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Willamette Basin Review Feasibility Study

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WRC Meeting
October 2016

Outline

- **History and purpose of the study**
- **Study timeline**
- **Progress on estimating current and future demands**
- **Study challenges**
- **Next steps**

Willamette Basin

Willamette Valley Project

- 13 reservoirs (1.64 M acre-feet legally stored)
- 5 percent is contracted
- Storage releases for fish & wildlife targets
- Strong recreational demand
- Fastest growing area in the state
- Diverse agricultural setting
- Several ESA-listed species



History of this Study

1991 Corps completes appraisal-level study

1994 Demands developed for municipal, industrial, and irrigation

1996 Study initiated, cost share agreement signed

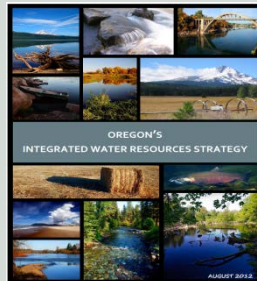
1999 ESA listing of Upper Willamette Steelhead & Chinook

2000  Agency partners place study on hold

2008

Biological
Opinions
Completed

2012



2015

New Cost
Share
Agreement

2018

Chief's
Report

Study Participants

U.S. Army Corps of Engineers

Federal Study Lead

Water Resources Dept.

Non-Federal Sponsor

Core Agencies

Contributing Technical Input & Guidance



State of Oregon
Department of
Environmental
Quality



Oregon
Department
of Agriculture

Key Stakeholders

- **Municipalities**
- **Irrigation and agricultural interests**
- **Conservation and restoration groups**
- **Recreation communities**
- **Science community and local universities**
- **Congressional staff**

Study Timeline – 2015 to 2018

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- August 2015 – Cost Share Agreement signed**
 - April 2016 – Demands & Alternatives**
 - April 2017 – Tentatively Selected Plan**
 - October 2017 – Draft Report & Environmental Assessment**
 - January 2018 – Corps makes an Agency Decision**
 - May 2018 – Review by the Corps' Civil Works Review Board**
 - August 2018 – Chief's Report**

Estimating Demands

- **Key question: how much can future demands be met from stored water?**
 - **Can stored water be used to supplement existing uses?**
 - **Can stored water be used in new areas?**
 - **Considering water needs for 3 major categories**
 - **Will also examine impacts to other uses in the basin**

Municipal & Industrial Demands

- **Work completed by David Miller and Associates**
- **Using a variety of datasets**
- **Examining uses for approximately 100 municipal and industrial suppliers**
- **Analysis includes considering single source systems and the need for redundancy**

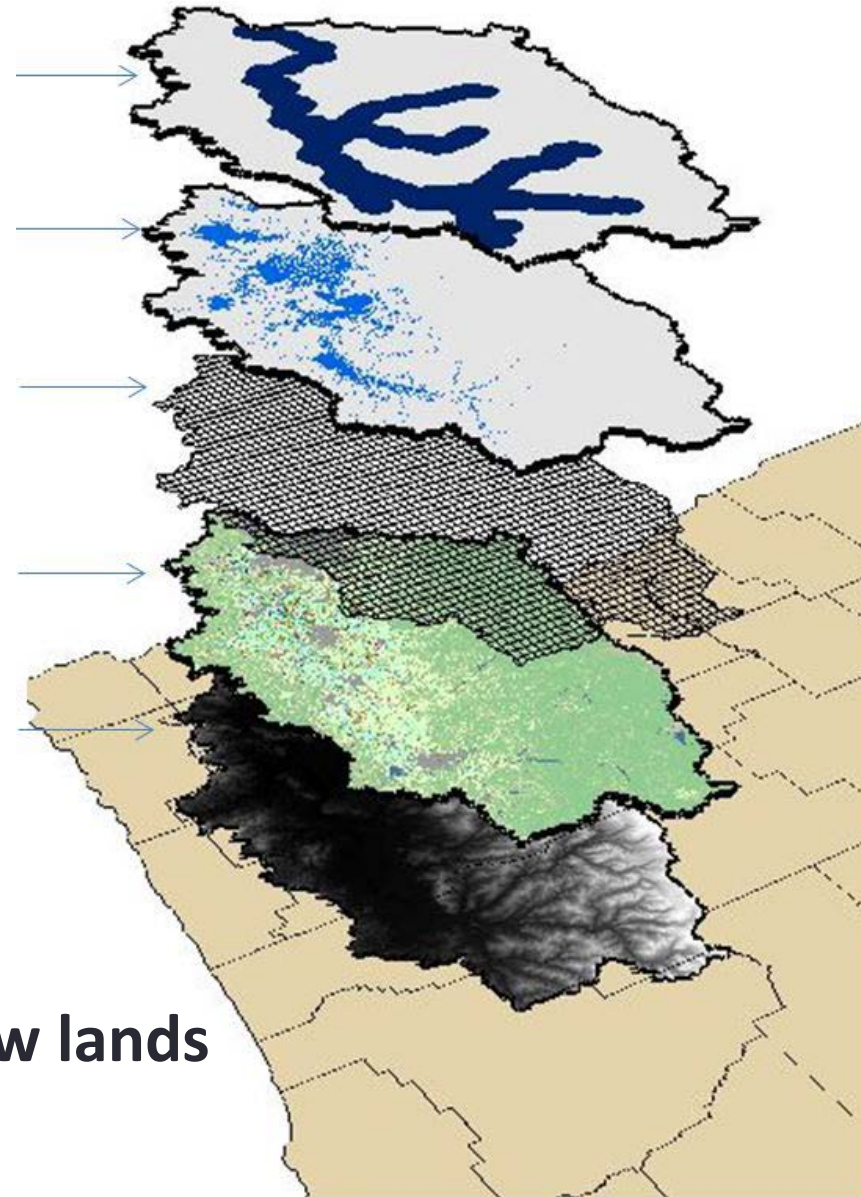
Fish & Wildlife Demands

- **Several meetings since March**
- **Exploring existing studies since BiOp issuance**
- **Taking a closer look at mainstem flow targets**
- **Meeting monthly through end of year**



Agricultural Demands

- **Development patterns**
- **Water rights**
- **Temperature and precipitation**
- **Crops grown in 2014**
- **Elevation**
- **Soils and land use**
- **Supplemental needs on existing lands, potential for new lands**



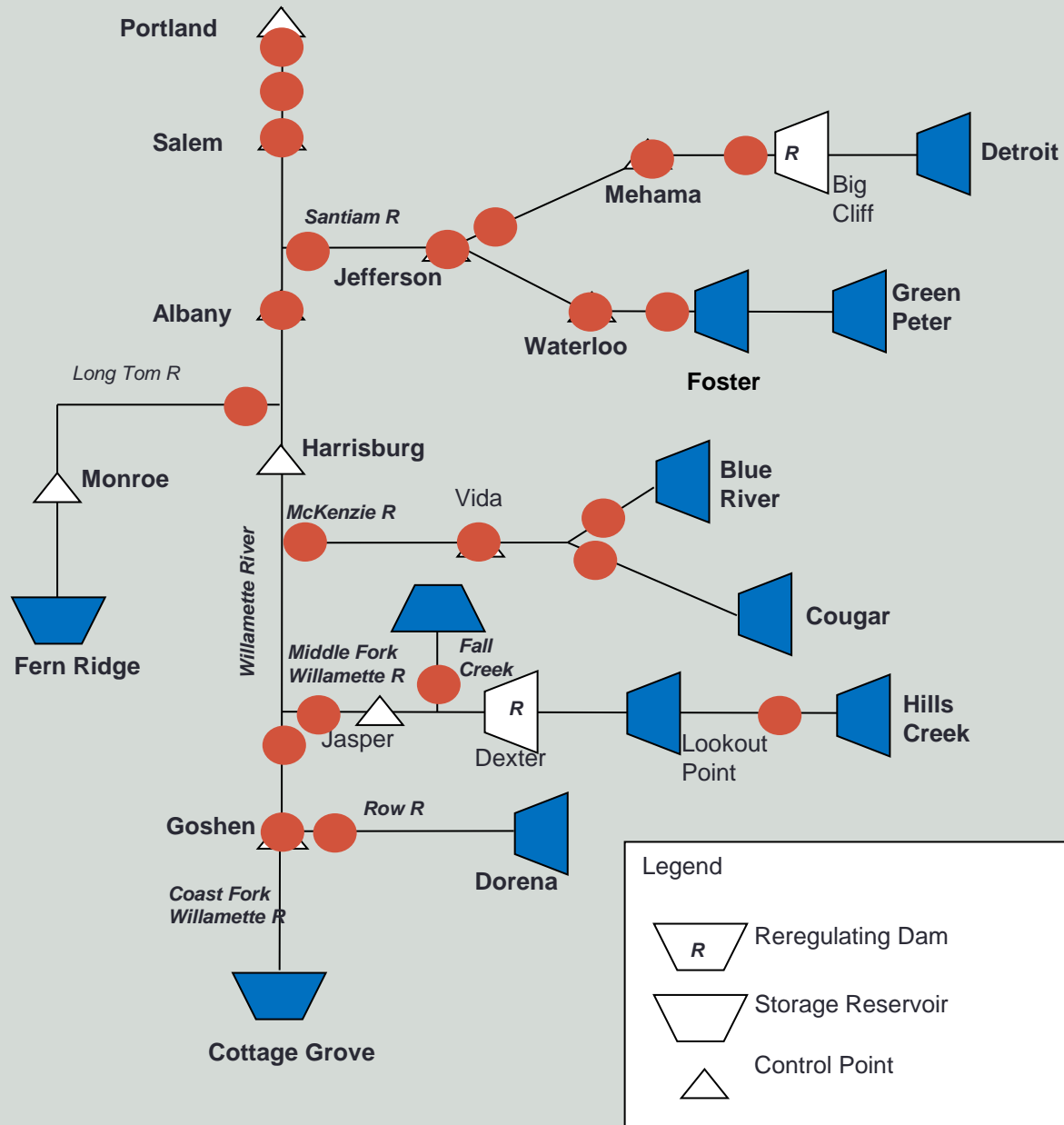
Study Challenges

- **50 year planning horizon**
- **Agriculture in the Willamette is very diverse**
- **Technical challenges**
- **Unconverted minimum perennial streamflows**
- **No contracting program for certain uses**

Minimum Perennial Streamflows

- **Adopted in Willamette Basin program rules**
- **About 2 dozen remain unconverted**
- **Call upon two sources of water**
- **Conversion requires securing contract agreement with the Corps of Engineers**
- **When converted, minimum flows will have senior priority dates (1964, 1971)**

Minimum Perennial Streamflows



Contracting Program

- **Corps has expressed interest in allowing the state to administer a contracting program for municipal and industrial users**
- **Bureau of Reclamation currently administers contracts for irrigation uses in the basin**
- **The state has no authority to purchase or contract stored water for beneficial uses**
- **Financial obligations need further review**
- **Discussions are ongoing**

Next Steps for the Study

- **The Corps will model whether future demands can be met with storage supply**
- **Initiate an environmental assessment under the National Environmental Policy Act**
- **Integrate information into a Tentatively Selected Plan, first draft due in April 2017**
- **Continued stakeholder engagement**

