



Oregon

Theodore R. Kulongoski, Governor

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: Water Resources Commission

FROM: Bill Fujii, OWSCI Grants Coordinator

SUBJECT: Agenda Item B, February 25, 2009
Water Resources Commission Meeting

Results of a 2008 Oregon Water Supply and Conservation Initiative Grant: Southern Willamette Valley Municipal Water Providers

I. Issue Statement and Background

In 2008, the Department awarded grants to 16 communities for use in their water supply planning efforts. The awards totaled \$200,000 and were given to communities that are taking a regional approach to meeting their current and future water needs. Applicants were eligible for up to \$20,000 per project and had to provide at least an additional 25 percent cost share. More than 30 applicants responded, requesting more than \$600,000 in total.

This report focuses on one particular project team, the Southern Willamette Valley Municipal Water Providers, led by Eugene Water and Electric Board (EWEB). The grantees requested help developing a plan to address technical and policy obstacles to using U.S. Army Corps of Engineers reservoirs in the Willamette Basin for municipal and industrial purposes.

II. Discussion

The Willamette Basin is the largest river basin in Oregon and contains approximately 70 percent of the state's population. It also contains very productive agriculture land and supports significant aquatic habitat for anadromous fish populations of the Pacific Northwest. The Willamette Basin is home to 16 of the largest 20 incorporated cities in the state. Approximately 85 percent of the population in the Willamette Basin is supported by public water providers.

Public water providers have a responsibility to provide safe, reliable water supply to communities to meet the basic needs for human consumption and sanitation, providing fire protection and other public safety uses, and for economic development. In order to meet this responsibility, water providers must plan to meet the future water needs within their service territories. These needs will be met through a combination of existing supplies, conservation measures, and development of new sources of supply.

The Willamette Basin water providers face a number of challenges to their ability to meet future water supply needs because there are few options for new sources of supply. Surface water is not available for new water rights from most sources. Further, the Willamette Basin program classifications for many surface water sources in Willamette Basin do not allow the use of water for municipal purposes year-round. Instead, Willamette Basin municipalities are directed to the storage projects to obtain water. Ground water is often not available for new water rights because of water quality concerns and ground water connection to surface water.

Municipal providers also face hurdles to utilizing additional water under their existing permits. In order to obtain an extension of time to fully develop existing permits, most municipal permits must undergo a review to determine whether use of the undeveloped portion of the right will maintain the persistence of listed species.

Finally, the future use of stored water may be affected by the 2008 biological opinion (BiOp) for the Willamette Basin Project. The BiOp, conducted by NOAA Fisheries, specified a number of restrictions that will be in place during the 15-year period of the BiOp. These restrictions affect existing irrigation contracts, as well as new contracts for the use of stored water from the U.S. Army Corps of Engineers Willamette Basin Project. The restrictions limit the total amount of stored water that can be provided under existing and new irrigation contracts to 95,000 acre-feet without renewed consultation with NOAA Fisheries and the U.S. Fish and Wildlife Service.

By comparison, the U.S. Army Corps of Engineers, who manage the Willamette Basin reservoirs, and the U.S. Bureau of Reclamation, who manage the stored water contracts in these reservoirs have long indicated that there is approximately 1.6 million acre-feet of stored water available for contracts from the Willamette Basin Project.

To meet their current and future water demands, Willamette Basin municipalities will likely need access to a portion of that stored water for both direct supply and for flow augmentation (mitigation) to protect surface water quality and quantity.

III. Project Description

One potential source of water for future water supply in the Willamette Basin is the federal reservoirs that comprise the Willamette Basin Project. These reservoirs collectively store approximately 1.6 million acre-feet of water annually in 13 reservoirs. Nine of these reservoirs are in the southern Willamette Basin.

Congress authorized the construction of these reservoirs for multiple purposes, including flood control, navigation, generation of hydroelectric power, irrigation; potable water supply; “and reduction of stream pollution in the interests of public health, fish conservation and public recreation.” To date, the US Army Corps of Engineers (USACE) has not allocated any storage space in the Willamette Basin Project to municipal and industrial (M&I) use.

Despite the multiple purposes for which the reservoir project was authorized, the US Bureau of Reclamation (USBOR) filed water right applications (and subsequently received water right certificates) for the entire 1.6 million acre-feet of storage, for irrigation uses only.

In 1996, state and federal agencies initiated the Willamette Basin Reservoir Study. The purpose of the 1996 study was to analyze water use and project water demand for a variety of uses in the basin, and identify ways to allocate reservoir water to assure the most public benefit within the policies and regulations of the USACE. The Reservoir Study was “put on hold” in 2000 following listing of certain Willamette River fish species under the Endangered Species Act (ESA). The partners in the Reservoir Study agreed that long-term decisions regarding allocation of the reservoir storage could not be completed until requirements for listed species were clarified. The ESA consultation process was completed and a biological opinion (BiOp) was issued in August 2008.

In 2008, the Southern Willamette Basin Municipal Water Providers (SWMWP), lead by the Eugene Water and Electric Board (EWEB), initiated a study report that explored whether a path exists for obtaining water from federal storage projects to meet future municipal water needs. For the purposes of the study the SWMWP includes: EWEB; Springfield Utility Board; and the cities of Creswell, Junction City, Veneta, Corvallis, and Monroe. SWMWP received a \$10,000 grant to conduct this study from the Oregon Water Resources Department’s (OWRD) Oregon Water Supply and Conservation Initiative (OWSCI).

As part of this study, the SWMWP: 1) summarized the Willamette Basin Project history; 2) compiled and documented water supply needs for southern Willamette Basin water providers; 3) identified issues and barriers to obtaining federally stored water; and 4) developed options for moving forward. Throughout this process, SWMWP worked cooperatively with staff from the USACE, USBOR and OWRD to compile and evaluate existing information, and to frame additional questions and issues that need to be resolved.

The study found that the current municipal water needs in the southern Willamette Basin total 52,000 acre-feet. The future municipal water needs in 2050 were estimated between 74,000 and 110,000 acre-feet. The SWMWP estimated had a near-term need for 500 to 1,000 acre-feet of stored water, and estimated a long-term need in 2050 of 11,000 to 30,000 acre-feet of stored water. The latter amount constitute between 0.7 and 1.8 percent of the total conservation storage pool in the reservoirs. These figures compare to current irrigation contracts for stored water in the Willamette Basin of 79,708 acre-feet, and a projected need in 2050 of 550,000 acre-feet, based on a 2001 study by the USACE.

The SWMWP study identified three primary issues or barriers to use of water stored in the Willamette Basin Projects for municipal and industrial (M&I) purposes. These impediments were identified as the limitations in the State of Oregon water rights issued for the projects, the anticipated pricing formula for M&I water, and the necessity of identifying an entity to assume the role of contracting authority.

As previously described, the existing storage rights for the Willamette Basin Project authorize storage only for irrigation purposes. Water rights authorizing storage for M&I purposes will be necessary for water providers to obtain and use stored water for municipal purposes.

Price for Municipal and Industrial (M&I) Water

According to its policies, the USACE would have to “reallocate” the storage in order to issue contracts for M&I use. USACE policies also indicate that the cost of contracts following a reallocation would be approximately \$1,500 per acre-foot. By comparison, Eugene Water and Electric Board currently provides water to its customers at a cost of approximately \$400 per acre-foot.

Contracting Authority

The USACE could issue contracts for uses other than irrigation from the Willamette Basin Project, developing agreements directly with private users. However, the USACE has indicated unwillingness to process a large number of requests for small amounts of M&I water, without grouping these customers together under one coordinating agency. With a coordinating agency in place, there is a precedent for the USACE to reduce the cost of reallocated water to the original cost of storage. This would change the cost from approximately \$1,500 per acre-foot to approximately \$189 per acre-foot.

IV. Summary

With the 2008 Biological Opinion now complete at the Federal level, much work remains to determine how much of the 1.6 million acre-feet in storage remains available for water supply, and what percent of that supply could be allocated to municipal and industrial needs. Additional issues could then be resolved, including a determination of the cost per acre foot. The grantees have an interest in continuing to work with the Water Resources Department and Federal agencies on these issues.