

Water Resources Department

North Mall Office Building 725 Summer Street NE, Suite A Salem, OR 97301-1266 503-986-0900 FAX 503-986-0904

MEMORANDUM

TO: The Oregon Water Resources Commission

FROM: Racquel Rancier, Senior Policy Coordinator

Brenda Bateman, Administrator, Technical Services Division

SUBJECT: Agenda Item A, March 6, 2014

Water Resources Commission Meeting

Update on Senate Bill 839 Implementation

I. Introduction

In 2013, the Oregon Legislature passed Senate Bill 839 establishing a Water Supply Development Account to provide loans and grants for water supply projects that have economic, environmental and community benefits. The Legislature authorized funding of \$10.2 million in lottery revenue bonds to be issued in spring of 2015. The bill requires the Water Resources Department to take a number of actions before developing rules and issuing grants and loans. This report will provide the Commission with information on the progress of implementation and next steps.

II. Background

Senate Bill 839 authorizes the Department to make grants and loans to evaluate, plan and develop instream and out of stream water supply projects approved by the Water Resources Commission.

Eligible projects include but are not limited to projects that increase water use efficiency; develop new or expanded storage; allocate federally stored water; promote water reuse or conservation; and protect or restore streamflows. Also eligible are projects developed in connection with newly developed water that: improve operations of existing water storage facilities; create new or improved water distribution, conveyance or delivery systems; provide for water management or measurement; or determine seasonally varying flows. Before issuing grants and loans for these types of projects, two subgroups and two task forces must be convened, and rules must be developed.

The Account may also be used to fund ongoing studies to allocate stored water conducted by the U.S. Army Corps of Engineers (USACE) and comprehensive basin studies conducted by the U.S. Bureau of Reclamation (BOR). Funding for these studies are not subject to grant and loan procedures or scoring and ranking processes. Examples of projects that the Department expects to fund include the USACE Willamette Reservoir Reallocation Study and, if accepted by BOR, a proposed Deschutes WaterSMART Basin Study.

Seasonally Varying Flows Subgroups Two subgroups developed separate findings and recommendations that were delivered in a report to the full Seasonally Varying Flows Task Force on February 1, 2014.

The "Science Subgroup" recommended methodologies for protecting the flows needed during periods outside of the irrigation season to support the biological, ecological, and physical functions in watersheds. These recommendations could affect the design of water storage projects funded by the Water Supply Development Account. Access the final report here:

The "Economic Subgroup" recommended methods for evaluating the feasibility of water storage projects and performing cost-benefit analysis. Access the final report here:

http://www.oregon.gov/owrd/docs/SB839/Economic Subgroup 2014 02 Report Final.pdf

"Seasonally Varying Flows" Task Force – Utilizing the information and recommendations provided by the subgroups, the Seasonally Varying Flows Task Force will work to develop a recommended methodology for determining seasonally varying flows that optimizes functional benefits. In making its recommendations, the task force will consider the financial feasibility of new water storage projects and that such projects might not be appropriate or feasible in many locations. The task force must submit its report to the Governor, Legislature and Water Resources Commission by July 1, 2014. Thereafter, the Water Resources Commission will consider the task force's findings to adopt rules to establish the seasonally varying flows methodology in time for the rules to take effect on January 1, 2015.

"Governance" Task Force – The Governance Task Force is a separate task force that is charged with reviewing the structure of the decision-making process outlined in the bill. In addition, the task force will review and provide recommendations on: (1) the appropriate role of the state in providing loan and grant funding for multipurpose water development, and (2) the decision-making process for allocating newly developed water when the uses of the water are not specified in the funding application. The task force will submit its report and recommendations to the Governor and Legislature by July 1, 2014.

III. Discussion

Overview of the Science and Economic Subgroups

During the months of October through December, each subgroup met at the Oregon Water Resources Department five times. The members of both subgroups were actively engaged and thoughtful throughout the process and worked with staff through January to develop the finalized reports. The Department appreciates the members' dedication to the process and the numerous hours that subgroup members spent researching, writing, and reviewing materials. The subgroups delivered the final reports on February 1, 2014, successfully meeting the deadline set by the Legislature.

The Science Subgroup was convened by Brett Brownscombe, the Governor's Natural Resources Advisor. Subgroup members included: Tim Hardin, Oregon Department of Fish and Wildlife; Valerie Kelly, U.S. Geological Survey; Don Anglin, U.S. Fish and Wildlife Service; Leslie Bach, The Nature Conservancy; and Ken Stahr, Oregon Water Resource Department.

Richard Whitman, the Governor's Natural Resources Policy Advisor, convened the Economic Subgroup. Subgroup members included: Dawn Wiedmeier, United States Bureau of Reclamation; Said Amali, Integral Consulting; Paul Matthews, Tualatin Valley Water District; Bill Jaeger, Oregon State University; Colleen Johnson, Environmental Quality Commission; and Ray Jaindl, Oregon Department of Agriculture.

Brenda Bateman, Racquel Rancier, Jon Unger, and Rachel LovellFord from the Oregon Water Resources Department staffed these efforts.

Science Subgroup Findings

The Science Subgroup conducted a literature review and consulted with other experts, finding a broad consensus that protection of a variable flow regime is critical to ecosystem function. Many states and Canadian provinces have adopted a percent of flow (POF) method to allow some allocation of water, while protecting natural flow variability. Following their lead, the science subgroup recommended a percent of flow approach for those water storage projects that receive funding from Oregon's Water

WRC Agenda Item A March 6, 2014 Page 3

Supply Development Account. Using this approach, funding recipients could potentially store up to 15 percent of daily flow, minus prior allocations, without extensive study or review. The amount of water remaining instream would follow the shape of, but be less than, the natural hydrograph.

For publicly funded projects needing more water than the POF allocation, the Science Subgroup recommended that applicants may develop an in-depth assessment, in consultation with the Water Resources Department and a technical review committee. The in-depth assessment will address elements within hydrology, biology, geomorphology, connectivity, and water quality. After developing hypotheses relating proposed changes in the flow regime to key elements in the above categories, the hypothesis will be used to conduct quantitative analyses. The resulting studies will describe the results, including the magnitude, frequency and duration of seasonally varying flows to be protected.

Economic Subgroup Findings

In its final report, the Economic Subgroup examined the economic realities of developing and operating water storage projects.

In the report, the Economic Subgroup identifies several factors that demonstrate a need in Oregon for additional stored water. The report then describes the four primary techniques used to store water for instream and out-of-stream use. The Economic Subgroup conducted a literature review of methods used to evaluate both the financial feasibility and the cost and benefits of water storage projects. The report provides an outline of both approaches, as well as additional references for practitioners.

The Economic Subgroup recommended that the State form a Technical Review Team to assist applicants with the design of the financial feasibility and cost-benefit analyses. The report also recommends using pre-application meetings to improve communication and coordination between the State and funding applicants.

Appreciating the benefits that water storage projects can provide to both instream and out-of-stream users, the Economic Subgroup has laid out methods to help funding applicants and potential funders at the state level to fully account for both the costs and benefits of these projects.

IV. Conclusion

Senate Bill 839 represents an important step towards implementation of Oregon's Integrated Water Resources Strategy (see Recommended Actions #10e, #10b, #3a and #11b). The Department is committed to the successful implementation of Senate Bill 839 and the creation of a Water Supply Development Initiative that will benefit both instream and out-of-stream needs for Oregonians now and into the future.

The Department will continue to provide the Commission with updates on the status of implementation. In a subsequent Commission meeting, staff will provide an in-depth review of the bill in order to help the Commission prepare for rulemaking during the second half of 2014.

Racquel Rancier (503) 986-0828

Brenda Bateman (503) 986-0879