



AWRA
 Presents
 2015
 Integrated Water Resources Management
 Award to the
 Oregon Water Resources Department
 Integrated Water Resources Strategy
 A recipient of the American Water Resources Association
 Community, Conservation, Connection Award

AMERICAN WATER
 RESOURCES ASSOCIATION
 AWRA
 Community, Conservation, Connection

FRIAS
 ANNUAL
 CONFERENCE CH



Columbia River, Columbia County



Eagle Creek Overlook, Multnomah County



Klamath River, Klamath County

Updating Oregon's Integrated Water Resources Strategy



November 20, 2015
Water Resources Commission Meeting

Alyssa Mucken
IWRS Program Coordinator



Outline

- Introduction
- Overview of the Strategy
- 2017 Update – key themes
- Commission Discussion



Owyhee River at Leslie Gulch, Malheur County

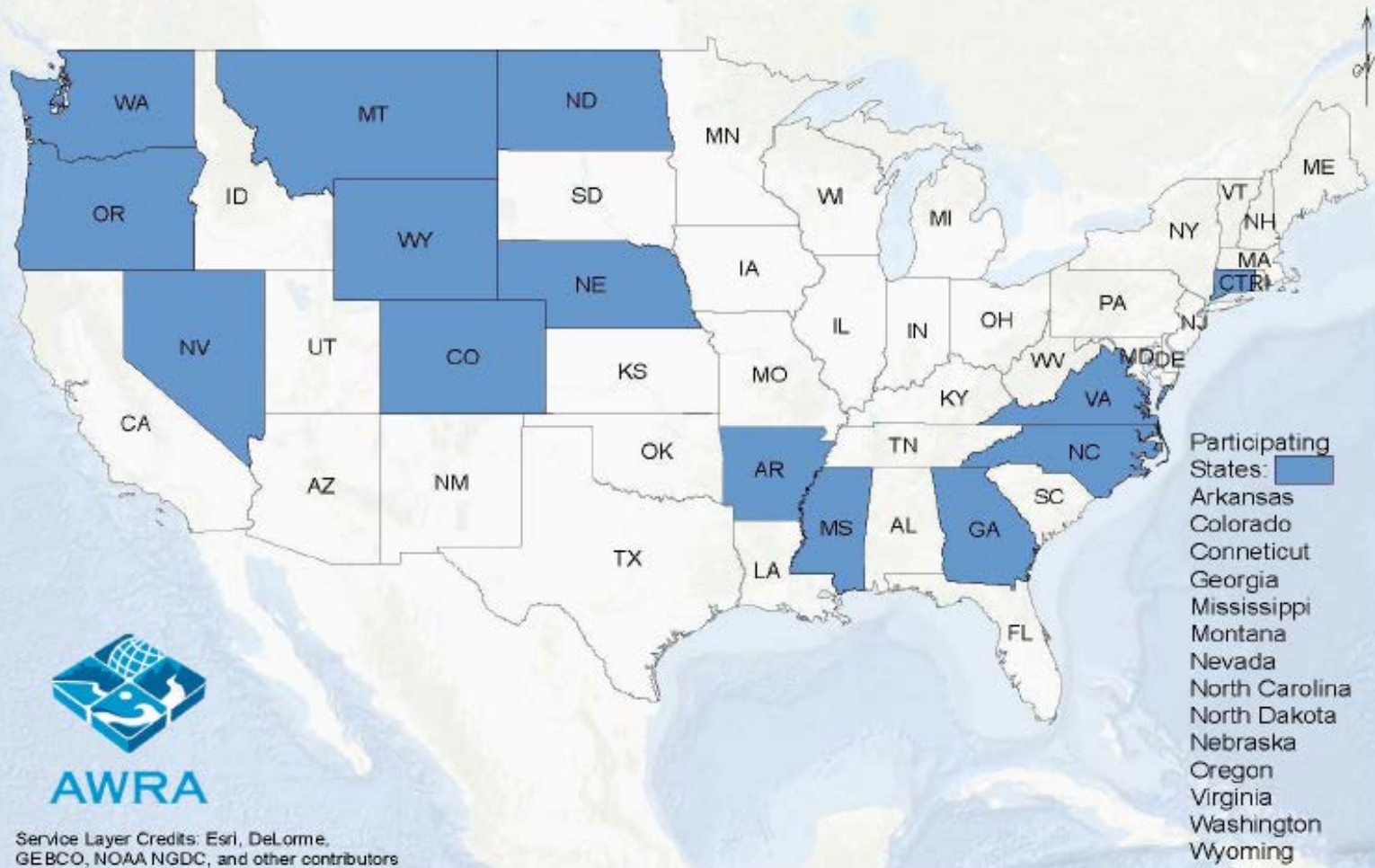


Benham Falls, Deschutes River, Deschutes County



Detroit Lake, Marion County

Participants in AWRA's 2015 State Water Leaders Workshop





Introduction: HB 3369

Oregon's House Bill 3369 (2009)

- Directed WRD to lead efforts to “understand and meet” Oregon’s water needs” →
- To partner with water quality, fish & wildlife, agriculture, other agencies, tribes, stakeholders, & public
- To account for coming pressures

7th OREGON LEGISLATIVE ASSEMBLY—2009 Regular Session

Enrolled
House Bill 3369

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

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

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



2 Goals and 4 Objectives

GOALS:

- Improve our understanding of Oregon's water resources
- Meet Oregon's water resources needs

OBJECTIVES:

- Understand water resources today
- Understand instream and out-of-stream needs
- Understand the coming pressures that affect our needs & supplies
- Meet Oregon's instream and out-of-stream needs



Critical Issues

- Limited water supplies & systems
- Water quality & quantity information
- Water management institutions
- Further define out-of-stream needs/demands
- Further define instream needs/demands
- Economic development
- Population growth
- Climate change
- Water & energy nexus
- Infrastructure
- Water & land use
- Education & outreach
- Place-based efforts
- Healthy ecosystems
- Water management & development
- Public Health
- Funding

Oregon's Integrated Water Resources Strategy

Framework

Goal 1: Improve Our Understanding of Oregon's Water Resources

Understand Water Resources Today

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

Improve Water Quality & Water Quantity Information

Further Understand Our Water Management Institutions

Understanding Water Resources / Supplies / Institutions

- 1a. Conduct additional groundwater investigations
- 1b. Improve water resource data collection and monitoring
- 1c. Coordinate inter-agency data collection, processing, and use in decision-making

← OBJECTIVES →

← CRITICAL ISSUES →

← RECOMMENDED ACTIONS →

Goal 1 (continued)

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

- 2a. Update long-term water demand forecasts ☐
- 2b. Improve water-use measurement & reporting
- 2c. Determine pre-1909 water right claims
- 2d. Update water right records with contact information
- 2e. Update Oregon's water-related permitting guide

Understanding Oregon's Instream Needs/Demands

- 3a. Determine flows needed (quality & quantity) to support instream needs ☐
- 3b. Determine needs of groundwater dependent ecosystems ☐

Goal 1 (continued)

Understand the Coming Pressures That Affect Our Needs and Supplies

Economic Development

Water & Energy Nexus

Water & Land Use Nexus

Population Growth

Climate Change

Infrastructure

Education & Outreach

← OBJECTIVES →

← CRITICAL ISSUES →

← RECOMMENDED ACTIONS →

The Water-Energy Nexus

- 4a. Analyze the effects on water from energy development projects & policies ☐
- 4b. Take advantage of existing infrastructure to develop hydroelectric power
- 4c. Promote strategies that increase/integrate energy & water savings ☐

Climate Change

- 5a. Support continued basin-scale climate change research efforts ☐
- 5b. Assist with climate change adaptation and resiliency strategies ☐

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

The Water and Land Use Nexus

- 6a. Improve integration of water information into land use planning (& vice versa)
- 6b. Update state agency coordination plans
- 6c. Encourage low-impact development practices ☐

Infrastructure

- 7a. Develop and upgrade water & wastewater infrastructure
- 7b. Encourage regional (sub-basin) approaches to water and wastewater systems

Education and Outreach

- 8a. Support Oregon's K-12 environmental literacy plan
- 8b. Provide education and training for Oregon's next generation of water experts ☐
- 8c. Promote community education and training opportunities ☐
- 8d. Identify ongoing water-related research needs ☐

Goal 2: Meet Oregon's Water Resource Needs

Meet Oregon's Instream and Out-of-Stream Needs

Place-Based Efforts

Water Management & Development

Healthy Ecosystems

Public Health

Funding

Place-Based Efforts

- 9a. Undertake place-based integrated, water resources planning
- 9b. Coordinate implementation of existing natural resource plans
- 9c. Partner with federal agencies, tribes, and neighboring states in long-term water resources management

Water Management & Development

- 10a. Improve water-use efficiency and water conservation ☐
- 10b. Improve access to built storage ☐
- 10c. Encourage additional water reuse projects ☐
- 10d. Reach environmental outcomes with non-regulatory alternatives ☐
- 10e. Authorize and fund a water supply development program

Healthy Ecosystems

- 11a. Improve watershed healthy, resiliency, and capacity for natural storage
- 11b. Develop additional instream protections
- 11c. Prevent and eradicate invasive species
- 11d. Protect and restore instream habitat and habitat access for fish & wildlife

Public Health

- 12a. Ensure the safety of Oregon's drinking water
- 12b. Reduce the use of and exposure to toxics and other pollutants
- 12c. Implement water quality pollution control plans

Funding

- 13a. Fund development & implementation of Oregon's IWRS
- 13b. Fund water resources management at the state level
- 13c. Fund communities needing feasibility studies for water conservation, storage, and reuse projects



The 2012 IWRS Process

Phase I SETTING THE STAGE

- Issue papers
- Formation of key principles
- 3-year public workplan
- Public involvement
- Project team
- Three advisory groups:
 - Agency Advisory Group
 - Federal Liaison Group
 - Policy Advisory Group



Columbia River, Umatilla County



Alsea Falls in the Coast Range, Benton County



Ochoco Reservoir, Crook County



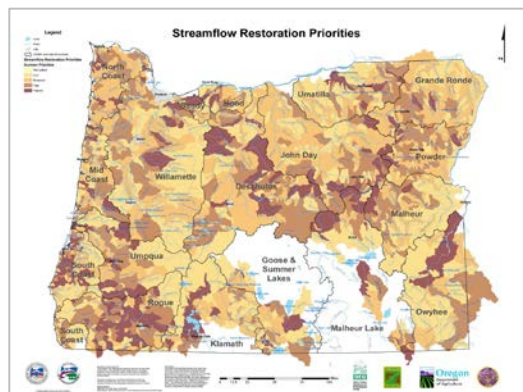
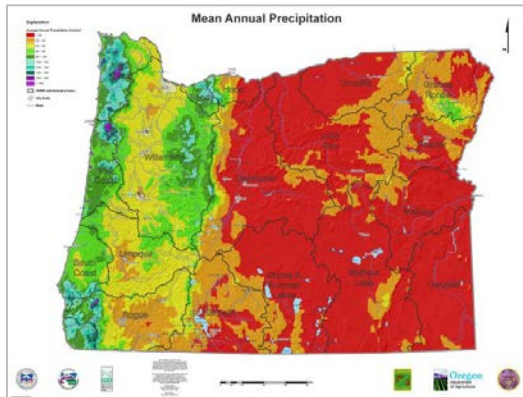
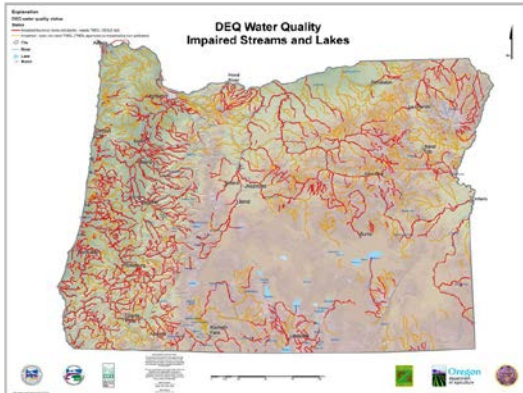
The 2012 IWRS Process

Phase II IDENTIFYING WATER NEEDS

- 11 open house events
- Numerous stakeholder workshops and briefings
- Online survey, and “virtual” open house

PUBLIC OUTREACH GOAL:

To form a vision for Oregon’s water future, & to identify critical issues and potential solutions





The 2012 IWRS Process



Willamina Creek, Yamhill County



Catherine Creek State Park, Union County



Malheur Lake, Harney County

Phase III DEVELOPING RECOMMENDED ACTIONS

- Feb. 2011 Progress Report to 76th Legislative Assembly
- Released “Bulletins” in June 2011
- Numerous opportunities for public comment
- Continued to meet with advisory groups
- Released Discussion Draft in December 2011



The 2012 IWRS Process

Phase IV PRODUCING OREGON'S FIRST IWRS

- Continued opportunity for comment
- Notified other boards/commissions
- Final Draft released: June 2012



Timothy Lake, Clackamas County



Brownlee Reservoir near Richland, Baker County



North Umpqua River, Douglas County



The 2012 IWRS Process

Phase V IMPLEMENTATION AND EVALUATION

- Commission adopted IWRS in August 2012
- Introduced budget and policy packages during 2013 Legislative Session
- All partner agencies received funding to implement the IWRS





Implementation: 2012 - 2015

2015 Demand Forecast

Hydrogeologists

Hydrologists

Water Use Reporting

Cooperative Groundwater Studies

Instream Flow Studies

New Monitoring Wells

New Gaging Stations

\$\$ for Measurement Devices

Monitoring Strategy

Updated Permitting Guide

Pesticide Stewardship Partnerships

Willamette Reallocation Study

Invasive Species

New Watermasters (Klamath & Enterprise)

TMDL Development

Scenic Waterways

Deschutes WaterSMART Study

Place-Based Planning

Grants & Loans for Feasibility & Implementation

IWRS Coordination

Oregon's Integrated Water Resources Strategy Framework

An iterative process will help us evaluate whether the recommended actions meet the goals and objectives of the Strategy.

The process will include monitoring the implementation of recommended actions, to commitment to resolving conflicts that arise during the course of implementation, providing feedback on any successes or shortcomings, and evolving or adapting to new information or resources. As we learn lessons from the first round of implementation, we can adjust the Strategy as needed through formal adoption every five years.



2017 Update: Looking Ahead



- **2017 IWRS Update will be surgical**
- **Comprehensive revision could occur at the ten-year mark**
- **Governor's July 2015 directive on drought and climate change**
- **A more targeted look at coming pressures (e.g., extreme weather events)**
- **A key focus on demonstrating and reporting progress made to date**



Questions for the Commission



Oregon Coast near Seal Rock, Lincoln County



Silvies River, Grant County



S. Fork McKenzie River, Lane County

1. Form a sub-committee of the Water Resources Commission?
2. Convene an Advisory Group?
3. Solicit public input in early 2016?
4. Continue to provide regular updates to the Commission?



Next Steps & Noteworthy Items



Oregon Coast near Seal Rock, Lincoln County



Silvies River, Grant County



S. Fork McKenzie River, Lane County

1. Develop a 2-year workplan
2. Must notify other boards and commissions prior to adoption
3. 2017 IWRS must be adopted by WRC and recognized in rule

Thank you

Images courtesy of Kyle Gorman of OWRD (Metolius River); Michael Lemmon (Snake River Gorge), Oregon Dept. of Transportation (Willamette R. Blue Heron), Bob Wood of OWRD (Mt. Hood); Oregon Parks and Recreation Department (Cottonwood Canyon); and the Oregon Department of Fish and Wildlife (Sandy River);
All other images courtesy of Gary Halvorson, Oregon State Archives.