

Eastern Snake Plain Aquifer (ESPA) **Comprehensive Aquifer Management Plan**

Advisory Committee

Meeting Notes

Thursday, August 23rd, 2007 Date:

10:00 am - 5:00 pm Time:

Location: NRCS Plant Materials Center, Aberdeen

Attendees:

Advisory Committee Members

Advisory Committee Members			
1.	Vince	Alberdi	Twin Falls Canal Co.
2.	Hal	Anderson	IDWR
3.	Randy	Bingham	Burley Irrigation
4.	Roger	Buchanan	Domestic Well
5.	Barry	Burnell	Idaho Department of Environmental Quality
6.	Rebecca	Casper	Ball Ventures
7.	Roger	Chase	City of Pocatello
8.	Scott	Clawson	Water District 110
9.	Lance	Clow	City of Twin Falls
10.	Tim	Deeg	Water District 120
11.	Craig	Evans	Water District 120
12.	Jared	Fuhriman	City of Idaho Falls
13.	Lloyd	Hicks	Burgess Canal Company
14.	Matt	Howard	Bureau of Reclamation
15.	Steve	Howser	Aberdeen Spring Field Canal
16.	George	Katseanes	Blackfoot
17.	Alex	LaBeau	Idaho Association of Commerce and Industry
18.	Linda	Lemmon	Idaho Aquaculture Association
19.	Albert	Lockwood	Northside Canal Company
20.	Randy	MacMillan	Clear Springs Foods
21.	Roy	Mink	IWRRI
22.	Damien	Miller	U.S. Fish and Wildlife Service
23.	Don	Parker	Water District 110
24.	Dave	Parrish	Idaho Fish and Game
25.	Jeff	Raybould	Fremont-Madison Irrigation District
26.	Dan	Schaeffer	A&B Irrigation District
27.	Steven	Serr	Bonneville County
28.	Dean	Stevenson	Magic Valley Ground Water District (MVGWD)
29.	Jim	Tucker	Idaho Power
30.	Max	Vaughn	Minidoka County Assessor
31.	Will	Whelan	The Nature Conservancy

Other Attendees

- 31. Bryce Contour IWRRI
- 32. Don Dixon Office of Senator Crapo
- 33. Ron Abbott FSA
- 34. Lynn Tominaga IGWA
- 35. Lyle Swank IDWR, WD1
- 36. Tony Olenichek IDWR, WD1
- 37. David Blew Idaho Power
- 38. Jon Bowling Idaho Power
- 39. Brian Patton IDWR
- 40. Neeley Miller IDWR
- 41. Bill Quinn IDWR
- 42. Harriet Hensley Attorney General's Office
- 43. Clive Strong Attorney General's Office
- 44. Diane Tate CDR Associates (facilitator)
- 45. Jonathan Bartsch CDR Associates (facilitator)
- 46. John Simpson
- 47. Neal Powell
- 48. Stan Clark
- 49. Jack Barraclough

MEETING AGENDA

- 1. Welcome, Introductions, Agenda Review and Meeting Note Finalization
- 2. Presentation: The Eastern Snake Aquifer Hydrologic Model
- 3. Lunch
- 4. Presentations and Discussion: Managed Recharge
- 5. Presentations and Discussion: Incidental Recharge
- 6. Presentations and Discussion: CREP and other Incentives for Voluntary Retirement
- 7. Presentation: "Strawman" proposal
- 8. Presentation and Discussion: Report from Quantitative Goal Sub-Committee
- 10. Public Comment

All presentations made during the meeting can be found on the project website: www.espaplan.idaho.gov

WELCOME, INTRODUCTIONS, AGENDA REVIEW & MEETING NOTE FINALIZATION

Jonathan Bartsch welcomed everyone to the meeting and led introductions. He reviewed the agenda, explaining that, because of the number of presentations, the facilitators may have to defer discussion on some topics to a future meeting. The Committee discussed the notes from the 07-26-07 meeting, and finalized them with no changes suggested.

THE EASTERN SNAKE PLAIN AQUIFER MODEL

Bryce Contour from the Idaho Water Resources Research Institute (IWRRI) at the University of Idaho Falls gave a presentation on the current Eastern Snake Plain Aquifer Model, or ESPAM 1.1. The following notes record questions, answers and discussion during and following Bryce's presentation.

Q: If the water level in the aquifer is low, are we at the point were any little decrease will stop water from running at all out through the springs?

A: (Contour) There are two things we can look at to answer this question, and one is historic water levels. We have some old wells on the Plain to review although not very many. Water levels today are higher than the low historic levels, and we're still at higher levels of spring discharge than historically.

Q: Does the aquifer model include a representation of baffles, or parts of the aquifer that are porous only at certain locations and thus impede flow like baffles in a tank might? A: (Contour) The model is a simplification of what's really going on in aquifer, and a tank is the crudest simplification. The aquifer behaves like a tank: if you held the "goezins" constant for a long enough period of time, outflow will stabilize.

Q: What is the modeling committee's estimate of the status of equilibrium of the ESPA at this time?

A: (Contour) There is no consensus right now. We're working on a scenario to tell us what the equilibrium discharges to springs and gains to the river would be if current practices and hydrologic conditions were to prevail into the future. There are different points of view within the ESHMC about whether that scenario is reliable or accurate.

Q: What is the history of the modeling committee and how is it affected by politics? A: (Hal Anderson, IDWR) In 2000, when we were implementing conjunctive administration, IDWR struggled with how to get a good representation of the relationship between groundwater and surface water. We had a committee of experts in place, who made series of recommendations regarding what needed to improve the original model, developed by IWRRI and IDWR, to improve it. IDWR received funding from the Legislature to implement those changes, and we hired the University of Idaho (UI) to do the majority of the work. UI and IDWR included the committee in development of model. The committee now includes IDWR, UI, and technical experts from other agencies, private organizations, etc.

Q: What is the decision making process used by the modeling committee?

A: (Contour) We have worked toward consensus but have not formalized that as the decision-making mechanism. Lots of time is spent at each meeting wrestling with issues where there is a divergence of opinion.

A: (Anderson) The model belongs to the state, and even if the modeling committee doesn't reach consensus, the state has an obligation to move forward and make decisions.

Discussion: In the model, transmissivity has been estimated at 200 points, and interpolated in between these points. Simplifying assumptions like this have been made because we don't know what every square foot of the aquifer looks like, and even if we did it would require significant computing power to run a model of that magnitude.

Q: Can the model be used do determine the impact of potential recharge on specific spring reaches?

Discussion: The model is less reliable for analysis of impacts on specific springs, meaning it may not be accurate in terms of the timing or amount of an increase in flow. The model is used to inform decisions and policy choices, like the ones to be made by the Committee.

Q: What does it cost to make a run of the model if you change just one assumption? A: (Contour) It depends on what the assumption you want changed is – if you change the current assumption of one layer uniform porous media, it would cost about \$2 million to change the model. If you want to change the assumption of what percentage of diversions return flows are in wet and dry years, that change might only cost a few thousand to make in the model, but getting agreement to make the change could cost a few tens of thousands of dollars.

Q: What is planned for improvement of the model?

A: (Contour) The modeling committee is considering and debating what changes should be included in the next version of the model. The Legislature and IDWR have funded data gathering, which will start in September 2007; improvements include methods used by the model, and recalibration.

Q: Recognizing the number of variables, if we decide to do some kind of action, will we be able to see the results in the system? Do we really know what is causing the change? A: (Contour) It's the size of the things we want to test, as compared to the size of other things going on, that is important. There is a big difference between a teaspoon of water poured onto the plain and the Atlantic ocean poured on to Craters of the Moon. Most of the things that we're talking about are going to be so small relative to the kind of variability that occurs naturally, we're stuck with not being able to physically measure the impact and determine causality.

Q: What scenarios have been run using the model? Have some looked at curtailment scenarios, including what would happen with no pumping at all?

A: (Contour) The Department maintains a website where information about all scenarios that have been run can be found. It is an FTP site (for big files) and you need a password to access it, which you can get by calling Rick Raymondi at the IDWR. With the previous version of the model, and the modeling committee members at the time, we ran a no-pump scenario. That has not been re-run since the model has been updated. With another curtailment scenario, we left pre-1900 wells, but shut off all others. We're pushing up against the stress limit of the model calibration, meaning that there are no water budget changes of that magnitude included in the period for which we have measured data. The volume impact the model shows should be accurate, but the timing is less precise, especially as you curtail more and more wells. Some modeling committee members believe that the benefit to the Blackfoot reach shown in the model output from the curtailment scenario is unrealistic, and the report from that scenario addresses possible causes for that discrepancy.

Q: How long will it take to do the re-calibration of the model?

A: (Contour) Recalibration cannot start until data is gathered, and will depend on what changes to the conceptual model are made, but the process will take many months.

Q: Are you open to input from the Committee regarding changes to the model? A: (Contour) Yes, and we're starting to get input from the modeling committee at our meeting on September 11th. If the changes require a lot of additional data, we'll have to discuss who will pay for anything not already included in the budget.

Q: Is there any benefit when you recalibrate to holding your inputs constant? How about using one month stress periods, as opposed to the current longer stress periods? A: (Contour) We have committed to try again to make a shorter stress period work in the model. (Discussion) We're not going to see quantum leaps in the capability of the model, but more realistically a slow improvements over time.

Q: Are the mathematics reversible? Can we say "I want this amount of reach gain, and what do I need to do to get it"?

A: (Contour) Let's say you want 10,000 additional acre-feet passing through your favorite reach, and you want half there by 2010. There are 4,000 cells within which that goal is achievable, but how many acre-feet you have to recharge in each to get the desired benefit one varies greatly. If you have two options that you want to compare, you can try different amounts in each location until you get an answer that you like. Comparing all 4,000 options would take a very long time. The model does provide response functions that can help answer questions such as where to recharge to have the best chance of benefiting a certain reach.

MANAGED RECHARGE

Brian Patton, IDWR, presented a history of managed recharge efforts in the ESPA, and discussed current work by the Board.

Questions, answers and discussion during and after the presentation:

Discussion: Costs of managed recharge will likely be much higher than earlier estimates for a variety of reasons, including monitoring requirements.

Q: What is the reason why natural flow, previously used by canal companies, cannot be used for recharge as in the past?

A: Recharge is not considered a beneficial use under Idaho rules.

Q: When did the IWRB's recharge water rights come into priority ion 2006? A: The IWRB recharge rights are relatively junior, and came into priority on April 12 and out of priority soon after.

Q: What happened to the \$150,000 the IWRB budgeted for recharge this year?

A: The IDWR will ask the Board to roll over this money into next year.

Q: What data supports the statement that infiltration rates are generally low across the ESPA?

A: The rates measured from test infiltration ponds match rates calculated at the Federal INL site. There are places across the plain that may have much higher infiltration rates, but it is not the norm. A literature review supports the fact that soils across the plain are fairly impermeable.

Q: If infiltration rates are low, why have canals in Water District 1 been able to recharge a significant amount of water without a specific recharge program?

A: In WD 01, canal companies divert lots of water and use the existing canal systems – they lose a lot of water due to normal operations. The Board's recharge water rights are only available 50% of the time, on average, and existing canal systems could only run that water during the shoulder seasons, i.e. in spring and fall.

Q: Where can the Board's water rights be diverted for recharge?

A: The Board's recharge water right, as originally filed, specifies Milner Dam as the diversion point. In 2005, the Board put these rights in the water bank to add additional points of diversion, and is discussing filing to make these additional points permanent.

Q: Why would you consider re-activating other water right applications filed by the Board for recharge?

A: That would be done to take advantage of those very wet years where there is a lot more water available. In order to do that, an additional water right application would have to be granted. That water right would be subordinate to just about everything. It would come into priority once every three years maybe, but without that the Board wouldn't have the right to use that water for recharge.

Q: How many existing recharge sites are out there?

A: The only ones that currently exist were constructed by LSARD (Lower Snake Aquifer Recharge District), including one at Shoshone. Most managed recharge to date has been through existing canal systems.

Comment: Wouldn't constructing a recharge site be a good one-time cost that could be funded with the money the Governor says he's got available for that sort of thing?

Comment: When we wanted to recharge before, although there were capital costs and money wasn't available for that. We, as a canal company, paid those ourselves on the promise of reimbursement, but that hasn't happened. Some of the canal company resistance to move forward without definite payment for our costs comes from that experience. We incur additional operation and maintenance costs when we recharge, including installation of drops, piping, and ladders. We already gave a lot for the previous program, and those old costs would need to be looked at again.

Discussion: Canals are a quick, easy, and efficient way to recharge the aquifer. Could we use the "windows" in the spring and fall to recharge? A: Yes, however the issue is the source of recharge water.

Q: If recharge is about storing and retiming water, how does that affect salmon flow? Why would replacing salmon flows with outside water be costly? A: It could affect salmon flow because there is a lag between when water is recharged and when it comes back to the river. Also, BOR has to deliver salmon water a specific amounts at specific times during the year. Replacing those flows would be costly because we have to buy that water, since it's already being used by someone else, or build new storage.

Bill Quinn, IDWR, presented information on the W-Canal pilot recharge project funded by the IWRB.

Questions, answers and discussion during and after the presentation:

Q: What is the expected maximum amount of water this site can take? What is the estimated cost?

A: The contractor estimates the site can take 30 cfs, or 60 ac-ft a day. A total of \$700,000 has been budgeted for the project, and we hope the lessons learned here will inform future recharge efforts.

Q: Why was this site chosen if the soils are not permeable?

A: We used Soil Conservation Service reports, which are not always specific. Unfortunately, you can't see under the soil before you start the work. When we had the soil boring results that showed that the soil was not as permeable as expected, the Board told us to move ahead anyway because the site conditions are representative of those we expect to find across the Eastern Snake Plain. The site was originally chosen because it is on state land, without federal environmental requirements to deal with, and it is next to a canal.

Q: Who is the target beneficiary for this project?

A: There is no targeted single beneficiary – we hope to learn and develop techniques for implementing managed recharge across the ESPA.

Q: Aren't good sites for recharge hard to come by? My understanding is that BLM doesn't want them on their lands?

A: Yes, they are hard to come by, and one of the things that made the W-Canal attractive was that it was on state ground.

David Blew, Idaho Power, gave a presentation which combined his knowledge gained through years as the Department's recharge coordinator and the perspective of his current employer. Main points from the presentation:

- Managed recharge in Idaho is at the "technology development" stage. We have to learn how to recharge given our soil, water quality, and water availability.
- Two options are available for managed recharge: infiltration basins, or injection wells.
- Injection wells require pretreatment of the source water, and the biggest water quality problem in Idaho is biological contamination.
- Soil clogging is the primary problem associated with long-term recharge.
- Hydrologic group A soils are the best for recharge, and they are limited across the Eastern Snake Plain, as well as hard to find located next to an existing canal.
- Basin recharge is unlikely to meet ESPA needs of getting significant quantities of water in the ground when the water is available.

Questions, answers and discussion during and after the presentation:

Q: I have heard that we have huge losses from the canal systems – that water is going somewhere, but you've said it takes an awful lot of area to lose that much water. A: The Northside canal loses 500,000 ac-ft per year. From the point of diversion to Jerome, the main canal alone is 1,200 acres in size. Think about the money it would take to rebuild a system like that – purchasing two sections of ground, and moving millions of yards of material.

Q: You mentioned that testing of previous recharge efforts indicate that Ecoli from the recharge water was found in nearby wells. How far did you trace the Ecoli? When I did similar research, on an old U-shape canal built in 1907, I could only trace Ecoli out a half a mile from the canal. Your comment that you couldn't use sinkholes to recharge is subject to question based on that research. The Department criteria require only one mile separation from any well, and sinkholes would be much easier.

A: It is hard to find a recharge site that doesn't have any wells within a mile. Based on what I saw, using sinkholes without pretreatment could result in contamination.

Comment: Soil structures across the ESPA differ greatly. Northside canal losses are actually very low – there are much higher loses up in the north end of the basin. Our

soils are permeable, and we don't have buildup of bad stuff in tests that we run. We believe our canals are effective, self cleansing.

Comment: If you're looking at large scale recharge, you have a very narrow window of opportunity. Right now, all we have is the Board's water right. You've got to get 322,000 ac-ft of water in the ground safely and efficiently. And I want to take what is happening on 30 miles of canal and get that to happen on 150 acres. The W-Canal does have domestic wells that are 180 days travel time downstream.

Q: The middle Snake and upper Snake have large areas where the soils are very permeable, for instance in Jensen's Grove in the Blackfoot area. The water table can drop 2 or 3 feet when the canals are shut off.

A: Yes, there are gravels along Snake, and they may go out a ways, but what are you really accomplishing with recharge up there if you're not putting any water in storage for the long term? Where does the water that infiltrates in Jensen's Grove end up?

Discussion: Recharge is a tool for storage of water. We need recharge that stays in the aquifer for long enough that when that water that we recharge makes it to the river it is useful. Need to delay water for months or years.

Q: Why did you conclude that spring recharge was limited to between 40,000 and 60,000 acre-feet?

A: The limiting factor is the short length of time the Board's recharge water right is in priority. Also, this number was calculated assuming use of existing canals, which have to open early to use the recharge water. One year, the canals opened early and we were set to recharge, but a snow storm hit upper basin and shut everyone down.

Rich Rigby, Bureau of Reclamation, discussed winter water savings and the Bureau's perspective on recharge in his presentation. The following notes document questions, answers and discussion during and after Rich's presentation.

Q: What are the institutional constraints to recharge and how can this group help to bring about changes to those constraints?

A: One constraint is winter water savings, and other is water rights. When water is available, the weather is wet and cold. What BOR wants to know is will recharge affect our ability to fill the reservoirs on the system? That's the kind of issue we've got to address.

Comment: From the perspective of Aberdeen Springfield, we'd be concerned about changing the winter water savings agreement if it jeopardized our ability to fill our storage space in the reservoir every year. For recharge in general, we want to make sure projects won't affect our ability to fill that reservoir storage.

Comment: Regarding flow augmentation, it is easy to complain about it and be frustrated. But what are we going to do about it? It is largely out of our control. There is a critical time period coming up in next couple months – we could be asked to do a lot more with regard to flow augmentation, or we could get a pass. We've really done well in the

scheme of things. We can complain about who made the decision, but it bought us 10 years of peace in the valley. We've got some serious issues we're dealing with now. To say that flow augmentation is cause of problem is short sighted – it is part of the cost of doing business.

Comment: We recognize the problem with ESA, and need to deal with it. I look at winter water savings as problem we can work around as well. We have an opportunity to use high lift water exchange to help meet that obligation, which could benefit everyone.

INCIDENTAL RECHARGE

Tony Olenichak, Water District 01, presented information on incidental recharge. The following notes document questions, answers, and discussion during and after the presentation.

Q: As far as a source of water for recharge is concerned, can we use non-canal company water to fill the canals sooner, so that they can conserve their water for irrigation and not waste any on charging the system?

A: That is exactly what was done with the managed recharge that occurred in the 1990s.

Comment: It all comes down to water right priorities. Storage water rights have dates like all rights, and my canal company depends on that storage filling. Allowing or encouraging incidental recharge goes against all that we learned about water management and conservation. My loss rates of up to 70% make me think that we need to line canals, because the water that infiltrates is water we can't use to grow crops. We would look for federal money to fund canal lining, but won't get it because of the environmental requirements that come with federal funds.

Comment: Remember that you need to have a demand on the canal system to divert water, because canals get smaller as they go through the project, and if there is not a demand taking water out of the system, you get flooding at the end of the line.

Comment: It is troublesome to me that managed recharge needs to look at water quality, since there are so many septic tanks. They probably cause more problems than recharge would cause.

CONSERVATION RESERVE ENHANCEMENT PROGRAM

Five presenters gave information on the history and current status of the ESPA's Conservation Reserve Enhancement Program or CREP: Lynn Tominaga (IGWA); Brian Patton (IDWR); Neeley Miller (IDWR); Ron Abbott (FSA); and Don Dixon (Office of Senator Crapo).

The following notes document questions, answers, and discussion during and after the presentations, which are available on the project website:

Q: If the well moratorium were lifted, would we endanger CREP or future CREP programs?

A: Lifting the moratorium could endanger CREP.

Q: What are the limitation/obstacles to CREP?

A: Land has to either be highly erodable, or in a priority area, to get into CREP, and only 1/3 of the state's area can be within a priority area unless the Secretary of Agriculture or Congress says otherwise. This means we don't have all of the priority acreage we could in the ESPA. Also, only 25% of any one county's cropland can be in a CRP or CREP, and Power and Bonneville County have already reached that limit. No one person can receive more than \$50,000 a year in CREP payments. Also, CRP and CREP are primarily habitat conservation programs, and that influences some of the rules.

Q: How do you calculate the benefit to the aquifer from the CREP program? A: Water savings are calculated using an estimate of 1.8 acre-feet per acre enrolled in the program.

Discussion: (Ron Abbott) The ESPA CREP program is unique, because it represents the combined efforts of the federal and state government, and non-governmental entities, to address water issues – most CREP programs deal with wildlife or endangered species issues. The 25% limit on the amount of cropland acres that can be in a CRP or CREP program is the result of secondary effects from drying up so many rural farms – Power and Bannock counties are a local example of what happens if you dry up a lot of acres in one county. It is important to get buy-in from businesses. Even if CREP is extended in the new farm bill, I think the 25% cap will remain.

Comment: The number of acres enrolled in CREP has gone backwards; 2 months ago we had 20,000 acres, and 2,000 acres were withdrawn from the program due to high commodity prices.

Q: Another issue that has affected enrollment is difficultly moving water rights around – people want to put their junior water rights with their least profitable land before they join the program. How can this be addressed?

A: The Department will now process water rights transfer applications along with CREP applications, to make it easier for people to put their junior rights with the land going into CREP.

Comment: Regarding Conservation Priority Areas (CPA) – all states can have a maximum of 1/3 of the cropland in the state in a CPA. Idaho has used up all of its 1/3, some for protection of mule deer and other endangered species. To make CREP meet its goals, we need a CPA in the Magic Valley area, especially Gooding and Lincoln counties. This would allow land that is not highly erodable to enter into the program.

Discussion: (Don Dixon) CREP is popular, and there is a good chance it will be reauthorized in the farm bill under discussion in Washington DC. Because there is no new money, funding priorities through the Farm Bill have to be juggled. As far as modifications to the program, things that have been discussed include erodability,

decoupling CRP from CREP, cropping history requirements, and possibly lowering the cap on AGI (adjusted gross income).

Q: What is the new estimate on how many acres will be enrolled by the December deadline?

A: (Ron Abbott) 50,000 acres was my estimate before the price of feed grain went up. Unless IDWR curtails or feed grain prices go down, we may not make that target. (Lynn Tominaga) I think we'll get close to 45,000 acres because some farmers may have decided to irrigate this season and apply for the program in October. (Brian Patton) I agree that we will probably see 43,000 to 45,000 acres enroll, if there are no other changes.

Q: What if you sell your water right? Can you stay in the CREP program? A: Program participants have to state that they will not use the water right for the period of CREP enrollment – not forfeiture of the water right, but an agreement not use the water right.

Comment: Could we free up water in the ESPA by getting water from other systems, like the Payette, perhaps through another CREP program?

Q: Is there a way for acres irrigated with surface water to get into the program? A: Surface water irrigated acres cannot apply for the program because, according to the federal agencies during the negotiation of the program requirements, there is no way to protect that water and ensure it benefits the aquifer. If one surface water diverter stops diverting, that water just goes downstream for the next junior user.

Q: Why did the barley set aside and wheat set aside programs disappear? Could we bring them back?

A: The set-aside programs aren't compatible with the current Farm Bill philosophy, as stated in the Freedom to Farm Act. It is doubtful that Congress would approve them today.

Comment: Could we attract people to CREP by encouraging establishment of habitat for pheasant or other gaming birds in these areas? This would allow people to make additional profit out of land that is in CREP – charging fees for hunters to use the property. Such a program could help address the \$50,000 benefit limit that is a drawback for some.

Q: Can a husband and wife each submit acres to the CREP program?
A: Yes, right now up to three related entities can submit land to CREP. The new Farm Bill might eliminate this, because some see it as a loophole.

2004 SETTLEMENT FRAMEWORK/STRAWMAN PROPOSAL

Clive Strong, from the office of the Idaho Attorney General, gave a presentation on the background and contents of the 2004 Settlement Framework, or Strawman Proposal. In order to allow time for discussion, he began in the middle of the PowerPoint presentation, and did not review interim agreements that led to the Settlement Framework with the Committee.

Prior to 2004, the interim legislative committee asked Clive, Speaker of the House Bruce Newcomb, Laird Ney, and then-Director of IDWR Karl Dreher to meet with parties individually and work on a proposal that would satisfy as many interests as possible, as a way to move litigating groups away from their positions. At that time, it was concluded that it was not necessary or possible to reach consensus on a quantitative goal for aquifer management, and developed the Framework based on a target change in the ESPA water budget that would lead toward stabilization of the aquifer. The target change was derived through litigation risk assessment, and taking into account the depletionary effect of groundwater pumping. The Framework included a monitoring program, and an adaptive management program. Acquisition of spring flow water rights was among the measures proposed, to reduce demand in places where water levels could not return to mid-century marks. Drafters intended the Framework to be an interim step, to begin addressing ESPA issues while a comprehensive aquifer plan was developed.

The notes below document questions, answers and discussion during and after the presentation:

Q: Did you have cost estimates and possible proposals to fund while developing the Framework?

A: (Strong) We had the most difficulty with the funding issue, because it is first necessary to define where you want to go. There is one principle in the prior appropriation doctrine higher that first in time first in right – water will follow money. You don't concentrate up front on money, but instead come back at the end when you have an idea of what makes sense as far as good public policy. What we did was go through and get a list of measures that could impact the water budget, then estimate total cost. From what I recall, that total cost was \$120 million. It may sound like huge number, but at the end of the day, it is not that much. With that number, we tried to figure out where funding would come from. We worked through a process of allocating according to general benefit and mitigation responsibilities, then backed in to what kind of fees we'd have to assess on water users, which were different based on location and type of use. I believe it is a statewide problem, but asking the state to pay the whole cost will be a difficult sell politically. The state has a responsibility, but water users who have benefited from the use of the resource also have responsibility. Once we know where we want to go, money will be easier to attract.

Q: It seems like there is potential for exchange of high-lift water, but there are road blocks? Are there easier ways to make these exchanges happen?A: Yes, but sometimes solutions do not become apparent until the needs exist. Changing times and economic interests will overcome some of the roadblocks you have.

Q: Do you think the ranges you gave on acre-feet change possible from each management action are the same today?

A: There have been changes to the model, and we could run it and see if the estimates are the same. As far as the overall water budget change target, we tried to hit a range that would make it meaningful for people to participate, and wasn't too high to ever be achieved. It gave us someplace to start.

Q: This proposal was ambitious – could you have achieved those numbers in 2 years? A: (Strong) Understand that this proposal was a way to start the discussion. We didn't try to answer that question – wanted to assess whether there was general agreement that this range made sense. It was ambitious, but made sense as a long term goal. Coming into another year of continued drought is what made it difficult to actually get agreement, because we couldn't find a way to address short term needs.

Q: What was the 600,000 to 900,000 acre-feet water budget change going to result in as far as a benefit?

A: That was the next point of discussion in development of the framework - a suite of conversations about what we collectively thought was necessary to reach that target goal.

Comment: (Strong) The word "conservation" in the context of water management is problematic, because one person's conservation is another person's injury. Right now we think winter water conservation is awful because it limits incidental recharge to the growing season, but long ago keeping the canals filled year round was considered wasteful use. Conservation is in the eye of the beholder. We have one cup of water, and we're trying to manage that to meet as many needs as possible. You're going to have this same debate in perpetuity. We have to look forward, and not backward. The decisions we make in 5 years have a 20, 30 year impact. What is the trend that is happening? If we take out lots of groundwater, what will be the consequences? We don't have control over the consequences – economics will dictate what happens. In a dry year, canal companies want to line their canals to conserve water. Any plan has to contemplate those kinds of eventualities.

Q: What kind of legislative changes can be done quickly?

A: (Strong) I'm reluctant to recommend changes in laws right now. We're in the middle of trying to get a legal understanding of what prior appropriation means in the context of conjunctive administration of surface and groundwater. We need to consider all of the consequences, something we have traditionally not done.

Comment: That decision needs to be made by everyone around the table, because here's where we can consider all of the issues. Having one side or the other pushing an issue that will not work for others won't get us anywhere.

Q: Why did the Strawman proposal die?

A: (Strong) When the 2005 season began, we couldn't overcome the short term issues and find a way to meet the needs of the surface water uses. With one good lucky water year, we could have gotten that Framework done. I think it represents what an agreement is going to look like – it has to have some element of fairness. Although the equity of "who pays what" was a problem, I think fixing the short term issues would have allowed people to stay around the table. We're on a good path now, and are finally getting to the

hearing process where we can get a decision, get it to court, and find out where the legal principles are. If we can stop that debate, and look at what is in the best interest of the state as the whole, the best decision is the one we make collectively. We shouldn't expect that the court decisions resolve all uncertainties, but more clarity will help people to analyze risks and rewards and bracket the conversation.

Comment: We did lose some opportunities when the Strawman didn't move forward. As an example, we are going to have to start the conversation with high lift people all over again. Let's be careful that we follow through with all of the ideas that we have.

Comment: One thing the Legislature needs to consider is adequately funding the Department of Water Resources. What are our needs going to be if we're going to start moving water around? If we have changes, the Department needs to be set and ready to implement them. There is going to be a big need for water transfers, and IDWR needs to be better funded than it is right now to process those in a timely fashion.

Comment: (Strong) From a benefit-cost standpoint, investing in more information (data collection by the Department) yields huge rewards.

QUANTITATIVE GOAL SUB-COMMITTEE

On behalf of the Quantitative Goal Sub-Committee, Jonathan reported briefly that the group met on Friday August 17th for their first discussion, and would continue the conversation on September 4th, with a full report to the Committee at the September 27th meeting.

PUBLIC COMMENT

No comments from the public were offered. Prior to adjourning, the group agreed to begin the next Committee meeting at 9:00 a.m. to accommodate more discussion after presentations.

The next meeting will be held on September 27th, from 9:00 a.m. to 5:00 p.m., at the Best Western CottonTree in Rexburg.