

## **ESPA Plan 2009 ESPA LATE SEASON RECHARGE DRAFT PLAN**

This document outlines a draft proposal for the 2009 late season recharge effort, for the Recharge Working Group review and refinement, and Idaho Water Resource Board (Board) for its consideration and decision making.

Early Season Recharge -The total volume of the Board's 2009 early season recharge program was approximately 104,000 acre-feet. The early season recharge effort took advantage of abundant natural flow to recharge both above and below American Falls (AF) under the Board's water right. The majority of the recharge water (73 kaf) was delivered through the Aberdeen-Springfield, Burgess, Fremont-Madison, Harrison, Idaho Irrigation District and Silkey Canals (73k a-f) and the remainder through the Milner-Gooding Canal (31 kaf). While this volume exceeds the established CAMP annual recharge goal, the Implementation Committee recognizes that all annual recharge opportunities must be maximized in order to compensate for years of low water availability. Accordingly, this draft late season recharge plan outlines steps to implement a roughly 67,000 a-f 2009 late season recharge program.

Late Season Recharge - The ESPA Plan provides broad direction on how to implement recharge, including a goal of equal distribution above and below AF. As a result, this late season recharge plan primarily focuses on recharge below AF through the North Side and Milner-Gooding canals along with recharge on the Great Feeder and Fremont-Madison canals. In addition, the ESPA Ground Water Model indicates that waters recharged below AF, with the possible exception of the Egin Bench recharge site above AF, have a longer retention time than recharge in canals above AF, providing hydrologic rationale for the late season emphasis.

Source of recharge water – (1) Initial indications from the Bureau of Reclamation and Water District 1 are that there will be sufficient carryover in the Upper Snake Basin reservoirs, and with sufficient carryover, canal companies envision minimal risk in making their storage water available for recharge. (2) Beginning in late October, up to 1,500 cfs of natural flow is expected to be available for diversion at Milner Dam under the Board's recharge permit.

Canals expected to participate - (1) Fremont-Madison Irrigation District has indicated it will conduct recharge at Egin Bench between mid-September and mid-November, in a program similar to the one it conducted last year. Fremont-Madison expects to recharge 5,000 a-f of rental pool water it plans to lease back to itself. (2) Great Feeder canals in the Rigby area have indicated an interest in a late season recharge effort, using rental pool water. The Great Feeder canals that would be participating are Burgess, Rudy, Progressive, Farmer's Friend and Harrison. An alternative to these canals actively recharging is the possibility of agreeing to make their storage water available for a fee, to be delivered down-river to canals below AF; this type of arrangement is currently being investigated. (3) Late season recharge is likely in the Milner-Gooding and North Side Canal Canals. The AFRD #2 and North Side Canal Company have expressed interest in participating in the 2009 late season recharge program.

Expected duration of late season recharge - based on the water availability conditions discussed above, and subject to freezing conditions, it appears feasible that 2009 late

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season recharge could occur for a minimum of approximately 30 days to a maximum of approximately 60 days.

Volume and cost of recharge - It is estimated that 67,000 a-f can be recharged in the 2009 late season program, based on a 60-day recharge program. It is presumed the Board will pay each canal company a conveyance fee of up to \$3.00/a-f, resulting in a cost of approximately \$201,000 (plus payment of Great Feeder storage fees, still to be determined).

A summary of the most likely canal companies to be recharging, recharge water source, estimated recharge volume (based on 60 recharge days), and estimated cost of recharge to the Board is indicated below:

canal	water source	volume	unit price*	cost
<u>Below American Falls</u>				
Milner-Gooding	up to 1500 cfs of natural flow available after Oct. 20 <sup>th</sup>	42,000 a-f <sup>1</sup>	\$3.00/a-f	\$126,000
North Side	up to 1,500 cfs of natural flow available after Oct. 20th	10,000 a-f	\$3.00/a-f	\$ 30,000
<u>Above American Falls</u>				
Great Feeder	leased Great Feeder storage	10,000 a-f <sup>2</sup>	\$3.00/a-f <sup>3</sup>	\$ 30,000 + lease fees
Fremont-Madison	leased Fremont-Madison storage	5,000 a-f <sup>4</sup>	\$3.00/a-f	\$ 15,000
<b>Total</b>		<b>67,000 a-f</b>	<b>\$3.00/a-f</b>	<b>\$ 201,000 + lease fees</b>

Notes:

\* \$3.00/a-f conveyance fee paid to canal companies. Does not include lease cost of storage water

<sup>1</sup> approximate 42,000 a-f volume based on 350 cfs recharge diversion.

<sup>2</sup> capping Great Feeder recharge at 10,000 a-f is recommended in order to equalize above/below AF distribution and manage Board recharge payments.

<sup>3</sup> cost likely higher due to lease fees

<sup>4</sup> Egin project

Additional cost may be incurred for water quality monitoring if the Shoshone recharge site is used in conjunction with Milner-Gooding recharge. In the 2009 early season recharge program, the Lower Snake River Aquifer Recharge District covered this cost.

Summary - if there is natural flow up to 1,500 cfs at Milner in October, the overall projected total 2009 recharge, based on our best current estimate would have the appearance of:

recharge above A F: spring: 73 kaf, fall: 15 kaf (Egin +Great Feeder) 88 kaf total

recharge below AF: spring: 31 kaf, fall: 52 kaf (Milner-Gooding) 83 kaf total  
(North Side)

2009 Total: 171 kaf

The plan outlined herein is designed to ensure the CAMP recharge distribution equity objective, as well as preserve the fiscal integrity of the Board's recharge funding for 2010. With natural flow water available for recharge in the spring of 2010, funding carryover should be sufficient to assure continued significant recharge volumes.