Eastern Snake Plain Aquifer (ESPA)
Comprehensive Aquifer Management Plan

Advisory Committee

MEETING NOTES

Date: Thursday, June 19, 2008
Time: 10:00 a.m. to 5:00 p.m.
Location: Mennonite Meeting Hall, Aberdeen

MEETING AGENDA

1. Welcome, Introductions, Agenda Review and Meeting Note Finalization

2. Presentation and Discussion: Water Availability for Recharge
   - Steve Burrell – IDWR

   Goal: Respond to Committee input regarding water availability estimates for recharge.

3. Presentation: A&B Conversion Study
   - John Roldan – MWH Engineering

   Goal: Committee understanding of A&B Conversion study results.

4. Presentation and Discussion: Revised Management Options and Packages Alternatives
   - IDWR

   Goal: Examination of the refined management alternatives; Committee concurrence on the direction regarding packaging of alternatives.

5. Presentation and Discussion: Fish and Wildlife Sub-Committee
   - Status of Modeling Efforts – IDWR and Idaho Power
   - Observations and Next Steps

   Goal: Committee understanding of Fish and Wildlife Sub-Committee progress and discussion of observations.

6. Discussion: Economic Sub-Committee Briefing

   Goal: Report Economic Sub-Committee funding approach and briefing on the status of economic analysis.

7. Discussion: Next Steps and Future Meeting Agenda Development

WELCOME, INTRODUCTIONS, AGENDA REVIEW AND MEETING NOTE FINALIZATION

Jonathan Bartsch, CDR, reviewed and finalized the meeting notes from May and discussed observations, concerns and perspectives regarding the overall CAMP Committee process. It was noted that the CAMP process is being discussed outside Committee meetings by individuals and agencies and was a key topic at the IUWA conference in Sun Valley.

During initial discussion, some voiced their opinion that subdivisions are being given a 'free ride' regarding water use and asked the group to consider recommending modifications to existing laws (modify to a true domestic right) and/or develop mechanisms to include them in the funding apportionment.

A Committee member noted that the Committee process has yet to identify the legislative barriers to implementing the management actions being considered. Potential barriers raised included the state policy of 'zero-flow' at Milner and funding mechanisms, specifically combining the Board's bonding authority with a Local Improvement District authority. A draft list of potential legislative changes will be outlined for the Committee. An interim legislative Committee meeting will be held on the 14th of July specifically to discuss the CAMP process and any legislative action required. Hal Anderson will attend and noted that it is a 'positive' development that this Committee is so involved.

Others suggested that the Committee should identify and prioritize 'low-hanging fruit' to take advantage of opportunities as they present themselves. Low-hanging fruit includes those actions that are quickest to implement, and most cost-effective and affordable. Committee members added that while moving forward slowly may be the correct and most practical approach, there will be tension with legislators who are looking for an overall solution – one answer that solves everything. It was noted that a 'silver bullet' approach is unlikely to be developed and that financial constraints are the likely drivers and discriminators.

A participant expressed concern that recharge was being over-emphasized by the Committee. Other Committee members noted that there are challenges to implementing recharge due to water supply, infrastructure requirements and associated environmental issues. Some suggested that if recharge with water outside the Board's natural flow rights is a part of the short-term improvements, a fall recharge effort might be most useful. Rich Rigby, USBR, summarized the NOAA Fisheries USBR Upper Snake Actions Incidental Take Statement (Statement) for the Committee. Per his summary, NOAA Fisheries have indicated that an 'indirect take' is likely to occur for the 13 ESA-listed salmonid species as a result of Reclamation actions. The Statement notes that a "take is primarily a result of Reclamation's effect on Snake and Columbia River flows during the juvenile migration season." Rigby highlighted the implication of the Statement flows that are in addition to salmon flow augmentation water. Objectors to the NOAA Biological Opinion (BO)have filed a trailing complaint and are working to challenge the BO elements and other associated opinions. It was noted that this Statement provides an additional challenge to large scale recharge efforts if they are deemed to further harm, harass or (indirectly) take such species. Other Committee members mentioned that the word recharge has been misused and merely refers a way to re-balance the aquifer. If recharge cannot occur, re-balancing the aquifer

will not be accomplished and other benefits (spring discharges) will not be realized. They expressed the view that the idea is to divert water for recharge in surplus years and recommended that the group not get caught up in the notion that all water needs to go downstream for ESA purposes.

Other Committee members noted that the group had come a long way and it should be able to make substantive recommendations on or before October of 2008.

PRESENTATION: WATER AVAILABILITY FOR RECHARGE

Steve Burrell, IDWR, provided a presentation illustrating assumptions and estimates of water availability for recharge. The presentation responded to Committee skepticism regarding the availability of water for recharge. Steve outlined the assumptions and noted that without such aggressive assumptions water would not be available for recharge. The assumptions included time needed to construct infrastructure for recharge, existing canal capacity to accept recharge, what time of year canals would be available to accept recharge (March 1 for lower valley canals) and the location of the anticipated recharge activities. The assumptions are quite aggressive robust, particularly having 20/20 foresight and the capacity to develop infrastructure to handle the 8,300 cfs per day. Steve noted that the 8,300 cfs maximum per day for recharge essentially put a limit on available water recharge (in response to whether 1997 had been eliminated from the analysis). He added that in March the conditions are typically cold and wet – not ideal for recharge. The number of years when canals were available for use on March 1 has been examined and included in the analysis.

Comment [MSOffice1]: Is there a presentation that will be posted? If so, note that here, because otherwise the notes are missing details on what assumptions were discussed by Steve.

Discussion Notes:

- Q: There is a difference between canal carrying capacity and the leakage in canal – can you build enough capacity to recharge? A: With the stated assumptions, yes we think this is what can be accomplished.

- Comment: We need to examine fall recharge efforts further – fall is a better time for recharge than March/July. The use of private water versus Board's existing recharge rights should be examined.

- Q: Are the Upper Valley canal rights identified – some of the rights in the upper valley are from the 1890's?

- Comment: Even if you work out the Milner Power right issue there are environmental factors that will cut down on the ability to recharge since there are maintenance flows to consider. You need to maintain at least a 350 cfs at American Falls, could any recharge occur under that obligation?

- Q: Have you examined large scale diversion for recharge in Idaho Falls? A: Yes the available canal capacity was examined (4,000 cfs).

- Q: What about Wood River recharge efforts that were discussed by Bill Hazen, including use of flood control water for recharge outside of the existing canals? A: While this presentation discusses recharge on the Wood, it focuses on the Board's recharge right versus flood control or use of storage water. The Wood River recharge assumptions are the same as previously presented.

- Q: During the 20 year period, what assumptions did you make regarding how long it would take to first implement infrastructure?

- Comment: If we want to manage this system differently, to realize the greatest bang for the buck, the answer may be a fall recharge program (November). We need to prioritize resources for recharge and create a revenue stream that will be able to implement such infrastructure.

- Comment: We cannot run 3,200 cfs into the ground in the short run, this is not a realistic objective. Response: Agreed, under the existing conditions we cannot deliver the type of water being considered and discussed (need 160 ac of land to distribute the 5,800 cfs) although the assumption is that large infrastructure would be in place.

- Comment: The use of flood control water should be considered

- Comment: In order to realize the benefits, the use of injection wells are likely to be needed off of canals; the diversion capacity is too limited without it.

PRESENTATION AND DISCUSSION: A&B CONVERSION STUDY RESULTS

John Roldan, MWH Engineers, discussed the findings of the A&B conversion study. The parameters of the study were outlined including:

- Conceptual Study
    - Evaluated conceptual alternatives for conversion of Unit B of the A&B Irrigation District from ground water to surface water
    - Prepared Class 5 cost opinion for recommended alternative
- Assumptions
    - Surface water supply will be available from the Snake River to *completely* replace ground water currently delivered to Unit B
    - Unit B maximum demand of 1,000 cfs

John noted that three alternatives had been developed including:

- Alternative 1: Gravity diversion from Snake River
- Alternative 2: Pressurized diversion from Snake River
- Alternative 3: Surface delivery for ground water recharge

The issues, including the surface water delivery for groundwater recharge, infrastructure and cost were outlined for each of the alternatives. The preferred alternative identified was Alternative 2: Pressurized diversion with single source from Lake Walcott with two mains for conveyance to

the northern and southern regions of Unit B. The 'opinion of probable project cost' for this alternative was $360 million in capital cost and $3.4 million annually for Operations and Maintenance. Additional analysis could include examination of a smaller pipe to make the project more cost effective. The Committee discussed the challenges of implementing such a large-scale conversion and deliberated about how best to move forward with the A&B conversion study information.

Discussion Notes

- Q: What were the results from the analysis of Alternative 3 – surface delivery for ground water recharge? A: While recharge was a viable option, the surface soils are not favorable for construction of an infiltration basin, similar to much of the ESPA, and building injection wells in the Valdoze zone is not a cost effective way to go.

- Q: Would the pressurized system be taken all the way to the farm? A: We assumed that we would be delivering the conversion water to existing conditions – right to the well head. The current surface water system cannot deliver the head needed at the farm. One option to optimize the system might be using a smaller pipe at the headways.

- Q: What is the source of water for conversion and providing the 1,000 cfs? A: It has been assumed that a replacement supply would be available through the Salmon Flow Exchange (below Milner water) and the raising of Minidoka dam. In half of the years there will be a full replacement of the gw, while the other half the supply will not be available (supplemental pumping would be required).

- Q: What does Idaho Power think about 1,000 cfs coming out of the river? Response: There will be environmental issues that will need to be plugged into the overall evaluation.

- Q: Have you looked at pulling out water from the Milner-Gooding Canal? A: No

- Comment: While the cost is significant and implementation issues challenging, we should not forget that the hydrologic experts tell us that A&B conversion is the single most important tool for improving aquifer levels, particularly due to its location and the fact that the benefits radiate equally – upper and lower valley.

- Comment: If I have done the math correctly, wouldn't it be cheaper to buy out 64,000 acres at a cost of $1250 ($80 million) than to do A&B conversion? Response: Yes, however when you consider the economic impacts and the fact that A&B wants to continue farming, it should caution us against looking only at buyouts. A better approach may be a partial conversion along with buyouts.

- Comment: The full replacement scenario outlined is the most aggressive scenario and we could start looking at a partial conversion. An optimization scenario to examine a part that is viable should be undertaken.

PRESENTATION AND DISCUSSION: MANAGEMENT ALTERNATIVES AND INITIAL PACKAGING

The management options and revised packages of alternatives (small, medium, large with either a recharge or demand reduction emphasis) were presented and discussed. Brian Patton, IDWR, outlined the changes in the management options and the Committee discussed where to start regarding recommendation of substantive packages. Numerous Committee members emphasized that costs and funding strategies will be the key factor in deciding where to begin. Others noted that weather modification, soft conversions, demand reduction and

Comment [MSOffice2]: What's supposed to be here? The sentence just kind of drifts off …

Discussion Notes

- Comment: We agreed to put a qualifier on the $1,250 for buyouts, this needs to be included in the documentation. Response: The qualifier will be added to future documents.

- Comment: The costs estimates for demand reduction are likely to be more accurate than the aquifer recharge estimates. The demand reduction component is sensitive to a range of factors (where, when, under what conditions). Full buyouts are estimated to cost $1,250, while other demand reduction elements (crop mix, rotating fallowing etc…) will likely be cheaper, although they may need twice the acreage to achieve the benefit. A demand reduction plan should be created to capitalize on the opportunities and optimize the benefits.

- Comment: While commodity prices are extremely high at the moment, we cannot base our approach on the current values – this is a long-term management plan. What will not change is the need for management and flexible adaptation of our approach.

- Comment: There are some key differences between the demand reduction and recharge packages. Demand reduction advantages include that the measures are not dependent on water supply, although some may have economic impacts and greater initial costs. Recharge has water supply issues, infrastructure needs and environmental impacts (spring sag and base-flow for ESA). Costs for implementing infrastructure and potentially renting water may be comparable to demand reduction.

- Jonathan encouraged the Committee to focus on the initial, substantive recommendations that the Committee will make in the CAMP. He reiterated his viewpoint that the Committee should start with realistic, implementable and affordable recommendations in the immediate term, while also articulating a long-term vision to fully address the Board's Goal and Objectives. Other Committee members concurred.

- Comment: We need to look at the issue of stubble and provide incentives to help reduce the watering of stubble. As an incremental demand reduction element, reducing the watering of stubble could be a way to improve the budget.

- Comment: Soft conversions have a lot of value to deep well pumpers and we need to think of this in the first increment. It is cost effective and we should have an approach to advance this option.

- Comments: A rotating fallowing program, such as in southern California, makes a lot of sense. The concept is to contract with a canal company to fallow, on a rotating basis, the land within a district. The land could either be groundwater or surface water irrigated and those who benefit would pay for the costs. Such a program would make more water available for recharge and conversions. This should be part of the overall package and could help solve problems upstream. Basically this is a 'set-aside' program that would allow the free market to dictate the terms. The focus needs to be on reducing the consumptive use component.. There could be a target identified, say a 10% consumptive use reduction in ten years, and then districts/companies could bid to accomplish the target.

- Protections should be included, such as only a certain percentage of a district could come out of production in any season so as to reduce third party impacts. One approach is to have a district/canal company sign up for a specified period of time and a determined percentage. The CAMP needs to develop a plan that incorporates demand reduction elements and allows the free market to help to address problems.

- Comment: One of the issues regarding where we start in the plan connects with funding. Where are the benefits going to be realized and what should we pay for such improvements?

- Comment: I think a sliding scale versus a small/medium and large package is better in terms of decision making. A scale provides us with more choices, although the downside is that the expectation of the legislature for substantive recommendations. I still like the shopping cart approach.

- Comment: We need a package that is do-able, cost effective and will make a positive difference.

- Comment: As part of the plan the measurement, documentation and transparency must be a key component.

- Comment: One issue to be sorted out with the demand reduction is the percentage of permanent and temporary reductions. Originally, the small, medium and large packages, envisioned 10,000 af in permanent demand reduction, while the balance was temporary. In this way, we would work toward the Board's goal of 'economic viability'.

- Comment: We are going to lose additional CREP acres unless something is mandated. We need to provide a way to ensure that actions to improve the aquifer will occur. CREP continues to provide the best bang for the buck.

- Comment: Eventually, water will have a real value and we may need to provide people with an opportunity to 'stay afloat'; demand reduction approaches provide mechanisms to address those needs.

- Comment: The Committee may have gone as far as we can go without talking about who pays and how much.

- Comment: We need to identify general ideas, move forward with key issues and tools to address the problem. We need to remember that adaptability is an essential component and that measurement and transparency are needed.

- Comment: While this water year is generally good for water users, it is the 2nd worst year on record for spring users. This is a result of earlier shortages that are now affecting the spring discharge.

- Comment: Sub-topics for consideration as we develop recommendations could include how we manage water in good years versus bad – may need to pick and choose the options dependent on the conditions.

PRESENTATION AND DISCUSSION: CAMP FUNDING MECHANISMS

Jim Wrigley, the Water Resource Board's financial advisor (from Wells Fargo Bank), presented information to the Committee regarding one potential funding mechanism. Wrigley discussed the opportunity to combine the Board's existing bonding authority with a Local Improvement District (Board does not currently have the authority to create Local Improvement Districts), to create a broad-based, tax-exempt way to fund ESPA projects. The goal is to implement as much possible with tax-exempt funding over a reasonable time frame. Wrigley distributed a document entitled "Snake River Plain Groundwater Improvement Projects" to illustrate the difference between tax exempt and taxable financing options, as well as a document from Southern California regarding the tax-exempt approach. Wrigley noted that the Board has the authority to bond, is active in the market place and there is no question of its statutory authority creating a strong platform. By creating an ESPA improvement district as a public entity with tax-exempt status, a broad based, cost effective source of funding for CAMP implementation could be realized.

Revenue, the method of bond repayment, would come from three sources: 1) sale of water; 2) assessment (for general projects); and 3) water banking. In this way, the market concept is built into the overall system. A valuation based on acre-feet, acre or some other common platform would need to be determined. The key question raised by this approach is the concept of 'equal benefits derived' which will require discussion and decisions by the Committee.

Discussion Notes

- Q: Would there be a mortgage on the properties/assessment lean? A: The pledge would be to the Water Board not an individual.

- Comment: Who pays, how do we fund it and what is the equitable benefit received? We need to determine what an equal share is versus a fair share. Response: The concept of equitable benefit will need to be outlined.

- Comment: It may be hard to 'sell' a funding approach to constituents that are not impacting the aquifer. Why should they pay, if they are not part of the problem? Response: The overall benefit versus the individual benefit will be a challenge in determining the funding approach. One way to think about it is that there could be credits back to those who don't benefit as much, although a broad assumption is that everyone would benefit from these projects.

- Comment: The use of the Board's bonding authority coupled with an ESPA Improvement District should be seen as only one component of the total funding - state, federal, WIF/WAF and others. An ESPA component to funding is the catalyst to demonstrate that the water users are seriously willing to come to the table and commit to working this issue through.

- Q: What is the rate structure to pay back the bond, what would individual water users have to contribute? The question is what is a fair amount to pay especially for consumptive users versus others? What about those who contribute to the aquifer versus those that impact it.

- Comment: The broad water users need to pay for the bulk of the actions, and the approach set forward includes domestic well owners. There is an issue of fairness in taxing that we need to discuss – what sort of principles need to be developed to arrive at an equitable/fair approach?

- Q: What is involved in determining the assessment (Improvement District)? A: Some common unit of measurement must be established whether it is acre, diversion amount or others.

- Q: What elements set the geographic boundary of the ESPA Improvement District? A: The Board would set the geographic boundaries, and it could be the entire ESPA, pieces or parts.

- Q: When the tax exempt status is mentioned, could the entire ESPA be tax exempt by virtue of its political subdivision? A: Yes

- Q: What would happen if I said I didn't want to pay for this? Can one file a remonstrance to be excluded for a variety of reasons? Can we petition the water Board? A: This has yet to be decided.

- Comment: If the assessment is broad based and not collected by a canal company or irrigation canal it becomes easier. Maybe it is a 5 cent general obligation or property tax levy.

Next Steps

Jim Wrigley will work with Phil Rassier (Department lawyer) to examine how to acquire the assessment authority with the least amount of institutional change. The goal is to accomplish the assessment authority without institutional changes.

July 14, 2008 interim legislative committee meeting to discuss CAMP funding approaches.

PRESENTATION: ECONOMIC SUB-COMMITTEE REPORT

Hal Anderson provided a brief update on the economic sub-committee including the focus on defining the primary objectives and secondary effects. It is hoped that that the July meeting can assist in providing observations.

NEXT STEPS AND MEETINGS

Advisory Committee Meetings

Advisory Committee meeting, Wednesday, July 23, 2008 in Burley (10 am – 5pm) at the Best Western.

Advisory Committee meeting, Thursday, August 28, 2008 in Bliss (10 am – 5 pm), location to be determined.

Sub-Committee Meetings

Economic Sub-Committee Meeting, Tuesday, July 8, 2008 at 9 am (teleconference and/or Boise participation)

Environmental Sub-Committee Meeting, Monday July 21, 2008 at 10 am (teleconference and/or Boise participation)

If you are interested in participating in the Sub-Committees but are not on the list, please contact me and indicate your interest. Otherwise, only those who have participated previously will be notified.

MEETING ATTENDEES June 19, 2008

Advisory Committee Members

1.	Lance	Clow	City of Twin Falls
2.	Randy	MacMillan	Clear Springs Foods, Inc.
3.	Steve	Howser	ASCC
4.	Linda	Lemmon	IAA/TSWUA
5.	Jim	Tucker	Idaho Power
6.	Brian	Olmstead	TF Canal
7.	Hal	Anderson	IDWR
8.	Jeff	Raybould	Freemont Madison Irr. Dist.
9.	Damien	Miller	USFWS
10.	Rebecca	Casper	Land Dev. Interests
11.	Vince	Alberdi	Surface Water Coalition
12.	Lloyd	Hicks	Burgess Canal
13.	Dean	Stevenson	WD 130-140
14.	Albert	Lockwood	NSCC
15.	George	Katseanas	Domestic Wells
16.	Don	Parker	WD 110
17.	Dee	Reynolds	Fall River Electric
18.	Rich	Rigby	Reclamation
19.	Randy	Bingham	BID
20.	Peter	Anderson	TU
21.	Scott	Clawson	WD 110
22.	Kim	Goodman	TU
23.	Dan	Schaeffer	A&B Irr.
24.	Charles	Correll	City of Jerome
25.	Craig	Evans	WD 120
26.	Steve	Burrell	IDWR
27.	Harriet	Hensley	Idaho Attorney General's office
28.	Stephen	Goodson	Governor's Office

Other Attendees

29.	Walt	Mullins	Milner Irrigation District
30.	Lyle	Swank	WD 1 / IDWR
31.	Stan	Clark	E.I.W.RC
32.	Lynn	Tominaga	Idaho Ground Water Appropriators, Inc
33.	Bill	Thompson	Minidoka Irrigation District
34.	Jim	Wrigley	Wells Fargo
35.	Jonathan	Bartsch	CDR Associates