



Oregon

Theodore R. Kulongoski, Governor

Water Resources Department

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MEMORANDUM

TO: Water Resources Commission

FROM: Tom Paul, Deputy Director

SUBJECT: Agenda Item C, November 18, 2010
Water Resources Commission Meeting

Willamette Basin Supply Briefing

I. Issue Statement

The Willamette Basin contains the majority of the State's population, leads the state in agricultural production, and is important for recreation and power production. The U. S. Army Corps of Engineers (COE) plays a major role in water management in the Basin. The COE operates 13 storage reservoirs holding more than 6.2 million acre-feet of water, including 1.64 million acre-feet of conservation storage (see Attachment 1). Water right certificates were issued to the U.S. Bureau of Reclamation (BOR) for the water stored behind the COE reservoirs within the conservation storage pool. The authorized use, of the stored water is for irrigation as stated on the water rights certificates. There are major water supply challenges facing the Basin. Stored water is being viewed as a key water source to satisfy the various needs.

II. Background

The COE, Bonneville Power Administration, and the (BOR) are the Federal Action Agencies involved in the operation of the 13 dams and reservoirs. The reservoirs were authorized for a variety of purposes, including flood control, generation of electricity, recreation, and municipal and industrial (M & I) water supply. Recreational use at many of the reservoirs is significant and releases provide instream benefits for fish, wildlife, navigation and water quality. The two water right certificates for the entire conservation pool are held by the BOR for irrigation, although only a small percentage is under contract.

In 1996, state and federal agencies initiated the Willamette Basin Reservoir Study. The study analyzed a variety of water uses in the basin, and identified potential ways to allocate the stored water. The Reservoir Study was suspended in 2000 following the listing of Willamette River fish species under the federal 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.

In July 2008 the National Marine Fisheries Services (NMFS) completed consultation with the Federal Action Agencies on the impact of the Willamette River Basin Project on species listed for protection under the ESA through issuance of a Biological Opinion (BiOp). One of the Reasonable and Prudent Actions under the Willamette Valley Project BiOp involves actions dealing with flow management, including protecting minimum stream flows with instream water rights in tributaries and the mainstem.

III. Discussion:

COE operation and planning activities in the Willamette Basin are ongoing. Funding for major activities of the Willamette Basin Reservoir Study is limited. The COE, in response to a request from municipal interests, is in the process of writing a white paper that will outline allocation of 499 ac ft of stored water to municipal use and how to access stored water for M&I purposes.

Concurrently, the COE is actively working on the Reasonable and Prudent Actions required by the BiOp. One action involves a change of character of use transfer for the water rights certificates for the project from irrigation to multi-purpose storage. The possibility of a water right transfer application being filed for instream use has raised concerns on the part of municipal and agricultural communities.

Under the BiOp, the flows required for species restoration are yet to be determined under one of the Reasonable and Prudent Actions. Although the BiOp identifies minimum flows at Albany and Salem, uncertainty of the flows to be determined under the BiOp has raised concerns about the future availability of stored water for other uses.

The Department convened discussions with the COE and stakeholders about water needs and how the stored water could meet those needs. At the most recent meeting hosted by the COE's Portland District office, the COE committed to defer filing the water right transfer application until a later date when more information is available.

IV. Summary

No action is required, this item is for information only. A panel will discuss how they see the water needs in the Willamette Basin, and possible next steps to addressing those needs. Panel participants consist of Todd Heidgerken, Manager, Community and Intergovernmental Relations, Tualatin Valley Water District – representing the Oregon Water Utilities Council; Joe Hobson, Attorney – representing the Oregon Farm Bureau; and Laura Hicks, Planning and Project Management Chief – representing the Portland District of the Corps of Engineers.

Attachment 1: Use of Willamette Storage

Bill Fujii, 503-986-0887

Reach	Reservoir	Total Conservation Storage Volume	Cumulative Conservation Storage	Irrigation Contracts ^a	Cumulative Irrigation Contracts acre-feet ^b	Flow Augmentation ^c	Cumulative Flow Augmentation ^d	M&I Contracts	Balance ^e	Unaccounted Storage (%) ^f
Coast Fork Willamette										
Row River - Cottage Grove	Cottage Grove	30,000		56	56	3,200				
Row River	Dorena	70,000		51	107	7,900				
Middle Fork - Row River	Dorena, Cottage Grove		100,000	1,166	1,273		11,100		87,627	88%
Middle Fork Willamette										
Fall Creek	Fall Creek	107,500		13	13	0				
	Lookout Point	340,000		95	108	6,600				
	Hills Creek	194,600				47,600				
Downstream of Fall Creek	Fall Creek, Lookout Point, Hills Creek		642,100	959	1,066		54,200		586,834	91%
McKenzie River										
	Blue River	223,000	223,000	1,740	1,740	1,500			217,060	97%
	Cougar					2,700	4,200			
Long Tom River										
	Fern Ridge	95,000	95,000	24,594	24,594	700	700		69,706	73%
Santiam River										
North Santiam River	Detroit	300,000		12,269	12,269	59,500				
South Santiam River	Green Peter	280,000		1,175		178,500				
	Foster									
Santiam River to Forks	Detroit, Green Peter, Foster		580,000	1,835	15,279		238,000		326,721	56%
Mainstem Willamette										
McKenzie River - Coast Fork	Fall Creek, Lookout Point, Hills Creek, Cottage Grove, Dorena		742,100	10	2,349				739,751	
Long Tom River - McKenzie River	All except Santiam Basin reservoirs & Fern Ridge		965,100	769	4,858				960,242	
Santiam River - Long Tom River	All except Santiam Basin reservoirs		1,060,100	12,425	41,877		292,000		726,223	69%
Downstream of Santiam River	All		1,640,100	23,275	80,431		536,700		1,022,969	62%
Totals		1,640,100		80,431	80,431		536,700		1,022,969	62%

a: The total acre feet of contracts, both issued and pending.

b: The cumulative acre-feet of contracts per sub-basin.

c: Acre-feet of stored water used to meet flow targets.

d: Cumulative acre-feet of stored water used to meet flow targets in each basin.

e: The amount of conservation storage available after taking into account existing and pending irrigation contracts and current flow augmentation requirements.

f: The percentage of conservation storage in each reservoir or system that is not accounted for by irrigation contracts or current flow augmentation.



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**Tom Paul, Deputy Director,
Water Resources Department**

**Laura Hicks, U.S. Army Corps of Engineers,
Todd Heidgerken, Tualatin Valley Water District,
Joe Hobson, Attorney**

November 18, 2010

The Willamette Basin

13 multi-purpose reservoirs



