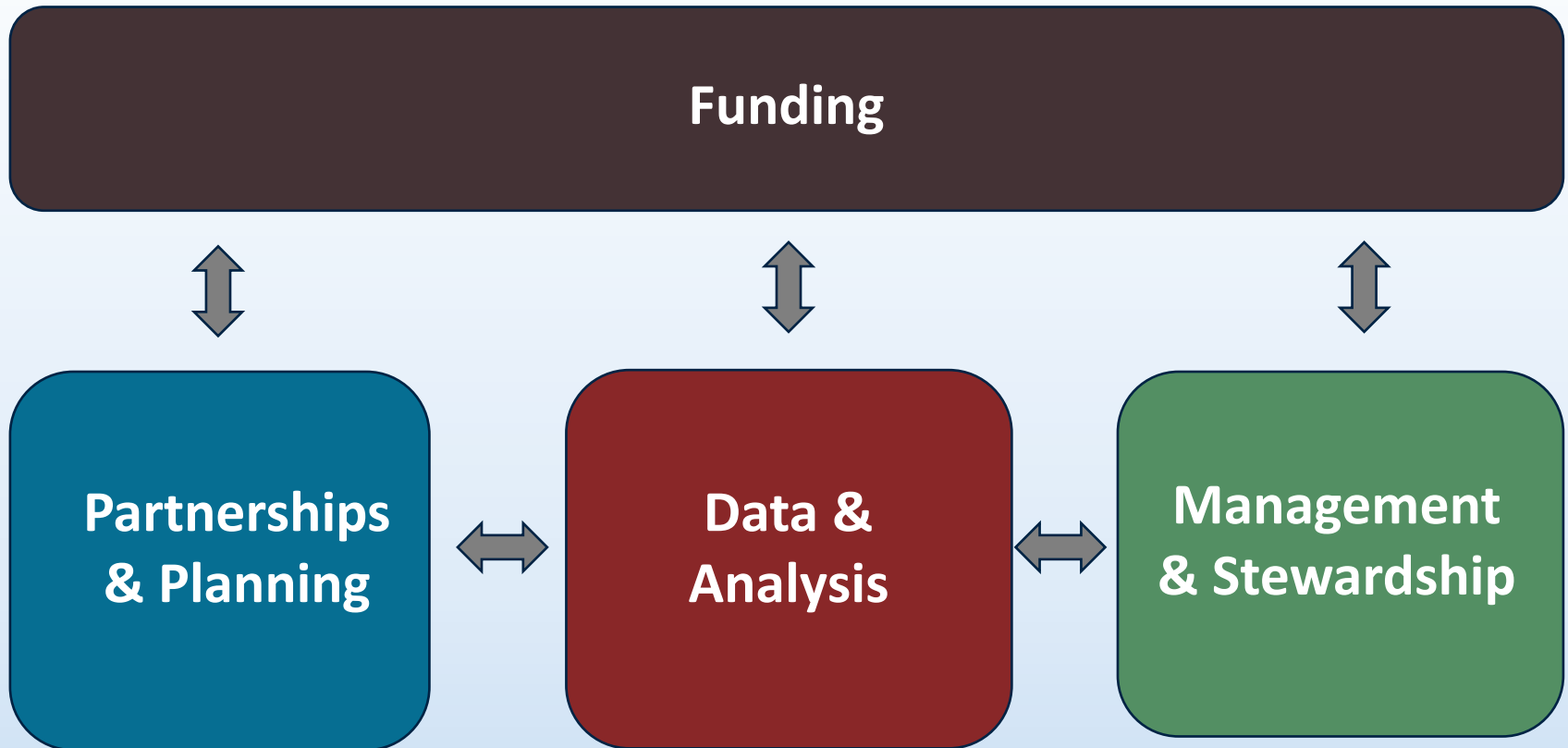
Key Changes to Increase Implementation

Increase Emphasis on Data

- Group data actions in one chapter for legislature, cross agency work
- Extensive awareness we need more data (tribes, public, agencies, legislature)



Changes for 2024 IWRS



Changes for 2024 IWRS

- Call for better coordination (tribes, state agencies, public)
- Co-locate existing planning programs
- Proactive management requires engagement, partnership
- New action for community engagement
- Places climate change at the beginning

Partnerships & Planning

Objective:
***Understand the pressures that affect our
needs and supplies***

Changes for 2024 IWRS

- Data continues to be a critical need since the 2012 IWRS
- Co-locate data and analysis needs in one chapter
- New action to develop instream forecasts

Objective:
***Understand water
resources***

**Data &
Analysis**

Objective:
***Understand instream
and out-of-stream
needs***

Changes for 2024 IWRS

- Projects or “solutions”
- Call for management, importance of stewardship
- Planning and data help inform management and stewardship actions

***Objective:
Meet Oregon’s instream
and out-of-stream needs***

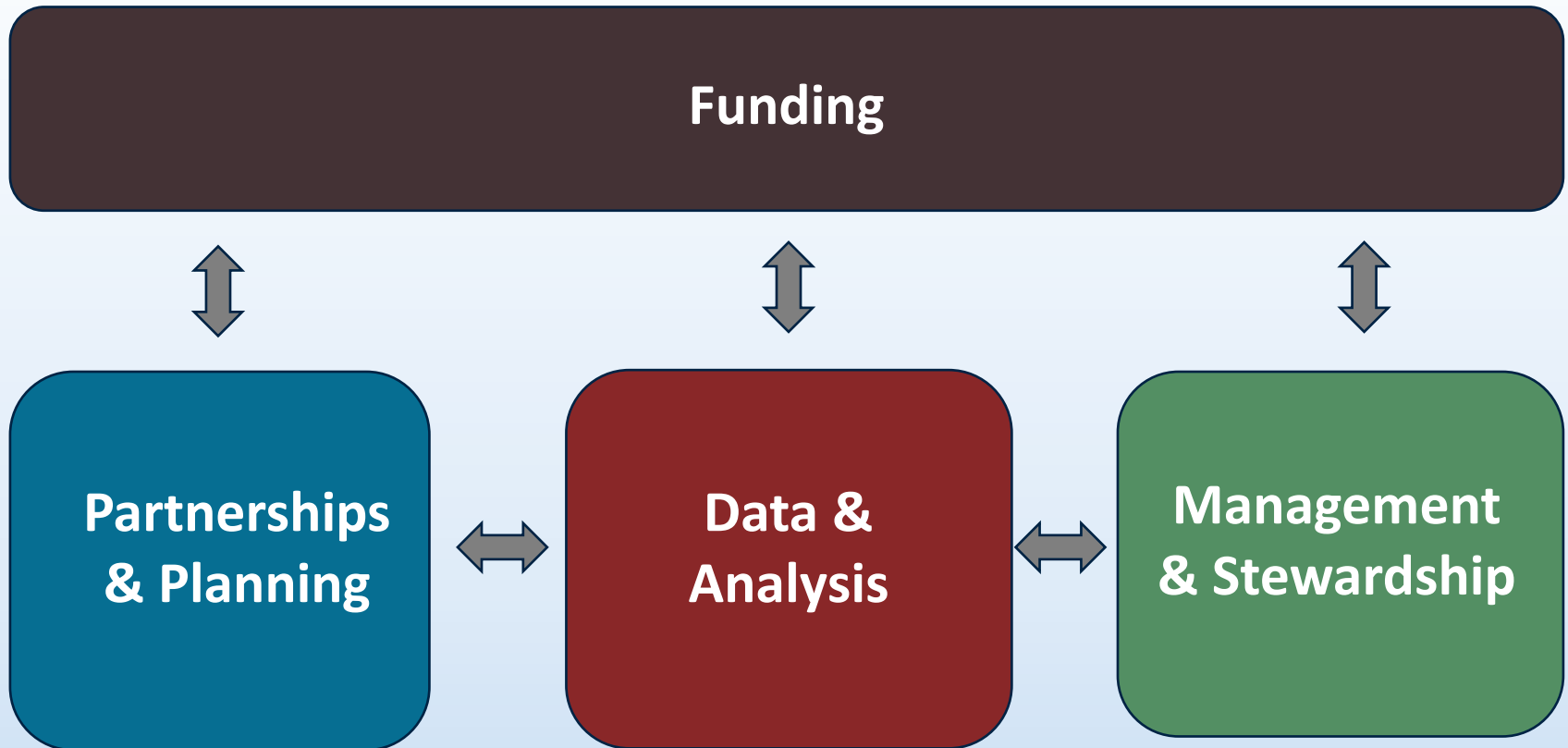
**Management
& Stewardship**

Changes for 2024 IWRS

- Funding is needed to meet IWRS goals, objectives, carry out actions
 - Capacity and resources for state water agencies
 - Pass-through funding (grants) for planning, studies, and projects




Changes for 2024 IWRS



Proposed Revisions to the Framework

Changes for 2024 IWRS

IWRS Terminology

- Goals
 - Objectives
 - Critical Issues
 - Recommended Actions  “Actions” for 2024
 - Example Actions

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

Changes for 2024 IWRS

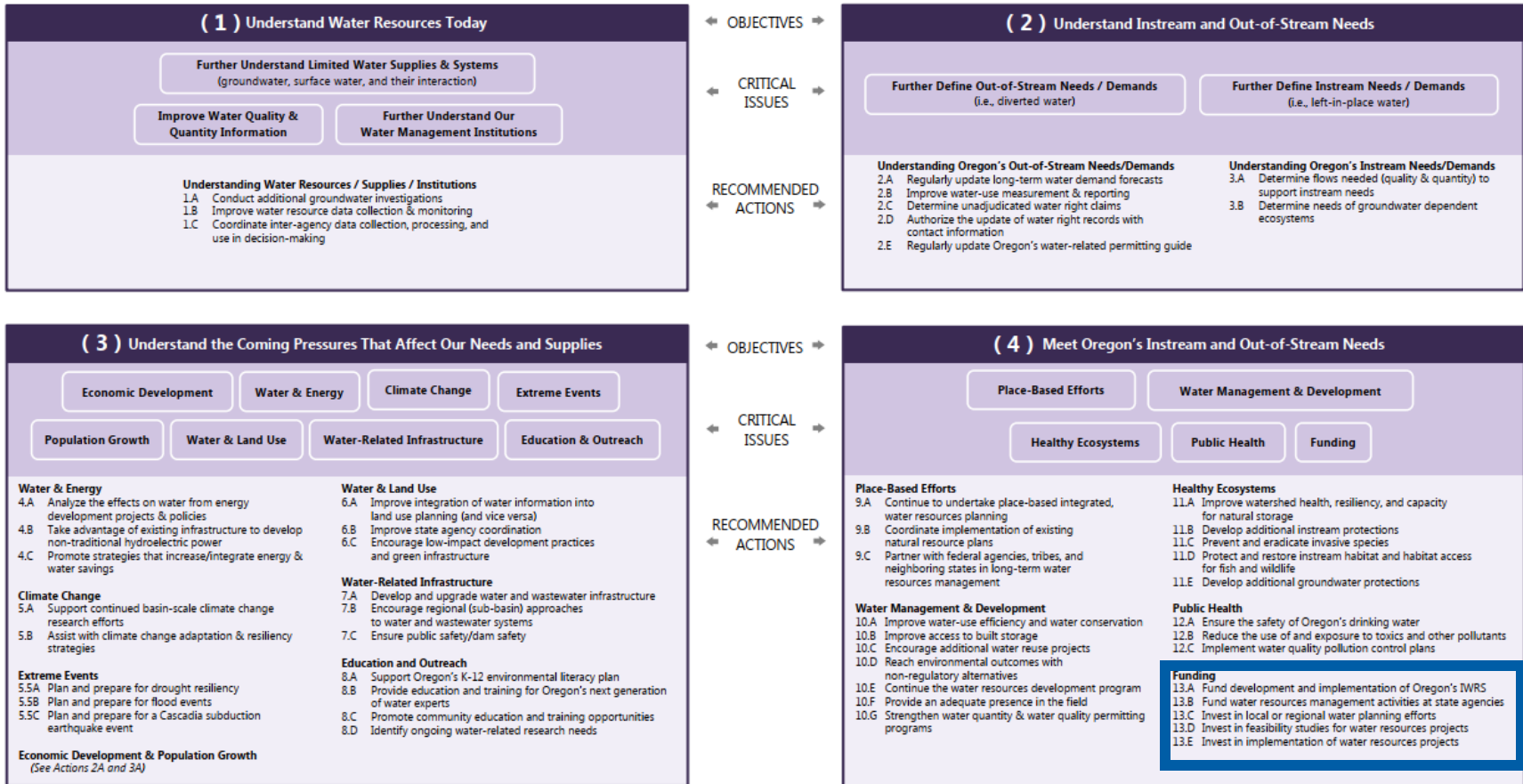
Critique of 2017 Framework

- How do objectives relate to one another? Is the “strategy” to complete them all sequentially?
- Lists “critical issues” twice
 - Most critical issues and action groups are 1:1
- Inconsistent language for critical issues (Objectives 1 & 2)
 - Are critical issues actions or topics?
- Outdated perspective for Objective 3 “Understand the Coming Pressures that Affect Needs & Supplies”
- Challenge finding topics/actions that go together
- Challenge for agencies to find relevant actions
- Funding applies to all objectives

Funding

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



Partnerships & Planning

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

Climate Change
 5.A research efforts
 5.B Assist with climate change adaptation & resiliency

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

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

Data & Analysis

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

OBJECTIVES

- Further Understand Limited Water Supplies & Systems (groundwater, surface water, and their interaction)
- Improve Water Quality & Quantity Information
- Further Understand Our Water Management Institutions

CRITICAL ISSUES

RECOMMENDED ACTIONS

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

OBJECTIVES

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

CRITICAL ISSUES

RECOMMENDED ACTIONS

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 use limitations on water rights
- 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

OBJECTIVES

- Economic Development
- Water & Energy
- Climate Change
- Extreme Events
- Population Growth
- Water & Land Use
- Water-Related Infrastructure
- Education & Outreach

CRITICAL ISSUES

RECOMMENDED ACTIONS

Water & Land Use

- 4.A Analyze the effects on water from energy development projects & policies
- 4.C Promote strategies that increase/integrate energy & water savings
- 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

Climate Change

- 5.A Support continued basin-scale climate change research efforts

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

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)

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

OBJECTIVES

- Place-Based Efforts
- Water Management & Development
- Healthy Ecosystems
- Public Health
- Funding

CRITICAL ISSUES

RECOMMENDED ACTIONS

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

Management & Stewardship

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.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

← OBJECTIVES →

← CRITICAL ISSUES →

RECOMMENDED

← ACTIONS →

(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

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

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

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)

(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



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

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

- 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

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

Instream & Ecosystem Water Needs

- 8A [4A] – Analyze the Effects on Water from Energy Development Projects and Policies
- 8B [3A] – Determine Instream Flow Needs (Quality and Quantity)
- 8C [3B] – Determine Needs of Groundwater-Dependent Ecosystems
- 8D [new] – Develop Instream & Ecosystem Water Demand Forecasts

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

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

Proposed Framework for Draft 2

- Restore 2017 title subheading (IWRS Goals)
- Restore “Management” into Chapter 4
- New objective for Funding
- Refine objective wording
- Refine critical issue titles
- Restore Climate Change critical issue header, without actions
- Add labels for objectives, critical issues, and actions
- Color code chapters to match narrative and action summary sheets
- Add diagram relating strategy actions to climate resilience

Revisions to the Framework

Selection from current ORS 536.220:

(d) The integrated state water resources strategy shall describe the following:

(A) Oregon's in-stream and out-of-stream water needs, including but not limited to ecosystem services, water quality and water supply needs.

(B) Objectives of the strategy.

(C) Actions that are designed to achieve the objectives of the strategy.

(D) Plans related to the challenges presented by climate change.

(E) Provisions to ensure communication and partnership with key stakeholders.

(F) Specific functions and roles to be played by state agencies, including but not limited to ODA, ODF, ODHS, BizOR, DLCD, OWEB, OPRD, DSL and other relevant state agencies.

(G) Public policy options and recommendations.

(H) Relevant strategy factors, including but not limited to population growth and land use change.

(I) Recommendations of the Water Resources Department regarding the continuous monitoring of climate change effects on Oregon's water supply and regarding water user actions that are necessary to address climate change.

Revisions to the Framework

Revisions to ORS 536.220, **effective after 2024 IWRS adoption:**

(6) The integrated state water resources strategy shall describe:

(a) Oregon's in-stream and out-of-stream water needs, including but not limited to ecosystem services, water quality and water supply needs.

(b) Critical water issues at the state level and within water basins across this state.

(c) Objectives of the strategy.

(d) Actions that are designed to achieve the objectives of the strategy.

(e) Plans and actions concerning water-related natural hazards and the challenges presented by climate change.

(f) Provisions to ensure communication and engagement with the public.

(g) Provisions to promote meaningful engagement with environmental justice communities, as defined in ORS 182.535, consistent with the requirements of ORS 182.545.

(h) Provisions to promote partnerships with Indian tribes, public bodies, as defined in ORS 174.109, and key stakeholders to implement recommended actions, as appropriate.

Revisions to the Framework

Revisions to ORS 536.220, **effective after 2024 IWRS adoption:**

- (i) How the integrated state water resources strategy will be implemented at multiple scales in a balanced, equitable and integrated manner.
- (j) How to support implementation of priority actions recommended in other relevant state-developed or state-recognized plans or strategies.
- (k) Specific functions and roles to be played by state agencies, including but not limited to DEQ, ODFW, ODA, ODF, ODHS, BizOR, DLCD, OWEB, OPRD, OHA, DSL and other relevant state agencies, along with provisions to achieve interagency coordination.
- (L) Provisions to achieve coordination with federal agencies and states that neighbor Oregon.
- (m) Public policy options and recommendations.
- (n) Relevant strategy factors, including but not limited to population growth and land use change.
- (o) Recommendations regarding the continuous monitoring of climate change effects on Oregon's water supply and regarding water user actions that are necessary to address climate change.
- (p) Processes by which a biennial work plan will be developed and by which implementation of the work plan will be coordinated.

Revisions to the Framework

Revisions to Critical Issue Titles

2017	2024
<p>Further Understand Limited Water Supplies & Systems, Improve Water Quality & Quantity Information, Further Understand Our Water Management Institutions</p> <p>Heading for Actions: Understanding Water Resources / Supplies / Institutions</p>	<p>Water Resources/Supplies</p>
<p>Further Define Out-of-Stream Needs/Demands</p> <p>Heading for Actions: Understanding Oregon's Out-of-Stream Needs/Demands</p>	<p>Out-of-Stream Water Needs</p>
<p>Further Define Instream Needs/Demands</p> <p>Heading for Actions: Understanding Oregon's Instream Needs/Demands</p>	<p>Instream & Ecosystem Water Needs</p>



Revisions to the Framework

Revisions to Critical Issue Titles

2017	2024
Extreme Events	Natural Hazard Mitigation Planning & Extreme Events
Water & Land Use	Land Use Planning
Water-Related Infrastructure	Water Infrastructure
Place-Based Efforts	Water Planning
Water Management & Development	Water Use & Management
Public Health	Clean Water

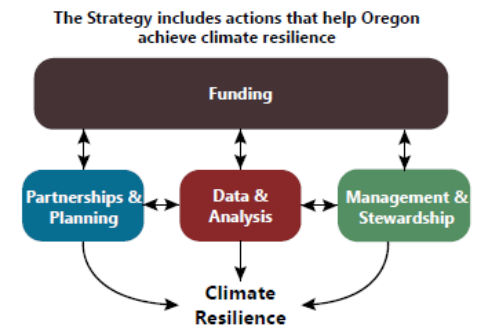


Oregon's 2024 Integrated Water Resources Strategy - Draft 1.5

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

	Funding	Partnerships & Planning					
Objectives	(1) Fund Oregon's Secure Water Future	(2) Understand the Coming Pressures that Affect Our Needs and Supplies					
Critical Issues	Funding	Climate Change	Education & Outreach	Coordination & Collaboration	Water Planning	Land Use Planning	Natural Hazard Mitigation Planning
Actions	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 Note: 2017 IWRS numbering shown in [brackets]	Resiliency actions are included throughout the Strategy 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	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	4A [9A] - Support Integrated Place-Based Planning and Other Water Planning Efforts 4B [9B] - Coordinate Implementation of Natural Resource Plans Economic Development & Population Change See Actions 8D & 9B	5A [6A] - Improve Integration of Water Information and Land Use Planning 5B [6C] - Encourage Low Impact Development Practices and Green Infrastructure	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	

	Data & Analysis		
Objectives	(3) Understand Water Resources Today	(4) Understand Instream & Out-of-Stream Needs	
Critical Issues	Water Resource / Supply Information	Instream & Ecosystem Water Needs	Out of Stream Water Needs
Actions	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 [3A] - Determine Instream Flow Needs (Quality and Quantity) 8B [3B] - Determine Needs of Groundwater-Dependent Ecosystems 8C [4A] - Analyze the Effects on Water from Energy Development Projects and Policies 8D [new] - Develop Instream & Ecosystem Water Demand Forecasts	9A [2B] - Improve Water-Use Measurement and Reporting 9B [2A] - Regularly Update Out-of-Stream Water Demand Forecasts



	Management & Stewardship				
Objectives	(5) Meet Oregon's Instream and Out-of-Stream Needs				
Critical Issues	Healthy Ecosystems	Clean Water	Water Use & Management	Water Infrastructure	Water & Energy
Actions	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	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	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	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	14A [4B] - Develop Non-Traditional Hydroelectric Power 14B [4C] - Promote Strategies that Increase/Integrate Energy and Water Savings

Revisions to the Framework

Commission Input

- Adopt or modify new objective for funding?

“Fund Oregon’s Secure Water Future”

- Other changes needed?





OREGON
WATER
RESOURCES
DEPARTMENT

State Action Priorities



Leadership Meetings



State of Oregon
Department of
Environmental
Quality



Who?

- Governors Office and six agency directors
 - Department of Agriculture
 - Department of Environmental Quality
 - Department of Fish & Wildlife
 - Department of Land Conservation and Development
 - Oregon Watershed Enhancement Board
 - Oregon Water Resources Department

Draft Water Priorities

Why?

- Achieve outcomes and increase and accountability
- GO request to include input from new agency leadership
- Promote collaboration across agencies
- Resource limitations make it impractical to implement all IWRS actions with equal attention
 - Action priorities will be an area of focus for the next 5-7 years (the next IWRS is due in 8 years)



Draft Water Priorities



Prevent Things
from Getting Worse



Optimize: Highest
& Best Use



Help Communities
Prepare & Adapt

1. Prevent Things From Getting Worse

Most important thing the state should do

Refine our understanding of what water is available in new climate conditions with the WARS update to avoid harm to other users or ecosystems

Classify basins where water is unavailable for greater transparency

Address factors contributing to nutrient pollution in surface & groundwater; identify risks and prevent pollution in surface & groundwaters

Ensure usability (quality) of water we do have – don't expand or allow practices that contaminate

Don't allow development in places where it can't be managed sustainably (water supply, wastewater, etc)

Engage with Tribes to better understand their water priorities

Biggest thing your agency can contribute

DEQ: pursue reduction in nutrient and other contaminant loading to aquifers and streams

DLCD: Provide tech assistance and \$ to help cities and counties modify their local codes to: 1) confirm water availability w/ OWRD before approving development, and 2) involve OWRD in public facilities planning.

ODA: reduce nutrient & contaminant loading into surface water and groundwater from ag practices

ODFW: update instream flow targets on large rivers, including storage season, and apply for associated instream water rights

OWEB: Funds restoration and protection projects, monitoring of conditions/trends, tech assistance and engagement

OWRD: Classify streams & aquifers, permit condition enforcement, basin assessments & studies, WARS update, increase awareness of water scarcity

What you need to make that happen

DEQ: modernize and adequately resource GW Quality Act activities; develop MOUs where appropriate involving agencies with applicable authorities/responsibilities

DLCD: grant funds and FTE to provide technical assistance. Policy question: disallow exempt use wells where water is not available?

ODA: agency staff resources for proactive engagement with partners and ag operators; increased capacity for proactive compliance and technical assistance; capacity funding for SWCDs to assist in outreach and restoration efforts.

ODFW: Develop data collection and analysis partnerships with other state agencies and Tribes to quantify instream needs

OWEB: Funds restoration and protection projects, monitoring of conditions/trends, tech assistance and engagement

OWRD: support to modernize IT systems, conduct basin assessments & studies, update basin rules, complete WARS update, and increase comms capacity

Bonus: Language to describe the bucket

Urgent actions

Protect quality and quantity for instream and out-of-stream uses

Actions that can "move the needle," have an impact

2. Optimize: Highest & Best Use

Most important thing the state should do

Incentivize water reuse, conservation, and other opportunities to preserve potable water

Increase pace and scale of innovative multi-benefit solutions

Identify and address policy, funding, & capacity barriers across agency boundaries

Enterprise data modernization and management

Engage and incentivize communities to implement practical solutions and solve local issues

Optimize at the right geographic scale for trade-offs, data, innovative solutions, & tailored rules

Biggest thing your agency can contribute

DEQ: Create predictable and transparent processes that reduce barriers to implementing water reuse efforts; share data modernization approaches with other agencies

DLCD: make involving OWRD one of the conditions for Economic Opportunity grants to local jurisdictions.

ODA: Support ag innovation and water conservation on farm; protect existing resources on ag lands; co-create plans; optimize partnerships to serve farms of all sizes

ODFW: finalize flow restoration prioritization project; refine instream targets; partner on flow restoration efforts in priority basins

OWEB: increase & strategically target water right acquisition and habitat improvement projects in priority areas

OWRD: Modernize transfer process, evaluate water use fee models, clean up unused rights, expand data collection and data systems

What you need to make that happen

DEQ: leverage existing data systems for centralized capture/sharing of water quality data (e.g. AWQMS); implement recs from Reuse Report

DLCD: local jurisdictions include OWRD in Economic Opportunities Analysis (EOA), so it can comment on water availability for different EcDev options

ODA: Elevate ag project funding; increase capacity for innovation, planning, and proactive coordination with OSU, USDA and other entities providing support to ag operators

ODFW: funding for additional instream studies, flow restoration capacity building (NGO's, ODFW, etc.) and for water transaction payments

OWEB: coordination with other agencies on shared priorities – geographic, resource

OWRD: Leg support for water right and IT modernization; resources for fee evaluation

Bonus: Language to describe the bucket

Don't let perfection be the enemy of good

Data to support decision-making

Interagency Collaboration

Be smart with what we have

Better share a scarce resource

Do more with less

3. Help communities prepare and adapt

Most important thing the state should do

Leverage co-benefits across water sectors (“win-win”)	Help people understand what the water future looks like, provide information	Technical assistance to navigate regulatory and permitting issues	Protect & Restore ecosystem functions
Provide funding and technical resources to get big projects done	Help natural resource economies prepare/adapt	Support infrastructure projects where it provides climate adaptation and sustainable growth	Increase incentives, payments, voluntary approaches

Biggest thing your agency can contribute

DEQ: pursue funding & tech support to increase water reuse	DLCD: grants, tech assistance, circuit riders for cities, counties, and tribes	ODA: leverage partnerships (OSU, UDSA, and others) to provide climate resilient resources that keep farms farming
ODFW: assess best options for mitigation; prioritize basins for restoration; provide technical assistance	OWEB: Increase use of incentives approach based on targeted priorities	OWRD: support voluntary actions & tools (e.g., grant programs), share information & data, support local planning and implementation

What you need to make that happen

DEQ: Support interagency coordination needed to address infrastructure upgrades, investments in landscape/riparian resilience, and other planning/funding needs.	DLCD: pass through grant \$, additional regional representatives	ODA: resources to consistently engage partners and develop materials that assist producers adapt to and adopt new climate friendly agricultural practices.
ODFW: fund more real-time water and temperature data; funding for local ODFW flow restoration engagement	OWEB: Identify NR enterprise-wide priorities that we can target available funding to [more money, more investment]	OWRD: Funding for grant and CREP programs, increase community engagement & comms capacity, funds to modernize IT/data systems, seek Tribal TEK

Bonus: Language to describe the bucket



We are all in this together, let's work it out together	Start early on projects!
Address economic impacts of climate change, water scarcity	

Feedback on Draft Priorities

Overall Comments

- Support for agency collaboration and prioritization effort
- General support for the actions
- Concern about “missing” agencies (e.g., OHA, ODF)
- Enforce regulations, ensure accountability, act urgently
- Voluntary actions have not worked, should not be included
- Need to prioritize public health
- Concern about how priorities will be summarized for use to the legislature
- Tension regarding urgency to act and outstanding data needs
- Tie to IWRS statute, structure, format for legislature

Feedback on Draft Priorities

Priority Area #1

Prevent Things from Getting Worse

- Consider including making things better
- Add directives to protect ecosystems
 - Modify rules re: instream flows for species recovery
- Nutrient reduction is specifically called out – does that mean other water quality parameters are not priorities? (e.g., DEQ 303(d) priorities, temperature, forestry impacts to water supplies)
- Add improvements to reuse / recycled water program multi-benefit green infrastructure solutions to reduce nutrient and temperature inputs to streams

Feedback on Draft Priorities

Priority Area #2

Optimize: Highest & Best Use

- Priority title is polarizing
- Alternative language to consider
 - “instream and out-of-stream uses”
 - “Expand and Enhance our Tools for Management of our Water Resources”
- Include basin planning here (as well as in #1)
- Support for revisiting beneficial use and active prioritization
- Enforce the law, higher fines (already in #1)
- Flows to support Tribal beneficial use, important environmental justice

Feedback on Draft Priorities

Priority Area #3

Help Communities Prepare and Adapt

- Highlight funding as overarching issue for all the priorities
- Soil and Water Conservation Districts important for technical assistance
- Add action to review/update regulatory processes to accomplish stated objectives
- Replace “communities” with “Oregon” to be more inclusive
- Replace “local planning” with “place-based planning”
- Add natural/green infrastructure under water quality trading or other tool programs
- Add better working relationships with Tribes
- Ensure water efficiencies go back into the environment

Priorities in Draft 2

Commission Input

- Feedback on priorities?
 - What is missing?
 - Are there bold outcomes we could/should identify?



Next Steps

Next Steps

2025

January
Draft 2
Public
Review

March
WRC
Workshop

May
Final
Draft

June
WRC
Adoption?

OREGON



WATER RESOURCES
DEPARTMENT