



Integrated Water Resources Development: Meeting Instream and Out-of-Stream Needs

**Oregon Water Resources Commission
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Integrated Water Resources Strategy

Some recommended actions to understand Oregon's instream and out-of-stream needs and to meet those needs into the future

Place-Based Planning

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

Funding Feasibility Studies

13.C - Fund communities needing feasibility studies for water conservation, storage and reuse projects

Funding to Support Projects

3.A - Determine flows needed to support instream needs

10.A - Improve water-use efficiency and water conservation

10.B - Improve access to built storage

10.C - Encourage additional water reuse

10.E - Authorize and fund a water supply development fund

11.B - Develop additional instream protections

Integrated Water Resources Development



Planning

SB 266 (2015)

Pending
Legislation for
Place-Based
Planning Grants

Evaluating Project Feasibility

SB 1069 (2008)

Water
Conservation,
Reuse and Storage
Feasibility Study
Grants

Project Financing and Implementation

SB 839 (2015)

Loans and Grants
to plan, evaluate
and develop
Water Supply
Development
Projects

Update on Place-Based Planning Guidelines

- Made slight revisions following November 2014 Commission meeting
- Additional input sought from Project Team
- Briefings to AOC, OWUC, DEQ, and Region Managers
- Posting guidelines online, distributing to workshop participants, and others via IWRS mailing list
- SB 266 had its first public hearing

See Attachment 1



Water Conservation, Reuse and Storage Feasibility Study Grants

- **Feasibility study grants program SB 1069 (2008)**
- **15 grants awarded in 2014**
- **Central Oregon Irrigation District completed study and has begun construction**
- **Silverton and Mt. Angel withdrew application**
- **Other studies underway, providing progress reports**
- **Department is gearing up for next cycle**

Senate Bill 839 (2013)

- **Purpose: To establish a means for the state to support water resource projects that provide economic, environmental and community benefits.**
- **Loans and grants to *evaluate, plan, and develop* both instream and out-of-stream water resource projects**

77th OREGON LEGISLATIVE ASSEMBLY-2013 Regular Session

Enrolled
Senate Bill 839

Sponsored by COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

CHAPTER

AN ACT

Relating to water; creating new provisions; amending ORS 541.700, 541.710, 541.720, 541.730, 541.740 and 541.830 and sections 17, 33, 34 and 46, chapter 907, Oregon Laws 2009; repealing ORS 541.600, 541.606, 541.611, 541.616, 541.621, 541.631, 541.636, 541.641, 541.646 and 541.725; appropriating money; and declaring an emergency.

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

SECTION 1. As used in sections 1 to 15 of this 2013 Act:

(1) "Newly developed water" means the new increment of water:

- (a) Stored for a project providing new or expanded storage;
- (b) Allocated to a use under a secondary water right for a project involving the allocation of previously uncontracted water stored by the United States Army Corps of Engineers under an existing water right; or
- (c) Conserved for a project to allocate conserved water under the program described in ORS 537.455 to 537.500.

(2) "Seasonally varying flows" means the duration, timing, frequency and volume of flows, identified for the purpose of determining conditions for a new or expanded storage project, that must remain in-stream outside of the official irrigation season in order to protect and maintain the biological, ecological and physical functions of the watershed downstream of the point of diversion, with due regard given to the need for balancing the functions against the need to store water for multiple purposes.

SECTION 2. (1) The purpose of sections 1 to 15 of this 2013 Act is to establish a means for state government to support the development of water resource projects having economic, environmental and community benefits.

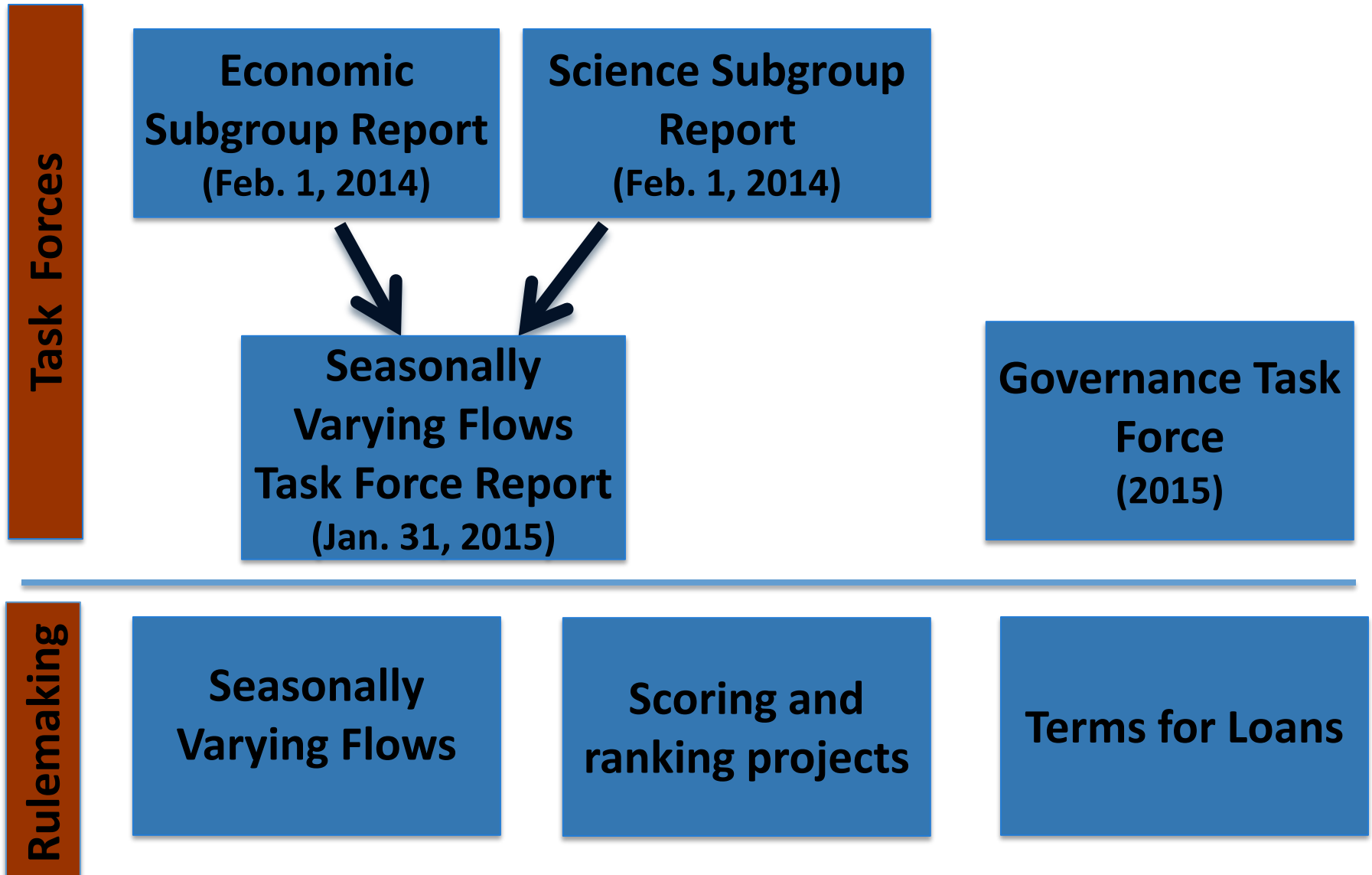
(2) The Legislative Assembly intends that any conditions or requirements described in sections 1 to 15 of this 2013 Act apply only to projects that receive loans or grants from the Water Supply Development Account established in section 3 of this 2013 Act.

SECTION 3. (1) The Water Supply Development Account is established in the State Treasury, separate and distinct from the General Fund. Interest earned by the Water Supply Development Account shall be credited to the account. Moneys in the account are continuously appropriated to the Water Resources Department for use in carrying out sections 1 to 15 of this 2013 Act.

(2) The department may expend moneys from the account for:

- (a) Subject to subsection (4) of this section, making loans and grants to evaluate, plan and develop in-stream and out-of-stream water development projects approved by the Water Resources Commission, including but not limited to projects that:

Senate Bill 839 (2013)



Governance Task Force



Scope of Governance Task Force – Section 18

- Review the structure established for water development project loans and grants
- Review the decision-making process outlined in §1-15, including:
 - Role of the state in providing loan and grant funding for multipurpose water resources development.
 - Decision-making process for the allocation of newly developed water.

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SVF Task Force



Components of the SB 839 Matrix

Key Questions Placed in Rule:

- How much of an impact is this project likely to have?
- How much information already exists?

The answers will help determine which methods should be used to establish SVFs. Methods include:

- Desktop Studies,
- Data Modeling,
- Site Visits,
- Workshops, and
- Field Studies & Analysis

Components of the SB 839 Matrix

More details placed in a guidance document.

SB 839 Matrix to Select Methods for Development of Seasonally Varying Flow Prescriptions

When Is a Seasonally Varying Flow Prescription Required?

FOR above and below ground water storage projects that require a water right authorization and are seeking SB 839 funding, AND that are: impounding on a perennial stream, or diverting from a stream supporting STE species, or ≥ 500 acre feet...

The project will need a Seasonally Varying Flow Prescription, determining the duration, timing, frequency and volume of flows, (including ecological baseflow) necessary for protection and maintenance of biological, ecological, and physical functions. Note that this flow prescription does not replace other environmental review required by rule (e.g. Division 33).

How Hard Would One Have to Work to Develop an Seasonally Varying Flow Prescription?

Methods and effort necessary to develop flow prescriptions are related to the level of impact of the project and the availability of information. Use the two sets of questions below to determine the effort one would expend to determine a flow prescription. Projects with lesser ecological impacts and more available information will require less intensive study approaches than those with greater ecological impacts and less available information.

Step 1: What Is the Ecological Impact of the Proposed Project?

Questions to Discern Ecological Impact of Project (Circle Yes or No for each question)	
Is this project diverting from a stream supporting sensitive, threatened, or endangered species?	Yes or No
Is the impoundment located in-channel?	Yes or No
Does the impoundment or proposed project have an impact on sensitive habitat/process?	Yes or No
Of the remaining available water in the basin, is the project proposing to divert more than half?	Yes or No
Is a majority of available water already developed in the basin?	Yes or No

Step 2: What Information about Streamflow Functions Is Already Available?

Functional Bands	Questions to Discern Availability of Information about Streamflow Functions (Circle Yes or No for each question)	Yes or No	Availability of Information Score Yes = Sufficient No = Insufficient
Hydrological Band	Are there sufficient long-term data* to understand the natural hydrograph?	Yes or No	Sufficient or Insufficient
	Is there sufficient information* to understand climate driven shifts to the flow regime?	Yes or No	Sufficient or Insufficient
	Is there sufficient information* about water availability?	Yes or No	Sufficient or Insufficient
Biological Band	Is there sufficient information* about all species present at/below the point of diversion and their lifecycle needs?	Yes or No	Sufficient or Insufficient
Hydraulic / Physical Processes Band	Are there habitat studies that provide sufficient information* to understand the relationship between selected habitat features and streamflow?	Yes or No	Sufficient or Insufficient
	Are there geomorphological studies or data that provide sufficient information* to understand the relationship between sediment transport and streamflow?	Yes or No	Sufficient or Insufficient
	Are sufficient* stream data available to describe stream complexity and floodplain connectivity?	Yes or No	Sufficient or Insufficient
	Are sufficient* water quality data available, particularly related to temperature?	Yes or No	Sufficient or Insufficient

Step 3: Combine Scores of Steps 1 and 2

Combined Scores from Steps 1 and 2 for Each Question (e.g. Minimal, Sufficient)

Step 4: Determine Which Study Methods to Use to Address Each of the Functional Band Questions

Resulting "Impact of Project" and "Availability of Information" Scores	Resulting SVF Study Methods Used to Develop Flow Prescription (see narrative for a description of data sources and a description of study methods)
Minimal, Sufficient	Data Collection: Field visits, and/or literature and expert review Analysis: Existing models and/or calculations
Minimal, Insufficient	Data Collection: Field work, field visit, and/or literature and expert review Analysis: Develop models, scientific expert workshop, existing models and/or calculations
Significant, Sufficient	Data Collection: Field work, field visits, and/or literature and expert review Analysis: Develop models, scientific expert workshop, existing models and/or calculations
Significant, Insufficient	Data Collection: Field investigations/study, scientific expert workshop, field work, field visits, and/or literature and expert review Analysis: Develop models, scientific expert workshop, existing models and/or calculations

Impact of Project Score If Yes to any questions = Significant If No for all questions = Minimal	Significant or Minimal
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* "Sufficient" information means enough scientific information collected using standard biological, hydrologic, or hydraulic methods to develop the recommended flow prescription. Level of effort creating a flow prescription should correspond to how the project relates to its biological and physical setting. As the proposed project increases in water requested relative to water available, risk to ecosystem functions, and complexity, so too will the level of detail necessary to develop a flow prescription. This approach responds to the economic feasibility realities noted in SB 839.

SVF Task Force December 15th, 2014

Next Steps

- **Legislation**
- **Pilot the draft place-based planning guidelines**
- **Conduct outreach on feasibility study grants program**
- **SB 839 Rulemaking**
 - **WRC target adoption in June**
 - **Issue Grants and Loans in 2016**



Questions?