



# IDAHO WATER RESOURCE BOARD

RECEIVED

JAN 15 2013

DEPARTMENT OF  
WATER RESOURCES

Date: January 15, 2013

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

**RE: Resubmittal of the Idaho Water Resource Board's 19 Application for Managed Aquifer Recharge (1-7131, 1-7132, 1-7133, 1-7134, 1-7135, 1-7136, 1-7137, 1-7139, 1-7140, 1-7141, 1-7142, 1-7143, 21-7574, 21-7575, 21-7576, 21-7577, 21-7578, 21-7579, 21-7580)**

**Roger W. Chase**  
Chairman  
Pocatello  
District 4

Mr. Shelley Keen:

**Bob Graham**  
Secretary  
Bonners Ferry  
District 1

Please find enclosed the resubmittal package of the Idaho Water Resource Board's (Board) suite of 19 applications for managed aquifer recharge.

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

Included in the package are revised application documents (x8), exhibit maps (x8), illustrative recharge contracts (x13), and a detailed narrative. The narrative provides an overview of the modifications, and in some cases consolidations, of the permit applications. In addition, the narrative addresses applicable sections of IDAPA 37.03.08 40.05 "Additional Information Requirements" and provides supporting documentation and information where necessary.

**Vince Alberdi**  
Kimberly  
At Large

As evidence of the authority necessary for the Board to conduct recharge in collaborating water delivery systems, a series of recharge contracts between the Board and pertinent partners have been included. These are actual recharge contracts that have been executed over the past five years between the Board and its respective recharge partners in the pursuit of managed aquifer recharge. In addition, although not currently included, the Board is pursuing general recharge consent agreements with each of the identified recharge partners in the revised applications, which should satisfy the consent requirements of I.C. §42-202.

**Jeff Raybould**  
St. Anthony  
At Large

**Peter Van Der Meulen**  
Hailey  
At Large

**Albert Barker**  
Boise  
District 2

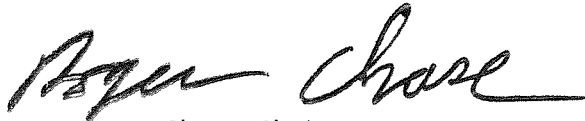
After review of the protests and issues raised during informal meetings with parties and other participants, the Board proposes separate and sequential hearings on the lower valley, mid-valley, and upper valley applications. This will assist in the formulation and simplification of issues, provide administrative efficiency, and lighten the burden on the parties. The issues related to water availability and the potential impact on fish and wildlife resources relevant to the lower valley applications are distinct from more specific concerns related to the mid-valley and upper valley applications. For example, the primary issue raised by protestants and others with respect to the upper valley applications is the potential adverse impact of managed

**John "Bert" Stevenson**  
Rupert  
District 3

recharge on the unique fish and wildlife resources in the Henrys Fork and South Fork. As the South Fork and Henrys Fork applications indicate, the Board is proposing additional protocols in those basins to address these region-specific environmental concerns. If separate and sequential hearings, beginning with the lower valley applications, are conducted, region-specific issues can be addressed in a more efficient manner. General issues relevant to all regions, such as the relationship of the Board's recharge program and optimal capture of available flow in storage reservoirs, could be addressed in a separate hearing. The Board looks forward to further discussion of case management opportunities that provide for administrative efficiency and minimize the expense on the public and the parties at the status conference on February 4, 2013.

Please contact Mathew Weaver by telephone at (208) 287-4914 or by email at [mathew.weaver@idwr.idaho.gov](mailto:mathew.weaver@idwr.idaho.gov) with questions or requests for additional information in this matter.

Respectfully,

A handwritten signature in black ink, appearing to read "Roger Chase". The signature is fluid and cursive, with the first name "Roger" and last name "Chase" clearly distinguishable.

Roger Chase, Chairman  
Idaho Water Resource Board

Enclosure(s)

## Support Narrative

RE: Re-submittal of Water Right Applications in the Name of the Idaho Water Resource Board for Managed Aquifer Recharge in the Upper Snake River Basins

Date: January 14, 2013

### Introduction

The intent of this narrative is to provide information to support the re-submittal, and in some cases consolidation, of the 19 water right applications filed by the Idaho Water Resource Board (Board) in 1998 for managed aquifer recharge. The existing 19 water rights considered by this narrative include the following: 1-7131, 1-7132, 1-7133, 1-7134, 1-7135, 1-7136, 1-7137, 1-7139, 1-7140, 1-7141, 1-7142, 1-7143, 21-7574, 21-7575, 21-7576, 21-7577, 21-7578, 21-7579, 21-7580. Although protests were filed, contested case hearings did not move forward. The Board has decided that resubmittal of the applications is necessary so that the applications can be adjusted to reflect contemporary submittal requirements, modified to address protestants' concerns (where possible), and perhaps most importantly, updated to accurately reflect the experience gained from on-the-ground recharge activity and practices as they have occurred over the last five years. In addition, this narrative will address the applicable sections of IDAPA 37.03.08 40.05 "Additional Information Requirements" and provide supporting documentation and information where necessary. This narrative supports and applies to all of the resubmitted applications.

### General Overview of Modifications

In some cases the modification of the existing water right applications includes the consolidation of multiple existing applications into a single document. As an example, on the South Fork of the Snake River seven applications were originally submitted; in the re-submittal they have been consolidated into a single application. In the case of application 1-7143, it has been resubmitted with substantial changes to the points of diversion (POD) and places of use (POU). For the consolidated applications and application 1-7143, where changes will likely require an advancement of the priority date, we recognize the Idaho Department of Water Resource (Department) will require republication of notice of the applications.

In some cases, existing applications have been re-submitted with no substantive changes to any of the key elements of the water right (diversion rate, season of use, POD, and POU). As a result, these applications should not require advancement of priority date or republication of notice.

For ease of reference, Table 1 has been prepared and included as **Attachment 1** to the narrative. Table 1 summarizes in a general manner, those applications that have been modified and/or consolidated and how. For a detailed understanding of the modifications please refer to the revised applications and exhibit maps.

## **IDAPA 37.03.8 40.05 – Additional Information Requirements**

### **40.05a. – Unprotested Applications and Permits**

Not applicable.

### **40.05b. – Jurisdiction**

We believe the submittal of this information to be timely.

### **40.05c. – Additional Information Requirements**

We understand that additional information requirements exist due to the size of the diversion rates requested. Each applicable item of 40.05, as we understand them, will be addressed in the following sections.

#### **40.05c. i.**

Not Applicable

#### **40.05c. ii.**

Not Applicable

#### **40.05c. iii. – Impact on Other Water Rights**

Generally, the Board has adopted the following fundamental policies associated with recharge: (1) recharge is an opportunistic use of surplus available natural flows that will occur through constructed head gates that are measured for total diversions associated with recharge by Water District 01; (2) recharge will be conducted in a manner that does not interfere with the optimal capture of storage water in the Upper Snake reservoir system; (3) recharge will be conducted in a manner that is consistent with the prior appropriation doctrine; (4) recharge will be conducted in a manner that is consistent with the exercise of the United States Bureau of Reclamation's (Bureau) unsubordinated power rights at Minidoka; and (5) recharge will be conducted in a manner that is consistent with the State Water Plan and the Eastern Snake Plain Aquifer (ESPA) Comprehensive Aquifer Management Plan (CAMP).

Attached to his narrative is a memorandum prepared for the Board titled "Recharge Considerations and Decision Tree" dated November 6, 2012 (**Attachment 2**). At the Board's request, the memorandum summarizes the considerations, including the policies above, that influence recharge in the Eastern Snake Plain. A decision tree was included as part of the memo. The decision tree incorporates the policies of the Board articulated in the memo, in addition to the realities of the water use landscape in the Upper Snake Basin. The decision tree is used by the Board to determine at a regional scale, at any instance in time, if and where recharge is feasible. The adopted policies of the Board, the referenced memo, and the decision tree, all act to ensure that the implementation of recharge by the Board, occurs in a manner that eliminates any adverse effects to existing water uses and water rights.

More specifically, the Board conducts recharge in almost all instances, by collaborating with a water delivery entity and using its facilities and systems to divert water from the river into a canal delivery system, a recharge basin, or an injection well. Annual contracts—five year contracts in the future—have been signed with each collaborating entity that detail the means with which recharge will occur, measurement requirements, and reimbursement requirements. These contracts ensure that the collaborating entity will make the final decision on recharge operations, thus ensuring that the recharge practices will not injure or interfere with the collaborating entities delivery of water. It is the practice of the Board to require the measurement of all water diverted for recharge into a delivery system and to measure all return flows from that delivery system to the river. In this way the Board has a factual record of all water that is actually recharged to the aquifer and this factual record is used as the basis for the financial reimbursement of collaborating partners. Measurement records at the points of delivery are overseen and conducted by Water District 01. Measuring requirements are included in every recharge contract. The recharge contracts and specifically the measurement clauses, along with the direct involvement and cooperation of Water District 01, all ensure that surface water will be diverted for recharge in a manner, at a location, and at a time that eliminates adverse affects to other existing water rights. Please refer to the contract documents that have been included with each of the resubmitted application packages for more detail on measurement requirements.

#### 40.05d. i. – Water Demand

The policy of the State of Idaho is to pursue, fund, and implement managed aquifer recharge on the Eastern Snake Plain (ESP). In the spring of 2005 House Concurrent Resolution 28, House Bill 373, and House Bill 329 were passed by the Legislature directing the Board to sponsor and fund recharge programs. In January of 2008 the Board adopted by resolution the ESPA CAMP, which established as a goal a 600,000 acre-foot increase in the water budget of the ESPA annually. Five mechanisms were identified in CAMP to effect change in the ESPA to meet the annual goal of increased aquifer storage, one of those five mechanisms was managed aquifer recharge. Specific volumetric average annual recharge targets were established in the CAMP. Phase 1 (first 10 years, 2009-2019) identified an average annual goal of 100,000 acre-feet. Phase 2 (2019 and beyond), identified an average annual goal of 150,000 to 250,000 acre-feet. The ESPA CAMP, including the average annual recharge goals, was adopted as part of the State Water Plan (House Bill 264) in April of 2009. In addition, the Board adopted a resolution in 2009 that sets forth additional criteria for managed recharge, the resolution is included with this narrative as Attachment 3. In January of 2012 the Board adopted and funded a five year ESPA Managed Aquifer Recharge program, setting aside \$1.5 million dollars to be spent over five years (2012-2017) for recharge. A copy of the resolution adopting and funding the recharge plan is included as Attachment 4 to this narrative. Finally, the State Water Plan adopted by the Board in November of 2012 reaffirms ESPA CAMP.

The goals established in the CAMP are average annual goals. Average targets recognize that in some years less than the target volume of water will be recharged, just as in other years more than the average target will be recharged. By making the annual goals averages, the CAMP attempts to decrease the likelihood that achieving annual goals will come at the expense of increased water use conflict in the Upper Snake Basin. In other words, in years of water scarcity, as seen during consecutive years of

drought, there is less pressure to recharge when it may interfere with other water needs. Conversely, in years of abundant water supply and natural flow, such as in 2011, recharge well in excess of the annual goals can occur with a greatly decreased likelihood that it will adversely affect other water uses. It is a goal of the Board to pursue managed aquifer recharge in a manner that minimizes water use conflict.

During a series of drought years (i.e. 2001-2005), there can be one, two, or even three years in which a minimum amount of water may be recharged to avoid water use conflict (something much less than the average goal). Therefore, to meet the average annual goals established by the State Water Plan, we must be able to recharge a volume of water in any single year that is greater than the annual targets to make up for years of deficiency. If we assume a three year drought that precludes any recharge, then in the fourth year, assuming abundant water supply, we must be able to recharge three times the annual goal. For example, with a Phase 2 CAMP goal of 250,000 acre-feet, there will be a need to recharge up to 750,000 acre-feet when water is abundant. As such, average annual volume demands will be between 100,000 and 250,000 acre-feet, with a peak annual volume demand of 750,000 acre-feet.

The following considerations limit, and often times prevent recharge: water availability, the prior appropriation doctrine, limited delivery capacity with collaborating recharge partners, weather, operation and maintenance of delivery systems, reservoir capture and operations, and environmental considerations. Table 2, which is included as **Attachment 5**, summarizes the number of days that recharge could have occurred at the Milner Gage, Minidoka Gage, Blackfoot Gage, Heise Gage, and St. Anthony Gage over the last 13 years. Table 2 assumes the 1980 priority date is “on” and that physical water is available for recharge in the river at the location of the respective gage. This table does not take into account the availability of a collaborating irrigation delivery system to divert and deliver water, which it cannot do during the irrigation season, or when the operation and maintenance of the canal precludes recharge. Further, this table does not take into account the effect of weather on the ability to conduct managed recharge, such as instances in which a canal is covered with ice or snow and infiltration of water into the ground is physically impossible. As a result, in many years the window of opportunity for recharge can be small. It is the Board’s experience that on average the window of opportunity is between 20 and 30 days for recharge conducted through existing delivery systems. However, as Table 2 indicates, depending on the year and location, it can often be zero. By establishing average and peak annual volume demands and a “design” time period over which recharge must occur, a diversion rate can be calculated that supports the established annual recharge goals. Table 3, which is included as an **Attachment 6**, summarizes the number of days required to recharge a specified volume of water (top row) when diverting at a specified diversion rate (left most column). The shaded portion of the table indicates the number of cells that contain values in the 20 to 30 day range. The table illustrates that to recharge 100,000 acre-feet in 20-30 days, diversion rates on the order of 1,600 to 3,000 cubic feet per second (cfs) are required. To recharge 250,000 acre-feet, diversion rates on the order of 4,000 to 7,000 cfs are required. Finally, to recharge a volume of 750,000 acre-feet, diversion rates on the order of 12,000 to 20,000 cfs are required. The combined diversion rate of the original 19 applications is 14,072 cfs. This number was originally established based on system capacities of the respective collaborating recharge partners. We are not proposing the modification (increases or decreases) of the diversion rates in our resubmittals. One reason for this decision is that the combined



diversion rate (14,072 cfs) is very close to an ideal diversion rate that is necessary to recharge our peak annual volume (750,000 acre-feet) in a window of opportunity that we can realistically expect to occur (20-30 days).

Currently the Board primarily recharges in the spring prior to the irrigation season, when runoff is occurring, and in the fall after the close of the irrigation season. However, the Board has the ability to recharge during the winter at select locations (i.e. the Southwest Irrigation District system). In addition, the Board is pursuing the development of recharge facilities that are independent of existing irrigation delivery systems and weather constraints. One such project is the Lake Walcott recharge site. For these reasons we have not proposed changing the year round period of use as identified in the original applications.

The purpose of recharge under these applications is to increase the volume of water stored by the Eastern Snake Plain Aquifer. Water is diverted and infiltrated into the ground, percolating down to the aquifer where it is stored until either it is re-diverted by another water user, or it returns to the Snake River. As such, we do not view recharge as having any meaningful consumptive loss component to the basin-wide water budget.

#### 40.05d. ii. – Available Water Supply

Figure 1 is a summary of the annual volume of natural flow water that spilled past the Milner Dam dating back to 1980; it is included as an attachment to this narrative ([Attachment 7](#)). Figure 1 has been corrected, such that storage releases for flow augmentation by the Bureau and for power generation by Idaho Power Company (IPC) are not included in the annual totals. It indicates an average annual spill of 1,777,566 acre-feet. According to Figure 1 the maximum annual spill that has occurred in the last 20 years is 5,983,267 acre-feet. The Milner Zero Minimum Flow policy divides the Snake River into two separate rivers, and precludes water users below the Milner Dam from calling on or influencing water users above the Milner Dam. A logical corollary of this policy is that when flow past Milner Dam is greater than zero, such flows should be diverted for aquifer recharge, or otherwise put to beneficial use, to the maximum extent feasible to avoid loss of water from the system. With this understanding, the volumes of water reported in Figure 1 represent the water supply that was available for recharge in any given year. This figure establishes that on average, an adequate water supply (1.7 M acre-feet) is available to meet the annual average recharge goals established in the ESPA CAMP as well as the peak identified need of 750K acre-feet.

The Board considers recharge to be an opportunistic activity utilizing surface water flows in a manner that does not result in water use conflict. Therefore, in the unlikely event that no spills past Milner were to occur for an entire year, no supplemental source of water is needed, because the Board would simply not conduct recharge in such a year.

#### 40.05e. i. – Good Faith Evidence

As previously described, the Board primarily conducts recharge in the irrigation delivery system of a collaborating recharge partner such as the North Side Canal Company or the Fremont Madison Irrigation

District. Prior to recharge, a contract is signed with the collaborating partner that enables recharge in their facilities. In this manner the Board is able to conduct recharge over large areas of the ESPA without the need to purchase land, obtain access easement, or develop rights-of-way. Please refer to the example contracts that have been submitted with the various applications.

Two readily available contemporary examples of good faith on the part of the Board to develop new recharge facilities include the development of the Milepost 31 recharge basin and the Lake Walcott recharge basin. Milepost 31 is the name given to a recharge site that is currently under construction on the Milner-Gooding Canal, under joint funding between the Board and the American Falls Reservoir District No. 2. The Board authorized the expenditure of up to \$35,000 to complete the first phase of construction of the Milepost 31 recharge site. Refer to the Milepost 31 Executive Briefing (Attachment 8) for a more detailed description of the site and to the Board Resolution authorizing funding (Attachment 9), which was signed on September 7, 2012. Both documents are included as attachments to this narrative. The Lake Walcott recharge site is another recharge facility that is currently under consideration by the Board. The Board hopes that the construction of this facility can begin within the next one to two years and contemplates contributing up to \$800,000 towards the construction of this facility. For more detail refer to the Lake Walcott Executive Briefing, which is also included as Attachment 10 to this narrative.

#### 40.05e. ii. – Good Faith Evidence, Other Regulatory Approvals

The Board is not currently pursuing any other applications, permits, licenses, or approvals regarding its recharge practices with any other regulatory authority. The Board has one other existing permit for groundwater recharge in the Upper Snake Basin—water right permit 01-7054.

#### 40.05f. i. – Proofs of Financial Resources

Included with this narrative are the current balance sheets for the Board's Revolving Development Account (Attachment 11) and the Secondary Aquifer Planning Management and Implementation Fund (Attachment 12). The Revolving Development Account was created in 1969 by the Idaho legislature and is governed by Idaho Code 42-1750 through 42-1759. The Revolving Account may be used by the Board for any water project it deems to be in the public interest, including on-going implementation of the Idaho State Water Plan, among other uses. The Secondary Aquifer Planning Management and Implementation Fund was created in 2010 by the Idaho legislature and is governed by Idaho Code 42-1780(2). Among other things the Secondary Fund can be used for water projects associated with aquifer management efforts. In addition, as previously mentioned, in January of 2012 the Board adopted a resolution authorizing the expenditure of \$1.5 million dollars to pursue managed aquifer recharge in the Eastern Snake Plain for five years (2012-2017).

#### 40.05f. ii. – Proofs of Financial Resources, Project Works Construction Costs

As previously described the Board's primary recharge activities occur in collaboration with recharge partners, utilizing their water distribution and conveyance systems. In select instances the Board has collaborated on construction projects such as the Mile Post 31 site to develop new recharge facilities. If



necessary, the Board could submit construction plans of the Mile Post 31 site; however, the Mile Post 31 site represents a very small fraction of basin-wide system capacity available to the Board for managed recharge.

#### 40.05g. – Local Public Interest

Perhaps the strongest evidence that the proposed applications are inherently in the Local Public Interest, where “local” refers to the Eastern Snake Plain, is the ESPA CAMP process, which culminated with the adoption of CAMP by the Legislature in 2009 as part of House Bill 264. The ESPA CAMP process took nearly three years to complete, consisted of over 36 public meetings, and included the participation of literally hundreds of interested parties. As part of the process an advisory committee was created to prepare and recommend a plan to the Board. Included on the advisory committee were representatives from municipalities, the business sector, the land development community, surface water users, groundwater users, spring water users, hydropower entities, domestic well owners, and environmental and conservation interests. In addition, an implementation committee was formed consisting of over 40 members spanning interests and geography across the ESP. A full list of both the advisory committee members (Attachment 13) and the implementation committee members (Attachment 14) are included as attachments to this narrative.

The stated goal of the ESPA CAMP is to *“Sustain the economic viability and social and environmental health of the Eastern Snake Plain by adaptively managing a balance between water use and supplies.”* The executive summary of the CAMP identifies *“The long-term objective of the Plan is to incrementally achieve a net ESPA water budget change of 600 thousand acre-feet (kaf) annually.”* Further, *“water budget adjustment mechanisms include...Managed aquifer recharge.”* Finally, as previously discussed, the ESPA CAMP establishes “Plan Hydrologic Targets” specific for managed aquifer recharge, identifying a 100 kaf target for Phase 1 and a 150-250 kaf target for Phase 2.

For substantially more detail regarding the ESPA CAMP process and the document itself, including lists of participants, meeting minutes, and other working documents refer to the following link.

<http://www.idwr.idaho.gov/waterboard/WaterPlanning/CAMP/ESPA/default.htm>

Specific to the Boards original recharge applications, the Board has conducted a series of public outreach meetings with the parties who filed protests on the original applications as well as other interested participants as follows:

1. General Meeting – Jerome, ID July 7, 2012
2. Meeting with Environmental Entities – Teleconference July 16, 2012
3. IDFG Upper Snake Region Coordination Meeting – Idaho Falls, ID August 15, 2012
4. IDFG Southeast Regional Coordination Meeting – Pocatello, ID August 17, 2012
5. IDFG Magic Valley Region Coordination Meeting – Jerome, ID September 16, 2012
6. 2<sup>nd</sup> General Meeting – Jerome, ID September 16, 2012

In the first two meetings, the staff presented an overview of recharge practices that described and explained the need for the applications under consideration. Following the presentation staff compiled a list of questions and concerns presented by the attendees. Three coordination meetings were held with Idaho Fish and Game (IDFG) that focused on the potential impacts of managed recharge on fish and wildlife resources. At the second general meeting staff distributed the list of questions and concerns and provided brief oral responses to each item. A copy of the Issue List Handout is included as **Attachment 15** to this narrative. Letters from IDFG and the Idaho Department of Environmental Quality (DEQ) have been submitted to the Board advising that the agencies will provide site-specific comments after regional staff have reviewed the applications. Both letters have been included to this narrative as **Attachments 16 and 17** respectively. DEQ will be working with the Board to identify if and where Ground Water Quality Monitoring Plans should be developed.

A primary concern of many protestants and other interested participants is the potential effect of managed recharge on fish and wildlife resources. The ESPA CAMP provides for the coordination of interested parties to plan for recharge efforts and optimize outcomes for, among other things, fish and wildlife resources and surface and ground water quality. The Board intends to establish a Managed Recharge Environmental Consultation Committee to receive and review recommendations regarding recharge activity under the Board's water right permits. Agendas, meeting summaries, and reports of all committee activities will be available for public review. The Committee will meet (on one or more occasions) prior to specific recharge operations to consider anticipated river flows, recharge opportunities, and potential impacts on fish and wildlife resources. Following each calendar year of recharge a Committee meeting will be held to review actual recharge accomplishments and lessons learned from the previous year. Other meetings can be held by the committee as desired or necessary.

In addition, the Henrys Fork maintains one of the premier blue ribbon trout fisheries in the Northwest and is home to abundant wildlife species. Protecting these valuable resources is important to Idaho citizens and the local economy. In addition to consultation with the Managed Recharge Environmental Consultation Committee, the Board has asked the Idaho Department of Fish and Game to cooperate in the development of a protocol for evaluating the potential impact of managed recharge on these resources, with review and comment by interested stakeholders. The protocol will be used by IDFG and the Board annually to assess site-specific impacts of the Board's planned recharge activities and adjust recharge operations to avoid adverse impacts on the fish and wildlife resources of the Henrys Fork River.

Finally, the South Fork has one of the few remaining and most likely the strongest fluvial populations of Yellowstone Cutthroat Trout (YCT). YCT are also present in the reach of the Snake River where some of the mid-valley points of diversion are located. According to IDFG, flow and habitat enhancement are the priority conservation strategies to protect and restore YCT and prevent listing under the federal Endangered Species Act. The South Fork is also home to the largest cottonwood gallery in the Greater Yellowstone ecosystem, supporting a range of wildlife and plant species, including species listed under the ESA. Federal and state agencies and numerous organizations are actively working to acquire conservation easements for the protection of fish and wildlife habitat in the South Fork. Protecting these valuable resources is important to Idaho citizens and the local economy. In addition to consultation with the Managed Recharge Environmental Consultation Committee, the Board has asked

the Idaho Department of Fish and Game to cooperate in the development of a protocol for evaluating the potential impact of managed recharge on these resources, with review and comment by interested stakeholders. The protocol will be used by IDFG and the Board annually to assess site-specific impacts of the Board's planned recharge activities and adjust recharge operations to avoid adverse impacts on the fish and wildlife resources of the South Fork River and applicable reaches of the main stem of the Snake River above American Falls Reservoir.

**Table 1 - Water Right Application Modification Summary Table**

19 total Existing Applications			8 Applications After Proposed Changes and Consolidations						
Exist. App. No.	Exist. Entity	App. Div. Rate (cfs)	Proposed App. No.	Proposed Modifications to Elements of WR App's					Comments
				Rate (cfs)	PODs	POUs	Priority	Conditions	
Lower Valley - Application 1									
1-7142	NSCC	2,831	1-7142					•	Leave this application unmodified except for conditions
Lower Valley - Application 2									
1-7143	TFCC	3,738	1-7143		•	•	•	•	Add PODs: AFRD2, Milner ID, SWID, BID, A&B, & Lake Walcott
Mid-Valley Consolidation									
1-7133	SRVID	682	1-7133	•	•	•	•	•	Consolidate into single application and add IID & ASCC
1-7134	Peoples	475							
1-7135	NSID	949							
South Fork Consolidation									
1-7131	Progressive	230	1-7131	•	•	•	•	•	Consolidate into single application and add the POD for the Great Feeder Canal and remove any PODs previous described on the Great Feeder
1-7132	Enterprize	283							
1-7136	Farmer's Friend	537							
1-7137	Harrison Canal	698							
1-7139	Rudy Irr.	110							
1-7140	Rigby Canal	253							
1-7141	Burgess Canal	1,095							
Henry's Fork - Application 1									
21-7577	Egin Bench	399	21-7577					•	Leave this application unmodified except for conditions
Henry's Fork - Application 2									
21-7578	St. Anthony Union	568	21-7578					•	Leave this application unmodified except for conditions
Henry's Fork - Application 3									
21-7580	Last Chance	94	21-7580					•	Leave this application unmodified except for conditions
Henry's Fork Consolidation									
21-7574	Twin Groves	160	21-7574	•	•	•	•	•	Consolidate into single application and add PODs for all FMID canals historically used for recharge since 2008, including: Egin, St. Anthony Feeder, Dewey, Cross-Cut, Farmer's Friend, Consolidated, Pinock-Gardner, Silkey, Teton Island, & Salem canals.
21-7575	Salem Union	339							
21-7576	Fall River	294							
21-7579	Independent	337							

TO: Idaho Water Resource Board

FROM: Mat Weaver, PE 

Date: November 6, 2012

**RE: Recharge Considerations and Decision Tree**

During the Idaho Water Resource Board's (Board) September 7, 2012, board meeting, Chairman Uhling requested staff prepare a document summarizing considerations that define, limit or affect recharge efforts in the Snake River Basin above Milner Dam and a "decision tree" to assist the Board in implementing an Upper Snake River Basin recharge program. This memorandum responds to your request.

Legal and Scientific Considerations That Define or Limit the Scope of Recharge in the Snake River above Milner Dam

- The Milner Zero Minimum Flow Principle (Idaho Code § 42-203B(2)).
- Eastern Snake Plain Aquifer (ESPA) Comprehensive Aquifer Management Plan (CAMP), Adopted by the Board January 2008, and Signed into Law April 2009 (HB 264)
- Swan Falls Reaffirmation Agreement, Memorandum of Understanding Signed March 2009
- Board Resolution Authorizing and Funding Managed Aquifer Recharge for Five Years, Adopted January 2012
- Prioritization of Aquifer Recharge Sites Based on Hydrologic Benefits Study, Conducted by Gary Johnson April 2012
- Enhanced Snake River Plain Aquifer Model Development and Utilization, Recharge Analysis by Mike McVay and the Idaho Department of Water Resources Technical Services Group, Ongoing.
- United States Bureau of Reclamation's (Bureau) Unsubordinated Minidoka Power Water Rights for 2,700 cfs (water rights 01-217 & 01-218)

Practical Considerations That Influence Recharge Decisions

- Fill and Re-Fill of Reservoir Storage Content in the Upper Snake River Basin
- Irrigation Entity Cooperation and Partnership (for delivery systems participating in recharge)
- Weather (specifically cold weather conditions that preclude recharge in many systems)
- Water Quality and Other Environmental Concerns Above Milner Dam (ex. ESA list species, UIC Rules (IDAPA 37.03.03))
- Competing Private Recharge Efforts
- Lower Valley vs. Upper Valley Relationship Tensions
- Surface Water Quality Concerns in the Snake River Below Milner Dam
- 2004 Snake River Water Rights Agreement

Although each consideration delineated in the two lists above may influence and affect individual aquifer recharge efforts, only three considerations directly affect all recharge efforts above Milner Dam.

They are the Milner Zero Minimum Flow Principle, the Bureau of Reclamations unsubordinated hydropower rights for 2,700 cfs at the Minidoka Dam, and the Board's policy of optimizing the capture of excess flows in existing surface water reservoirs.

The Milner Zero Minimum Flow Principle divides the Snake River into two separate rivers, and precludes water users in the lower Snake River (below Milner Dam) from calling on or influencing water use above Milner Dam. The Milner Principle is premised upon the optimum use of the flows of the Snake River above Milner Dam to meet the water supply needs of the Snake River Basin above the dam. A natural corollary of the Milner Principle is that when flow past Milner is greater than zero, such flows should be captured in surface reservoir systems or diverted for aquifer recharge to the maximum extent feasible to avoid waste of this water.

Application of the Milner Principle to aquifer recharge in the Snake River Basin above Milner Dam leads to the following conclusions.

First, water releases from Minidoka Dam in excess of demand under Snake River main stem natural flow rights diverting from the Minidoka to Milner Dam reach of the Snake River will flow past Milner Dam unless diverted. Diversion of flows that would otherwise flow past Milner Dam for aquifer recharge is consistent with the Milner Principle and will preclude the loss of water.

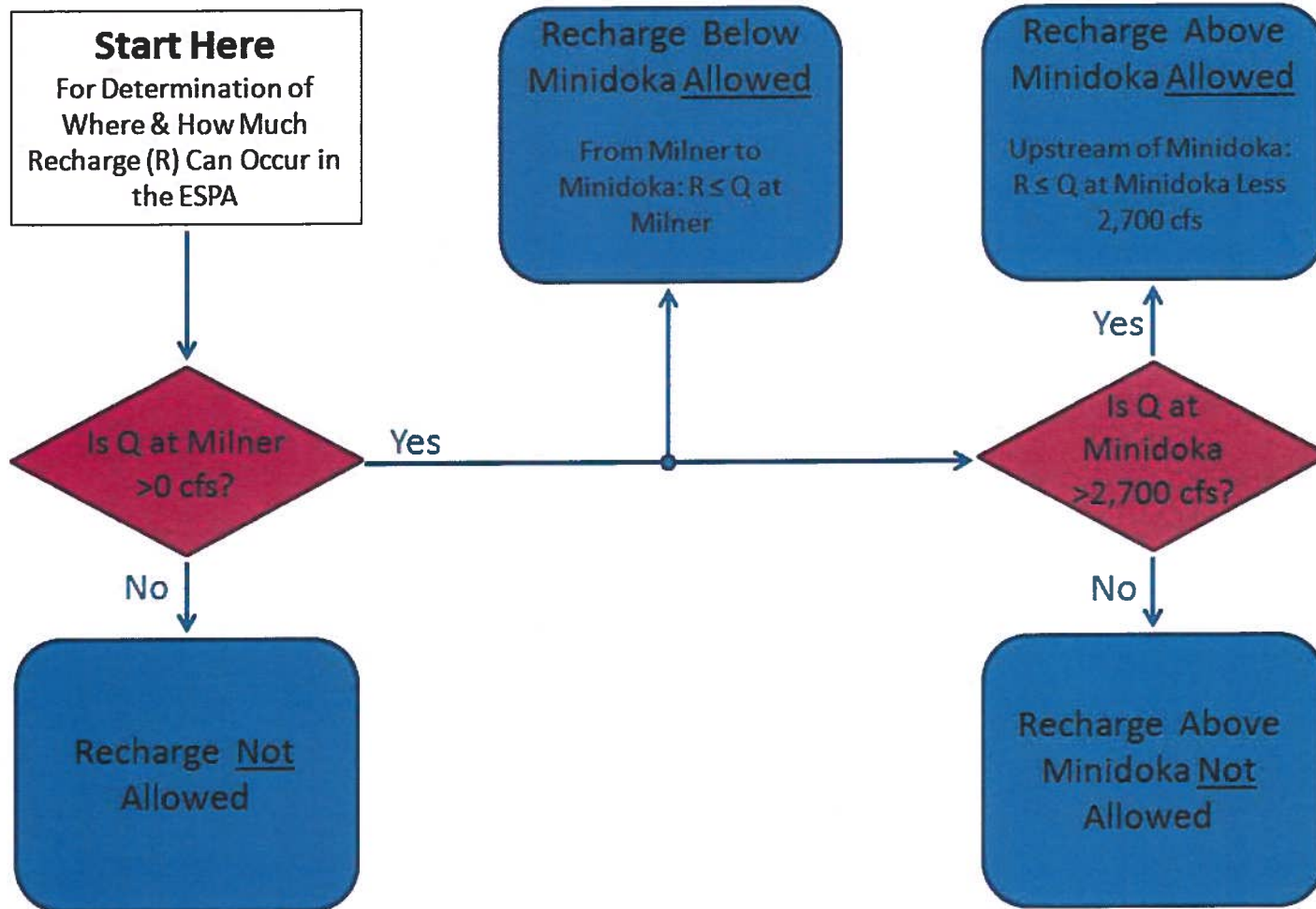
Second, the Bureau of Reclamation's unsubordinated hydro power water rights at the Minidoka Dam constrain where and how much water can be recharged above Minidoka Dam. The Board has adhered to a policy that recharge should not interfere with or prevent the capture of water in the federal reservoir system. The Bureau's unsubordinated Minidoka hydropower water rights serve as visible and transparent indicators of whether recharge water can be captured in the reservoir system. When flows at Minidoka exceed 2,700 cfs, the Bureau is signaling that it is confident reservoir system will fill, and therefore, diversion of water for recharge will not be taking water that could otherwise be captured in the reservoir system. When flows at Minidoka are less than 2,700 cfs, this is an indication that the Bureau is still filling the reservoir system; thus, recharge of water upstream of the Minidoka Dam would have the potential of taking water that would otherwise be captured in the reservoir system.

The following flow chart incorporates these fundamental considerations into a decision tree. This tool allows for the determination at a regional scale, at any instance in time, if and where recharge is feasible. The other considerations listed above will influence the details and specifics of local recharge efforts, but their influences are less certain and less easily definable. For this reason they are not included in the ESPA Recharge Flow Chart.

In closing I recommend the considerations and decision tree outlined in this memo be used by the Board to pursue managed aquifer recharge in the ESPA. I believe this memo is consistent with prior Board decisions and discussions with the Board. In particular, the ESPA CAMP calls for a net ESPA water budget change, which is best affected by increasing water storage in the aquifer. This was articulated by Mike McVay in his presentation to the Board.



# ESPA Recharge Flow Chart



## BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF A MEMORANDUM )  
 OF AGREEMENT REGARDING THE )  
 IMPLEMENTATION OF MANAGED )  
 RECHARGE UNDER THE EASTERN ) A RESOLUTION  
 SNAKE PLAIN AQUIFER MANAGEMENT )  
 PLAN AND STATE LAW )  
 \_\_\_\_\_ )

WHEREAS, on March 25, 2009 Governor C.L. "Butch" Otter, Idaho Power Company President J. Lamont Keen and Attorney General Lawrence G. Wasden signed the Framework Reaffirming the Swan Falls Settlement; and

WHEREAS, the Framework Reaffirming the Swan Falls Settlement establishes that the parties will jointly, expeditiously and in good faith support execution of a Memorandum of Agreement between the Idaho Water Resource Board ("Board"), the Governor and Idaho Power Company, which is attached to the Framework Reaffirming the Swan Falls Settlement as Exhibit 2; and

Whereas, the Memorandum acknowledges that the Board adopted the Eastern Snake Plain Aquifer Comprehensive Aquifer Management Plan (ESPA CAMP) and that the ESPA CAMP establishes a long-term hydrologic target for managed recharge from 150,000 to 250,000 acre-feet on an average annual basis; and

Whereas, the Memorandum acknowledges that managed recharge would be implemented in phases under ESPA CAMP and further recognizes that the Board has discretion on how to implement the components of ESPA CAMP, but provides the Board will seek legislative approval if it seeks to increase the ESPA CAMP Phase I managed recharge target of 100,000 acre-feet on an average annual basis by more than 75,000 acre-feet prior to January 1, 2019;

Whereas, the proposed Memorandum of Agreement between the Board, the Governor and Idaho Power Company sets forth an understanding between the parties regarding certain protocols for implementation of managed recharge under ESPA CAMP; and

Whereas, the Memorandum acknowledges that through the 1984 Swan Falls Settlement the State and the Company have a shared interest in ensuring that the Swan Falls minimum flows are maintained and recognizes that it is in their mutual interest to work cooperatively to explore and develop a managed recharge program that achieves to the extent possible benefits for all uses including hydropower; and

Whereas, the Memorandum of Agreement memorializes Idaho Power Company's right to participate in the public process before the Board for evaluating and approving managed recharge as provided by state law and present information relative to any issues associated with a

managed recharged proposal; and

Whereas, the Memorandum of Agreement recognizes that the implementation of managed recharge is governed by state law as it currently exists or as subsequently amended; and

Whereas, the Memorandum of Agreement provides that the Board will cooperate with and inform the Public Utilities Commission of any direct effects the Board determines may arise from implementation of managed recharge on hydropower generation capacity; and

Whereas, nothing in the Memorandum is intended to divest or interfere with the Public Utilities Commission authority to independently evaluate the effects of managed recharge on hydropower generation capacity or the appropriateness of any request by Idaho Power Company to address any such effects; and


Whereas, the Memorandum does not require the Board to take any affirmative position on whether a specific request by the Idaho Power Company seeking relief for the alleged effects of managed recharge is appropriate or necessary or on how any resulting rate impact should be allocated; and


Whereas, the State and Idaho Power Company recognize it is in their mutual interest to work cooperatively to explore and develop managed recharge for the Snake River Basin above Swan Falls Dam; and

NOW, THEREFORE BE IT RESOLVED, the Board approves the Memorandum of Agreement attached hereto and authorizes the Chairman to execute the same.

DATED this 30th day of April, 2009.

ATTEST:

  
BOB GRAHAM, Secretary

  
TERRY T. UHLING, Chairman

## MEMORANDUM OF AGREEMENT

WHEREAS, the Swan Falls Settlement recognized that the resolution of Idaho Power Company's water rights and the recognition thereof by the State of Idaho, together with the State Water Plan, provided a sound comprehensive plan best adapted to develop, conserve, and utilize the water resources of the Snake River in the public interest; and

WHEREAS, the Swan Falls Settlement provided that the State shall enforce the State Water Plan and shall assert the existence of water rights held in trust by the State; and

WHEREAS, the Swan Falls Settlement reconfirmed that the minimum daily flow at Milner Dam shall remain at zero, and that for the purposes of the determination and administration of rights to the use of the waters of the Snake River or its tributaries downstream from Milner Dam, no portion of the waters of the Snake River or surface or ground water tributary to the Snake River upstream from Milner Dam shall be considered; and

WHEREAS, the Swan Falls Settlement recognized that the establishment of a zero minimum flow at Milner Dam allowed existing uses above Milner to continue and for some additional development above Milner, and further recognized that the zero minimum flow means that river flows downstream from Milner Dam to Swan Falls Dam at times may consist almost entirely of ground-water discharge and that therefore the Eastern Snake Plain Aquifer (ESPA) must be managed as an integral part of the Snake River; and

WHEREAS, the Swan Falls Settlement recognized that the amount of development that can take place without affecting the average daily flows of 3,900 CFS from April 1 to October 31 and 5,600 CFS from November 1 to March 31 as measured at the Murphy Gaging Station would depend on the nature and location of each new development, as well as the implementation of new practices to augment the stream flows; and

WHEREAS, the Swan Falls Settlement recognized that maintenance of inexpensive hydropower resources contributes to a positive economic climate for the creation of new jobs for Idahoans and thus future water rights allocation decisions should weigh the benefits to be obtained from each development against the probable impact it will have on hydropower resources; and

WHEREAS, the Swan Falls Settlement recognized methods that enhance stream flows, such as in-stream storage and aquifer recharge projects, benefit both agricultural development and hydropower generation and deserve study to determine their economic potential, their impact on the environment, and their impact on hydropower generation; and

WHEREAS, flows passing Milner Dam provide opportunities for hydropower generation and under the Swan Falls Settlement the Idaho Power Company has a right to use such flows when available at its facilities; and

WHEREAS, the State, through the Eastern Snake Plain Aquifer Comprehensive Aquifer Management Plan (ESPA CAMP), a component of the State Water Plan, intends to implement managed recharge as part of a series of comprehensive measures to enhance the water supply of the ESPA and the Snake River; and

WHEREAS, it is important that the effects of implementation of managed recharge be understood in order to permit the State to make informed water management and planning decisions that are in the public interest as provided by chapter 17 title 42 Idaho Code; and

WHEREAS, the Idaho Power Company participated in the development of the ESPA CAMP and as part of the Phase I actions is cooperating with the implementation of a recharge program between Milner Dam and American Falls; and

WHEREAS, the coordination and consideration of the respective interests of the State and Idaho Power Company with regard to managed recharge furthers their mutual interest in honoring the commitments made as part of the Swan Falls Settlement.

NOW THEREFORE, the parties agree as follows:

1. It is in the mutual interest of the parties to work cooperatively to uphold and implement the principles established by the Swan Falls Settlement.
2. ESPA CAMP, as adopted by the Idaho Water Resource Board (January 2009) and approved by the Idaho Legislature as a component of the state water plan, establishes a long-term hydrologic target for managed aquifer recharge from 150,000 to 250,000 acre feet on an average annual basis. Amendment of this long-term hydrologic target for managed recharge shall constitute a change in the state water plan as contemplated by Article 15, § 7 of the Idaho Constitution and the legislation approving CAMP, and therefore must be adopted pursuant to Idaho Code § 42-1734B, as it currently exists or as it may be amended hereafter.
3. The purpose of this memorandum of agreement is to recognize that implementation of managed recharge will have an effect on the flow characteristics of the Snake River above and below Milner Dam and to confirm that the relative merits of recharge proposals in addition to or different than that provided for in Phase I of ESPA CAMP will be considered through the adaptive management process set forth in Section 4 of ESPA CAMP. If the Board proposes to increase the 100,000 acre-foot average annual ESPA CAMP Phase I target for managed aquifer recharge by more than 75,000 acre-feet prior to January 1, 2019, the Board must obtain legislative approval for such increase.

The Board and the Director will consider, in accordance with state law, any information received in determining whether a managed recharge proposal is in the public interest.

4. Further, the parties recognize it is in their mutual interest to work cooperatively to explore and develop a managed recharge program for the Snake River Basin above Swan Falls Dam that achieves to the extent possible benefits for all uses including hydropower and therefore agree that in connection with the development and consideration of proposals for managed recharge that may be in addition to or different than that provided for in Phase I of the ESPA CAMP, the State of Idaho, through the Idaho Water Resource Board (the Board):
  - a. will provide notice to Idaho Power Company of such managed recharge proposals together with an opportunity to meet and confer with the Board on the potential costs and benefits of such proposals and ways to implement managed recharge to achieve the mutual interests of the State and Idaho Power Company; and
  - b. will provide an opportunity for Idaho Power Company to appear before the Board and present information relative to any concerns the Company may have about a managed recharge proposal;
5. The State, through the Governor and the Idaho Water Resource Board, will in good faith cooperate with and support Idaho Power Company in any regulatory proceeding before the Idaho Public Utilities Commission to address any rate, or other impacts directly attributable to the implementation of managed recharge.
6. Idaho Power Company acknowledges that the decision of whether to proceed with the implementation of managed recharge is fundamentally a public policy decision of the State of Idaho and that nothing in this memorandum of agreement shall be construed to limit or interfere with the authority of the State of Idaho to authorize managed recharge in accordance with applicable state law.
7. Nothing in this memorandum of agreement shall be construed to preclude Idaho Power Company from exercising any rights it may have under state law to challenge the State's implementation of managed recharge. While Idaho Power Company retains its right under the Swan Falls Settlement to contest any appropriation of water, including but not limited to appropriations for recharge, in accordance with State law, the Company shall not have a right to assert that implementation of managed recharge is precluded by the Swan Falls Settlement.

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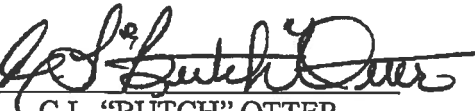
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DATED this 6<sup>th</sup> day of may 2009.

STATE OF IDAHO

By:   
C.L. "BUTCH" OTTER  
Governor of the  
State of Idaho

IDAHO POWER COMPANY

By:   
J. LAMONT KEEN  
President  
and Chief Executive Officer

By:   
TERRY T. UHLING  
Chairman  
Idaho Water Resource Board



STATE OF IDAHO  
OFFICE OF THE ATTORNEY GENERAL  
LAWRENCE G. WASDEN

RECEIVED

MAY 20 2009

DEPARTMENT OF  
WATER RESOURCES

May 19, 2009

*Sent Via Statehouse Mail*

Idaho Water Resource Board  
c/o Hal Anderson  
Idaho Department of Water Resources  
P.O. box 83720  
Boise, Idaho 83720-0098

Dear Hal:

Please find enclosed a fully executed original of the "Memorandum of Agreement" signed by the Governor, Terry T. Uhling of the Idaho Water Resource Board, and J. Lamont Keen of Idaho Power Company on May 6, 2009. There are three other fully executed originals. One is being provided to the Governor's office, one will be retained in the files of the office of the Attorney General, and one was retained by Idaho Power Company.

Very Truly Yours,

A handwritten signature in cursive script that reads "Michael C. Orr".

Michael C. Orr  
Deputy Attorney General

MCO/olv

Enclosures

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE	)	A RESOLUTION TO ALLOCATE
EASTERN SNAKE PLAIN AQUIFER	)	FUNDS
MANAGED RECHARGE PILOT PROGRAM	)	

WHEREAS, the Eastern Snake Plain Aquifer Comprehensive Aquifer Management Plan (ESPA CAMP) was approved in 2009 by the Legislature and Governor Otter through House Bill 264; and

WHEREAS, Phase 1 of the ESPA CAMP established a goal of implementing a managed aquifer recharge program for the ESPA designed to recharge 100,000 acre-feet of natural flow water on an average annual basis; and

WHEREAS, managed aquifer recharge for the ESPA has been undertaken by the Idaho Water Resource Board (IWRB) consistently since 2009, however, there remain questions about how to optimize the benefits of managed recharge in the ESPA; and

WHEREAS, the IWRB desired to accomplish the Phase 1 ESPA CAMP goal for managed recharge and answer questions regarding how to optimize the benefits of managed recharge in the ESPA.

NOW THEREFORE BE IT RESOLVED that the IWRB approves the expenditure of a total of \$1.5 million from the Secondary Aquifer Planning, Management, and Implementation Fund (Secondary Fund) to implement a 5-year managed aquifer recharge pilot program, based on an a projected average annual expenditure of \$300,000.

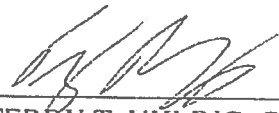
BE IT FURTHER RESOLVED that the IWRB will request the University of Idaho's Idaho Water Resource Research Institute (IWWRI) to recommend the high-priority locations for managed recharge. Based on the recommendations of IWWRI, the Board will contract with certain canal companies and irrigation districts to deliver natural flow water into the high-priority locations. The conveyance contracts with the canal companies and irrigation districts will be for the 5-year duration of the pilot recharge program.

BE IT FURTHER RESOLVED that the 5-year pilot program will be coupled with a monitoring program to verify the effects of managed recharge. The results from monitoring the 5-year pilot program will be evaluated and used to determine future actions regarding managed recharge in the ESPA. The monitoring costs will be covered by funds already programmed for monitoring and measuring the ESPA.

BE IT FURTHER RESOLVED that the pilot managed recharge project will be limited to recharging natural flow to avoid placing additional pressure on storage supplies above Milner Dam.

BE IT FURTHER RESOLVED that while the IWRB will limit its recharge efforts to implementation of the ESPA CAMP managed recharge goal, nothing herein precludes privately funded recharge efforts consistent with Idaho law.

DATED this 27<sup>th</sup> day of January, 2012.

  
\_\_\_\_\_  
TERRY T. UHLING, Chairman  
Idaho Water Resource Board

ATTEST   
BOB GRAHAM, Secretary

**Table 2 - Summary of Annual No. of Days Recharge Can Occur**

Year	USGS River Gage Stations				
	@ Milner	@ MINI	@ Blckft	@ Heise	@ St. Anthony
2000	197	120	44	42	44
2001	161	120	0	0	0
2002	253	246	0	0	0
2003	159	220	0	0	0
2004	192	204	0	0	0
2005	161	99	0	0	0
2006	239	129	50	46	50
2007	177	138	4	0	4
2008	161	131	0	0	0
2009	295	250	60	53	55
2010	221	165	16	16	16
2011	320	213	82	79	82
2012	121	186	56	56	56
Sum:	2,657	2,221	312	292	307
Avg.:	204	171	24	22	24
St.Dev.:	58	52	30	29	29
None 0 Min.:	121	99	4	16	4
Max.:	320	250	82	79	82

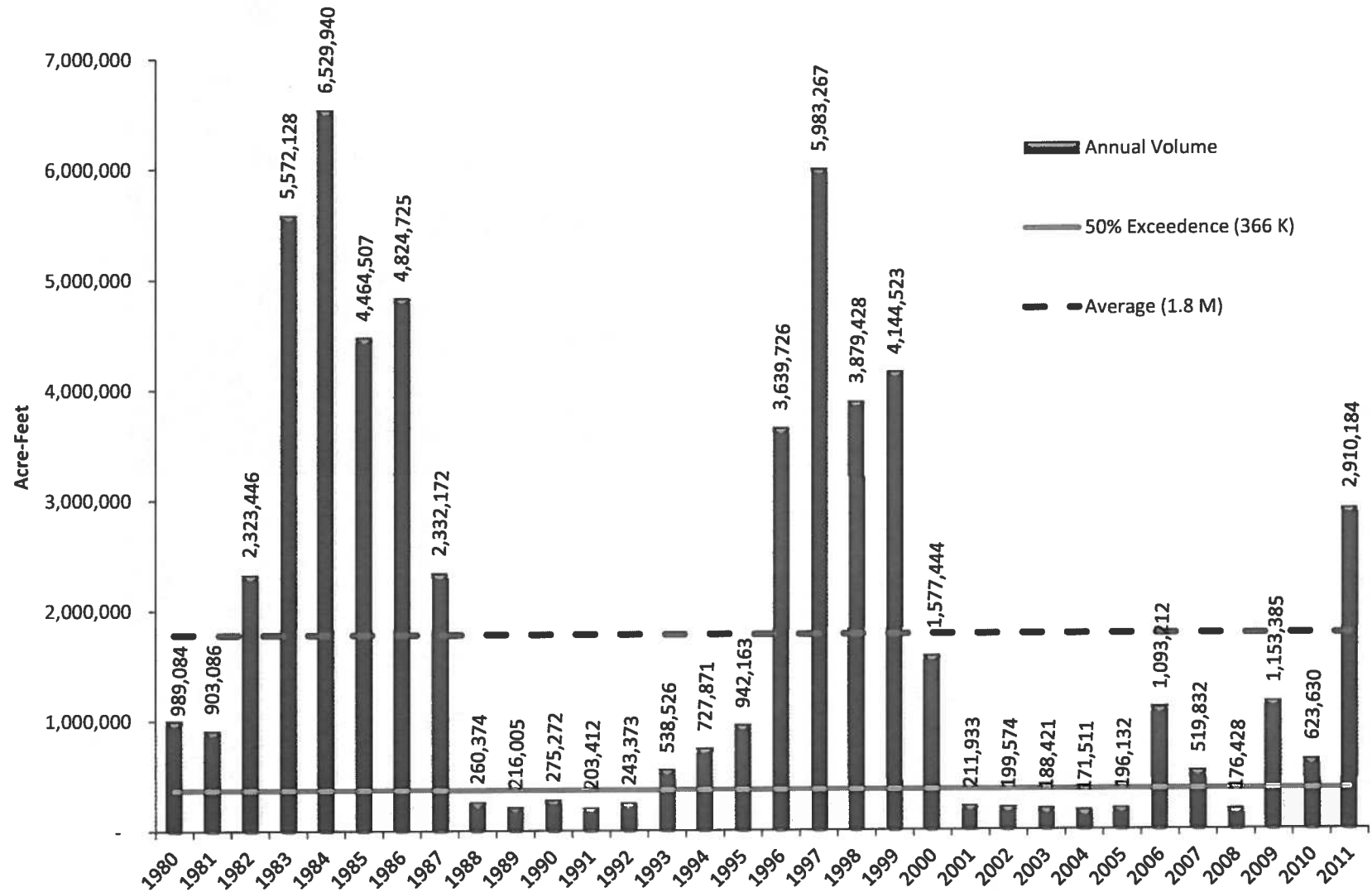
**Table 3 - Summary of No. of Days Required to Reach Various Annual Recharge Volumes**

QRECHARGE, CFS	No. of Days to Recharge Target Volume (Ac-Feet)									
	100,000	150,000	200,000	250,000	300,000	350,000	400,000	450,000	500,000	750,000
200	--	--	--	--	--	--	--	--	--	--
400	126	--	--	--	--	--	--	--	--	--
600	84	126	--	--	--	--	--	--	--	--
800	63	95	126	--	--	--	--	--	--	--
1,000	50	76	101	126	--	--	--	--	--	--
1,200	42	63	84	105	126	--	--	--	--	--
1,400	36	54	72	90	108	126	--	--	--	--
1,600	32	47	63	79	95	110	126	--	--	--
1,800	28	42	56	70	84	98	112	126	--	--
2,000	25	38	50	63	76	88	101	113	126	--
2,500	20	30	40	50	61	71	81	91	101	--
3,000	17	25	34	42	50	59	67	76	84	126
4,000	13	19	25	32	38	44	50	57	63	95
5,000	10	15	20	25	30	35	40	45	50	76
6,000	8	13	17	21	25	29	34	38	42	63
7,000	7	11	14	18	22	25	29	32	36	54
8,000	6	9	13	16	19	22	25	28	32	47
9,000	6	8	11	14	17	20	22	25	28	42
10,000	5	8	10	13	15	18	20	23	25	38
12,000	4	6	8	11	13	15	17	19	21	32
14,000	4	5	7	9	11	13	14	16	18	27
16,000	3	5	6	8	9	11	13	14	16	24
18,000	3	4	6	7	8	10	11	13	14	21
20,000	3	4	5	6	8	9	10	11	13	19
22,000	2	3	5	6	7	8	9	10	11	17

\*Shaded areas attempt to bound the 20-30 day interval.



**Figure 1 - Total Annual Volume of Natural Flow Passing Milner  
(1980 - 2011)**





## PROPOSED MILEPOST 31 GROUND WATER RECHARGE PROJECT

### EXECUTIVE BRIEFING

The Eastern Snake Plain Aquifer Comprehensive Aquifer management Plan (ESPA CAMP) was approved by the 2009 legislature and signed into law by Governor Otter as the state's long-term plan for managing the ESPA. One of the major strategies identified by the ESPA CAMP is managed ground water recharge. Recent recommendations to the Board of prioritized recharge locations have identified the **Milepost 31** site as being ranked **fifth overall in providing the most benefit to aquifer storage**. Modeling indicates that **33%** of all water recharged at the Milepost 31 site will be retained by the aquifer 10 years after the recharge activity.

Currently Board Staff and American Falls Reservoir District No. 2 (AFRD2) are working in coordination to develop a permanent off-canal recharge site at milepost 31 on the Milner-Gooding Canal. The Milepost 31 recharge site was first identified as a promising point of recharge in the *Feasibility of Large-Scale Managed Recharge of the ESPA* report from 1999. A pilot recharge effort was conducted in 2010 through an 8-inch diameter turnout. Approximately **153 acre-feet** were recharged in **13 days**. The success of the pilot recharge effort encouraged the current plan to install a check structure in the Milner-Gooding Canal and a large capacity turn-out just downstream of the check structure. Currently design of the check structure and a permanent large-scale turnout (30-inch diam. pipe x2) is underway with a **projected capacity of 70 cfs**. These improvements are targeted for construction in the fall of 2012. If the recharge basin can "drink" the full anticipated diversion capacity of 70 cfs at steady state, future expansion of the turn-out is proposed for subsequent years. A **minimum diversion capacity of 500 cfs at future build-out is desired for this location**.

#### Project Facts

- ✓ Permanent Off-Canal Recharge Site
- ✓ Min. Desired Long Term Recharge Diversion Rate: 500 cfs
- ✓ Proposed Check Dam Structure in Milner-Gooding Canal
- ✓ Gravity Diversion Turnouts from Milner-Gooding Canal
- ✓ Propose future Phased Expandability of Turnouts
- ✓ Proposed 123 acre Recharge Basin
- ✓ Proposed Ground Water Monitoring at Two Location

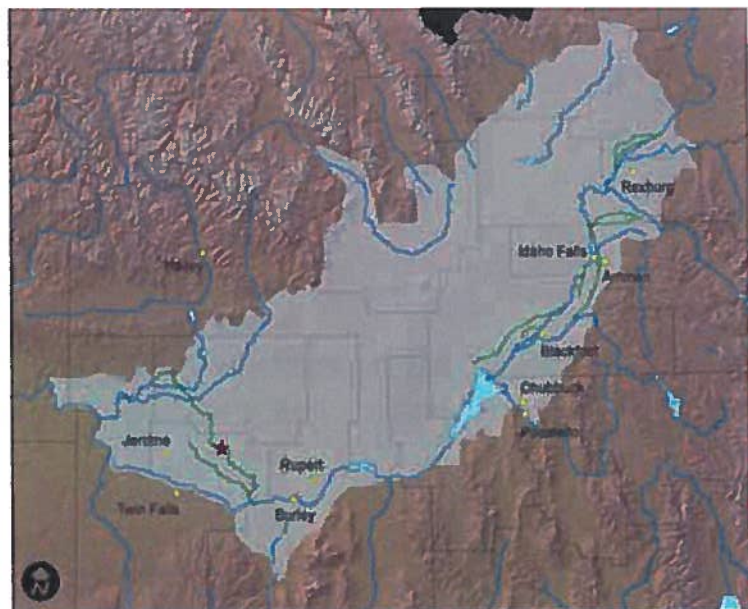


Figure 1 - Regional Vicinity Map of the Milepost 31 Recharge Site (red star)

(over)



## Legend

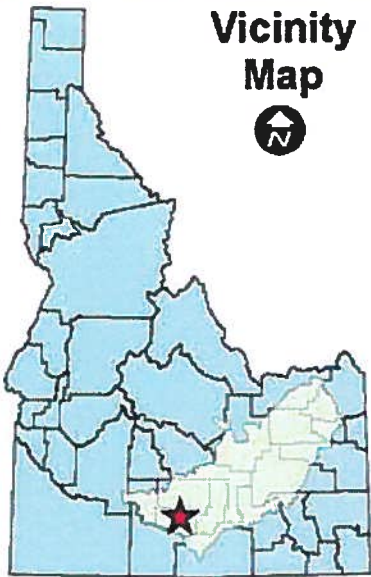
- Wells
- 5 -Ft Contours
- 4,060-Ft Contour
- RechargeBasin

Proposed Recharge Basin  
Approximately 123 Acres  
Bounded by the 4,060 Foot Contour

4060

Milner-Gooding Canal

## Vicinity Map



Observation Well  
ID# 335933

Point of Diversion:  
Gravity Diversion Structure  
Desired Capacity: ~500 cfs

## Milepost 31 Recharge Site - Exhibit Map 1

NAIP Imagery - 2011 (1 meter resolution)



0 0.05 0.1 0.2 0.3 0.4 Miles

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE	)	A RESOLUTION TO ALLOCATE
EASTERN SNAKE PLAIN AQUIFER	)	FUNDS
MANAGED RECHARGE PROGRAM	)	
MILE POST 31 RECHARGE SITE	)	
_____	)	

WHEREAS, the Eastern Snake Plain Aquifer Comprehensive Aquifer Management Plan (ESPA CAMP) was approved in 2009 by the Legislature and Governor Otter through House Bill 264; and

WHEREAS, Phase 1 of the ESPA CAMP established a goal of implementing a managed aquifer recharge program for the ESPA designed to recharge 100,000 acre-feet of natural flow water on an average annual basis; and

WHEREAS, the IWRB desires to accomplish the Phase 1 ESPA CAMP goal for managed recharge and optimize the benefits of managed recharge in the ESPA; and

WHEREAS, in order to optimize the benefits of ESPA managed recharge, hydrologic modeling indicates that additional recharge capacity is needed below American Falls Reservoir; and

WHEREAS, the American Falls Reservoir District No. 2 (AFRD2) proposes the construction of a large-scale managed recharge site along the Milner-Gooding Canal near canal mile post 31, which will provide additional recharge capacity below American Falls Reservoir.

NOW THEREFORE BE IT RESOLVED that the IWRB approves the expenditure of up to \$35,000 from the Secondary Aquifer Planning, Management, and Implementation Fund (Secondary Fund) to assist the AFRD2 with construction of the Mile Post 31 Managed Recharge Site, not to exceed 40% of actual project costs.

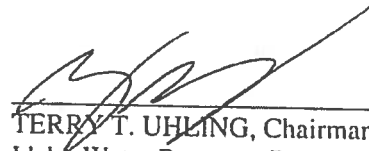
BE IT FURTHER RESOLVED that AFRD2 shall make best efforts to deliver recharge water to the Mile Post 31 Recharge Site, and to the existing Shoshone Recharge Site, in coordination with the IWRB.

BE IT FURTHER RESOLVED that final construction and installation of the Mile Post 31 Managed Recharge Site shall incorporate a permanent means of water measurement that can accurately determine the quantity of water diverted for recharge at the Mile Post 31 location.

BE IT FURTHER RESOLVED that should the Mile Post 31 recharge location demonstrate the ability to recharge water in excess of the maximum capacity of the currently proposed improvements, the AFRD2 will work with the IWRB to expand the diversion capacity of the Mile Post 31 location with additional future diversion improvements.

BE IT FURTHER RESOLVED that AFRD2 shall enter into a 5-year delivery agreement with the IWRB that defines the delivery rate to \$3/acre-foot for the duration of the agreement.

DATED this 7<sup>th</sup> day of September, 2012.

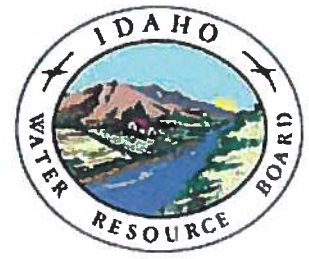
  
TERRY T. UHLING, Chairman  
Idaho Water Resource Board

ATTEST   
BOB GRAHAM, Secretary



## PROPOSED LAKE WALCOTT GROUND WATER RECHARGE PROJECT

### EXECUTIVE BRIEFING



The Eastern Snake Plain Aquifer Comprehensive Aquifer management Plan (ESPA CAMP) was approved by the 2009 legislature and signed into law by Governor Otter as the state's long-term plan for managing the ESPA. One of the major strategies identified by the ESPA CAMP is ground water recharge. Recent recommendations to the Board of prioritized recharge locations have identified the **Lake Walcott** site as being ranked **second overall in providing the most benefit to aquifer storage**. Modeling indicates that **43%** of all water recharged at the Lake Walcott site will be retained by the aquifer 10 years after the recharge activity, this ratio of retention was second only the Southwest Irrigation District recharge sites.

Currently the Lake Walcott Recharge Site is being championed by the Magic Valley Ground Water District (MVGWD) as a means of providing added storage to the aquifer and increasing reach gains to select locations. Preliminary estimates have identified a **total cost of \$2,000,000** associated with this project. In order for this project to be viable the MVGWD has indicated that a **minimum of 30,000 acre-feet of recharge** will be required on an average annual basis. Currently this project is still in the due diligence phase as the MVGWD works through two remaining obstacles: (1) right-of-way agreements with the U.S. Department of Fish and Wildlife, and (2) subordination of the Minidoka Hydropower water right to recharge at this location. Refer to the attached Exhibit Map 1 for an illustration of the proposed project.

Magic Valley Ground Water District is assuming a **60:40 cost sharing split** with the Idaho Water Resource Board. There is potential for the identification of additional participants, but at this time the cost sharing partnership includes only the Board and the MVGWD. Proposed funding split:

- Idaho Water Resource Board: \$800,000
- Magic Valley GW District: \$1,200,000

#### Project Facts

- ✓ Annual Target Recharge Volume: 30,000 acre-feet
- ✓ Proposed Diversion Rate: 100 cfs
- ✓ Number of Days Required for Recharge: 150 days
- ✓ Proposed 150 hp pump station
- ✓ ~3,600 LF of Conveyance Pipeline Proposed
- ✓ Proposed 34 acre Recharge Basin
- ✓ 4-5 Injection Wells Proposed
- ✓ Proposed Ground Water Monitoring at Two Locations

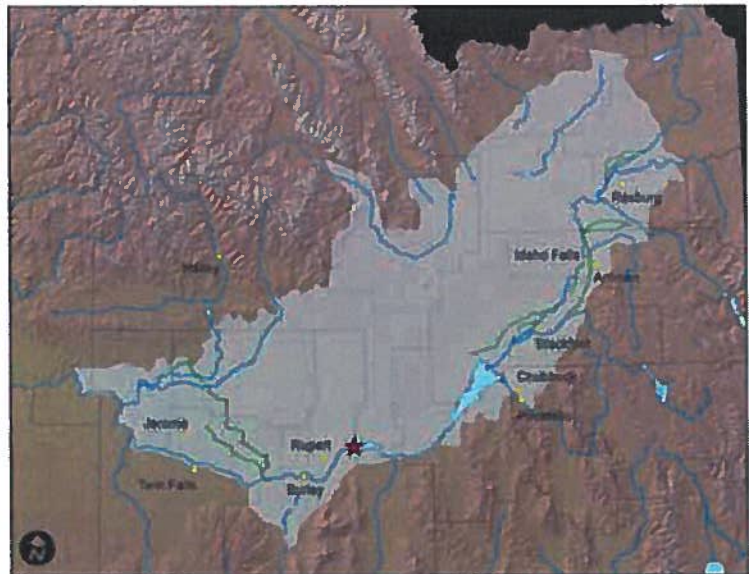
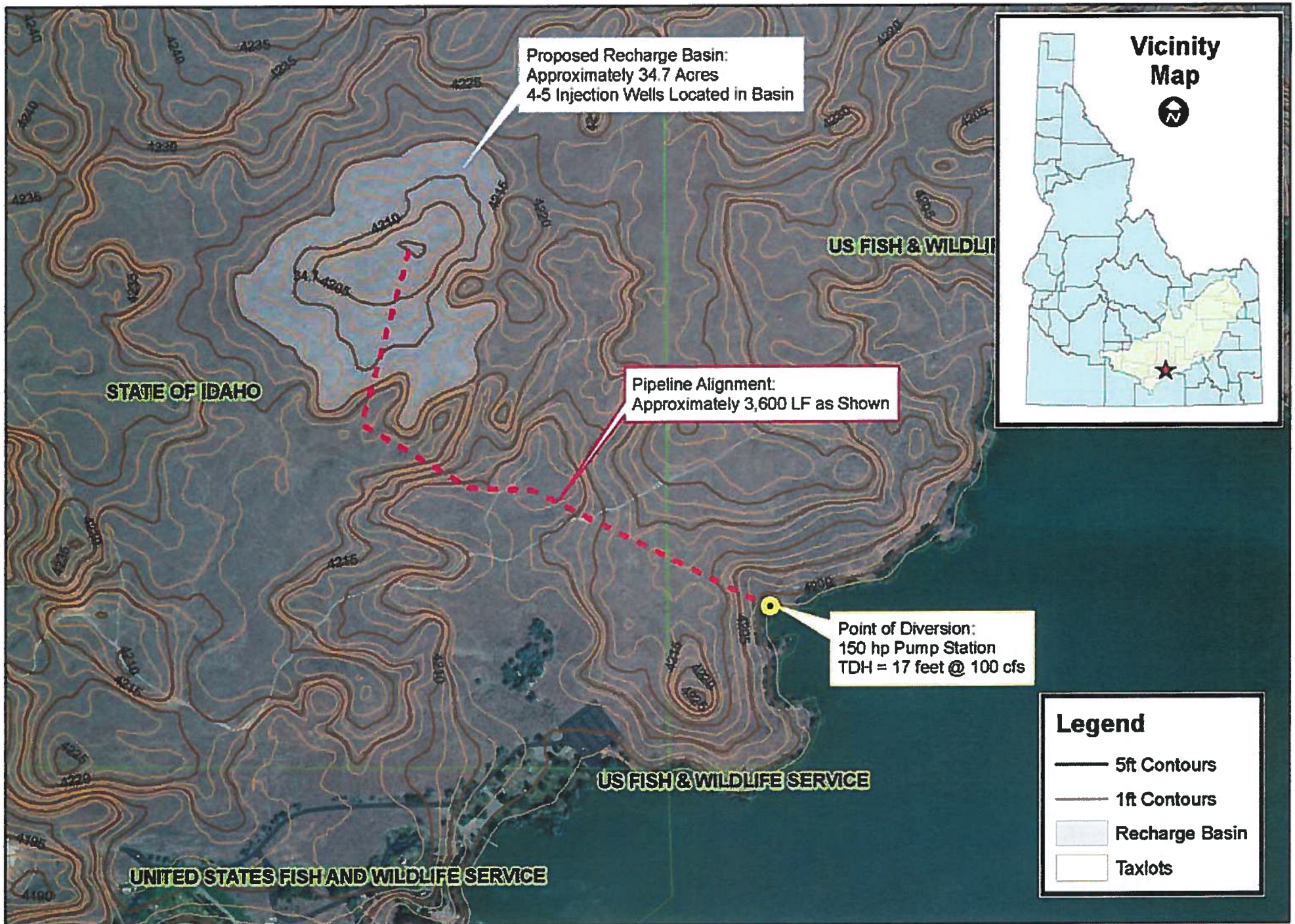


Figure 1 - Regional Vicinity Map of the Lake Walcott Recharge Site (red star)

(over)





Lake Walcott Recharge Site - Exhibit Map 1

Imagery from Bing Maps, circa 2011. [www.microsoft.com/maps](http://www.microsoft.com/maps)



0 0.05 0.1 0.2 0.3 0.4 Miles



IDAHO WATER RESOURCE BOARD  
Sources and Applications of Funds  
as of December 1, 2012  
REVOLVING DEVELOPMENT ACCOUNT

Original Appropriation (1969).....	\$500,000.00
Legislative Audits.....	(\$45,834.45)
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.....	\$5,869,754.05
Interest Earned State Treasury (Transferred).....	\$1,603,207.68
Filing Fee Balance.....	\$47,640.20
Bond Fees.....	\$1,474,173.20
Arbitrage Calculation Fees.....	(\$9,000.00)
Protest Fees.....	(\$275.00)
Series 2000 (Caldwell/New York) Pooled Bond Issuers fees.....	\$43,657.93
2012 Ground Water District Bond Issuer fees.....	\$377,000.00
Bond Issuer fees.....	\$49,299.09
Attorney fees for Jughandle LID.....	(\$3,600.00)
Water Supply Bank Receipts.....	\$3,025,416.17
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.....	(\$1,121,960.18)
Weiser Galloway Study - US Army Corps of Engineers.....	(\$1,245,085.74)

**Bell Rapids Water Rights Sub-Account**

Legislative Appropriation 2005, HB392.....	\$21,300,000.00
Interest Earned State Treasury.....	\$691,813.60
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, water bank, etc.).....	(\$6,740.10)

**Commitments**

Ongoing Bell Rapids Finance Costs (trustee fees, etc.).....	\$179,673.04
Committed for alternative finance payment.....	\$0.00

**Total Commitments.....** \$179,673.04

**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.....	\$30,199.47
Loan Interest.....	\$1,443,123.22
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.....	\$2,872,059.82
Appraisal.....	(\$15,000.00)
Insurance.....	(\$20,650.00)
Recharge District Assessment.....	(\$6,051.00)
Hydro Plants Engineering Certification (Straubhar).....	(\$3,000.00)
Payment to EHM Engineers for pipeline work.....	(\$1,200.00)
Payment to John Root for Easement Survey.....	(\$1,000.00)
Telemetry Station Equipment.....	(\$10,445.00)
Property Taxes and other fee assessments (Jerome County).....	(\$6,015.39)
Rental Payments.....	\$1,273,634.32
Transferred to Secondary Aquifer Fund (2011 Legislature, HB 291).....	(\$2,465,300.00)
Transferred to Secondary Aquifer Fund (2012 Legislature, SB 1389).....	(\$1,232,000.00)

**Pristine Springs Hydropower Projects**

Net power sales revenues.....	\$216,136.06
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**Pristine Springs Committed Funds**

ESPA CAMP (to be transferred to Secondary Fund).....	616,454.72
Repair/Replacement Fund.....	\$1,164,227.96
<b>TOTAL COMMITTED FUNDS.....</b>	<u>\$1,780,682.68</u>

**Loans Outstanding**

North Snake and Magic Valley Ground Water Districts.....	\$7,127,940.18
<b>Total Loans Outstanding.....</b>	<u>\$7,127,940.18</u>

**Funds to RP CAMP & TV CAMP Sub-Account.....** \$211,671.34

**Pristine Springs Revenues into Main Revolving Development Account.....** \$82,137.48

**Rathdrum Prairie CAMP & Treasure Valley CAMP Sub-Account**

Pristine Springs Hydropower and Rental Revenues.....	\$211,671.34
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Interest Earned State Treasury.....	\$573.11	
Treasure Valley Water Quality Summit.....	(\$500.00)	
Committed Funds.....		
Treasure Valley Water Quality Summit.....	0.00	
Balance Rathdrum Prairie CAMP & Treasure Valley CAMP Sub-Account.....		\$211,744.45
<b>Upper Salmon/CBWTP Sub-Account</b>		
Water Transaction Projects Payment Advances from CBWTP/Accord.....	\$2,840,997.65	
PCSRF Funds for Administration of Non-Diversion Easements on Lemhi River.....	\$161,079.26	
Interest Earned State Treasury.....	\$87,038.83	
Transfer to Water Supply Bank.....	(\$43,484.60)	
Change of Ownership.....	(\$600.00)	
Alturas Lake Creek Appraisal.....	(\$8,989.23)	
Payments for Water Acquisition.....	(\$337,190.65)	
Committed Funds.....		
Administration of Non-Diversion Easements on Lemhi River.....	\$158,532.38	
Alturas Lake Creek (Breckenridge).....	(\$0.00)	
Bayhorse Creek.....	\$28,992.56	
Beaver Creek (DOT LLP).....	\$15,756.01	
Big Hat Creek.....	\$270.85	
Big Timber Tyler (Leadore Land Partners).....	\$429,168.31	
Canyon Creek/Big Timber Creek (Beyeler).....	\$402,367.55	
Fourth of July Creek (Vanderbilt).....	\$17,581.57	
Iron Creek (Phillips).....	\$216,368.67	
Lemhi River & Little Springs Creek (Kauer).....	\$18,827.49	
Little Springs Creek (Snyder).....	\$251,817.65	
Lower Eighteenmile Creek (Ellsworth Angus Ranch).....	\$6,058.63	
Lower Lemhi M Olson (Mark Olson).....	\$11,218.29	
Lower Lemhi Thomas (Robert Thomas).....	\$2,370.46	
P-9 Bowles (River Valley Ranch).....	\$278,581.23	
P-9 Charlton (Sydney Dowton).....	\$18,439.38	
P-9 Dowton (Jim Dowton Ranch).....	\$220,962.37	
P-9 Elzinga (Elzinga).....	\$273,312.38	
Patterson-Big Springs (PBSC9).....	\$167,848.67	
Sulphur Creek.....	\$12,305.00	
Whitefish (Leadore Land Partners).....	\$179,314.72	
Total Committed Funds.....	\$2,710,094.15	
Balance CBWTP Sub-Account.....		(\$11,242.89)
<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.....	\$1,877,139.29	
Loan Interest.....	\$181,294.43	
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.....	(\$3,510,257.36)	
Reimbursement from BOR for Palisades Reservoir.....	\$2,381.12	
W-Canal Project Costs.....	(\$326,834.11)	
Black Canyon Exchange Project Costs.....	(\$71,680.00)	
Black Canyon Exchange Project Revenues.....	\$23,800.00	
2008 Recharge Conveyance Costs.....	(\$14,580.00)	
2009 Recharge Conveyance Costs.....	(\$355,253.00)	
2010 Recharge Conveyance Costs.....	(\$484,231.62)	
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.....	\$0.00	
Commitment - Additional recharge projects preliminary development.....	\$350,000.00	
Commitment - Palasades Storage O&M.....	\$10,000.00	
Commitment - Black Canyon Exchange Project (fund with ongoing revenues).....	\$519,444.95	
Commitment - W-Canal Aquifer and Recharge Conveyance.....	\$0.00	
Total Loans and Other Commitments.....	\$3,910,645.45	
Loans Outstanding:		
American Falls-Aberdeen GWD (CREP).....	\$113,814.73	
Bingham GWD (CREP).....	\$0.00	
Bonneville Jefferson GWD (CREP).....	\$67,469.03	
Magic Valley GWD (CREP).....	\$108,538.78	
North Snake GWD (CREP).....	\$58,070.56	
TOTAL ESP LOANS OUTSTANDING.....	\$347,893.10	
Uncommitted Balance Eastern Snake Plain Sub-Account.....		\$109,112.79
<b>Dworshak Hydropower Project</b>		
Dworshak Project Revenues.....		
Power Sales & Other.....	\$5,710,719.01	
Interest Earned State Treasury.....	463,264.71	
Total Dworshak Project Revenues.....		\$6,173,983.72
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.....	\$1,507,644.72		
Powerplant Repairs.....	\$58,488.80		
Capital Improvements.....	\$318,366.79		
FERC Payments.....	\$35,956.16		
Total Dworshak Project Expenses.....		(\$2,609,549.28)	
Dworshak Project Committed Funds			
Emergency Repair/Future Replacement Fund.....	\$1,314,575.00		
FERC Fee Payment Fund.....	\$30,001.49		
Total Dworshak Project Committed Funds.....		\$1,344,576.49	
Excess Dworshak Funds Into Main Revolving Development Account.....			\$2,219,857.95
<b>TOTAL.....</b>			<b>\$16,452,275.00</b>
Loans Outstanding:	Amount	Principal	
	Loaned	Outstanding	
Aberdeen-Springfield Canal Company (WRB-491; Diversion structure).....	\$329,761	\$198,967.51	
Big Wood Canal Company (23-Jan-09; Thorn Creek Flume).....	\$90,000	\$30,382.31	
Boise City Canal Company (WRB-492)... 18th St Canal Rehab.....	\$82,362	\$21,422.81	
Boise City Canal Company (WRB-492)... Grove St Canal Rehab.....	\$110,618	\$54,215.30	
Bonnie Laura Water Corporation (14-Jul-06; Well repairs).....	\$71,000	\$39,259.29	
Carlin Bay Property Owners Association.....	\$115,609	\$0.00	
Challis Irrigation Company (28-Nov-07; river gate replacement).....	\$50,000	\$30,668.69	
Chaparral Water Association.....	\$90,154	\$17,165.69	
Chaparral Water Association (21-Jan-11; Well deepening & impreveme.....	68,000	\$32,625.39	
Cloverdale Ridge Water Corp. (Irrigation system rehab 25-sep-09).....	106,400	\$83,979.88	
Country Club Subdivision Water Association (18-May-07; Well Project).....	\$102,000	\$67,563.71	
Cub River Irrigation Company (18-Nov-05; Pipeline project).....	\$1,000,000	\$848,571.79	
Cub River Irrigation Company.....	\$500,000	\$429,457.19	
Dalton Water Association (14-Mar-08; Water main replacement).....	\$375,088	\$0.00	
Deep Creek Property Owners Association.....	\$25,115	\$2,993.84	
Enterprise Irrigation District (14-Jul-06; Pipeline project).....	\$37,270	\$21,242.66	
Enterprise Irrigation District (North Lateral Pipeline).....	\$105,420	\$52,592.14	
Evergreen Terrace Water Association (water study; 25-sep-09).....	\$15,000	\$0.00	
Firth, City of.....	\$112,888	\$47,434.70	
Foothills Ranch Homeowners Association (7-oct-11; well rehab).....	\$150,000	\$135,187.76	
Garden Valley Ranchettes Homeowners Association (25-Jan-05).....	\$2,716	\$1,641.85	
Genesee, City of (Storage tank, 22-Jan-10).....	\$250,000	\$170,517.05	
Georgetown, City of.....	\$278,500	\$77,603.92	
Harbor View Water & Sewer District (Combined Loans).....	\$602,819	\$187,051.41	
Hoyt Bluff Water Association (Rathdrum Prairie Well).....	\$273,029	\$26,474.20	
Jefferson Irrigation Company (well deepenings).....	\$110,780	\$0.00	
Jefferson Irrigation Company (well deepenings).....	\$207,016	\$72,728.09	
Jefferson Irrigation Company (9-May-2008 Well Replacement).....	\$81,000	\$64,668.15	
Jughandle HOA/Valley County Local Improvement District No. 1 (well p.....	\$907,552	\$810,295.00	
King Hill Irrigation District (24-Sep-10; Pipeline replacement).....	\$300,000	\$161,434.51	
Kulleyspell Estates Property Owners Assoc.....	\$219,510	\$0.00	
Lake Reservoir Company (29-July-11; Payette Lake-Lardo Dam Outle.....	\$594,000	\$308,243.11	
Lakeview Water District.....	\$45,146	\$0.00	
Last Chance Canal Company (WRB-497).....	\$500,000	\$181,760.75	
Lava Hot Springs, City of.....	\$347,510	\$190,259.92	
Lindsay Lateral Association (22-Aug-03).....	\$9,600	\$3,215.63	
Lindsay Lateral Association (Engineering Design Project).....	\$35,000	\$15,200.00	
Lindsay Lateral Association (Pipeline Study).....	\$15,000	\$4,500.00	
Live-More Lake Community (9-Jun-04).....	\$42,000	\$17,479.91	
Lower Payette Ditch Company (2-Apr-04; Diversion dam replacement).....	\$875,000	\$465,632.00	
Marsh Center Irrigation Company (13-May-05; Hawkins Dam).....	\$236,141	\$163,043.88	
Marysville Irrigation Company (18-May-07; Pipeline Project Phase 1).....	\$625,000	\$377,890.82	
Marysville Irrigation Company (9-May-08; Pipeline Project Phase 2).....	\$1,100,000	\$721,216.76	
McGuire Estates Water Users Association (4-Mar-05).....	\$60,851	\$25,725.37	
Meander Point Subdivision Homeowners Association (7-Sep-07; comm.....	\$330,000	\$82,907.62	
Meridian Heights Water & Sewer Association (18-May-07).....	\$350,000	\$279,271.42	
Monument Ridge Homeowners Association (20-Mar-09; irrigation syst.....	\$360,000	\$0.00	
Mores Creek Rim Ranches Water District.....	\$221,400	\$67,839.91	
New Hope Water Corporation.....	\$42,000	\$0.00	
New Hope Water Corporation.....	\$151,460	\$63,411.06	
Oakley Valley Water Company.....	\$138,331	\$24,302.66	
Packsaddle Water Corporation.....	\$49,600	\$0.00	
Picabo Livestock Co (Picabo town water system new well).....	\$38,000	\$0.00	
Pinehurst Water District (14-mar-08; Water Storage tank).....	\$160,000	\$6,678.73	
Powder Valley-Shadowbrook Homeowners Assoc.....	\$201,500	\$5,039.12	
PPRT Water System.....	\$70,972	\$29,901.31	
Preston Riverdale & Mink Creek Canal Co.....	\$400,000	\$0.00	
Preston-Whitney Irrigation Company (29-May-09; Fairview Lateral Pipe.....	\$800,000	\$314,103.12	
Producers Irrigation Company (17-Mar-06; well replacements).....	\$185,000	\$80,197.32	
Ranch Subdivision Property Owners Assoc.....	\$24,834	\$13,671.36	
Riverside Independent Water District.....	\$350,000	\$198,952.97	
Robertson Ditch Co.....	\$30,000	\$0.00	
Skin Creek Water Association.....	\$188,258	\$106,754.52	
Sourdough Point Owners Association (23-Jan-07; water supply & treati.....	\$750,000	\$119,394.77	
Spirit Bend Water Association.....	\$92,000	\$55,438.11	
Thunder Canyon Owners Association (6-Feb-04).....	\$92,416	\$54,674.81	
Twenty-Mile Creek Water Association.....	\$104,933	\$0.00	
Twin Lakes Canal Company - Winder Lateral Pipeline Project (13-Jul-0.....	\$500,000	\$376,757.34	
Twin Lakes Canal Company (2-Apr-04).....	\$90,000	\$19,328.88	
Twin Lakes-Rathdrum Fld Cont Dist (24-Oct-02; Twin Lakes Dam).....	\$399,988	\$64,340.50	
Whitney-Nashville Water Company.....	\$225,000	\$72,899.26	
<b>TOTAL LOANS OUTSTANDING.....</b>			<b>\$8,226,177.78</b>
Loans and Other Funding Obligations:			
Senate Bill 1511 - Teton Replacement and Minidoka Enlargement Studies.....		\$778,161.82	
Boise River Storage Feasibility Study.....		\$350,000.00	
Weiser-Galloway Study (28-May-10).....		\$551,620.87	

Canyon Creek Canal Company (14-Mar-08; Pipeline project).....	\$133,599.00	
Canyon County Drainage District No. 2 ( 28-Nov-12; Drain tile pipeline replacement).....	\$35,000.00	
Chaparral Water Association (21-Jan-11; Well deepening & improvement).....	\$18,465.16	
Clearwater Water District - pilot plant (13-Jul-07).....	\$80,000.00	
Consolidated Irrigation Company (July 20, 2012; pipeline project).....	\$1,500,000.00	
Dover, City of (23-Jul-10; Water Intake project).....	\$194,063.00	
Evergreen Terrace Water Association (water study; 25-Sep-09).....	\$1,316.09	
Foothills Ranch Homeowners Association (7-Oct-11; well rehab).....	\$14,812.24	
Garden Valley Ranchettes Homeowners Association (25-Jan-05).....	\$8,183.69	
Lake Reservoir Company (29-July-11; Payette Lake-Lardo Dam Outlet Gates).....	\$285,756.89	
Lindsay Lateral Association .....	\$15,300.00	
North Snake & Magic Valley GWD Loan - Mitigation Pipeline.....	\$250,000.00	
Point Springs Grazing Association (July 20, 2012; storck water pipeline).....	\$48,280.00	
Portneuf Irrigating Company (29-July-11; Pipeline project).....	\$0.00	
<b>TOTAL LOANS AND OTHER FUNDING OBLIGATIONS.....</b>		<b>\$4,264,558.76</b>
<b>Uncommitted Funds.....</b>		<b>\$3,961,538.46</b>
<b>TOTAL.....</b>		<b>\$16,452,275.00</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 December 1, 2012

SECONDARY AQUIFER PLANNING, MANAGEMENT, & IMPLEMENTATION FUND

Legislative Appropriation (HB 291, Sec 2).....	\$2,465,300.00
Legislative Appropriation (SB 1389, Sec 5).....	\$1,232,000.00
Interest Earned State Treasury (Transferred).....	\$32,595.15
Water Users Contributions.....	\$100.00
Conversion project (AWEP) measurement device payments.....	(\$16,455.21)
Contribution from GWD's for 2011 ESPA Managed Recharge.....	\$71,893.16
Contribution from GWD's for Revenue Bond Prep Expenses.....	\$14,462.50
American Falls Res. Dist#2 - MP31 Recharge Site Engineering.....	(\$1,593.75)
Payments for 2012 Recharge.....	(\$205,031.84)
Payment for Recharge.....	(\$80,000.00)
Payment for High Country RC&D Cloud Seeding.....	(\$12,264.62)

Committed Funds

Measurement devices for AWEP conversion projects.....	\$183,544.79
High Country RC&D Cloud Seeding.....	\$27,735.38
American Falls Res. Dist#2 - MP31 Recharge Site Engineering.....	\$4,406.25
American Falls Res. Dist#2 - MP31 Recharge Site Construction.....	\$35,000.00
Five-Year Managed Recharge Pilot Program.....	\$1,294,968.16
Contribution from GWD's for 2011 ESPA Managed Recharge.....	(\$8,106.84)
GWD Bond Preparatory Expenses.....	\$37,500.00
Idaho Irrigation District Recharge Phase 1.....	\$13,200.00
Fremont-Madison Irrigation District Egin Recharge.....	\$40,000.00
<b>Total Committed Funds.....</b>	<b>\$1,628,247.74</b>

**TOTAL UNCOMMITTED FUNDS..... \$1,872,757.65**

**CURRENT ACCOUNT BALANCE..... \$3,501,005.39**

## Attachment 13

The following is the Idaho Water Resources Board approved list of Advisory Committee members.

### Municipalities/Counties (Two representatives)

#### Representative

Mayor Lance Clow, Twin Falls  
Mayor Jared Fuhrman, Idaho Falls

#### Alternate

Mayor Charles Correll, Jerome  
Mayor Roger Chase, Pocatello

### Business (One representative)

#### Representative

Alex S. LaBeau, IACI President

#### Alternate

Arie Roeloff, Idaho Dairy Association

### Land developers (One representative)

#### Representative

Rebecca Casper, Ball Ventures  
Resource Commission

#### Alternate

Bob Muffley, Mid-Snake Water

### Surface water users (Three representatives)

#### Representative

Jeff Raybould, Fremont-Madison Irrigation Dist  
Company  
Randy Bingham, Burley Irrigation District  
Canal Company  
Vince Alberdi, Twin Falls Canal Company  
Company

#### Alternate

Lloyd Hicks, Burgess Canal  
Steve Howser, Aberdeen-Springfield  
Albert Lockwood, Northside Canal

### Groundwater users (Three representatives)

#### Representative

Don Parker, water district 110-100  
Tim Deeg, water district 120  
Dean Stevenson, water district 130-140

#### Alternate

Scott Clawson, water district 110-100  
Craig Evans, water district 120,  
Lynn Carlquist, water district 130

### Spring water users (One representative)

#### Representative

Randy MacMillan, Clear Springs Foods, Inc.  
Water Users Assn.

#### Alternate

Linda Lemmon, Thousand Springs

### Hydropower (One representative)

#### Representative

James Tucker, Idaho Power

#### Alternate

Dee Reynolds, Fall River Electric

### Domestic well owners (One representative)

#### Representative

George Katseanes, Blackfoot  
Association

#### Alternate

Roger Buchanan, Idaho Well Drillers

Environmental and Conservation Interests (One representative)

Representative

Kim Goodman, Trout Unlimited

Alternate

Will Whelan, The Nature Conservancy



## Eastern Snake River Plain Aquifer (ESPA) Plan Implementation Committee Contact List

Municipalities/Counties
<p><b>Mayor Lance Clow</b>, City of Twin Falls PO Box 1907, Twin Falls, ID 83303-1907 Phone: 208-734-8909 Email: lwclow@pmt.org</p> <p><b>Mayor Charles Correll</b>, City of Jerome 152 East Ave A Jerome, ID 83338 Phone: 208-308-8187 (cell) Main city phone: 208-324-8189 Email: charliecorrell@gmail.com</p> <p><b>Mayor Jared Fuhrman</b>, City of Idaho Falls 308 Constitution Way Idaho Falls, ID 83402 Phone: 208-612-8235 Email: mayor@ci.idaho-falls.id.us</p> <p><b>Mayor Steve England</b>, City of Chubbuck 5160 Yellowstone Avenue Chubbuck, ID 83202 Phone: 208-237-2400 Fax: 208-237-2409 Email: sengland@cityofchubbuck.us</p>
Business
<p><b>Alex S. LaBeau</b>, IACI President 225 N 9<sup>th</sup> Street, Suite #230 Boise, ID 83701 Phone: 208-343-1849 x12 Email: alabeau@iaci.org</p>
Land Developers
<p><b>Rebecca Casper</b>, Ball Ventures LLC PO Box 51298 Idaho Falls, ID 83402 Phone: 208-681-9989 Email: rcasper@byu.net</p>
<p><b>Bob Muffley</b>, Mid-Snake Water Resource Commission 124 5th Ave West Gooding, ID 83330 Phone: 208-934-4781 Email: bmuffley@muffleyagency.myrf.net</p>

### Surface Water Users

**Jeff Raybould, Fremont-Madison Irrigation District**

301 N 1500 E  
St. Anthony, ID 83445  
Phone: 208-624-3640  
Email: jeffr@ida.net

**Lloyd Hicks, Burgess Canal Company**

225 N 3600 E  
Rigby, ID 83442  
Phone: 208-754-4302  
Email: hixlivestock@netscape.net

**Randy Bingham, Burley Irrigation District**

246 East 100 South  
Rupert, ID 83318  
Phone: 208-678-2511  
Email: bid@dcdi.net

**Steve Howser, Aberdeen-Springfield Canal Company**

PO Box 857  
Aberdeen, ID 83210  
Phone: 208-397-4192  
Email: steveh@ascanal.org

**Albert Lockwood, Northside Canal Company**

921 North Lincoln  
Jerome, ID 83338  
Phone: 208-280-6446  
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357 6<sup>th</sup> Avenue West  
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### Groundwater Users

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**Scott Clawson**, Water District 100-110  
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Rexburg, ID 83440  
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**Tim Deeg**, Water District 120  
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**Craig Evans**, Water District 120  
1523 West 300 North  
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Email: idcspud@aol.com

**Dean Stevenson**, Water District 130-140  
575 West 600 North  
Paul, ID 83347  
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Email: desteve@pmt.org

**Randy Brown**, South West Irrigation District  
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Burley, ID 83318  
Phone: (208)308-7711  
Fax: (208)432-6647

#### **Spring Water Users**

**Randy MacMillan**, Clear Springs Foods, Inc.  
P.O. Box 712  
Buhl, ID 83316  
Phone: 208-543-3462  
Email: randy@clearsprings.com

**Linda Lemmon**, Thousand Springs Water Users Association  
PO Box 178  
Hagerman, ID 83332  
Phone: 208-837-4808  
Email: iaa@northrim.net

**Hydropower****James Tucker, Idaho Power**

P.O. Box 70 (83707)

1221 West Idaho Street

Boise, ID 83702

Phone: 208-388-2112

Fax: 208-388-6936

Email: [jamestucker@idahopower.com](mailto:jamestucker@idahopower.com)**Domestic Well Owners****George Katseanes, Blackfoot**

1468 W. Hoff Rd.

Blackfoot, ID 83221

Phone: 208-684-4248

Email: [katsfam-sc@msn.com](mailto:katsfam-sc@msn.com)**Environmental and Conservation Interests****Peter Anderson, Trout Unlimited**

910 W Main Street, Suite 342

Boise, ID 83702

Phone: 208-345-9800

Email: [panderson@tu.org](mailto:panderson@tu.org)**Will Whelan, The Nature Conservancy**

950 W Bannock Street, Suite 210

Boise, ID 83702

Phone: 208-350-2202

Email: [wwhelan@tnc.org](mailto:wwhelan@tnc.org)**Mixed-Use Interest****Dan Temple, A&B Irrigation District**

PO Box 675

Rupert, ID 83350

Phone: 208-436-3152

Email: [abid@pmt.org](mailto:abid@pmt.org)**County Assessor****Max Vaughn, Minidoka County**

PO Box 368

Rupert, ID 83350

Email: [max.vaughn@co.minidoka.id.us](mailto:max.vaughn@co.minidoka.id.us)**Steven Serr, Bonneville County**

605 N. Capitol Ave.

Idaho Falls, ID 83402

Phone: 208-524-7920

Email: [sserr@co.bonneville.id.us](mailto:sserr@co.bonneville.id.us)

## AGENCY PARTICIPANTS

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<b>Idaho Department of Environmental Quality</b>
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<b>Governor Otter's Office</b>
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## OTHER RELEVANT CONTACTS

### IDWR Staff

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**July 11 & 16, 2012 - Summary of Issues Identified by Participants**

1. IWWRI managed recharge prioritization study – current applications.
2. Calculation method for determining progress toward average annual recharge targets set forth in ESPA CAMP and Swan Falls Reaffirmation Agreement.
  - a. What is included in calculation?
  - b. How is it calculated?
3. IWRB applications – Minidoka hydropower water right.
4. IWRB applications – reservoir storage water rights.
5. IWRB applications – physical refill of the reservoirs.
6. IWRB applications – future surface water storage projects and water rights.
7. IWRB applications – post-1998 permits and licenses on Snake River.
8. IWRB applications – operational authority of individual irrigation entities associated with each application.
9. IWRB applications – environmental impacts.



**IDAHO DEPARTMENT OF FISH AND GAME**  
600 S Walnut / P.O. Box 25  
Boise, Idaho 83707

C.L. "Butch" Otter / Governor  
Virgil Moore / Director

January 14, 2013

**Idaho Water Resource Board**  
The Idaho Water Center  
322 East Front Street  
PO Box 83720  
Boise, Idaho 83720-0098

Re: Water Rights 1-7131, 1-7132, 1-7133, 1-7134, 1-7135, 1-7136, 1-7137, 1-7139, 1-7140,  
1-7141, 1-7142, 1-7143, 21-7574, 21-7575, 21-7576, 21-7577, 21-7578, 21-7579, 21-7580

Dear Chairman:

During the last few months, the staff from Idaho Department of Fish and Game (IDFG) has worked with representatives of the Idaho Water Resource Board (Board) to help them understand the potential effects to fish and wildlife resources resulting from use of the above referenced rights. IDFG neither supports nor opposes the proposed water right applications; rather IDFG's role is to provide technical review of the applications. We are committed to providing technical information about the potential effects to fish and wildlife resources resulting from managed recharge efforts as soon as we receive the final applications and our regional staff has the opportunity to review them.

In addition, IDFG supports further discussions with the Board regarding the establishment of a Managed Recharge Environmental Consultation Committee to provide review (at least annually) of potential effects of the proposed water rights on fish and wildlife resources and to provide recommendations about the avoidance, reduction or mitigation of identified impacts. IDFG has participated in such reviews in the past and looks forward to working with the Board proactively to develop protocols that assess effects of planned managed recharge activities in order to avoid adverse effects to fish and wildlife resources in the Snake River System.

Sincerely,

A handwritten signature in blue ink that reads "Sharon W. Kiefer".

Sharon W. Kiefer  
Deputy Director

cc: Harriet Hensley, Deputy Attorney General  
Dallas Burkhalter, Deputy Attorney General  
Walt Poole, IDFG

*Keeping Idaho's Wildlife Heritage*





STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor  
Curt Fransen, Director

January 15, 2013

Idaho Water Resources Board  
The Idaho Water Center  
322 East Front Street  
PO Box 83720  
Boise, Idaho 83720-0098

RE: Water Right Permit Applications:

1-7131, 1-7132, 1-7133, 1-7134, 1-7135, 1-7136, 1-7137, 1-7139, 1-7140, 1-7141, 1-7142,  
1-7143, 21-7574, 21-7575, 21-7576, 21-7577, 21-7578, 21-7579, 21-7580

Dear Chairman of the Board:

The Idaho Department of Environmental Quality received drafts of the above referenced managed recharge water right applications. We will provide site-specific water quality information to you after regional office staff completes their review of the applications.

For your information, Subbasin Assessments and TMDLs have been developed for the following water bodies:

Teton River Subbasin	HUC 17040204 - Sediment and Nutrients
South Fork Snake River Subbasin	HUC 17040201 - Flow Alteration
Henrys Fork (Upper and Lower) Subbasin	HUC 17040202 - Delisted
Henrys Fork (Lower) Subbasin	HUC 17040203 - Delisted

These Subbasin Assessments and TMDLs contain information that may be useful in evaluating the impact of the proposed managed recharge activities on water quality in these areas.

As you requested, DEQ will work with the Idaho Water Resource Board (Water Board) to determine where recharge activities under the proposed water rights will require approval of Ground Water Quality Monitoring Plans pursuant to IDAPA 58.01.16.600. DEQ in conjunction with staff from IDWR prepared guidance to assist landowners in preparation of Ground Water Quality Monitoring plans.

Idaho Water Resources Board  
January 15, 2013  
Page 2

The guidance is available at:

[http://www.deq.idaho.gov/media/522432-recharge\\_guidance\\_0610\\_revision.pdf](http://www.deq.idaho.gov/media/522432-recharge_guidance_0610_revision.pdf)

DEQ will also assist the Water Board in the development of those plans.

Sincerely,

A handwritten signature in blue ink that reads "Barry N. Burnell". The signature is fluid and cursive, with the first name "Barry" being more prominent than the last name "Burnell".

Barry N. Burnell  
Water Quality Division Administrator

BNB:dls

C: Harriett A. Hensley – Deputy Attorney General  
Douglas Conde – DEQ – Attorney General's Office



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

RECEIVED

JAN 16 2013

DEPARTMENT OF  
WATER RESOURCES

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor  
Curt Fransen, Director

January 15, 2013

Idaho Water Resources Board  
The Idaho Water Center  
322 East Front Street  
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RE: Water Right Permit Applications:

1-7131, 1-7132, 1-7133, 1-7134, 1-7135, 1-7136, 1-7137, 1-7139, 1-7140, 1-7141, 1-7142,  
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Barry N. Burnell  
Water Quality Division Administrator

BNB:dls

C: Harriett A. Hensley – Deputy Attorney General  
Douglas Conde – DEQ –Attorney General's Office