



Eastern Snake Plain Aquifer (ESPA) Comprehensive Aquifer Management Plan

Recharge Working Group Meeting #1

**Draft Meeting Summary
July 2, 2009
Idaho Dept. of Water Resources
900 N. Skyline
Idaho Falls, Id. 83402**

Overview

The Recharge Working Group (WG) discussed the following at the July 2, 2009 meeting:

- Early Season Recharge 2009
- Late Season Recharge 2009
- Timing and Location of Recharge
- Water Quality Monitoring
- Constructed Recharge Sites
- Recharge Liability

Early Season Recharge 2009

Bill Quinn provided the latest early season recharge estimates - 102 kaf at a cost of \$215,000 for wheeling costs. Fees negotiated with the Board and canals for wheeling costs vary widely. WG members recommended examining approaches to increase recharge earlier in the season because "more could have been in early 2009 recharge if more canals were 'ready to go' starting on April 1, 2009". The Board went forward with companies that responded to the RFP, so only 5 major canal companies recharged in the early season. The WG would like to develop long-term contracts with more canal companies so that recharge is maximized when water supply is available.

Long-term contracts with all canal companies identified in the ESPA Plan must be developed as there is a recognition that the core of any ESPA recharge efforts will rely on canals. Ideas regarding elements of the contract were discussed including providing a small fee to canals to cover maintenance fees even if the Board's right is not in priority, establishing a uniform wheeling fee and an option for an annual renewal clause.

Late Season Recharge 2009

A potential 50kaf – 100kaf of late season recharge water may be available in 2009. In order to maximize late season recharge, coordination between BOR (operations manager), IWRB, and the Committee of 9 is required as recharge will require leased water; funding for purchase of the leased water come from either IOU's or use of Board approved 2010 spring recharge funds (subject to approval and considerations of financial impairment of 2010 early season recharge). Determining the price of leased water, given the likelihood that a block of flood control water will be released, should be reasonable although space holders will include 'last to fill' provisions.

The WG will rely on Board staff input/data regarding the location(s) for where the most beneficial use of late season recharge can take place, if flexibility is available.

A modeling effort to determine the geographical targets and temporal effects of recharge will be developed that will assist in decisions regarding late season recharge in 2009 and beyond. A 'user-friendly/synergistic' chart to identify where best to recharge will take place of the canals providing recharge will be developed.

There is research (USGS reports, conference write-ups, etc) that could provide guidance on assembling a list of prioritized projects.

Timing and Location of Recharge

One of the issues to explore further is the transient time of water recharged. For example it may make sense to focus early season recharge in the upper valley due to shorter resident time for later use during the irrigation season. Later in the season it may make more sense to recharge below Milner where the residence time may be longer.

The first issue is to take advantage of water when it is in priority and be aggressively opportunistic with the contracts in place. The next issue is to determine where it makes most sense to recharge (long term vs. shorter residency of water). This determination is critical to allocating Plan resources wisely.

Finally, the WG needs to determine what to do, where to recharge and when it is most appropriate.

Water Quality Monitoring

As a dedicated recharge site there is a water quality monitoring program to address contamination concerns at Shoshone. A consultant, former DEQ staffer, was hired that developed a water quality report and there have not been problems. It was emphasized that DEQ is not an obstacle, but rather a partner where projects that monitor water quality and promote healthy communities can be developed.

Constructed Recharge Sites

Bill Quinn noted that there were a lot of lessons learned from the W-Canal project on constructed recharge sites, even though the Board decided not to continue to pursue it. Lessons from W-Canal project are being applied to the MP 31 site. One major lesson is that the large scale recharge, as envisioned in the Plan, cannot be implemented without significantly more resources, energy and time.

The primarily criteria used for identifying the W-Canal project included 1) located on state land and 2) close to a canal (gravity flow). What was learned was that the soils at the W-Canal, like most in the ESPA, have slow infiltration rates (6 inches – 11 inches a day) and that identifying lava tubes and basalt fractures is very difficult. Treatment of soils (scarification) can improve the infiltration rates but those sites need to be maintained due to blockage and build up. Other lessons from W-Canal include the need to manage expectations for a quick and cheap alternative - recharge if done right will cost

money and the question is whether the cost of infrastructure vs. the availability of water is acceptable. While smaller sites will be identified, there is increased maintenance costs and the need to control noxious weeds at all recharge sites. This cost should be accounted for in decision making.

A prioritized list of potential constructed managed recharge sites (small and large areas) will be developed. Criteria include:

- Suitability of the site for infiltration (permeability, soil thickness, density of bedrock) likely determined by a GIS exercise
- Proximity to a canal and gravity fed
- Canal conveyance capacity. (It was recognized that small sites should be identified but may have increased maintenance efforts due to removal of bacteria and other blockages.)
- Costs, particularly relate to the price of injection wells.

Finally, WG members suggested a vision for involving private landowners and cities in recharge projects. Many have expressed interest in becoming “shareholders” in this process. It also was suggested to consider a land exchange program with the federal government.

Recharge Liability

The issue of recharge liability was discussed and concerns were expressed about potential lawsuits. Currently the canals, not the State, assume all risks and liabilities related to recharge (contamination/flooding). The WG recommends statutory changes to have the State assume such liability since recharge is being conducted under the state water plan and ESPA Plan. The interim Legislative Committee is looking for guidance on liability.

Next Steps

Action	Responsible
Early action: Determine sites for late season 2009 recharge	Bill Quinn
Begin a modeling effort to determine the geographical targets and temporal effects of recharge	?
Develop long-term contracts for recharge	WG
Discuss potential for statutory changes regarding recharge liability	WG
Develop a prioritized list of constructed recharge sites based on criteria above	Bill Quinn
Continue collaboration with DEQ on water quality monitoring	WG/DEQ

Recharge Working Group Meetings

- June 14 at 10 am (teleconference) - late season recharge effort primary effort
- August 5 at 8 am (teleconference) – to review list of constructed recharge sites, canal contracts, and liability issues

MEETING ATTENDEES *telephone participation

Recharge Working Group Members

1.	Peter	Anderson	Conservation
2.	Barry	Burnell*	DEQ
3.	Rebecca	Casper	Development interests
4.	Craig	Evans	Groundwater
5.	Jeff	Raybould	Surface water
6.	Linda	Lemmon*	Spring Users
7.	Scott	Clauson	GW
8.	Charles	Correll	Municipalities
9.	Lloyd	Hicks	Surface water
10.	James	Tucker	Hydropower
11.	Steve	Howser	Surface water users

Ex Officio Members and Other Attendees

12.	Jonathan	Bartsch	CDR Associates
13.	Jennifer	Graham	CDR Associates
14.	Joan	Kathol	CDR Associates
15.	Brian	Patton	IDWR
16.	Rich	Rigby	BOR
17.	Lynn	Tominaga	Idaho Ground Water Appropriators, Inc
18.	Walt	Poole	Idaho F&G
19.	Bill	Quinn	IDWR