



# Oregon's Integrated Water Resources Strategy

Inland NW Drought Forum  
Boise Idaho Water Center  
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Oregon Water Resources Department

# THE CHARGE TO DEVELOP THE STRATEGY

## Oregon's House Bill 3369 (2009)

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

7th OREGON LEGISLATIVE ASSEMBLY-2009 Regular Session

### Enrolled House Bill 3369

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

Relating to water supply management; creating new provisions; amending ORS 536.220, 541.700, 541.706, 541.710, 541.720, 541.730, 541.740, 541.765, 541.770, 541.785, 541.830, 541.845 and 541.850; repealing ORS 541.755; appropriating money; and declaring an emergency.

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 supply; 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

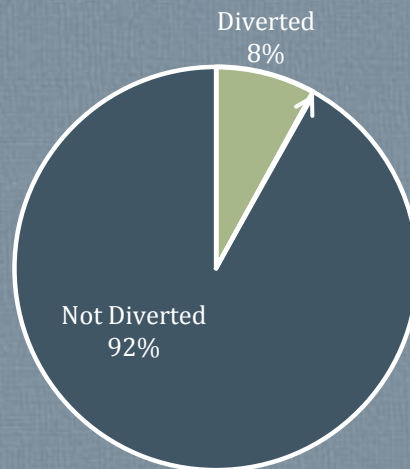
Whereas all water within Oregon belongs to the public pursuant to law; now, therefore,

Be It Enacted by the People of the State of Oregon:

ADDING

# WATER IN OREGON

~ 100 million acre feet of water / year



87%



6%



6%

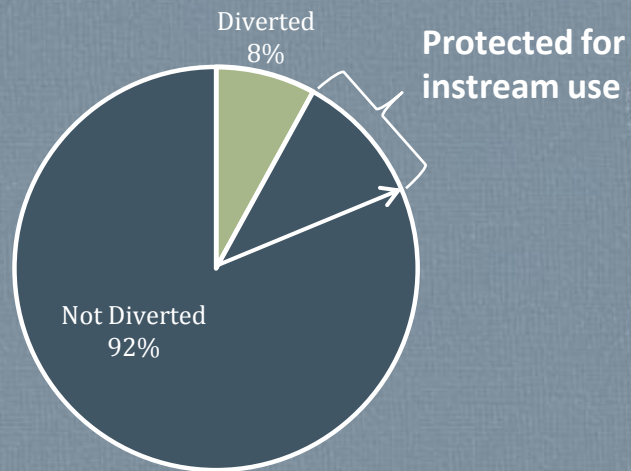


1%



# WATER IN OREGON

~ 100 million acre feet of water / year



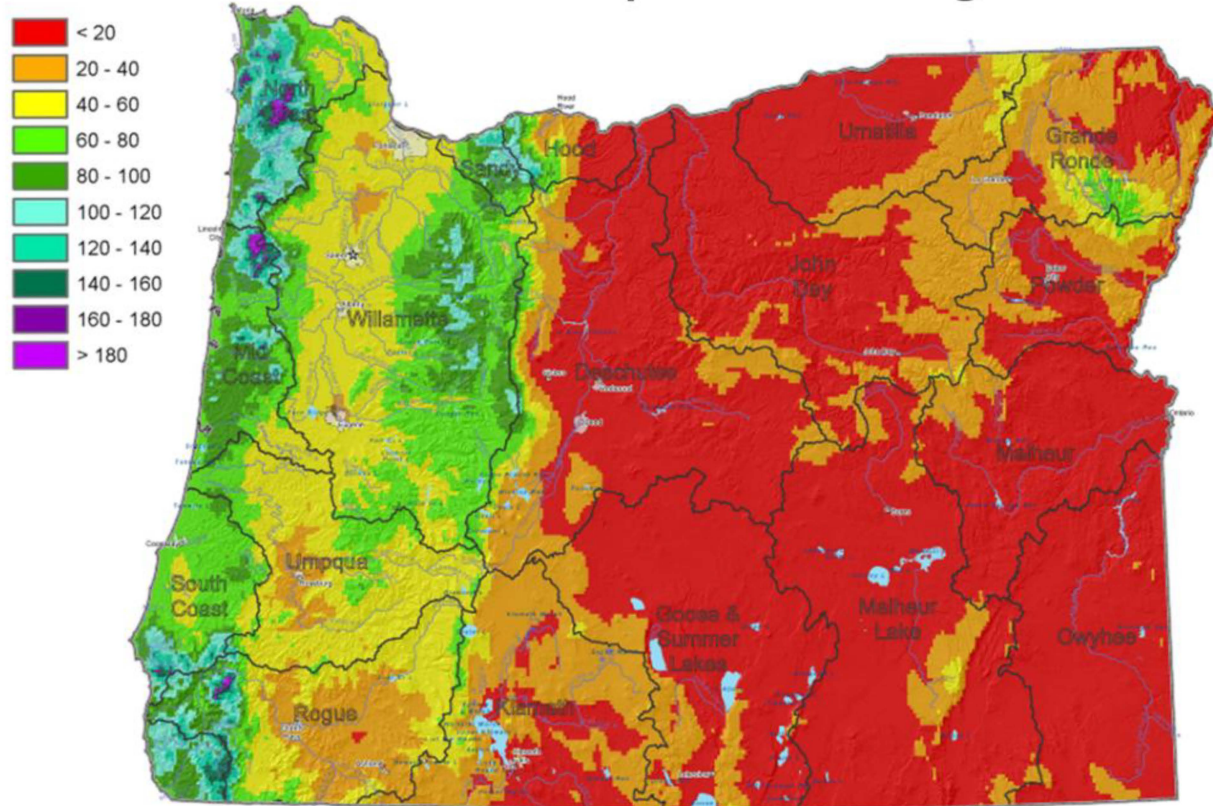
# WATER IN OREGON

If the majority of the water is unallocated,  
why is it a challenge to meet our  
instream & out-of-stream needs?

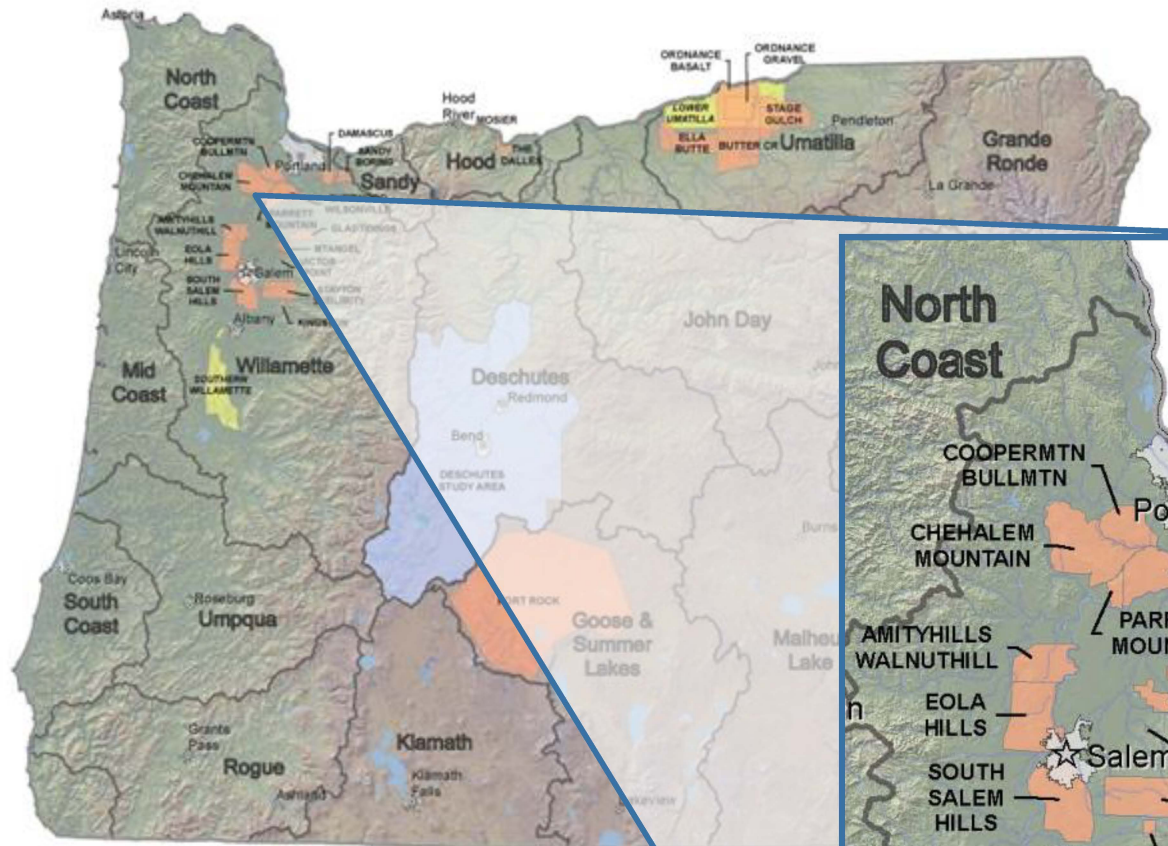
- Location
- Timing
- Form
- Quality
- Access / Ecological Issues

# LOCATION

## Mean Annual Precipitation in Oregon



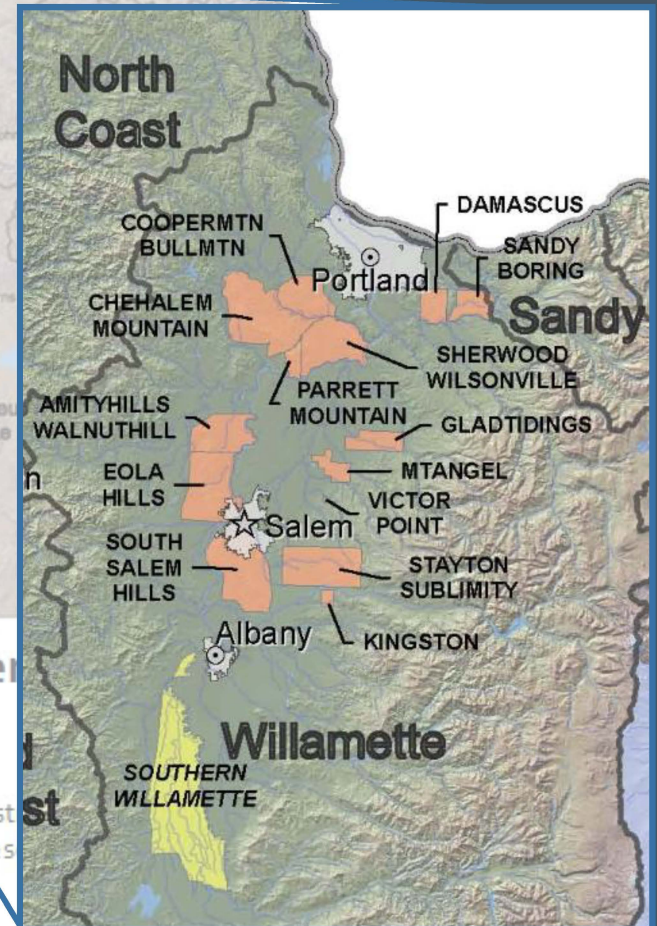
# LOCATION



**Areas with Known Groundwater  
(Quality & Quantity)**

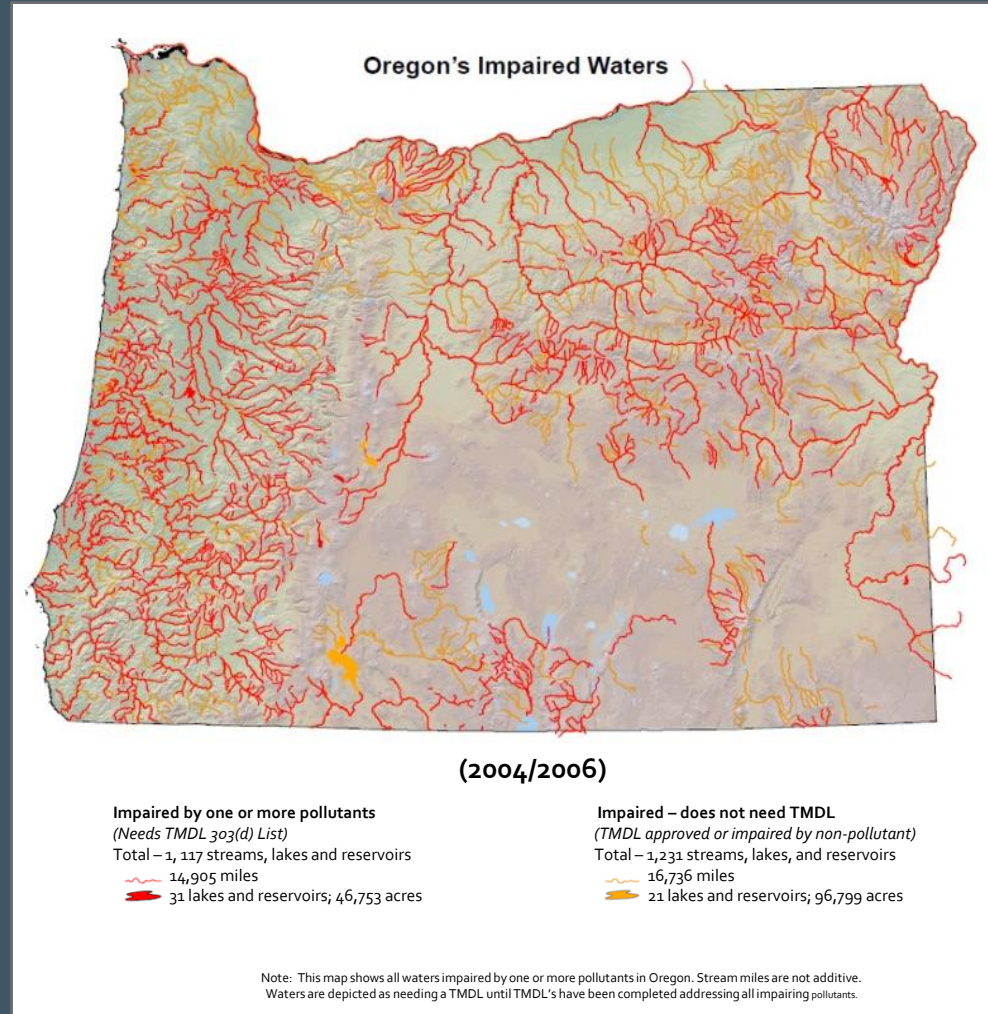
- DEQ GW Management Area
- OWRD Administrative Basin

- OWRD GW Restoration Area
- WRD/USGS Deschutes Study Area



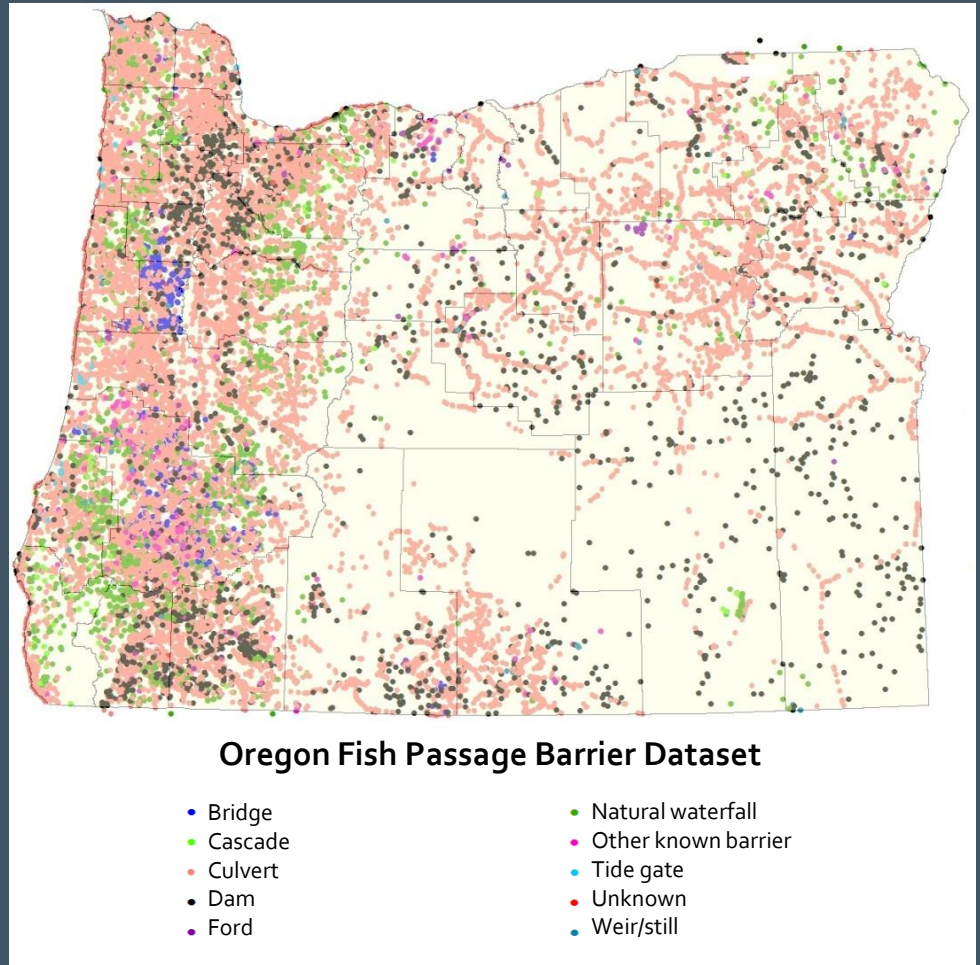
# QUALITY: SURFACE WATER

- More than 1,860 water bodies are impaired and not meeting water quality standards
- More than 30 lakes and reservoirs
- About 22,000 stream miles are impaired
  - Temperature
  - Sedimentation
  - Nutrients
  - Dissolved Oxygen
  - Habitat Alteration



# ACCESS / ECOLOGICAL ISSUES

Since **1991**, NOAA has listed  
**27** Pacific salmonid species under  
the Endangered Species Act, and has  
**delisted zero species**

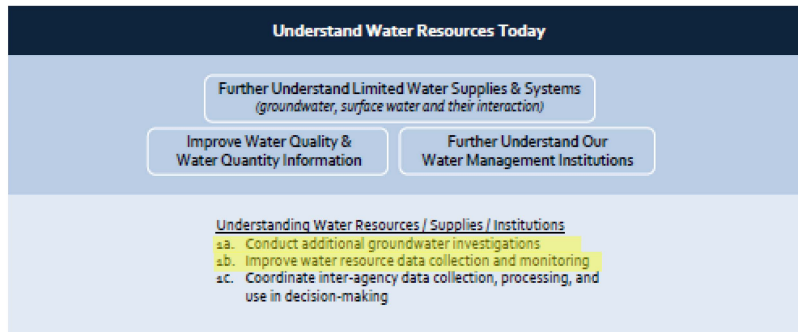


# THE FRAMEWORK

## Oregon's Integrated Water Resources Strategy

Framework

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

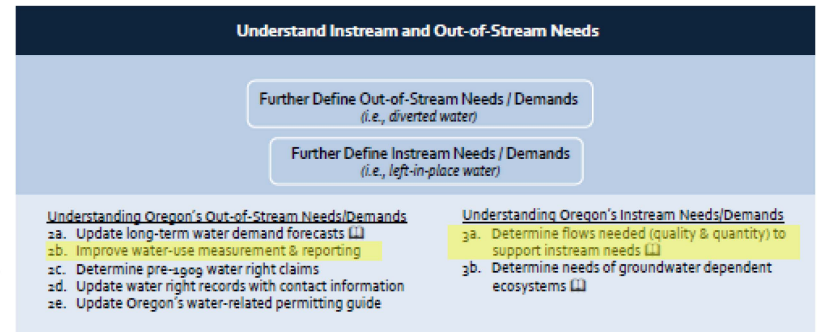


OBJECTIVES

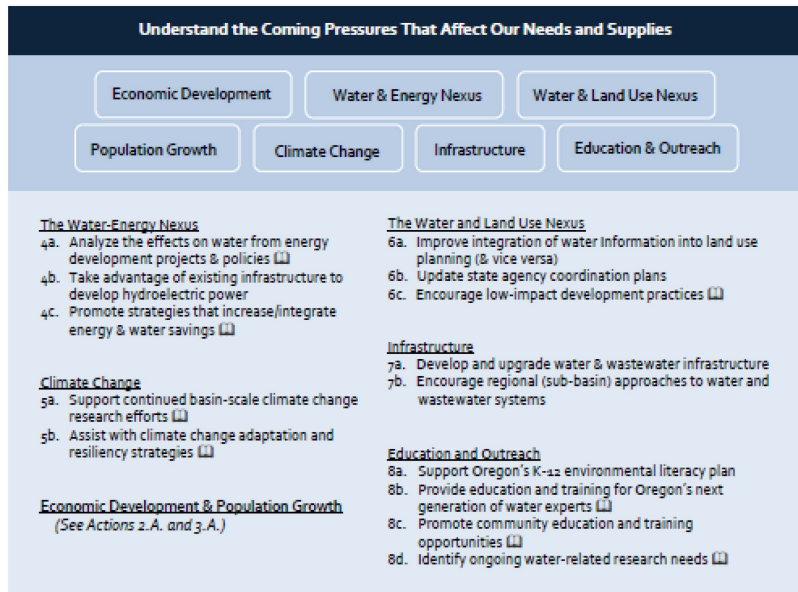
CRITICAL ISSUES

RECOMMENDED ACTIONS

Goal 1 (continued)



Goal 1 (continued)

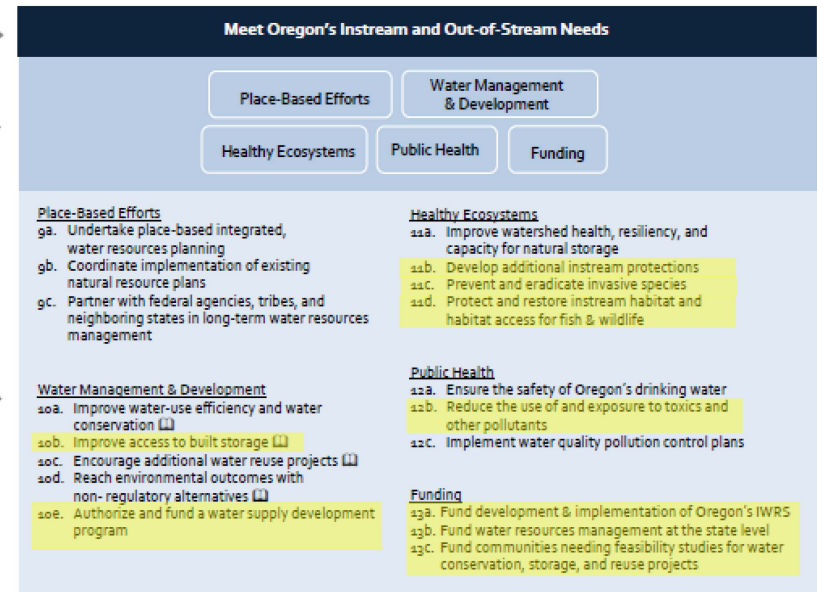


OBJECTIVES

CRITICAL ISSUES

RECOMMENDED ACTIONS

Goal 2: Meet Oregon's Water Resource Needs



# DROUGHT RESPONSE IN OREGON

- **Drought Council**
  - Assesses impacts of drought conditions
  - Makes recommendations to Governor
- **Water Availability Committee**
  - OWRD (chair), includes Oregon Climate Service, NRCS, National Weather Service, ODF, USGS, USACE, NW River Forecast Center
  - Meets monthly
- **Oregon Water Resources Department has three primary tools to help communities respond to drought:**
  1. Emergency Water Use Permits
  2. Temporary Drought Transfers
  3. Use of existing right (option/agreement)
- **Water Resources Commission also has special authorities during a drought declaration**

# STRATEGIES FOR ASSISTING COMMUNITIES

## Three Actions to Highlight from the Strategy:

1. **Improve Water Resource Data Collection and Monitoring (Action 1b)**
2. **Improve Access to Built Storage (Action 1ob)**
3. **Authorize and Fund a Water Supply Development Program (Action 1oe)**

# EXPANDING THE STATE'S MONITORING NETWORKS

## Groundwater Monitoring in Oregon

- More than 350 groundwater observation wells located across the state
- Expanding our network by 13 additional wells
- 2 additional hydrogeologists



Identifying Well Locations, OWRD



Water Level Measurements, OWRD

# EXPANDING THE STATE'S MONITORING NETWORKS

## Surface Water Monitoring in Oregon

- More than 225 state-operated gaging stations
- Expanding our network by 16 additional gaging sites
- 2 hydrologic technicians



Water Quality Sampling, ODEQ



Aquatic Species Surveying, ODFW



Streamflow Measurements, OWRD

# IMPROVE ACCESS TO BUILT STORAGE

## Available Storage in the Willamette Basin

- 13 reservoirs operated by USACE
- Operated primarily for flood control
- Storage = 1.6 million acre-feet
- Today, less than 5% of that water is under contract (for irrigation uses only)
- OWRD/USACE evaluate how to meet multiple water needs during wet, dry years



# WATER SUPPLY DEVELOPMENT

## New program for Oregon

- **\$10 million available in 2013-15 for water supply projects**
- **Eligible Projects for Funding**
  - Conservation/Efficiency Projects
  - New or expanded storage (above/below)
  - Basin Studies (BOR)
  - Streamflow protection/restoration
  - Repair/replace infrastructure
  - Water reuse
  - Water measurement

## CLOSING

- Update the Strategy every 5 years (2017)
- Many opportunities to learn from other states
- More information on our website ([www.wrd.state.us](http://www.wrd.state.us))
- Track our progress through the IWRS listserv:  
<http://listsmart.osl.state.or.us/mailman/listinfo/iwrs>

**THANK YOU**

**The End**

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