Oregon
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**MEMORANDUM**

**TO:** Water Resources Commission

**FROM:** Alyssa Mucken, IWRS Program Coordinator

**SUBJECT:** Agenda Item C, June 18, 2015
Water Resources Commission Meeting

**Willamette Basin Reservoir Study Update**

## I. Introduction

The Willamette Basin Reservoir Study is a multi-year effort between the U.S. Army Corps of Engineers (Corps) and the Oregon Water Resources Department. Project lead staff from the Corps will join the Department for this agenda item, providing general status updates and progress made in 2014 and 2015, including development of a Project Management Plan to guide the study process.

## II. Background

The Willamette Project, a series of 13 dams and reservoirs, provides important benefits for the Willamette Valley. Flood control is the primary authorization for this project; however, recreational use at many of the reservoirs is significant, and releases of water from the reservoirs provide hydroelectric power and support instream flows for fish, wildlife, and water quality. Water right certificates for the reservoirs authorize the storage of 1.64 million acre-feet for irrigation, a small portion of which is used to satisfy existing irrigation contracts.

Interest in accessing stored water in the Willamette Basin has been growing for many years. Municipalities across the basin are looking at the Willamette as a supply source to build redundancy and meet long-term needs in the basin. Oregon's 2012 Integrated Water Resources Strategy recognized the importance of this existing supply to meet a variety of future needs in the Willamette Basin. In 2013, the Department secured funding to co-sponsor the Reservoir Study. Earlier this year, the Corps received approval and funding in its workplan to begin working on the study.

The Willamette Basin Reservoir Study originally began in 1996 and was subsequently put on hold in 2000 to allow federal agencies sufficient time to consult on new listings under the Endangered Species Act. The study's main goal is to determine to what extent the reservoirs can be used to help meet future water demands in the valley and to determine if changes in project authorizations are necessary to meet those demands.

## III. Current Water Conditions

The current forecast for the Willamette Valley Project indicates this will be a deficit year in terms of storage. A deficit storage year is defined as a storage volume that is less than

900,000 acre-feet, measured May 10-20. This definition was established in the 2008 Willamette Valley Project Biological Opinion.

As of May 12, the total system storage in the federal Willamette Project reservoirs peaked at approximately 767,000 acre-feet of storage, or roughly 48 percent of the total storage capacity. The reservoirs are currently drafting to meet tributary and main-stem flow targets. These flow targets satisfy multiple instream needs, including fish, wildlife, and water quality needs. Low storage will mean that critical decisions will need to be made regarding the multiple needs for stored water. A Flow Management Team with representatives from state and federal agencies meets weekly to discuss planned releases to best meet these needs.

## IV. Update on the Small-Scale Surplus Agreement

In 2013-14, the Department and the Corps completed a study with limited funds to explore whether stored water was available to meet the water supply needs for the City of Creswell, a small community located in the Coast Fork Willamette River sub-basin. The Corps approved the final report in July 2014. A Surplus Water Supply Agreement between the City of Creswell and the Corps for a term of five years has been drafted and reviewed by the City. The Corps has authority to extend the life of the agreement for an additional five years.

A storage water right transfer along with a secondary application to use stored water must be approved by the Department before stored water is legally available. The Corps is currently working with the Department and the Bureau of Reclamation to administratively transfer 437 acre-feet of stored water in Dorena and Cottage Grove reservoirs to municipal and industrial uses. The Bureau of Reclamation is currently drafting the transfer application.

## V. SMART Planning Process

Planning modernization is a central component of the Corps' Civil Works transformation efforts. The planning process is the first step for Civil Works project development at the Corps, where projects are formulated, evaluated, and recommended for implementation. While the foundation of the process is strong, the current practice has been criticized as expensive, time-consuming, and problematic for non-federal sponsors, taxpayers, and Corps decision-makers.

One option for remedying these issues is through adoption of a more risk-based approach to planning known as SMART Planning (Specific, Measurable, Attainable, Risk-Informed, Timely). The Water Resources Reform and Development Act (WRDA) of 2014 formally incorporated this approach, commonly referred to as the 3x3x3 rule. As a result, all new feasibility studies must be completed within an optimal timeframe of 18 months, but no more than three years, at a total cost of no more than $3.0 million (federal & non-federal), with coordination early and often through Corps teams at the District, Division, and Headquarters level.

The Portland District and the Department are responsible for executing the Willamette Basin Reservoir Study and the Corps has already started forming a project delivery team. Through the SMART planning approach, the Corps' Portland District will continually communicate with their Northwest Division office and Headquarters in Washington D.C. to identify and resolve policy, technical, and legal issues early in the process.

The SMART planning framework also requires a full array of alternatives to be considered and evaluated. Much of this work has been completed throughout the basin over the years and will be compiled, updated as required, and utilized during analysis.

## VI. Current Status of the Project Management Plan

The Project Management Plan (PMP) is a living document that guides the direction of the study by outlining all work to be completed, identifying critical assumptions and constraints, assigning tasks, determining the schedule, and calculating costs to accomplish the final feasibility report. The environmental compliance and economic subtasks are still being reviewed for thoroughness. The Corps and Department anticipate having all tasks defined and budgeted by the end of June. This includes reaching agreement on the study's critical assumptions and constraints. At the conclusion of the study process, the report will be submitted to Congress for approval to reallocate storage in the Willamette Valley Project.

The Department will continue to hold regular stakeholder meetings. It is anticipated that these meetings will expand over time to include a broader array of agencies, interests, and water users. The agencies are working on a public outreach plan, which will be incorporated into the Project Management Plan. During development of the draft feasibility report, a series of public meetings will be held throughout the basin to disseminate information and solicit comments related to the proposed plan.

The Department continues to meet with the Oregon Department of Agriculture (ODA), which has taken the lead on estimating future agricultural water demands in the Willamette Basin. The Department will likely provide technical or financial assistance to support ODA's efforts. The Department is exploring whether additional analysis is needed to refine basin-wide municipal demands, industrial demands, and flow needs to support fish and wildlife uses. The Oregon Department of Fish and Wildlife continues to be involved in the Reservoir Study discussions.

## VII. Next Steps

Now that the Corps has received funding and approval to move forward with the basin-wide study, OWRD and the Corps will sign a new Feasibility Cost Share Agreement (FCSA) which starts the three-year clock under the new SMART Planning Framework. Signing of the new FCSA is expected to occur in late June. Once the FCSA is signed, the Corps will finalize a task order to acquire services related to environmental compliance, planning support, and economic analysis from a firm with recent experience with reallocation studies.

In order to maintain the three-year schedule required under SMART planning, several major tasks must be completed in the near-term. Within the first six months of signing the FCSA, demand information, preliminary data collection, and alternative analyses must be concluded and verified. The draft feasibility report, including draft environmental compliance documents, must be completed within the first 20 months. A stakeholder meeting is being planned for mid-to-late July.

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