



Columbia River, Columbia County



Eagle Creek Overlook, Multnomah County



Klamath River, Klamath County

# Updating Oregon's Integrated Water Resources Strategy



February 25, 2016  
Water Resources Commission Meeting

Alyssa Mucken  
IWRS Program Coordinator



- **2017 IWRS Development Plan (Attachment 1)**
- **Revised Progress Report (Attachment 2)**
- **Conclusion/Next Steps**



- **Working draft showing planned 2016-17 activities**
- **Content:**
  - **Background and statutory foundation**
  - **Oregon's 2012 Integrated Water Resources Strategy**
  - **Setting Expectations for the 2017 Update**
  - **Public Involvement & Stakeholder Engagement**
  - **Project Team & Advisory Groups**
  - **Adoption**
  - **Project Schedule**
  - **The Legal Framework (ORS 536.220)**



## BACKGROUND AND STATUTORY FOUNDATION

- **HB3369**
- **ORS 536.220**
- **Responsible entities, public involvement**
- **Adoption requirements**

# 2017 IWRS Development Plan



## 2012 INTEGRATED WATER RESOURCES STRATEGY

- Includes the Commission's vision, goals, and objectives
- Provides a link to the IWRS Framework
- Highlights the 2012 workplan priorities for implementation

### 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

### RECOMMENDED ACTIONS

### Pace-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 health, 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



## SETTING EXPECTATIONS FOR THE 2017 UPDATE

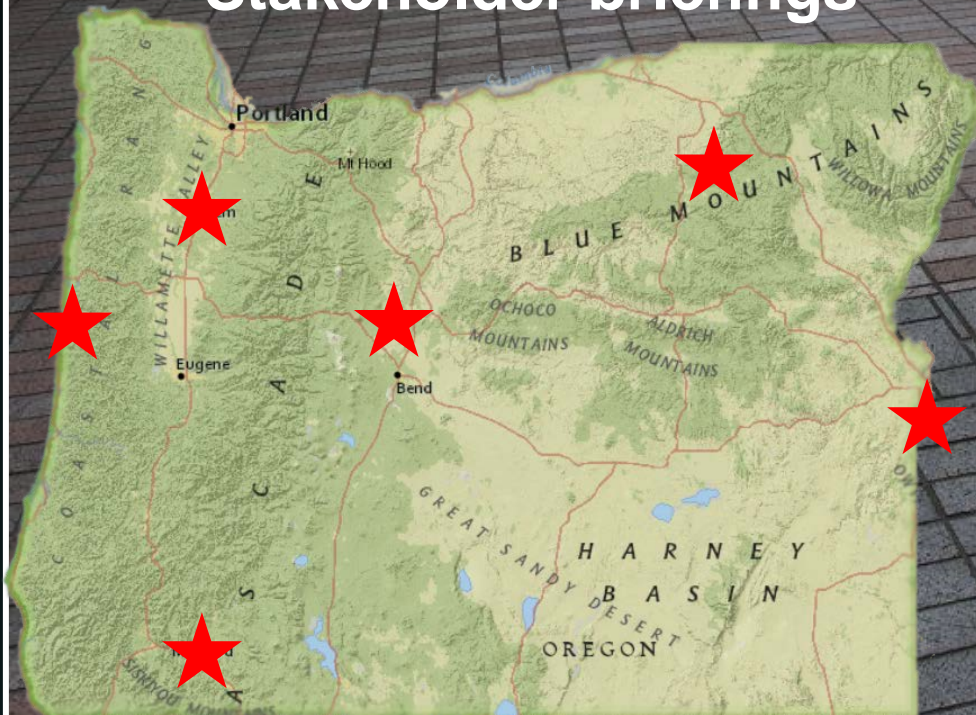
- **Phased approach to implementation**
- **Significant progress has been made**
- **Development Plan provides a basic framework for the 2017 Update:**
  - **Revisions**
  - **Reporting Progress**
  - **Address Drought & other Emerging Issues (EO 15-09)**
  - **Develop an Implementation Workplan (2017-2022)**

# 2017 IWRS Development Plan



## PUBLIC INVOLVEMENT & STAKEHOLDER ENGAGEMENT

- Online survey in February-March
- Public meetings (open houses) in late April
- Stakeholder briefings





## PUBLIC INVOLVEMENT & STAKEHOLDER ENGAGEMENT (cont.)

- **Project Team**
- **Agency Advisory Group**
- **Federal Liaison Group**
- **Policy Advisory Group**







## Selecting a new Policy Advisory Group:

- **Staff sought suggestions from stakeholder organizations**
- **Represent a wide array of interests**
- **Four meetings in 2016**
- **First meeting on Wednesday, March 30 in Salem**
  - **Meeting 2: Wednesday, June 8**
  - **Meeting 3: Wednesday, September 14**
  - **Meeting 4: Wednesday, November 30**

# 2017 IWRS Development Plan



## 2016 Policy Advisory Group Members:

**Will Collin**

Environmental Justice Advocate

**Valerie Kelley**

(retired hydrologist)

**Peggy Lynch**

League of Women Voters of Oregon

**Suzanne DeLorenzo**

Clackamas River Water District

**Gayle Killam**

River Network

**Curtis Martin**

Oregon Cattlemen's Association

**Arlene Dietz**

Rice Farms

**Craig Lacy**

(retired fly-fishing outfitter)

**Craig Pope**

Polk County Commissioner

**Ron Foggin**

City Manager

**Winnie Lam**

Google Server Farm

**Brent Stevenson**

Santiam Water Control District

**Rebecca Geisen**

Portland Water Bureau

**Hiram Li**

(retired biologist)

**Stan van de Wetering**

Confederated Tribes of Siletz Indians

**TJ Hansell**

Hansell Farms

**Tracey Liskey**

Liskey Farms

**Mary Wahl**

Wahl Ranch

# 2017 IWRS Development Plan



## POLICY ADVISORY GROUP SCHEDULE

**Meeting 1: March 30, 2016**

**Meeting 2: June 8, 2016**

**Meeting 3: September 14, 2016**

**Meeting 4: November 30, 2016**

Bring forth final draft recommended actions for review and input. Following meeting, make revisions, release IWRS draft for public comment (target release: October 31).

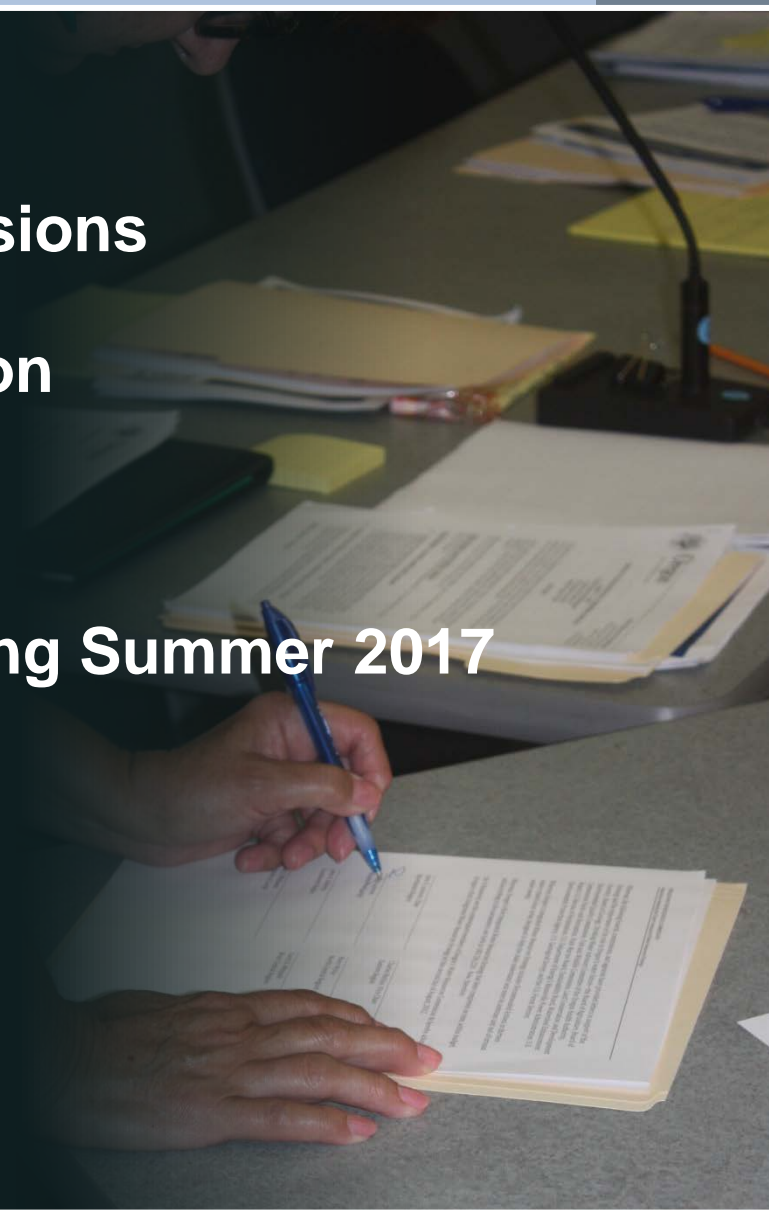
**Meeting 4: November 30, 2016**

Bring forth final draft recommended actions for review and input. Following meeting, make revisions, release IWRS draft for public comment (target release: October 31).



## ADOPTION

- **Notify other boards/commissions**
- **Water Resources Commission**
- **Rule-making**
- **Scheduled for adoption during Summer 2017**



# 2017 IWRS Development Plan



## PROJECT SCHEDULE

	2016												2017											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Launch IWRS Update 2017	■																							
Convene IWRS Project Team		■																						
Drought Survey		■																						
Open Houses (4-5)				■																				
Stakeholder Briefings			■																					
PAG Meetings			1		2		3		4															
Commission Updates		■			■		■		■															
Legislative Session		■											■	■	■	■	■	■	■	■	■	■	■	■
Draft Progress Report			■																					
Revised Progress Report					■																			
Draft Drought Chapter & Actions							■																	
Draft IWRS Released										■														
Public Comment Period										■	■	■												
Final revisions and formatting													■	■	■	■	■	■	■	■	■	■	■	■
Notify other boards/commissions															■	■	■	■	■	■	■	■	■	■
Adoption																					■	■	■	■
Rule-Making																						■	■	■

# Draft Progress Report (2012-2015)



**DRAFT**



## Oregon's Integrated Water Resources Strategy Progress Report

### Objective 1: Understand Water Resources Today

- 1A. Conduct additional groundwater investigations
- 1B. Improve water resources data collection and monitoring
- 1C. Coordinate inter-agency data collection, processing, and use in decision-making

### Objective 2: Understand Instream and Out-of-Stream Needs

- 2A. Update long-term water demand forecasts
- 2B. Improve water-use measurement and reporting
- 2C. Determine pre-1909 water right claims
- 2D. Update water right records with contact information
- 2E. Update Oregon's water-related permitting guide
- 3A. Determine flows needed (quality & quantity) to support instream needs
- 3B. Determine needs of groundwater-dependent ecosystems

### Objective 3: Understand the Coming Pressures that affect our Needs and Supplies

- 4A. Analyze effects on water from energy development projects and policies
- 4B. Take advantage of existing infrastructure to develop hydroelectric power
- 4C. Promote strategies that increase/integrate energy and water savings
- 5A. Support continued basin-scale climate change research efforts
- 5B. Assist with climate change adaptation and resiliency strategies

## ABOUT THE KEY

- Completed
- In Progress
- Not yet started

### ABOUT THIS DOCUMENT

This at-a-glance implementation document summarizes progress made under Oregon's 2012 Integrated Water Resources Strategy (IWRS). In 2015, the IWRS Project Team shared its progress with the Water Resources Commission. This 2015-2017 implementation work means the Department and its partners are taking action, as described in the implementation plan. Little to no work has been completed.

This new format condenses the March 2015 progress report into a short summary tool. As we gather more implementation updates from our sister agencies, stakeholders, and other public and private organizations, the Water Resources Department will continue to evaluate and revise future iterations of this progress report.

### ABOUT THE KEY




- Completed
- In Progress
- Not yet started

- 10A. Improve access to built storage
- 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
- 11A. Improve watershed health, 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
- 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
- 13A. Fund development and implementation of Oregon's IWRS
- 13B. Fund water resources management activities at the state level
- 13C. Fund communities needing feasibility studies for water conservation, storage, and reuse projects








# Objectives 1 & 2: Understanding...



## Objective 1: Understand Water Resources Today

-  1A. Conduct additional groundwater investigations
-  1B. Improve water resources data collection and monitoring
-  1C. Coordinate inter-agency data collection, processing, and use in decision-making











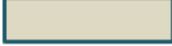
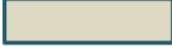


## Objective 2: Understand Instream and Out-of-Stream Needs

-  2A. Update long-term water demand forecasts
-  2B. Improve water-use measurement and reporting
-  2C. Determine pre-1909 water right claims
-  2D. Update water right records with contact information
-  2E. Update Oregon's water-related permitting guide
-  3A. Determine flows needed (quality & quantity) to support instream needs
-  3B. Determine needs of groundwater-dependent ecosystems

# Objective 3: Coming Pressures...



## Objective 3: Understand the Coming Pressures that affect our Needs and Supplies

-  4A. Analyze effects on water from energy development projects and policies
-  4B. Take advantage of existing infrastructure to develop hydroelectric power
-  4C. Promote strategies that increase/integrate energy and water savings
-  5A. Support continued basin-scale climate change research efforts
-  5B. Assist with climate change adaptation and resiliency strategies
-  6A. Improve integration of water info into land use planning (vice versa)
-  6B. Update state agency coordination plans
-  6C. Encourage low impact development practices
-  7A. Develop and upgrade water & wastewater infrastructure
-  7B. Encourage regional (sub-basin) approaches to water/ wastewater systems
-  8A. Support implementation of Oregon's K-12 environmental literacy plan
-  8B. Provide education & training for Oregon's next generation of water experts
-  8C. Promote community education and training opportunities
-  8D. Identify ongoing water-related research needs



# Objective 4: Meeting Needs



## Objective 4: Meet Oregon's Instream and Out-of-Stream Needs

-  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
-  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
-  11A. Improve watershed health, 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
-  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
-  13A. Fund development and implementation of Oregon's IWRS
-  13B. Fund water resources management activities at the state level
-  13C. Fund communities needing feasibility studies for water conservation, storage, and reuse projects

#### 5B. Assist with Climate Change Adaptation and Resiliency Strategies

- IP Provide support to communities to incorporate climate change into their planning decisions
- IP Look for more efficient ways to conserve, store, and reuse water in anticipation of climate change
- IP Invest and make improvements in surface water and groundwater monitoring
- IP Invest in real-time forecasting of water deliveries, basin yield, streamflow, flood and drought frequency projections
- Analyze how in-stream and out-of-stream water rights will fare with hydrologic changes
- Analyze how water rights will fare with changing crop needs
- IP Use the U.S. Environmental Protection Agency's Climate Ready Water Utilities Program
- IP Increase ecosystem resiliency to climate change
- IP Ensure continued water and wastewater services in a changing climate

#### 6A. Improve Integration of Water Info into Land Use Planning (vice versa)

- Develop and share information regarding the location, quantity, and quality of water resources
- Protect water sources in the course of land use decisions

#### 6B. Update State Agency Coordination Plans

- Update State Agency Coordination Programs in coordination with DLCD

#### 6C. Encourage Low Impact Development Practices

- Compile and provide online information on low impact development policies
- Update local development codes, improving local capacity to review and permit green infrastructure designs

#### 7A. Develop and Upgrade Water & Wastewater Infrastructure

- Improve dam safety; retrofit for seismic issues
- IP Develop emergency action plans for high hazard dams
- Properly abandon infrastructure at the end of its useful life
- Use an "asset management" approach to identify and plan for rehabilitation, upgrade or replacement of infrastructure
- IP Ensure that basic maintenance needs continue to be eligible for grant and loan funding
- IP Advocate for continued infrastructure funding
- Encourage communities to consider natural infrastructure in lieu of, or as a complement to, built infrastructure.

#### 7B. Encourage Regional (Sub-Basin) Approaches to Water/ Wastewater Systems

- Provides incentives, such as funding and technical assistance

#### 8A. Support Implementation of Oregon's K-12 Environmental Literacy Plan

- Support funding for implementation
- Natural resource agencies, community organizations, and others should engage in education for environmental literacy activities

#### 8B. Provide Education & Training for Oregon's Next Generation of Water Experts

- Conduct a survey of water organizations in Oregon
- Determine whether educational programs in Oregon are equipped to meet the coming demand for water professionals
- Offer internships, fellowships, and job shadow programs to expose students to careers in water
- Continue funding support for water-related trade programs at Oregon community colleges

#### 8C. Promote Community Education and Training Opportunities

- Continue to promote education and outreach through actions required in local Water Management & Conservation Plans
- IP Promote technical training for public and private partners
- IP Promote access to water-related recreational opportunities through the use of the Water Trails Program

#### 8D. Identify Ongoing Water-Related Research Needs

- IP Continue to identify ongoing research needs at the local and state level
- IP Partner with public and private researchers

#### 9A. Undertake Place-Based Integrated, Water Resources Planning

- Develop a template for place-based integrated water resources strategies
- Provide technical assistance and other incentives to communities undertaking place-based IWRs
- IP Compile relevant and readily-available water-related information to support place-based IWRs

#### 9B. Coordinate Implementation of Existing Natural Resource Plans

- Coordinate and reconcile existing ecological planning and restoration efforts
- IP Dedicate resources for state and local implementation

#### 9C. Partner with Federal Agencies, Tribes, and Neighboring States in Long-Term Water Resources Management

- IP Protect Oregon's interests in shared surface water and groundwater basins
- IP Partner to improve access to additional stored water

#### 10A. Improve Water-Use Efficiency and Water Conservation

- Establish and maintain an online water-use efficiency and conservation clearinghouse
- Prioritize agricultural water-use efficiency
- Expand outreach and participation in the State's water-use efficiency and conservation programs
- Conduct a state-wide water conservation potential assessment

#### 10B. Improve Access to Built Storage

- IP Develop additional below-ground storage sites
- IP Re-allocate water in federal reservoir systems that have not undertaken formal allocation processes
- IP Develop additional above-ground, off-channel storage sites where needed
- Evaluate the status of storage infrastructure
- Authorize and fund the State to invest in and purchase water from stored water facilities

## Conclusion & Next Steps



- **Update project website with new information**
- **Regular updates to the Commission**
- **Continue checking in with the Commission sub-committee, as needed**