



# IDAHO WATER RESOURCE BOARD

## MEETING NO. 4-11 OF THE IDAHO WATER RESOURCE BOARD

**C.L. "Butch" Otter**  
Governor

July 29, 2011, at 8:30 a.m.  
immediately following Executive Session to be held at 7:30 a.m.

**Terry T. Uhling**  
Chairman  
Boise  
District 2

**Bob Graham**  
Secretary  
Bonners Ferry  
District 1

**Charles "Chuck"  
Cuddy**  
Orofino  
At Large

**Leonard Beck**  
Burley  
District 3

**Roger W. Chase**  
Pocatello  
District 4

**Vince Alberdi**  
Kimberly  
At Large

**Jeff Raybould**  
St. Anthony  
At Large

**Peter Van Der Meulen**  
Hailey  
At Large

Idaho Water Center  
6th Floor, Conference Rooms 602C and D  
322 E. Front St., Boise, Idaho

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1. **EXECUTIVE SESSION** – The Board will meet at 7:30 a.m. pursuant to Idaho Code Section 67-2345(1)(c) and (f) to communicate with legal counsel regarding pending litigation. Executive Session is closed to the public.
  2. Roll Call
  3. Agenda and Approval of [Minutes 3-11](#)
  4. Election of Officers
  5. IWRB Committees and Committee Appointments
  6. Public Comment – The Board will allocate a period of time (not to exceed 30 minutes) for the public to address the Board on subjects not specifically shown as an agenda item.
  7. IWRB Financial Program
    - a. [Status Report](#)
    - b. [Lake Reservoir Company Loan](#)
    - c. [Portneuf Irrigation Company Loan](#)
    - d. [Ground Water Districts Bond Inducement Resolution](#)
    - e. [Bear River Bond Pool Issuance](#)
    - f. [Upper Salmon Water Transactions: Patterson Big Spring Creek](#)
    - g. [Weiser-Galloway Project](#)
    - h. [ESPA Managed Recharge Status Update](#)
  8. Planning Activities
    - a. [Rathdrum Prairie CAMP](#) – Consideration of Adoption of Final Plan
    - b. [Treasure Valley CAMP Status Update](#)
    - c. [ESPA CAMP and Aquifer Management Efforts](#) – Status Update
  9. [Water Storage Studies Update](#)
  10. [Minimum Stream Flow Program – NIA Claim Fees](#)
  11. Rental Pool Procedures
    - a. [WD #63](#)
    - b. [WD #01](#)
  12. Director's Report
  13. Other Items Board Members May Wish to Present
  14. Next Meeting and Adjourn

# IDAHO WATER RESOURCE BOARD

## Work Session in Preparation for Meeting No. 4-11

July 28, 2011 at 8:00 a.m.

Idaho Water Center  
6th Floor, Conference Rooms 602C and D  
322 E. Front St., Boise, Idaho

July 27, 2011      Storage Committee Weiser Basin Field Trip  
8:00 am to 5:00 pm – IWRB Storage Committee Members & staff

July 28, 2011      Work Session Agenda

1. [Climate Change and Water Presentation by Bureau of Reclamation](#)
2. [Henrys Fork Study Presentation](#)
3. [ESPA Storage Change and Equilibrium Presentation Follow-Up](#)
4. ESPA CAMP and Aquifer Management Efforts – In-Depth Discussion (**Tab 8c in Board Book**)

Working Lunch

5. [Water Supply Bank Annual Report](#)
6. Rathdrum Prairie CAMP (**Tab 8a in Board Book**)
7. [Overview of Treasure Valley Aquifer Investigations and Ground Water Model Development](#)
8. Treasure Valley CAMP (**Tab 8b in Board Book**)
9. Financial Action Items
  - a. Lake Reservoir Company Loan (**Tab 7b in Board Book**)
  - b. Portneuf Irrigation Company Loan (**Tab 7c in Board Book**)
  - c. Ground Water Districts Bond Inducement Resolution (**Tab 7d in Board Book**)
  - d. Bear River Bond Pool Issuance (**Tab 7e in Board Book**)
  - e. Upper Salmon Water Transactions
    - 1) Patterson Big Springs Creek (**Tab 7f in Board Book**)
    - 2) Upper Salmon Water Right Processing
  - f. Weiser-Galloway Project (**Tab 7g in Board Book**)

### AMERICANS WITH DISABILITIES

The meeting will be held in facilities that meet the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Diana Ball, Administrative Assistant, by email [diana.ball@idwr.idaho.gov](mailto:diana.ball@idwr.idaho.gov) or by phone at (208) 287-4800.



# IDAHO WATER RESOURCE BOARD

## MEETING MINUTES 3-11

Best Western Coeur d'Alene Inn  
Coeur d'Alene, Idaho  
May 13, 2011

**C.L. "Butch" Otter**  
Governor

**Terry T. Uhling**  
Chairman  
Boise  
District 2

**Bob Graham**  
Secretary  
Bonners Ferry  
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**Charles "Chuck"  
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Orofino  
At Large

**Leonard Beck**  
Burley  
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**Roger W. Chase**  
Pocatello  
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**Vince Alberdi**  
Kimberly  
At Large

**Jeff Raybould**  
St. Anthony  
At Large

**Peter Van Der Meulen**  
Hailey  
At Large

Chairman Uhling called the meeting to order at approximately 8:40 a.m. and asked for roll call. Seven members were present; Leonard Beck was absent.

### Agenda Item No. 1, Roll Call

#### *Board Members Present*

Terry Uhling, Chairman  
Bob Graham  
Chuck Cuddy  
Peter Van Der Meulen

Vince Alberdi  
Roger Chase  
Jeff Raybould  
Leonard Beck, *absent*

#### *Staff Members Present*

Gary Spackman, Interim Director  
Helen Harrington, Planning Section Manager  
Jack Peterson, Federal Liaison

Brian Patton, Planning Bureau Chief  
Diana Ball, Administrative Assistant  
Rich Rigby, Federal Liaison

#### *Guests Present*

Lynn Tominaga, IGWA  
Brenda Tominaga, IGWA  
Candice McHugh, IGWA  
Norm Semanko, IWUA  
Walt Poole, Idaho Fish and Game  
John Simpson, Barker Rosholt & Simpson LLP

Jim Markley, City of Coeur d'Alene  
Clinton Pline, Nampa & Meridian Irrigation  
Daren Coon, Nampa & Meridian Irrigation  
Alan Miller, Hayden Lake Irrigation District  
Vern Case, Wilder Irrigation District

### Agenda Item No. 3, Agenda and Approval of Minutes 2-11

There were no changes to the agenda. Mr. Graham moved to approve Minutes for Meeting 2-11 as submitted. Mr. Alberdi seconded the motion. Voice vote. All were in favor. Motion carried. Minutes for Meeting 2-11 were approved as submitted.

#### **Agenda Item No. 4, Public Comment**

Chairman Uhling asked for public comment regarding any items not included on the agenda.

Mr. Jim Markley, City of Coeur d'Alene, addressed the Board on the Draft RP CAMP. Chairman Uhling asked Mr. Markley to stay in contact with the RP Advisory Committee as the process moves forward into the implementation stage.

Mr. Norm Semanko, IWUA, addressed the Board about his concerns on the RAFN portion of the TV CAMP. He also reminded the Board that the IWUA Law Seminar will be held June 27 & 28 in Sun Valley and provided a brief overview of topics and presenters, including IDWR interim director, Gary Spackman, and previous IWRB member, Jerry Rigby.

Mr. Clinton Pline, Nampa & Meridian Irrigation District Board of Directors, addressed the Board about his concerns on the RAFN portion of the TV CAMP. As a member of the TV CAMP Advisory Committee, he feels the focus of the TV CAMP process should be on the aquifer. He also commented that the TV CAMP Advisory Committee is not a rule making body but as a group is looking at the issues and making recommendations.

Mr. Daren Coon, Nampa & Meridian Irrigation District Board of Directors, addressed the Board about his concerns on the RAFN portion of the TV CAMP. He referred to IMAP legislation enacted about 15 years ago and commented that it seems inappropriate for RAFN to be a part of the TV CAMP process since there are other methods within statutes, such as IMAP, to address those issues.

Mr. Vern Case, Wilder Irrigation District, addressed the Board about his concerns on the RAFN portion of the TV CAMP. As a member of the TV CAMP Advisory Committee, he suggested that RAFN should be addressed by the full Advisory Committee rather than the Drafting Group that has been meeting.

Chairman Uhling assured Mr. Case that the Board understands the concerns and is committed to addressing those concerns in a productive way.

#### **Agenda Item 5, Financial Items**

##### **a. Financial Program Status Report**

Mr. Brian Patton presented the Financial Program Status Report. As of April 1, 2011, total IWRB funds committed but not disbursed totaled approximately \$13.6 million. The outstanding loan principal balance is \$19.1 million, and the total uncommitted balance is approximately \$2.7 million. The committed but not disbursed includes the \$2.4 million shown as committed for the ESPA CAMP under the Pristine Springs subaccount. It will be transferred to the Secondary Aquifer Fund pursuant to legislative direction. A balance sheet will be provided showing that deposit once the transfer has taken place.

Mr. Patton provided a brief explanation to the new Board members regarding the source of the \$2.4 million, which is attributed to the loan made to the two ground water districts for their participation in the Pristine Springs acquisition. Each ground water district is responsible for making approximately \$1.2 million annual payments. The Board committed the first two payments to the ESPA CAMP process to fund projects. There was concern over spending those funds directly from the Revolving Development Account, so the legislature created the Secondary Aquifer Fund for those funds to be deposited to. The fund can also accept dollars from water users.

Mr. Patton referred to the list of potential loan applications being considered and stated there are no loan applications before the Board for consideration at this meeting. He also stated the Bear River Canals Bond Pool is still on track for early summer issuance. He provided a brief summary for the benefit of the new Board members, explaining that Bear River Canals received \$2.46 million in federal stimulus grant money through BOR for canal improvements and came before the Board to ask for matching funds. The bonds would be in the amount



of approximately \$2.4 million, and they would be non-recourse to the Board. This has been a challenging project for staff and Mr. Wrigley.

Mr. Patton provided a list of individuals who have paid Board loans in full in recent months, including Fall River Irrigation Company, Cougar Ridge Water & Sewer District, Howe Water District, and Point Springs Grazing Association.

Mr. Patton provided a chart showing Rental Pool Surcharge Revenues per the Board's request at the last meeting. Of the \$3.33 million surcharge received to date, \$841,800 has been deposited into the Water Management Account and the rest into the Revolving Development Account. About 60% is a direct result of BOR leasing storage water for salmon flow augmentation.

**b. Revenue Bond Request – ESPA Ground Water Districts**

Mr. Patton provided information regarding the revenue bond request from three ESPA ground water districts: Magic Valley, North Snake, and Southwest Irrigation. The bond amount is still unknown pending evaluations by the Districts.

No action at this time.

**c. ESPA Managed Recharge**

**1) Status Update**

Mr. Rich Rigby provided an update of current recharge estimates, totaling approximately 40,000 ac-ft of recharge year-to-date. He stated that Milner is operating at 9,000 cfs, which is 4,000 cfs above hydropower capacity, indicating there is more water available for recharge if funding is available.

Mr. Rigby recommended an amended resolution for the Board's consideration in the matter of 2011 ESPA managed recharge operations to accept funding from IGWA and to authorize an expenditure of funds. The resolution provides that funds provided by IGWA will be deposited into the Secondary Aquifer Fund until expended for the specified purpose, and recharge conducted in 2011 under contracts with the Board will be apportioned between the Board and IGWA according to terms specified in the resolution.

Chairman Uhling stated it is important that the Board's position is to encourage recharge consistent with the goals of the CAMP and consistent with the goals to help the state from a state water perspective. He stated it is not the Board's role in relationship to the administrative issues, which are appropriately left to the Director and to the Department (IDWR). Chairman Uhling stated that from his perspective it is important to move forward with aquifer recharge in a way that is constructive and to work with ground water users and others who want to participate in the process, and it is critical to recharge in the right spots to the extent possible for maximum retention, especially with the limited funds. Chairman Uhling asked Mr. Rigby for clarification that there is approximately \$115,000 allocated for recharge remaining in the recharge account.

Mr. Rigby stated that was correct, however based on the discussion during the work session and the amended resolution, that amount would be increased, and there should be some funds available for fall recharge and possibly some for next spring.

Mr. Raybould asked for clarification on the 50 / 50 funding provision in paragraph c of the resolution, specifically asking if there was a possibility that the Board funding could be exhausted before all the IGWA funding was used up and would that limit utilizing all the IGWA funding.

Mr. Rigby stated that it should not be a problem through the spring, and they can revisit it in the fall.

Ms. Candace McHugh, legal representative for IGWA, asked for clarification on recharge locations. She stated that the resolution does not set forth specific locations but that it would likely be determined jointly between the ground water users and the Department technical staff determining where the water is located and what canals are available. Chairman Uhling confirmed that was correct.

Mr. Chase made a motion to accept the resolution to accept funding and to authorize an expenditure of funds in the matter of 2011 ESPA managed recharge operations as amended. The motion was seconded by Mr. Raybould. Chairman Uhling called for a roll call vote.

Roll Call Vote: Mr. Cuddy: Aye; Mr. Alberdi: Aye; Mr. Chase: Aye; Mr. Beck: Absent; Mr. Raybould: Aye; Mr. Van Der Meulen: Aye; Mr. Graham: Aye; Chairman Uhling: Aye. Roll Call Vote: 7 Ayes. 1 Absent. Motion carried.

#### **d. Water Transactions Program Update**

Ms. Helen Harrington provided a brief update on the Water Transactions Program and provided background on the program for the new Board members. This Board program is intended to be voluntary, cooperative, and market based to keep local communities and economies viable in the face of potential endangered species actions in the Salmon basin. There are a number of different funding sources used to leverage the activities that the Board sponsors in that area. One source is the Columbia Basin Water Transactions Program (CBWTP) funded through the Bonneville Power Administration (BPA). This program identifies Qualified Local Entities (QLEs) who carry out this program in different states; IWRB is the only qualified QLE in Idaho. Board works with local agencies as well as private organizations such as The Nature Conservancy to coordinate and cooperate to make these transactions occur. The program began in 2003 and has been continuing successfully over time.

Twice a year staff meets with the program managers of the CBWTP to assess the program and discuss issues and concerns, and it also provides an opportunity for staff to showcase work that has been accomplished. Staff recently met with CBWTP and there were no concerns or issues. CBWTP will be having their fall QLE meeting in Salmon and Stanley, which will primarily be a field trip that will showcase the activities that have been going on. Ms. Harrington invited the Board to attend the field trip and encouraged Board members to contact Ms. Morgan Case, who is the primary IDWR staff person that oversees the program, with any questions they might have regarding the program. The plan is to spend one night in Stanley and two nights in Salmon.

Chairman Uhling added background for new Board members, stating that this has been a very successful program, and a cooperative basis with the land owners in the area, and speaks well of the Board and the State and those working to get this done. He also emphasized that the program funding is a pass-through funding and is not coming directly from the Board.

Ms. Harrington stated that the funds come from the Bonneville Power Administration to fund projects.

Chairman Uhling stated again that the program has been very successful and extended the Board's appreciation to Ms. Case for all her work on the program. He noted that the dates for the field trip are September 12 to 14. Mr. Harrington stated they are still finalizing plans and will update the Board on final dates.

Ms. Harrington stated the last couple of years the Department has been holding the processing of new water right applications in the Salmon basin. Recently the Department has been working with the Water Transactions Program and a number of agencies to develop steps to move forward with the processing of those applications. The Department is going to begin processing those new applications. With the processing of those applications, the Board may want to consider how to respond, similar to protection of MSFs in other basins, there is potential for injury to some of the projects that the Board has facilitated or implemented in the Upper Salmon basin, meaning there is money being expended and there is potential for new diversions to negatively impacts where those projects have occurred. Staff will be tracking those applications to determine the impact and will share concerns with the Board; there are also concerns from the funding agencies for these projects.

Mr. Alberdi asked what kind of projects may be impacted. Ms. Harrington stated that the goal of the Water Transaction Program is primarily to get flows back in stream and to reconnect streams. There is concern that some applications may be to divert water from those reaches in which the Board has paid to put water back in the stream.

Chairman Uhling stated that from a process standpoint it would make sense to keep in touch with the AG office on this matter and receive recommendations on any potential applications that would have a negative impact.

Ms. Harrington also informed the Board that the U.S. Forest Service has been considering how to deal with water rights they hold in the Sawtooth National Forest, specifically in the Busterback Ranch area, that they purchased a number of years ago. Staff continues to meet with the U.S. Forest Service to discuss opportunities for how they may want to deal with those water rights, how to protect them, and perhaps accomplish the goals they have within the programs that currently exist.

**e. Pristine Springs**

Mr. Patton informed the Board that the North Snake Ground Water District (NSGWD) and Magic Valley GWD are requesting that the Board consent to the sale of 0.2 cfs of Pristine Springs water right 36-2603C to the Carey Valley GWD. The Board's consent is required because of 1) the terms of the loan contract between the Board and the two districts, and 2) the Board is the trustee for the Water Trust for Water Right 36-2603C. This is the first proposed sale to any of the other ground water districts. Staff has been working with these districts and their attorneys to structure this sale. It is important that the existing loan agreement remain unchanged and that the terms of the Trust remain unchanged. Mr. Patton presented a Consent to Sale for the Board to consider in this matter.

Ms. McHugh addressed the Board and stated that with that background it is also important to understand that the ground water districts 10 cfs that they purchased under this agreement has been supplied as mitigation to Blue Lakes since the purchase. The ground water districts have been leasing some of the water and have covered Carey GWD under the mitigation plan that was approved for direct delivery to Blue Lakes. Carey Valley GWD exercised their option to purchase a portion of the Pristine Springs water right and earlier this year, or late last year, they chose to exercise their purchase option. It was originally proposed that Carey Valley pay the Board directly, but it was understood that the Board prefers the two original ground water districts make payments to the Board under the terms of the original purchase contract. A revised Consent to Sale before was presented to the Board for consideration to allow Carey Valley GWD to purchase the 0.2 cfs of the Pristine Springs water right from the North Snake and Magic Valley GWDs.

Mr. Alberdi asked for clarification as to whether the mitigation requirements were less than 10 cfs. Ms. McHugh responded that the actual total mitigation under all the orders of the Director is over 10 cfs, approximately 12 cfs including Water District 140. She stated that the individual obligation of North Snake and Magic Valley is approximately 8.8 or 9.2 cfs. Mr. Alberdi asked if the sum is less than 10 cfs, then could the ground water districts sell the balance up to 10 cfs? Ms. McHugh responded that the ground water districts only own, or are purchasing 10 cfs from the Board. Mr. Alberdi asked if that would compromise the ground water districts ability to supply mitigation to Blue Lakes if they have 10 cfs of mitigation water and are selling a portion of that off. Ms. McHugh responded that the ground water districts could not provide direct delivery of more than 10 cfs to Blue Lakes hence they have the Hardy purchase. The amount of water owed to Blue Lakes has increased, but the 10 cfs is sufficient at this time to meet the ground water districts obligation to Blue Lakes, in addition to their other mitigation plans, which have been approved for voluntary curtailment and recharge that they have done in the past. The districts entered into the agreement with Hardy because they needed a long-term solution for all the facilities including Blue Lakes. Mr. Alberdi asked if something were to happen to the Hardy agreement and they sell this portion off, and their requirements are greater than the 10 cfs, would they be willing to take that responsibility? Ms. McHugh responded that, yes, in fact, there are ongoing discussions with the City of Twin Falls to establish a buffer if necessary for any increased obligation that may occur to Blue Lakes.

Mr. Raybould made a motion to adopt the Consent to Sale and Transfer. The motion was seconded by Mr. Alberdi. Chairman Uhling called for a roll call vote.

Roll Call Vote: Mr. Cuddy: Aye; Mr. Alberdi: Aye; Mr. Chase: Aye; Mr. Beck: Absent; Mr. Raybould: Aye; Mr. Van Der Meulen: Aye; Mr. Graham: Aye; Chairman Uhling: Aye. Roll Call Vote: 7 Ayes. 1 Absent. Motion carried.

There was a short break in the meeting.

## **Agenda Item No. 6, Planning Activities**

### **a. Rathdrum Prairie CAMP**

Ms. Harrington provided a brief update on RP CAMP program. A public hearing was held May 12, 2011; the process has been timely. Advisory Committee started meeting in December 2009 and submitted draft Recommended Plan to IWRB in January 2011. The Advisory Committee has taken the task very seriously and submitted the draft Plan and is now discussing implementation. Three primary objectives related to meeting future water needs, preventing and resolving conflicts, and to protect the aquifer, primarily related to the water quality.

Draft Plan is currently out for public comment to meet statutory requirements for the IWRB to consider adopting the Plan. Public comment period runs from April 10 to June 10, 2011. Testimony was taken at the public hearing. That testimony along with public comments will be compiled and reviewed by the subcommittee, IWRB members, Mr. Cuddy and Mr. Graham, and the Advisory Committee, and a subcommittee meeting will be held to review any suggested changes. Anticipated that will occur this summer.

Chairman Uhling commented that they are halfway through the comment period and to date no written comments have been received. Ms. Harrington, that was correct, but several who attended the public hearing stated they would be submitting written comments.

RP Advisory Committee members, Mr. Dale Peck, Panhandle Health District, and Mr. Alan Miller, Hayden Lake Irrigation District, addressed the Board. Mr. Peck provided positive feedback on the RP CAMP Plan and the process. Mr. Peck stated his intent to assist the Board in the implementation phase. Chairman Uhling expressed his appreciation for Mr. Peck's willingness to sit on the committee and work on the project. Mr. Miller thanked the Board for their proactive approach to the CAMP process and future support of implementation. Chairman Uhling thanked Mr. Miller for his participation on the RP CAMP.

### **b. ESPA CAMP / ESPA Activities**

Mr. Rich Rigby presented a copy of a letter dated April 14, 2011, from the Governor to the Secretary of State regarding H318, which may help the ground water users fund their acquisition of the Blue Lakes properties. At the July Board meeting there will be an in-depth discussion about the ESPA, CAMP, and funding issues to assist the Board in making decisions.

Mr. Rigby briefly updated the Board on the AWEF program, which is in year 3 of the 5-year funding authorization. In years 1 and 2, a total of 23 ground and surface water conservation projects were approved involving approximately 65,400 acres with \$1.9 million from federal funding and \$644,000 from non-federal. Potential water saving on the aquifer is up to 9,600 acre-feet annually on the rim. On the plain below the rim in the Thousand Springs area, 19 assist and improve projects were approved with \$1.8 million from federal funding, \$453,000 non-federal cost-sharing, and an estimated reduction demand for spring flows of approximately 10,000 acre-feet. Recently the Board passed a resolution authorizing funding of \$200,000 for measurement devices that are required for AWEF projects and that has been applied with a 60/40 split.

There is approximately \$1.25 million dollars allocated and available from federal funds for current year projects, and there are more projects than there is money, which is a good sign. In Hazelton Butte area, there are conversion projects covering approximately 4,685 acres. There is an application for a reregulating reservoir on the Twin Falls Canal, three additional projects in the Thousand Springs area, and some additional demand reduction projects.

Mr. Alberdi asked for updates on the J8 pumpback project, the Fremont-Madison Study project, and the Idaho Canal Measurement project. Mr. Rigby responded that the J8 project is still under discussion, and there has been no further progress on the proposal. Mr. Patton responded that no Board monies have been disbursed on either the Idaho Canal Measurement or the Fremont-Madison projects to date.

Mr. John Simpson, Barker, Rosholt, Simpson, LLP, addressed the Board with respect to the J8 pumpback and conversion of ground water lands on the Northside system. He stated they are still working with the ground water districts and the State in an effort to try and ensure the project moves forward. This has been part of the negotiations that spring users have been having with the ground water districts to find ways to improve ground water levels in spring flows.

#### **c. Treasure Valley CAMP**

Ms. Harrington provided a brief update on current activities of the Treasure Valley CAMP Advisory Committee (AC). The AC recognized that it would be difficult for all 41 members to produce a draft document, so the full AC established a drafting group to develop a framework and draft language for the CAMP plan. The drafting group consists of Rex Barrie, Russ Dane, Matt Howard, Chris Jones, Brian Patton, Kathy Peter, Rick Ward, Paul Woods, and Mark Zirschky.

In response to the Board's direction at the last meeting to include a member of the surface water irrigation community to ensure that perspective was a part of the drafting process, Mr. Zirschky was added to the drafting group and has been participating since that time. There are concerns over how the drafting is done. The intent is to take whatever materials the drafting group develops to the full AC for review.

A letter was submitted by IWUA addressing concerns over the Reasonably Anticipated Future Needs (RAFN) component, which is shorthand for the Municipal Water Rights Planning Act of 1996. An additional letter was submitted from Mr. Paul Woods who is a member of both the TV CAMP AC and the drafting group. The intent of the letter is to inform the Board how the drafting group is working and what their role is in the process.

#### **Agenda Item No. 7, Water Storage Studies**

Mr. Brian Patton provided a brief update on the status of the ongoing water storage studies.

##### **Lower Boise River**

The Lower Boise Feasibility Study is a joint study between the IWRB and the COE. Late last year, the COE completed an initial screening analysis and identified the top three sites for additional storage: 1) higher dam at Arrowrock, 2) new dam at Alexander Flats, and 3) new dam at Twin Springs. At this point, study activity is suspended until Federal match funding is made available.

##### **Henrys Fork Basin**

The Henrys Fork Basin Study is a joint effort between the IWRB and the BOR with both parties providing funding. There are 26 surface water storage sites that have been identified and discussed. An investigation of other water management alternatives is a requirement of BOR funding.

Mr. Jeff Raybould commented that the Henrys Fork Basin Study group developed a working group that includes many interests of the Study, including Henrys Fork Foundation, Trout Unlimited, Friends of the Teton Rivers and American Rivers, along with Fremont-Madison Irrigation, and it was determined that the Study was getting off-track. Stakeholder meetings have been suspended until the working group can refocus the Study and

identify how to get the process back on track. A full stakeholders meeting is scheduled to be held in June. There is a strong reluctance from some of the interest groups to have a storage component come out of the Study but they recognized that the State of Idaho wanted storage options to be considered.

#### Weiser-Galloway Project

The Weiser-Galloway Project is a 50/50 cost share agreement between the IWRB and the COE to identify a potential storage project on the Weiser River. The report has been finalized and a full briefing will be made to the IWRB at the July meeting. The Storage Subcommittee will likely convene prior to the July meeting to receive a briefing on this report.

#### Minidoka Dam Raise Special Study

This study is complete and indicated that a 5 foot rise at Minidoka Dam would yield an additional storage capacity of 67,000 acre-feet at a cost of \$205 million dollars. Further action on this project is on hold pending economic changes or other changes that might prompt the IWRB to address it at a future date.

### **Agenda Item No. 8, Minimum Stream Flow (MSF) Program**

Ms. Helen Harrington provided a brief update in anticipation of future action that may be needed on behalf of the IWRB.

Kelso Lake Minimum Streamflow Lake Level – Several residents of the Kelso Lake area previously requested that the IWRB consider filing an application for a minimum lake level. In the State of Idaho, the IWRB is the only body that can hold a water right for a minimum streamflow or a minimum lake level. Staff met with interested parties and suggested that they conduct more background work before they approach the IWRB with a formal request. The interested parties do not have any water level data, and staff has encouraged them to install water monitoring devices to acquire water data, which will take at least a year. Kelso Lake is located between Coeur d'Alene and Sandpoint.

Pack River Minimum Streamflow – This is an existing permit, or license, with a 1992 priority date. An inquiry was received from a landowner who has property adjacent to the Pack River which is tributary to the Pend Oreille. The landowner was concerned that the minimum streamflow was not being met because a neighbor was diverting a junior water right. There are no gages that indicate if that is an accurate assessment. The IWRB may want to consider how and if it wants to address questions about whether the IWRB minimum streamflow water rights held by the IWRB are being met and whether they may want to implement any gaging.

Kootenai Minimum Streamflow Application – This application was filed by the IWRB in 1992 and is still in application status. The intent was to file for 5,340 cfs on the Kootenai River. The IDWR has been updating files and is contacting applicants to determine what their intent is. The IDWR will likely continue to contact the IWRB to determine if they want to continue to extend their request for a delay or take action, and the IWRB has several options to consider regarding this application.

Mr. Bob Graham strongly urged the IWRB to file for another delay and to delay as long as possible because there are very few water demands on the Kootenai River.

### **Agenda Item No. 9, IWRB Water Supply Bank (WSB) Update**

Mr. Patton presented several charts showing that WSB staff has made a tremendous effort in reducing the backlog on both the lease and rental side of the program. Mr. Patton suggested the IWRB reconvene the WSB Subcommittee to address several issues: 1) forfeiture review of leased water rights and concerns over the staff spending too much time reviewing forfeiture and 2) whether the current rental fee is appropriate. It is currently set at \$14.00 / acre foot. The IWRB's original intent was to match the out of basin rental rate for the rental pools as set in the Nez Perce Agreement. Clarification was requested as to whether that is still the IWRB's intent and the rental pool fee will start escalating this year from \$14.00 to \$17.00 / acre foot. The IWRB will be required to take action if that is their intent.

Chairman Uhling agreed that the Subcommittee should be reconvened and that the Attorney General's office should be kept in the loop on any forfeiture issues.

#### **Agenda Item No. 10, Wood River Basin Enhancement WSB**

Ms. Harrington stated this is the local rental pool established through legislation through the Wood River Legacy Program. Water District 37 has been working with this WSB and has requested an amendment to the local operating procedures related primarily to the administration of the water rights donated to the rental pool that are used to meet minimum streamflows that were legislatively created. The resolution for amendment of the procedures was provided, along with a current list of donations that are in the rental pool. The legislation sunsets at the end of 2012.

Mr. Raybould made a motion to accept the resolution in the matter of the Wood River Basin Enhancement WSB. The motion was seconded by Mr. Alberdi. Chairman Uhling called for a voice vote. All were in favor. Motion carried.

#### **Agenda Item No. 11, Director's Report**

Mr. Gary Spackman addressed the IWRB and expressed his concern for flooding potential both in northern Idaho and across the state. He also stated he was visiting the northern region because of the ongoing superfund activities with EPA and DEQ and concerns of local residents. The IDWR oversees the national flood insurance program and is also producing flood insurance maps and RISK map, which has been implemented by FEMA. One of the big concerns in the Silver Valley is that the removal of contaminant materials from yards and other exposed land surfaces and the replacement with about a 12 inch cap of non contaminated material. A concern is that every flooding event ends up exposing and potentially remobilizing the contaminated material. Millions of dollars have been spent on remediation and there's potential much of that could be lost through a major flood event. The State is trying to implore some protective measures to protect the remediation.

Mr. Spackman discussed the proposal to divert water from streams and to transport ground water for treatment and there are questions over whether state water rights are needed. There are a lot of concerns over what is happening in Silver Valley right now.

Mr. Spackman also stated there are concerns over rising lake levels at Hayden Lake and the COE has requested that action be taken. Hayden Lake is rated as a low hazard dam because there is an area below the dam to catch the water. There are sewer and gas lines that run through the dam that could create a problem that may need to be addressed.

Mr. Spackman spoke briefly about the Priest Lake Outlet. Mr. Karl Duncan who has been the operator in the past has been contracted by the IDWR. Discussion needs to be initiated regarding report of lake levels and flow and deciding what to do for the current year and future years. Mr. Graham has been a facilitator in those discussions.

Mr. Spackman stated he received a question from Rep. Eskridge about a study that was completed by Washington State University and funded by Washington State Ecology. The report is an attempt by the state of Washington to look at maximizing the timing of water coming into the Spokane River. The proposed water would be coming from the Pend Oreille area, which is a concern to the residents of Idaho and moving water from basin to basin.

Mr. Spackman briefly updated the IWRB about the IDWR budget. It is anticipated that the IDWR will complete the fiscal year in the black. There is extra in the operating expense in the range of \$50 to \$100,000 that will be allocated towards new computers. It is anticipated that the IDWR will meet budget and that additional mandatory furloughs will likely not be incurred.

## **Agenda Item No. 12, Western States Water Council (WSWC) Update**

Mr. Simpson, Barker Rosholt Simpson, LLP, is an appointed representative for WSWC, along with Mr. Jerry Rigby. Mr. Simpson provided a brief update on recent WSWC activities. Mr. Simpson provided a copy of the report by the executive director of WSWC that will be provided to Governor Otter. Mr. Simpson also provided a position statement that he worked on with Mr. Rigby and Mr. Bill McDonald, former regional director for the Bureau, regarding the National Levy Safety Act of 2007 that arose out of the Hurricane Katrina disaster and how some of the implications of that Act could be applied to the canals and diversion structures for irrigation use. The broad application could impact measures and maintenance in those canals and substantially increase the cost to irrigation entities. WSWC adopted this position statement and supports the Act but requested that the provision of this Act not be applied to irrigation canals.

WSWC is also addressing a case study in which there is a real effort in the West to identify where there is water available for thermal production – cooling, thermal plants, and energy. Mr. Spackman along with the IDWR will be contacted by WSWC representatives for information regarding how much water is being diverted and how much water is being consumed. Various interest groups are also trying to identify where the water sources are for energy needs.

WSWC meeting locations vary and the last one was held in Santa Fe. In New Mexico they are also looking at managed recharge. Their projects range from 700 acre-feet on one project to 1,000 acre-feet on another project, and they are spending millions of dollars to save that water.

Mr. Simpson states that we are currently in a La Nina. New Mexico is experiencing on average 30% of average precipitation with some basins at 1 to 2%. Idaho is in a blessed state this year with a water supply, but when it flips to an El Nino, typically the southwest gets higher water levels and Idaho would face drier conditions. Idaho can learn from New Mexico's conditions in the El Nino to plan and prepare for a similar situation.

The last item Mr. Simpson presented is the WSWC Fall Meeting to be held October 5 – 7 in Idaho Falls and suggested coordinating the IWRB Meeting with the WSWC Meeting.

## **Agenda Item No. 13. Other Items IWRB Members May Wish to Present**

Mr. Graham stated that both the Moyie and the Kootenai Rivers are predicted to be at an all time high and will likely hit flood stage next week.

Chairman Uhling discussed the timing of the next IWRB meeting, which is scheduled for July 28 & 29 in Boise, and rescheduling of future meeting dates. The IWRB meeting scheduled for September 8 & 9 was rescheduled for October 6 & 7 to coincide with the WSWC Fall Meeting in Idaho Falls. The November 1 & 2 meeting was changed to a one-day meeting on November 2 in Boise.

Chairman Uhling welcomed two new Board members: Jeff Raybould and Peter Van Der Meulen. He also congratulated Bob Haynes, Northern Regional manager, on his retirement and 43 years with the State.



#### **Agenda Item No. 14, Next Meeting and Adjourn**

Meeting was adjourned at approximately 11:20 a.m. The next regular IWRB meeting is scheduled for July 28 and 29, 2011, at the Idaho Water Center, in Boise, Idaho.

Respectfully submitted this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

\_\_\_\_\_  
Bob Graham, Secretary

\_\_\_\_\_  
Diana Ball, Administrative Assistant II

#### **Board Actions:**

1. Mr. Graham moved to approve Minutes for Meeting 2-11 as submitted. Motion was seconded by Mr. Alberdi. All were in favor. Motion carried.
2. Mr. Chase made a motion to accept the resolution to accept funding and to authorize an expenditure of funds in the matter of 2011 ESPA managed recharge operations as amended. The motion was seconded by Mr. Raybould. Chairman Uhling called for a roll call vote.

Roll Call Vote: Mr. Cuddy: Aye; Mr. Alberdi: Aye; Mr. Chase: Aye; Mr. Beck: Absent; Mr. Raybould: Aye; Mr. Van Der Meulen: Aye; Mr. Graham: Aye; Chairman Uhling: Aye. Roll Call Vote: 7 Ayes, 1 Absent. Motion carried.

3. Mr. Raybould made a motion to adopt the Consent to Sale and Transfer. The motion was seconded by Mr. Alberdi. Chairman Uhling called for a roll call vote.

Roll Call Vote: Mr. Cuddy: Aye; Mr. Alberdi: Aye; Mr. Chase: Aye; Mr. Beck: Absent; Mr. Raybould: Aye; Mr. Van Der Meulen: Aye; Mr. Graham: Aye; Chairman Uhling: Aye. Roll Call Vote: 7 Ayes. 1 Absent. Motion carried.

4. Mr. Raybould made a motion to accept the resolution in the matter of the Wood River Basin Enhancement WSB. The motion was seconded by Mr. Alberdi. Chairman Uhling called for a voice vote. All were in favor. Motion carried.



# MEMO

**To:** Idaho Water Resource Board  
**From:** Brian W. Patton  
**Subject:** Water Resource Projects Funding Program Status Report  
**Date:** July 15, 2011

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As of **July 1st** the IWRB's available and committed balances in the Revolving Development Account, Water Management Account, and the Secondary Aquifer Management Account are as follows:

*Revolving Development Account (main fund)*

Committed but not disbursed	
Loans for water projects	\$1,410,781
Water storage studies	\$924,868
Total committed but not disbursed	\$2,335,649
Loan principal outstanding	9,246,243
Uncommitted balance	4,185,620
Estimated revenues next 12 months	1,900,000
Commitments from revenues next 12 months	0
Estimated uncommitted funds over next 12 months	6,085,620

*Rev. Dev. Acct. ESPA Sub-Account*

Committed but not disbursed	
CREP	2,419,581
Aquifer recharge	561,883
Bell Rapids	361,620
Palisades storage	10,000
Black Canyon Exchange	417,485
Loan for water project	250,000
Total committed but not disbursed	\$4,020,569
Loan principal outstanding	424,172
Uncommitted balance	119,488
Estimated revenues next 12 months	172,000
Commitments from revenues over next 12 months	0
Estimated uncommitted funds over next 12 months	291,488

*Rev. Dev. Acct. Bell Rapids Sub-Account*

Committed but not disbursed (finance costs)	\$178,149
Estimated revenues next 12 months (I)	2,000
Commitments from revenues over next 12 months	2,000
Estimated uncommitted funds over next 12 months	0

*Rev. Dev. Acct. Dworshak Hydropower (2)*

Committed but not disbursed (repair fund, etc.)	\$1,252,341
Estimated revenues next 12 months (3)	200,000
Commitments from revenues over next 12 months	200,000
Estimated uncommitted funds over next 12 months	0

*Rev. Dev. Acct. Pristine Springs Sub-Account*

Committed but not disbursed	
Repair fund	\$993,693
Total committed but not disbursed	\$993,693
Loan principal outstanding	8,652,165
Uncommitted balance	0
Estimated revenues next 12 months	1,732,000
Commitments from revenues over next 12 months	1,732,000
Estimated uncommitted funds over next 12 months	0

*Rev. Dev. Acct. Upper Salmon/CBWTP Sub-Account*

Committed but not disbursed	\$2,004,666
(Upper Salmon flow enhancement projects)	
Estimated revenues next 12 months (4)	30,000
Commitments from revenues over next 12 months	30,000
Estimated uncommitted funds over next 12 months	0

*Water Management Account*

Committed but not disbursed:	\$111,376
Loan principal outstanding	12,726
Uncommitted balance	3,181
Estimated revenues next 12 months	2,000
Commitments from revenues over next 12 months	0
Estimated uncommitted funds over next 12 months	\$5,181

*Secondary Aquifer Management Fund*

Committed but not disbursed:	\$251,107
Uncommitted balance	2,214,702
Estimated revenues next 12 months	27,000
Commitments from revenues over next 12 months	0
Estimated uncommitted funds over next 12 months	2,241,702

<b>Total committed but not disbursed</b>	<b>\$11,147,550</b>
<b>Total loan principal outstanding</b>	<b>18,335,307</b>
<b>Total uncommitted balance</b>	<b>6,522,991</b>
<b>Total estimated uncommitted funds over next 12 months</b>	<b>8,623,991</b>

(1) Exclusive of pass-through payments made by the U.S. Bureau of Reclamation.

(2) Excess funds generated by the Dworshak Hydropower Project are deposited into the Revolving Development Account (Main Fund) on a monthly basis. To the date of this report this has totaled \$1,847,881.

- (3) This line item includes power sales and interest income after removing debt service. Debt service is paid prior to the funds being deposited in the Revolving Development Account.
- (4) Exclusive of project funds provided by Bonneville Power Administration or federal appropriation sources. These funds are provided to the Board based on individual project proposals.

**Summary of Financial Action Items:**

The IWRB will be considering funding for the following loan requests:

<b>Applicant</b>	<b>Project</b>	<b>Request</b>	<b>Recommendation</b>
Lake Reservoir Company	Replace and automate outlet gates at Payette Lake	\$594,000 loan (received federal grant for 50% of project cost)	\$594,000 loan from Revolving Development Account (half to be repaid upon receipt of federal grant and half to be carried long-term)
Portneuf Irrigating Company	Replace open canal with closed pressure pipeline	\$1.3 million loan (received federal grant for 75% of project cost)	\$1.3 million loan from Revolving Development Account

The IWRB will be considering action on the following Upper Salmon Water Transaction Project:

<b>Project</b>	<b>Project Description</b>	<b>Project Costs</b>	<b>Recommendation</b>
Patterson-Big Springs Creek	Relocate PBSC-9 diversion to allow stream re-connect and fish passage. IWRB portion of project would compensate diversion owner for increased pumping cost for 20 years	\$222,371	\$222,371 contingent on funds being received as expected from BPA

The IWRB will be taking action on the final issuance of revenue bonds for the Bear River Bond Pool in the amount of \$2 million, in order to match federal grant funds received by four canal companies in the Bear River Basin for canal improvement projects. The bond proceeds would then be loaned to the Local Improvement Districts now underlying each of the four canal systems.

The IWRB may also be taking action on an Inducement Resolution for the proposed issuance of revenue bonds to finance the acquisition of certain commercial fish hatcheries by the several ground water districts on the Eastern Snake Plain. An Inducement Resolution indicates an issuers intent to issue certain types of tax-exempt bonds.

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The New Plymouth Water Users Association has repaid their loan to the IWRB.

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**The following is a list of potential loans that we know about:**

Potential Applicant	Potential Project	Preliminary Loan Amount	Comment
Cub River Irrigation Company	Replace open lateral with pressure pipeline	\$300,000	Have received federal (BOR) grant, but Cub River Irrigation serves lands in both Idaho and Utah so working out how much loan funds should come from each state
Marysville Canal Company	Phase 3 of gravity pressure pipeline project	\$1,000,000	Waiting on outcome of federal (NRCS) grant request; IWRB has financed Phases 1 & 2 with \$1.725M in loans to match prior federal grants.
Point Springs Grazing District	Pipeline replacement	\$25,000	
Ohio Match Road Water District	Back-up generator at well	435,000	
Jughandle Estates Homeowners Association	Community water supply	\$800,000	Forming LID and building project with interim financing. Once LID is complete and costs are known, may do this a Revolving Account loan or a as a small stand-alone revenue bond.

IDAHO WATER RESOURCE BOARD  
Sources and Applications of Funds  
as of June 30, 2011  
**REVOLVING DEVELOPMENT ACCOUNT**

Original Appropriation (1969).....	\$500,000.00
Legislative Audits.....	(\$37,814.45)
IWRB Bond Program.....	(\$15,000.00)
Legislative Appropriation FY90-91.....	\$250,000.00
Legislative Appropriation FY91-92.....	\$280,700.00
Legislative Appropriation FY93-94.....	\$500,000.00
IWRB Studies and Projects.....	(\$249,067.18)
Loan Interest.....	\$5,181,691.46
Interest Earned State Treasury (Transferred).....	\$1,530,655.39
Filing Fee Balance.....	\$47,640.20
Bond Fees.....	\$1,474,173.20
Arbitrage Calculation Fees.....	(\$9,000.00)
Protest Fees.....	(\$175.00)
Series 2000 (Caldwell/New York) Pooled Bond Issuers fees.....	\$43,657.93
Water Supply Bank Receipts.....	\$2,580,656.38
Legislative Appropriation FY01.....	\$200,000.00
Pierce Well Easement.....	\$2,000.00
Transferred to/from Water Management Account.....	\$317,253.80
Legislative Appropriation 2004, HB843.....	\$500,000.00
Legislative Appropriation 2009, SB 1511 Sec 2, Teton/Minidoka Studies.....	\$1,800,000.00
Legislative Appropriation 2009, SB 1511 Sec 2, Teton/Minidoka Studies Expenditures.....	(\$921,838.18)
Weiser Galloway Study - US Army Corps of Engineers.....	(\$55,901.88)

**Bell Rapids Water Rights Sub-Account**

Legislative Appropriation 2005, HB392.....	\$21,300,000.00
Interest Earned State Treasury.....	\$689,789.60
Bell Rapids Purchase.....	(\$16,006,558.00)
Bureau of Reclamation Principal Amount Lease Payment Paid.....	\$8,294,337.54
Bureau of Reclamation Interest Paid.....	\$179,727.97
Bureau of Reclamation Remaining Amount Lease Payment Paid.....	\$9,142,649.54
First Installment Payment to Bell Rapids.....	(\$1,313,236.00)
Second Installment Payment to Bell Rapids.....	(\$1,313,236.00)
Third Installment Payment to Bell Rapids.....	(\$1,313,236.00)
Fourth Installment Payment to Bell Rapids.....	(\$1,040,431.55)
Interest Credit due to Bureau of Reclamation (Part of Fourth Installment).....	(\$19,860.45)
Fifth Installment Payment to Bell Rapids.....	(\$1,055,000.00)
Transfer to General Fund - Principal.....	(\$21,300,000.00)
Transfer to General Fund - Interest.....	(\$772,052.06)
BOR payment for Bell Rapids.....	\$1,040,431.55
BOR payment for Bell Rapids.....	\$1,313,236.00
BOR prepayment for Bell Rapids.....	\$1,302,981.70
BOR prepayment for Bell Rapids.....	\$1,055,000.00
BOR payment for Alternative Financing Note.....	\$7,117,971.16
Payment to US Bank for Alternative Financing Note.....	(\$7,118,125.86)
Payment for Ongoing Bell Rapids Finance Costs (trustee fees, etc.).....	(\$6,240.10)

**Commitments**

Ongoing Bell Rapids Finance Costs (trustee fees, etc.).....	\$178,149.04
Committed for alternative finance payment.....	\$0.00
<b>Total Commitments.....</b>	<b>\$178,149.04</b>

**Balance Bell Rapids Water Rights Sub-Account..... (\$0.00)**

**Pristine Springs Project Sub-Account**

Legislative Appropriation 2008, SB1511, Pristine Springs.....	\$10,000,000.00
Legislative Appropriation 2006, HB870, Water Right Purchases.....	\$5,000,000.00
Interest Earned State Treasury.....	\$18,009.75
Loan Interest.....	\$779,431.25
Transfer from ESP Sub-Account.....	\$1,000,000.00
Payment for Purchase of Pristine Springs (3).....	(\$16,000,000.00)
Payment from Magic Valley & Northsnake GWD for Pristine Springs.....	\$1,686,387.63
Appraisal.....	(\$15,000.00)
Insurance.....	(\$10,475.00)
Recharge District Assessment.....	(\$3,003.00)
Hydro Plants Engineering Certification (Straubhar).....	(\$1,500.00)
Property Taxes and other fee assessments (Jerome County).....	(\$5,598.99)
Rental Payments.....	\$848,634.32
Transferred to Secondary Aquifer Fund (2011 Legislature; HB 291).....	(\$2,465,300.00)

**Pristine Springs Hydropower Projects**

Net power sales revenues.....	\$162,107.22
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**Pristine Springs Committed Funds**

ESPA CAMP.....	0.00
Repair/Replacement Fund.....	\$993,693.18
<b>TOTAL COMMITTED FUNDS.....</b>	<b>\$993,693.18</b>

**Loans Outstanding**

North Snake and Magic Valley Ground Water Districts.....	\$8,652,165.33
<b>Total Loans Outstanding.....</b>	<b>\$8,652,165.33</b>

**Balance Pristine Springs Sub-Account..... \$0.00**

**Upper Salmon/CBWTP Sub-Account**

Water Transaction Projects Payment Advances from CBWTP/Accord.....	\$1,934,932.78
PCSRF Funds for Administration of Non-Diversion Easements on Lemhi River.....	\$161,079.26
Interest Earned State Treasury.....	\$58,572.04
Transfer to Water Supply Bank.....	(\$22,236.94)
Payments for Water Acquisition.....	(\$127,681.42)

**Committed Funds**

Administration of Non-Diversion Easements on Lemhi River.....	\$161,052.85
Alturas Lake Creek (Breckenridge).....	\$2,098.09
Beaver Creek (DOT LLP).....	\$21,775.56
Big Hat Creek.....	\$364.96

Big Timber Tyler (Leadore Land Partners).....	\$476,018.46	
Fourth of July Creek (Vanderbilt).....	\$18,726.48	
Iron Creek (Phillips).....	\$241,592.52	
Lower Eighteenmile Creek (Ellsworth Angus Ranch).....	\$7,774.88	
Lower Lemhi M Olson (Mark Olson).....	\$11,109.95	
Lower Lemhi Thomas (Robert Thomas).....	\$2,944.16	
P-9 Bowles (River Valley Ranch).....	\$307,259.56	
P-9 Charlton (Sydney Dowton).....	\$20,337.61	
P-9 Dowton (Jim Dowton Ranch).....	\$243,709.18	
P-9 Elzinga (Elzinga).....	\$301,448.32	
Whitefish (Leadore Land Partners).....	\$188,453.14	
Total Committed Funds.....	\$2,004,665.72	
Balance CBWTP Sub-Account.....		(\$0.00)
<b>Eastern Snake Plain Sub-Account</b>		
Legislative Appropriation 2005, HB392.....	\$7,200,000.00	
Legislative Appropriation 2005, HB392, CREP Program.....	\$3,000,000.00	
Interest Earned State Treasury.....	\$1,832,955.63	
Loan Interest.....	\$139,658.80	
Bell Rapids Water Rights Closing Costs.....	(\$6,558.00)	
First Installment Payment to Bell Rapids Irr. Co. (Partial).....	(\$361,800.00)	
Second Installment Payment to Bell Rapids Irr. Co. (Partial).....	(\$361,800.00)	
Third Installment Payment to Bell Rapids Irr. Co. (Partial).....	(\$361,800.00)	
Fourth Installment Payment to Bell Rapids Irr. Co. (Partial).....	(\$614,744.00)	
Fifth Installment Payment to Bell Rapids Irr. Co. (Final).....	(\$1,675,036.00)	
Reimbursement from Commerce & Labor W-Canal.....	\$74,709.77	
Transfer to Pristine Springs Sub Account.....	(\$1,000,000.00)	
Reimbursement from Magic Valley GWD - Pristine Springs.....	\$500,000.00	
Reimbursement from North Snake GWD - Pristine Springs.....	\$500,000.00	
Reimbursement from Water District 1 for Recharge.....	\$159,764.73	
Palisades (FMC) Storage Costs.....	(\$3,508,224.83)	
Reimbursement from BOR for Palisades Reservoir.....	\$2,381.12	
W-Canal Project Costs.....	(\$326,834.11)	
Black Canyon Exchange Project Costs.....	(\$35,840.00)	
2008 Recharge Conveyance Costs.....	(\$14,580.00)	
2009 Recharge Conveyance Costs.....	(\$355,253.00)	
2010 Recharge Conveyance Costs.....	(\$215,906.82)	
Pristine Springs Cost Project Costs.....	(\$6,863.91)	
Loans and Other Commitments.....		
Commitment - ESPA Comprehensive Aquifer Management Plan - CDR Contract.....	\$0.00	
Commitment - North Snake & Magic Valley GWD Loan - Mitigation Pipeline.....	\$250,000.00	
Commitment - Remainder of Bell Rapids Water Rights Purchase (1).....	\$361,620.00	
Commitment - CREP Program (HB392, 2005).....	\$2,419,580.50	
Commitment - Recharge Conveyance.....	\$159,764.73	
Commitment - Additional recharge projects preliminary development.....	\$350,000.00	
Commitment - Palisades Storage O&M.....	\$10,000.00	
Commitment - Black Canyon Exchange Project (fund with ongoing revenues).....	\$417,484.95	
Commitment - W-Canal Aquifer and Recharge Conveyance.....	\$52,118.36	
Total Loans and Other Commitments.....	\$4,020,568.54	
Loans Outstanding:		
American Falls-Aberdeen GWD (CREP).....	\$121,950.13	
Bingham GWD (CREP).....	\$46,808.06	
Bonneville Jefferson GWD (CREP).....	\$75,932.93	
Magic Valley GWD (CREP).....	\$116,841.90	
North Snake GWD (CREP).....	\$62,639.36	
TOTAL ESP LOANS OUTSTANDING.....	\$424,172.38	
Uncommitted Balance Eastern Snake Plain Sub-Account.....		\$119,488.46
<b>Dworshak Hydropower Project</b>		
Dworshak Project Revenues		
Power Sales & Other.....	\$5,050,903.87	
Interest Earned State Treasury.....	425,652.07	
Total Dworshak Project Revenues.....		\$5,476,555.94
Dworshak Project Expenses (2)		
Transferred to 1st Security Trustee Account.....	\$148,542.63	
Construction not paid through bond issuance.....	\$226,106.83	
1st Security Fees.....	\$314,443.35	
Operations & Maintenance.....	\$1,274,428.72	
Powerplant Repairs.....	\$58,488.80	
Capital Improvements.....	\$318,366.79	
FERC Payments.....	\$35,956.16	
Total Dworshak Project Expenses.....		(\$2,376,333.28)
Dworshak Project Committed Funds		
Emergency Repair/Future Replacement Fund.....	\$1,222,340.00	
FERC Fee Payment Fund.....	\$30,001.49	
Total Dworshak Project Committed Funds.....		\$1,252,341.49
Excess Dworshak Funds into Main Revolving Development Account.....		\$1,847,881.17
TOTAL.....		<u>\$15,767,512.84</u>
Loans Outstanding:	Amount Loaned	Principal Outstanding
Aberdeen-Springfield Canal Company (WRB-491; Diversion structure).....	\$329,761	\$220,628.06
Bee Line Water Association.....	\$157,500	\$9,094.00
Big Wood Canal Company (23-Jan-09; Thorn Creek Flume).....	\$90,000	\$44,541.67
Boise City Canal Company (WRB-492)...18th St Canal Rehab	\$82,362	\$31,581.42
Boise City Canal Company (WRB-492)...Grove St Canal Rehab	\$110,618	\$62,125.33
Bonnie Laura Water Corporation (14-Jul-06; Well repairs).....	\$71,000	\$46,273.64
Caribou Acres Water Company.....	\$88,769	\$5,539.93
Carlin Bay Property Owners Association.....	\$115,609	\$8,465.96
Challis Irrigation Company (28-Nov-07; river gate replacement).....	\$50,000	\$39,679.15
Chaparral Water Association.....	\$90,154	\$28,072.20
Chaparral Water Association (21-Jan-11; Well deepening & improve	68,000.00	\$39,680.78

Cloverdale Ridge Water Corp. (irrigation system rehab 25-sep-09).....	106,400.00	\$95,954.25
Conant Creek Canal Company.....	\$239,615	\$21,896.92
Country Club Subdivision Water Association (18-May-07, Well Project).	\$102,000	\$76,890.49
Cub River Irrigation Company.....	\$35,000	\$0.00
Cub River Irrigation Company (18-Nov-05; Pipeline project).....	\$1,000,000	\$881,018.35
Cub River Irrigation Company.....	\$500,000	\$454,549.88
Dalton Water Association (14-Mar-08; Water main replacement).....	\$375,088	\$155,836.20
Deep Creek Property Owners Association.....	\$25,115	\$8,953.36
Enterprise Irrigation District (14-Jul-06; Pipeline project).....	\$37,270	\$24,686.77
Enterprise Irrigation District (North Lateral Pipeline).....	\$105,420	\$68,572.64
Evergreen Terrace Water Association (water study; 25-sep-09).....	15,000.00	\$13,683.91
Firth, City of.....	\$112,888	\$55,700.46
Garden Valley Ranchettes Homeowners Association (25-Jan-05).....	2,716.00	\$2,198.76
Genesee, City of (Storage tank, 22-Jan-10).....	250,000.00	\$250,000.00
Georgetown, City of.....	\$278,500	\$134,933.77
Harbor View Water & Sewer District (Combined Loans).....	\$602,819	\$286,143.24
Harpster Water District .....	\$9,000	\$6,541.63
Howe Water District (5-Aug-05).....	\$10,000	\$0.00
Hoyt Bluff Water Association (Rathdrum Prairie Well).....	\$273,029	\$71,583.44
Jefferson Irrigation Company (well deepenings).....	\$110,780	\$0.00
Jefferson Irrigation Company (well deepenings).....	\$207,016	\$94,963.43
Jefferson Irrigation Company (9-May-2008 Well Replacement).....	\$81,000	\$71,530.68
King Hill Irrigation District (24-Sep-10; Pipeline replacement).....	300,000.00	\$175,000.00
Kulleyspell Estates Property Owners Assoc.....	\$219,510	\$13,851.88
Last Chance Canal Company (WRB-497).....	\$500,000	\$227,476.12
Lakeview Water District.....	\$45,146	\$10,409.37
Lava Hot Springs, City of.....	\$347,510	\$235,847.14
Lindsay Lateral Association (22-Aug-03).....	\$9,600	\$19,474.14
Lindsay Lateral Association .....	19,800.00	\$4,500.00
Live-More Lake Community (9-Jun-04).....	\$42,000	\$22,624.07
Lower Payette Ditch Company (2-Apr-04; Diversion dam replacement)	\$875,000	\$550,550.34
Marsh Center Irrigation Company (13-May-05; Hawkins Dam).....	\$236,141	\$176,991.40
Marysville Irrigation Company (18-May-07, Pipeline Project Phase 1)....	\$625,000	\$414,501.22
Marysville Irrigation Company (9-May-08, Pipeline Project Phase 2).....	\$1,100,000	\$787,125.75
Meander Point Subdivision Homeowners Association (7-Sep-07; comr	\$330,000	\$99,942.16
Meridian Heights Water & Sewer Association (18-May-07).....	\$350,000	\$335,939.89
McGuire Estates Water Users Association (4-Mar-05).....	\$60,851	\$45,948.73
Monument Ridge Homeowners Association (20-Mar-09; irrigation syst	\$360,000	\$205,732.00
Mores Creek Rim Ranches Water District.....	\$221,400	\$97,673.35
New Hope Water Corporation.....	\$42,000	\$71,851.00
New Plymouth Water Users Association .....	\$7,450	\$0.00
Oakley Valley Water Company .....	\$138,331	\$41,764.52
PPRT Water System.....	\$70,972	\$37,387.79
Packsaddle Water Corporation .....	\$49,600	\$6,495.13
Picabo Livestock Co (Picabo town water system new well).....	\$38,000	\$4,744.11
Pinehurst Water District (14-mar-08; Water Storage tank).....	\$160,000	75,349.03
Powder Valley-Shadowbrook Homeowners Assoc. ....	\$201,500	\$10,522.95
Preston Riverdale & Mink Creek Canal Co.....	\$400,000	\$28,877.50
Preston-Whitney Irrigation Company (29-May-09; Fairview Lateral Pipel	\$800,000	\$763,029.69
Producers Irrigation Company (17-Mar-06; well replacements).....	\$185,000	\$94,249.70
Ranch Subdivision Property Owners Assoc.....	\$24,834	\$16,229.15
Riverside Independent Water District .....	\$350,000	\$221,757.40
Robertson Ditch Co.....	\$30,000	\$3,731.08
Skin Creek Water Association.....	\$188,258	\$127,157.09
Sourdough Point Owners Association (23-Jan-07; water supply & treatr	\$750,000	\$205,450.09
Spirit Bend Water Association.....	\$92,000	\$62,866.82
Thunder Canyon Owners Association (6-Feb-04).....	\$92,416	\$63,476.69
Twenty-Mile Creek Water Association .....	\$104,933	\$12,257.09
Twin Lakes Canal Company - Winder Lateral Pipeline Project (13-Jul-0	\$500,000	\$425,448.20
Twin Lakes Canal Company (2-Apr-04).....	\$90,000	\$64,090.95
Twin Lakes-Rathdrum Fld Cont Dist (24-Oct-02; Twin Lakes Dam).....	\$399,988	\$83,595.87
Whitney-Nashville Water Company.....	\$225,000	\$91,003.32
<b>TOTAL LOANS OUTSTANDING.....</b>		<b>\$9,246,243.05</b>
<b>Loans and Other Funding Obligations:</b>		
Senate Bill 1511 - Teton Replacement and Minidoka Enlargement Studies.....	\$878,161.82	
Weiser-Galloway Study (28-May-10).....	\$46,706.61	
Big Wood Canal Company (23-Jan-09; Thorn Creek Flume).....	\$0.00	
Canyon Creek Canal Company (14-Mar-08; Pipeline project).....	\$133,599.00	
Chaparral Water Association (21-Jan-11; Well deepening & Improvement).....	\$28,319.22	
Clearwater Water District - pilot plant (13-Jul-07).....	\$80,000.00	
Dover, City of (23-Jul-10; Water Intake project).....	\$194,063.00	
Evergreen Terrace Water Association (water study; 25-sep-09).....	\$1,316.09	
Garden Valley Ranchettes Homeowners Association (25-Jan-05).....	\$8,183.69	
King Hill Irrigation District (24-Sep-10; Pipeline replacement).....	\$0.00	
Kulleyspell estates Property Owners Association (water line replacements; 25-sep-09).....	\$500,000.00	
Jefferson Irrigation Company (9-May-2008; Well replacement).....	\$0.00	
Lindsay Lateral Association .....	\$15,300.00	
North Snake & Magic Valley GWD Loan - Mitigation Pipeline.....	\$250,000.00	
Monument Ridge Homeowners Association (20-Mar-09; irrigation system rehab).....	\$0.00	
Preston-Whitney Irrigation Company (29-May-09; Fairview Lateral Pipeline).....	\$0.00	
Sourdough Point Owners Association (23-Jan-07; water supply & treatment).....	\$0.00	
South Liberty Irrigation Company (28-May-10; Pipeline project).....	\$200,000.00	
<b>TOTAL LOANS AND OTHER FUNDING OBLIGATIONS.....</b>		<b>\$2,335,649.43</b>
<b>Uncommitted Funds.....</b>		<b>\$4,185,620.36</b>
<b>TOTAL.....</b>		<b>\$15,767,512.84</b>

(1) Actual amount needed may vary depending on final determination of water actually purchased and interest income received.

(2) Debt service on the Dworshak Project bonds is paid before the Dworshak monies are deposited into the Revolving Development Account and is therefore not shown on this balance sheet.



Idaho Water Resource Board  
Sources and Applications of Funds  
as of June 30 , 2011

WATER MANAGEMENT ACCOUNT

Original Appropriation (1978).....	\$1,000,000.00
Legislative Audits.....	(\$3,145.45)
IWRB Appraisal Study (Charles Thompson).....	(\$5,000.00)
Transfer funds to General Account 1101(HB 130, 1983).....	(\$500,000.00)
Legislative Appropriation (6/29/1984).....	\$115,800.00
Legislative Appropriation (HB988, 1994).....	\$75,000.00
Turned Back to General Account 6/30/95, (HB988, 1994).....	(\$35,014.25)
Legislative Appropriation (SB1260, 1995, Aquifer Recharge, Caribou Dam).....	\$1,000,000.00
Interest Earned.....	\$118,967.24
Filing Fee Balance.....	\$2,633.31
Water Supply Bank Receipts.....	\$841,803.07
Bond Fees.....	\$277,254.94
Funds from DEQ and IDOC for Glenns Ferry Water Study.....	\$10,000.00
Legislative Appropriation FY01.....	\$200,000.00
Western States Wate Council Annual Dues.....	(\$7,500.00)
Tranfer to/from Revolving Development Account.....	(\$317,253.80)
Legislative Appropriation (SB1239, Sugarloaf Aquifer Recharge Project).....	\$60,000.00
Legislative Appropriation (HB 843 Sec 6).....	\$520,000.00
Legislative Appropriation (SB1496, 2006, ESP Aquifer Management Plan).....	\$300,000.00
Legislative Appropriation (HB 320, 2007, ESP Aquifer Management Plan).....	\$849,936.99
<b>TOTAL .....</b>	<b>\$4,503,482.05</b>

Grants Disbursed:

Completed Grants.....	\$1,291,110.72
Arco, City of.....	\$7,500.00
Arimo, City of.....	\$7,500.00
Bancroft, City of.....	\$7,000.00
Bloomington, City of.....	\$4,254.86
Boise City Canal Company.....	\$7,500.00
Bonniers Ferry, City of.....	\$7,500.00
Bonneville County Commission.....	\$3,375.00
Bovill, City of.....	\$2,299.42
Buffalo River Water Association.....	\$4,007.25
Butte City, City of.....	\$3,250.00
Cave Bay Community Services.....	\$6,750.00
Central Shoshone County Water District.....	\$7,500.01
Clearwater Regional Water Project Study, City of Orofino et al.....	\$10,000.00
Clearwater Water District.....	\$3,750.00
Cottonwood Point Water and Sewer Association .....	\$7,500.00
Cottonwood, City of.....	\$5,000.00
Cougar Ridge Water & Sewer.....	\$4,661.34
Curley Creek Water Association.....	\$2,334.15
Downey, City of.....	\$7,500.00
Fairview Water District.....	\$7,500.01
Fish Creek Reservoir Company, Fish Creek Dam Study.....	\$12,500.00
Franklin, City of.....	\$6,750.00
Grangeville, City of.....	\$7,500.00
Greenleaf, City of.....	\$3,000.00
Hansen, City of .....	\$7,450.00
Hayden Lake Irrigation District.....	\$7,500.00
Hulen Meadows Water Company.....	\$7,500.00
Iona, City of.....	\$1,425.64
Kendrick, City of.....	\$7,500.00
Kooskia, City of.....	\$7,500.00
Lakeview Water District.....	\$2,250.00
Lava Hot Springs, City of.....	\$7,500.00
Lindsay Lateral Association.....	\$7,500.00
Lower Payette Ditch Company.....	\$5,500.01
Maple Grove Estates Homeowners Association.....	\$5,020.88
Meander Point Homeowners Association.....	\$7,500.00
Moreland Water & Sewer District.....	\$7,500.00
New Hope Water Corporation.....	\$2,720.39
North Lake Water & Sewer District.....	\$7,500.00

Northside Estates Homeowners Association.....	\$4,492.00	
North Tomar Butte Water & Sewer District.....	\$3,575.18	
North Water & Sewer District.....	\$3,825.00	
Parkview Water Association.....	\$4,649.98	
Payette, City of.....	\$6,579.00	
Pierce, City of.....	\$7,500.00	
Potlatch, City of.....	\$6,474.00	
Preston Whitney Irrigation Company.....	\$7,500.00	
Preston & Whitney Reservoir Company.....	\$3,606.75	
Preston & Whitney Reservoir Company.....	\$7,000.00	
Roberts, City of.....	\$3,750.00	
Round Valley Water.....	\$3,000.00	
Sagle Valley Water & Sewer District.....	\$2,117.51	
South Hill Water & Sewer District.....	\$3,825.00	
St Charles, City of.....	\$5,632.88	
Swan Valley, City of.....	\$5,000.01	
Twenty-Mile Creek Water Association.....	\$2,467.00	
Valley View Water & Sewer District.....	\$5,000.02	
Victor, City of.....	\$3,750.00	
Weston, City of.....	\$6,601.20	
Winder Lateral Association.....	\$7,000.00	
<b>TOTAL GRANTS DISBURSED.....</b>		<b>(\$1,632,755.21)</b>
IWRB Expenditures		
Lemhi River Water Right Appraisals.....	\$31,000.00	
Expenditures Directed by Legislature		
Obligated 1994 (HB988).....	\$39,985.75	
SB1260, Aquifer Recharge.....	\$947,000.00	
SB1260, Soda (Caribou) Dam Study.....	\$53,000.00	
Sugarloaf Aquifer Recharge Project (SB1239).....	\$55,953.69	
ESPA Settlement Water Rentals (HB 843 2004).....	\$504,000.00	
ESP Aquifer Management Plan (SB1496, 2006).....	\$300,000.00	
ESP Aquifer Management Plan (HB320, 2007).....	\$801,077.75	
<b>TOTAL IWRB AND LEGISLATIVE DIRECTED EXPENDITURES.....</b>		<b>(\$2,732,017.19)</b>
<b>WATER RESOURCE BOARD RECHARGE PROJECTS.....</b>		<b>(\$11,426.88)</b>
<b>CURRENT ACCOUNT BALANCE.....</b>		<b>\$127,282.77</b>
Committed Funds:		
Grants Obligated		
Cottonwood Point Water & Sewer Association.....	\$0.00	
Preston - Whintey Irrigation Company.....	\$7,500.00	
Water District No. 1 (Blackfoot Equalizing Reservoir Automation).....	\$35,000.00	
Legislative Directed Obligations		
Sugarloaf Aquifer Recharge Project (SB1239).....	\$4,046.31	
ESPA Settlement Water Rentals (HB 843, 2004).....	\$16,000.00	
ESPA Management Plan (SB 1496, 2006).....	\$0.00	
ESP Aquifer Management Plan (HB320, 2007).....	\$48,829.24	
<b>TOTAL GRANTS &amp; LOANS OBLIGATED &amp; UNDISBURSED.....</b>		<b>\$111,375.55</b>
Loans Outstanding:	Amount Loaned	Principal Outstanding
Arco, City of.....	\$7,500	\$0.00
Butte City, City of.....	\$7,425	\$1,969.94
Roberts, City of.....	\$23,750	\$5,095.22
Victor, City of.....	\$23,750	\$5,660.70
<b>TOTAL LOANS OUTSTANDING.....</b>		<b>\$12,725.86</b>
Uncommitted Funds.....		\$3,181.36
<b>CURRENT ACCOUNT BALANCE.....</b>		<b>\$127,282.77</b>

Idaho Water Resource Board  
Sources and Applications of Funds  
as of June 30, 2011

SECONDARY AQUIFER PLANNING, MANAGEMENT, & IMPLEMENTATION FUND

Legislative Appropriation (HB 291, Sec 2).....	\$2,465,300.00
Interest Earned State Treasury (Transferred).....	\$2,502.01
Water Users Contributions.....	\$100.00
Conversion project (AWEP) measurement device Payments.....	(\$2,092.68)

Committed Funds

Measurement devices for AWEP conversion projects.....	\$197,907.32
Idaho Irrigation District Recharge Phase 1.....	\$13,200.00
Fremont-Madison irrigation District Egin Recharge.....	\$40,000.00
<b>Total Committed Funds.....</b>	<b>\$251,107.32</b>

**TOTAL UNCOMMITTED FUNDS..... \$2,214,702.01**

**CURRENT ACCOUNT BALANCE..... \$2,465,809.33**

# STATE OF IDAHO

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## Idaho Water Resource Board

322 East Front Street  
PO Box 83720  
Boise, ID 83720  
Phone (208) 287-4800  
Fax (208) 287-6700



**To:** Idaho Water Resource Board

**From:** Daniel Nelson, Staff Hydrologist

**Date:** July 13, 2011

**Subject:** Lake Reservoir Company – Lardo Dam Upgrade

---

Action Item: \$594,000 loan request

### 1.0 INTRODUCTION

The Lake Reservoir Company is requesting a loan of \$594,000 to upgrade the Lardo Dam at the outlet of Big Payette Lake located at McCall, Idaho. The Lake reservoir Company has been awarded a Water Smart Grant of \$297,000 by the US Bureau of Reclamation. Upon Receipt of these grant funds, which will occur at the project completion, the Lake Reservoir Company will repay \$297,000 of the Idaho Water Resource Board (IWRB) loan. The remainder of the IWRB loan, \$297,000, would be carried out to the term of the loan. The Lake Reservoir Company is proposing a 10 year term for the loan.

Lake Reservoir Company is comprised of six irrigation entities. The six irrigation entities are Emmett Irrigation District serving 23,106 acres, Farmers Cooperative Irrigation Company serving 13,283 acres, Lower Payette Ditch Company serving 12,770 acres, Noble Ditch Company serving 8,380 acres, Letha Irrigation and Water Company serving 5,246 acres, and the Enterprise Ditch Company serving 2,921 acres for a total of 65,706 acres. The six entities that make up the Lake Reservoir Company includes most of the Payette Valley below Black Canyon Dam in Gem, Payette, and Washington counties.

The Lake Reservoir Company's facilities include the Big Payette Lake (27,750 af), Upper Payette Lake (2,400 acre feet), Granite Lake (2,800 acre feet), Box Lake (1,300 acre feet), and Blackwell Lake (340 acre feet) for a total storage capacity of 34,590 acre feet of water. Lardo Dam is the lowest dam on the system, and all 34,590 acre feet of water passes through the dam as it is released for use downstream.

## 2.0 BACKGROUND

On March 13, 1920, Lake Reservoir Company was formed to regulate the water storage in the lakes of the upper Payette River system. In 1943, Lake Reservoir Company began construction of Lardo Dam to regulate the storage in Big Payette Lake. The dam was constructed with 9 control bays. The middle three control bays were fitted with radial gates, and the three bays on each side were set up with manually installed stop logs. In 1997, the three radial gates in the center bays were fitted with remote operation ability, but the other 6 bays still requires the manual installation of the stop logs.

The flows into Big Payette Lake can vary from 7,000 cfs to below 1,500 cfs. The natural crest of the lake will only allow outflows from the lake of 5,000 cfs. The stop logs cannot be safely inserted until the high spring flows into the lake have subsided. By the time the stop logs are installed, significant water storage is lost. The project is to equip the six stop log bays with Obermeyer Overtopping Control Gates with remote and automatic controls. This will allow Lake Reservoir Company to maintain instantaneous and complete control of the facility from a remote location. This will assist them in minimizing flooding while maximizing storage in this system.

## 3.0 PROPOSED PROJECT

The proposed project is to remove the six stop log gates at Lardo Dam and replace them with six Obermeyer Overtopping Gates with remote and automatic controls. When a minimal contingency of 8% is included, the estimated project costs are as follows:

Description	Project Cost
Legal fees for regulatory compliance and permits	\$4500
Architectural and Engineering Fees	\$12,450
Demolition and Construction Costs	\$46,400
Obermeyer gates equipment and materials	\$485,750
8% Contingencies costs	\$44,900
TOTAL	\$594,000

## 4.0 BENEFITS

A large recreational economy exists on Big Payette Lake that benefits the City of McCall and the surrounding area. Maintaining constant water levels in the lake has a direct influence on the economic impact for the City of McCall. Due to this project, releases from Big Payette Lake can improve the coordination efforts for releases from the Federal storage projects in the basin (Cascade and Deadwood reservoirs). Having instantaneous and remote control of Lardo Dam gates will allow better control of the outflow from and the water levels in the Big Payette Lake. This project will also substantially improve operator safety by eliminating the need to install and remove stop logs in the dam.

## 5.0 FINANCIAL ANALYSIS

**Table 1. Estimated Annual Payment Assuming \$297,000 is carried out with a 10 year term at 5.5 % interest.**

The Lake Reservoir Company is requesting a loan of \$594,000. However, \$297,000 would be repaid in the near term upon their receipt of the grant funds from the Bureau of Reclamation. The Lake Reservoir Company is proposing a 10 – year term for the remaining \$297,000 that would be carried out long term.

<b>Term</b>	<b>Estimated Annual Payment - Revolving Account Loan</b>	<b>Cost Per Acre / Year Before Loan</b>	<b>Cost per Acre / Year With Loan</b>
10 years	\$40,131	\$0.65	\$1.81

**Table 3. Financial Ratios**

<b>Indicator</b>	<b>Before Project</b>	<b>10 year term 5.5%</b>
Revenues/Expenses Strong: greater than 1.20 Average: 1.0 – 1.2 Weak: less than 1.0	1.75 (Strong)	1.18 (Average)
Debt Service Coverage Ratio Strong: 1.20 or greater Average: 1.0 – 1.20 Weak: less than 1.0	N/A (Strong)	1.24 (Strong)
Cash Reserves/Annual Expenses Strong: greater than 1.0 Average: 0.5 – 1.0 Weak: less than 0.5	0.46 (Weak)	0.87 (Average)
Cost per acre foot delivered.  Strong: less than \$10.00 Average: \$10.00 - \$20.00 Weak: more than \$20.00	\$0.65 (Strong)	\$2.66 (Strong)
Overall Rating	Strong -	Strong -

NOTE: The information depicted above is for a loan \$297,000.

## 6.0 WATER RIGHTS

Lake Reservoir Company water rights are as follows:

Water Right	Water Right Type	Priority Date	Source	Amount
65-2060	Decree	5/1/1907	Payette River North Fork	3.00 cfs
65-2278	Decree	2/18/1920	Big Payette Lake	27,750 af
65-2376	Decree	4/2/1932	Big Willow Creek, Main Drain District #1, Payette River, and Unnamed Stream	60.00 cfs
65-2918	Decree	3/23/1927	Upper Payette Lake	2400 af
65-2919	Decree	8/1/1928	Granite Lake	2600 af
65-2923C	Decree	7/1/1929	Fall Creek	96.4 af
65-2923E	Decree	7/1/1929	Fall Creek	81.6 af
65-10519	Decree	4/1/1966	Granite Lake	200 af
65-10520	Decree	7/9/1929	Box Lake	1300 af
65-23305	Permit	8/12/2009	Fall Creek	162 af

**Please Note:** There are natural flow water rights owned by Lake Reservoir Company as well as storage water rights. The natural flow water rights only show a diversion rate (cfs), while the storage water rights only show a volume (afa).

## 7.0 SECURITY

The IWRB will hold Lake Reservoir Company water rights and associated storage structures for this loan if approved.

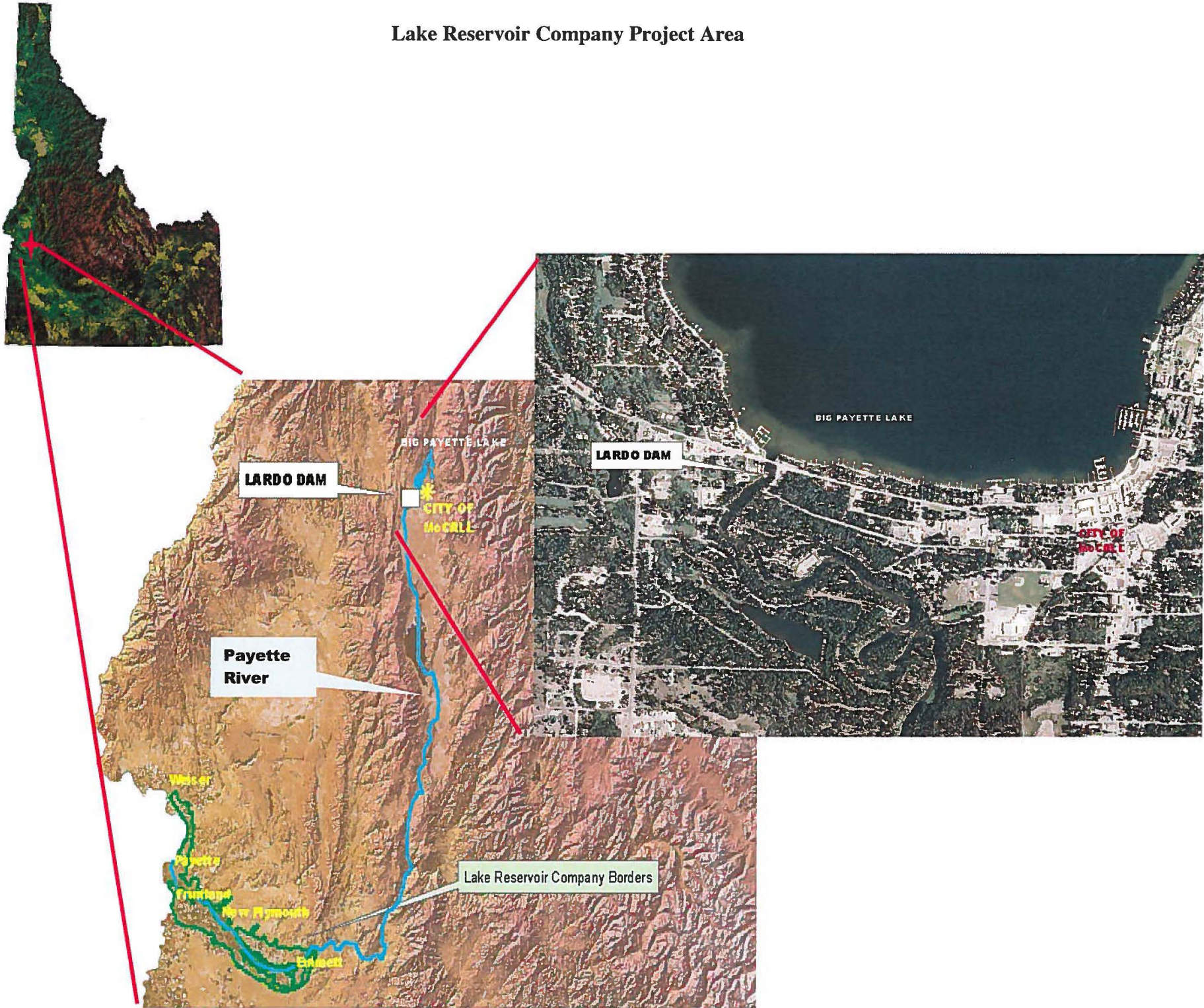
## 8.0 CONCLUSION AND RECOMMENDATION

This loan will be used to upgrade Lardo Dam at the outlet of Big Payette Lake. It has been approximately 68 years since this outlet structure has been updated. This project will provide substantial benefits to the Lake Reservoir Company, as well as improve the ability to control water levels in Big Payette Lake and releases from the lake.

Staff recommends approval of the Lake Reservoir Company's Revolving Development Account loan in the amount of \$594,000 with conditions as specified in the attached resolution.



Lake Reservoir Company Project Area

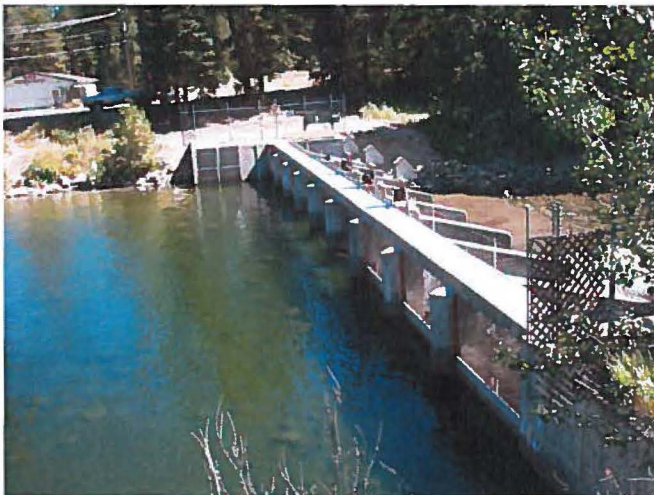




## PHOTOS OF LARDO DAM



This photo shows one of the stop log gates. The stop logs are manually inserted into this gate once water levels reach a safe level. There are three of these gates on either side of the dam.



This photo shows the upstream face of the dam. There are three gates on either side of the dam that are stop log gates. The three gates in the middle of the dam are radial gates with automatic controls.



This photo shows the automatic controls on the three radial gates. There will be similar controls on the 6 stop log gates once the project is completed.

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE )  
LAKE RESERVOIR COMPANY ) A RESOLUTION TO MAKE  
 ) A FUNDING COMMITMENT  
 )

WHEREAS, the Lake Reservoir Company (Company) has submitted an application to the Idaho Water Resource Board (IWRB) requesting a loan in the amount of \$594,000; and

WHEREAS, the Company stores irrigation water for delivery to 6 irrigation water delivery entities irrigating a combined total of 65,706 acres located in the Payette Valley below Black Canyon Dam in Gem, Payette, and Washington Counties; and

WHEREAS, the Company is requesting funding to upgrade Lardo Dam at the mouth of Big Payette Lake near McCall, Idaho to allow remote and automatic controls of 6 of the 9 gates that control storage in the lake and the release of water from Big Payette Lake into the Payette River; and

WHEREAS, the Company has received approval from the U.S. Bureau of Reclamation for a Water Smart Grant in the amount of \$297,000 for this project, and pledge to use this grant toward the \$594,000 cost of the project; and

WHEREAS, the proposed project will improve the ability to manage the water levels in Payette Lake and releases from the lake and improve the ability to coordinate operations with other major reservoirs in the Payette River Basin; and

WHEREAS, the Company is a qualified applicant and the proposed project qualifies for a loan from the Revolving Development Account; and

WHEREAS, the proposed project is in the public interest, and is in compliance with the State Water Plan.

NOW THEREFORE BE IT RESOLVED that the IWRB approves a loan not to exceed \$594,000 from the Revolving Development Account at 5.5 % interest with a 10 year repayment term and provides authority to the Director of the Idaho Department of Water Resources, to enter into contracts with the Company on behalf of the IWRB.

BE IT FURTHER RESOLVED that this resolution and the approval of the loan is subject to the following conditions:

- 1) The Company shall comply with all appropriate Federal, State, and Local rules and requirements including Association bylaws that may apply to the proposed project and the borrowing of funds.
- 2) The Company shall provide adequate security to the Board for this loan.
- 3) The Company shall utilize the \$297,000 grant from the U.S. Bureau of Reclamation for this project in such a way that it reduces the loan principal to the extent possible.

DATED this 29<sup>th</sup> day of July, 2011.

\_\_\_\_\_, Chairman  
Idaho Water Resource Board

ATTEST \_\_\_\_\_  
\_\_\_\_\_, Secretary

# STATE OF IDAHO

---

## Idaho Water Resource Board

322 East Front Street  
PO Box 83720  
Boise, ID 83720  
Phone (208) 287-4800  
Fax (208) 287-6700



**To:** Idaho Water Resource Board  
**From:** Daniel Nelson, Staff Hydrologist  
**Date:** July 13, 2011  
**Subject:** Portneuf Irrigating Company– Pipeline Project

---

Action Item: \$1,300,000 loan request

## 1.0 INTRODUCTION

The Portneuf Irrigating Company is requesting a loan of \$1,300,000 to replace their open canal system with a pipeline near Arimo in Bannock County. Portneuf Irrigating Company received a Natural Resource Conservation Service's (NRCS) Agricultural Water Enhancement Program (AWEP) grant for \$3,900,000 (75%) to fund this \$5,200,000 project. Portneuf Irrigation Company is requesting a loan for their 25% of the project.

## 2.0 BACKGROUND

Portneuf Irrigating Company is comprised of 30 water users irrigating 2,518 acres of ground. Their water rights allow the irrigation of 55 cfs for 3,118 acres. Approximately 10.5 cfs and 600 acres are no longer being used on the project, and have been placed in the Water Supply Bank. There are a total of 60.5 shares for the remaining 2,518 acres in the Company at approximately 42 acres per share. The project will include approximately 10 miles of High-Density Poly-Ethelene (HDPE) pipe varying in size from 48 inches to 24 inches to be installed in the same right-of-way of the Portneuf Irrigating Company's canal also known as the Arimo Ditch.

The Portneuf Irrigating Company was originally awarded the AWEPP grant in a joint project with the adjacent Portneuf Marsh Valley Canal Company. The Joint project was to improve the delivery systems of both irrigation companies. Due to the size of this combined project the NRCS felt it was best to split the project up into several phases. Unfortunately, the NRCS is requesting that these projects be started during the fall of 2011. The Portneuf Marsh Valley Canal Company has undergone new management, and there appears to be additional issues that raise a significant doubt on their continued participation in the project. The only phase of the project that can move forward at this time is Portneuf Irrigating Company's Arimo Ditch phase. The Portneuf Irrigating Company wishes to move forward with their portion of the project, and plan to use the the possible future sale of the water rights currently in the Water Supply Bank to pay off the loan, or to use the rental of these water rights to assist in paying the annual payment for the Idaho Water Resource Board (IWRB) loan.

### **3.0 PROPOSED PROJECT**

The proposed project is to replace the existing open ditch with an underground pipeline. When a minimal contingency of 7% is included, the estimated project costs are as follows:

Description	Project Cost
HDPE Pipe	\$4,189,304
Inlet Structure	\$150,000
Shareholder headgates	\$300,000
7% Contingencies costs	\$360,696
<b>TOTAL</b>	<b>\$5,200,000</b>

Please Note: All engineering services will be performed by the NRCS staff, and construction costs are included in the HDPE pipe costs.

### **4.0 BENEFITS**

This project will allow Portneuf Irrigating Company to install their pipeline with a 75% (\$3.9 million) cost share from the NRCS. The pipeline will also allow Portneuf Irrigation Company to participate in the original proposal if the City of Pocatello's water right transfer is approved, and the Portneuf Marsh Valley Irrigation Company can resolve their internal issues. If the City of Pocatello water right transfer is denied and Portneuf Marsh Valley Irrigation Company can't resolve their internal issues, the Portneuf Irrigating Company will still be in a position to market the portion of their water right currently residing in the Water Supply Bank in a manner to pay off the loan or pay a portion of the loan payment. The pipeline will build pressure in the lower reaches, which will reduce pumping costs for the water users in those sections of the system. The Arimo Ditch loses a significant amount of water. This pipeline will allow the Portneuf Irrigating Company to deliver the ditch losses to their customers.



## 5.0 FINANCIAL ANALYSIS

**Table 1. Assuming Estimated Annual Payment of \$1,300,000 is carried out with a 30 year term at 5.5 % interest.**

The Portneuf Irrigating Company is requesting a loan of \$1,300,000. They are requesting that the payment amount be minimized by stretching out the loan term to 30 years. The life span of the buried NPDE pipe is 30 to 50 years.

<b>Term</b>	<b>Estimated Annual Payment - Revolving Account Loan</b>	<b>Cost Per Acre / Year Before Loan</b>	<b>Cost per Acre / Year With Loan</b>
20 years	\$108,783	\$0.51	\$4.11
30 years	\$89,447	\$0.51	\$2.96

**Table 3. Financial Ratios**

<b>Indicator</b>	<b>Before Project</b>	<b>20 year term 5.5 %</b>	<b>30 year term 5.5 %</b>
Revenues/Expenses Strong: greater than 1.20 Average: 1.0 – 1.2 Weak: less than 1.0	0.91 (Weak)	0.99 (Weak)	0.99 (Weak)
Debt Service Coverage Ratio Strong: 1.20 or greater Average: 1.0 – 1.20 Weak: less than 1.0	N/A (Weak)	0.99 (Weak)	0.98 (Weak)
Cash Reserves/Annual Expenses Strong: greater than 1.0 Average: 0.5 – 1.0 Weak: less than 0.5	0.58 (Average)	0.94 (Average)	0.93 (Average)
Cost per acre foot delivered.  Strong: less than \$10.00 Average: \$10.00 - \$20.00 Weak: more than \$20.00	\$1.70 (Strong)	\$10.80 (Average)	\$8.88 (Strong)
Overall Rating	Average -	Average -	Average -

## 6.0 WATER RIGHTS

Portneuf Irrigating Company water rights are as follows:

Water Right	Water Right Type	Priority Date	Source	Amount	Acres
29-51	Decree	3/27/1889	Portneuf River	55.00 cfs	3117.6
29-11277	Decree	8/7/1932	Portneuf River	55.00 cfs	3117.6

**Please Note:** When these two water rights are combined, they are limited to 55.00 cfs and 3117.6 acres. The Portneuf Irrigating Company has placed 10.5 cfs and 600 acres of the unused portion of both of their water rights into the Water Supply Bank.

## 7.0 SECURITY

The IWRB will hold Portneuf Irrigating Company's water rights and associated delivery structures for this loan if approved.

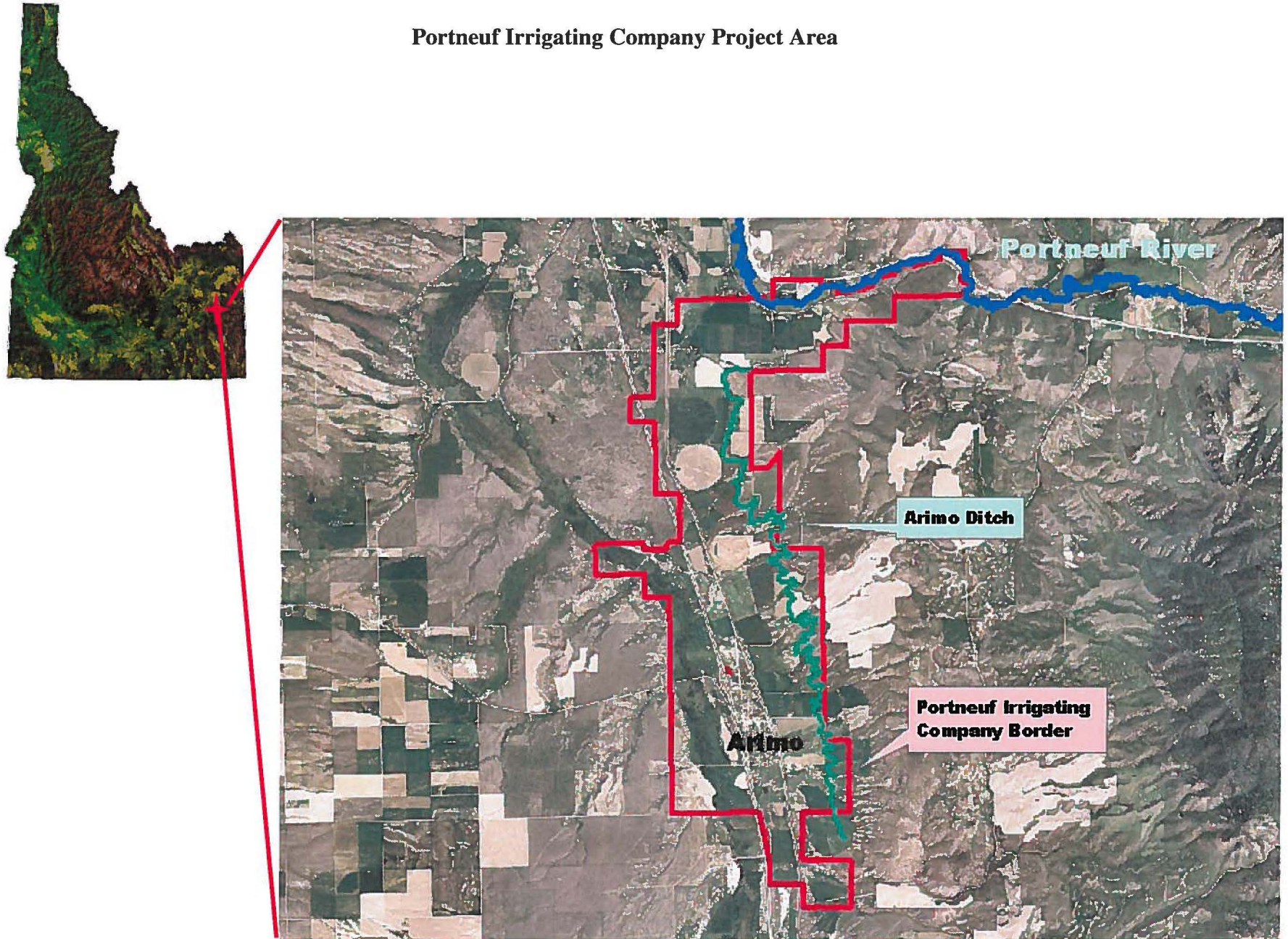
## 8.0 CONCLUSION AND RECOMMENDATION

This loan will be used to replace Arimo Ditch with a buried pipeline. The Arimo Ditch loses a significant amount of water that can be delivered to shareholders if the pipeline is installed. It will also give Portneuf Irrigating Company an advantageous head start if the City of Pocatello's water right transfer is approved and Portneuf Marsh Valley Irrigation Company resolved their internal issues. The portion of the Portneuf Irrigating Company's water rights that currently resides in the Water Supply Bank can be marketed to pay off the loan or reduce the payments. Completing the pipeline this fall will give them a marketing advantage for the portion of the water right in the water supply bank, since they will be able to begin marketing this water right for next year's irrigation season.

Staff recommends approval of the Portneuf Irrigating Company's Revolving Development Account loan in the amount of \$1,300,000 with conditions as specified in the attached resolution.



## Portneuf Irrigating Company Project Area



# STATE OF IDAHO

---

## Idaho Water Resource Board

322 East Front Street  
PO Box 83720  
Boise, ID 83720  
Phone (208) 287-4800  
Fax (208) 287-6700



**To:** Idaho Water Resource Board

**From:** Brian Patton  
Dan Nelson

**Date:** July 29, 2011

**Subject:** Bear River Area Pooled Bond Loan Applications

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## 1.0 INTRODUCTION

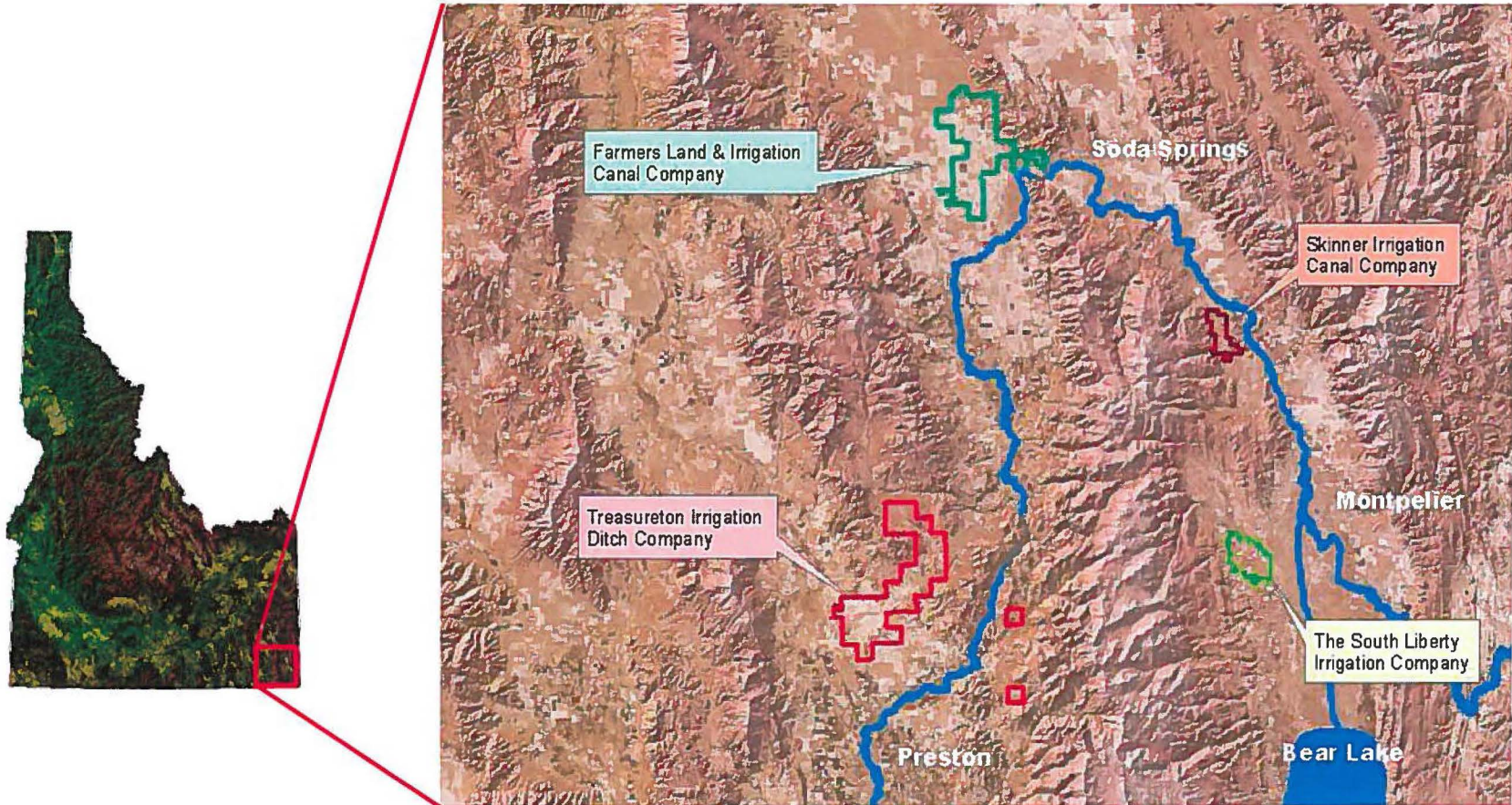
Prior to the November, 2009 Idaho Water Resource Board (IWRB) meeting, a request was made to the IWRB to fund eight different canal companies from the Bear River area for approximately \$3,300,000 in order to match stimulus grant funds from the U.S. Bureau of Reclamation to replace their existing canals with pressurized pipelines, and another request was received to fund a pipeline project for Southwest Irrigation District for approximately \$6,200,000. There were not adequate funds to finance all of these projects, so the IWRB was asked to consider a pooled bond to finance all of these projects during the November 4, 2009 meeting. It was agreed that staff should pursue a pooled bond for these projects. In order to use the pooled bond process, each canal company was required to form a Local Improvement District (LID) in order to provide the necessary security of assessment to allow the IWRB to issue Revenue Bonds and loan the proceeds to finance these projects. As a result, only five of the Bear River area companies opted to pursue the pooled bond process. The other Bear River companies and Southwest Irrigation decided to opt out of the Bond process.

The Bureau of Reclamation issued a Stimulus Grant to Water District 11 in the Bear Lake area of southeastern Idaho. This grant allowed several canal and irrigation companies to construct individual canal improvement projects with a 50% cost share. The five canal companies pursuing pooled bond loan through the IWRB actively pursued and formed their individual LID. One of the five canal companies' membership were able to pay their costs up front, so they are no longer involved in the financing process. The four remaining companies have completed the process, and are requesting that the IWRB initiate the process to start selling the bonds to complete the process for the long term financing for these projects.

## 2.0 CURRENT STATUS

The projects have been completed using interim financing and are ready to begin the final step for the financing of these projects. The Bureau of Reclamation is in the process of distributing the funds for these projects. The final day to distribute funds is November 30, 2011. You will find a resolution prepared by the IWRB bond attorney authorizing the issuance of the revenue bonds and entering into contracts with the LIDs (canal companies) to finance the projects.





### Bear River Revolving Loan Project Areas

The four Canal Companies are:

**Treasureton Irrigation Ditch Company** – located 7 miles north of Preston ID – Irrigating 750 to 1,000 acres.

**South Liberty Irrigation Company** – Located near the City of Ovid – Irrigating 1,100 to 1,800 acres.

**Skinner Irrigation Canal Company** – located 3.5 miles west of Georgetown, ID – Irrigating 1,800 acres

**Farmers Land & Irrigation Canal Company** - Located west of Soda Springs, ID – Irrigating 4,040.

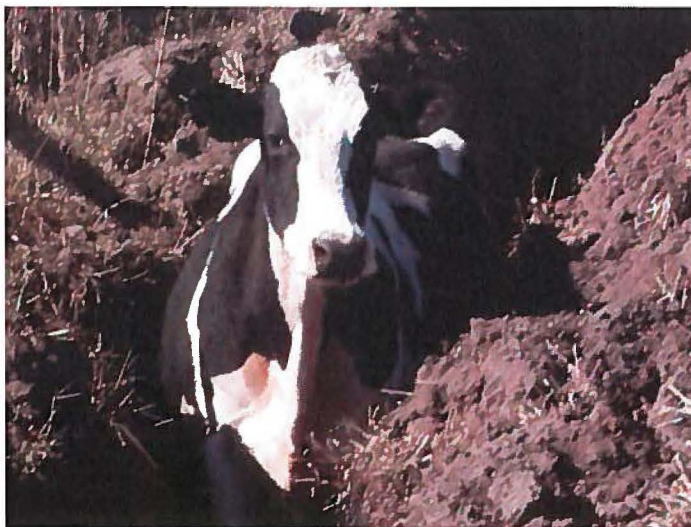
**Please Note:** South Liberty had early concerns that they would not have sufficient funding through the pooled bond loan. They applied for a Revolving development account loan in the amount of \$200,000 to be used if the pooled bond loan was not adequate. The loan was approved, but they have yet to draw any funds on this loan.





The photos above show the installation of the pipelines for Treasureton Irrigation Ditch Company, South Liberty Irrigation Company, Skinner Irrigation Canal Company and Farmers Land & Irrigation Canal Company.

As always there tends to be at least one ~~fly~~ Cow in the ointment with any construction project.



# Memorandum



To: Idaho Water Resource Board

From: Morgan Case

Date: July 28, 2011

Re: 2012 Transaction in Development – Patterson Big Springs Creek (Big Springs Creek Ranch LLC)

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**Action Item:** Attached is a resolution authorizing the Board to enter into a 20-year agreement not to divert out of Patterson Big Springs Creek with the Big Springs Creek Ranch LLC and authorizing the Board to expend \$222,370.91 from the Idaho Fish Accord Idaho Water Transactions Fund.

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The Pahsimeroi River Basin, in Central Idaho, provides enormous potential as spawning and rearing habitat for anadromous fish, particularly steelhead and Chinook salmon. Patterson Big Springs Creek (PBSC) in particular provides cool, clean, spring water and habitat. Recent restoration projects in PBSC, including the P-9 Ditch removal project, have provided enormous benefit to anadromous fish populations as evidenced by the immediate use of the newly accessible habitat by spawning Chinook salmon.

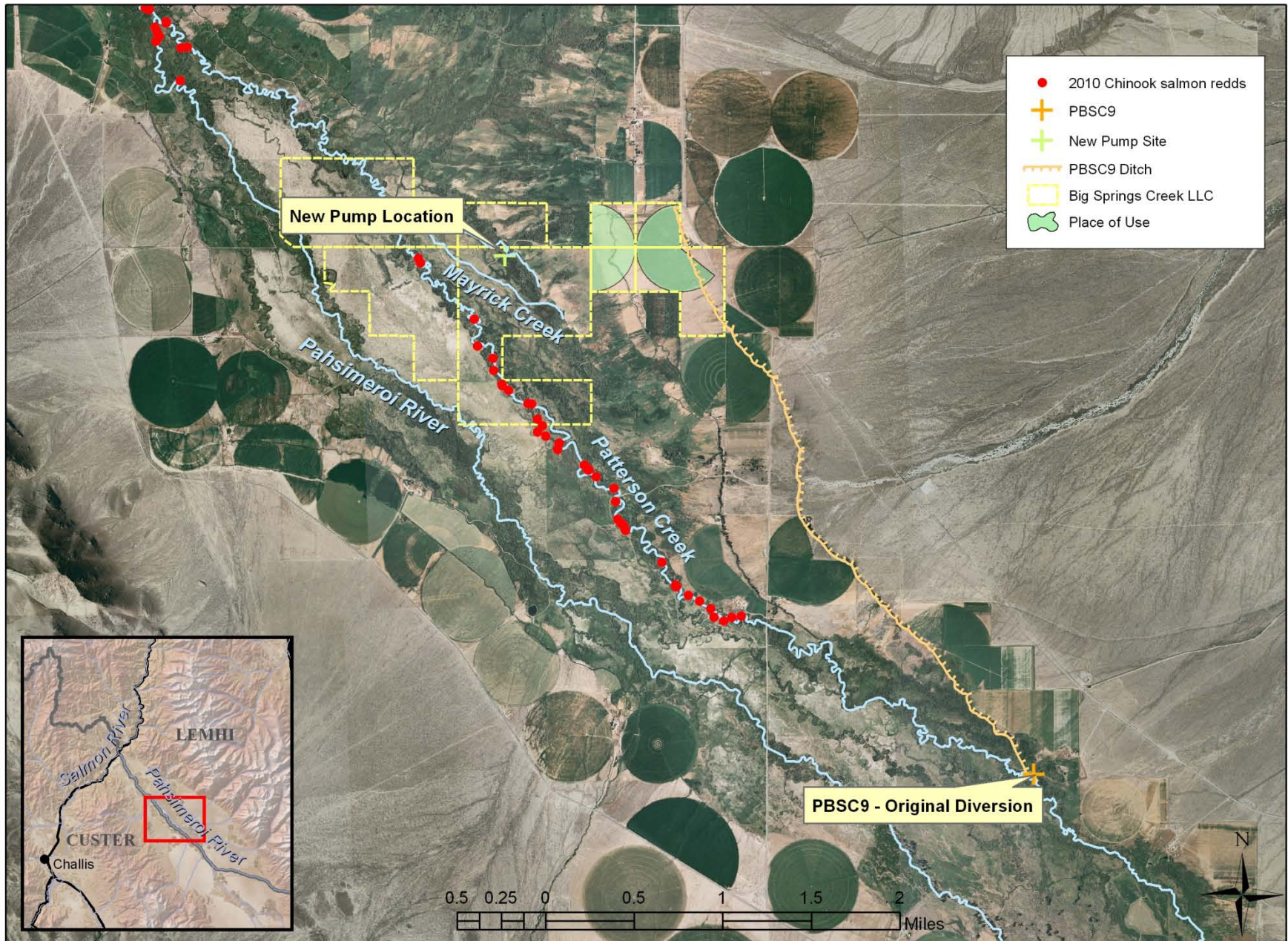
Upstream passage and low flows are still a problem at the PBSC-9 diversion, which diverts 7 cfs of water for the Big Springs Creek Ranch (BSCR). BSCR has been working with the Custer Soil and Water Conservation District (CSWCD) to secure funds to install a new irrigation system that will allow the water rights diverted out of PSBC-9 to remain instream and instead exchanged with Mayrick Creek water, approximately 5 miles downstream of the original point of diversion. Mayrick Creek is a spring channel that is not currently connected to PBSC. The 7 cfs from PBSC 9 will be spilled past the diversions between PBSC 9 and the historic confluence with Mayrick Creek. While the new pump will divert only 2.2 cfs and leave 4.8 cfs in the system due to irrigation efficiency, those flows will not be protected downstream from the confluence with Mayrick Creek, however, flow is not limited in the reaches below this point.

Current diversion from PBSC 9 is gravity; the new system will require installation of a pumping facility. In order to make the project economically feasible for the ranch, staff proposes entering into a 20-year agreement not to divert out of Patterson Big Springs Creek. Project costs are based upon pumping cost estimates, with an annual 5% increase to account for potential power rate increases. Funds will approximate the power costs incurred.

The transaction cost to the IWRB will be \$222,370.91 over the 20-year term. Funding for this project is available through the Idaho Fish Accords Water Transactions Fund. The funds would be placed into the IWRB's Revolving Development Account from which annual payments would be made.



# Patterson Big Springs Creek Transaction



BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE PATTERSON )  
BIG SPRINGS CREEK – BIG SPRINGS )  
CREEK RANCH TRANSACTION )  
\_\_\_\_\_)

A RESOLUTION TO  
MAKE A FUNDING  
COMMITMENT

WHEREAS, Chinook salmon and steelhead habitat in the Pahsimeroi River basin is limited by insufficient flow; and

WHEREAS, it is in the interest of the State of Idaho to reconnect the Pahsimeroi River and tributaries to encourage recovery of ESA-listed Chinook salmon and steelhead fish; and

WHEREAS, Patterson Big Springs Creek (PBSC) is a tributary that provides high quality spawning and rearing habitat for anadromous fish in the lower reaches, but is flow and passage limited at the PBSC 9 diversion.

WHEREAS, staff has developed a twenty-year agreement not to divert water from Patterson Big Springs Creek at the PSBC 9 diversion to reconnect stream flow for anadromous and resident fish; and

WHEREAS, the water user has changed the point of diversion to pump from stream reaches that are not flow-limited and the funds paid under the agreement will approximate the power expenses incurred, over a 20-year period, by changing the points of diversion; and

WHEREAS, funds are available from the Bonneville Power Administration through the Idaho Fish Accord Idaho Water Transaction Fund; and

WHEREAS, staff anticipates the funds being placed into the Idaho Water Resource Board (IWRB) Revolving Development Account for annual payment to the water right owners; and

WHEREAS, the Patterson Big Springs Creek- Big Springs Creek Ranch transaction is in the public interest and consistent with the State Water Plan.

NOW THEREFORE BE IT RESOLVED that the IWRB authorizes the Chairman to enter into contracts with Big Springs Creek Ranch LLC and/or subsequent owners for an agreement not to divert out of Patterson Big Springs Creek at the PBSC 9 diversion in the amount of two hundred twenty-two thousand three hundred seventy dollars and ninety-one cents (\$222,370.91).

NOW THEREFORE BE IT FURTHER RESOLVED that this resolution is subject to the condition that the IWRB receives the requested funding from the Bonneville Power Administration through the Idaho Water Transaction Program in the

amount of two hundred twenty-two thousand three hundred seventy dollars and ninety-one cents (\$222,370.91).

DATED this 29th day of July, 2011.

\_\_\_\_\_  
\_\_\_\_\_, Chairman  
Idaho Water Resource Board

ATTEST: \_\_\_\_\_

\_\_\_\_\_  
Secretary

# MEMO



**To:** Idaho Water Resource Board

**From:**  Bill Quinn, Recharge Coordinator

**Subjects:** 2011 Early Season ESPA Recharge Summary

**Date:** July 8, 2011

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This memorandum summarizes the Board's 2011 Early Season ESPA Managed Recharge Program through early July. This year due to abundant natural flow waters, the Board's Snake River recharge right has remained in priority continuously from February through early July.

Six canal companies or irrigation districts participated in the program. Through early July, these companies/districts accomplished approximately 57,000 acre-feet of recharge at a cost of approximately \$160,000. Above American Falls Aberdeen-Springfield Canal Company, Fremont-Madison Irrigation District, and United Canal Company accounted for approximately 34,000 acre-feet of the total recharge. Below American Falls American Falls Reservoir District No. 2, Big Wood Canal Company and Southwest Irrigation District accounted for approximately 23,000 acre-feet of the total recharge.

Attached table and charts: Table 1 is a tabulation of all Board-sponsored ESPA managed recharge from 2008 through early July 2011. Figure 1 is a map indicating 5-year ESPA recharge response functions, Figure 2 indicates 2011 recharge volume, Figure 3 indicates 2011 recharge diversion rates by canal, and Figure 4 indicates total recharge volume since 2008.



TABLE 1

Annual ESPA Managed Recharge and Yearly Totals, 2008 - 2011 <small>(7-4-11)</small>																														
Year	ASCC		AFRD2		BWCC		FMID		Grt Fdr		IID		NSCC		SRVID		SWID		United		Total		above Am Falls		below Am Falls		% above Am Falls		% below Am Falls	
	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$	a-f	\$
2008	0	0	0	0	0	0	4,860	14,580	0	0	0	0	0	0	0	0	0	0	0	0	4,860	14,580	4,860	14,580	0	0	100	100	0	0
2009	18,563	40,438	38,698	116,094	0	0	37,317	30,878	20,944	62,966	1,004	3,012	6,519	19,557	0	0	1,491	4,473	0	0	124,536	277,418	77,828	137,294	46,708	140,124	62	49	38	51
2010	5,322	15,966	2,002	6,006	157	460	49,466	148,398	0	0	0	0	0	0	1,125	3,375	3,436	10,308	0	0	61,508	184,513	55,913	167,739	5,595	16,774	91	91	9	9
2011	13,291	39,873	18,630	55,890	3,025	9,075	17,560	45,000	0	0	0	0	0	0	0	0	1,394	4,182	2,740	5,000	56,640	159,020	33,591	89,873	23,049	69,147	59	57	41	43
Total AF	37,176		59,330		3,182		109,203		20,944		1,004		6,519		1,125		6,321		2,740		247,544		172,192		75,352					
% of total AF	15		24		1.3		44		8		1		3		0		3										70		30	
Total \$		96,277		177,990		9,535		238,856		62,966		3,012		19,557		3,375		18,963		5,000		635,531		409,486		226,045				
% of total \$		15		28		1.5		38		10		0		3		1		3										64		36

all recharge listed above sponsored by Idaho Water Resource Board  
all figures except percentages in acre-feet or dollars

- ASCC
- Aberdeen-Springfield Canal Co.
- AFRD2
- American Falls Res. Dist. No. 2 (Milner-Gooding Canal)
- BWCC
- Big Wood Canal Co.
- FMID
- Fremont-Madison Irr. Dist. (includes 562 a-f from Silkey Canal)
- Grt Fdr
- Great Feeder Canals
- IID
- Idaho Irr. Dist
- NSCC
- North Side Canal Co.
- SRVID
- Snake River Valley Irr. Dist.
- SWID
- Southwest Irr. Dist.
- UNITED
- United Canal Co.

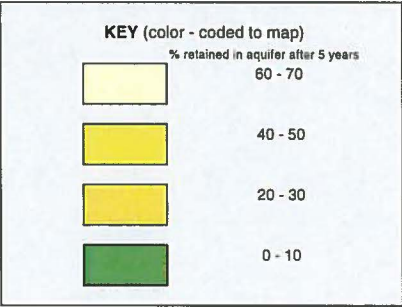




FIGURE 1

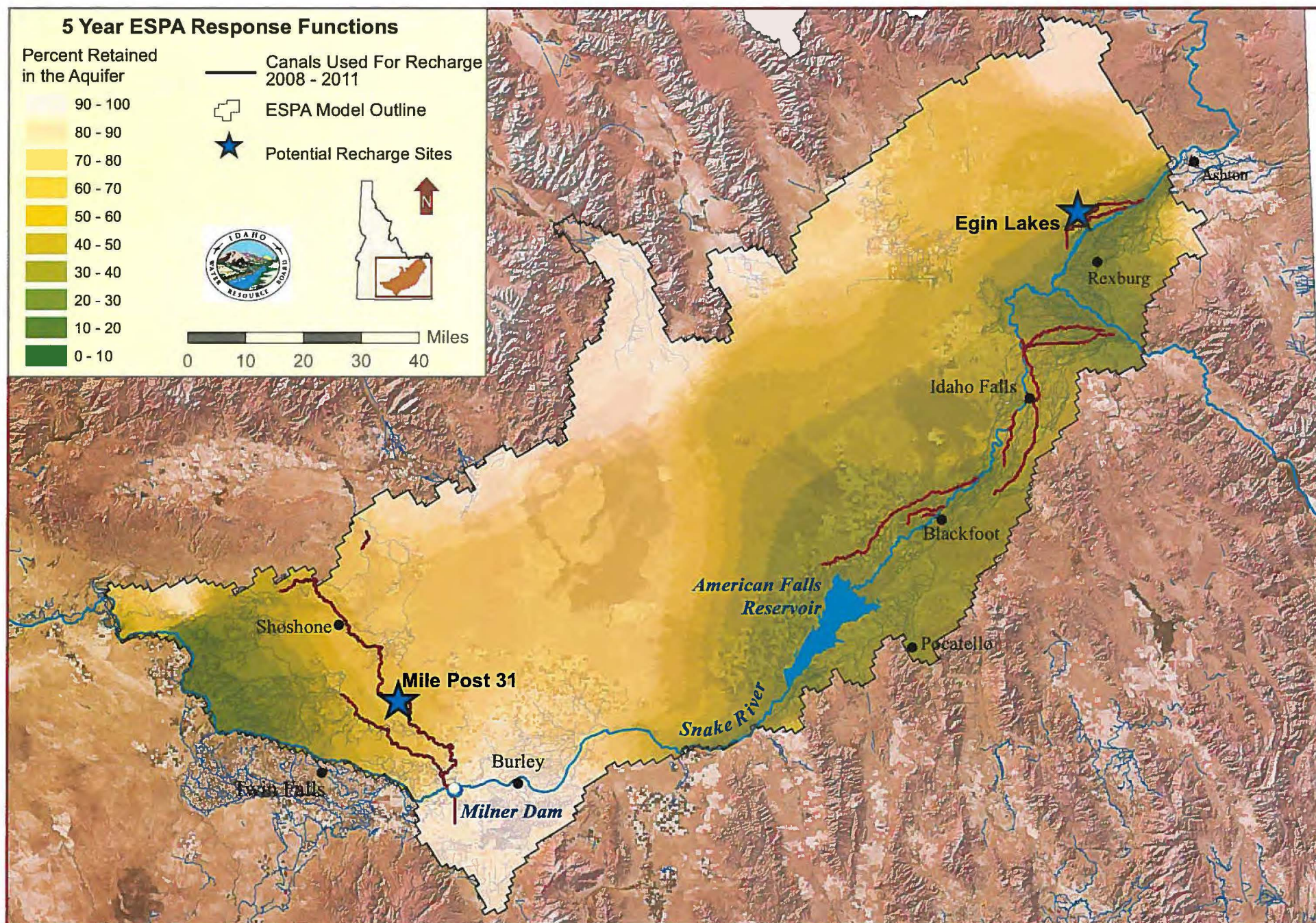




FIGURE 2

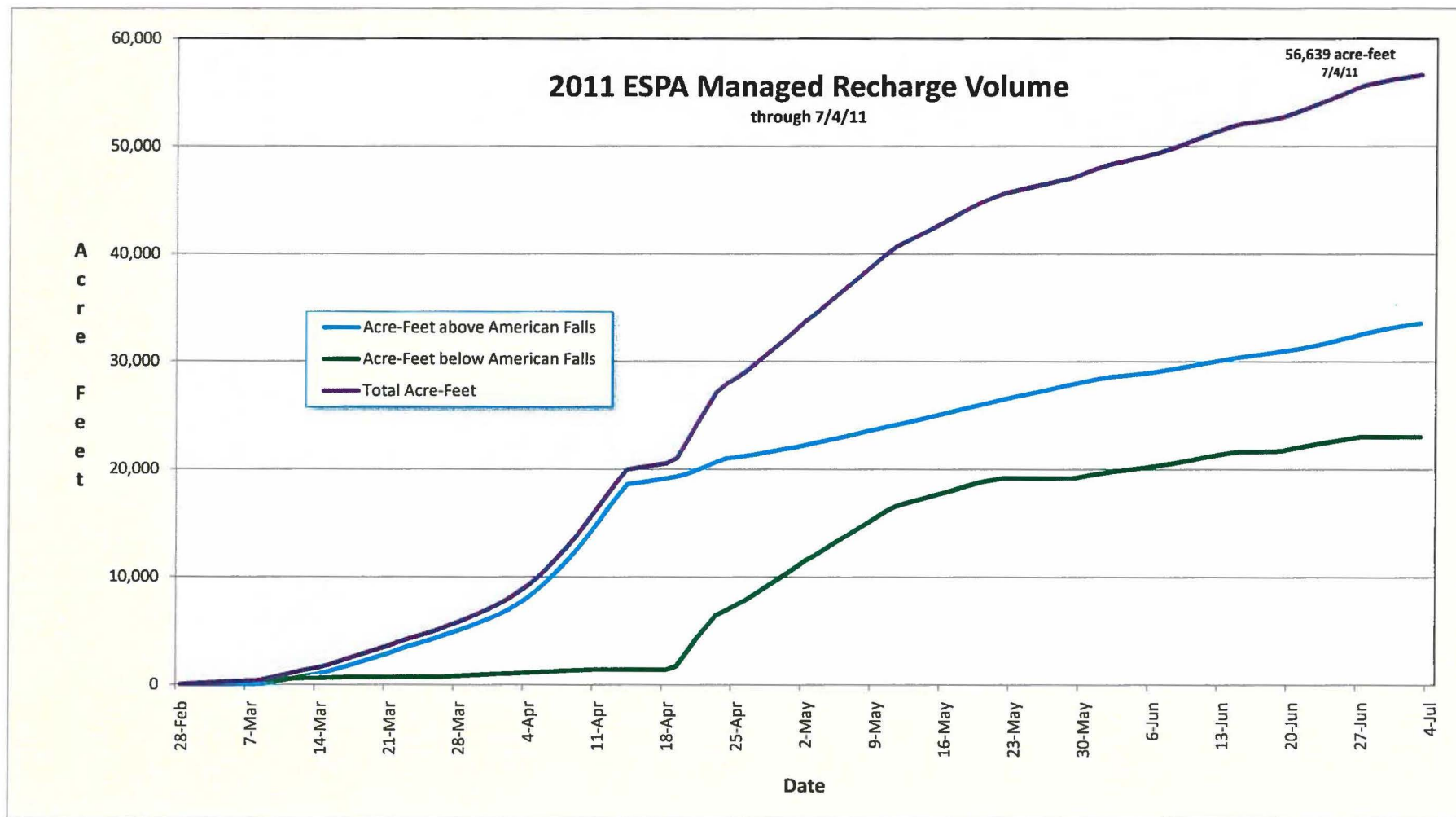


FIGURE 3

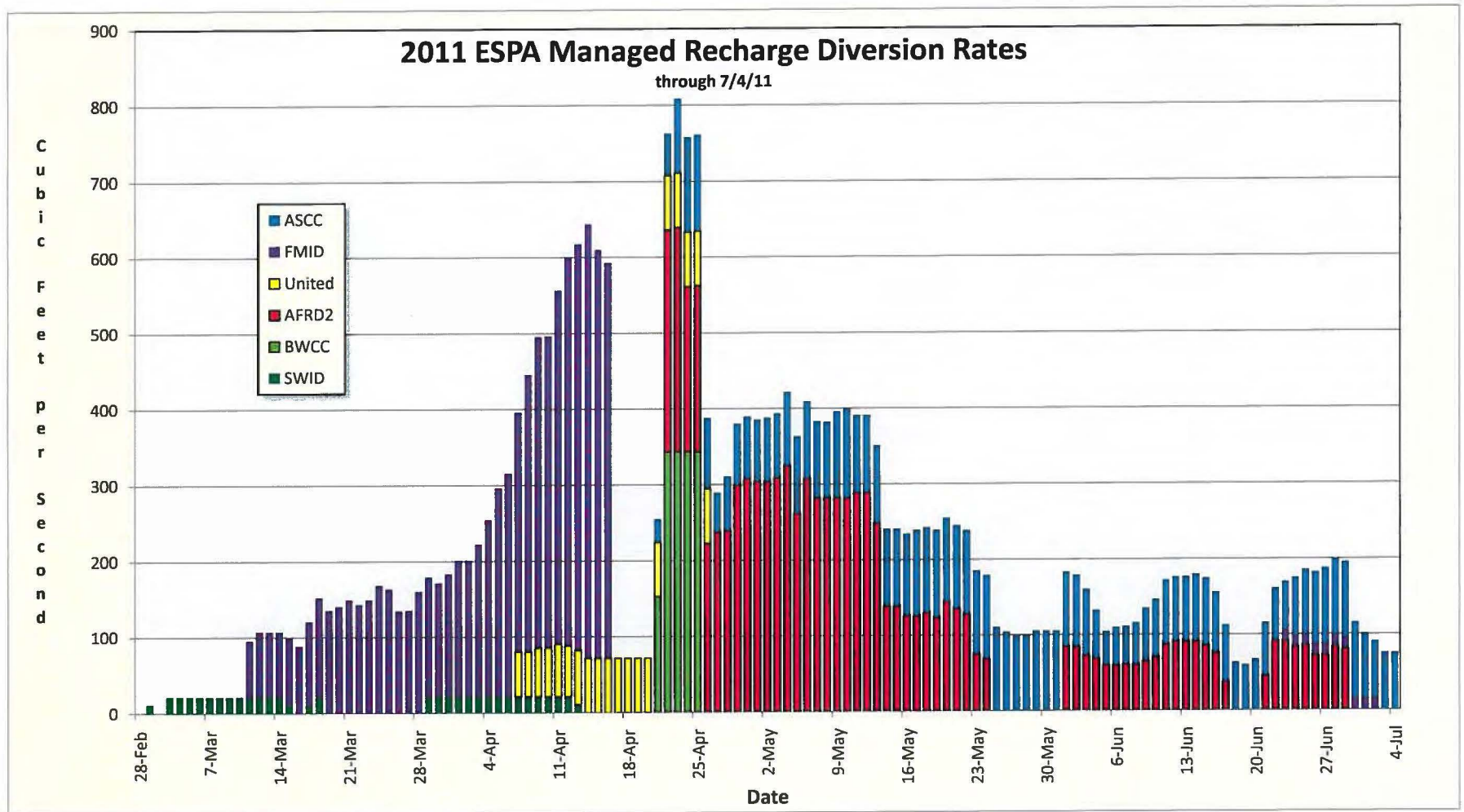
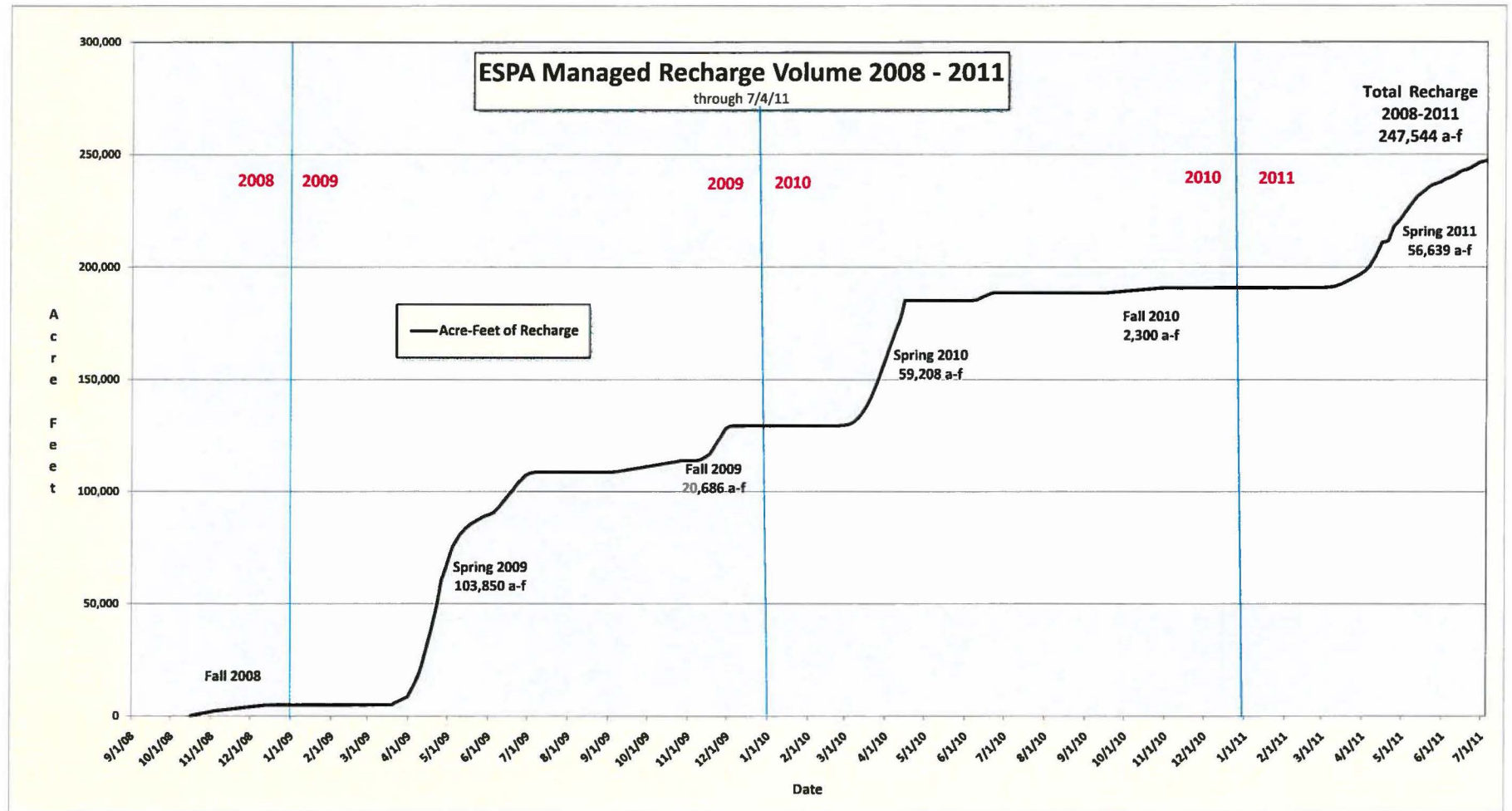


FIGURE 4



# Memorandum



To: Idaho Water Resource Board  
From: Helen Harrington  
Date: July 13, 2011  
Re: Rathdrum Prairie Comprehensive Aquifer Management Plan

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## Action Items

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1. Consider adoption of revised Plan through resolution
2. Consider Advisory Committee appointment of Bob Haynes through voice vote

## Discussion

In March 2011, the IWRB accepted a draft Rathdrum Prairie Comprehensive Aquifer Management Plan (RP CAMP) for public comment. Since that time, a 60-day public comment period was held from April 10-June 10; a public hearing was held on May 12; and an Advisory Committee meeting was held on June 21.

Five individuals provided oral testimony and five letters of comment were received. At the Advisory Committee meeting, all testimony and comments were reviewed and discussed with Board Member Bob Graham and IDWR staff.

Comments and testimony ranged from statements of appreciation for the efforts of the Board and committee in the development of the plan to suggestions for more detail. Mr. Graham and committee members agreed that many of the suggestions for more detail will likely be addressed when CAMP implementation progresses.

The following is a summary of the substantive changes made to the draft plan based on testimony, comments and discussion:

- **Objective 1, Action Item 1 – Enact water conservation measures that promote water efficiency and reduced use.** Revised language regarding the concept of regulatory measures if voluntary conservation efforts do not accomplish expected results. The Advisory Committee felt strongly that the concept should be included in the plan. The committee strongly supports recommending regulatory actions to aid in showing good stewardship in the shared water resources and to have a level playing field with Washington as the states discuss water management across the region. However, strong concern from the Idaho Water Users Association and further research into the authorities and ramifications, final language reads as follows:

In the event additional measures are found necessary to maintain a sustainable Rathdrum Prairie Aquifer, it may be necessary for municipal water providers and/or other water users to consider regulatory measures.

- **Appendix 8 Aquifer Protection District.** Concerns regarding the separation of the District and CAMP authorities were expressed, resulting in a revision of the title from Full description of strategies that should be addressed by the Aquifer Protection District to be titled Aquifer Protection District with an introductory sentence reading “The IWRB supports cooperation with

the Aquifer Protection District to accomplish the following:” followed the strategies previously written.

The revised Plan has been reviewed by Deputy Attorney General John Homan for legal consistency.

#### **Advisory Committee Appointment Consideration**

Bob Haynes recently retired from IDWR. He was the IDWR Northern Region Manager for over 35 years and has been a key participant in water management in the Northern Region, including the Rathdrum Prairie. Mr. Haynes would bring institutional knowledge and experience if he were to be appointed as a member of the RP CAMP Advisory Committee.

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE	)	
RATHDRUM PRAIRIE AQUIFER	)	RESOLUTION
COMPREHENSIVE AQUIFER	)	
MANAGEMENT PLAN	)	
_____	)	

WHEREAS, the Idaho Water Resource Board (Board), pursuant to its planning authorities in Article XV, Section 7 of the Idaho Constitution, and Idaho Code 42-1779, has completed a Comprehensive Aquifer Management Plan for the Rathdrum Prairie Aquifer as directed by House Bill No. 428 passed and approved by the 2008 Idaho Legislature; and

WHEREAS, the Board is directed to identify goals and objectives, as well as make recommendations for improving, managing, developing or conserving the water resources of the aquifer in the public interest; and

WHEREAS, the Board has sought and received substantial public participation and comment throughout the planning process.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopts the attached Rathdrum Prairie Comprehensive Aquifer Management Plan and directs that it be submitted to the Idaho Legislature.

DATED this 29<sup>th</sup> day of July, 2011.

\_\_\_\_\_  
\_\_\_\_\_, Chairman  
Idaho Water Resource Board

ATTEST \_\_\_\_\_  
\_\_\_\_\_, Secretary

# Memorandum



To: Idaho Water Resource Board  
From: L. Neeley Miller  
Date: July 13, 2011  
Re: Treasure Valley Comprehensive Aquifer Management Plan (TV CAMP)

---

## **Status Report and Background**

The Treasure Valley Comprehensive Aquifer Management Plan Advisory Committee has been meeting since April 2010. A copy of the current advisory committee membership is attached.

In early February, the full Advisory Committee established a drafting group to develop the text for the CAMP plan. The drafting subgroup consists of Rex Barrie (Boise River Watermaster WD #63), Russ Dane (Keller Williams Realty), Matt Howard (Bureau of Reclamation), Chris Jones (Trout Unlimited), Brian Patton (IDWR), Kathy Peter (former Director of USGS Idaho Water Science Program), Rick Ward (Idaho Dept of Fish and Game), Paul Woods (Boise City Public Works Dept), and Mark Zirschky (Pioneer Irrigation). At the direction of the IWRB, Mark Zirschky was added to the drafting group.

The Drafting Group completed a preliminary draft TV CAMP (see attached) and distributed the draft to the full Advisory Committee on June 30<sup>th</sup>. The Advisory Committee has been given until August 12<sup>th</sup> to compile comments and submit them to the Drafting Group for consideration and revision.

The TV CAMP Advisory Committee will consider all comments, and make the necessary revisions to the preliminary draft TV CAMP. Once a revision is completed, the full Advisory Committee will have an opportunity to review and comment. Depending on the quantity and type of comments, it is anticipated that a revised draft will be circulated in early fall.

During the development of the initial draft plan, the Drafting Group considered the comments received from the Idaho Water Users Association regarding the language discussion of the Municipal Water Right Act of 1996. As a result of that discussion, the Drafting Group proposed two alternatives for the Advisory Committee to consider in the Plan, as well as being open to other options based upon comments from the Advisory Committee.

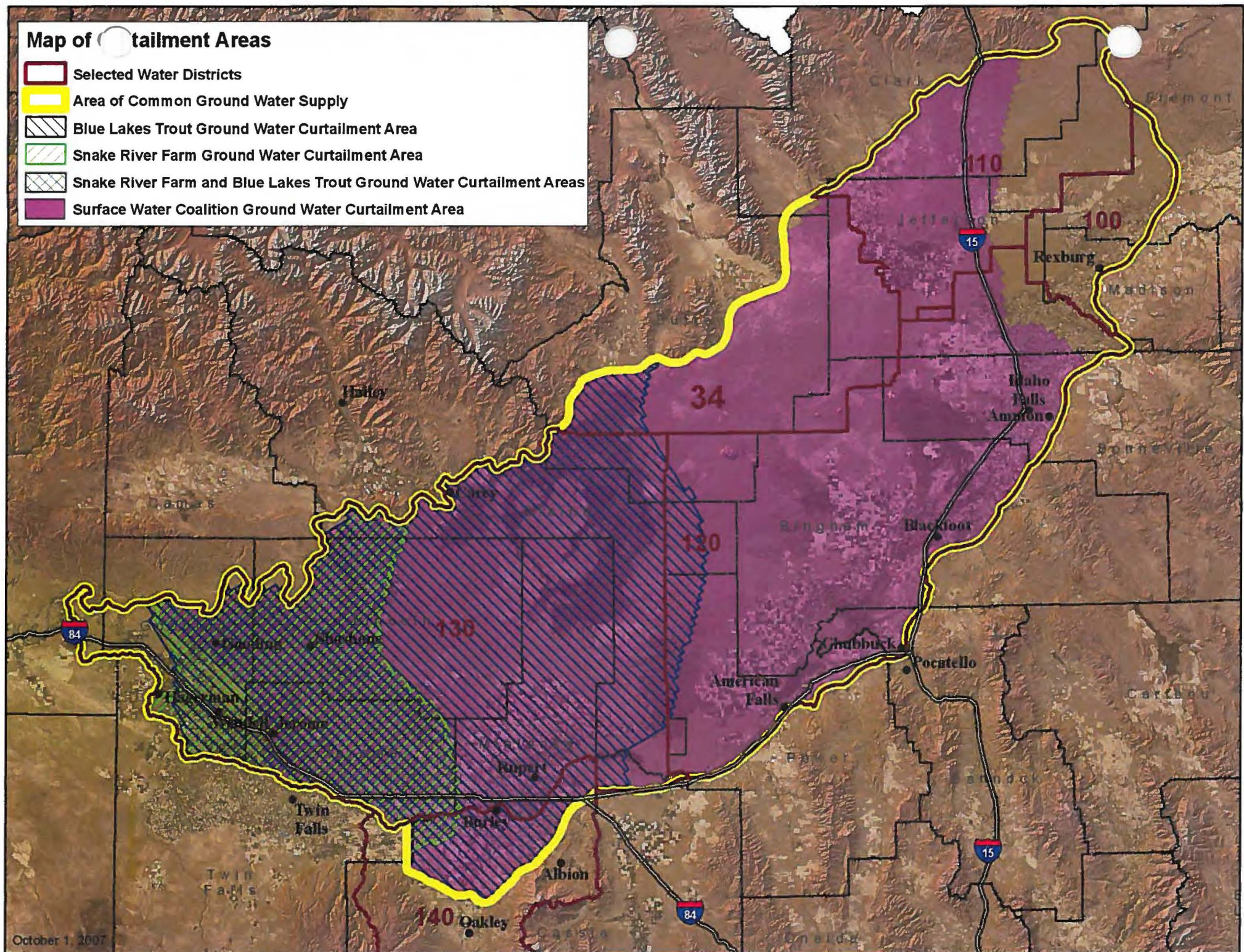


TV CAMP ADVISORY COMMITTEE	
<u>MEMBER</u>	<u>AFFILIATION</u>
Abramovich, Ron	NRCS
Adamson, Brent	Boise County Assessor
Amick, Doug	City of Greenleaf Public Works Director
Anderson Jamie	Boise County Commissioner
Atkinson, Michelle	Micron Technology, Inc.
Barrie , Rex	Boise River Watermaster WD #63
Batt, Gayle (Vern Case)	Wilder Irrigation District
Berggren, Ellen	Army Corps of Engineers
Bowling, Jon	Idaho Power Company
Burnell, Barry	Idaho Dept of Environmental Quality
Dane, Russ	Keller Williams Realty
Decker, Kevin	Idaho Wildlife Federation, Treasurer
Deveau, Paul	Boise Project Board of Control
Dixon, Dave	Owner, Greenleaf Farms Inc.
Duspiva, Gary	Canyon County P&Z Commission
Echeita, Mike	City of Eagle Public Works Director
Funkhouser, Allen	Drainage District # 2
Fuss, Michael	Nampa Public Works Director
Goodson, Stephen	Governor's Office
Howard, Matt	Bureau of Reclamation
Jones, Chris	VP Ted Trueblood Chapter, Trout Unlimited
Larson, Bill	Treasure Valley Partnership
Leatherman, Megan	Ada County
McKee, Lynn	Vice Chair, Ada Cty. SWCD
Nelson, Greg	Farm Bureau member, former mayor of Kuna
Patton , Brian	Idaho Department of Water Resources
Peter, Kathy	Unaffiliated, former Dir. Of USGS Idaho Water Science Program
Pline, Clinton	Board, Nampa-Meridian Irrigation District
Prigge, John	Sorrento Lactalis, Wastewater Treatment Manager
Rhead, Scott	Director Engineering for United Water
Ronk, Jayson	VP of Idaho Assn of Commerce & Industry
Schmillen, Bob	City of Middleton Public Works Director
Shoemaker, Gary	City of Caldwell Water Dept.
Stewart, Lon	Sierra Club
Stewart, Warren	Engineering Manager, City of Meridian Public Works Dept
Telford, Craig	Mayor of Parma
Thornton, John	N. Ada Cty. GW users; N. Ada Co Foothills Assoc; Member of N. Ada Cty. Tech. Working Group
Ward, Rick	Idaho Dept of Fish and Game
Woods, Paul	Boise City Public Works Dept.
Yerton, Janice	Water System Operator, Kuna
Zirschky, Mark	Pioneer Irrigation District



# Map of Curtailment Areas

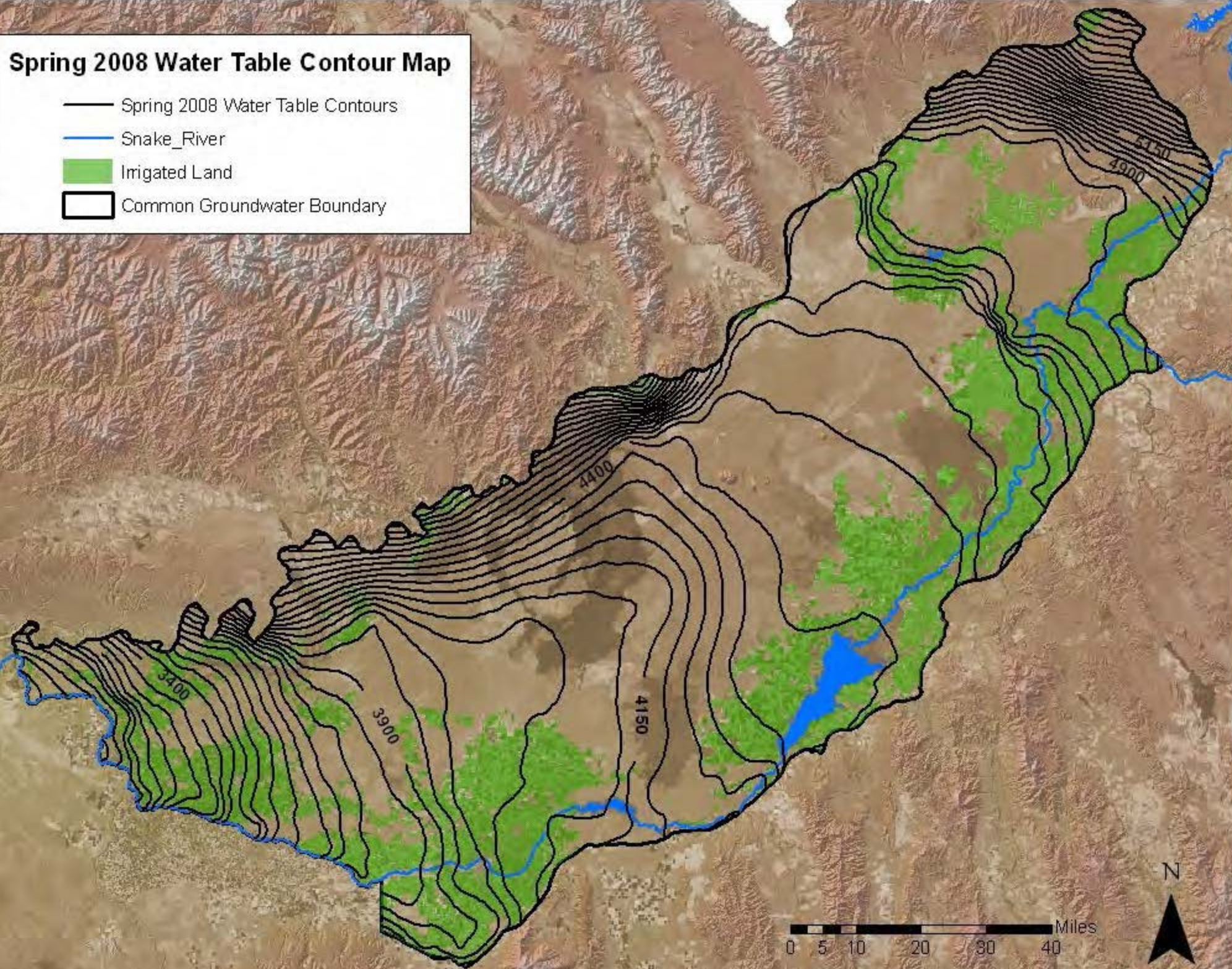
- Selected Water Districts
- Area of Common Ground Water Supply
- Blue Lakes Trout Ground Water Curtailment Area
- Snake River Farm Ground Water Curtailment Area
- Snake River Farm and Blue Lakes Trout Ground Water Curtailment Areas
- Surface Water Coalition Ground Water Curtailment Area





## Spring 2008 Water Table Contour Map

- Spring 2008 Water Table Contours
- Snake\_River
- Irrigated Land
- Common Groundwater Boundary



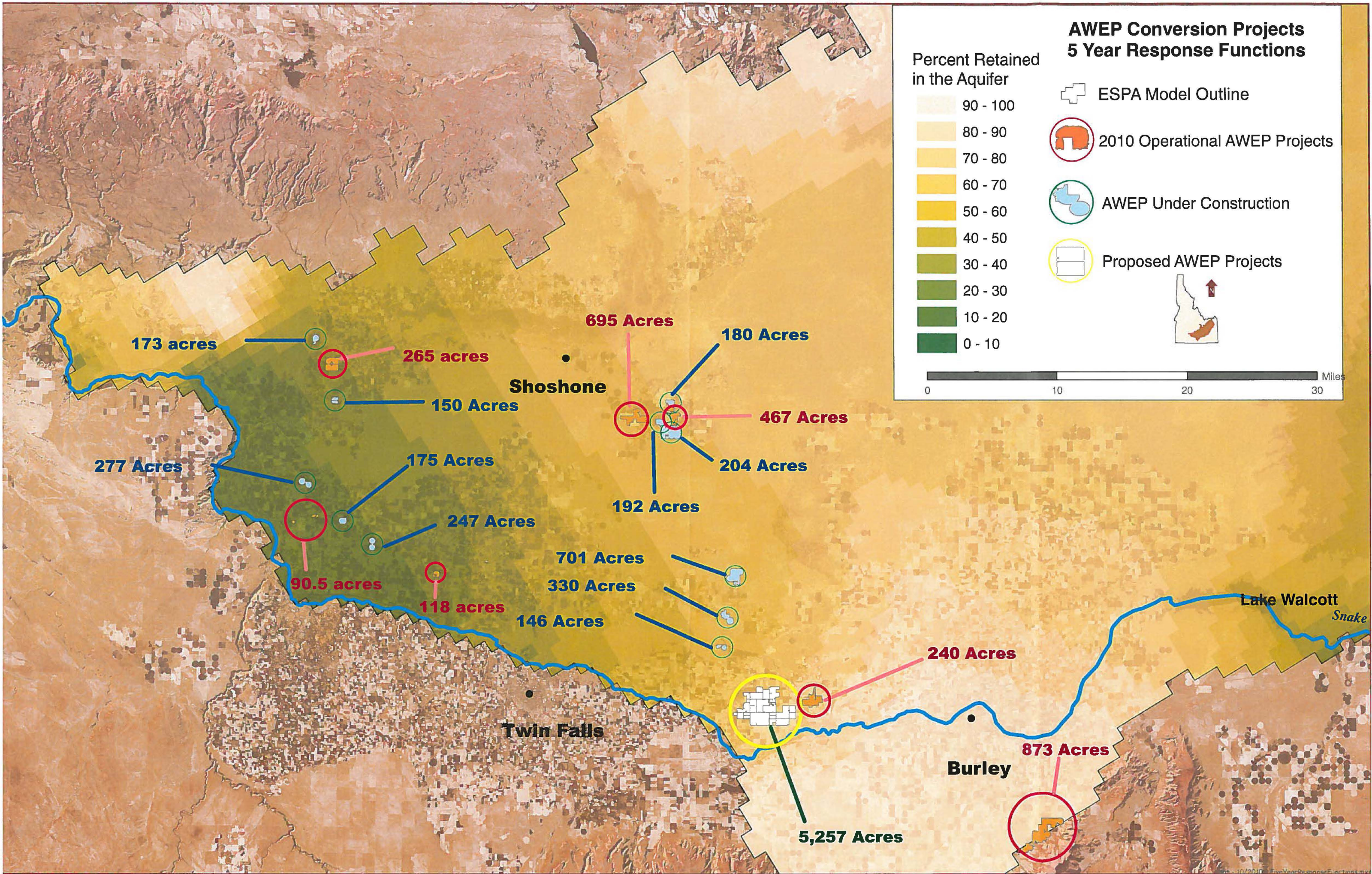


## Hagerman area AWEPP projects

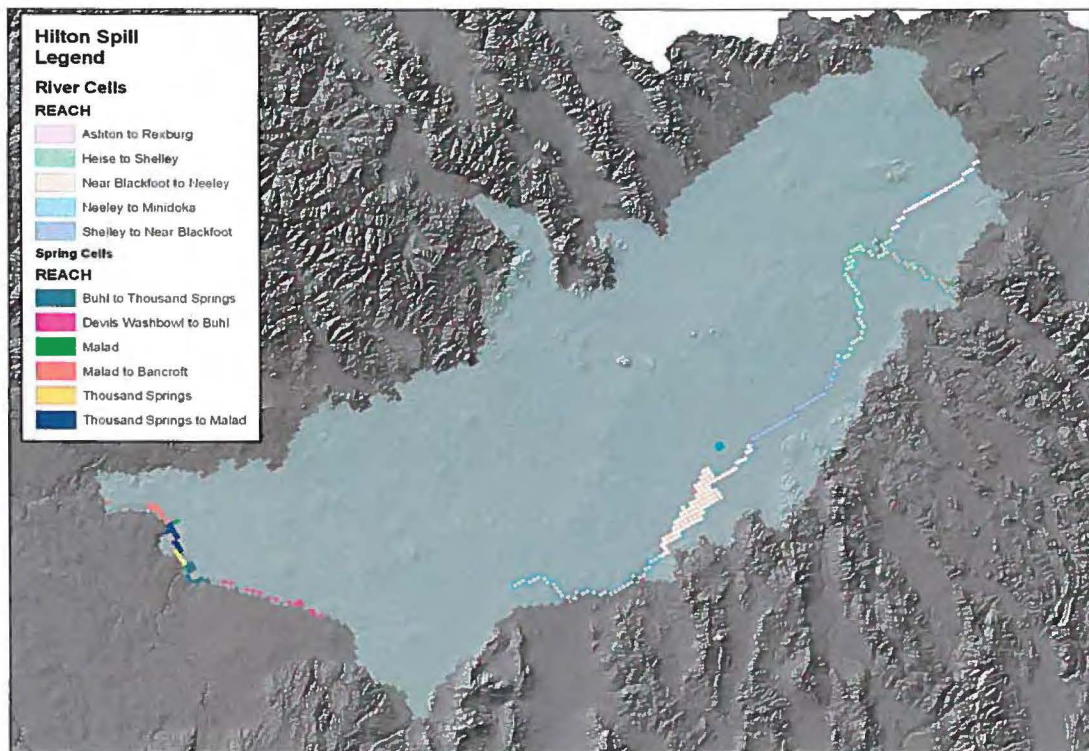
- Captured spring and piping of delivery canal
- Converted from hand lines or flood to pivot

Approximately 26,000 ac-ft of water savings through infrastructure improvements.

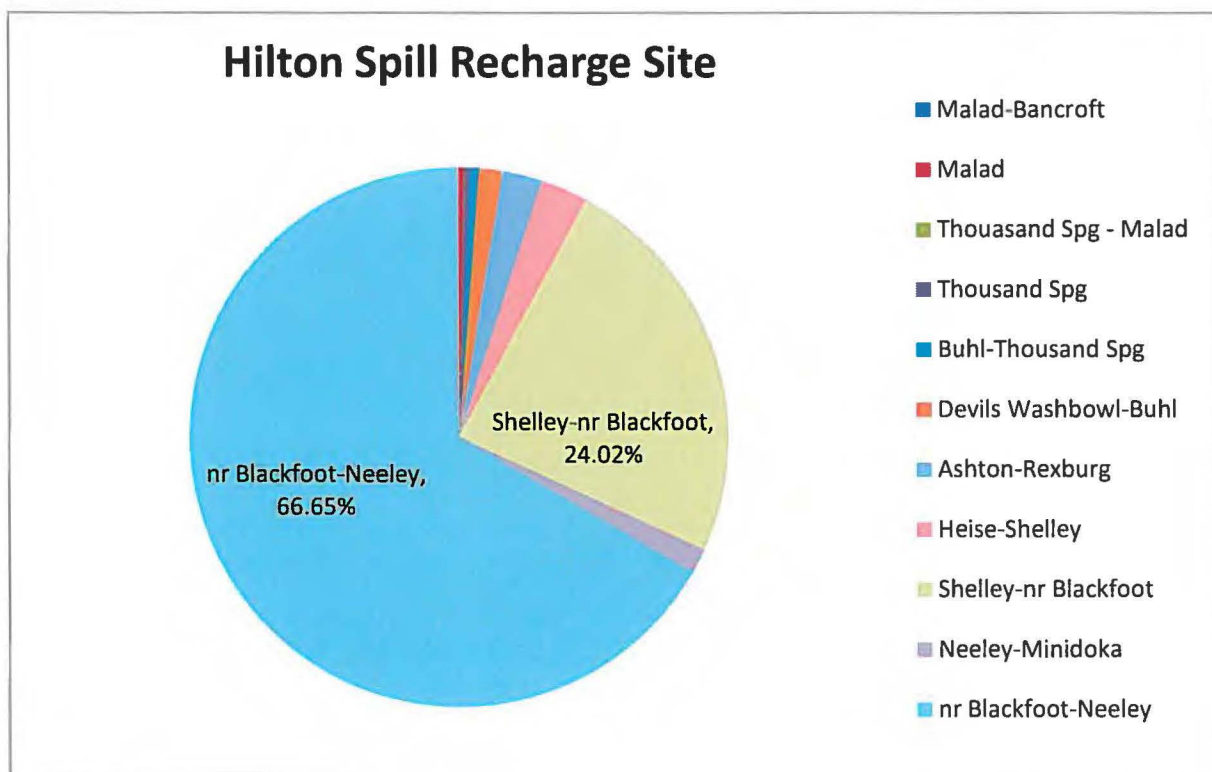


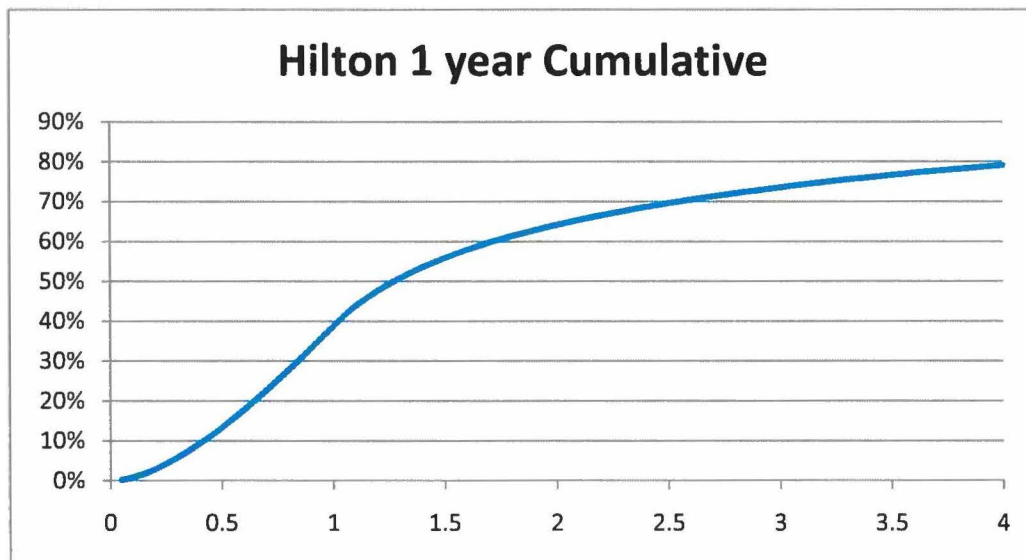
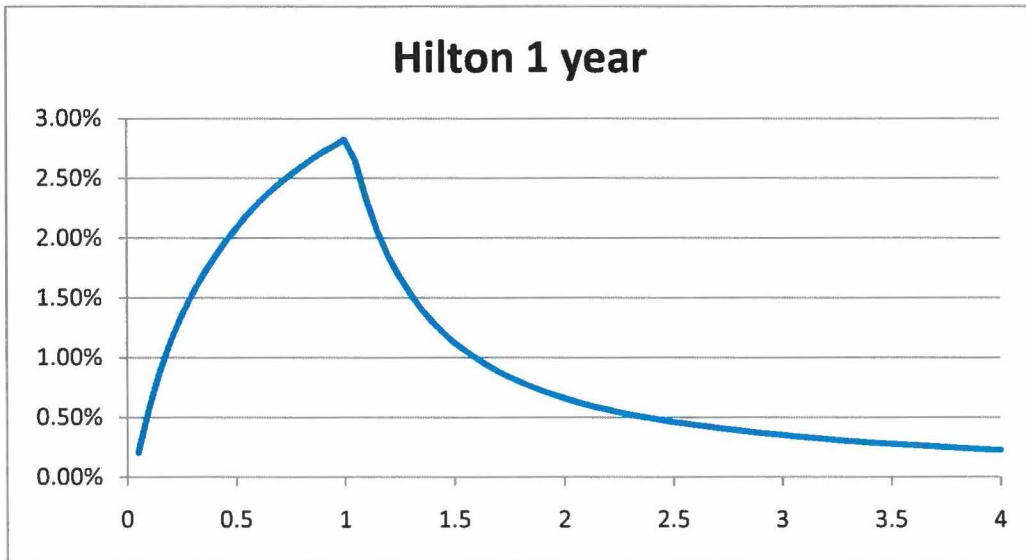


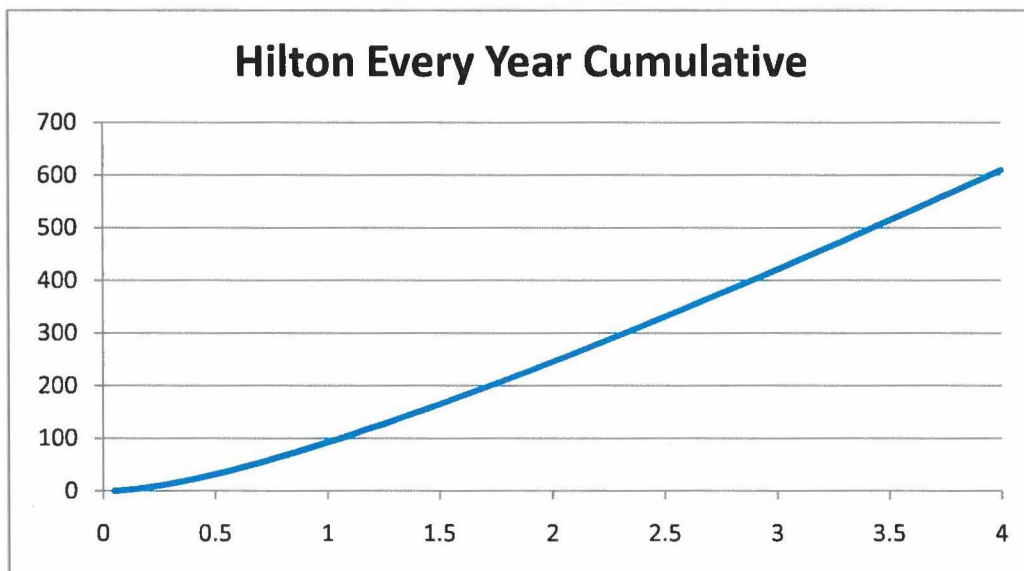
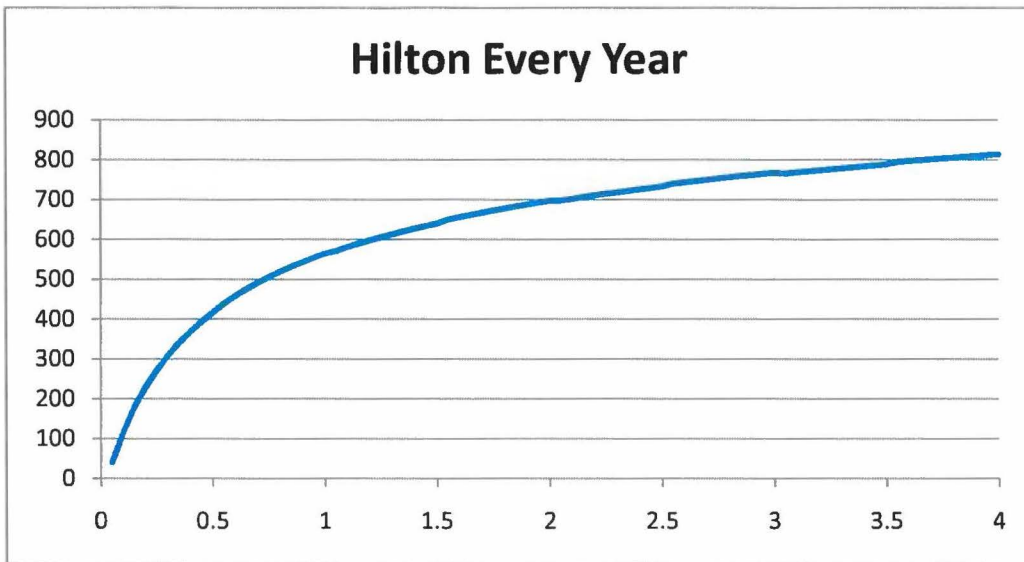




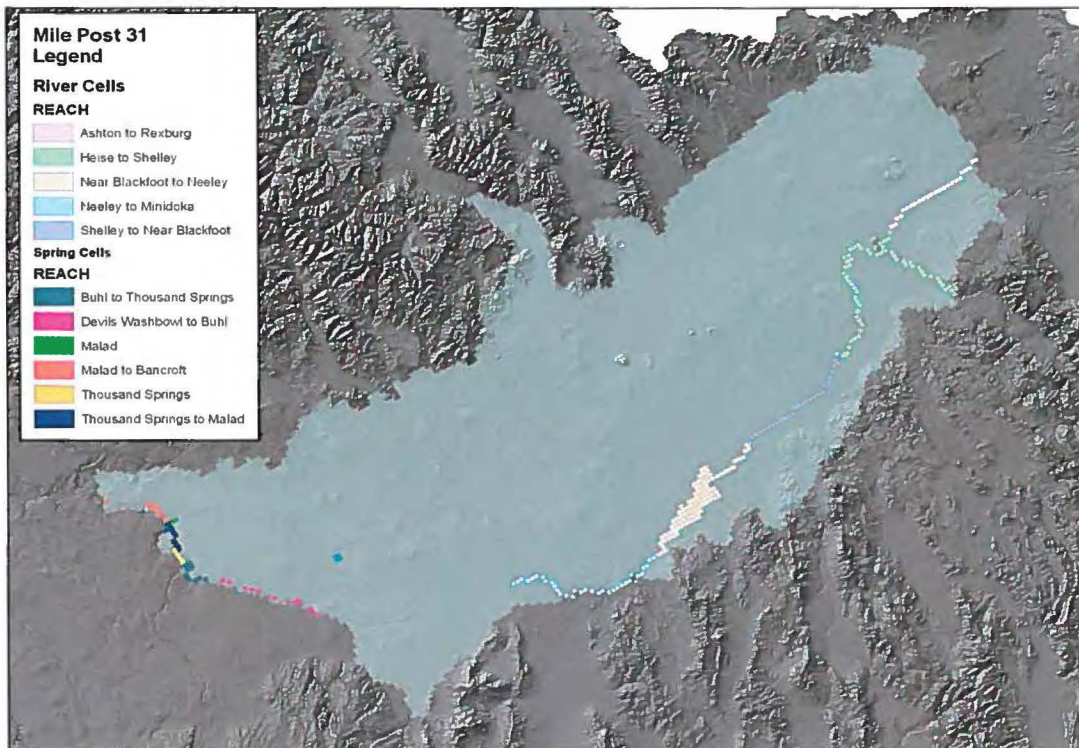
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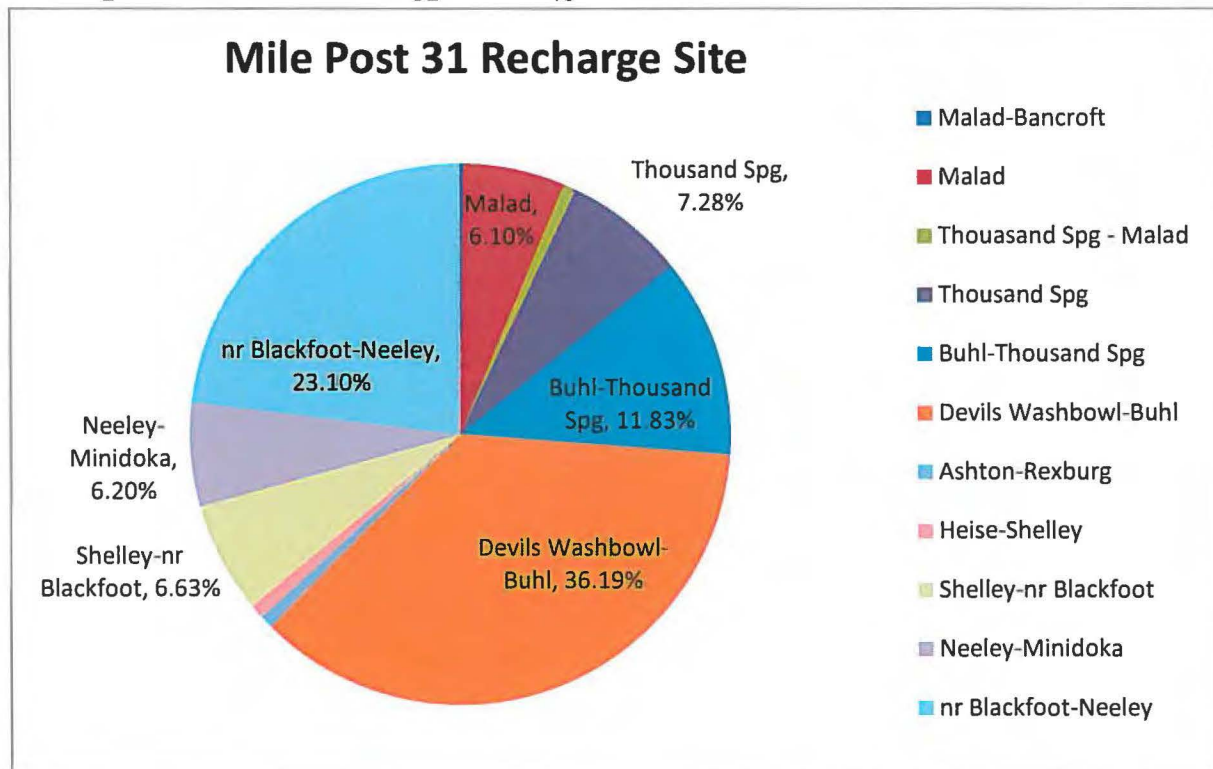


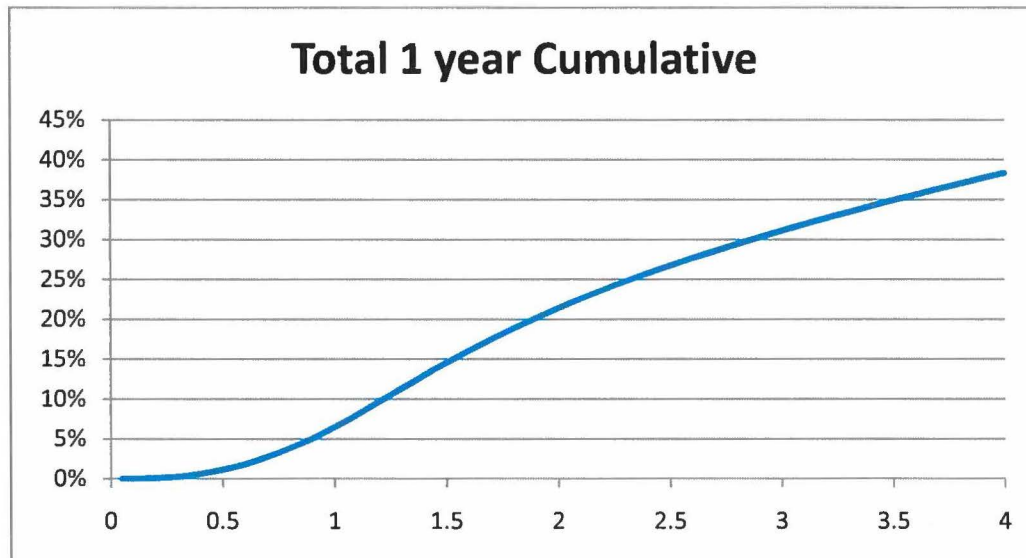
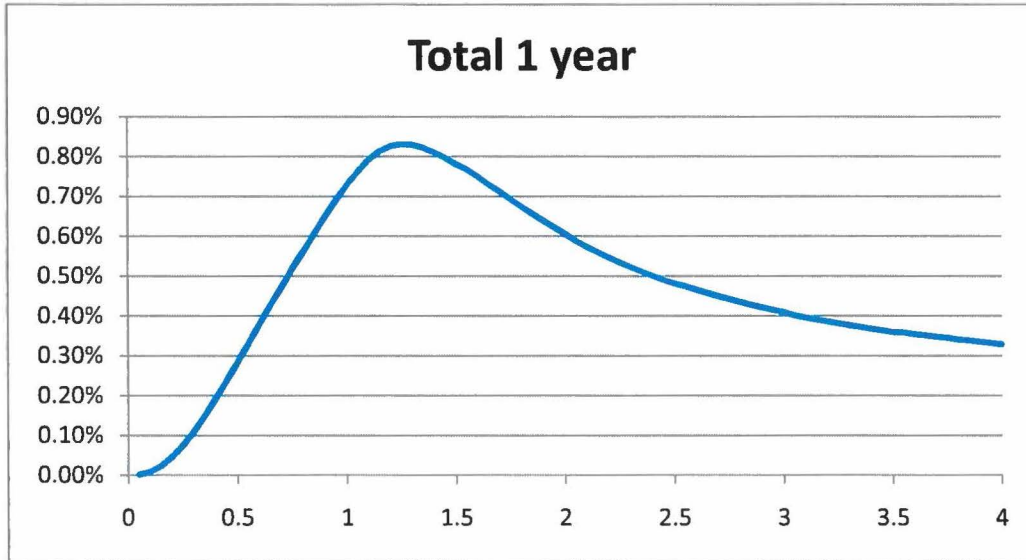


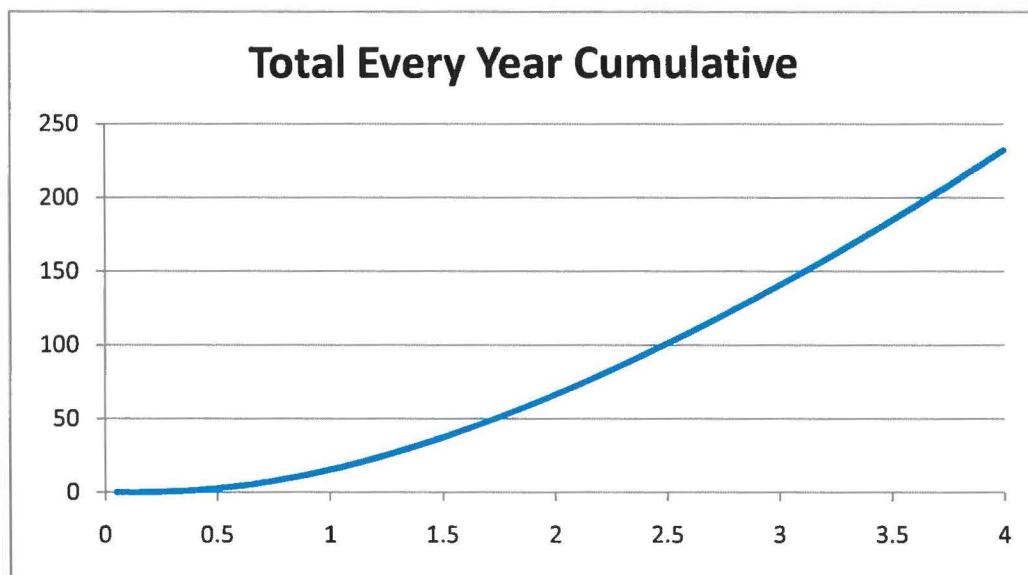
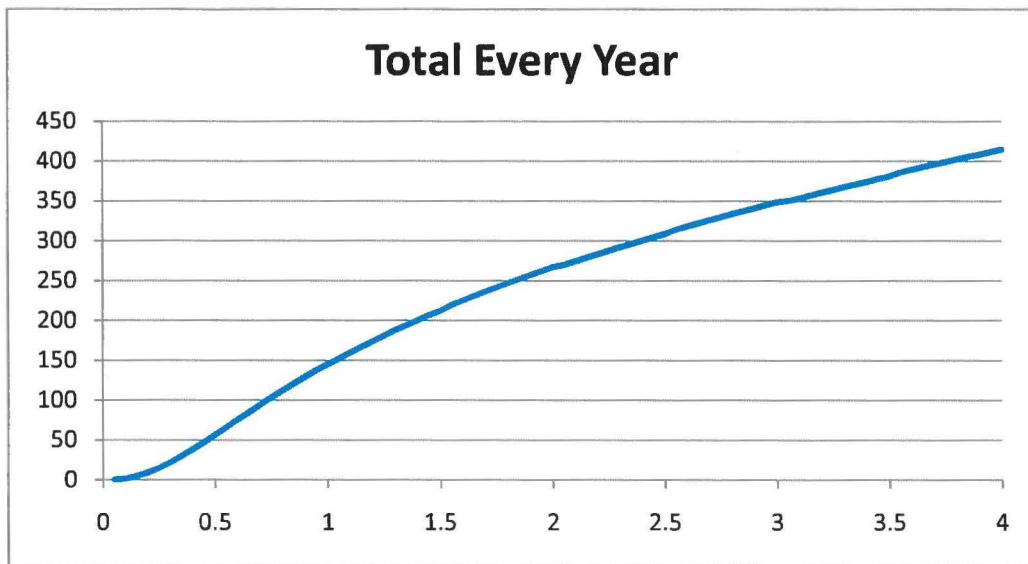


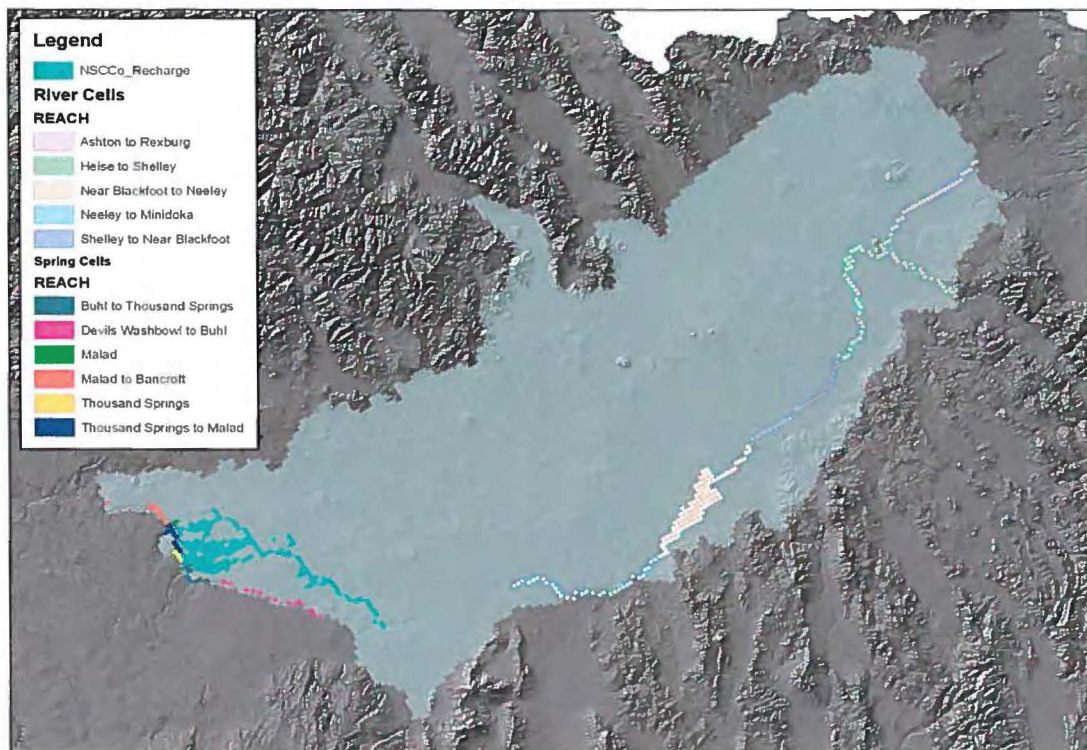


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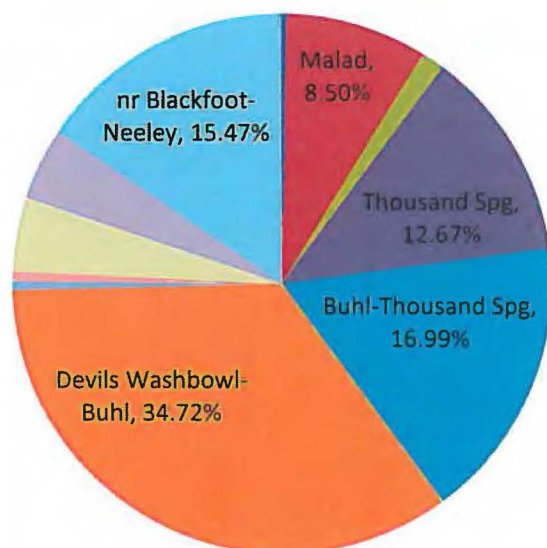






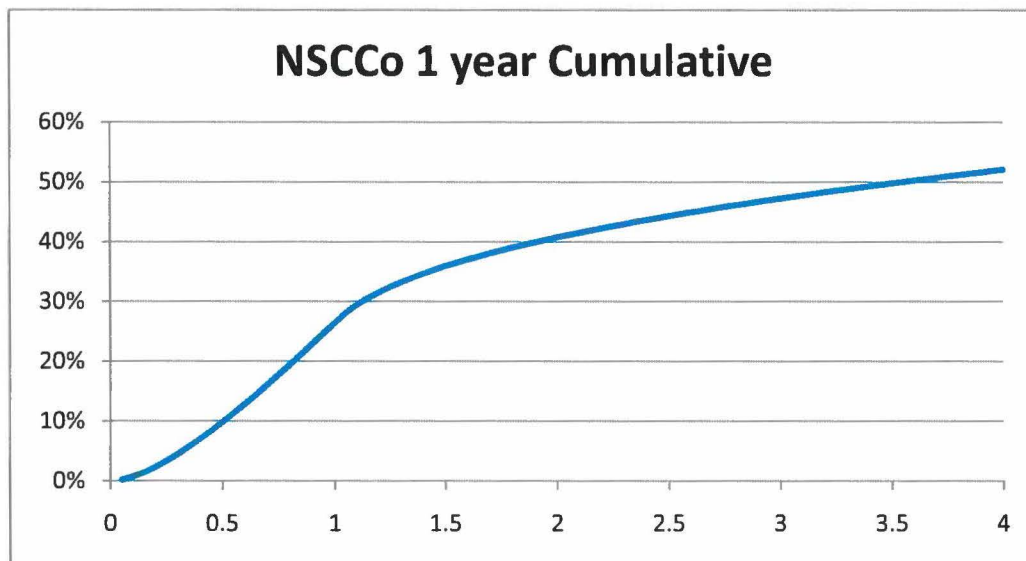
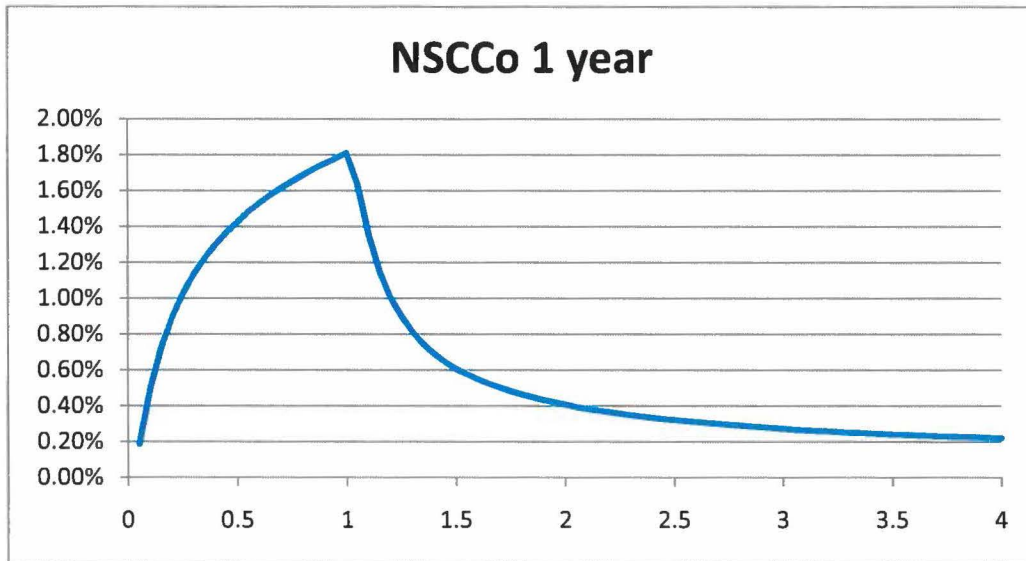


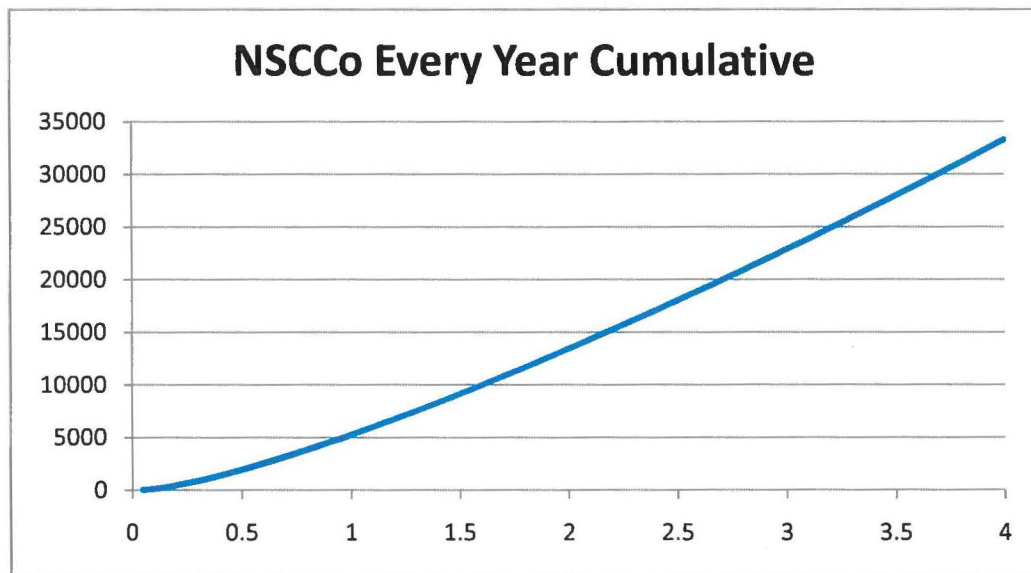
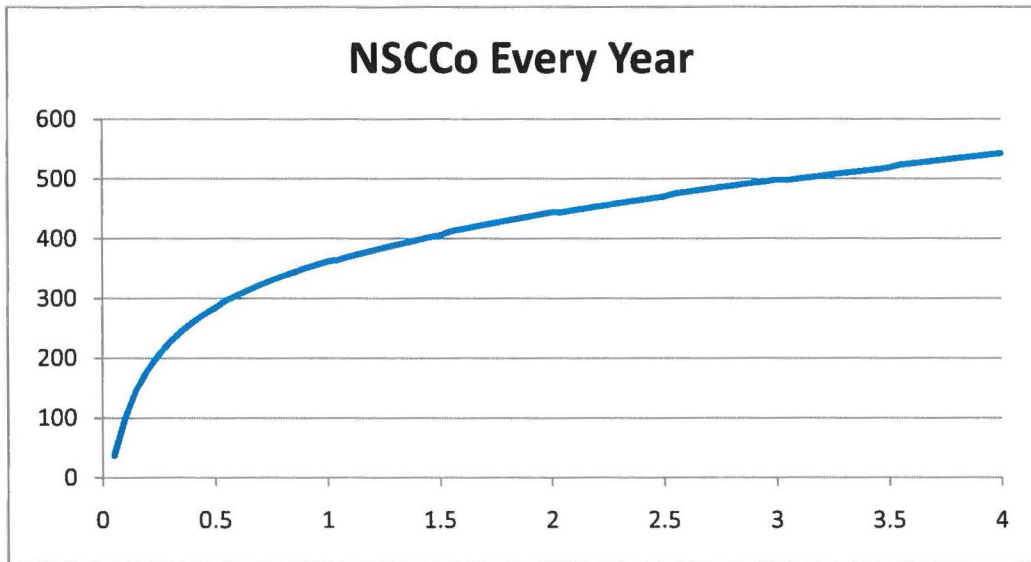
## NSCCo Recharge Site



- Malad-Bancroft
- Malad
- Thousand Spg - Malad
- Thousand Spg
- Buhl-Thousand Spg
- Devils Washbowl-Buhl
- Ashton-Rexburg
- Heise-Shelley
- Shelley-nr Blackfoot
- Neeley-Minidoka
- nr Blackfoot-Neeley











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DEVELOPMENT AREA, INC**

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Fax: (208) 356-7240

RECEIVED  
MAY 10 2011  
DEPARTMENT OF  
WATER RESOURCES

May 6, 2011

Mr. Terry T. Uhling, Chairman  
Idaho Water Resource Board  
P.O. Box 83720  
Boise, ID 83720-0098

Dear Chairman Uhling:

The High Country Resource Conservation and Development Area, Inc. (Council) respectfully submits this letter as a proposal to the Idaho Water Resource Board (Board) to cost share in the Council's cloud seeding program through the ESPA Comprehensive Aquifer Management Plan(CAMP). We understand that CAMP has recognized cloud seeding can enhance water levels in the Eastern Snake Plain Aquifer (ESPA) and the Board is seeking proposals to cost share in CAMP projects on a 40%/60% ratio (Board/Applicant).

The Council's cloud seeding program was formalized in 2007 and has been funded through voluntary donations from a broad range of interested entities including counties, cities, canal companies, irrigation districts, water districts, utilities, recreation entities, soil conservation districts, and others. The budget for 2010-2011 was \$145,730.00. The Board's annual contribution (\$58,292) would stabilize the funding and ensure that the program will continue into the future. Depending on the outcome of evaluations there could be opportunities to expand the program to increase its effectiveness which of course would require additional funding.

We appreciate the Board's consideration of our proposal and look forward to your response.

We have enclosed a fact sheet about our project, and a proposed use of the cost share. North American Weather Consultants, Inc. independent evaluations of each year's results are also available upon request.

If you have any questions feel free to call our Projects Coordinator – Sabrina Lear at the number above or 541-250-9532 (cell).

Sincerely,

Dave Radford  
Chair





**High Country RC&D**  
**302 Profit Street**  
**Rexburg, ID. 83440**  
**www.hcountryrcd.org**  
**Phone: (208) 356-5213 ex 5**  
**hcountryrcd@gmail.com**

## EASTERN IDAHO CLOUD SEEDING PROJECT

Augmenting snow to increase ground and aquifer water supplies.



Cloud Seeding uses silver iodide and Propane to form snow crystals.

**Eastern Idaho 2010-2011:** Eastern Idaho's surface and ground water resources of the Snake River Basin have been stressed by drought, population growth, and increasing demands by agriculture, cities, and recreational activities. Severe drought conditions have reinforced the need to use all potential water management tools, including cloud seeding, to enhance the low water supplies.

Cloud Seeding for Eastern Idaho counties officially began in December of 2003. These were annual programs that fluctuated based on budgets. During 2007/2008 the program significantly ramped up under the leadership of the HCRC&D Council. A commitment by the Council was made to operate a five-year cloud seeding program that includes a monitoring component to scientifically evaluate the programs benefits. The project is managed by a High Country RC&D Cloud Seeding Committee. The committee manages the program by determining the placement of generators, conducting fund raising, developing budgets and paying bills, and monitoring the results of the project. The current operating budget is raised from 45 sponsors including cities, counties, water districts, conservation districts, local land owners, private companies, power companies, etc.

We are currently operating a winter cloud seeding program for the 2010/2011 season. The project includes 25 ground based generators and 15 remote controlled generators placed in Bingham, Bonneville, Clark, Fremont, Madison, and Teton Counties. The generator locations are above 6,000 feet and placed to impact a target area down range. Let it Snow, a contractor based in Clark County, and Idaho Power Company monitor weather conditions including storm patterns, wind speeds, and cloud temperatures to determine when to turn specific generators on and off. To assure a non-biased evaluation, a independent third party, North American Weather Consultants Inc., is retained to provide an analysis of the impact.

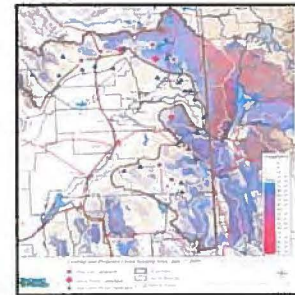
The results of the 2007/2008 season showed an estimated 0.29 to 0.93 inches of additional water content depending on the site. The preliminary estimated average increases in the March – July stream flow on Willow Creek near Ririe, Idaho were equivalent to an increase in an 8.1% stream flow or 4937 acre feet. The current cost of an acre-foot of water is \$20.00; thus the value of this one increased stream flow could be valued at \$98,740.00. The 2008/2009 results showed a 0.29 to 0.84 inches of additional water content depending on the site.



*Snotel Sites: NRCS employees check snow depth, precipitation, temperature, and soil moisture.*



*Ground based generators are turned on and off by local landowners.*



*Map of all generator locations during the 2009-2010 season.*

### Project Funding:

- \$113,866.67 Local Donors (2007-2008)
- \$127,975.00 Local Donors (2008-2009)
- \$102,677.42 Local Donors (2009-2010)
- \$105,699.00 Local Donors (2010-2011)

**Project Partners:** High Country RC&D, Idaho Power, A&B Irrigation District, New Sweden Irrigation District, Bingham Ground Water District, Enterprise Irrigation District, Fremont-Madison Irrigation District, Progressive Irrigation District, Water District 1, Clark County Water District #32-C, Jefferson-Clark Ground Water District, Southwest Irrigation District, Idaho Irrigation District, East Cassia SWCD, Mud Lake SWCD, East Side SWCD, North Bingham SCD, Central Bingham SWCD, West Side SWCD, Clark SCD, Madison SWCD, Bannock, Bingham, Bonneville, Fremont, Power, Clark, Madison, and Jefferson Counties, Cities of Ammon, Arimo, Idaho Falls, Iona, Rexburg, St. Anthony, and Sugar City, North Fremont Canal Systems Inc., North Side Canal Company, LTD., Reno Ditch Company, Teton Irrigation & Manufacture Co., Birch Power Company, Fall River Rural Electric Cooperative, Idaho Falls Power, Fremont County Snowmobile Club, Madison County Farm Bureau.

**Proposed Use  
Of  
Idaho Water Resources Board  
Cost Share  
For the  
Eastern Idaho Cloud Seeding Project**

High Country would use the proposed cost-share support from the Idaho Water Resources Board for the following:

**Repair and Maintenance of 25 manual ground based generators - \$45,000**

The Counties bought these generators about 10 years ago, they are aging and need some repair and adjustment.

**Renew 5-year commitments of existing sponsors, and recruit additional sponsors - \$5,000**

The 2011-2012 cloud seeding season is the last season of our original 5-year commitment. We need to renew these commitments and recruit additional sponsors. The \$5000 will cover informational brochure development, postage, and phone and mileage reimbursements for the volunteer steering committee members working to secure these commitments.

**Purchase of cloud seeding chemicals and silver iodide - \$8,292**

Support the sponsors donations for purchase of the materials necessary for cloud seeding for the 2011-2012 season.

# Memorandum



To: Idaho Water Resource Board  
From: Cynthia Bridge Clark  
Date: July 11, 2011  
Re: Status of Ongoing Storage Water Studies

---

## Lower Boise River Interim Feasibility Study

A *Water Storage Screening Analysis* was completed by the U.S. Army Corps of Engineers (Corps) in August 2010 which identified the top three ranked sites as a raise of Arrowrock Dam, Alexander Flats, and Twin Springs. The IWRB recommended the top three ranked sites be carried forward for more in-depth analysis as called for in the Interim Feasibility Study agreement.

Study activities were suspended after completion of the screening analysis pending availability of Federal match funding. In June, 2011, \$30,000 was assigned by the Corps to resume activities. This is not sufficient funding to perform engineering and cost analyses on any one of the top ranked sites. Therefore, after consultation with IDWR/IWRB staff, the Corps has begun additional engineering analysis of the storage concept proposed at Arrowrock Dam, the top ranked site in the *Water Storage Screening Analysis* with the intent to identify any potential fatal flaws.

## Henrys Fork Basin Study

The Bureau of Reclamation (Reclamation) and the State of Idaho are conducting a study of water resources in the Henrys Fork River basin to develop alternatives to improve water supply conditions in the Eastern Snake Plain aquifer and Upper Snake River basin. The study will identify opportunities for development of water supplies and improvement of water management while sustaining environmental quality.

In consultation with participating stakeholders, Reclamation has developed a list of potential storage sites and other water management alternatives to move forward for "reconnaissance level" evaluation, a more comprehensive scoping and analysis. The study ultimately calls for an appraisal level analysis of a short-list of alternatives.

Reclamation will discuss the status of the study and present the list of potential alternatives to the IWRB at the upcoming work session on July 28, 2011.

## Weiser-Galloway Project

The *Weiser-Galloway Gap Analysis, Economic Evaluation and Risk-Based Cost Analysis Project* (Project) was completed on schedule in March, 2011. The Project is a reexamination of specific components of the previously identified Galloway Dam and Reservoir site (Corps studies from 1987-1994) based on current conditions, and is intended to be used by decision makers in determining whether to move forward with a full feasibility level study.

The final project cost was \$150,000, \$50,000 under the total estimated project budget of \$200,000. In addition, approximately \$21,000 of credit was approved by the Corps for in-kind services provided by IDWR staff on behalf of the IWRB, resulting in a net cost contribution of an estimated \$54,000 by the IWRB.

Members of the project development team, including staff from the Corps, IDWR, and Senior Advisor Jack Peterson, will present results of the study at the upcoming IWRB work session and meeting on July 28 and 29, 2011.





# MEMO

**To:** Idaho Water Resource Board  
**From:** Helen Harrington  
**Subject:** Northern Idaho Adjudication Minimum Stream Flow Water Rights held by the IWRB  
**Date:** July 13, 2011

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## Action Item

---

**Consider resolution to submit a budget request to the Idaho Legislature for the next budget cycle for an appropriation in the amount of \$464,800 to pay filing fees associated with the IWRB water right claims for Phase 1 in their 2013 budget request.**

## Discussion

The Idaho Water Resource Board holds water rights for minimum stream flows and lake level maintenance within the boundaries of the Northern Idaho Adjudication (NIA). The area authorized for adjudication has been phased into three sections:

Phase 1: Administrative Basins 91-95	Coeur d'Alene-Spokane River basins
Phase 2: Administrative Basin 87	Palouse River basin
Phase 3: Administrative Basins 96-97	Clark Fork-Pend Oreille River basins

The Board holds six water licenses for minimum stream flows in Basins 91-95. There are 12 water rights in Basins 96-97. There are no rights held by the Board in Basin 87. A list of the rights for which claims will be required in the NIA is attached.

The Director, IDWR, submitted a budget request for the FY 2012 budget cycle. However, the Governor did not recommend the request and the legislature did not act on an appropriation due to the financial outlook.

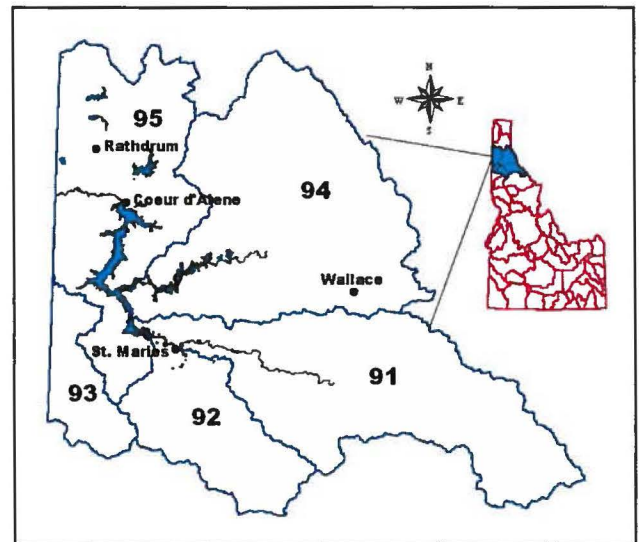
In May 2011, IDWR submitted a schedule of projected timeframes for state-law based claims. According to that schedule, claims will need to be filed prior to the end of calendar year 2012. An exact date is not available; however, it is expected that it would probably be in the second half of the year. After that time, late fees may be assessed which would greatly increase the fees.



## NIA Phase 1

Phase 1 of the NIA commenced on November 12, 2008. Claims are currently being taken for Administrative Basins 91-95; a final deadline for filing claims has not been established. It is anticipated that the deadline for filing claims will occur before the end of 2012.

The filing fees for adjudication claims are \$50 per claim, plus a variable fee. For minimum stream flow water rights, the variable fee is \$100 per cubic foot per second (cfs).



Filing fees are estimated as follows:

Phase 1	Total cfs	4,645	at \$100/cfs
	Filing Fee	300	\$50/claim

**Phase 1 Total Fees            \$464,800**

Phase 3	Total cfs	12,588	at \$100/cfs
	Filing Fee	600	\$50/claim

**Phase 3 Total Fees            \$1,259,400**

NORTHERN IDAHO ADJUDICATION							
IDAHO WATER RESOURCE BOARD WATER RIGHTS							
<u>Basin</u>	<u>Sequence</u>	<u>Basis</u>	<u>Priority Date</u>	<u>Rate(cfs)</u>	<u>Volume(af)</u>	<u>Source</u>	<u>Water Use(s)</u>
<b>PHASE 1 (Administrative Basins 91-95)</b>							
91	7122	License	6/15/1992	941		ST JOE RIVER	MINIMUM STREAM FLOW
92	7200	License	6/15/1992	141		ST MARIES RIVER	MINIMUM STREAM FLOW
94	7341	License	6/15/1992	1018		COEUR D ALENE RIVER	MINIMUM STREAM FLOW
95	7874	License	9/13/1978	30		WOLF LODGE CREEK	MINIMUM STREAM FLOW
95	8560	License	10/16/1987	20		HAYDEN CREEK	MINIMUM STREAM FLOW
95	8780	License	6/15/1992	2495		SPOKANE RIVER	MINIMUM STREAM FLOW
			Total:	4645			
<b>PHASE 2 (Administrative Basin 87)</b>							
No water rights in the name of the IWRB							
<b>PHASE 3 (Administrative Basins 96-97)</b>							
96	7771	License	4/17/1979	10		GRANITE CREEK	MINIMUM STREAM FLOW
96	7772	License	4/17/1979	7		SULLIVAN SPRING	MINIMUM STREAM FLOW
96	7979	License	6/19/1981	84		LIGHTNING CREEK	MINIMUM STREAM FLOW
96	7980	License	6/19/1981	85		GROUSE CREEK	MINIMUM STREAM FLOW
96	8717	License	6/15/1992	129		PACK RIVER	MINIMUM STREAM FLOW
96	8730	License	6/15/1992	10655		PEND OREILLE RIVER	MINIMUM STREAM FLOW
97	7274	License	4/26/1985	26		INDIAN CREEK	MINIMUM STREAM FLOW
97	7275	License	4/26/1985	22		LION CREEK	MINIMUM STREAM FLOW
97	7308	License	11/9/1990	70		EAST RIVER NORTH FORK	MINIMUM STREAM FLOW
97	7380	License	10/22/1997	1500		PRIEST RIVER	MINIMUM STREAM FLOW
96	8503	License	10/16/1987			ROUND LAKE	LAKE LEVEL MAINTENANCE
96	8764	License	6/24/1993			GAMBLE LAKE	LAKE LEVEL MAINTENANCE
			Total:	12588			

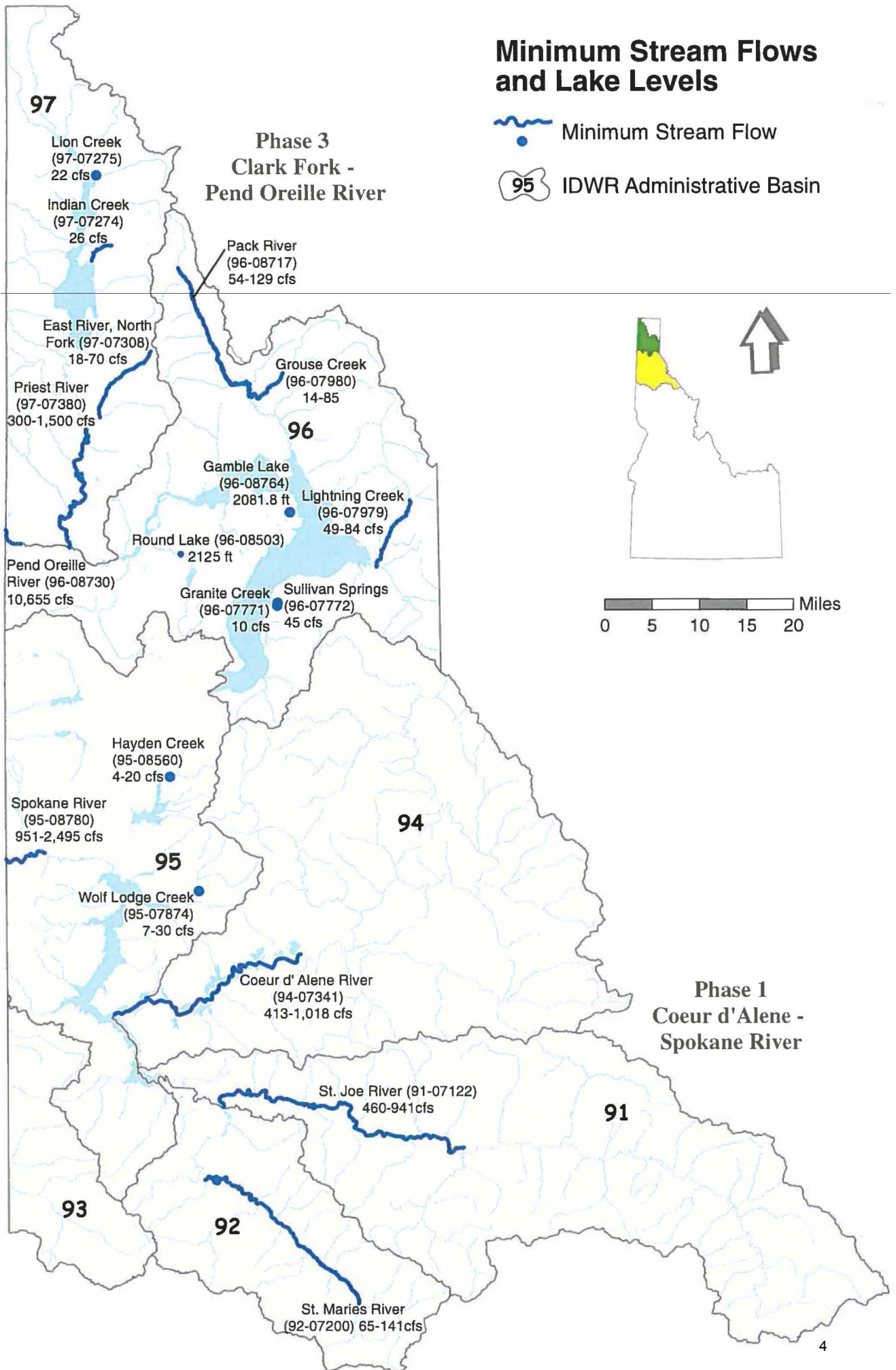
# Minimum Stream Flows and Lake Levels



Minimum Stream Flow



IDWR Administrative Basin





BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF FILING CLAIMS )  
IN THE NORTHERN IDAHO ADJUDICATION )  
FOR INSTREAM FLOW WATER RIGHTS HELD )  
BY THE IDAHO WATER RESOURCE BOARD )  
\_\_\_\_\_ )

RESOLUTION

WHEREAS, the Phase 1 of the Northern Idaho Adjudication was commenced by order of the district court on November 12, 2008; and,

WHEREAS, Phase 1 of the Northern Idaho Adjudication includes surface and ground water basins within IDWR Administrative Basin 91-95, covering the Coeur d'Alene-Spokane River basins; and,

WHEREAS, section 1409, Idaho Code, provides that the director, may, prior to filing the director's report with the court, require claims to be filed for licenses or permits for which proof of beneficial use was filed prior to entry of the court's order commencing the adjudication; and,

WHEREAS, the Board is the holder of licensed water rights for instream flow within the boundaries of Phase 1 of the Northern Idaho Adjudication; and,

WHEREAS, fees shall be required to be paid if claims are filed for these instream flow water rights; and,

WHEREAS, claims fees have been determined to be \$464,800 for water rights held by the Board in Phase 1 of the Northern Idaho Adjudication; and,

NOW THEREFORE, BE IT RESOLVED that the Board submit a request to the Idaho Legislature to pay adjudication claim fees in the amount of \$464,800 for water rights held by the Board, and that upon receipt of the necessary funds the Board will file the appropriate adjudication claims.

DATED this 29<sup>th</sup> day of July, 2011.

\_\_\_\_\_  
\_\_\_\_\_, Chairman  
Idaho Water Resource Board

ATTEST \_\_\_\_\_  
\_\_\_\_\_, Secretary

# Memorandum



To: Idaho Water Resource Board  
From: Helen Harrington  
Date: July 13, 2011  
Re: 2012 Water District 63 Rental Pool Procedures  
Request for Approval of Revised Procedures

---

## Action Item

---

Consider attached resolution to amend the 2012 Water District 63 Rental Pool Procedures

## Background

The IWRB has appointed the Advisory Committee of Water District 63 as the local committee for the Boise River Rental Pool and to operate the Boise River Rental Pool. The Committee submitted revised 2012 Water District 63 Rental Pool Procedures for consideration and approval by the Idaho Water Resource Board.

The current procedures were adopted in 2005. The revised procedures are intended to bring the Boise River Rental Pool Procedures more in line with the Upper Snake and Payette River Rental Pool Procedures. There are two substantive changes incorporated into the proposed procedures:

1. Section 4.3.104 Deadline for Application.  
A deadline of October 31 for receipt of applications to assign storage is imposed. The purpose of this language is to clarify the process and ensure correct allocation of assignments.
2. The committee is also requesting an increase in the administrative fee collected by Water District 63 to \$1.00 per acre foot for both in and out of basin use. Previously, the administrative fee was \$.50 for in basin and \$.75 for out of basin use. The Committee intends to charge the \$14.00 per acre foot rate through 2012 and will increase the rate to \$17.00 per acre foot in 2013, per the Snake River Water Rights Agreement of 2004 (also known as the Nez Perce Mediator's Term sheet dated April 20, 2004). The rental price is inclusive of fees and surcharges.

The proposed changes were unanimously approved by the Water District 63 Advisory Committee. The proposed changes were also reviewed and accepted by the US Bureau of Reclamation staff. Additionally, the proposed procedures were reviewed by staff of the Attorney General's Office for legal consistency.



BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE	)	
2012 WATER DISTRICT 63	)	RESOLUTION
RENTAL POOL PROCEDURES	)	
_____	)	

WHEREAS, Section 42-1765, Idaho Code, authorizes the Idaho Water Resource Board (IWRB) to appoint a local committee whose responsibilities include, among other responsibilities, adoption of procedures for the orderly operation of rental pools and such procedures must be approved by the IWRB; and

WHEREAS, the IWRB has previously appointed the Advisory Committee of Water District 63 as the local committee to operate the Boise River Rental Pool; and,

WHEREAS, the local committee submitted procedures to the IWRB which were approved on April 15, 2005, and the local committee has reviewed and proposes changes to the existing procedures for 2012; and

WHEREAS, the local committee has submitted proposed changes to the approved procedures prior to April 1, 2012, as required under IDAPA 37.02.02, Water Supply Bank Rules; and,

WHEREAS, the Department of Water Resources has reviewed the proposed revised Procedures and has determined it to be in substantial compliance with the IWRB Water Supply Bank Rules, IDAPA 37.02.03.040; and

WHEREAS, the IWRB has determined that the proposed changes are appropriate and should be accepted.

NOW THEREFORE BE IT RESOLVED that the proposed 2012 Water District 63 Rental Pool Procedures be accepted and approved.

DATED this 29<sup>th</sup> day of July, 2011.

\_\_\_\_\_, Chairman  
Idaho Water Resource Board

ATTEST \_\_\_\_\_  
\_\_\_\_\_, Secretary

# Memorandum



To: Idaho Water Resource Board  
From: Helen Harrington  
Date: July 20, 2011  
Re: Water District 1 (Upper Snake) Rental Pool Procedures Proposed Change

---

## **Action Items**

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Consider approval of new section proposed by the Committee of Nine to the Water District 1 Rental Pool Procedures creating a new supplemental pool for rentals below Milner Dam.

## **Discussion**

The Committee of Nine, the local committee appointed to manage the Water District 1 (Upper Snake) Rental Pool, has adopted a new section to the Water District 1 Rental Pool Procedures and submitted the new section for IWRB approval. The new section (Rule 8.0) creates a new Supplemental Pool. Under the new section, a Supplemental Pool will be created to provide an opportunity for spaceholders to make their storage water available for rental by Idaho Power to rent storage below Milner Dam. Additional proposed changes not associated with the new section are under review and will be brought to the Board at a later date.

The "Supplemental Pool" will be a "last-to-fill" category. Spaceholders will be able to move their storage into the Supplemental Pool, but moving rented space to the Supplemental Pool ensures that spaceholders who choose not to participate in the Supplemental Pool do not have their refill impacted by the release of storage water below Milner Dam.

The Committee is requesting approval by the IWRB at this time so the new section can be implemented immediately during this accounting year. Idaho Power has submitted a request to lease 15,000 acre-feet from the Supplemental Pool at an offer of \$13.82/acre-foot to spaceholders. The Committee issued an announcement to spaceholders on July 5, 2011, to solicit contracts to fill the request. The announcement included a deadline of July 12, 2011 for submission of contracts.

House Bill 272, passed by the Idaho Legislature, went into effect on April 7, 2011. This legislation resolved uncertainty and ambiguities in Idaho Code regarding authority for local rental pools to facilitate hydropower rentals in basins with rental pools. Once the legislation was effective, the Committee of Nine proceeded to draft the proposed addition to the Rental Pool Procedures to describe the mechanism to operate the Rental Pool for leasing storage water below Milner Dam for hydropower generation. The mechanism, the Supplemental Pool, is the result. Although proposed changes are required to be submitted by April 1 for amendments to be implemented within the accounting year according to Water Supply Bank Rules, the Committee has proceeded in a timely manner to draft the new section. The Committee of Nine adopted the new section on June 27, 2011 and submitted the proposed changes to the IWRB on July 13, 2011.

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF APPROVAL	)	
OF THE LOCAL RENTAL POOL	)	A RESOLUTION APPROVING
PROCEDURES FOR WATER DISTRICT 1,	)	LOCAL RENTAL POOL
UPPER SNAKE RIVER	)	PROCEDURES
_____	)	

WHEREAS, section 42-1761 of the Idaho Code authorizes the Idaho Water Resource Board (Board) to operate a Water Supply Bank; and

WHEREAS, the purposes of the Water Supply Bank are to encourage the highest beneficial use of water; provide a source of adequate water supplies to benefit new and supplemental uses; and provide a source of funding for improving water user facilities and efficiencies; and

WHEREAS, effective July 18, 2008, the Board has renewed the appointment of the Committee of Nine for a period of five (5) years to serve as the local committee to operate the rental pool for water stored in the Upper Snake River system, pursuant to sections 42-1765, Idaho Code; and

WHEREAS, the Idaho Legislature passed House Bill 272 during the 2011 Legislative Session amending section 42-108B to clarify uncertainty and ambiguity related to water rentals; and

WHEREAS, the Procedures were not submitted to the Board by April 1 as required by because House Bill 272 did not become effective until April 7, 2011; and

WHEREAS, the Committee of Nine has proposed amending Water District 1 Rental Pool Procedures creating a new "Supplemental Pool" (Rule 8.0); and

WHEREAS, the Board has determined that proposed Rule 8.0 Supplemental Pool should be approved to facilitate the purposes of the Water Supply Bank and Rental Pools.

NOW THEREFORE BE IT RESOLVED that the Board approves the addition of Rule 8.0 Supplemental Pool to the 2010 Water District 1 Rental Pool Procedures and waives the April 1 submission date pursuant to the Board's Water Supply Bank Rules, as these procedures are intended to be utilized this current year in the Upper Snake Rental Pool.

DATED this 29<sup>th</sup> day of July, 2011.

\_\_\_\_\_  
\_\_\_\_\_, Chairman  
Idaho Water Resource Board

ATTEST \_\_\_\_\_  
\_\_\_\_\_, Secretary

# RECLAMATION

*Managing Water in the West*

## Bureau of Reclamation SECURE Water Act Report 2011



U.S. Department of the Interior  
Bureau of Reclamation

### Reclamation WaterSMART

- Landscape Conservation Cooperatives
- West-Wide Climate Risk Assessments
  - Assessment and Development activities to help Reclamation respond to SECURE 9503
- Basin Studies
- Title XVI
- Cooperative Watershed Management Program
- WaterSMART Grants
  - Water and Energy Efficiency
  - System Optimization Review
  - Advanced Water Treatment
  - Climate Analysis Tools

RECLAMATION

## SECURE Water Act – 9503 Reporting (paraphrased by Levi B.)

- Reclamation to report to congress initially March 2011 and every 5 years thereafter on:
  - global climate change impacts on hydrology in eight major reclamation river basins
    - Colorado, Columbia, Klamath, Missouri, Rio Grande, Sacramento, San Joaquin, Truckee
  - global climate change impacts on operations in these eight major reclamation river basins;
  - mitigation and adaptation strategies ...
  - coordination activities...
  - the implementation by the Secretary of the monitoring
  - plan developed under subsection (b)(5).

RECLAMATION

## Relevance to RMJOC

- Reclamation is issuing a report on climate change implications for hydrology in the western U.S. (SECURE report).
- The Columbia Basin is one of eight basins that Reclamation is required to discuss in the SECURE report.
- The SECURE report suggest similar trends in future climate and hydrology as the RMJOC Part I report, although there are some differences:
  - A larger ensemble of transient projections are considered
  - Different future periods are considered when taking a period-change view (2020s, 2050s, and 2070s relative to 1990s)

RECLAMATION



## SECURE Water – Other Sections

March 30, 2009

- The SECURE Water Act 2-year first reporting:
  - Section 9503 – Reclamation Water
  - Section 9505 – Hydropower (DOE / PMA)
  - Section 9506 – Intragovernmental Panel (Administrator / Secretary -> Subcommittee on Water Availability and Quality)

RECLAMATION

## Interagency Collaboration

- The SECURE Water Act had many sections with a 2-year first report:
  - Section 9503 – Reclamation Water
    - USGS
    - NOAA
    - USACE
  - Section 9505 – Hydropower (DOE / PMA)
    - USGS
    - USACE
    - Reclamation
    - NOAA
  - Section 9506 – Intragovernmental Panel (Administrator / Secretary -> Subcommittee on Water Availability and Quality)
    - USGS
    - NOAA
    - USACE
    - Reclamation

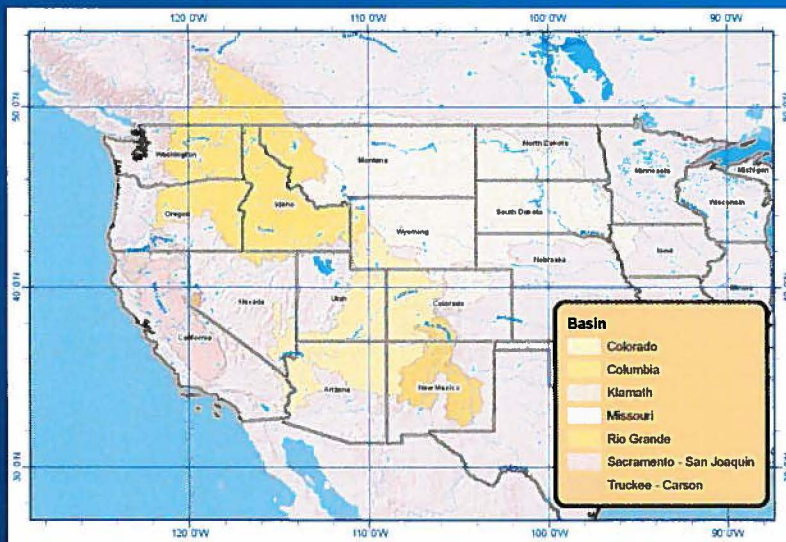
RECLAMATION

## About Reclamation's SECURE Report (Finalized March 2011)

- Introduction
- Basin Specific Chapters
  - Historical Climate and Hydrology (lit review and some quantification)
  - Projected Climate and Hydrology (lit review plus original analysis, transient VIC hydrologic modeling west-wide)
  - Associated Impacts (lit review on impacts for other water and environmental resources, as well as operations)
- West-wide View
- Acknowledgement of Uncertainties
- Collaboration Activities (CCAWWG / LCCs)

RECLAMATION

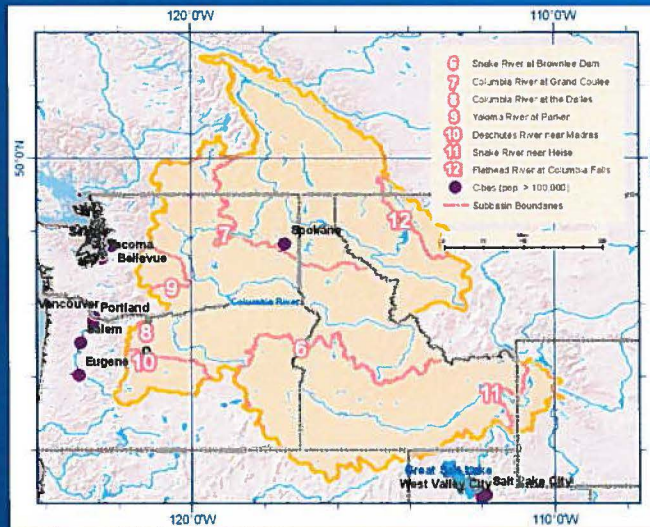
## 9503: Major Reclamation River Basins



RECLAMATION

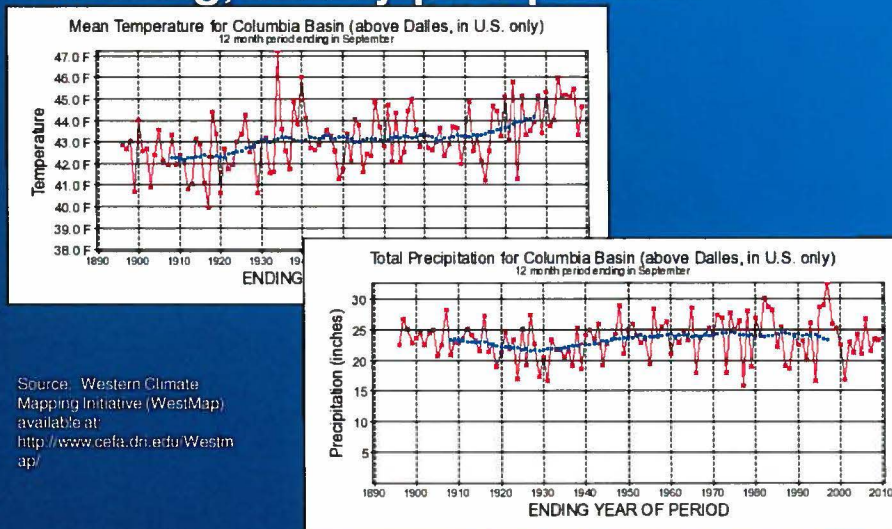


## Columbia Basin



RECLAMATION

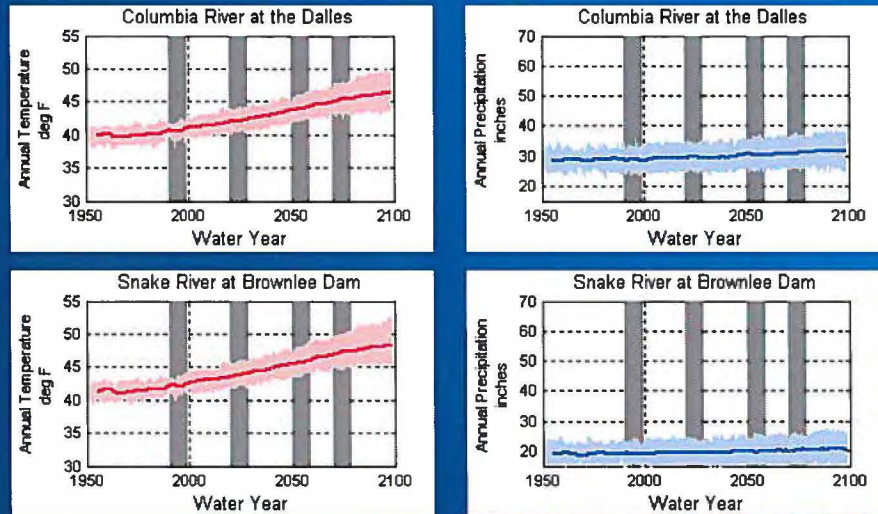
## Historical Climate Trends: warming, steady precipitation



RECLAMATION

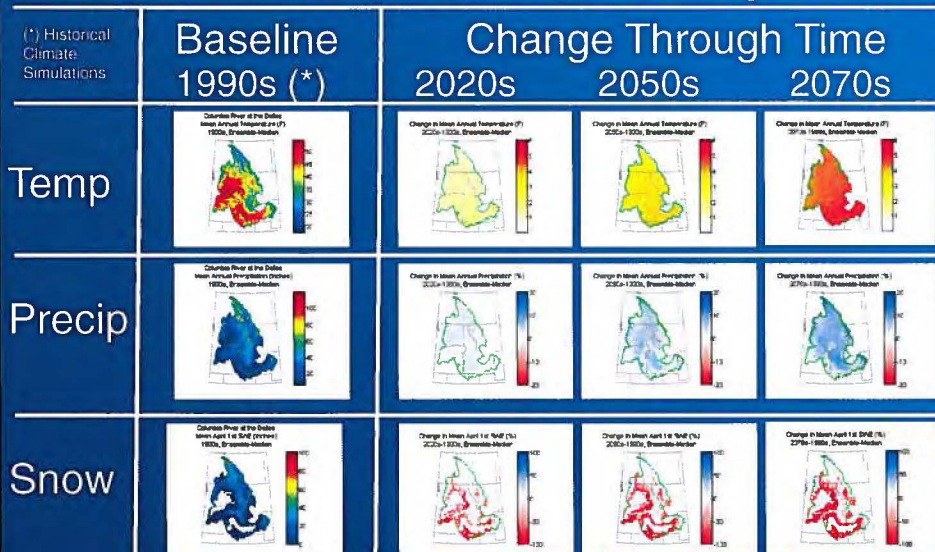


## Basin-mean Climate Projections: Warmer, slightly wetter



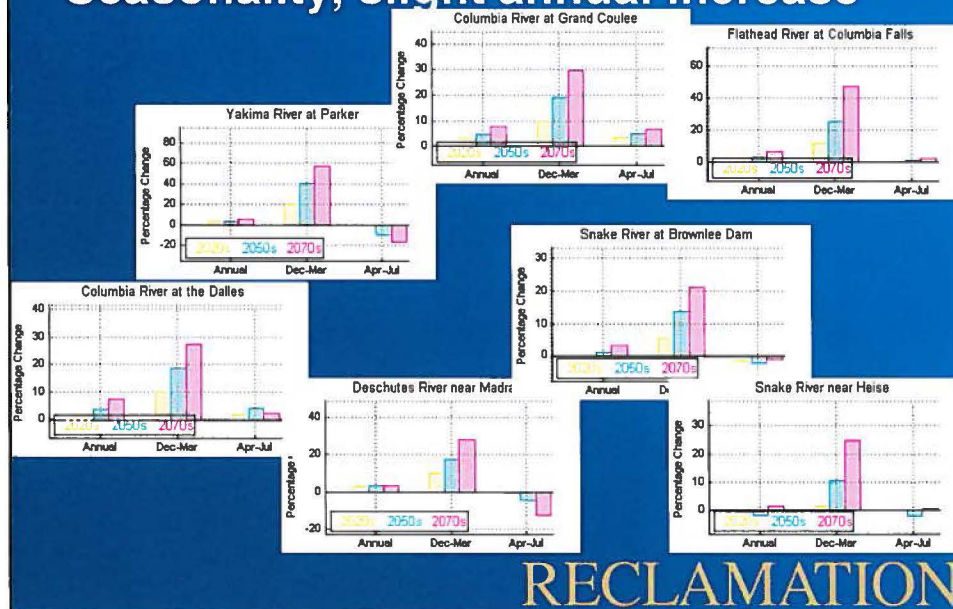
RECLAMATION

## Basin-Distributed Climate and Snow: Warmer – Wetter – Reduced Snowpack

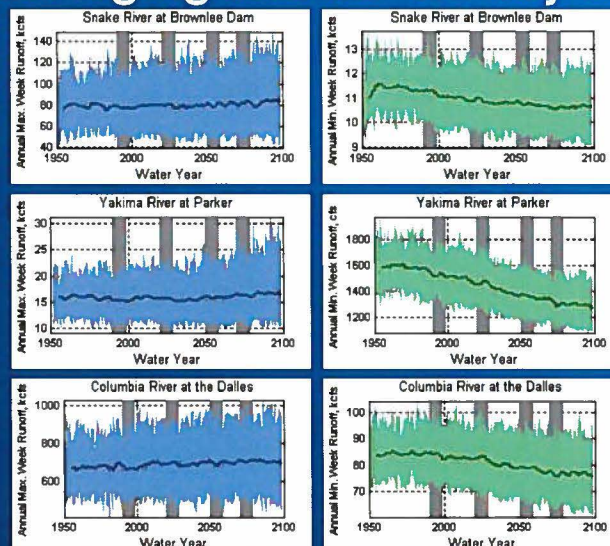


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## Runoff Impact: Changed Seasonality, slight annual increase



## Runoff Impact: ... diverging annual “weekly extremes”





## Peer Review

- Held February 4 – February 28, 2011
- USACE
  - Chief H&H - Jerry Webb
  - IWR - Jeff Arnold
- USGS
  - WaterSMART Coordinator – Eric Evenson
- NOAA
  - Chief Climate Analysis ESRL – Robin Webb
- Western States Water Council
  - Tony Williardson

RECLAMATION

## Many Activities Support Development - Examples

- Bias Corrected Spatially Downscaled Climate Projections
  - Reclamation R&D, Santa Clara University, Lawrence Livermore National Labs, DOE
- VIC Model development
  - University of Washington
- Basin Specific Planning / Operations Tools
  - All Reclamation Regions
- Climate Change Literature Synthesis
  - Reclamation R&D


RECLAMATION



## Reclamation Acknowledgments

- **Program Management Office**
  - David Raff (Basin Studies and WWCRA Program Manager), [draff@usbr.gov](mailto:draff@usbr.gov), Avra Morgan
- **Technical Service Center (Denver)**
  - Tom Pruitt, Subhrendu Gangopadhyay, Levi Brekke, Mark Spears, Alan Harrison, Nancy Parker, Dave King
- **Regional Directorates**
  - Pacific Northwest (Toni Turner)
  - Great Plains (Gary Davis, Patrick Erger)
  - Upper Colorado (Jim Prairie, Katrina Grantz)
  - Lower Colorado (Carly Jerla, Paul Miller, Warren Sharp)
  - Mid-Pacific (Michael Tansey, Tom Scott, Jon Hicks)
- **Research and Development**
  - Curt Brown, Chuck Hennig

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Water Resource Board

**ESPA Water Level Changes and Estimated Volume of Water**

Presented by Mike McVay

July 28, 2011

**Aquifer Water Balance**

**Inflow – Outflow =  $\Delta$ Storage**

ESPA Inflows = Incidental recharge from SW irrigation, Canal Seepage, Perched River Seepage, Tributary Underflow, Precipitation.

ESPA Outflows = Evapotranspiration, Spring Discharge, Well Pumping

We spend a lot of time and effort attempting to estimate these parameters. However, we can calculate change in storage more directly using synoptic measurements. We can then compare to earlier estimates of aquifer storage and generate an aquifer “history.”

## Synoptic Water-Level Measurements

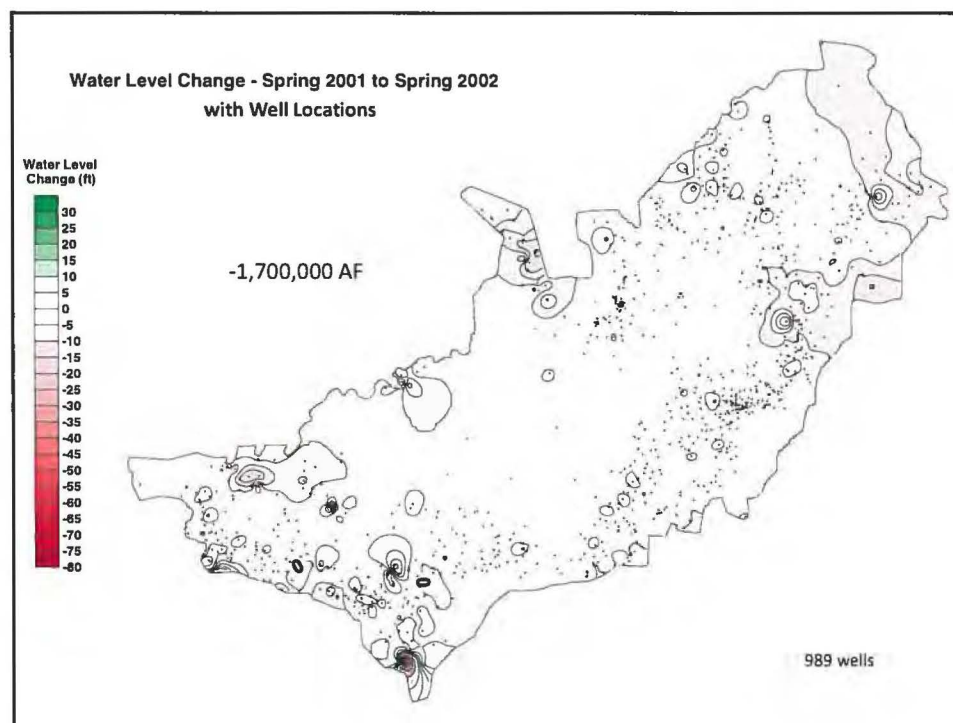
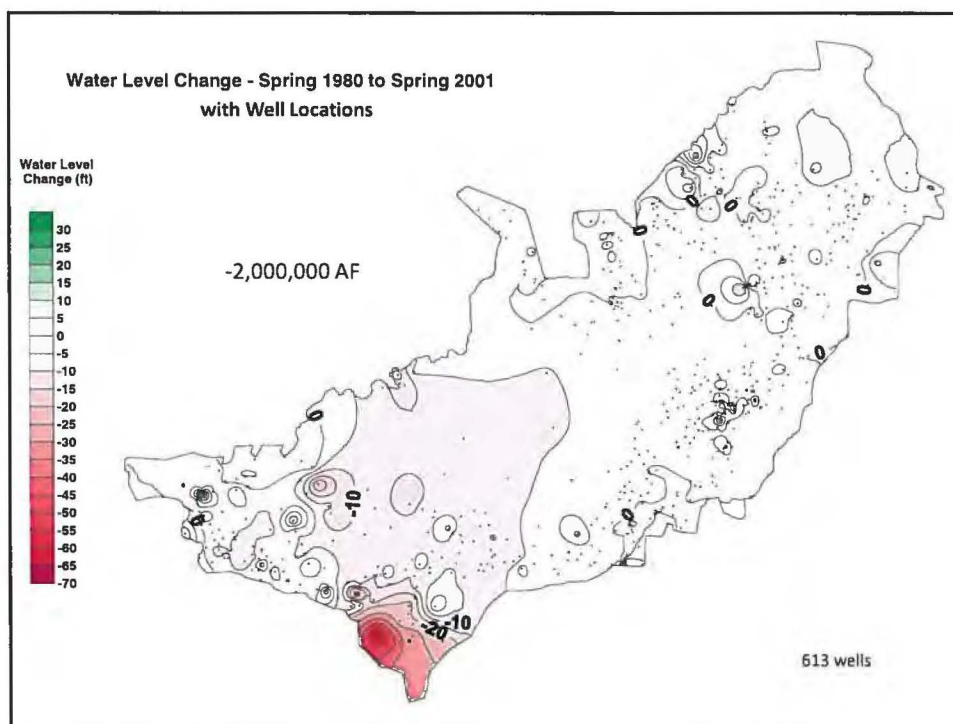
- Synoptic measurement events measure a large number of wells over a short period of time (approximately 8 weeks).
- Synoptic events in 1980, 2001, 2002 and 2008. Events are scheduled to occur every 5 years.
- Data from four synoptic water level measurements (mass measurements) have been used to estimate changes in aquifer storage.

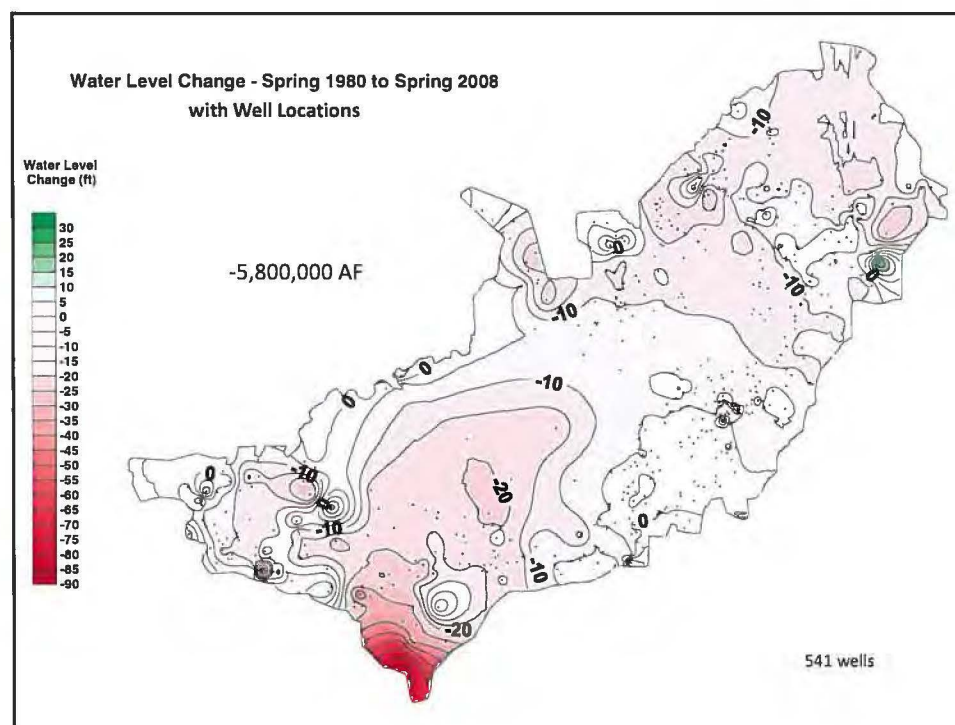
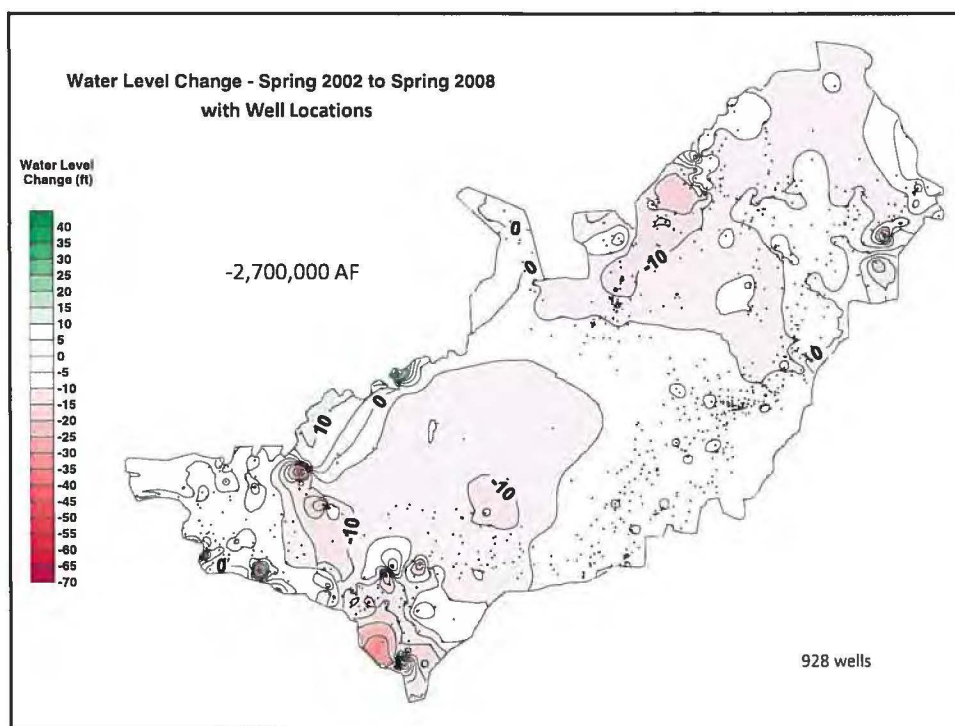
## Using Synoptic Water-Level Data to Estimate Changes in Aquifer Storage

The volume of changes in storage were calculated as follows:

1. Synoptic water level data was differenced to get water-level changes at discrete points.
2. Change point data was interpolated to create water-level change maps.
3. The water-level-changes were multiplied with the average calibrated Sy value from ESPAM1.1 (0.07) and the area to calculate volume of water.



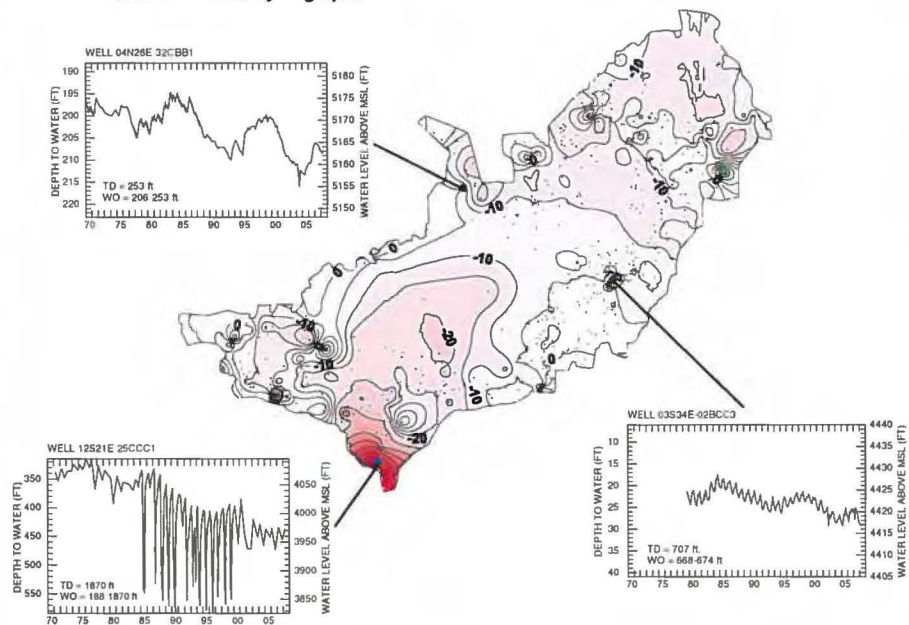






Are these change maps snapshots that capture the trend in regional water-level changes over time, or do they represent discrete phenomena (measurement error, pumping, etc.)?

**Water Level Change - Spring 1980 to Spring 2008  
with Select Well Hydrographs**

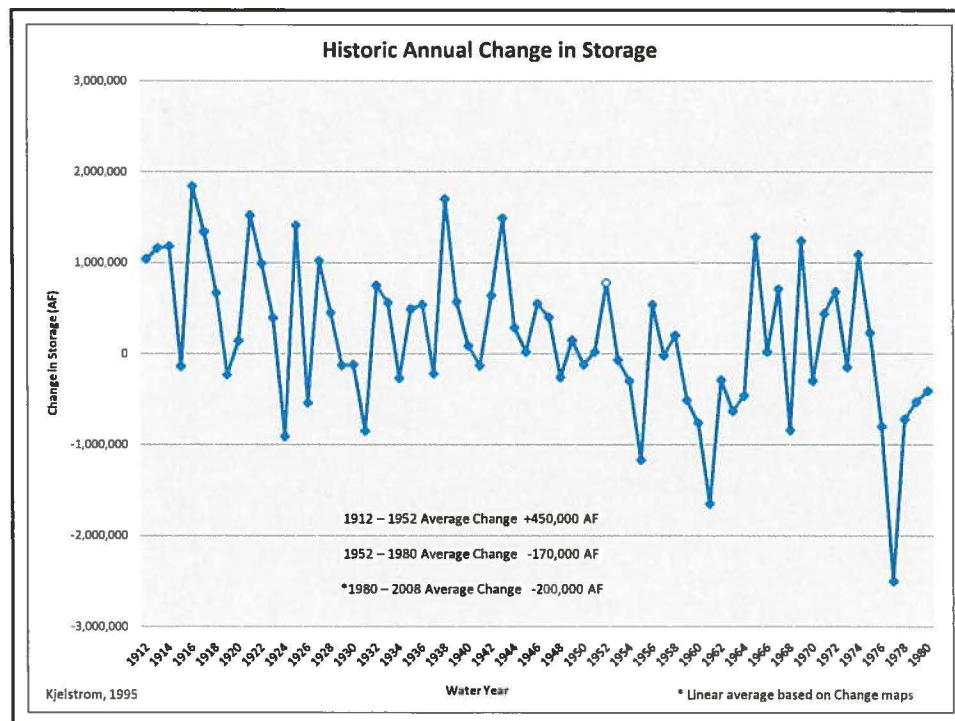


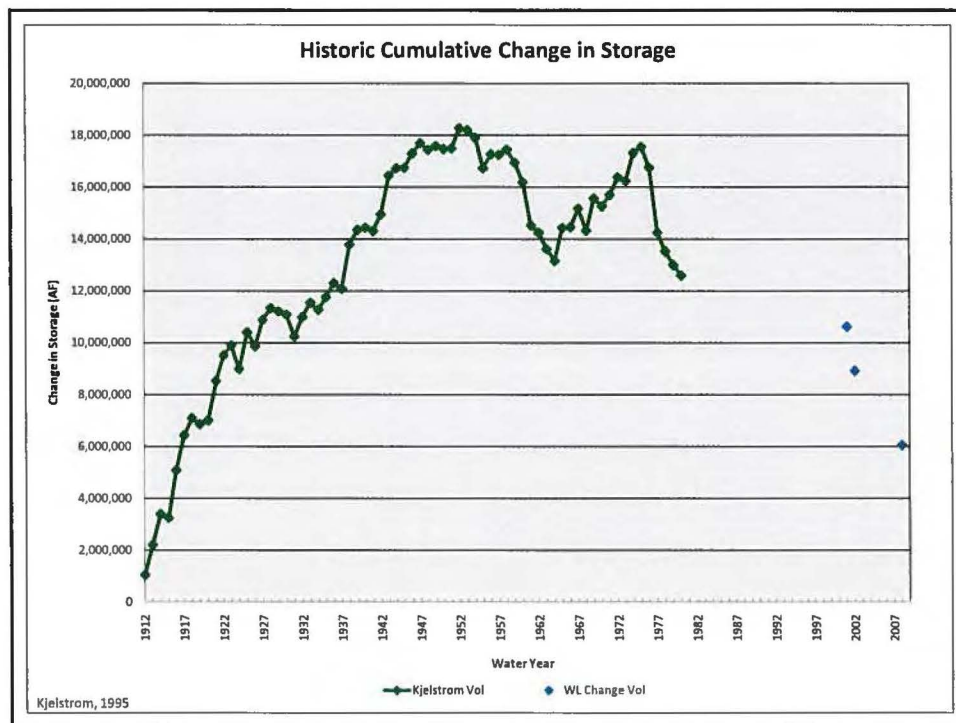




## Important Considerations

- The change maps appear to capture the trend in regional water-level changes over time.
- Approximately 2,000,000 AF of water was removed from storage between 2001 and 2002, and approximately 6,000,000 AF between 1980 and 2008.
- Are these change-in-storage values reasonable?

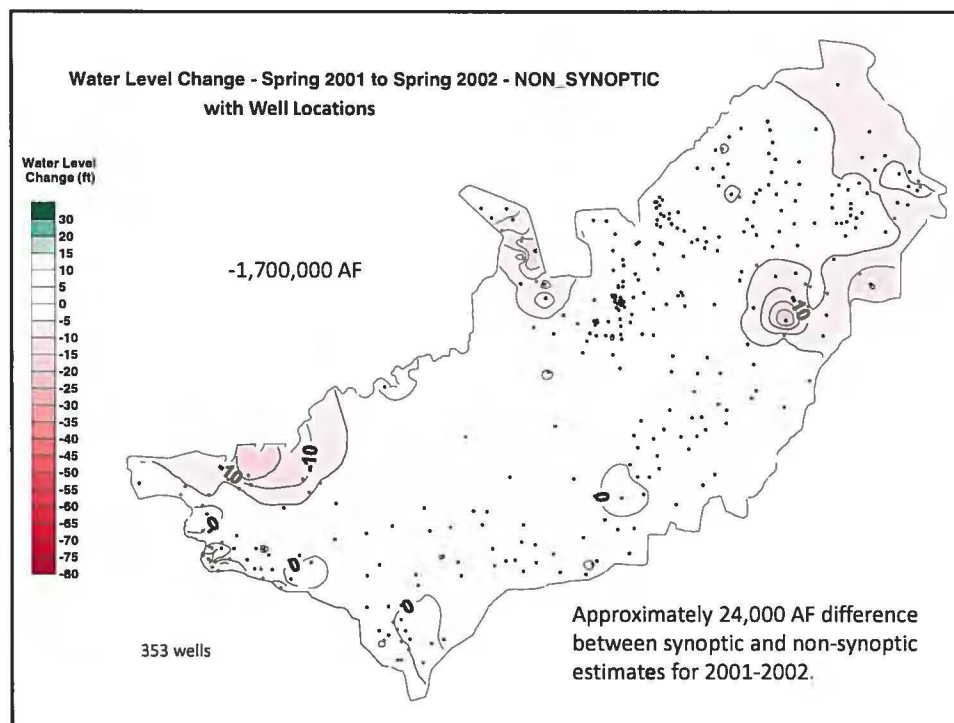
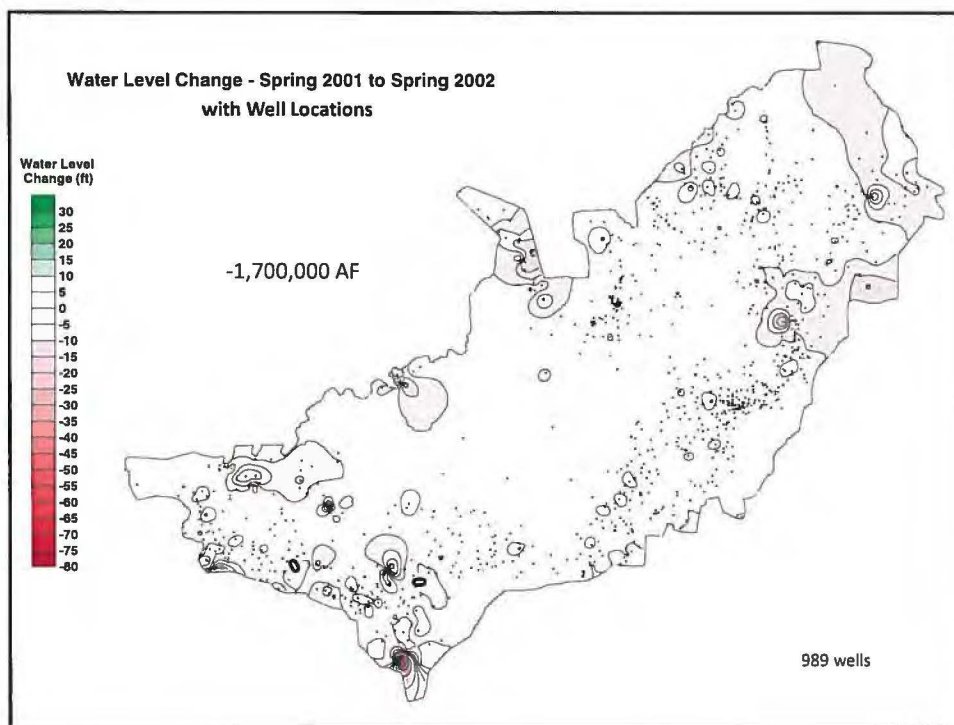




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The comparison with Kjelstrom indicates that the change-in-storage volumes are within the range of historical changes, and the cumulative change seems to make sense. However, there is a large data gap between the Kjelstrom estimates and the synoptic estimates. Let's try to estimate storage changes with typical spring-time measurements (non-synoptic).

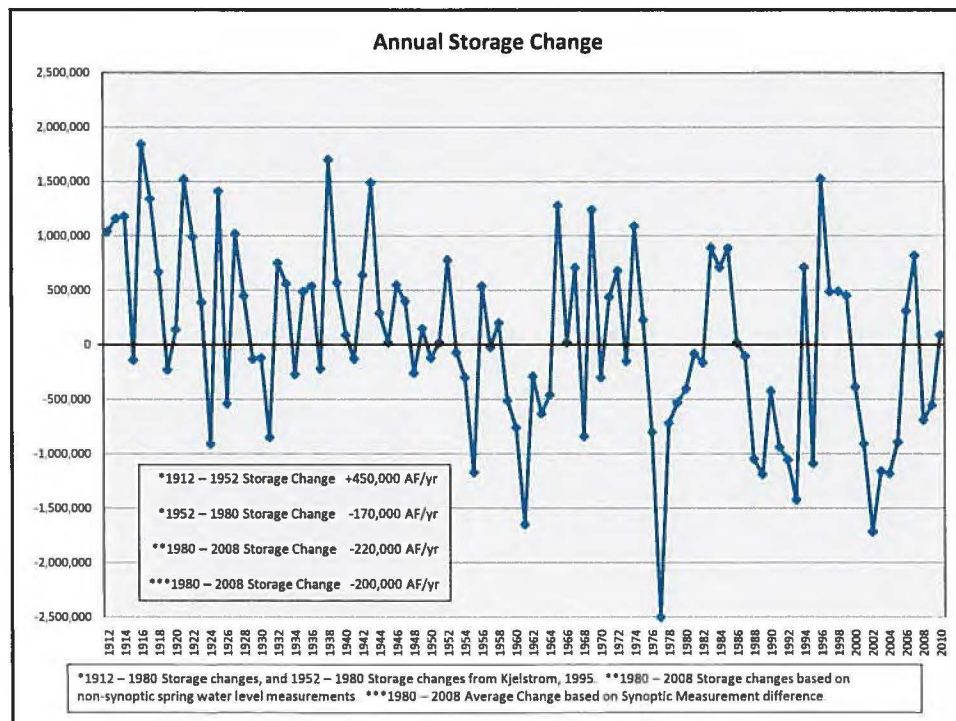


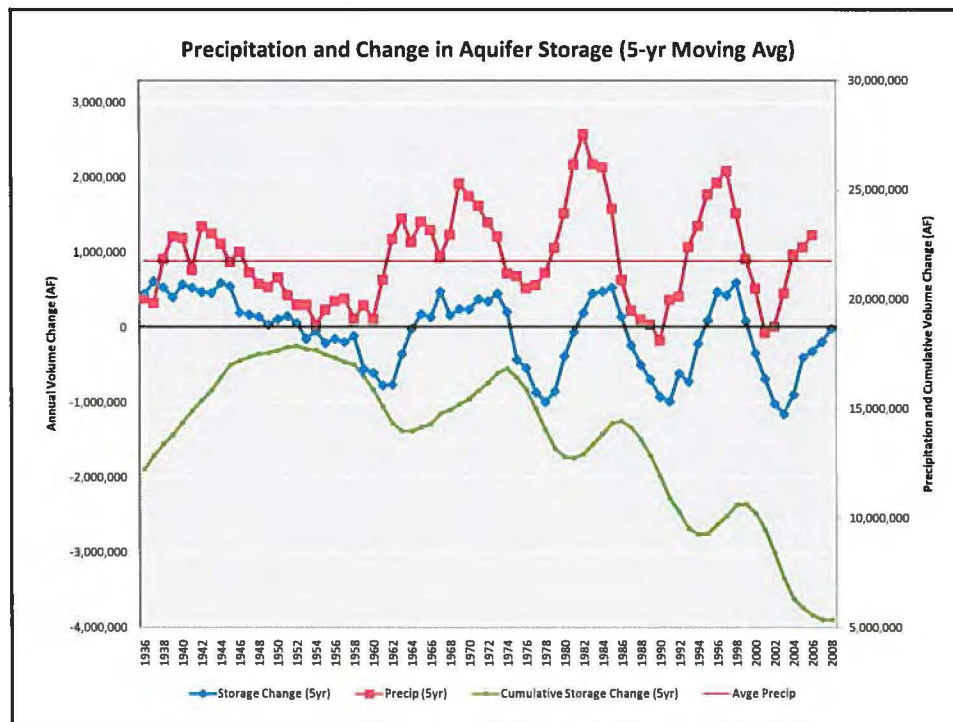
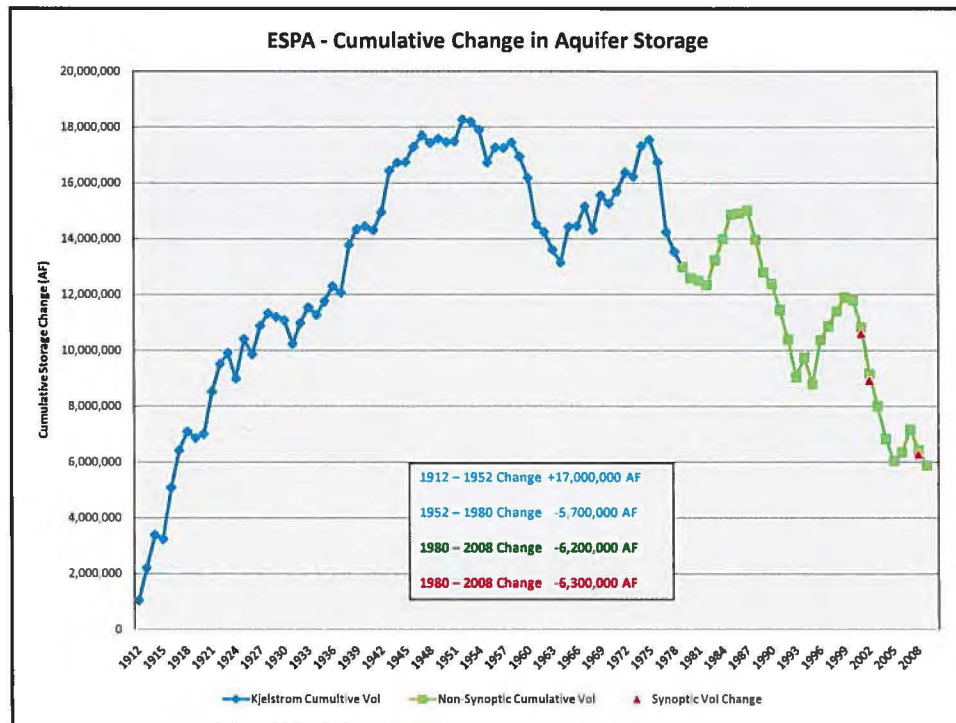




## Comparison of Calculated Storage Volumes

Comparison of Synoptic and Non-synoptic volume calculations				
Change Years	Synoptic Average Sy 0.07 (ESPAM1.1)	Non-Synoptic Average Sy 0.07 (ESPAM1.1)	Difference (AF)	Difference (%)
	Volume (AF)	Volume (AF)		
SP2001-SP2002	-1,668,280	-1,659,658	-24,433	1%
SP2002-SP2008	-2,648,868	-2,738,924	74,781	-3%
SP2001-SP2008	-4,071,544	-4,398,582	300,182	-7%
SP1980-SP2001	-1,978,546	-1,772,623	-222,719	11%
SP1980-SP2002	-3,845,664	-3,432,280	-440,737	11%
SP1980 - SP2008	-5,736,486	-6,171,205	384,995	-7%

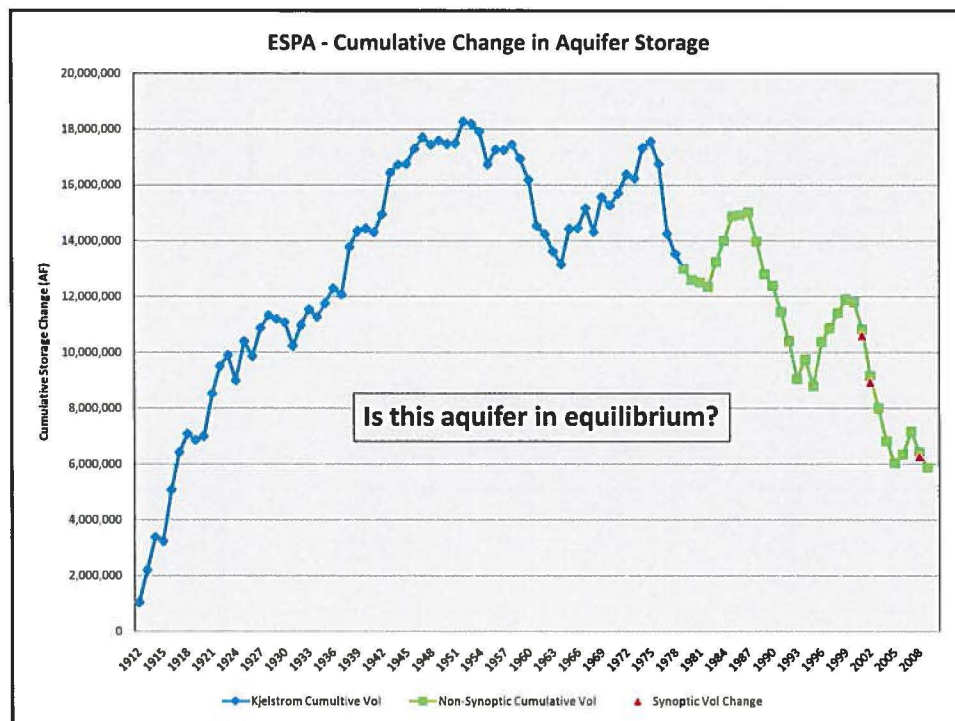






## Important Points to Remember

- Water-level measurements allow a simple method to estimate changes in aquifer storage.
- Estimated changes in aquifer storage using water-level measurements, used in combination with earlier estimates, provides a practical description of aquifer history.
- Short-term precipitation related changes are superimposed on a downward trend of approximately 200,000 AF/year.
- The trend is a combination of climatic and anthropogenic effects.







## How does this analysis correspond to previous statements that the aquifer is in equilibrium?

*"...the Snake River Plain aquifer is close to dynamic equilibrium (inexactness of the water budget prohibits making a more definitive statement). This implies that further long-term changes in aquifer water levels and spring discharges are expected to be small, if average water use and supply remain as they were in the [sic] 1980-2002. Short-term fluctuations due to weather variation and the resulting changes in irrigation supply would be expected to occur to a degree similar to what has occurred historically"*

**– Base Case Scenario, 2005**

*"...today's water use (as applied to historic water supply conditions) is more or less in balance with today's general levels of spring discharge and river gains. The implied equilibrium gains and discharges associated with current practices are near today's levels. However, given this implied equilibrium, one would still expect significant seasonal, year-to-year and multi-year variability."*

**– Current Practices Scenario, 2007**



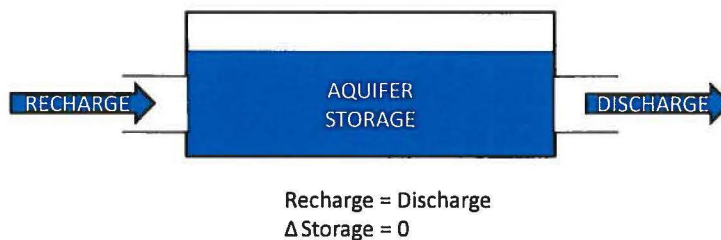
## How to approach Dynamic Equilibrium

- What is the definition of dynamic equilibrium?
- What did previous researchers mean when they referred to equilibrium?
- What does equilibrium mean to us?

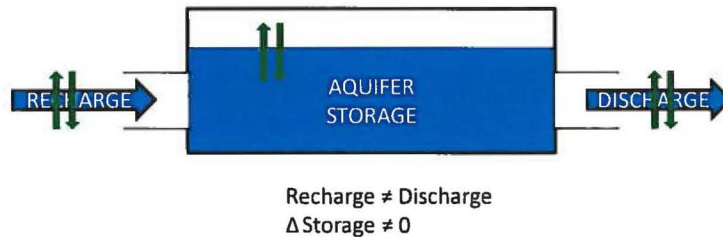
## Dynamic Equilibrium

"When seasonal and year-to-year variations are superimposed, but there is no long term trend in recharge and discharge, a dynamic equilibrium is eventually reached where aquifer water levels and river gains and losses fluctuate about the steady state level. Steady state conditions do not necessarily imply that the balance has occurred at a desirable level." – **Base Case Scenario, 2005**

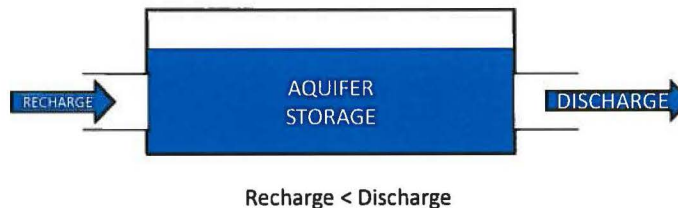
**When an aquifer is in equilibrium, recharge is approximately equal to discharge, and the volume of water in storage is constant.**



If the aquifer experiences a new stress (increase/decrease in precipitation, incidental recharge, pumping, ET, etc.), the equilibrium is disrupted, and changes in recharge, discharge and storage occur.

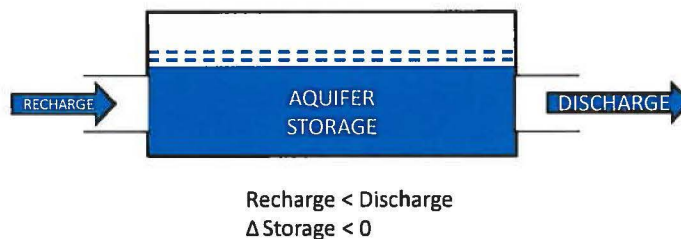


**Example:** Suppose precipitation is below average, and recharge to the aquifer is reduced as a result. This is a new stress.

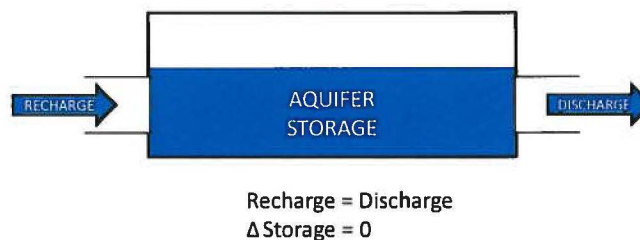




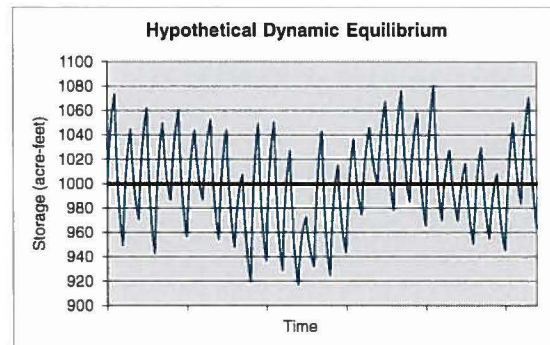
The system will respond with reductions in aquifer storage (water-level declines).



After some time, the aquifer discharge will reduce to match recharge. Aquifer storage will stabilize, and a **NEW** equilibrium will be reached. This new equilibrium state exhibits less water in storage, and less discharge than before the stress.



The aquifer will continue respond to annual changes in precipitation– and can be said to be in a state of dynamic (or changing) equilibrium as long as there is no long-term trend in recharge/discharge. This quasi-stable state will fluctuate about a long-term mean... As long as no new stresses are applied to the aquifer.



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How does this analysis correspond to previous statements that the aquifer is in equilibrium?

*"...the Snake River Plain aquifer is close to dynamic equilibrium (inexactness of the statement).*

*and spring discharge supply remain to weather variations expected to occur*  
– Base Case Scenario

*water levels are and variations due would be ally"*

#### IMPORTANT

These analyses were never meant to be predictions or forecasts.

*"...today's water is more or less in balance. The implied equilibrium*

*is more or over gains. practices*

*are near today's levels. However, given this implied equilibrium, one would still expect significant seasonal, year-to-year and multi-year variability."*

– Current Practices Scenario, 2007



## What does the Base Case Scenario really say?

*Both the water budget analysis and the model results produced indicate that, as of May 2002, the Snake River Plain aquifer is close to dynamic equilibrium (inexactness of the water budget prohibits making a more definitive statement).*

*This implies that further long-term changes in aquifer water levels and spring discharges are expected to be small, if average water use and supply remain as they were in the [sic] 1980-2002. Short-term fluctuations due to weather variation and the resulting changes in irrigation supply would be expected to occur to a degree similar to what has occurred historically.*

### "close to dynamic equilibrium"

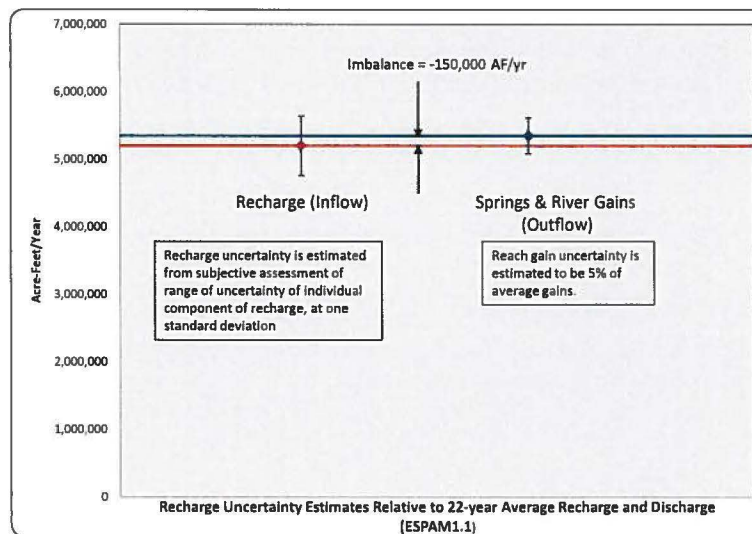


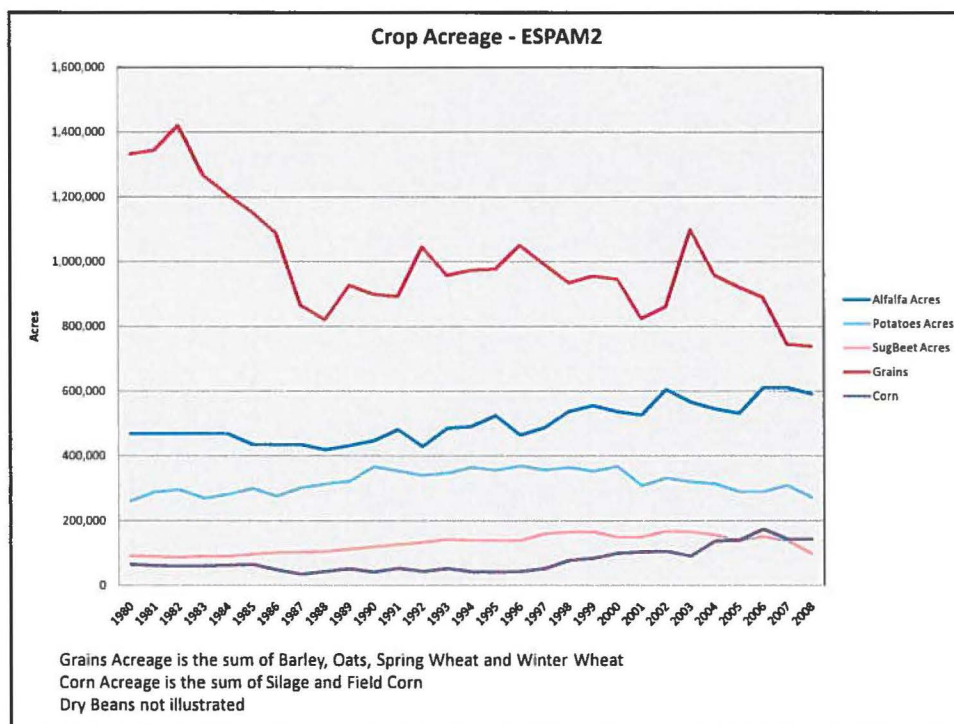
Figure adapted from "Base Case Scenario" – IWRI, 2005





## Have water use and supply remained the same as the 1980-2002 average?

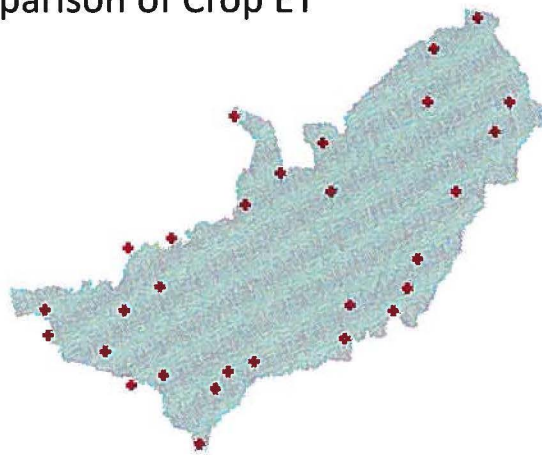
*This implies that further long-term changes in aquifer water levels and spring discharges are expected to be small, if average water use and supply remain as they were in the [sic] 1980-2002. Short-term fluctuations due to weather variation and the resulting changes in irrigation supply would be expected to occur to a degree similar to what has occurred historically.*



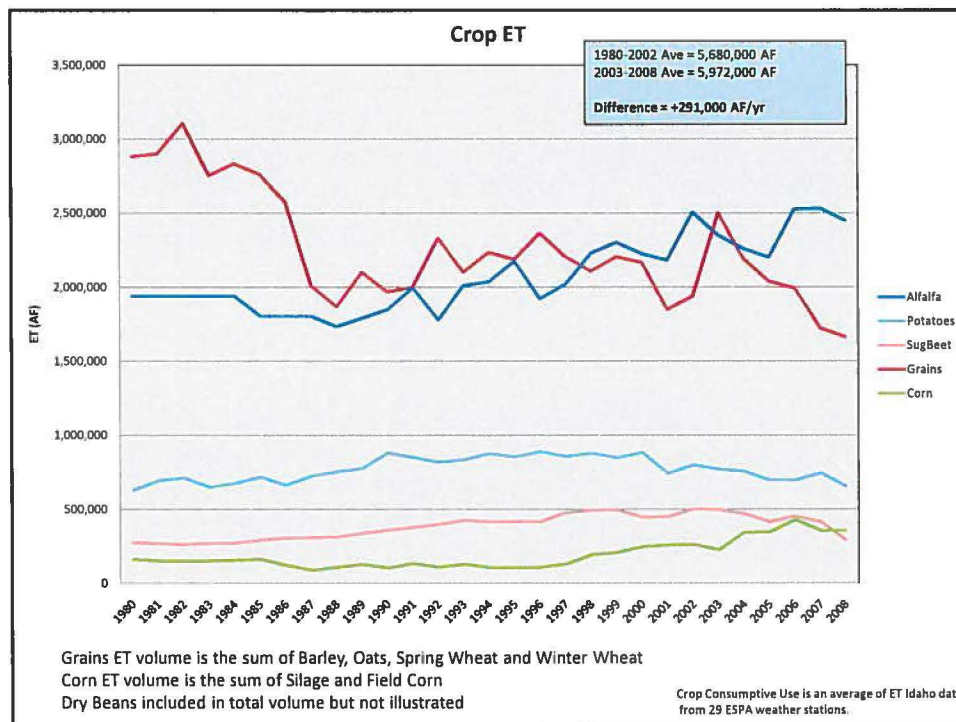


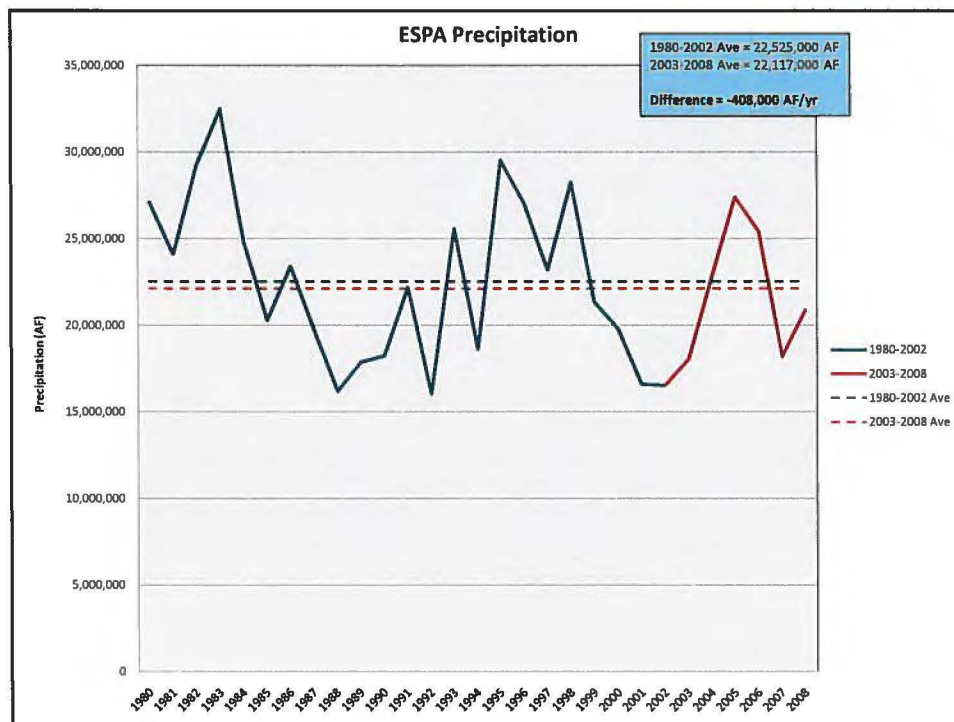
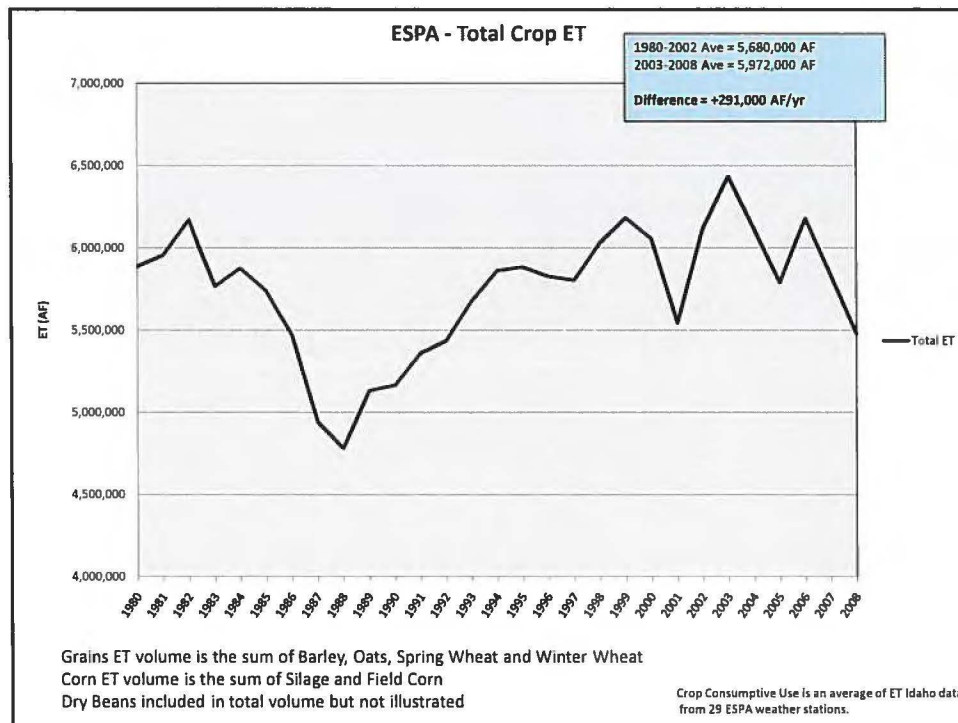
## Comparison of Crop ET

Crop	Average Annual ET*
Alfalfa	4.14
Sugar Beets	2.99
Field Corn	2.56
Barley	2.63
Oats	2.63
Spring Wheat	2.63
Silage Corn	2.45
Potatoes	2.40
Dry Beans	1.81
Winter Wheat	1.09

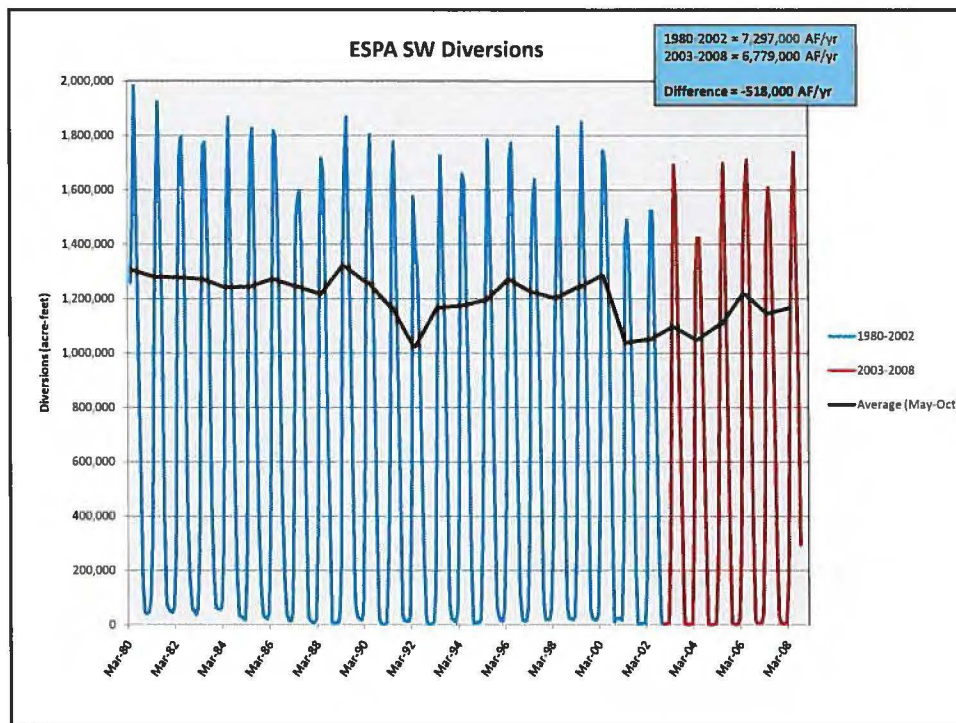


\* ET data represents the mean of the "Average Annual ET<sub>act</sub>" from 29 NWS weather stations. ET<sub>Idaho</sub> 2009.



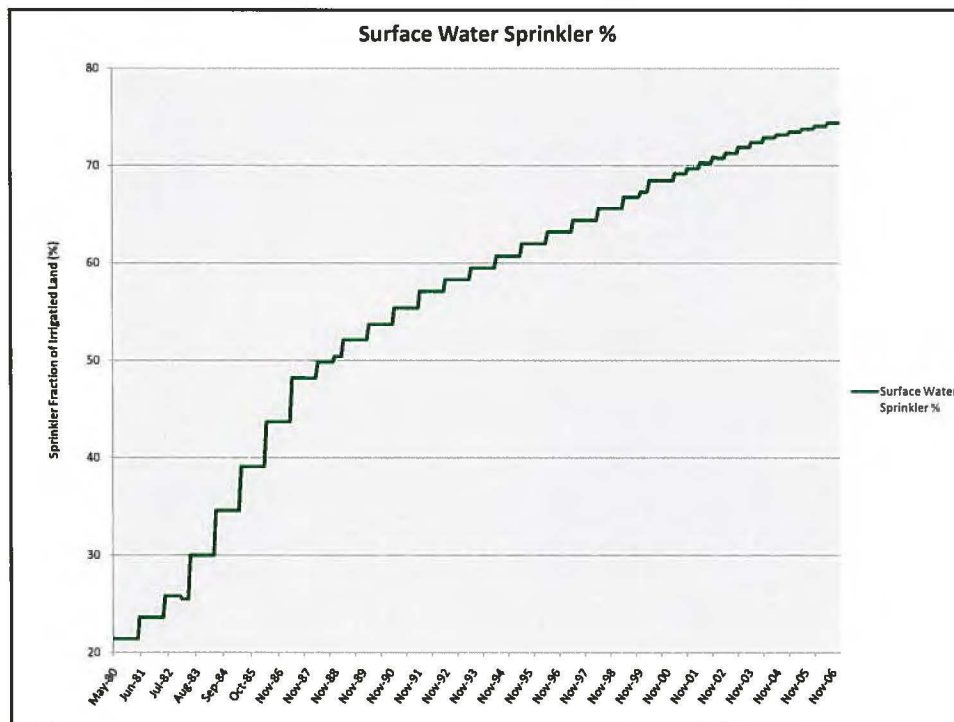
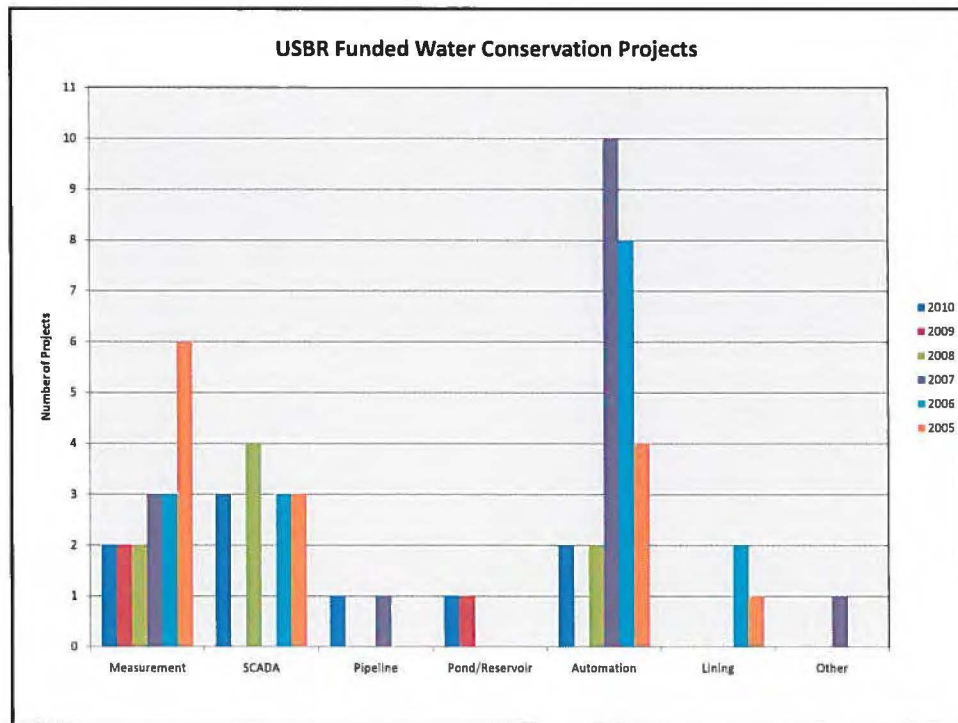






## Irrigation Efficiency

- Lower diversions provide evidence of increased irrigation efficiency.
- Increased efficiency affects the water budget in three ways.
  - Decreased incidental recharge.
    - Incidental recharge is 60% of aquifer recharge.
  - Increased consumptive use.
    - Improved technology and management produce higher crop yields.
    - Water "saved" can be applied to higher yield crops or other uses.
  - Irreversibility precludes capture (recharge) of above average water supply.





## What does the Current Practices Scenario tell us?

*"...today's water use (as applied to historic water supply conditions) is more or less in balance with today's general levels of spring discharge and river gains. The implied equilibrium gains and discharges associated with current practices are near today's levels. However, given this implied equilibrium, one would still expect significant seasonal, year-to-year and multi-year variability."*

– **Current Practices Scenario, 2007**

The scenario showed that the system generally equilibrates to 2007 water use within one year (to within 10% of steady-state).

- No expectation of significant future recovery of river gains and spring discharges, unless a future event were to cause such a recovery.
- No indication that residual effects of past conditions artificially support current gains and discharges.
- Variability should be expected to continue into the future.



## Equilibrium Recap

- Previous statements about aquifer equilibrium indicated that the aquifer is close to dynamic equilibrium.
  - The water-balance difference (between recharge and discharge) of -150,000 AF/yr was less than the uncertainty in the recharge/discharge estimates.
- Previous statements about aquifer equilibrium were dependent on water use and supply remaining constant.
  - Water use and supply do not remained constant.
- The aquifer system equilibrates quickly.
- No indication that significant residual effects are influencing current conditions.





## Why is it difficult to categorically state that the aquifer is in equilibrium ?

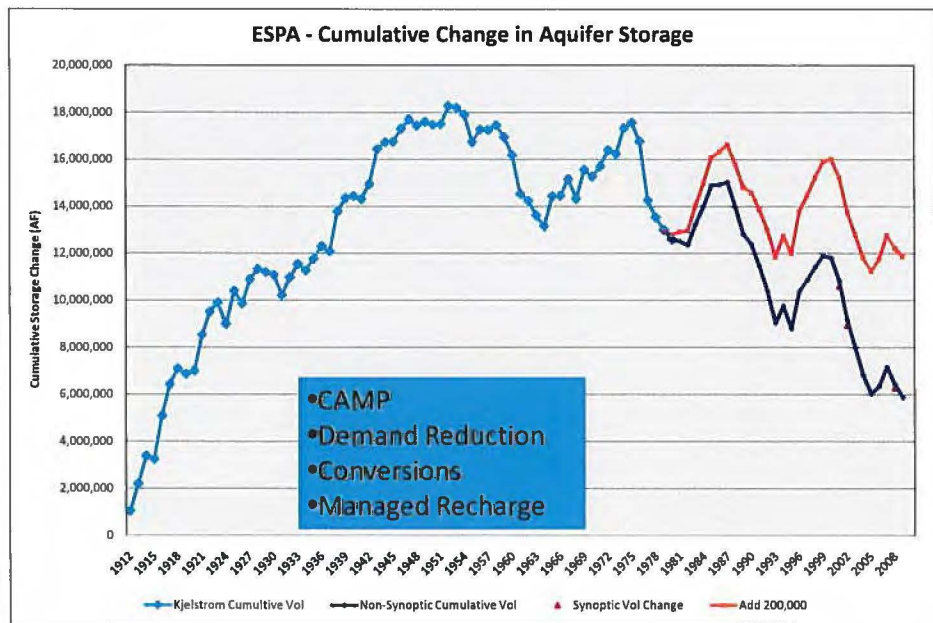
- The relationship between changing stresses and equilibration is time dependant. Furthermore, there are multiple time dependencies based on distance, magnitude and duration of stresses – and where we assess equilibrium (i.e. springs, water levels)
- The interactions between recharge, discharge, and storage are more complicated than illustrated above.
- Nothing is truly static. All of the inputs into the aquifer water budget are constantly changing.
- It is difficult to measure all of the aquifer water-budget parameters with enough precision to declare mathematical equilibrium.



## What is the Real Question?

- Assessing equilibrium is subjective. Categorical equilibrium statements are difficult to make.
- There are two questions that we truly want to ask.
  - Did the aquifer decline?** Yes.
  - What is going to happen in the future?**
    - Due to the rapid response of the aquifer, it doesn't appear that there are significant long-term effects propagating throughout the aquifer that we haven't seen yet.
    - Depends on what we do.
      - The system has changed (irreversibly) to become more efficient at water delivery and application. Therefore, we cannot depend on incidental recharge to restore aquifer volumes to historical levels.
  - We need more tools.

## More Tools



Note: The addition of 200,000 AF is a theoretical maximum.

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Discussion.



Mission statement

“The water resource board shall have the duty of operating a water supply bank. The water supply bank shall make use of and obtain the highest duty for beneficial use from water, provide a source of adequate water supplies to benefit new and supplemental water uses, and provide a source of funding for improving water user facilities and efficiencies.”  
(Idaho Code, §42-1761)

Letter to the Stakeholders

2010 was a year of growth and change for the Water Supply Bank. After years of mounting backlogs, more staff effort and focus on process improvement greatly changed the landscape of Bank processing.

Idaho water users have relied on water banking since the 1930s but the Idaho Legislature did not formalize the Bank until enacting Idaho Code, §42-1761, in 1979. The Idaho Water Resource Board (IWRB) appointed the Idaho Department of Water Resources (IDWR) to operate the Bank in 1979. Bank activity remained low through the 1980s and 1990s, but began to increase around 2001 with the issuance of the first partial decrees in the Snake River Basin Adjudication (SRBA).

Bank activity has grown considerably over the past few years. Rental activity increased more than 2,500% and lease activity increased more than 1,600% between 1998 and 2010. The Bank is clearly an increasingly popular option for water users. This unanticipated popularity resulted in significant backlogs in Bank processing. In 2010, despite limited revenue to fund bank activities, IDWR Interim Director Gary Spackman responded to the backlogs by temporarily assigning additional staff to Bank processing.

Water Supply Bank Staff 2010

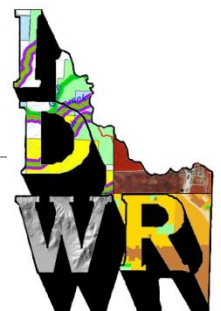
Aaron Marshall, Former Coordinator  
Monica Van Bussum, New Coordinator  
Christine Field, Administrative Assistant

I was designated coordinator of the Bank on August 10, 2010. Temporary assignment of additional IDWR staff members to Bank activities enabled the addition of data cleanup efforts and process improvements. The data cleanup effort helped clarify and reduce backlogs for leases and rentals and provided more accurate data for this report.

It is important to note this is an annual report for the calendar year 2010, not the fiscal year. Bank operations run by calendar year because many leases run from January 1 to December 31 or through the irrigation season. A fiscal year report for the Bank would bifurcate not only the year-round leases and rentals, but the irrigation season ones as well.

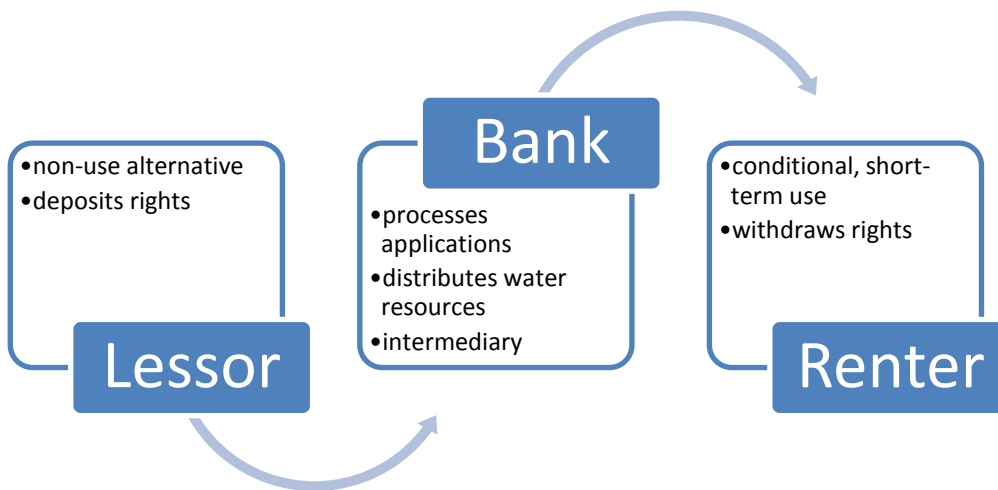
This report summarizes 2010 Bank activity and discusses goals for 2011.

- Monica Van Bussum



### ABOUT THE WATER SUPPLY BANK

IDWR has managed the Bank for the IWRB since 1979, but banking has been important to the distribution of water rights in Idaho since the 1930s. The purposes of the Bank are to encourage the highest beneficial use of water, provide a source of adequate water supplies to benefit new and supplemental water uses, and provide a source of funding for improving water user facilities and efficiencies (Idaho Code § 42-1761). Anecdotal evidence suggests Bank users have different goals in mind. Water Supply Banks are most common to the Northwest. Idaho, along with Arizona and California, is one of three Western states identified as having high-activity market mechanism programs (Clifford, 2004. *Water Banking in the Western States*. Washington Department of Ecology. Uploaded 3/14/2011).



The Bank serves as a market clearer making unused water rights available to others through a lease and rental process. The Bank is a means to connect buyers and sellers. It establishes a regulated water rights market that facilitates the exchange of water rights that would have otherwise been unused and/or forfeited.

Water right holders may lease rights into the bank for a number of reasons. Leases may protect rights from forfeiture – the most common reason for leasing. Leases have the potential to become rented, thus resulting in rental payments to the lessor and Bank. While the right is leased to the Bank, it may not be used by the lessor regardless of rental activity.

IDWR changed its lease terms in August 2010. Before August 2010, IDWR would approve so-called indefinite leases, or leases where the right was in the Bank for an unspecified period. Since that time, terms for new leases have been capped at five years with an option to extend them for additional up-to-five-year periods. We are currently maintaining the status of previously-granted indefinite leases pending further discussion and decision by the IWRB. Most leases may be renewed/extended at the lessor's signed request.

2

Bank rental demand is generally greater in areas of limited supply, such as in the Eastern Snake Plain Aquifer (ESPA), particularly in the Bingham County area. In the Treasure Valley area (Basin 63), there is little demand for rentals but considerable lease activity. In northern Idaho, where surface water supplies and precipitation are more plentiful, Bank activity is minimal.



## **PROJECTS**

Bank staff initiated numerous process improvement projects in 2010 to improve efficiency and reduce backlogs.

### **Rental tracking, GIS and modeling**

Historically, the Bank managed most of its data in an Excel spreadsheet, but in 2008 converted to an Access database. Although an improvement over the Excel format, the Access database is still not connected to IDWR's enterprise database and, therefore, is not easily accessible to most IDWR staff and the public. IDWR staff are designing a GIS-based data management system to house, share, and display Bank rental data. In addition to greater connectivity to other Department data and increased data sharing, the GIS platform will enable IDWR to better model leases and rentals in the Eastern Snake Plain Aquifer (ESPA). ESPA modeling of rental applications currently takes a tremendous amount of time. Using GIS software, and with some assistance from IDWR's Hydrology staff, ESPA modeling for rentals could be significantly reduced.

### **Bank task calendar**

Bank personnel are designing a calendar to direct Bank focus. For example, one goal is to process payments to lessors at the end of the irrigation season as opposed to during December. This will alleviate pressure on Bank staff during end-of-the-year processing and allow additional time to complete payments than in past years. IDWR may also begin processing Bank rentals in the fall, allowing ample time to process rentals scheduled to begin January 1. Having a Bank calendar will provide the public a predictable structure for the Bank. When the Bank calendar is completed and approved, the calendar will be implemented to standardize Bank operations/processing.

### **Fiscal guidelines**

IDWR staff are writing a fiscal reporting guideline for the Bank. This will aid Bank and IDWR fiscal staff in gathering tax forms and sending prompt lessor payments. This will also align Bank financial matters with IDWR Fiscal guidelines. Additionally, a flowchart will provide an easy visual to clarify this sometimes complicated process.

### **Backlog reduction**

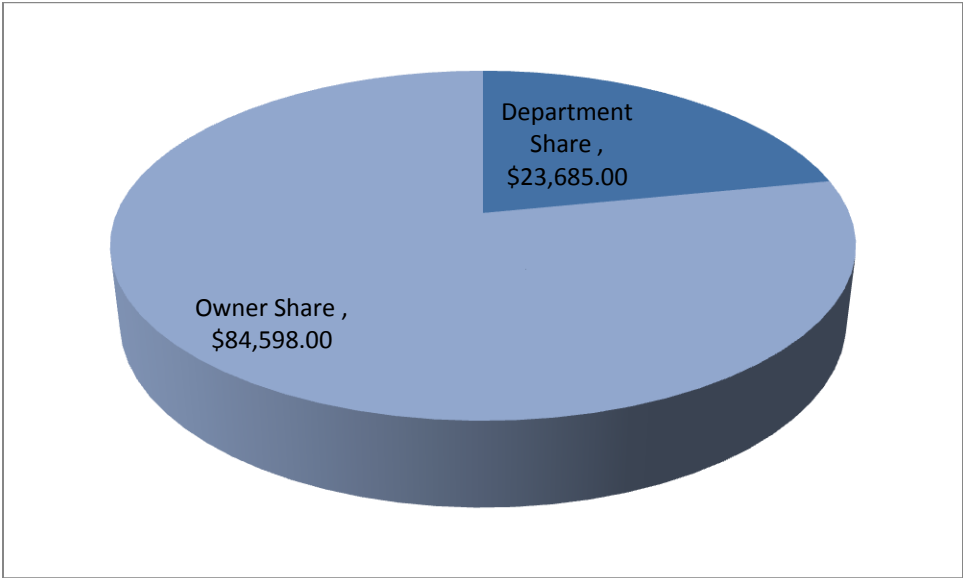
As stated previously, Interim Director Spackman temporarily assigned additional staff to work on Bank backlogs in 2010. The next section discusses 2010 backlog reduction.

ADMINISTRATIVE

Financial

The Bank generated \$108,283.00 in rental revenue during calendar year 2010 . Of that, IDWR paid \$84,598.00 to lessors and retained \$23,685.00 to cover a portion of the administrative costs for the year. Of a total of 55 rental agreements, 23 were renter-lessor agreements, meaning the renter rented their own leased right and paid only the 10% administrative charge. Lessor-renter agreements are commonly used by rightholders to gain approval to use the right differently than described. The chart below illustrates distribution of lessor payments.

Rental Revenue 2010



### Financial cont'd.

As noted above, the Department retained \$23,685 in rental administrative fees for the 2010 rental season. The staffing cost for IDWR during 2010 was \$59,173. This left an operating deficit of \$35,488. Data for prior years cannot be accurately determined, but IDWR's experience has been that similar operating deficits have occurred in recent years.

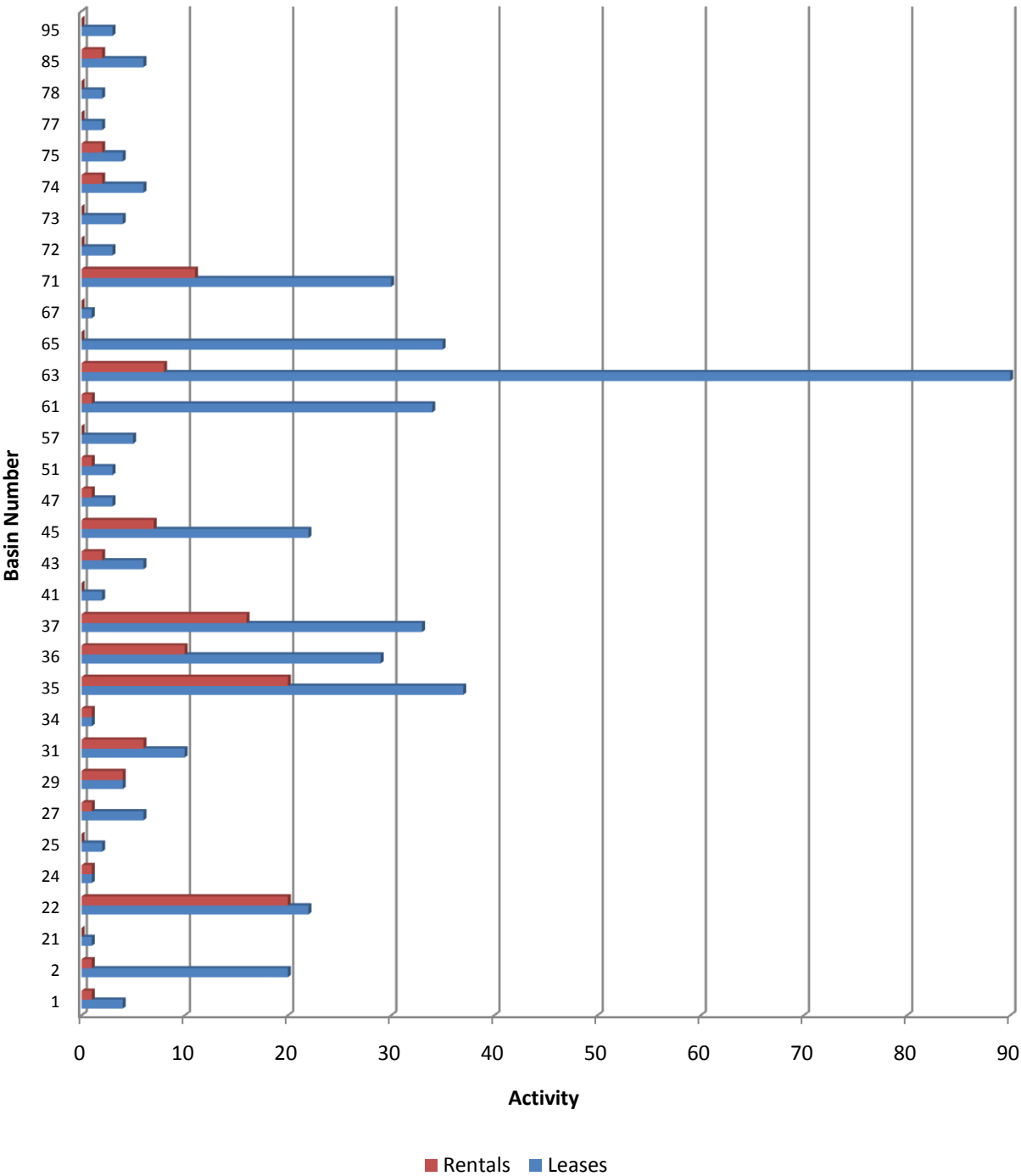
IDWR estimates increasing Bank staffing levels would allow for growth in rental revenue and prevent backlog growth. IDWR believes the optimal Bank staffing level is two full-time employees at a total estimated cost of \$105,000. To help cover administrative costs, the IWRB recommended a fee rule change to the Idaho State Legislature for the 2011 session. In November 2010, in an estimate prepared for the IWRB, IDWR projected annual lease revenues of \$37,329 with the proposed fee. This projected amount would augment the annual rental revenues (\$23,685 in 2010) to fund approximately one full-time employee. This projection is highly dependent on the number of lease applications submitted to the Bank in a given year. This rule change was approved but is being implemented in 2011, so details are not included in this 2010 annual report.

### Operations

Generally speaking, for all lease and rental activity, about 1 in every 4 water rights leased to the Bank is rented from the Bank. The chart on the following page shows lease and rental activity (in number of water rights leased or rented) per basin. Basin 63 (Boise River Basin) had the most lease activity in 2010, but only 9% of the total active Basin 63 leases were rented. In comparison, Basin 22 (Teton River Basin) water users rented 91% of 22 total active leases. Basins 24, 29, and 34 water users rented 100% of active leases.



Rental & Lease Activity by Basin

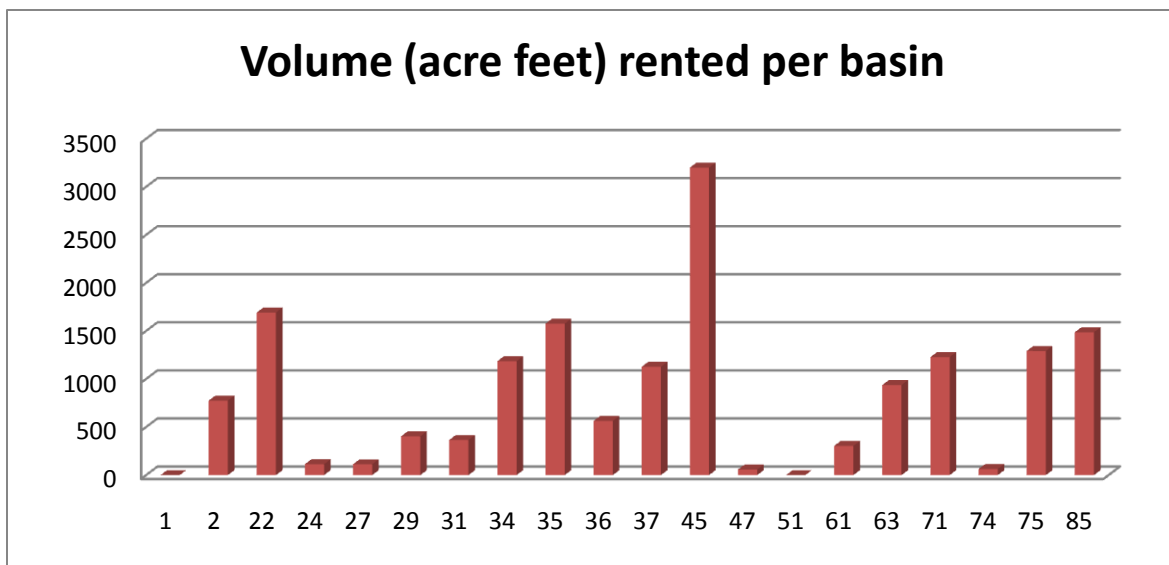


\*NOTE: If a basin number is not displayed, there was no activity for the basin during 2010.



**Operations cont'd.**

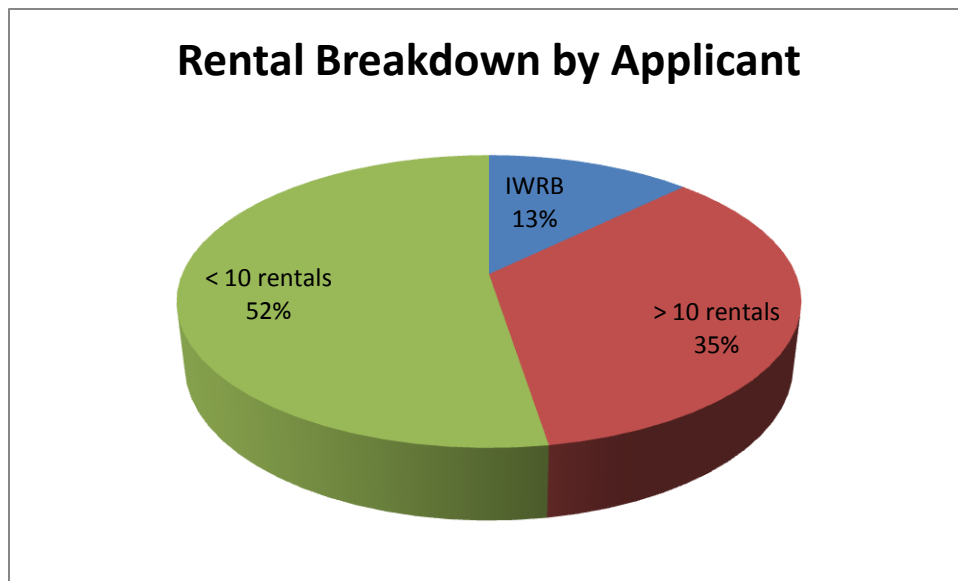
Rental volume totaled 23,191 acre-feet of water in 2010. Approximate total leased volume was 123,658 acre-feet. It is not possible to determine actual leased volume because many water rights leased to the Bank do not have volume limits. If we accept the total leased volume as 123,658 acre-feet, then 18.75% of the leased volume was rented. The figure below indicates total volume rented per administrative basin. \*NOTE: If a basin number is not displayed, there were no rentals for 2010.



There were 58 active rental agreements for 118 water rights in 2010:

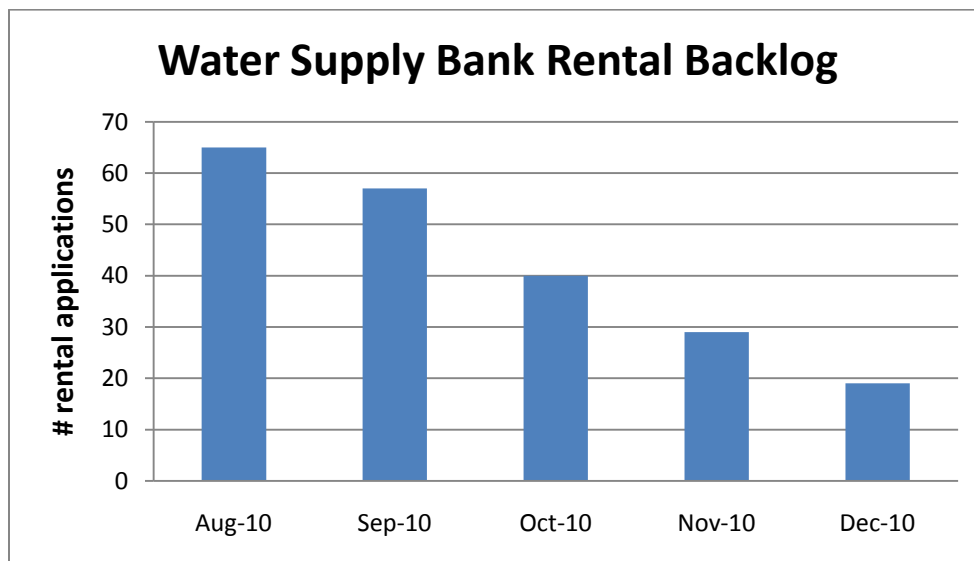
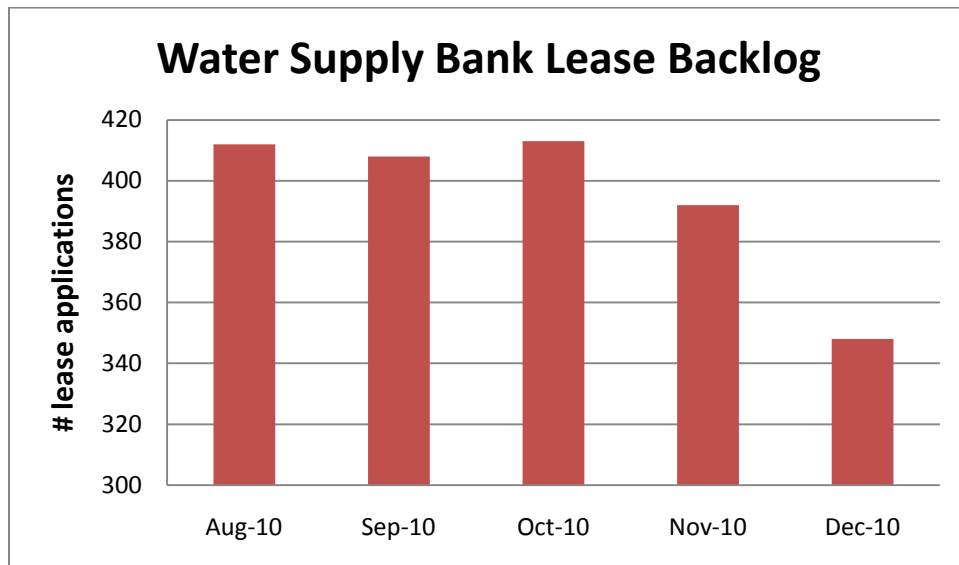
- Irrigation: 37
- Commercial /Industrial: 3
- Municipal: 5
- Instream flow: 5
- Other: 8

The following chart shows rental distribution for the 118 rented water rights. The IWRB accounts for 13% of rental activity. Several renters rent more than ten water rights. Between the IWRB and large renters, fewer than five renters account for nearly half the total 2010 rental activity. About 60 applicants account for the other 52% of rentals.



### The Backlogs

As stated above, Bank activity has grown considerably over the past few years. Rental activity increased more than 2,500% and lease activity increased more than 1,600% between 1998 and 2010. This popularity resulted in significant backlogs in Bank processing for both leases and rentals. In his 2008 annual report, dated February 2009, former Water Supply Bank Coordinator Aaron Marshall indicated a processing backlog of 291 lease applications and 85 rental applications. In a subsequent memo to the Water Supply Bank Subcommittee on March 9, 2010, Aaron Marshall reported a processing backlog of 390 lease applications and 75 rental applications. In 2010, IDWR Interim Director Gary Spackman responded to the backlogs by assigning additional IDWR staff to Bank processing, despite limited revenue to fund bank activities. In August 2010, the lease backlog stood at 412 applications and the rental backlog was at 65. The following two figures illustrate the decrease in the backlog since August 2010.



Processing in 2010 focused on reducing the rental backlog, resulting in a 71% decrease. While the lease backlog was not a primary focus, the Bank still realized a 16% backlog reduction.

#### LOOKING AHEAD

The 2011 year will continue to bring change. The rental backlog has been reduced considerably by the temporary staffing surge and by process improvements begun in 2010. In 2011 IDWR will focus on decreasing the lease backlog. Increased revenues should help fund a larger portion of staffing costs to administer Bank activities. Additionally, 2011 should bring completion of several other process improvement projects, especially reduced ESPA modeling time and better data management for rentals.