Oregon's 100-Year Water Vision

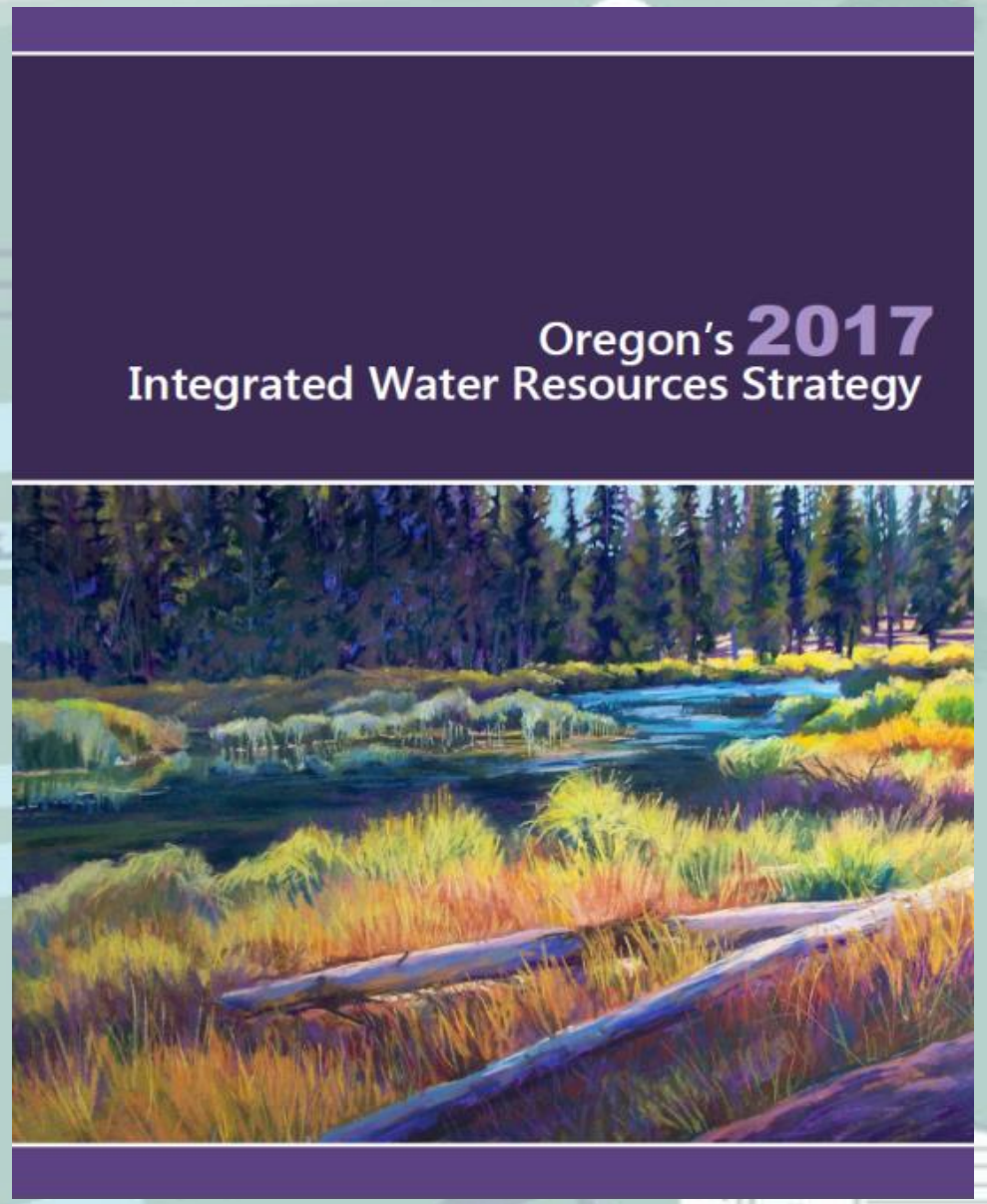
Meta Loftsgaarden, Executive Director, Oregon Watershed Enhancement Board

Tom Byler, Director, Oregon Water Resources Department

Integrated Water Resources Strategy

"Oregon's 2017 Integrated Water Resources Strategy continues to chart a long-term course to meet the state's instream and out-of-stream water needs. All Oregonians need water to thrive—it supports our economies, our renowned wildlife and nature, bountiful agriculture products, and healthy and livable communities"

Governor Kate Brown (IWRS Foreword, 2017)



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

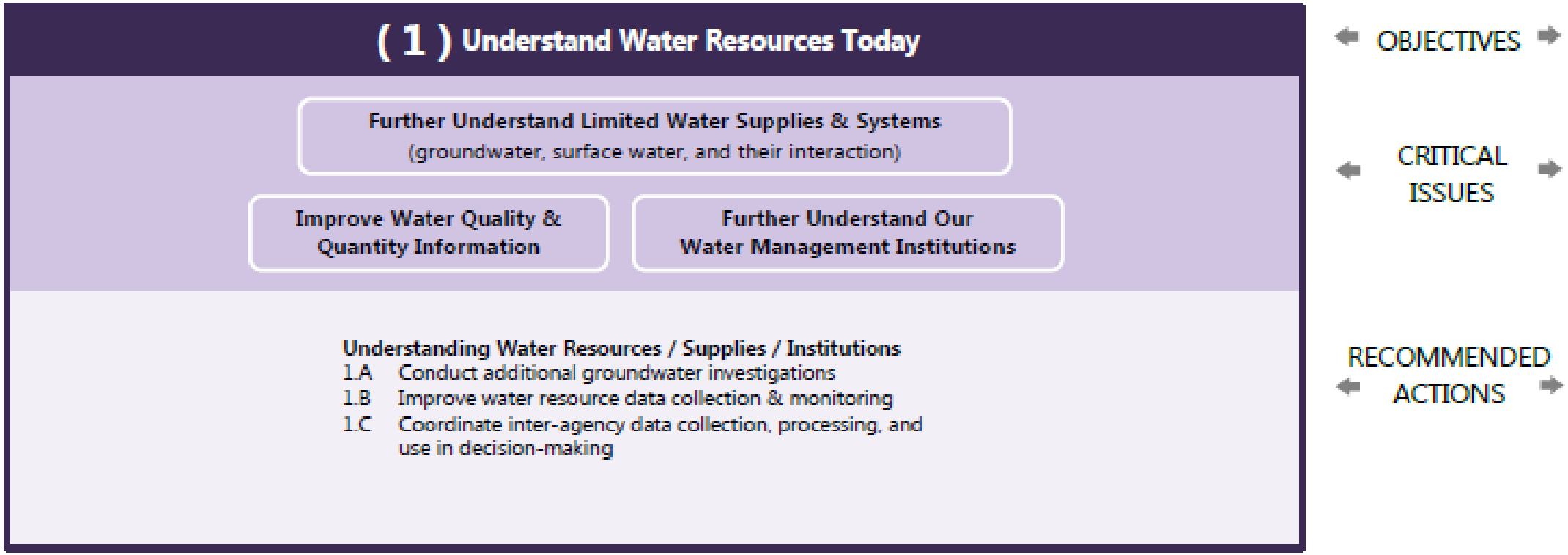
Water Management & Development
- 10.A Improve water-use efficiency and water conservation
- 10.B Improve access to built storage
- 10.C Encourage additional water reuse projects
- 10.D Reach environmental outcomes with non-regulatory alternatives
- 10.E Continue the water resources development program
- 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

Understand Water Resources Today



Understand Instream and Out-of-Stream Needs

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

CRITICAL ISSUES

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

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Healthy Ecosystems

Public Health

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100-Year Water Vision

- Preparing a Secure, Safe and Resilient Water Future for All Oregonians
- Develop broad coalition to assess current status, evaluate need, develop funding and investment strategies for built and natural infrastructure
- Build on the Integrated Water Resources Strategy and other existing plans

Example IWRS Recommended actions (2017)

- Plan and prepare for drought resiliency, flood events, Cascadia
- Ensure public safety/dam safety
- Provide an adequate presence in the field
- Strengthen water quantity/quality permitting programs
- Develop additional groundwater protections
- Invest in local/regional water planning
- Invest in implementation of water resources projects

100-Year Vision Goals

Health: Secure, safe, accessible, and healthy water for current and future Oregonians.

Economy: Adequate and clean ground and surface water to support economic vitality for all Oregonians.

Environment: Adequate cool, clean water for native fish and wildlife to thrive, and healthy watersheds that can store and filter water naturally.

Safety: Resilient water supply and flood protection systems that can face natural hazards like earthquakes, floods and drought.

Draft Water Vision Problem Statements

Oregon's water infrastructure has served us well, but is showing its age.

We have underinvested in the new natural and built systems to meet the needs of a vibrant 21st century Oregon.

Draft Problem Statements

What's at Risk?	What's the Result?
Built and natural water supply infrastructure & conservation tools to access adequate water	Lack of reliable access to water in emergencies and for healthy people, communities, food production, economy
Built and natural waste water and water treatment infrastructure for cool, clean water	Increased health risks for people, fish and wildlife
Built and natural stormwater infrastructure, levees and dams	Reduced community safety, increased property damage, and economic hardship
What's Lacking?	**What's the Impact?**
Data about water and infrastructure	Reduced ability for strategic decision-making, cross-agency coordination, and ways to test new ideas
Capacity across all Oregon communities for planning, strategic investment and implementation	Missed opportunities to take advantage of large-scale funding and partnerships
Coordinated built and natural water infrastructure investments	Reduced ability for Oregonians – including disproportionately impacted and rural communities – to access adequate clean water and return it for downstream uses

Phase I: Listen, learn and gather information from across Oregon

Objectives:

- ✓Refine the draft vision document, problem statement, and goals as appropriate from feedback received.
- ✓Increase awareness by water leaders of the context around the 100-Year Water Vision and its goals, including examples.

Phase I: Listen, learn and gather information from across Oregon

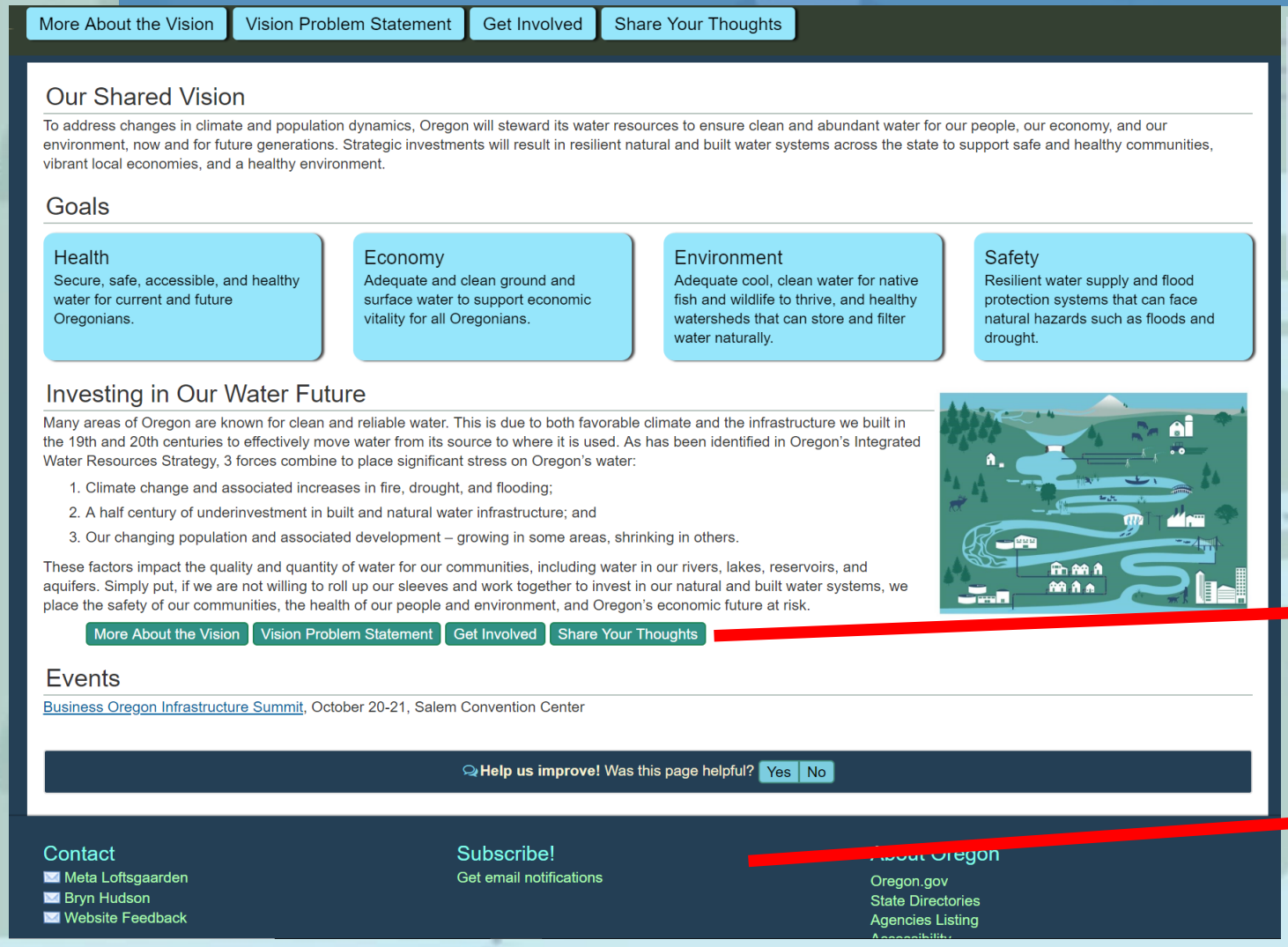
Objectives:

- ✓Building on the Integrated Water Resources Strategy (IWRS), increase understanding of available data and gaps in data related to current surface and groundwater condition, as well as built and natural water infrastructure conditions and needs.
- ✓Building on the IWRS, increase identification of priority data needs for effective built and natural water infrastructure decision-making.
- ✓Increase knowledge of current state and federal funding available for water system investments and funding gaps.

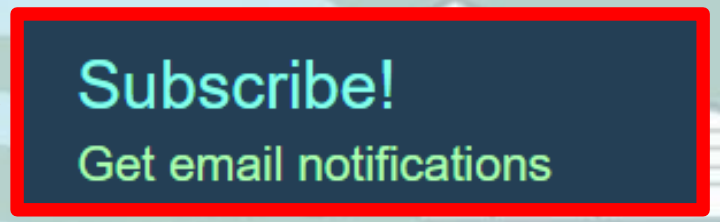
Phase I: Fall Actions

Interviews and Online Feedback
Water Academies
Technical Workshops
Presentations at organizational meetings, with boards and commissions, tribes and other partners

Website, Feedback, and Listserve



- Visit www.OregonWaterVision.org



Points of Contact

- Water Directors – Jason Miner (GNRO), Tom Byler (WRD), Meta Loftsgaarden (OWEB – Governor's office lead), Richard Whitman (DEQ)
- Water Core Team – Bruce McIntosh (ODFW) & Renee Davis (OWEB) – co-chairs; Doug Woodcock (WRD lead); other agencies
- Vision Implementation Team – Meta Loftsgaarden & Renee Davis (OWEB), Racquel Rancier (WRD), Bobby Cochran & Peter Harkema (NPCC)

Thank You!