AGENDA

IDAHO WATER RESOURCE BOARD
MEETING NO. 3-16
May 20, 2016 at 8:00 am

Idaho Water Center
Conference Rooms 602 B,C,D
322 East Front Street, Boise, Idaho 83720

1. Roll Call
2. Agenda and Approval of Minutes 2-16
3. Public Comment
4. Financial Status
5. FY 2017 Secondary Aquifer Fund Budget
6. Water District #01 Rental Pool Procedures
7. Producers Canal Company Loan
8. ESPA Recharge
9. Red River Channel Restoration Project
10. Ground Water Conservation Grants
11. State Water Plan & Proposed Sustainability Policy
12. Director's Report
13. Non-Action Items for Discussion
14. Executive Session – Board will meet pursuant to Idaho Code §74-206(1) subsection (f), for the purpose of communicating with legal counsel regarding legal ramifications of and legal options for pending litigation, or controversies not yet being litigated but imminently likely to be litigated. Executive Session is closed to the public. Topics: Wood River and Lemhi Basin.
Following adjournment of Executive Session – meeting reopens to the public.
15. Next Meeting and Adjourn

Americans with Disabilities

The meeting will be held in facilities that meet the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email jennifer.strange@idwr.idaho.gov or by phone at (208) 287-4800.

IDAHO WATER RESOURCE BOARD

MINUTES
MEETING NO. 2-16

Idaho Water Center
Conference Rooms 602 B,C,D
322 East Front Street, 6th Floor, Boise, Idaho 83720

March 17, 2016

Work Session

Chairman Chase called the meeting to order at 8:30 a.m. At roll call, Mr. Alberdi, Mr. Barker, Mr. Raybould, Mr. Van Der Meulen, Mr. Van Stone, and Chairman Chase were present. Just after 9 a.m., Mr. Cuddy arrived and Mr. Stevenson joined via conference call. Guests present were: Eric Landsberg, Dan Temple, Alan Christy, Peter Anderson, Jan Christensen, Douglas Croft, Todd Glindeman, Matt Uranga, Harmon Horton, Brandi Horton, Vernon Lolley, Tom Harvey, Rich Reavis, Jon Bowling, Kresta Davis-Butts, Wayne Shepherd, David Sonnentag, Kevin Tan, Ed Squires, John Simpson, Jairo Hernandez, Jordan Nielsen, Dautis Pearson, Marie Kellner, Meghann Donley, Julie Wright, and Rick Haener. IDWR staff present were: Stuart Van Greuningen, Rick Collingwood, Randy Broesch, Neeley Miller, Mat Weaver, Gary Spackman, Wesley Hipke, Jennifer Sukow, Sean Vincent, Craig Tesch, Dennis Owsley, Cynthia Bridge Clark, Brian Patton and Jennifer Strange.

During the Work Session the following items were discussed:

- Status reports on the A&B Irrigation District pipeline were given by Bruce Sandoval and Dan Temple.

- A presentation was given by Eric Landsberg on a Mountain Home Air Force Base water supply project. Introductions were by Mr. Patton and Mr. Broesch.

- A presentation was given by Christian Petrich of SPF on the Treasure Valley Water Demand Study. Introduction was by Mr. Patton.

- Two presentations were given on ground water modeling for the Wood River and Treasure Valley areas by Mr. Vincent.

- Harmon Horton and Vernon Lolley discussed water supply issues in the Weiser River Basin and potential improvement projects to the Lost Valley and Crane Creek Dams. Introduction given by Ms. Bridge Clark.

- Two presentations were given by Idaho Power representatives Rick Haener and Kresta Davis-Butts. Jon Bowling introduced the presenters as well as presented a check for $5,000 to the Board for the Swan Falls Forecasting Tool.

- An update on ESPA Recharge was given by Mr. Hipke.
- An annual report on the Water Supply Bank was given by Mr. Buyer.
- A presentation on Priest Lake was provided by Ms. Bridge Clark.

No action was taken by the Board during the Work Session. The session adjourned at 4:30 p.m.

March 18, 2016

IWRB Meeting 2-16

At 8:00 a.m. Chairman Chase called the meeting to order. All members were present, except Mr. Stevenson who joined via conference call.

Agenda Item No. 1: Roll Call

Board Members Present

Roger Chase, Chairman
Vince Alberdi, Secretary
Bert Stevenson—via conference call
Chuck Cuddy
Jeff Raybould, Vice-Chairman
Pete Van Der Meulen
Dale Van Stone
Albert Barker

Staff Members Present

Brian Patton, Bureau Chief
Neeley Miller, Senior Planner
Rick Collingwood, Planning Engineer
Remington Buyer, WSB Coordinator
Randy Broesch, Planning Engineer
Garrick Baxter, Attorney General
Cynthia Bridge Clark, Water Projects Section Manager
Morgan Case, Northern Region Manager
Wesley Hipke, Recharge Project Manager
Sean Vincent, Hydrology Section Manager
Jennifer Strange, Admin Assistant
Ken Neely, Hydrology Supervisor

Guests Present

Teri Murrison, ISWCC
Chuck Pentzer, ISWCC
Dale Ralston, Ralston Hydrologic
Peter Anderson, Trout Unlimited
Lynn Tominaga, IGWA
Ann Vonde, Dept Attorney Gen.
Doug Zenner, Nez Perce County
Robin Nimmer, Terra Graphics
Jon Bowling, Idaho Power

Agenda Item No. 2: Agenda and Approval of Minutes 1-16

There were no changes to the agenda.

Mr. Barker moved to adopt the minutes for Meeting 1-16. Mr. Alberdi seconded the motion. Voice vote. All were in favor. Motion carried.

Agenda Item No. 3: Public Comment

From the Soil & Water Conservation Commission, Chuck Pentzer provided a presentation on the CREP Program. The presentation included a brief history of the program; a current view of the program; and improvements for adding water savings. Lynn Tominaga also spoke to the Board about the CREP program. He requested that the Board provide a letter of support for an update and change to the program. Mr. Tominaga stated there is no cost to the IWRB to provide a letter of support. There was

discussion among the Board members. Funds needed for these changes are expected to come from FSA. Questions arose pertaining to term sheet agreements for current or future CREP members. Chairman Chase said he would put together a letter of support that would state the Board has no financial obligations and that this cannot affect term sheet agreements.

Agenda Item No. 4: Legislative Update

Mr. Baxter provided updates on various pieces of legislation that could affect the Department. Questions were asked about the Ground Water Management Areas bill (HB595). Mr. Barker suggested that SJM 106, regarding the Columbia River Treaty, would be an important piece of legislation to watch. There was some discussion on the treaty. Mr. Patton suggested that Jim Yost from the Idaho branch of the Northwest Power and Conservation Council be asked to provide an update to the Board.

No actions were taken by the Board.

Agenda Item No. 5: Financial Status

Mr. Patton provided an update on the Board's financial status as of March 1, 2016. Chairman Chase asked about the remainder of the Aquifer Fund. Mr. Patton stated that a Finance Committee meeting will be planned for April or May. There was discussion on the location for that planned meeting.

Mr. Patton provided a resolution to payoff Dworshak bonds in full. Mr. Raybould moved to adopt the Resolution as written. Mr. Van Stone seconded the motion. Roll call vote: Mr. Alberdi: Aye; Mr. Barker: Aye; Mr. Cuddy: Aye; Mr. Raybould: Aye; Mr. Stevenson: Absent; Mr. Van Der Meulen: Aye; Mr. Van Stone: Aye; Chairman Chase: Aye. 7 Ayes. Motion passed.

Agenda Item No. 6: Sustainability Policy

Mr. Miller provided a briefing on the State Sustainability Policy. There was discussion about available and proposed hearing dates and locations. He stated there will be a proposal brought before the board meeting in May.

No actions were taken by the Board.

Agenda Item No. 7: Lewiston Regional Deep Aquifer Investigation

Mr. Miller introduced the presentation and provided some background. A resolution for a study of the Lewiston Regional Deep Aquifer was included in the materials.

Commissioner Doug Zenner said a study regarding the declining aquifer is needed. Dr. Dale Ralston discussed the hydrogeology and some history on the Lewiston deep aquifer. Board members asked questions related to domestic wells in the area. Mr. Ken Neely provided information about the procedures necessary in drilling a well in the GWMA. Board Member Barker provided clarification on the rules of drilling a domestic well.

Dr. Ralston presented a plan for a one year study of the deep ground water resources for $90,000. The focus would be to identify possible recharge sites. There was some discussion about the costs involved.

Mr. Cuddy moved to adopt the resolution. Mr. Van Stone seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 8 Ayes. Motion passed. The resolution was adopted.

Agenda Item No. 8: Water Transaction Program

Ms. Case presented a resolution to provide funding not to exceed $8,000.00 to fund an appraisal in the matter of the Badger Creek water transaction. Mr. Van Stone asked about the funding sources and for clarification on the amount expected from the Board for the appraisal.

Mr. Raybould moved to adopt the resolution approving the appraisal. Mr. Van Der Meulen seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. Motion passed. The resolution was adopted.

Mr. Barker had some final comments about the expense involved in appraisals. He asked whether it is necessary to perform appraisals on small purchases. A legal interpretation of the need was requested to determine whether there are options to streamline the appraisal process for lower cost projects.

Ms. Case presented a resolution to make a funding commitment in the matter of the Pole Creek water transactions contract. The request was for $60,250.00. There was some discussion among the members.

Mr. Van Der Meulen moved to adopt the resolution. Mr. Cuddy seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 8 Ayes. Motion passed. The resolution was adopted.

The Bohannon Creek water transaction resolution was presented.

Mr. Van Stone moved to adopt the resolution. Mr. Raybould seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 8 Ayes. Motion passed. The resolution was adopted.

Ms. Cassel presented a resolution for a Bar G Farm lease along the Pahsimeroi River.

Mr. Alberdi moved to adopt the resolution. Mr. Raybould seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 8 Ayes. Motion passed. The resolution was adopted.

Ms. Cassel presented a resolution to provide funding for Pratt Creek water transaction. Mr. Van Stone asked about the payment schedule. There was some discussion on the funds.

Mr. Van Der Meulen moved to adopt the resolution. Mr. Cuddy seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 8 Ayes. Motion passed. The resolution was adopted.

Agenda Item No. 9: ESPA Recharge

Mr. Hipke presented two resolutions for Aquifer Stabilization. He provided a timeline for some upcoming work. There was some discussion among the Board members.

Mr. Van Stone moved to adopt a resolution to approve funds for design of recharge infrastructure improvements on the North Side Canal Company. Mr. Alberdi seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 8 Ayes. Motion passed. The resolution was adopted.

Mr. Hipke presented the second resolution for the AFRD2 Recharge site. The funding will expedite the project and remove obstacles.

Mr. Raybould moved to adopt the resolution. Mr. Van Stone seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 8 Ayes. Motion passed. The resolution was adopted.

Agenda Item No. 10: Priest Lake

Ms. Bridge Clark brought a resolution before the board to provide funding for Priest Lake. Mr. Van Stone discussed the importance of this resolution to the region. Mr. Barker suggested that property rights impacts need to be included in the study.

Mr. Van Stone moved to adopt the resolution up to $300,000.00. Mr. Cuddy seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 8 Ayes. Motion passed. The resolution was adopted.

Agenda Item No. 11: Director's Report

Mr. Patton provided the Director's Report. He gave updates on the Department's budget. There was a question on the Cigarette Tax funds. The allocated budget amount from JFAC is expected to be $12.5 million this next fiscal year. He discussed specific areas that will receive funding in the Department. There was discussion about selling Pristine Springs. Mr. Alberdi suggested a letter be sent to CSI in Twin Falls and the City of Twin Falls that would outline the directive.

An update was provided on the Eastern Snake Plain Settlement Agreement between IGWA ground water districts and the Surface Water Coalition.

Finally, there was some discussion on the current snow pack for the state. It was asked if cloud seeding monies were included in the budget. Mr. Jon Bowling addressed the Board on new plans for additional cloud seeding. He said that they are still in preliminary discussions on expansion throughout the State.

Agenda Item No. 12: Non-Action Items for Discussion

Mr. Cuddy shared with the Board some information that he received from the Spokane River Forum. He noticed that there is a watershed project that includes Idaho; and he suggested that we remain informed. Mr. Miller provided more information on this project. It was suggested to send a letter to the partners of the project, including the Idaho Dept of Lands.

Agenda Item No. 13: Next Meeting & Adjourn

The Board agreed to meet again May 19 & 20, 2016 in Boise. Then the next meeting will be July 21 and 22, 2016 with a plan for a field trip to Priest Lake. Finally, there was a reminder of the Water Users Association meeting in June in Sun Valley.

Mr. Van Stone moved to adjourn. Mr. Raybould seconded the motion. Voice Vote. All were in favor. Chairman Chase adjourned the meeting at approximately noon.

Respectfully submitted this 20th day of May, 2016.

_____

Vince Alberdi, Secretary

_____

Jennifer Strange, Administrative Assistant

Board Actions:

1. Mr. Barker moved to adopt Minutes 1-16. Mr. Alberdi seconded the motion. Voice Vote. All were in favor. Motion carried.

2. Mr. Raybould moved to adopt the resolution to commit funds and pay in full revenue bond associated with the Dworshak Small Hydroelectric Project. Mr. Van Stone seconded the motion. Roll Call Vote. 7 Ayes. Motion passed.

3. Mr. Cuddy moved to adopt a resolution to allocate funds in the matter of a hydrogeologic analysis of the eastern and southern portions of the Lewiston ground water management area in Idaho. Mr. Van Stone seconded the motion. Roll Call Vote. 8 Ayes. Motion passed.

4. Mr. Raybould moved to adopt a resolution to make a funding commitment in the matter of the Badger Creek water transaction. Mr. Van Der Meulen seconded the motion. Roll Call Vote. 8 Ayes. Motion passed.

5. Mr. Cuddy moved to adopt a resolution to make a funding resolution in the matter of the Pole Creek water transaction contract. Mr. Van Der Meulen seconded the motion. Roll Call Vote. 8 Ayes. Motion passed.

6. Mr. Van Stone moved to adopt a resolution to make a funding commitment in the matter of the 2016 Bohannon Creek water transaction contract. Mr. Raybould seconded the motion. 8 Ayes. Motion passed.

7. Mr. Alberdi moved to adopt a resolution to make a funding commitment in the matter of the Little Mud Creek and Pahsimeroi River water transaction. Mr. Raybould seconded the motion. Roll Call Vote. 8 Ayes. Motion passed.

8. Mr. Van Der Meulen moved to adopt a resolution to make a funding commitment in the matter of the Pratt Creek water transaction. Mr. Cuddy seconded the motion. Roll Call Vote. 8 Ayes. Motion passed.

9. Mr. Van Stone moved to adopt a resolution to approve funds for recharge infrastructure improvements in the matter of Aquifer Stabilization and Eastern Snake Plain Aquifer recharge on the North Side Canal Company. Mr. Alberdi seconded the motion. Roll Call Vote. 8Ayes. Motion passed.

10. Mr. Raybould moved to adopt a resolution to approve funds for recharge infrastructure improvements in the matter of Aquifer Stabilization and Eastern Snake Plain Aquifer Recharge at the AFRD2 site. Mr. Van Stone seconded the motion. Roll Call Vote. 8 Ayes. Motion passed.

11. Mr. Van Stone moved to adopt a resolution to commit funds and provide signatory authority in the matter of Priest Lake Improvement Projects. Mr. Cuddy seconded the motion. Roll Call Vote. 8 Ayes. Motion passed.

MATERIALS MAY BE PROVIDED AT THE

IWRB MEETING

MEMO

To: Idaho Water Resource Board
From: Brian Patton
Subject: Financial Status Report
Date: May 11, 2016

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

Revolving Development Account (main fund)		
Committed or earmarked but not disbursed		
Loans for water projects	$3,781,547	
Water storage studies	1,153,361	
Priest Lake Improvement Study	300,000	
HB479 2014		
Mountain Home	1,434,007	
Galloway	1,912,500	
Boise/Arrowrock	1,122,311	
Island Park	2,500,000	
Water supply Bank	339,715	
Total committed/earmarked but not disbursed		12,543,331
Loan principal outstanding		14,885,561
Uncommitted balance		(881,667)
Estimated revenues next 12 months		3,500,000
Commitments from revenues next 12 months		0
Estimated uncommitted funds over next 12 months		2,618,333
Rev. Dev. Acct. Bell Rapids Sub-Account		
Committed but not disbursed		$152,893
Estimated revenues next 12 months *(1)*		1,000
Commitments from revenues over next 12 months		1,000
Estimated uncommitted funds over next 12 months		0
Rev. Dev. Acct. Aqualife Sub-Account		
Loan principal outstanding		2,900,000
Estimated revenues next 12 months *(1)*		2,900,000
Estimated uncommitted funds over next 12 month		2,900,000
Rev. Dev. Acct. Pristine Springs Sub-Account (5)		
Committed but not disbursed		
Repair/Replacement Fund		$1,007,428
To go to Aquifer Planning Fund		358,004
Loan principal outstanding		5,958,320
Uncommitted balance		0
Estimated revenues next 12 months		1,000,000
Commitments from revenues over next 12 months		1,000,000
Estimated uncommitted funds over next 12 months		0

Rev. Dev. Acct. Treasure Valley & Rathdrum Prairie CAMP Sub-Account		
Committed but not disbursed		$5,000
Available for RP and TV CAMP projects		168,745
Estimated revenues next 12 months (5)		200,000
Estimated Available funds over next 12 months		368,745
Rev. Dev. Acct. Upper Salmon/CBWTP Sub-Account		
Committed but not disbursed		$3,069,837
(Upper Salmon flow enhancement/reconnect projects)		
Estimated revenues next 12 months *(4)*		10,000
Commitments from revenues over next 12 months		10,000
Estimated available funds over next 12 months		0
Rev. Dev. Acct. Water District 02 Water Smart Grant Sub-Account (6)		
Committed but not disbursed		$66,085
(Water District 02 Measurement Devices)		
Commitments from revenues over next 12 months		$66,085
Estimated available funds over next 12 months		0
Rev. Dev. Acct. Water Supply Bank Sub-Account (7)		
Committed but not disbursed		$447,899
(Owners share – water bank lease/rentals)		
Estimated revenues next 12 months		1,000
Commitments from revenues over next 12 months		$447,899
Estimated available funds over next 12 months		$1,000
Rev. Dev. Acct. ESPA Sub-Account		
Committed but not disbursed		
CREP	2,419,581	
Aquifer recharge	337,594	
Bell Rapids	361,620	
Palisades storage	10,000	
Black Canyon Exchange	485,749	
Total committed but not disbursed		$3,614,643
Loan principal outstanding		256,172
Uncommitted balance		487,650
Estimated revenues next 12 months		100,000
Commitments from revenues over next 12 months		0
Estimated uncommitted funds over next 12 months		587,650
Rev. Dev. Acct. Dworshak Hydropower (2)		
Committed but not disbursed (repair fund, etc.)		$1,337,151
Estimated revenues next 12 months *(3)*		200,000
Commitments from revenues over next 12 months		200,000
Estimated uncommitted funds over next 12 months		0
Water Management Account		
Committed but not disbursed:		$111,376
Loan principal outstanding		0
Uncommitted balance		9,915
Estimated revenues next 12 months		0
Commitments from revenues over next 12 months		0
Estimated uncommitted funds over next 12 months		$9,915

Secondary Aquifer Management Fund

Committed or earmarked but not disbursed:	
HB 479 2014 Northern Idaho Future Water Needs	299,274
Cloud Seeding	509,992
Public Information Services (Steubner)	36,480
Other	261,045
Loan – ESPA Ground Water Districts	0
FY2016 Budgeted Funds	
ESPA managed recharge expenses	1,107,435
ESPA managed recharge infrastructure	4,499,586
ESPA managed recharge engineering	300,000
Administrative	47,566
GW conservation grants in priority aquifers	172,778
Reserved for projects in other priority aquifers	1,000,000
Total Committed or earmarked	$8,234,156
Loan principal outstanding	4,000,000
Uncommitted balance	$3,335,885
Estimated revenues next 12 months	7,500,000
Commitments from revenues over next 12 months	0
Estimated uncommitted funds over next 12 months	10,835,885

Secondary Aquifer Fund Aquifer Mon. Meas. & Model Sub-Acct (8)

Committed but not disbursed	$210,380
Commitments from revenues over next 12 months	$210,380
Estimated available funds over next 12 months	0

Total committed/earmarked but not disbursed	**$31,158,185**
Total loan principal outstanding	**28,000,053**
Total uncommitted balance	**3,120,527**
Total estimated uncommitted funds over next 12 months	**17,321,528**

(1) Exclusive of pass-through payments made by the U.S. Bureau of Reclamation.
(2) Excess funds generated by the Dworshak Hydropower Project are deposited into the Revolving Development Account (Main Fund) on a monthly basis. To the date of this report this has totaled $2,065,365.
(3) This line item includes power sales and interest income after removing debt service. Debt service is paid prior to the funds being deposited in the Revolving Development Account.
(4) Exclusive of project funds provided by Bonneville Power Administration or federal appropriation sources. These funds are provided to the Board based on individual project proposals and so are not included in the income projection.
(5) Excess funds generated by the Pristine Springs Project are deposited into the Revolving Development Account (Main Fund) or into the Rathdrum Prairie/Treasure Valley Sub Account.
(6) Pass-through for Bureau of Reclamation grant to assist with installation of measurement devices in Water District 02.
(7) Pass-through for owners share of Water Supply Bank lease/rentals. Interest earned accrues to IWRB.
(8) Source is Pristine Springs loan repayments of $716,000.

Staff will be updating the Secondary Aquifer Fund reporting to more of a budget-tracking format from a balance sheet format. We should be rolling that out over the next few months.

The following is a list of potential loans:

Potential Applicant	Potential Project	Preliminary Loan Amount	Comment
Producers irrigation Company	Replacement wells	$200,000	At May IWRB meeting
Dalton Water	System improvements	$1,000,000	
Marysville Irrigation Company/North Fremont	Gravity pipeline system – next phase	$1.5 million	Project in planning and design. Applying for NRCS cost share grants
Big Wood Canal Co.	Gravity pipelines	$2 million	Project in planning

IDAHO WATER RESOURCE BOARD
Sources and Applications of Funds
as of March 31, 2016
REVOLVING DEVELOPMENT ACCOUNT

Original Appropriation (1969)		$500,000.00
Legislative Audits		($49,404.45)
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		$7,847,673.02
Interest Earned State Treasury (Transferred)		$1,664,486.45
Filing Fee Balance		$47,640.20
Bond Fees		$1,469,601.45
Arbitrage Calculation Fees		($12,000.00)
Protest Fees		($770.00)
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		$27,357.59
Attorney fees for Jughandle LID		($3,600.00)
Attorney fees for A&B Irrigation		($4,637.50)
Water Supply Bank Receipts		$4,964,368.78
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		($1,229,460.18)
Weiser Galloway Study - US Army Corps of Engineers		($1,597,099.12)
Boise River Storage Feasibility Study		($333,000.00)
Geotech Environmental (Transducers)		($6,402.61)
Legislative Appropriation 2014, HB 479 Sec 1 and 2		$10,500,000.00
Appraisal (LeMoyne Appraisal LLC)		($10,500.00)
Payment to JR Simplot Co for water rights		($2,500,000.00)
IWRB WSB Lease Application		($750.00)
Mountain Home Misc Costs		($89,761.59)
Galloway Dam & Reservoir Project (HB 479)		($124,708.68)
Water District 02 Assessments for Mtn Home		($2,078.61)
Boise River (Arrowrock Enlargement) Feasibility Study (HB479)		($543,999.96)
Water Supply Bank Computer Infrastructure (HB 479)		($223,899.50)
Treasureton Irrigation Ditch Co		($5,000.00)
Aqualife Hatchery Sub-Account		
Aqualife Hatchery, HB644, 2014		($1,885,000.00)
Aqualife Lease receipt from Seapac		$114,720.00
Tax Payments		($1,419.15)
Lemoyne Appraisal for Aqualife facility		($10,500.00)
Loans Outstanding		
ESPA Ground Water Districts (Aqualife purchase)	$2,900,000.00	
Total Loans Outstanding	$2,900,000.00	
Balance Aqualife Hatchery Sub-Account		**($1,782,199.15)**
Bell Rapids Water Rights Sub-Account		
Legislative Appropriation 2005, HB392		$21,300,000.00
Interest Earned State Treasury		$692,937.34
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 Water District 02 Assessments		($27,903.60)
Payment for Ongoing Bell Rapids Finance Costs (trustee fees, water bank, etc.)		($6,740.10)
Commitments		
Ongoing Bell Rapids Finance Costs (trustee fees, WD02)		$152,893.18
Committed for alternative finance payment		$0.00
Total Commitments		$152,893.18
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		$36,651.59
Loan Interest		$2,116,784.68
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		$4,041,679.61
Appraisal		($25,500.00)

Insurance		($41,078.25)	
Recharge District Assessment		($26,605.25)	
Water District 130 Annual Assessment		($3,841.45)	
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)	
Payment to MWH Americas Inc		($11,326.27)	
Payment to Dan Lafferty Contruction		($16,846.68)	
Telemetry Station Equipment		($15,193.92)	
Rein Tech LLC (Satellite phone annual payment)		($1,980.00)	
Standley Trenching (Trac system for communication equip)		($2,863.99)	
Property Taxes and other fee assessments (Jerome County)		($9,676.95)	
Rental Payments		$1,589,334.18	
Payments to Scott Kaster		($122,003.40)	
Utility Payments (Idaho Power)		($37,748.06)	
Costs for property maintenance		($193,171.70)	
Travel costs for property maintenance		($383.31)	
Pipeline repair (IGWA)		($170,000.00)	
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)	
Transferred to Secondary Aquifer Fund (2013 Legislature; HB 270)		($716,000.00)	
Transferred to Secondary Aquifer Fund (2014 Legislature; HB 618)		($716,000.00)	
Transferred to Aquifer Planning Fund (2015 Legislature; HB 273)		($716,000.00)	
Pristine Springs Hydropower Projects			
Net power sales revenues		$602,633.75	
Pristine Springs Committed Funds			
To be transferred to Aquifer Planning Fund	358,004.00		
Repair/Replacement Fund	$1,007,427.96		
TOTAL COMMITTED FUNDS	$1,365,431.96		
Loans Outstanding			
North Snake and Magic Valley Ground Water Districts	$5,958,320.39		
Total Loans Outstanding	$5,958,320.39		
Funds to RP CAMP & TV CAMP Sub-Account		**$271,672.34**	
Pristine Springs Revenues into Main Revolving Development Account			**$221,260.28**
Rathdrum Prairie CAMP & Treasure Valley CAMP Sub-Account			
Pristine Springs Hydropower and Rental Revenues		$271,672.34	
Interest Earned State Treasury		$573.11	
Spokane River Forum		($8,000.00)	
Treasure Valley Water Quality Summit		($500.00)	
Kootenai-Shoshone Soil & Water Cons. Dist. - Agrimet Station		($20,000.00)	
Rathdrum Prairie-Spokane Valley Aquifer Pumping Study (CON00989)		($70,000.00)	
Committed Funds			
Kootenai-Shoshone Soil & Water Cons. Dist. - Agrimet Station	$0.00		
Spokane River Forum	$5,000.00		
Rathdrum Prairie-Spokane Valley Aquifer Pumping Study	$0.00		
Treasure Valley Water Quality Summit	$0.00		
TOTAL COMMITTED FUNDS	$5,000.00		
Balance Rathdrum Prairie CAMP & Treasure Valley CAMP Sub-Account		**$168,745.45**	
Upper Salmon/CBWTP Sub-Account			
Water Transaction Projects Payment Advances from CBWTP/Accord		$3,376,193.09	
PCSRF Funds for Administration of Non-Diversion Easements on Lemhi River		$225,482.76	
Interest Earned State Treasury		$103,662.55	
Transfer to Water Supply Bank		($55,548.12)	
Change of Ownership		($600.00)	
Alturas Lake Creek Appraisal		($8,989.23)	
Payments for Water Acquisition		($797,852.42)	
Committed Funds			
Administration of Non-Diversion Easements on Lemhi River	$134,132.19		
Alturas Lake Creek (Breckenridge)	($0.00)		
Bayhorse Creek (Peterson Ranch)	$33,403.46		
Beaver Creek (DOT LLP)	$0.00		
Big Hat Creek	$0.00		
Big Timber Tyler (Leadore Land Partners)	$497,761.30		
Canyon Creek/Big Timber Creek (Beyeler)	$459,528.47		
Fourth of July Creek (Vanderbilt)	$18,437.16		
Iron Creek (Phillips)	$0.00		
Iron Creek (Koncz)	$242,984.27		
Kenney Creek Source Switch (Gail Andrews)	$25,426.43		
Lemhi - Big Springs (Merrill Beyeler)	$62,818.25		
Lemhi River & Little Springs Creek (Kauer)	$22,062.27		
Little Springs Creek (Snyder)	$294,681.45		
Lower Eighteenmile Creek (Ellsworth Angus Ranch)	$1,777.78		
Lower Lemhi Thomas (Robert Thomas)	$1,800.00		
P-9 Bowles (River Valley Ranch)	$312,656.46		
P-9 Charlton (Sydney Dowton)	$20,694.83		
P-9 Dowton (Western Sky LLC)	$247,989.83		
P-9 Elzinga (Elzinga)	$306,743.16		
Patterson-Big Springs (PBSC9)	$193,385.01		
Spring Creek (Richard Beard)	$1,628.64		
Spring Creek (Ella Beard)	$2,387.07		
Whitefish (Leadore Land Partners)	$189,538.72		
Total Committed Funds	$3,069,836.75		
Balance CBWTP Sub-Account		**($227,488.12)**	
Water District 02 WaterSmart Grant Sub-Account			
Received from BOR		$137,685.37	
Payments made to contractors		($151,404.43)	
Committed Funds:			
Grant Approval	$66,085.24		
Total Committed Funds	$66,085.24		
Balance WaterSmart Grant Sub-Account		**($13,719.06)**	

Water Supply Bank Sub-Account			
Interest Earned State Treasury			$1,316.12
Payments received from renters for 2013 season			$529,823.25
Payments received from renters for 2014 season			$609,120.41
Payments received from renters for 2015 season			$585,885.61
Payments received from renters for 2016 season			$474,246.95
Payments made to owners for 2013 season			($522,645.12)
Payments made to owners for 2014 season			($599,422.75)
Payments made to owners for 2015 season			($582,864.66)
Water Supply Bank Sub-Account Subtotal			**$495,459.81**
Committted Funds:			
Owners Share	$447,899.26		
Total Committed Funds	$447,899.26		
Balance Water Supply Bank Sub-Account			**$47,560.55**
Eastern Snake Plain Sub-Account			
Legislative Appropriation 2005, HB392			$7,200,000.00
Legislative Appropriation 2005, HB392, CREP Program			$3,000,000.00
Interest Earned State Treasury			$1,900,787.93
Loan Interest			$227,251.91
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			($3,516,544.76)
Reimbursement from BOR for Palisades Reservoir			$2,381.12
W-Canal Project Costs			($326,834.11)
Black Canyon Exchange Project Costs			($115,276.00)
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)
Additional recharge projects preliminary development			($28,909.30)
Pristine Springs Cost Project Costs			($6,863.91)
Loans and Other Commitments			
Commitment - Remainder of Bell Rapids Water Rights Purchase (1)			$361,620.00
Commitment - CREP Program (HB392, 2005)			$2,419,580.50
Commitment - Additional recharge projects preliminary development			$337,594.00
Commitment - Palasades Storage O&M			$10,000.00
Commitment - Black Canyon Exchange Project (fund with ongoing revenues)			$485,848.95
Total Loans and Other Commitments			$3,614,643.45
Loans Outstanding:			
American Falls-Aberdeen GWD (CREP)	$87,332.55		
Bingham GWD (CREP)	$0.00		
Bonneville Jefferson GWD (CREP)	$47,835.17		
Magic Valley GWD (CREP)	$83,345.10		
North Snake GWD (CREP)	$37,658.96		
TOTAL ESP LOANS OUTSTANDING	$256,171.78		
Uncommitted Balance Eastern Snake Plain Sub-Account			**$487,649.53**
Dworshak Hydropower Project			
Dworshak Project Revenues			
Power Sales & Other	$6,539,006.49		
Interest Earned State Treasury	487,156.77		
Total Dworshak Project Revenues			$7,026,163.26
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	$2,138,039.86		
Powerplant Repairs	$58,488.80		
Bond payoff	$391,863.11		
Capital Improvements	$318,366.79		
FERC Payments	$57,795.61		
Total Dworshak Project Expenses			($3,653,646.98)
Dworshak Project Committed Funds			
Emergency Repair/Future Replacement Fund	$1,314,575.00		
FERC Fee Payment Fund	$22,576.30		
Total Dworshak Project Committed Funds			$1,337,151.30
Excess Dworshak Funds into Main Revolving Development Account			
			$2,035,364.98
TOTAL			**$26,547,225.10**

Loans Outstanding:	Amount Loaned	Principal Outstanding
A&B Irrigation District (18-July-14; pipeline and conversion project)	7,000,000	$6,879,256.78
Aberdeen-Springfield Canal Company (WRB-491; Diversion structure)	$329,761	$126,593.43
Boise City Canal Company (WRB-492)...Grove St Canal Rehab	$110,618	$0.00
Bonnie Laura Water Corporation (14-Jul-06; Well repairs)	$71,000	$15,890.80
Canyon County Drainage District No. 2 (28-Nov-12; Drain tile pipeline	$35,000	$26,316.76
Challis Irrigation Company (28-Nov-07; river gate replacement)	$50,000	$15,331.99
Chaparral Water Association (21-Jan-11; Well deepening & improvem	68,000	$19,351.03
Clearview Water Company	50,000	$50,000.00
Cloverdale Ridge Water Corp. (irrigation system rehab 25-sep-09)	106,400	$41,176.11

Consolidated Irrigation Company (July 20, 2012; pipeline project).....	2,000,000	$2,000,000.00	
Country Club Subdivision Water Association (18-May-07, Well Project).	$102,000	$24,008.22	
Cub River Irrigation Company (18-Nov-05; Pipeline project).....	$1,000,000	$0.00	
Cub River Irrigation Company.....	$500,000	$0.00	
Enterprise Irrigation District (14-Jul-06; Pipeline project).....	$37,270	$4,644.00	
Enterprise Irrigation District (North Lateral Pipeline).....	$105,420	$27,562.12	
Firth, City of.....	$112,888	$0.00	
Foothills Ranch Homeowners Association (7-oct-11; well rehab).....	$150,000	$115,604.39	
Harvest Valley Homeowners Association (22-Mar-13; Pump Replaceme	4,500.00	$1,329.43	
Jefferson Irrigation Company (well deepenings).....	$207,016	$0.00	
Jefferson Irrigation Company (9-May-2008 Well Replacement).....	$81,000	$41,020.66	
Jughandle HOA/Valley County Local Improvement District No. 1 (well p	$907,552	$664,623.59	
King Hill Irrigation District (24-Sep-10; Pipeline replacement_.....	$300,000	$70,806.38	
Lake Reservoir Company (29-July-11; Payette Lake-Lardo Dam Outle	$594,000	$146,009.05	
Last Chance Canal Company (WRB-497).....	$500,000	$28,326.23	
Last Chance Canal Company (14-July-2015, diversion dam rebuild).....	2,500,000.00	$971,250.39	
Lava Hot Springs, City of.....	$347,510	$111,313.81	
Lindsay Lateral Association (Engineering Design Project & Pipeline Stu	$19,700	$14,390.00	
Live-More Lake Community (9-Jun-04).....	$42,000	$13,432.26	
Lower Payette Ditch Company (2-Apr-04; Diversion dam replacement)	$875,000	$0.00	
Marsh Center Irrigation Company (13-May-05; Hawkins Dam).....	$236,141	$98,522.65	
Marysville Irrigation Company (18-May-07, Pipeline Project Phase 1)....	$625,000	$181,184.65	
Marysville Irrigation Company (9-May-08, Pipeline Project Phase 2).....	$1,100,000	$384,440.08	
Meander Point Subdivsion Homeowners Association (7-Sep-07; comn	$330,000	$20,283.69	
North Fremont Canal Systems (25-Jan-13; Marysville Project).....	$2,500,000	$2,000,000.00	
Outlet Water Association (22-Jan-16; new well & improvements).....	100,000.00	$71,040.11	
Pinehurst Water District (23-Jan-15).....	100,000	$95,031.11	
Point Springs Grazing Association (July 20, 2012; stock water pipeline)	48,280.00	$39,899.82	
Preston-Whitney Irrigation Company (29-May-09; Fairview Lateral Pipe	$800,000	$45,292.32	
Producers Irrigation Company (17-Mar-06; well replacements).....	$185,000	$11,729.65	
Ranch Subdivision Property Owners Assoc.....	$24,834	$2,587.83	
Riverside Independent Water District	$350,000	$122,045.42	
Skin Creek Water Association.....	$188,258	$63,137.75	
Spirit Bend Water Association.....	$92,000	$16,402.57	
Sunset Heights Water District (17-May-13; Exchange water project)...	$48,000	$35,035.30	
Twin Lakes Canal Company (Winder Lateral Pipeline Project).....	$500,000	$267,629.45	
Twin Lakes Canal Company (Bear River Narrows).....	$90,000	$11,296.22	
Whitney-Nashville Water Company.....	$225,000	$11,764.94	
TOTAL LOANS OUTSTANDING.....			**$14,885,560.99**

Loans and Other Funding Obligations:

Legislative Appropriation 2014, HB 479 Sec 1 and 2		
Mountain Home AFB Water Rights (HB479).....	$1,434,007.73	
Galloway Dam & Reservoir Project (HB 479).....	$1,912,390.00	
Boise River (Arrowrock Enlargement) Feasibility Study (HB479).....	$1,122,310.89	
Island Park Enlargement (HB479).....	$2,500,000.00	
Water Supply Bank Computer Infrastructure (HB 479).....	$339,714.50	
Aqua Life Hatchery, HB644, 2014.....	$0.00	
Senate Bill 1511 - Teton Replacement and Minidoka Enlargement Studies.....	$678,161.82	
Boise River Storage Feasibility Study.....	$13,578.15	
Weiser-Galloway Study (28-May-10).....	$461,620.87	
Priest Lake Improvement Study (16-Mar-16).....	$300,000.00	
Bee Line Water Association (Sep 23, 2014; System Improvements).....	$600,000.00	
Dover, City of (23-Jul-10; Water Intake project).....	$194,063.00	
Last Chance Canal Company (14-July-2015, diversion dam rebuild).....	$1,528,749.61	
Outlet Water Association (22-Jan-16; new well & improvements).....	$28,959.89	
St. Johns Irrigating Company (14-July-2015; pipeline project).....	$1,429,775.00	
TOTAL LOANS AND OTHER FUNDING OBLIGATIONS.....		**$12,543,331.46**
Uncommitted Funds.....		**($881,667.35)**
TOTAL.....		**$26,547,225.10**

(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 March 31, 2016
WATER MANAGEMENT ACCOUNT

Original Appropriation (1978)	$1,000,000.00
Legislative Audits	($10,645.45)
IWRB Appraisal Study (Charles Thompson)	($5,000.00)
Transfer funds to General Account 1101(HB 130, 1983)	($500,000.00)
Legislative Appropriation (6/29/1984)	$115,800.00
Legislative Appropriation (HB988, 1994)	$75,000.00
Turned Back to General Account 6/30/95, (HB988, 1994)	($35,014.25)
Legislative Appropriation (SB1260, 1995, Aquifer Recharge, Caribou Dam)	$1,000,000.00
Interest Earned	$120,475.04
Filing Fee Balance	$2,633.31
Water Supply Bank Receipts	$841,803.07
Bond Fees	$277,254.94
Funds from DEQ and IDOC for Glenns Ferry Water Study	$10,000.00
Legislative Appropriation FY01	$200,000.00
Western States Wate Council Annual Dues	($7,500.00)
Tranfer to/from Revolving Development Account	($317,253.80)
Legislative Appropriation (SB1239, Sugarloaf Aquifer Recharge Project)	$60,000.00
Legislative Appropriation (HB 843 Sec 6)	$520,000.00
Legislative Appropriation (SB1496, 2006, ESP Aquifer Management Plan)	$300,000.00
Legislative Appropriation (HB 320, 2007, ESP Aquifer Management Plan)	$849,936.99
TOTAL	**$4,497,489.85**

Grants Disbursed:

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

Northside Estates Homeowners Association	$4,492.00	
North Tomar Butte Water & Sewer District	$3,575.18	
North Water & Sewer District	$3,825.00	
Parkview Water Association	$4,649.98	
Payette, City of	$6,579.00	
Pierce, City of	$7,500.00	
Potlatch, City of	$6,474.00	
Preston Whitney Irrigation Company	$7,500.00	
Preston & Whitney Reservoir Company	$3,606.75	
Preston & Whitney Reservoir Company	$7,000.00	
Roberts, City of	$3,750.00	
Round Valley Water	$3,000.00	
Sagle Valley Water & Sewer District	$2,117.51	
South Hill Water & Sewer District	$3,825.00	
St Charles, City of	$5,632.88	
Swan Valley, City of	$5,000.01	
Twenty-Mile Creek Water Association	$2,467.00	
Valley View Water & Sewer District	$5,000.02	
Victor, City of	$3,750.00	
Weston, City of	$6,601.20	
Winder Lateral Association	$7,000.00	
TOTAL GRANTS DISBURSED		**($1,632,755.21)**
IWRB Expenditures		
Lemhi River Water Right Appraisals	$31,000.00	
Expenditures Directed by Legislature		
Obligated 1994 (HB988)	$39,985.75	
SB1260, Aquifer Recharge	$947,000.00	
SB1260, Soda (Caribou) Dam Study	$53,000.00	
Sugarloaf Aquifer Recharge Project (SB1239)	$55,953.69	
ESPA Settlement Water Rentals (HB 843 2004)	$504,000.00	
ESP Aquifer Management Plan (SB1496, 2006)	$300,000.00	
ESP Aquifer Management Plan (HB320, 2007)	$801,077.75	
TOTAL IWRB AND LEGISLATIVE DIRECTED EXPENDITURES		**($2,732,017.19)**
WATER RESOURCE BOARD RECHARGE PROJECTS		**($11,426.88)**
CURRENT ACCOUNT BALANCE		**$121,290.57**
Committed Funds:		
Grants Obligated		
Cottonwood Point Water & Sewer Association	$0.00	
Preston - Whintey Irrigation Company	$7,500.00	
Water District No. 1 (Blackfoot Equalizing Reservoir Automation)	$35,000.00	
Legislative Directed Obligations		
Sugarloaf Aquifer Recharge Project (SB1239)	$4,046.31	
ESPA Settlement Water Rentals (HB 843, 2004)	$16,000.00	
ESPA Management Plan (SB 1496, 2006)	$0.00	
ESP Aquifer Management Plan (HB320, 2007)	$48,829.24	
TOTAL GRANTS & LOANS OBLIGATED & UNDISBURSED		**$111,375.55**

Loans Outstanding:	Amount Loaned	Principal Outstanding
Arco, City of	$7,500	$0.00
Butte City, City of	$7,425	$0.00
Roberts, City of	$23,750	$0.00
Victor, City of	$23,750	$0.00

TOTAL LOANS OUTSTANDING	**$0.00**
Uncommitted Funds	**$9,915.02**
CURRENT ACCOUNT BALANCE	**$121,290.57**

Idaho Water Resource Board
Sources and Applications of Funds
as of March 31, 2016
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
Legislative Appropriation (HB270, Sec 3)		716,000.00
Legislative Appropriation (HB479, Sec 1)		4,500,000.00
Legislative Appropriation (HB547)		10,000,000.00
Legislative Appropriation (SB1190, Sec 3) Aquifer Recharge Section 42-1780 (2)		500,000.00
Legislative Appropriation (HB479, Sec 1) Managed Recharge Infrastructure Expenses		(776,697.94)
Legislative Appropriation (HB479, Sec 1)Northern Idaho Future Water Needs Studies		(200,726.91)
Legislative Appropriation (HB547) Expenditures		(1,853,169.41)
Legislative Appropriation (SB1190, Sec 3)Aquifer Recharge Section 42-1780 (2) Expenditures		(256,479.93)
Interest Earned State Treasury (Transferred)		81,097.80
ESPA Managed Recharge Operations		(753.94)
Administrative expenses		(899.00)
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		(46,593.75)
American Falls Res. Dist#2 - MP31 Recharge Site Construction		(34,435.44)
Bond issuer Fees		(3,500.00)
Payments for 2012 Recharge		(260,031.02)
Payments for 2013 Recharge		(8,133.00)
Payments for 2014 Recharge		(19,297.00)
Payment for Recharge		(80,000.00)
Payment for High Country RC&D Cloud Seeding		(20,000.00)
Upper Snake Aircraft Cloud Seeding Pilot project		(288,378.64)
Payment for Idaho Irrigation District		(13,200.00)
Payment for Magic Valley GWD and A&B Irrig. Dist. - Walcott Recharge Engineering		(113,163.84)
Public Information Services (Steubner)		(18,898.75)
Loan - Magic Valley & North Snake GWDs (Magic Springs Pipeline)		(4,000,000.00)
Aquifer Monitoring, Measurement, and Modeling Sub-Account		
Legislative Appropriation/Funds Transfer (HB618, Sec 3)		716,000.00
Interest Earned State Treasury (Transferred)	845.59	
Personnel Costs	(203,612.77)	
Professional Services	(241,939.53)	
Equipment Purchases	(39,068.86)	
Travel Expenses	(10,722.33)	
Supplies	(6,595.38)	
Miscellaneous Expenses	(4,526.86)	
Total Expenses	(506,465.73)	
Balance Aquifer Monitoring, Measurement, and Modeling Sub-Account		**$210,379.86**
Loans Outstanding		
North Snake & Magic Valley Ground Water Districts (Magic Springs Pipeline)		$4,000,000.00
Committed Funds		
Northern Idaho Future Water Needs Studies (HB479)		299,273.09
(Rathdrum work complete; Palouse Basin committed for $100,000: Lewiston for $90,000)		
Measurement devices for AWEP conversion projects		183,544.79
High Country RC&D Cloud Seeding		0.00
Cooperative Weather Modification Program (Cloud Seeding)		492,000.00
Public Information Services (Steubner)		36,480.00
GWD Bond Prepatory Expenses		37,500.00
Fremont-Madison Irrigation District Egin Recharge		40,000.00
Upper Snake Aircraft Cloud Seeding Pilot project		17,992.99
Loan Funds Committed - ESPA Ground Water Districts (Magic Springs Pipeline)		0.00
Committed - FY2016 Budgeted Funds		
ESPA Managed Recharge Operations	1,107,435.44	
ESPA Managed Recharge Infrastructure		
Milner-Gooding Recharge Capacity Projects (Flume, MP31, Road, 28 hydro)	310,000.00	
Milner-Gooding Dietrich Drop	1,500,000.00	
Twin Falls Canal recharge improvements	0.00	
Northside canal hydro plant bypasses	2,000,000.00	
Great Feeder Canal recharge improvements	0.00	
Milner Pool Development and other Projects	0.00	
Egin Recharge Enlargement	658,058.70	
Jensens grove project	26,527.00	
SRVID Monitoring	5,000.00	
Investigation/engineering for further ESPA recharge capacity improvements	300,000.00	
Administrative expenses	47,566.00	
Ground water conservation grants in priority aquifers (Roger's proposal)	172,778.00	
(Committed $18,000 for City of Hailey; $12,212 for Sun Valley)		
Amount reserved for projects in other priority aquifers	1,000,000.00	
(Committed $60,000 for Elmore County Study; $95,000 for Swan Falls Forecasting; $15,000 for Star W&S Recharge Study)		
TOTAL FY2016 BUDGETED FUNDS	7,127,365.14	
Total Committed Funds		**$8,234,156.01**
TOTAL UNCOMMITTED FUNDS		**$3,335,883.67**
CURRENT ACCOUNT BALANCE		**$11,780,419.54**

MEMO

To: Idaho Water Resource Board
From: Brian Patton
Subject: Secondary Aquifer Planning, Management, & Implementation Fund
Date: May 9, 2016

On May 6, 2016 the IWRB Finance Committee and the IWRB Aquifer Stabilization Committee met in a joint meeting in Jerome, Idaho to consider a draft Fiscal Year 2017 Budget for the available funds in the Secondary Aquifer Planning, Management, and Implementation Fund.

The Committees reviewed progress on ESPA Managed Recharge, reviewed Fiscal Year 2016 spending, and developed a recommended FY2017 Budget based on prioritizing needs and available funds.

A resolution is attached that would approve the recommended Fiscal Year 2017 Budget for the Secondary Aquifer Planning, Management, and Implementation Fund. The recommended budget is included in the resolution as "Attachment A". The Committees reviewed the resolution, and with some amendments, provided a "do pass" recommendation to the full IWRB.

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF STATEWIDE WATER SUSTAIBILITY AND AQUIFER STABILIZATION, AND THE SECONDARY AQUIFER PLANNING, MANAGEMENT, AND IMPLEMENTATION FUND FISCAL YEAR 2017 BUDGET	A RESOLUTION

WHEREAS, House Bill 547 passed and approved by the 2014 Legislature allocates $5 million annually through 2019 from the Cigarette Tax to the Idaho Water Resource Board's (IWRB) Secondary Aquifer Planning, Management, and Implementation Fund (Secondary Aquifer Fund) for statewide aquifer stabilization; and

WHEREAS, Senate Bill 1402 passed and approved by the 2016 Legislature allocated $5 million in ongoing General Fund dollars and $2.5 million in Economic Recovery Reserve Funds to the IWRB's Secondary Aquifer Fund for statewide water sustainability and aquifer stabilization; and

WHEREAS, un-allocated funds already in the Secondary Aquifer Fund will be carried forward into the Fiscal Year 2017 budget; and

WHEREAS, many aquifers across Idaho are declining or have existing or potential conjunctive administration water use conflicts, including the Eastern Snake Plain Aquifer, the Mountain Home Aquifer, the Wood River Valley Aquifer, the Big Lost Aquifer, the Raft River Aquifer, the Malad Valley Aquifer, the Treasure Valley Aquifer, the Rathdrum Prairie Aquifer, the Palouse Basin Aquifer, the Lewiston Plateau Aquifer, and others; and

WHEREAS, the State of Idaho relies on spring discharge from the Eastern Snake Plain Aquifer (ESPA) through the Thousand Springs to assist in meeting the minimum streamflow water rights at the Murphy Gage established under the Swan Falls Agreement; and

WHEREAS, the ESPA has been losing approximately 216,000 acre-feet annually from aquifer storage since the 1950's resulting in declining ground water levels in the aquifer and declining spring flows from the aquifer; and

WHEREAS, during parts of 2013 and 2014 flows at the Murphy Gage approached the minimum flow, and in 2015 flows at the Murphy Gage went below minimum flows; and

WHEREAS, the ESPA has also been experiencing conjunctive administration water use conflicts over the past two decades that have the potential to significantly impact Idaho's economy; and

WHEREAS, on June 30, 2015 members of the Idaho Ground Water Appropriations entered into an agreement with the Surface Water Coalition whereby the ground water users agreed to reduce their consumptive use from the ESPA by 240,000 acre-feet annually and take other actions, and

WHEREAS, the 2016 Idaho Legislature passed and approved Senate Concurrent Resolution 138 supporting this agreement; and

WHEREAS, the State Water Plan includes a goal to accomplish managed recharge in the ESPA averaging 250,000 acre-feet annually; and

WHEREAS, the 2016 Idaho Legislature passed and approved Senate Concurrent Resolution 136 directing the IWRB to develop the capacity to achieve 250,000 acre-feet of annual average managed recharge to the ESPA by December 31, 2024; and

WHEREAS, the ground water use reduction and managed recharge are together designed to stabilize and then recover the ESPA; and

WHEREAS, a recent study commissioned by the IWRB predicts that approximately 160,000 to 283,000 new acre-feet of water supply may be needed to meet the DCMI needs of the growing Treasure Valley population over the next 50 years; and

WHEREAS, conjunctive administration water delivery calls have been made in the Big and Little Wood River Basins against junior-priority upstream ground water uses; and

WHEREAS, the Mountain Home aquifer is being over-drafted by about 30,000 acre-feet annually;

WHEREAS, the deep aquifer in the Palouse Basin has been declining for decades despite aggressive conservation measures; and

WHEREAS, the Department of Water Resources recently enacted Ground Water Management Areas in the Malad Valley Aquifer and the Lewiston Plateau Aquifer in response to declining ground water levels in those aquifers; and

WHEREAS, ground water levels in many aquifers are inadequate to sustain a supply of water for surface and ground water irrigation, hydropower, municipal, industrial, and other uses, the curtailment of which would cause severe economic harm to Idaho's economy; and

WHEREAS, the 2016 Idaho Legislature passed and approved Senate Concurrent Resolution 137 which recognized that stabilizing and enhancing aquifer levels is in the public interest, and directs the IWRB to take actions in aquifers across the state to stabilize and enhance aquifer levels thereby maintaining water supply for consumptive and non-consumptive uses and minimizing harm to Idaho's economy arising from water supply shortages; and

WHEREAS, on May 6, 2016 the IWRB Finance and Aquifer Stabilization Committees met in a joint meeting in Jerome, Idaho, and recommended the approval of a Fiscal Year 2017 Budget for the use of available funds in the Secondary Aquifer Fund for statewide water sustainability and aquifer stabilization purposes; and

NOW THEREFORE BE IT RESOLVED that the IWRB adopts the Fiscal Year 2017 Budget for the continuously-appropriated Secondary Aquifer Planning, Management, and Implementation Fund as shown in Attachment A to this resolution.

BE IT FURTHER RESOLVED that the budget may be adjusted if necessary based on the actual amount of Cigarette Tax funds received, interest income received, or the actual amount of carry-over from Fiscal Year 2016.

BE IT FURTHER RESOLVED that funds for budgeted ESPA managed recharge infrastructure shall be approved by the IWRB by resolution for each individual project in excess of $20,000, detailing the terms and conditions of approval, and must include conditions maintaining long-term access for recharge by the IWRB in any facilities owned by others.

BE IT FURTHER RESOLVED that expenditures for ESPA managed recharge operations, investigations and engineering for further ESPA managed recharge capacity development may proceed with no further approvals, however, the IWRB shall be kept appraised of such expenditures.

BE IT FURTHER RESOLVED that expenditures for the Treasure Valley Ground Water Model, the Wood River Ground Water Model Enhancements, and for Aquifer Monitoring Network Enhancements in Priority Aquifers, and Administrative Expenses may proceed with no further approvals, however, the IWRB shall be kept appraised of such expenditures.

BE IT FURTHER RESOLVED that expenditures for the Cooperative Cloud Seeding Program may proceed with no further approvals, however, the IWRB shall be kept appraised of such expenditures. Further, it is the IWRB's stated goal that both the state and the water users financially participate with Idaho Power in the Cooperative Cloud Seeding Program.

BE IT FURTHER RESOLVED that all other expenditures from the Secondary Aquifer Fund shall require an additional approval by the IWRB by resolution.

BE IT FURTHER RESOLVED that the IWRB may modify this budget during Fiscal Year 2017 at a properly noticed meeting of the IWRB.

_____

ROGER CHASE, Chairman

_____

VINCE ALBERDI, Secretary

ATTACHMENT A – Fiscal Year 2017 Secondary Aquifer Planning, Management, and Implementation Fund Budget

FY17 BUDGET AVAILABLE FUNDS

Projected Carry-Over From FY16		$	1,815,000
SB 1402 funds:	General Fund (ongoing)	$	5,000,000
	Economic Recovery Reserve Fund (one-time)	$	2,500,000
HB547 funds - receipt of Cigarette Tax proceeds (through 2019)		$	5,000,000
HB479 funds - remainder of North Idaho Aquifers earmark		$	109,273
Estimated interest		$	20,000
TOTAL PROJECTED TO BE AVAILABLE		**$**	**14,444,273**

BUDGET

Category	Sub-Category	FY17 Budget
ESPA MANAGED RECHARGE		
ESPA Recharge Operations	Conveyance Cost	$1,500,000
	Equipment & Supplies	$87,000
	Site Monitoring	$114,000
	Regional Monitoring	$200,000
	TOTAL	**$1,901,000**
ESPA Managed Recharge Infrastructure Projects – **Budgeted Projects**	Northside Canal recharge improvements	$4,000,000
	SWID Recharge Project	$1,000,000
	MP31 Check Dam	$1,000,000
	Egin Lakes Phase II	$500,000
Reserved for additional recharge infrastructure projects		$1,000,000
	TOTAL	**$7,500,000**
Managed Recharge Investigations – **Budgeted Investigations**	ASCC Recharge Feasibility	$300,000
	South Fork Engineering & Site Evaluation	$200,000
	NSID Recharge Feasibility	$200,000
Reserved for additional investigations and engineering		$300,000
	TOTAL	**$1,000,000**
ESPA MANAGED RECHARGE TOTAL		**$10,401,000**

(Continued)

Continued - Fiscal Year 2017 Secondary Aquifer Planning, Management, and Implementation Fund Budget

TREASURE VALLEY

Treasure Valley Aquifer Ground Water Model	$500,000
Treasure Valley Aquifer Managed Recharge Study	$200,000
Anderson Ranch Reservoir Enlargement Study	$100,000
Treasure Valley DCMI Water Conservation Study	$200,000
TREASURE VALLEY TOTAL	**$1,000,000**

WOOD RIVER VALLEY

Wood River Valley Aquifer Ground Water Model Enhancement	$200,000
WOOD RIVER VALLEY TOTAL	**$200,000**

WEISER BASIN

Weiser Basin Project	$200,000
WEISER BASIN TOTAL	**$200,000**

NORTHERN IDAHO AQUIFERS

Reserve for additional investigations related to Northern Idaho Aquifers	$109,273
NORTHERN IDAHO AQUIFERS TOTAL	**$109,273**

STATE-WIDE

Aquifer monitoring network enhancement in priority aquifers	$100,000
NRCS Snow Survey contribution	$200,000
Cooperative Cloud Seeding Program (1/3 of operations costs)	$600,000
Ground water conservation grants in priority aquifers	$200,000
Administrative expenses (public information, staff training, etc)	$75,000
STATE-WIDE TOTAL	**$1,175,000**

RESERVE FOR OTHER WORK IN PRIORITY AQUIFERS OR CARRY-FORWARD INTO FUTURE YEARS	**$1,359,000**

GRAND TOTAL	**$14,444,273**

Memorandum

To: Idaho Water Resource Board

From: Remington Buyer

Date: May 10, 2016

Re: Water District 01, 2016 Rental Pool Procedures

Action Items: The IWRB may by resolution approve the Water District 01, 2016 Rental Pool Procedures

During the 2016 annual meeting of the water users of Water District 01, the water users approved amendments to the Water District 01 Rental Pool Procedures. The following documents are provided for reference: 1) WD01 Rental Pool Procedures, Amendments; and 2) WD01 2016 Rental Pool Procedures. The first document highlights changes proposed to the rental pool procedures for 2016 while the second document reflects the amended procedures, accepted by the Water Users of Water District 01.

During the IWRB work session on May 19, 2016, Water District 01 Program Manager Tony Olenichak will brief the Board on the 2016 amendments. Additional comments pertaining to the amendments of the rental pool procedures will be delivered to the Board by representatives of the Shoshone Bannock Tribes.

Pursuant to Water Supply Bank Rule 40.05 (IDAPA 37.02.03), the Water Resource Board may by resolution approve the Water District 01, 2016 rental pool procedures. A draft resolution approving amendments to the Water District 01 Rental Pool Procedures is provided for the consideration of the Board.

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF APPROVAL OF THE WATER DISTRICT 01, 2016 RENTAL POOL PROCEDURES	))))))	A RESOLUTION

WHEREAS, section 42-1761, Idaho Code provides that the Idaho Water Resource Board shall have the duty of operating a Water Supply Bank; and

WHEREAS, section 42-1762, Idaho Code provides that the Idaho Water Resource Board shall adopt rules and regulations governing the management, control, delivery and use and distribution of water to and from the Water Supply Bank; and

WHEREAS, Water Supply Bank Rule 40.05 authorizes the Idaho Water Resource Board to approve amendments to local rental pool procedures; and

WHEREAS, the water users of Water District 01 have proposed amendments to the Water District 01, Rental Pool Procedures, for use during calendar year 2016;

NOW THEREFORE BE IT RESOLVED that the Idaho Water Resource Board approves the amendments to the Water District 01 Rental Pool Procedures.

Dated this _____ day of May, 2016.

_____
ROGER W. CHASE
Idaho Water Resource Board Chairman

Attest: _____
VINCE ALBERDI
Secretary

COMPARISON OF 2014 & 2016 RENTAL POOL PROCEDURES
Tony Olenichak, Water District #1 Program Manager – May 11, 2016

The previously approved 2014 rental pool procedures for Water District #1 have been used during the past two irrigation seasons to administer storage rentals because the proposed 2015 rental pool procedures were not approved by the IWRB in 2015. New 2016 procedures have been proposed for usage during the 2016 irrigation season to replace the approved 2014 procedures. The following summary shows the differences between the 2014 and 2016 procedures. Additions (underlined) and deletions (strike-through) are shown for the changed rules.

Rules added in 2016: 1.5, 3.4, 4.3.107, 5.6, 6.7, 7.3.101, 7.7, and 7.8
Rules modified in 2016: 5.2.104, 5.2.106, 5.2.107, 5.5.107, 5.5.108, and 7.3.102
Rules deleted in 2016: 5.4.101(e)
Rules re-numbered in 2016: 7.3.101 re-numbered to 7.3.102, and 7.3.102 re-numbered to 7.3.103
The word "computed" was added in front of the word "impact" in Rules: 2.18, 2.29, 2.32, 5.1, 5.2.101, 5.4.101(a), 5.5.107, 7.1, 7.2, 7.3, 7.3.101, 7.3.102, 7.4, 7.5, 7.6, 7.8, 8.1, 8.5.102, and 8.7.

Rule 1.5 was added to the four existing rules under LEGAL AUTHORITY (Rule 1) of the procedures.

> ***Rule 1.5*** *These procedures shall not be interpreted in any manner that is inconsistent with or would adversely impact or effect the rights of the Shoshone-Bannock Tribes as set out in the Fort Hall Agreement, the Blackfoot River Equitable Adjustment Settlement Agreement, and the 2015 Settlement Agreement between the Tribes and the Committee of Nine.*

Rule 3.4 added to the three existing rules under PURPOSES (Rule 3) of the procedures.

> ***Rule 3.4*** *To provide storage water at no cost under Rule 5.5 for the benefit of the Tribes consistent with the terms of the Blackfoot River Equitable Adjustment Settlement Agreement and the 2015 Settlement Agreement. Discussions are ongoing to identify the party responsible for mitigating impacts to the Tribes. Nothing in these Procedures should be construed as an admission of liability by Water District 1 or the Committee of Nine.*

Rule 4.3.107 added to set a deadline for rental storage usage.

> ***Rule 4.3.107 Deadline to Use Rental or Lease Storage.*** *Approved applications pursuant to Rule 4.3 or water leased through a private lease, must be used and diverted on or before December 1 of the same year.*

Rule 5.2.104 modified to require approval of delivery system operator and to clarify quantity available per each point of diversion for small rentals.

> ***Rule 5.2.104 Small Rentals.*** *The common pool will make available from participant contributions 5,000 acre-feet for rentals of ~~less than~~ 100 acre-feet or less per point of diversion, subject to the priorities and limitations set forth in Rule 5. Rentals from the small pool shall only be considered for approval following submittal of written consent from the operator of the delivery system. The Committee may approve on a case-by-case basis the additional rental of storage under this provision to exceed the 100-acre-feet limitation. The 100 acre-feet limitation per point of diversion does not apply if the rental is supplied pursuant to Rule 5.2.103.*

Rule 5.2.106 modified to clarify the participation status of the Shoshone-Bannock Tribes and to add a reference to the 2015 Settlement Agreement **(in part b)** in addition to the Blackfoot Equitable Adjustment **(in part a)** previously included in the 2014 procedure's Rule 5.2.106:

> ***Rule 5.2.106 Shoshone-Bannock Tribes.*** *The Tribes shall be treated as non-participants unless written notice is provided under 5.2.101.*
>
> a) ***Blackfoot River Equitable Adjustment Settlement Agreement Water.*** *Storage water not to exceed 20,000 acre-feet shall be made available in accordance with the terms of the Blackfoot River Equitable Adjustment Settlement Agreement. The source and funding of the storage water shall be determined by the Committee at its June meeting. Administrative fees shall be paid by Water District 1.*
>
> b) ***2015 Settlement Agreement.*** *Storage water not to exceed 10,000 acre-feet (except with the approval of the Committee of Nine) shall be made available in accordance with the terms of the 2015 Settlement Agreement from the current year's Common Pool prior to providing any rental under the priorities of Rule 5.4.101. Administrative fees shall be paid by Water District 1. Discussions are ongoing to identify the party responsible for mitigating impacts to the Tribes. Nothing in these Procedures should be construed as an admission of liability by Water District 1 or the Committee of Nine.*

Rule 5.2.107 modified to remove the 60,000 acre-feet volume limitation from the large rental supply.

> ***Rule 5.2.107 Additional Quantities.*** *~~For the 2014 season, i~~In the event rental requests from participants impacted from the prior year's rentals exceed 50,000 acre-feet and insufficient storage has been assigned to the common pool to meet such additional requests, the maximum amount of storage that will be available through the common pool will be ~~60,000 acre-feet~~ equivalent to the amount necessary to meet the demand of those shown to have been impacted from the prior year's rentals.*
>
> a) ~~***Distribution of Storage.*** *If, following the deadline for receipt of request from participants impacted from the prior year's rentals, the Watermaster determines that the total quantity of storage sought to be rented through the common pool exceeds the quantity limitation established under this Rule, then the Watermaster shall reduce the quantity of each impacted common pool rental contract to a pro rata share of 60,000 acre-feet limitation based on the amount of storage sought to be rented by each impacted spaceholder. The Watermaster shall amend the impacted common pool rental contract(s) to reflect any reduced quantity required by this provision.~~

Rule 5.4.101(e) - The fifth of five priorities for renting storage from the Common Pool supply was deleted from the proposed 2016 procedures. This eliminates the availability of rentals for hydropower below Milner from the 50,000 acre-feet large rental supply. Rentals for hydropower below Milner can only be supplied by the IWRB (Rule 6.7) or through the Supplemental Pool (Rule 8.0) in the 2016 procedures.

> ~~***Rule 5.5.101(e) Fifth Priority.*** *Rentals for purposes below Milner, excluding flow augmentation; provided, however, such rentals are limited to 50,000 acre-feet per year or a lesser amount as set by the Committee. Rentals for purposes below Milner can only be filled with storage from the 50,000 acre-feet of participant contributions described in Rule 5.2. To the extent the storage is assigned to the Common Pool, assigned storage will be used to fill the rentals of the First, Second, Third, and Fourth Priorities, allowing that portion of the participant contributions to be used for rentals below Milner. Rentals for purposes below Milner will only be approved to the extent the renter provides written certification from the Bureau stating either 1) that the Bureau has sufficient flow augmentation supplies for the year, or 2) that the storage to be released past Milner will count towards the Bureau's flow augmentation total.~~

Rule 5.5.107 modified to include an additional "impact fee" for fourth-priority (non-spaceholder) rentals when those rentals cause an impact to spaceholder allocations in the year following the rentals and the price paid for the rental was less than the rental price during the following year of impact.

> ***Rule 5.5.107 Fees & Surcharges.*** *There shall be added to the rental price for all rentals the administrative fee and Board surcharge. There shall also be added to the rental price for rentals pursuant to fourth priority Rule 5.2.104 and impact fee to mitigate the computed impacts under Rule 7 from such rentals, payable as follows: The exact amount which is to be set and paid when the full impacts of such rentals, based upon the following year's Common Pool rental price, are determined under said Rule 7, including all additional fees and surcharges. Payment shall then be due payable on or before 60 days from the day of allocation. There shall also be added to the rental price for rentals below Milner, excluding flow augmentation, the infrastructure fee. Failure of a non-spaceholder to timely pay the fees indentified above, shall result in the non-spaceholder's ineligibility to rent water in the future. Such failure to pay shall also subject the non-spaceholder to such legal actions as allowed under state law in the collection of fees.*

Rule 5.5.108 modified to certify that the Palisades powerhead storage does not need to be completely full to meet the definition of storage system fill.

> ***Rule 5.5.108 Storage System Fill.*** *For purposes of Rule 5.5 only, the storage system is considered full when all storage rights are filled in Jackson Lake, Palisades (except for powerhead), American Falls, and Island Park.*

Rule 5.6 added to re-affirm a renter cannot arbitrage Common Pool rental, consistent with Rule 6.2 already in existence for private leases.

> ***Rule 5.6 Limitations.*** *A participant cannot rent water from the Common Pool if the participant is replacing storage space or water which has been evacuated due to an assignment to or private lease through the Water District 1 Rental Pool, unless an exception is granted by the Committee.*

Rule 6.7 added to allow IWRB to lease its storage below Milner.

> ***Rule 6.7 Idaho Water Resource Board (IWRB) Storage.*** *The IWRB may lease its existing storage (up to 5,000 acre-feet) to Idaho Power and have it released past Milner for the purpose of mitigating minimum flows at Murphy. The administrative fee must be paid by the IWRB for any storage used for such purpose.*

Rule 7.3.101 modified to include payments to participant spaceholders from the newly created "impact fee". Payments from the "impact fund" were moved from old Rule 7.3.101 to new Rule 7.3.102, and old Rule 7.3.102 (Timing of Payment) was renumbered to new Rule 7.3.103.

> ***Rule 7.3.101 Payments to Impacted Participants Using Impact Fees.*** *Participants whose storage allocation has a computed impact from the prior year's rental of storage from the common pool, excluding assignments, shall first receive payment from impact fees collected pursuant to Rule 5.5.107 from the previous year's fourth priority rentals. The amount of impact fees disbursed to impacted participants will be proportional to the total common pool rental, including flow augmentation rentals, that occurred during the prior year:*
>
> *Impact Fee Payment = (Isp * RP) * (Fp/Cp)*

Isp = Participants computed impacted space in current year
RP = Rental Price in current year
Fp = Fourth priority rentals in prior year
Cp = Total common pool rentals (including flow augmentation) in prior year

Payment to spaceholders for the impacts by non-spaceholders pursuant to 7.3.101 shall be paid from the balance remaining in the impact fund after payments are made pursuant to 7.3.102, which shall then be reimbursed pursuant to Rule 5.5.107.

~~Rule 7.3.101: Impact Payment Formula.~~ ***Rule 7.3.102: Remaining Impact Payment.*** *Participants whose storage allocation ~~is~~ has a computed impact~~ed~~ from the prior year's rental of storage from the common pool, excluding assignments, will also receive payment from the Impact Fund ~~according the following formula~~ (in addition to the Impact Fee Payment pursuant to Rule 7.3.101) equal to the lesser value of the two following formulas:*

*Remaining Impact Payment = [(Isp*RP) – Impact Fee Payment]*
or
[½IF(Isp/Ispt) – Impact Fee Payment]*

Isp = Participants computed impacted space in acre-feet
RP = Rental Price
IF = Impact Fund
Ispt = Total of all Participants' computed impacted space in acre-feet

Rule ~~7.3.102~~ 7.3.103 Timing of Payment. *Impact payments, which will be based on preliminary data, will be made to participants on or before July 15.*

Rule 7.7 added to address impacts from USBR leasing their powerhead allocation for flow augmentation.

Rule 7.7 Impacts to Spaceholders Resulting from USBR Powerhead Private Lease. *Consistent with the Mediator's Term Sheet of the 2004 Snake River Water Rights Agreement, powerhead space used for flow augmentation shall be the last space to refill after all other pace in reservoirs in that water district, including other space used to provide flow augmentation, in the basin has filled*

Rule 7.8 added to address impacts of IWRB releasing their storage below Milner.

Rule 7.8 Impacts to Spaceholders Resulting from Release of Idaho Water Resource Board (IWRB) Storage Used for Mitigating Minimum Flows at Murphy. *For 2016 only, if the release of IWRB storage past Milner caused computed impacts, as determined by the Watermaster, the IWRB storage allocation shall be reduced by an amount equal to such computed impacts, not to exceed the quantity of storage released, and reallocated to mitigate computed impacts to affected spaceholders.*

Lastly, the word "**computed**" was inserted into the 2016 procedures ahead of the word "**impact**" in Rules 2.18, 2.29, 2.32, 5.1, 5.2.101, 5.4.101(a), 5.5.107, 7.2, 7.3, 7.3.101, 7.3.102, 7.4, 7.5, 7.6, 7.8, 8.1, 8.5.102, and 8.7. Insertion of the word "computed" does not change the way impacts from rentals have been computed in the past. Impacts in 2016 will be computed the same way they have been computed in previous years with the additional consideration for impacts resulting from powerhead and IWRB storage leases (Rules 7.7 and 7.8).

The SHOSHONE-BANNOCK TRIBES

FORT HALL INDIAN RESERVATION
PHONE (208) 478-3700
FAX # (208) 237-0797

FORT HALL BUSINESS COUNCIL
P.O. BOX 306
FORT HALL, IDAHO 83203

May 12, 2016

Roger Chase, Chairman
Idaho Water Resources Board
322 East Front Street
Boise, ID 83720

RE: Shoshone-Bannock Tribes Comments and Concerns with the Proposed 2016 Amendments to WD01 Rental Pool Procedures

Dear Chairman Chase:

The Shoshone-Bannock Tribes submit the following comments in response to the "Proposed 2016 Water District 01 Rental Pool Procedures." (Rental Pool Procedures.) A key component of the "1990 Fort Hall Indian Water Rights Agreement" ("Agreement") was the creation of a Shoshone-Bannock Tribal Water Bank to allow for rental for any beneficial use of all or any part of the Tribes water accruing in federal contract storage. Article 7.3.6. of the Agreement, states that: "The State agrees not to take any action that will interfere with the nature, scope, spirit and purpose of the Shoshone-Bannock Water Bank."

Currently, there are two water banks that operate in the upper Snake River Basin, the Shoshone-Bannock Tribal Water Bank and Water District 01 Water Bank. The Tribes believe that 2016 WD01 Rental Pool Procedures impact the Tribes ability to effectively market its storage water supply.

Thank you for giving the Tribes the opportunity to provide you with these comments and concerns regarding the Rental Pool Procedures. We appreciate the willingness of the IWRB to consider the Tribes' comments and concerns. The Tribes previously submitted comments to the Committee of Nine, but there are still two issues of concern with the Rental Pool Procedures that remain unresolved.

Section 5.6 provides that a renter cannot rent water from the Common Pool to replace water that was leased. This proposed language would limit the tools that the Tribes would have available to manage its portfolio of water rights and impede their ability to generate revenue from stored water rights – the negotiated purpose of which was to provide a source of revenue and economic development for the Tribes. By removing this tool, the Tribes would lose part of the benefits agreed upon in the 1990 Fort Hall Water Rights Agreement and the 2015 Settlement Agreement, since, under specific circumstances, this restriction creates a disincentive for participants to execute water right transactions with the Tribes. This limitation may also impact the ability of other non-Tribal water users, who are being incentivized to enter into private leases, from finding willing lessors

among spaceholders. The Tribes would like to have a detailed discussion about the impacts of this approach and the concerns underlying it, about the needs of the Tribes, and about the overall concept. The Tribes propose that this Section 5.6 be deleted, and we initiate those discussions as soon as possible. In the interim, the limitation provided in Section 6.2 would remain in place to address spaceholder concerns.

Section 7.4 addresses mitigating the impacts to non-participants due to rentals from the Common Pool. The key term, "impacts," is now modified by the adjective "computed" (replacing "associated"). The Tribes are concerned with the use of the term "computed" to qualify the amount of impact that will be mitigated. This term is loosely defined in Section 7.1, but it is not clear what happens when the "computed" impact is in fact lower than what turns out to be the actual impact. The Tribes' position is that since its water rights are property rights, any taking of such rights must be compensated to the full amount of the taking, and not arbitrarily limited by model calculations. This language was discussed at the Intergovernmental Board Meeting involving the Tribes, the United States, and the Idaho Water Resources Department on March 9, 2016, in Boise. The Tribes raised this concern at the meeting. The Tribes understood that there was some agreement around the concept of removing the qualifying adjective and just leaving the Procedures to state "impacts," without calling them "associated" or "computed." Tony Olenichack, of the Water District 01 Watermaster's office, in fact suggested that such an approach made sense. If the Board is not willing to make that change, in the alternative the Tribes would proposed that the language ought to be clarified so that (1) "computed" is defined and (2) that if the "computed" impacts turn out to be inaccurate, that the amount of mitigation shall be appropriately adjusted.

Again, thank you for the opportunity to provide you with our comments and concerns. We look forward to discussing this letter with you in the very near future.

Sincerely,

Blaine Edmo, Chairman
Shoshone-Bannock Tribes

Cc: Roger Chase
4985 Clearview Avenue
Pocatello, ID 83204-5023
rwchase33@gmail.com

Remington Buyer
Water Supply Bank Coordinator
Idaho Department of Water Resources
remington.buyer@idwr.idaho.gov

Peter Van Der Meulen
PO Box 537
Hailey, ID 8333-0537
vandermeulenpete@yahoo.com

Jeff Raybould
301 N 1500 E
St. Anthony, ID 83445-5111
jeffr@idaho.net

Charles Cuddy
PO Box 64
Orofino, ID 83554-0064 chuckcuddy@valint.net

Vince Alberdi
3510 E 3980 N
Kimberly, ID 83341-5118
Val45@q.com

Albert Barker
1010 W Jefferson Street, Suite 102
PO Box 2139
Boise, ID 83701-2139
apb@idahowaters.com

John "Bert" Stevenson
1099 N 400 W
Rupert, ID 83350-8322
johns@safelink.net

ALBERT P. BARKER
JOHN A. ROSHOLT
JOHN K. SIMPSON
TRAVIS L. THOMPSON
SHELLEY M. DAVIS
PAUL L. ARRINGTON
SCOTT A MAGNUSON

BARKER
ROSHOLT
&
SIMPSON
LLP

1010 W. Jefferson, Suite 102
Post Office Box 2139
Boise, Idaho 83701-2139
(208) 336-0700 telephone
(208) 344-6034 facsimile
brs@idahowaters.com

Address Change Effective 5/26/16:
163 2nd Avenue West
Twin Falls, Idaho 83301-5672
(208) 733-0700 telephone
(208) 735-2444 facsimile

John K. Simpson
jks@idahowaters.com

May 18, 2016

VIA E-MAIL AND HAND-DELIVERY
Roger Chase, Chairman
Idaho Water Resources Board
322 East Front Street
Boise, ID 83702-7374

Re: 2016 WD 1 Rental Pool Procedures

Dear Chairman Chase:

Water District 1 ("WD 1") has appreciated the long-standing relationship between the Idaho Water Resources Board ("IWRB") and WD 1 in managing water supplies above Milner. The procedures for the rental of storage water (WD 1 Rental Pool Procedures) are annually reviewed by the Committee of Nine ("Co of 9"), approved by WD 1 at the annual meeting and forwarded onto the IWRB for final approval. This process has allowed waterusers the opportunity to provide input during the Co of 9 review and at the WD 1 annual meeting. By the time the procedures are before the IWRB, the waterusers should have fully discussed issues and resolved any disagreements.

Over the last couple of years the WD 1 Rental Pool Procedures have come before the IWRB with lingering questions. In 2015, as a function of the implementation of certain water rights settlements, changes were proposed which certain waterusers questioned. Following discussions, the waterusers agreed that the 2014 WD 1 Rental Pool Procedures would remain in place and requested that the 2015 proposed procedures be withdrawn. The IWRB agreed and the 2014 procedures remained effective for the 2015 water year.

As in previous years the Co of 9, through the Rental Pool sub-committee, then began looking at the procedures prior to the 2016 WD 1 annual meeting to consider changes that the waterusers or the watermaster requested. These sub-committee meetings are open to all waterusers and the Bureau of Reclamation ("BoR") is present in an advisory role. Meetings are noticed in accordance with open meeting requirements. Numerous meetings were held from December, 2015 through February 2016, leading up to the annual meeting.

At the request of BoR, a set of draft procedures was distributed for review and comment. BoR specifically referenced the need to provide the Shoshone Bannock Tribes ("Tribes") a copy for review and comment. Prior to the February 29, 2016 Rental Pool and Co of 9 meetings, comments to the draft 2016 procedures were received from the United States and the Tribes. The comments received were fully discussed at the February 29th meetings. The United States, through BoR and the Interior Department attended, but no other Tribal representatives were present. Certain comments by the United States and Tribes were accepted into the draft procedures. Other suggestions were considered but ultimately, additional changes were not made. The United States through the Interior representative, acknowledged their acceptance of the changes and draft procedures. The WD 1 Rental Pool Procedures were then finalized by the Rental Pool sub-committee, approved by the Co of 9 and approved by resolution at the WD 1 annual meeting on March 1, 2016. Again, no direct representative from the Tribes was present at the Co of 9 meeting or WD 1 annual meeting. Furthermore, no additional written comments or concerns were lodged by the Tribes prior to said meetings.

The clear intent of the rental pool procedures is to make water available on a temporary basis to participating spaceholders. Any additional, available water is then made available to non-spaceholders through the procedures. All spaceholders are treated equally and equitably while protecting the integrity of the rental pool.

The Tribes have consistently taken the position that they didn't want to participate in the WD 1 Rental Pool. Pursuant to the Rental Pool Procedures, as a non-participant, the Tribes' storage supply will be protected from impacts arising from the operation of the WD 1 Rental Pool.

After all of the above opportunities have come and gone, WD 1 has now received a copy of the Tribes' May 12, 2016 letter to the IWRB addressing comments and concerns with the proposed 2016 Amendments to WD 1 Rental Pool Procedures. The remainder of this letter will address the Tribes' concerns associated with "Section 5.6" and "Section 7.4."

Rule 5.6 (Tribes' reference "Section 5.6") states:

"Limitations. A participant cannot rent water from the Common Pool if the participant is replacing storage space or water which been evacuated due to an assignment to or private lease through the Water District 1 Rental Pool, unless an exception is granted by the Committee."

This rule was added to ensure that a "participant" doesn't take advantage of variable rental or lease rates in marketing storage water which could have a detrimental impact on the viability of the rental pool. A "participant" is a spaceholder who elects to contribute storage to the common pool. *See Rule 5.2.101.* The Tribes have consistently declined participant status and therefore fall under the non-participant status described in Rule 5.2.102. The May 12, 2016 letter and identified Rule 5.6 concern was previously raised by the Tribes in comments submitted to the Rental Pool Committee. However, no one from the Tribes attended meetings to explain the rationale behind the comments. No specific factual examples were provided. To speculate that the rule as drafted would "impede their ability to generate revenue" appears factually untrue

as the Tribes have successfully negotiated a long-term lease of their storage to the Idaho Groundwater Appropriators ("IGWA"). Further, the language of Rule 5.6 clearly addresses only transactions through the Water District 1 Rental Pool and does not infringe upon the Tribes' operations of its separate water bank. The Co of 9 has consistently provided a forum for discussion and will continue to do so. It is the Co of 9's belief that Rule 5.6 furthers the WD 1 Rental Pool purposes articulated in Rule 3.0 and as administered, does not conflict with the Tribes' Water Bank.

Rule 7.4 (Tribes' reference "Section 7.4") states:

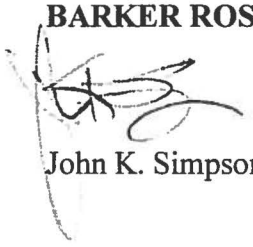
Impacts to Non-Participants due to Rentals from the Common Pool (excluding assignments). *If the prior year's rental of storage from the common pool caused computed impacts to non-participants as determined by the Watermaster, the current year's Common Pool shall be reduced to supply such impacts to non-participants (at no cost to non-participants) prior to providing any rental under the priorities of Rule 5.4.101.*

The Co of 9 believes that understanding as to how impacts as defined in the WD 1 Rental Pool Procedures are identified may resolve this concern. The attached "as applied" Rule 7.1 example and explanation is provided by the WD 1 Watermaster's office. The attachment identifies the steps undertaken to "compute" impacts. Any spaceholder has and will continue to have the process provided in IDWR rules and law to protect property interests, including storage allocation. The WD 1 Rental Pool Procedures do not change those protections.

With these clarifications, the Co of 9 through its sub-committees, believes the 2016 Rental Pool Procedures are appropriate and should be approved as submitted. Counsel for and Tony Olenichak of the Water District 1 office will be available during the IWRB working day, May 19, 2016, to address any questions the IWRB may have on the issues discussed herein.

Very truly yours,

BARKER ROSHOLT & SIMPSON LLP



John K. Simpson

JKS/jlw
Enclosure

2016

WATER DISTRICT 1

RENTAL POOL PROCEDURES

TABLE OF CONTENTS

2016
WATER DISTRICT 1
RENTAL POOL PROCEDURES

RULE 1.0 LEGAL AUTHORITY

1.1 These procedures have been adopted by the Water District 1 Committee of Nine pursuant to Idaho Code § 42-1765.

1.2 These procedures shall not be interpreted to limit the authority of the Idaho Department of Water Resources, the Idaho Water Resource Board, or the Watermaster of Water District 1 in discharging their duties as prescribed by statute or rule.

1.3 These procedures shall be interpreted consistent with Idaho Code, rules promulgated by the Idaho Water Resource Board, relevant provisions of spaceholder contracts with the United States, and the Mediator's Term Sheet of the 2004 Snake River Water Rights Agreement.

1.4 The operation of the rental pool shall in no way recognize any obligation to maintain flows below Milner or to assure minimum stream flows at the United States Geological Survey (USGS) gaging station on the Snake River near Murphy.

1.5 These procedures shall not be interpreted in any manner that is inconsistent with or would adversely impact or effect the rights of the Shoshone-Bannock Tribes as set out in the Fort Hall Agreement, the Blackfoot River Equitable Adjustment Settlement Agreement, and the 2015 Settlement Agreement between the Tribes and the Committee of Nine.

RULE 2.0 DEFINITIONS

2.1 **Accounting Year:** the Water District 1 accounting year that begins on November 1 and ends on October 31.

2.2 **Acre-foot:** a volume of water sufficient to cover one acre of land one foot deep and is equal to 43,560 cubic feet.

2.3 **Administrative Fee:** a fee of one dollar and five cents ($1.05) per acre-foot assessed on the total quantity of storage set forth in any rental or lease application, disbursed to the District at the end of the irrigation season.

2.4 **Allocation:** the amount of stored water, including carryover, that has accrued to a spaceholder's storage space on the date of allocation that is available for the spaceholder's use in the same accounting year.

2.5 **Applicant:** a person who files with the Watermaster an application, accompanied by the required fees, to rent or lease storage through the rental pool.

2.6 **Assignment:** storage provided by an assignor from the current year's storage allocation for rental through the common pool pursuant to Rule 5.3.

2.7 **Assignor:** a participant who assigns storage to the common pool pursuant to Rule 5.3 and subject to Rule 7.5.

2.8 **Board:** the Idaho Water Resource Board (IWRB).

2.9 **Board Surcharge:** a surcharge equal to ten percent (10%) of the rental price or lease price assessed on the total quantity of storage set forth in any rental or lease application, disbursed to the Board at the end of the irrigation season.

2.10 **Bureau:** the United States Bureau of Reclamation (USBR).

2.11 **Committee:** the Committee of Nine, which is the advisory committee selected by the members of Water District 1 at their annual meeting and appointed as the local committee by the Board pursuant to Idaho Code § 42-1765.

2.12 **Common Pool:** storage made available to the Committee through participant contributions and/or assignments for subsequent rental pursuant to Rule 5.

2.13 **Date of Allocation:** the date determined each year by the Watermaster on which the maximum accrual to reservoir spaceholders occurs.

2.14 **Date of Publication:** the date on which the Watermaster publishes on the District website the storage allocation for the current accounting year.

2.15 **Department:** the Idaho Department of Water Resources (IDWR).

2.16 **District:** Water District 1 of the state of Idaho.

2.17 Impact Fee: a fee added to the rental price for non-spaceholder rentals pursuant to Rule 5.5.107.

2.18 **Impact Fund:** a fund maintained by the Watermaster for the mitigation of computed impacts to participants pursuant to Rule 7.3.

2.19 **Infrastructure Fee:** a fee of five dollars ($5.00) per acre-foot assessed on all storage rented through the common pool for purposes below Milner, excluding flow augmentation, disbursed to the Infrastructure Fund at the end of the irrigation season.

2.20 **Infrastructure Fund:** a fund maintained by the Watermaster for the purposes outlined in Rule 4.5.

2.21 **Lease:** a written agreement entered into between a lessor and lessee to lease storage through the rental pool pursuant to Rule 6.

2.22 **Lease Price:** a price per acre-foot negotiated between a lessor and lessee as set forth in a lease agreement.

2.23 **Lessee:** a person who leases storage from a participant under a lease.

2.24 **Lessor:** a participant who leases storage to a person under a lease pursuant to Rule 6 and subject to Rule 7.6.

2.25 **Milner:** Milner Dam on the Snake River.

2.26 **Net Price:** the average price per acre-foot of all rentals from the common pool, including flow augmentation, but excluding rentals of assigned storage.

2.27 **Net Proceeds:** the net price times the number of acre-feet rented from the common pool, excluding rentals of assigned storage.

2.28 **Participant:** a spaceholder who contributes storage to the common pool pursuant to Rule 5.2.

2.29 **Participant Contributions:** storage made available to the common pool by participants, with computed impacts accounted from next year's reservoir fill, which forms the supply for large rentals, small rentals, and flow augmentation, subject to the limitations in Rule 5.2.

2.30 **Person:** an individual, corporation, partnership, irrigation district, canal company, political subdivision, or governmental agency.

2.31 **Rent:** the rental of storage from the common pool.

2.32 **Rental Pool:** the processes established by these procedures for the rental and/or lease of storage, mitigation of computed impacts to spaceholders, and disposition of revenues.

2.33 **Rental Pool Subcommittee:** a subcommittee composed of the Watermaster (advisor), a designated representative from the Bureau (advisor), and three or more members or alternates of the Committee who have been appointed by the chairman of the Committee.

2.34 **Rental Price:** the price per acre-foot of storage rented from the common pool, as set forth in Rule 5.5, excluding the administrative fee, the Board surcharge, and the infrastructure fee.

2.35 **Renter:** a person who rents storage from the common pool.

2.36 **Reservoir System:** refers to American Falls, Grassy Lake, Henrys Lake, Island Park, Jackson Lake, Lake Walcott, Milner Pool, Palisades, and Ririe.

2.37 **Space:** the active capacity of a reservoir measured in acre-feet.

2.38 **Spaceholder:** the holder of the contractual right to the water stored in the space of a storage facility within the Reservoir System.

2.39 **Storage:** the portion of the available space that contains stored water.

2.40 **Watermaster:** the watermaster of Water District 1.

2.41 **Water Supply Forecast:** the forecasted unregulated runoff for April 1 to September 30 at the Heise USGS gaging station, referred to in Table 1.

RULE 3.0 PURPOSES

3.1 The primary purpose of the rental pool is to provide irrigation water to spaceholders within the District and to maintain a rental pool with sufficient incentives such that spaceholders supply, on a voluntary basis, an adequate quantity of storage for rental or lease pursuant to procedures established by the Committee. These procedures are intended to assure that participants have priority over non-participants and non-spaceholders in renting storage through the rental pool.

3.2 To maintain adequate controls, priorities, and safeguards to insure that existing water rights are not injured and that a spaceholder's allocation is not impacted without his or her consent. To compensate an impacted spaceholder to the extent the impact can be determined by the procedures developed by the District.

3.3 To generate revenue to offset the costs of the District to operate the rental pool and to fund projects that fall within the parameters of Rule 4.5.

3.4 To provide storage water at no cost under Rule 5.5 for the benefit of the Tribes consistent with the terms of the Blackfoot River Equitable Adjustment Settlement Agreement and the 2015 Settlement Agreement. Discussions are ongoing to identify the party responsible for mitigating impacts to the Tribes. Nothing in these Procedures should be construed as an admission of liability by Water District 1 or the Committee of Nine.

RULE 4.0 MANAGEMENT

4.1 **Manager.** The Watermaster shall serve as the manager of the rental pool and shall take all reasonable actions necessary to administer the rental pool consistent with these procedures, which include, but are not limited to:

(a) Determining impacts pursuant to Rule 7;
(b) Calculating payments to participating spaceholders as prescribed by Rules 5.2 and 7.3;
(c) Accepting storage into the common pool and executing rental agreements on behalf of the Committee;
(d) Disbursing and investing rental pool monies with the advice and consent of the Rental Pool Subcommittee; and
(e) Taking such additional actions as may be directed by the Committee.

4.2 **Rental Pool Subcommittee.** The Rental Pool Subcommittee shall exercise the following general responsibilities:

(a) Review these procedures and, as appropriate, make recommendations to the Committee for needed changes;
(b) Review reports from the Watermaster regarding rental applications, storage assignments to the common pool, and leases of storage through private leases;
(c) Advise the Committee regarding rental pool activities;
(d) Develop recommendations for annual common pool storage supplies and rental rates;
(e) Assist the Watermaster in resolving disputes that may arise from the diversion of excess storage; and
(f) Assume such additional responsibilities as may be assigned by the Committee.

4.3 **Applications**

4.3.101 Applications to rent or lease storage through the rental pool shall be made upon forms approved by the Watermaster and shall include:

(a) The amount of storage sought to be rented or leased;

(b) The purpose(s) for which the storage will be put to beneficial use;

(c) The lease price (for private leases); and

(d) To the extent practicable at the time of filing the application, the point of diversion identified by legal description and common name; and a description of the place of use.

4.3.102 *Application Acceptance*. Applications are not deemed accepted until received by the Watermaster together with the appropriate fees required under Rules 5.5 (rentals) or 6.4 (leases).

4.3.103 *Application Approval.* An application accepted under Rule 4.3.102 shall be approved after the Watermaster has determined that the application is in compliance with these procedures and sufficient storage will be available from the common pool and/or lessor to provide the quantity requested in the application. Upon approval of the application, the Watermaster shall send notice to the renter/lessor/lessee and entity owning the point-of-diversion designated in the application of such approval and allocation of storage; provided, however, no allocation of storage shall be made until the applicant designates the point of diversion and place of use of the rented and/or leased storage in the application or pursuant to Rule 4.3.106.

4.3.104 *Timeframe for having Rental Application Accepted to Preserve Rental Priority*. Applications to rent storage will not be accepted until April 5 of the year in which the storage will be used. Applications must be accepted by the Watermaster within 15 days following the date of publication to preserve the applicant's priority under Rule 5.4.101.

4.3.105 *Deadline for Accepting Applications to Rent or Lease Storage*. All applications to rent or lease storage must be accepted by the Watermaster pursuant to Rule 4.3.102 on or before December 1 in order for the storage identified in such applications to be accounted for as having been diverted prior to October 31 of the same year. Applications accepted after December 1 will be accounted for from storage supplies in the following calendar year, unless an exception is granted by the Rental Pool Subcommittee.

4.3.106 *Deadline to Designate Point of Diversion and Place of Use.* If the point of diversion and/or place of use of the rented and/or leased storage was not previously designated in the application, the renter and/or lessee must make such designation in writing to the Watermaster on or before December 1 of the same year, unless an extension is granted by the Rental Pool Subcommittee. Failure to comply with this provision shall cause any unused storage to automatically revert back to the common pool and/or lessor, respectively.

4.3.107 *Deadline to Use Rental or Lease Storage*. Approved applications pursuant to Rule 4.3 or water leased through a private lease, must be used and diverted on or before December 1 of the same year.

4.4 **Rental Pool Account**

4.4.101 All monies submitted by applicants shall be deposited in an interest-bearing account known as the "Rental Pool Account" and maintained by the Watermaster on behalf of the Committee. Monies in the Rental Pool Account will be disbursed to participants, the District, the Board, the Impact Fund, and the Infrastructure Fund in the proportions set forth in these Rules. Accrued interest to the Rental Pool Account shall be used to maintain the Impact Fund. Rental Pool Funds shall be considered public funds for investment purposes and subject to the Public Depository Law, Chapter 1, Title 57, Idaho Code.

4.4.102 Monies deposited in the Rental Pool Account are non-refundable to the extent the rental and/or lease application is approved pursuant to Rule 4.3.103, regardless of whether the storage is used.

4.5 **Infrastructure Fund**

4.5.101 Monies in the Infrastructure Fund may only be used to fund District costs of projects relating to improvements to the District's distribution, monitoring, and gaging facilities, and other District projects designed to assist in the adjudication, which includes the cost of Blackfoot River Equitable Adjustment Settlement Water, if any is required, conservation, or efficient distribution of water.

4.5.102 Disbursements from the Infrastructure Fund are subject to two-thirds (2/3) Committee approval.

4.5.103 If monies in the Infrastructure Fund accrue to one million dollars ($1,000,000.00), the infrastructure fee shall be waived and the same amount (five dollars ($5.00)) added to the rental price in Rule 5.5.105.

4.5.104 Monies in the Infrastructure Fund may be carried over from year to year.

RULE 5.0 COMMON POOL

5.1 **Scope.** The common pool consists of storage made available to the Committee through participant contributions and assignments. Participants make all of their storage available to the common pool pursuant to the terms of Rule 5.2, with computed impacts accounted from next year's reservoir fill. Assignors provide storage to the common pool, pursuant to Rule 5.3, by assigning a portion of their current year's storage allocation. Rentals from the common pool are subject to the priorities and prices established under this Rule.

5.2 **Participant Contributions**

5.2.101 *Participants.* Any spaceholder may, upon submitting written notice to the Watermaster prior to March 15, 2016, elect to contribute storage to the common pool. Any spaceholder making such election shall be deemed a "participant" for the current year and every year thereafter until the spaceholder provides written notice to the Watermaster prior to March 15, 2016 rescinding its participation. Upon election to participate, a spaceholder is eligible for all the benefits of a participant set forth in these procedures, excluding monetary payment for rentals or computed impacts associated with rentals from the prior year. If after March 15, 2016, less than seventy-five percent (75%) of the

contracted storage space is committed to the common pool by participants, the Committee shall revise the rental pool procedures as necessary prior to April 1.

5.2.102 *Non-Participants.* Spaceholders who are not participants shall not be entitled to supply storage to, or rent storage from, the common pool, or supply or lease storage through a private lease. Notwithstanding this restriction, the Bureau may rent water from the common pool for flow augmentation pursuant to Rule 5.2.105.

5.2.103 *Large Rentals.* The common pool will make available from participant contributions 50,000 acre-feet of storage for rentals, plus any assigned storage, subject to the priorities and limitations set forth in Rule 5.

5.2.104 *Small Rentals.* The common pool will make available from participant contributions 5,000 acre-feet for rentals of 100 acre-feet or less per point of diversion, subject to the priorities and limitations set forth in Rule 5. Rentals from the small pool shall only be considered for approval following submittal of written consent from the operator of the delivery system. The Committee may approve on a case-by-case basis the additional rental of storage under this provision to exceed the 100 acre-feet limitation. The 100 acre-feet limitation per point of diversion does not apply if the rental is supplied pursuant to Rule 5.2.103.

5.2.105 *Flow Augmentation*

(a) *Table 1.* The amount of storage, from participant contributions to the common pool, available for rental for flow augmentation shall be determined by Table 1.

(b) *Extraordinary Circumstances.* A greater amount of storage may be made available by the Committee, if it determines on or before July 1 that extraordinary circumstances justify a change in the amount of storage made available for flow augmentation.

5.2.106 *Shoshone-Bannock Tribes.* The Tribes shall be treated as non-participants unless written notice is provided under 5.2.101.

(a) *Blackfoot River Equitable Adjustment Settlement Agreement Water.* Storage water not to exceed 20,000 acre-feet shall be made available in accordance with the terms of the Blackfoot River Equitable Adjustment Settlement Agreement. The source and funding of the storage water shall be determined by the Committee at its June meeting. Administrative fees shall be paid by Water District 1.

(b) *2015 Settlement Agreement.* Storage water not to exceed 10,000 acre-feet (except with the approval of the Committee of Nine) shall be made available in accordance with the terms of the 2015 Settlement Agreement from the current year's Common Pool prior to providing any rental under the priorities of Rule 5.4.101. Administrative fees shall be paid by Water District 1. Discussions are ongoing to identify the party responsible for mitigating impacts to the Tribes. Nothing in these Procedures should be construed as an admission of liability by Water District 1 or the Committee of Nine.

5.2.107 *Additional Quantities*. In the event rental requests from participants impacted from the prior year's rentals exceed 50,000 acre-feet and insufficient storage has been assigned to the common pool to meet such additional requests, the maximum amount of storage that will be available through the common pool will be equivalent to the amount necessary to meet the demand of those shown to have been impacted from the prior year's rentals.

5.2.108 *Participant Payments*. Monies collected through the rental of the participant contribution portion of the common pool, including flow augmentation, shall be disbursed as follows:
(a) seventy percent (70%) of the Net Proceeds disbursed to participants; and
(b) thirty percent (30%) of the Net Proceeds disbursed to the Impact Fund.

5.2.109 *Participant Payment Formula.* Participants will receive payment for storage rented from the participant contribution portion of the common pool pursuant to the following payment formulas:

1^{st} Installment = (R x SP/TSP) / 2
2^{nd} Installment = (R x ST/TST) / 2

R = 70% of net proceeds
SP = Space of participants
ST = Storage of participants based on the preliminary storage allocation for the following year
TSP = Total participating space in system
TST = Total participating storage in system based on the preliminary storage allocation for the following year

If a specific reservoir's allocation has been reduced as a result of flood-control operations, the ST and TST values in the above formula for those reservoir spaceholders will reflect the values that otherwise would have occurred without any reductions for flood-control.

5.2.110 *Timing of Payments.* Payments to participants will be made in two installments. The first installment will be paid to participants immediately following the irrigation season in which the proceeds were collected. The second installment will be paid to participants within two weeks of the date of publication for the following irrigation season.

5.3 Assignments

5.3.101 *Assignors*. Any participant may assign storage to the common pool. An assignment of storage shall be made in writing on forms approved by the Watermaster.

5.3.102 *Purposes*. Storage assigned to the common pool may be rented only for purposes above Milner.

5.3.103 *Limitations.* Storage assigned to the common pool may be rented only after the participant contributions to the common pool have been rented. A participant

may not assign storage and rent storage in the same accounting year unless an exception is granted by the Rental Pool Subcommittee.

5.3.104 *Assignor Payment.* The assignor shall receive one-hundred percent (100%) of the rental price per acre-foot of the assigned storage that is rented.

5.3.105 *Distribution of Assigned Storage.* Assignments can only be made between April 5 and 15 days after the date of publication in the year in which the storage is to be rented. Assignments shall initially be distributed on a pro-rata basis, with each pro-rata share based on the amount of storage assigned or 10% of the assignor's storage space, whichever is less. If, after this initial distribution, additional rental requests exist, the remaining assigned storage shall be distributed on a pro-rata basis.

5.4 Priorities for Renting Storage

5.4.101 *Priorities*. Storage rented from the common pool shall be pursuant to the following priorities:

(a) *First Priority*. Rentals by participants whose storage is determined to have been impacted by the prior year's rental from the common pool not to exceed the amount of the computed impact.
(b) *Second Priority.* Rentals by participants for agricultural purposes up to the amount of their unfilled space.
(c) *Third Priority.* Rentals by participants for any purposes above Milner in excess of their unfilled space. Applications for such rentals will be reviewed by the Committee and may be approved on a case-by-case basis.
(d) *Fourth Priority*. Rentals by non-spaceholders for any purposes above Milner.

5.4.102 *Priority for Late Applications.* Applications received after the deadline set forth in Rule 4.3.104 will be deemed last in priority and will be filled in the order they are received, only after all timely applications have been filled.

5.4.103 *Distribution Within Priority Classes.* If rental supplies are not sufficient to satisfy all of the timely applications within a priority class (those received within 15 days of the date of publication), the available rental supplies will be distributed to the applicants within that priority class on a pro-rata basis.

5.4.104 *Priority for Small Rentals.* Small rentals made pursuant to Rule 5.2.104 are not subject to the priorities set forth in Rule 5.4.101 and will be approved in the same order in which the rental applications are received by the Watermaster, so long as the total amount of all such applications does not exceed 5,000 acre-feet.

5.4.105 *Priority for Flow Augmentation.* Rentals for flow augmentation are not subject to the priorities set forth in Rule 5.4.101 and shall be determined pursuant to Rule 5.2.105.

5.5 Rental Prices

5.5.101 *Tier 1*: If the storage system fills, the rental price for purposes above Milner shall be $6.00 per acre-foot.

5.5.102 *Tier 2:* If the storage system does not fill but storage is provided for flow augmentation pursuant to Rule 5.2.105(a), the rental price for purposes above Milner shall be $14.50 per acre-foot.

5.5.103 *Tier 3:* If the storage system does not fill and no flow augmentation water is provided pursuant to Rule 5.2.105(a), the rental price for purposes above Milner shall be $22.00 per acre-foot.

5.5.104 *Determination of Tier1, 2 or 3 Rental Price*: Unless the storage system has filled, the Watermaster shall designate on or before April 5 either Tier 2 or Tier 3 as the rental price for above-Milner rentals. If at any time during the same accounting year, the storage system should subsequently fill, the Watermaster shall designate Tier 1 as the rental price for above-Milner rentals and refund any excess rental fees within 30 days after the date of publication.

5.5.105 *Tier 4:* The rental price for storage rented for flow augmentation shall be $14.50 per acre-foot.

5.5.106 *Tier 5:* The rental price for storage rented for purposes below Milner, excluding flow augmentation, shall be negotiated between the applicant and the rental pool sub-committee.

5.5.107 *Fees & Surcharges*. There shall be added to the rental price for all rentals the administrative fee and Board surcharge. There shall also be added to the rental price for rentals pursuant to fourth priority Rule 5.4.101(d) and rentals to non-spaceholders pursuant to Rule 5.2.104 an impact fee to mitigate the computed impacts under Rule 7 from such rentals, payable as follows: The exact amount which is to be set and paid when the full impacts of such rentals, based upon the following year's Common Pool rental price, are determined under said Rule 7, including all additional fees and surcharges. Payment shall then be due and payable on or before 60 days from the day of allocation. . There shall also be added to the rental price for rentals below Milner, excluding flow augmentation, the infrastructure fee. Failure of a non-spaceholder to timely pay the fees identified above, shall result in the non-spaceholder's ineligibility to rent water in the future. Such failure to pay shall also subject the non-spaceholder to such legal actions as allowed under state law in the collection of fees.

5.5.108 *Storage System Fill*. For purposes of Rule 5.5 only, the storage system is considered full when all storage rights are filled in Jackson Lake, Palisades (except for powerhead), American Falls, and Island Park.

5.6 Limitations. A participant cannot rent water from the Common Pool if the participant is replacing storage space or water which has been evacuated due to an assignment to or private lease through the Water District 1 Rental Pool, unless an exception is granted by the Committee.

RULE 6.0 PRIVATE LEASES

6.1 **General**. All leases must be transacted through the rental pool. Only participants may lease storage to a Lessee subject to the provisions of these rules.

6.2 **Purposes.** Storage may be leased through the rental pool only for beneficial use purposes above Milner. A participant may not lease storage to a lessee and rent storage from the common pool in the same accounting year unless an exception is granted by the Rental Pool Subcommittee.

6.3 **Payment to Lessor.** The lessor shall receive one-hundred percent (100%) of the lease price.

6.4 **Fees & Surcharges.** There shall be added to the lease price the administrative fee and the Board surcharge.

6.5 **Non-Applicability to Common Pool.** Storage leased pursuant to this rule does not count against the participant contribution volumes set forth in Rule 5.2.

6.6 **Recharge**. All storage used for the purpose of recharge must be transacted through the rental pool. Unless storage is rented pursuant to Rule 5.0, storage used for recharge, whether diverted by the storage spaceholder or another person, will be treated as a lease of storage.

6.7 **Idaho Water Resource Board (IWRB) Storage.** The IWRB may lease its existing storage (up to 5,000 acre-feet) to Idaho Power and have it released past Milner for the purpose of mitigating minimum flows at Murphy. The administrative fee must be paid by the IWRB for any storage used for such purpose.

RULE 7.0 IMPACTS

7.1 **Determination.** In any year in which the storage rights in the reservoir system do not fill, the Watermaster will determine the actual computed impacts to spaceholders, if any, associated with the prior year's rentals and leases. In making this determination, the Watermaster will use a procedure which identifies the following:

(a) What each computed reservoir fill would have been had the previous year's rentals and leases not taken place;

(b) The storage space from which rented or leased storage was actually supplied for the previous year's rental or lease; and

(c) The amount of storage each spaceholder's current allocation was reduced by the previous year's rental or lease activities.

7.2 **Flood Control.** There are no computed impacts resulting from the previous year's rentals or leases for a specific reservoir when that reservoir's storage is released as a result of flood-control operations and water is spilled past Milner in the current year.

7.3 **Impacts to Participants due to Rentals from the Common Pool (excluding assignments)**

7.3.101 *Payments to Impacted Participants Using Impact Fees.* Participants whose storage allocation has a computed impact from the prior year's rental of storage from the common pool, excluding assignments, shall first receive payment from impact fees collected pursuant to Rule 5.5.107 from the previous year's fourth priority rentals. The amount of impact fees disbursed to impacted

participants will be proportional to the total common pool rental, including flow augmentation rentals, that occurred during the prior year:

Impact Fee Payment = (Isp * RP) * (Fp/Cp)

Isp = Participants computed impacted space in current year
RP = Rental Price in current year
Fp = Fourth priority rentals in prior year
Cp = Total common pool rentals (including flow augmentation) in prior year

Payment to spaceholders for the impacts by non-spaceholders pursuant to 7.3.101 shall be paid from the balance remaining in the impact fund after payments are made pursuant to 7.3.102, which shall then be reimbursed pursuant to Rule 5.5.107.

7.3.102 *Remaining Impact Payment.* Participants whose storage allocation has a computed impact from the prior year's rental of storage from the common pool, excluding assignments, will also receive payment from the Impact Fund (in addition to the Impact Fee Payment pursuant to Rule 7.3.101) equal to the lesser value of the two following formulas:
Remaining Impact Payment = [(Isp*RP) – Impact Fee Payment] or [½ IF*(Isp/Ispt) – Impact Fee Payment]

Isp = Participant's computed impacted space in acre-feet
RP = Rental Price
IF = Impact Fund
Ispt = Total of all Participants' computed impacted space in acre-feet

7.3.103 *Timing of Payment.* Impact payments, which will be based on preliminary data, will be made to participants on or before July 15.

7.4 **Impacts to Non-Participants due to Rentals from the Common Pool (excluding assignments).** If the prior year's rental of storage from the common pool caused computed impacts to non-participants as determined by the Watermaster, the current year's Common Pool shall be reduced to supply such impacts to non-participants (at no cost to non-participants) prior to providing any rental under the priorities of Rule 5.4.101.

7.5 **Impacts to Spaceholders due to Rental of Assigned Storage.** If the rental of assigned storage caused computed impacts, as determined by the Watermaster, the assignor's storage allocation shall be reduced by an amount equal to such computed impacts, not to exceed the quantity of storage assigned by the assignor, and reallocated to mitigate computed impacts to affected spaceholders. This reallocation will only occur in the year following the rental of assigned storage.

7.6 **Impacts to Spaceholders due to Private Leases.** If the lease of storage pursuant to a private lease caused computed impacts, as determined by the Watermaster, the lessor's storage allocation shall be reduced by an amount equal to such computed impacts, not to exceed the quantity of storage leased by the Lessor, and reallocated to mitigate computed impacts to affected spaceholders. This reallocation will only occur in the year following the lease of storage.

7.7 ***Impacts to Spaceholders Resulting from USBR Powerhead Private Lease***. Consistent with the Mediator's Term Sheet of the 2004 Snake River Water Rights Agreement, powerhead space used for flow augmentation shall be the last space to refill after all other space in reservoirs in that water district, including other space used to provide flow augmentation, in the basin has filled;

7.8 *Impacts to Spaceholders Resulting from Release of Idaho Water Resource Board (IWRB) Storage Used for Mitigating Minimum Flows at Murphy.* For 2016 only, if the release of IWRB storage past Milner caused computed impacts, as determined by the Watermaster, the IWRB storage allocation shall be reduced by an amount equal to such computed impacts, not to exceed the quantity of storage released, and reallocated to mitigate computed impacts to affected spaceholders.

RULE 8.0. SUPPLEMENTAL POOL

8.1 **Purpose.** To provide a voluntary mechanism for the lease of storage water below Milner for hydropower generation within the state of Idaho when storage water supplies, as a result of hydrologic, climate and other conditions, are sufficient to satisfy above Milner uses and flow augmentation. A supplemental pool shall be created in order to mitigate for computed impacts associated with leases below Milner, consistent with the Idaho Water Resource Board's policy to establish an effective water marketing system consistent with state law and assuring the protection of existing water rights while accommodating the purchase, lease or conveyance of water for use at Idaho Power's hydroelectric facilities, including below Milner Dam.

8.2 **Annual Authorization Required**. No storage may be leased through the supplemental pool until the Committee on or after April 1 of each year authorizes use of the pool and the Bureau certifies that it has sufficient flow augmentation supplies for the year or that storage to be released past Milner will count toward flow augmentation.

8.3 **Quantity and Price Determinations.**

8.3.101 *Quantity Determination*. The maximum quantity of storage authorized to be leased through the supplemental pool shall be determined annually by the Committee taking into account the advice and recommendation of the Rental Pool Subcommittee, together with current and forecasted hydrological conditions and estimated demand on the rental pool for above Milner uses.

8.3.102 *Price Determination.* The Committee shall authorize the leasing of water, including price pursuant to Rule 8 after taking into account spaceholder needs and current market conditions for power generation. There shall be added to the lease price the board surcharge and not to exceed a $1.80 per acre-foot administrative fee associated with the development and implementation of the supplemental pool, assessed on the total quantity of storage set forth in any lease application approved or conditionally approved under Rule 8.4.

8.3.103 *Subsequent Quantity and Price Determinations.* If within the same accounting year, the Committee subsequently determines based on the criteria set forth in Rule 8.3.101 that additional opportunities exist for utilizing the use of water within Idaho through the supplemental pool consistent with Rule 8.1.it shall designate such additional maximum quantity authorized to be leased through

the supplemental pool and identify a separate lease price for such additional quantity pursuant to Rule 8.3.102.

8.4 **Application to Lease Storage from the Supplemental Pool.**

8.4.101 Applications to lease storage from the supplemental pool for hydropower purposes shall be made upon forms approved by the Watermaster and shall include:

(a) The amount of storage sought to be leased;

(b) The lease price with associated fees as identified by the Committee under Rule 8.3.102;

(c) The point of diversion identified by legal description and common name; and

(d) A description of the place of use.

8.4.102 *Application Acceptance*. Applications are not deemed accepted until received by the Watermaster together with the appropriate fees required under Rule 8.3.102.

8.4.103 *Application Approval.* An application accepted under Rule 8.4.102 shall be approved after the Watermaster has determined that the application is in compliance with these procedures and sufficient storage will be available from the supplemental pool to provide the quantity requested in the application; provided, however, if the date of publication has not yet occurred, approval of the application shall be conditioned on the ability of spaceholders who have contracted to lease storage through the supplemental pool to have a sufficient storage allocation during the accounting year to satisfy their contracts approved under Rule 8.5.104. Upon approval or conditional approval of the application, the fees collected from the applicant shall be non-refundable to the extent of the total quantity of storage approved or conditionally approved in supplemental pool lease contract(s) under Rule 8.5.104. The Watermaster shall provide notice of such approval.

8.4.104 *Deadline for Accepting Applications*. All applications to lease storage from the supplemental pool must be accepted by the Watermaster pursuant to Rule 8.4.102 not later than October 31 in order for the storage identified in such applications to be accounted for as having been diverted as of October 31 of the same year. Applications accepted after October 31 will be accounted for from storage supplies in the following calendar year, unless an exception is granted by the Rental Pool Subcommittee.

8.5 **Supplemental Pool Supply.**

8.5.101 *Notice to Spaceholders of Opportunity to Lease Storage through the Supplemental Pool.* The Watermaster shall provide notice of the supplemental pool on the Water District 1 website, which shall include the following information:

(a) The maximum quantity of storage authorized to be leased through the supplemental pool;

(b) The lease process, including price and deadlines as authorized by the Committee;

(c) Instructions for spaceholders interested in leasing storage through the supplemental pool, including instructions for executing a standardized supplemental pool lease contract; and
(d) The deadline, as set by the Committee, for the Watermaster to receive supplemental pool lease contracts from spaceholders interested in leasing storage through the supplemental pool.

8.5.102 *Supplemental Pool Lease Contracts.* Spaceholders interested in leasing storage through the supplemental pool shall execute a standardized supplemental pool lease contract, which shall be provided by the Watermaster and include provisions for the following:
(a) Limit eligibility to lease storage through the supplemental pool only to spaceholders who qualify as participants under Rule 2.27;
(b) The quantity sought to be leased by the spaceholder may be any amount, except that the total amount of storage leased pursuant to Rule 8 may not exceed either the maximum quantity set by the Committee under Rule 8.3.101 or 10% of the spaceholder's total reservoir system space, unless an exception is approved by the Rental Pool Subcommittee;
(c) The quantity actually leased by the spaceholder may be reduced depending upon the number of spaceholders who elect to lease storage through the supplemental pool as provided in Rule 8.5.103;
(d) That, in the event the spaceholder elects to sign a standard pool lease contract before the date of publication, the spaceholder assumes the risk that its storage allocation may be less than the spaceholder anticipated; and
(e) Notice to the spaceholder that if the spaceholder's lease through the supplemental pool causes computed impacts, the mitigation required under Rule 8.7 will result in an amount of the spaceholder's space, not to exceed the quantity of storage leased by the spaceholder, being assigned a junior priority which may not fill for multiple consecutive years, an accounting commonly referred to as "last to fill."

8.5.103 *Distribution of Storage to the Supplemental Pool.* If, following the deadline for receipt of executed supplemental pool lease contracts, the Watermaster determines that the total quantity of storage sought to be leased through the supplemental pool exceeds the quantity limitation established under Rule 8.3, then the Watermaster shall reduce the quantity of each supplemental pool lease contract to a pro rata share based on the amount of storage sought to be leased by each spaceholder. The Watermaster shall amend the supplemental pool lease contract(s) to reflect any reduced quantity required by this provision.

8.5.104 *Lease Contract Approval.* Following receipt of a supplemental pool lease contract, the Watermaster shall determine whether the contract is in compliance with these procedures, and, if so, shall approve the same; provided, however, if the date of publication has not yet occurred, approval of the contract shall be conditioned on the spaceholder having a sufficient storage allocation during the accounting year to satisfy the contract.

8.6 **Notice of Contract Approval and Payment to Lessors**. The lessors shall receive one-hundred percent (100%) of the lease price apportioned according to the quantity of storage each lessor leased through the supplemental pool. The Watermaster shall notify spaceholder(s) who submitted supplemental pool lease contracts of the approved amount

and distribute the funds to the lessors within 30 days following approval or conditional approval of an application under Rule 8.4.103.

8.7 **Mitigation of Impacts.** If a lease of storage through the supplemental pool caused computed impacts, as determined by the Watermaster, the lessor's storage allocation shall be reduced by an amount equal to such computed impacts, not to exceed the quantity of storage leased by the lessor, and reallocated to mitigate computed impacts to affected spaceholders until the lessor's affected space fills under a priority junior to that required to fill Palisades powerhead space.

8.8 **November 1 Carryover Unaffected**. For purposes of determining the amount of storage available for flow augmentation under Rule 5.2.105(a), storage leased through the supplemental pool shall not affect the November 1 carryover quantity on Table 1.

November 1 Stipulated Augmentation Rental Water District 1

Carryover	<----------April 1 to Sept 30 Heise Forecast 1000s AF---------->						
1000s AF	<2,450	<2,920	<3,450	<4,208	<5,042	<5,670	>5,670
0	0	0	0	0	150000	185000	185000
100	0	0	0	0	150000	185000	185000
200	0	0	0	0	150000	185000	185000
300	0	0	0	0	150000	185000	185000
400	0	0	0	0	150000	185000	185000
500	0	0	0	0	150000	185000	185000
600	0	0	0	60000	150000	185000	185000
700	0	0	0	60000	150000	185000	185000
800	0	0	0	60000	150000	185000	185000
900	0	0	60000	60000	150000	185000	185000
1000	0	0	60000	60000	150000	185000	185000
1100	0	0	60000	60000	150000	185000	185000
1200	0	0	60000	60000	150000	185000	185000
1300	0	0	60000	60000	150000	185000	185000
1400	0	0	60000	60000	150000	185000	185000
1500	0	0	100000	150000	185000	185000	185000
1600	0	0	100000	150000	185000	185000	185000
1700	0	0	100000	150000	185000	185000	185000
1800	0	0	100000	150000	185000	185000	185000
1900	0	0	100000	150000	185000	185000	185000
2000	0	0	100000	150000	185000	185000	185000
2100	0	0	100000	150000	205000	205000	205000
2200	0	0	100000	150000	205000	205000	205000
2300	0	0	100000	150000	205000	205000	205000
2400	0	0	100000	150000	205000	205000	205000
2500	0	0	100000	150000	205000	205000	205000
2600	0	0	185000	185000	205000	205000	205000
2700	0	0	185000	185000	205000	205000	205000
2800	0	0	185000	185000	205000	205000	205000
2900	0	0	185000	185000	205000	205000	205000
3000	60000	60000	185000	185000	205000	205000	205000
3100	60000	60000	185000	185000	205000	205000	205000
3200	100000	100000	185000	185000	205000	205000	205000
3300	100000	100000	185000	185000	205000	205000	205000
3400	100000	100000	185000	185000	205000	205000	205000
3500	100000	100000	185000	185000	205000	205000	205000
3600	100000	100000	185000	185000	205000	205000	205000

MEMO

To: Idaho Water Resource Board

From: Rick Collingwood

Date: May 20, 2016

Subject: Producers Irrigation Company

Action Item: $173,000.00 loan

1.0 INTRODUCTION

The Producers Irrigation Company (PIC) is requesting a $173,000 loan from the Idaho Water Resource Board (Board) at 3.5% interest with a 15-year term to drill a new well to meet and maintain the irrigation requirements of the PIC's shareholders. The new well will replace two (2) existing wells, which nearly run dry during the latter portion of the irrigation season. Due to these low producing wells, and substantial seepage losses in the canal, the PIC has difficulty in meeting the irrigation needs of the shareholders. In September, 2015, the Department approved a water right transfer application to change the point of diversion from the two low producing wells, Well Nos. 1 and 4, to the new well site. An easement from a PIC shareholder has been obtained by the PIC for the new well

2.0 BACKGROUND

The PIC is located in Jefferson County near Monteview Idaho. The PIC irrigation system is currently comprised of nine wells which provide ground water for irrigation of 2,170 acres of agricultural land. Ground water is conveyed through approximately 6 - 7 miles of canals and laterals for flood and sprinkler irrigation. A significant amount of water is lost through seepage in conveying the ground water through the canal system - (See Site Map, pg 4).

The new well will be designed to supply water to two or three existing pivot irrigation systems, and will be drilled near the associated ground or place of use. It will also be connected to the existing PIC canal conveyance system to allow delivery of water to other ground within the delivery area. Currently, water is delivered to this designated place of use by pumping directly from the canal. This place of use is located near the end of the canal system, and does not receive an adequate water supply in the later part of the irrigation season due to lack of production from Well Nos. 1 and 4 and seepage losses in the canal. Delivering water directly from the new well to the place of use for sprinkler irrigation will improve water supply reliability to the designated place of use.

3.0 PROPOSED PROJECT

The project includes the following:

- Drilling of a new 395-foot deep well
- Installation of pumping equipment and controls
- Construction of a pump pad and meter base

The project cost estimate is $173,000. The project cost estimates are listed below:

- Drilling and equipment for 16" well to 395 foot depth (+/-) $75,000.00
- Pump, motor, VFD, control panel, pump pad, meter base $98,000.00

$173,000.00

Construction is scheduled to begin at the end of the 2016 irrigation season, and be completed prior to the 2017 irrigation season.

PIC proposes to finance the project using funds from a Board loan. The PIC is comprised of a total of eight (8) shareholders and a total of 2,170 shares issued at one share per acre within the PIC service area. The shareholders are currently assessed $100 per share. In September, 2015, to provide funds for repayment of the loan, the shareholders approved an additional assessment of $10 per share for the 15-year term of the loan.

4.0 BENEFITS

There are a number of anticipated benefits from the project for PIC. This project will reduce water loss in the main canal and laterals resulting in a water savings for the company that is critical during dry years, and avoid excessive pumping costs associated with the two non-productive wells.

5.0 FINANCIAL ANALYSIS

PIC is requesting a loan of $173,000.00 at 3.5% interest for a 15-year term. The following analysis reflects the Board's current interest rate of 3.5% for this type of project.

Payment Analysis

Term (Years)	Estimated Annual Payment-Revolving Account Loan	Current Assessment Cost/Share/Year	After Assessment Cost/Share/Year	Current Assessment Cost/Acre/Year	After Assessment Cost/Acre/Year
10	$20,801.76	$109.59	$119.59	$109.59	$119.59
15	$15,020.74	$106.92	$116.92	$106.92	$116.92
20	$12,172.47	$105.61	$115.61	$105.61	$115.61
25	$10,496.61	$104.84	$114.84	$104.84	$114.84

Note: PIC issues one share per acre. Therefore, the cost per share and cost per acre are the same. Payments based on the "current assessment" cost per share are calculated based on the estimated annual loan payment divided by a total of 2,170 shares plus the current assessment of $100 per share. Payments based on the increase assessment, or "after assessment" cost per share, are calculated based on the estimated annual loan payment divided by the total number of acres, 2,170, plus the increased assessment of $110 per share. The same calculation was performed to determine the cost per acre payments.

Loan History:

In March, 2006, the Board approved a 10-year term loan for PIC for $185,000.00. The remaining balance of the loan is $21,036.39. The final loan payment for this loan is scheduled for November 23, 2017.

6.0 WATER RIGHTS

PIC water rights are as follows:

WATER RIGHT	SOURCE	FLOW (cfs)	WATER USE	BASIS	PRIORITY DATE
31-10669	Ground Water	17.27	Irrigation	Decreed	8/7/1962
31-12253	Ground Water	7.06	Irrigation	Decreed	7/25/1955
31-12255	Ground Water	4.48	Irrigation	Decreed	7/26/1961
31-12257	Ground Water	31.21	Irrigation	Decreed	6/22/1953

7.0 SECURITY

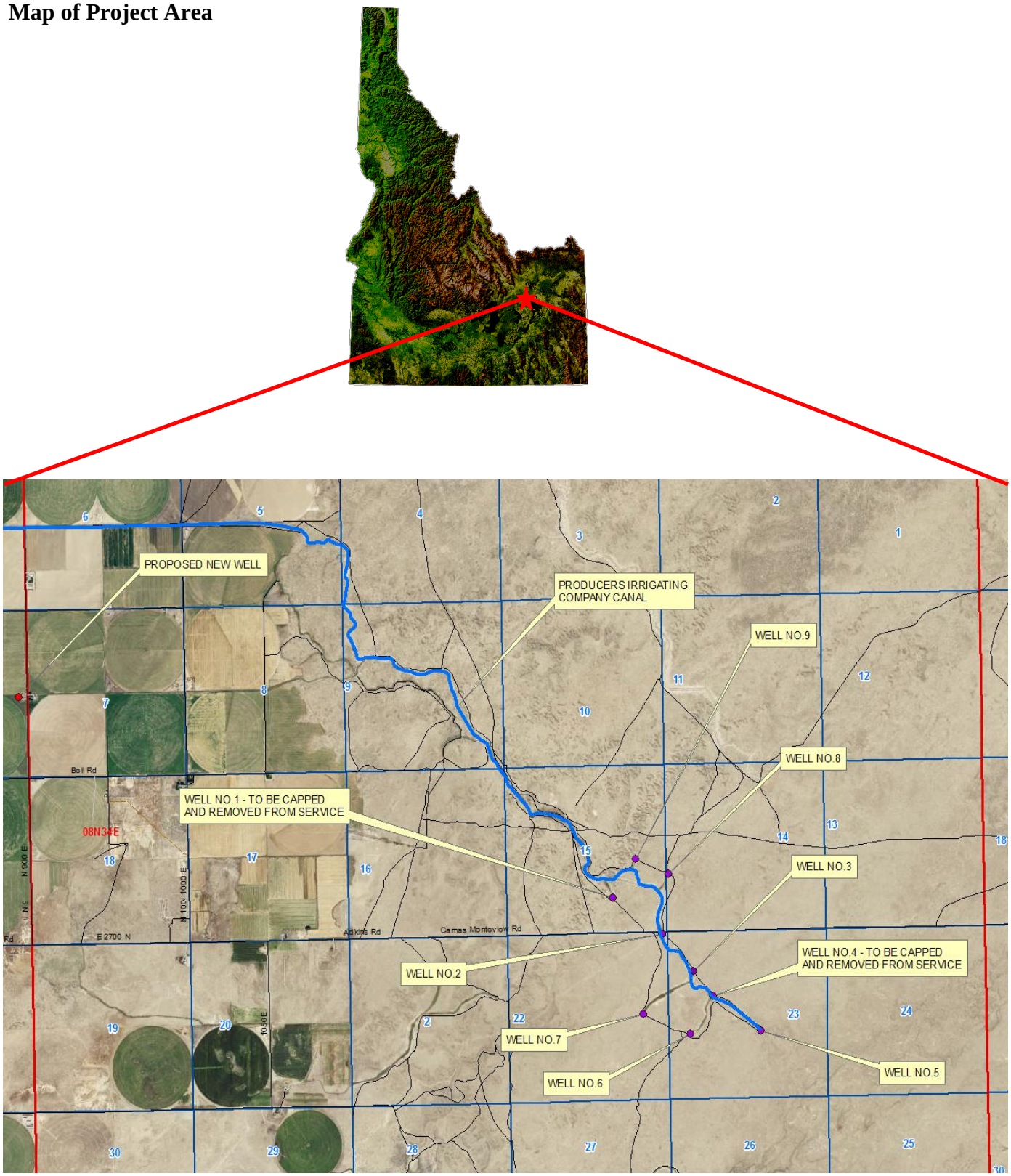
The IWRB is authorized to hold PIC's water rights, wells, pumps and motors (100-hp and larger), associated equipment, weir, diversion gates, and all materials associated with this project as collateral for the loan.

8.0 CONCLUSION AND RECOMMENDATION

This loan will be used to drill a new well to replace two (2) low production wells, the installation of the well pump and motor, control panel and equipment, power meter base, and construction of a concrete pump pad.

The project will benefit PCI's shareholders by providing water savings, reduce pumping costs, and provide a more reliable and efficient irrigation system. Staff recommends approval of the requested loan.

Map of Project Area



BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE	)	A RESOLUTION TO MAKE
PRODUCERS IRRIGATION COMPANY	)	A FUNDING COMMITMENT
_____	)	

WHEREAS, the Producers Irrigation Company (Company) submitted a loan application to the Idaho Water Resource Board (IWRB) in the amount of $173,000.00; and

WHEREAS, the Company currently operates nine ground water wells for flood and sprinkler irrigation of 2,170 acres in Jefferson County; and

WHEREAS, due to steadily declining ground water levels in the Eastern Snake Plain Aquifer, water production from the existing wells has been significantly reduced; and

WHEREAS, the Company proposes to drill a new well to replace the two low production wells to improve the Company's ability to meet the irrigation needs of the shareholders; and

WHEREAS, the Company will use the funds to drill a new well, install a pump and motor, control panel, and variable speed drive; and

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

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

NOW THEREFORE BE IT RESOLVED that the IWRB approves a loan not to exceed $173,000 from the Revolving Development Account at 3.5% interest with a 15-year repayment term and provides authority to the Chairman of the Idaho Water Resource Board, or his designee, to enter into contracts with the Company on behalf of the IWRB.

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

1) The Company shall comply with all applicable rules and regulations that apply to the proposed project.

2) The Company shall provide acceptable security for the loan to the IWRB including but not limited to the Company's water rights and irrigation facilities.

3) The Company shall establish a reserve account in an amount equal to one annual payment.

DATED this 20th day of May, 2016.

_____
ROGER W. CHASE, Chairman
Idaho Water Resource Board

ATTEST _____
VINCE ALBERDI, Secretary

Appendix D

IDAHO WATER RESOURCE BOARD
322 East Front Street, Statehouse Mail
Boise, Idaho 83720
Tel: (208) 287-4800
FAX: (208) 287-6700

APPLICATION FOR FINANCIAL ASSISTANCE FOR NON-POTABLE WATER SYSTEM CONSTRUCTION PROJECT

Answer the following questions and provide the requested material as directed. All pertinent information provided. Additional information may be requested by the Idaho Water Resource Board (IWRB) depending on the scope of the project and amount of funding requested. For larger funding amounts an L.I.D. may be required.

Incomplete documents will be returned and no further action taken will be taken by IWRB staff. All paperwork must be in twenty eight (28) working days prior to the next bi-monthly Board meeting.

Board meeting agendas can be found at: http://www.idwr.idaho.gov/waterboard/

I. Prepare and attach a "Loan Application Document".

The Loan Application Document requirements are outlined in the Water Project Loan Program Guidelines. The guidelines can be found at: http://www.idwr.idaho.gov/waterboard/Financial%20program/financial.htm. You can also obtain a copy by contacting IWRB staff.

II. General Information:

A. Type of organization: (Check box)

- ☐ Irrigation District
- ☒ Canal/Irrigation Company
- ☐ Lateral Association
- ☐ Flood Control District
- ☐ Homeowners Association
- ☐ Water User's Association
- ☐ Municipality
- ☐ Reservoir Company
- ☐ Other

Explain: _____

Producers Irrigation Company
Organization name

Michael D. Overton / President
Name and title of Contact Person

2886 N. 800 E. Montpelier, Id. 83435
PO Box/Street Address

(208) 657-2529
Contact telephone number

City, County, State, Zip Code

e-mail address

Project location legal description NESE, Sec 12, T 08N, R 33 E

B. Is your organization registered with the Idaho Secretary of State's office? Yes ☒ No ☐

C. Purpose of this loan application.

- [x] New Project
- [ ] Rehabilitation or replacement of existing facility
- [ ] DEQ requirement
- [ ] Other: _____

D. Briefly describe the project:

A new well to replace well or wells that are nearly dry.

III. WATER SYSTEM:

A. Source of water:

- [ ] Stream
- [ ] Reservoir
- [x] Groundwater
- [ ] Other

B. Water Right Numbers:

Water Right	Stage	Priority Date	Source	Amount
31-10669	Decreed	8/7/62	Ground Water	17.270 cfs
31-12253	D	7/25/55	G	7.060 cfs
31-12255	D	7/26/61	G	4.480 cfs
31-12257	D	6/22/53	G	32.210 cfs

Note: Stage refers to how the water right was issued (License, Decree, or Permit)

C. If irrigation/lateral system:

Number of acres served: 2169.5
Number of shareholders served 8
Water provided annually (acre-feet) 7593.3

D. If flood control system, drainage system, groundwater recharge, or other type of system:

Number of acres within District or service area: _____
Number of people within District or service area: _____

E. If an Association/Municipality the number of residences served by the system:

Number of residences served: _____
Number of hookups possible: _____

IV. USER RATES:

A. How des your organization charge users rates?

- [ ] Per acre
- [ ] Per hook up
- [x] Per share
- [ ] Tax assessment

Explain what a share is: 160 shares per qtr sec, current rate # 100/share

- [ ] Other, explain _____

B. Current rate? $ 100 per share
(Share, hook-up, month, year, etc)

C. When was the last rate change? May 2013 (month/year)

D. Does your organization measure water use? Yes ☒ No ☐
If yes, explain how: 20 ft weir, calibrated staff guage

E. Does you organization have a regular assessment for a reserve fund? Yes ☐ No ☒
If yes, explain how it is assessed:

F. Does your organization have an assessment for some future special need? Yes ☐ No ☒
If yes, explain for what purpose and how it is assessed:

V. PROPOSED METHOD FOR REVENUE FOR REPAYMENT OF LOAN

How will you plan to assess for the annual loan payments?

Check revenue sources below:

☐ Tax Levies
☐ Capital Improvement Reserve Account or Sinking Fund
☐ User Fees and Tap/Hookup Fees
☐ Other (explain) Increase water share rate

Will an increase in assessment be required? Yes ☒ No ☐
When will new assessments start and how long will they last?
2016 until loan is repayed

VI. SECUREMENT OF LOAN

List all land, buildings, waterworks, reserve funds, and equipment with estimated value that will be used as collateral for the loan:

Property	Estimated Value
10 wells, weir, 9 diversion gates	750,000
11 100hp or bigger pumps, motors, etc.	750,000

For property Securement, attach a legal description of the property being offered along with a map referencing the property.

VII. FINANCIAL INFORMATION:

A. Attach a copy of each of the last 3 year's financial statement. **(Copies must be attached)**

B. Reserve fund (current) NA

C. Cash on hand $37,000.00

For explanation, see Financial Analysis section of application.

D. Outstanding indebtedness:

To Whom	Annual Payment	Amt. Outstanding	Years Left
IWRB	# 12000.00	# 21036.39	2

E. What other sources of funding have been explored to fund the project? (example: NRCS, USDA Rural Development, Banks, Local Government, etc.)

Banks

VIII. ORGANIZATION APPROVAL:

Is a vote of the shareholders, members, etc. required for loan acquisition? Yes ☐ No ☒
If yes, a record of the vote must be attached.

Amount of funds requested: # 173,000.00

By signing this document you verify that all information provided is correct and the document is filled out to the best of your ability.

Authorized signature& date: Michael D. Quist 2/15/16

President
Producers Irr. Co.

PRODUCERS IRRIGATION COMPANY

PRESIDENT

Michael Overton

Vice President

Robert McCulloch

Secretary

Darcy Overton

ADDRESS

Producers Irrigation Company
2886 N. 800 E.
Monteview, Idaho 83435
Phone: (208) 657-2529

Engineering and Technical Support

IDWR

Golden West Irrigation--Rexburg, Idaho

Denning Well Drilling--Idaho Falls, Idaho

List of Appendices

LOAN DOCUMENT OF NEW WELL

PRODUCERS IRRIGATION COMPANY

INTRODUCTION

Producers Irrigation Company, located in Jefferson county, operates a water system that supplies irrigation water for 2200 acres of farmland. In the last ten or so years, the water table where nine of our wells are sited has steadily declined. This drop in water level has caused our wells to steadily decline in output. Two wells nearly run dry later in the irrigation season. For this reason, we are proposing to drill a new well to recoup our water output.

PROJECT SPONSOR

Producers Irrigation Company is a non-profit corporation registered with the State of Idaho. Our sole purpose is to deliver irrigation water to our shareholders. The Board of Directors of Producers Irr. Co. has the power to assess a yearly fee to cover operation costs. Each quarter-section of land has 160 shares of Producers Irr. Co. stock. Each share is assessed the same yearly fee, regardless of the actual acres irrigated within the quarter-section. A copy of the incorporation and by-laws are included Appendix A.

PROJECT SERVICE AREA AND FACILITIES

The service area of Producers Irr. Co. is located in Monte-view, Idaho. A map of the service area and a map of the existing wells will be provided in the back pocket of the report.

HYDROLOGY AND WATER RIGHTS

The sources of water that supply our irrigation company are nine groundwater wells.The proposed new well will also be a groundwater well.A summary of Producers Irr. Co. water rights will be found in Appendix B.

PROJECT DESCRIPTION AND ALTERNATIVES

The purpose of the new project is an attempt to maintain the amount of irrigation water needed for proper irrigation of our 2200 acres. A steadily declining aquifer for the last 12-15 years has diminished our water supply. Three alternatives were considered:

ALTERNATIVES

!. A non-action alternative,

2. Drilling a new well at a different location.

3. Drilling a new well or wells in the same area as our present-day wells.

Alternative 1. was considered unacceptable because, sooner or later,more drilling will be necessary untill the aquifer level stabilizes.

Alternative 2. was selected because the new well will be located at the site of actual use. This will help prevent water loss due to the 3-5 mile delivery system in use now.

Alternative 3. was not selected for the reason dicussed in Alternative 2. There is also doubt as to whether more water could be found at reasonable pumping depth or found at all.

a. The selected alternative, Alternative 2, involves drilling a new well at the source of actual use, and tying it into the existing system. This well will be designed to supply water to two or three pivots. The well will also be able to deliver water into the existing canal system.

b. Design considerations and cost estimates are supplied by Denning Well Drilling and Golden West Irrigation. If the project is undertaken, other bids may be considered.

IMPLEMENTATION SCHEDULE

If suficient financing becomes available, construction could start in the Fall of 2016 and hopefully completed for use in the 2017 irrigation season. Preliminary design report and cost estimates will be found in Appendix C.

PERMITTING

An easement for the location of the project has been granted by Producers Irr. Co. shareholder Robert McCulloch. This easement has been submitted to the IDWR. All permits for the change of Point of Diversion have been approved.

INSTITUTIONAL CONSIDERATIONS

Producers Irr. Co. will be the entity involved in design and construction of this project We will make sure all phases of this project complies with all IDWR rules and regulations.

FINANCIAL ANALYSIS

Two entities will be involved in financing the estimated total cost of $173000.00 for the project. Producers Irr. Co. would like to request a 10-15 year loan from the IWRB. Producers Irr. Co. would raise our annual assessment to cover the yearly cost of servicing this loan. The current water assessment for Producers Irr. Co. is $100.00 per share of company stock. Each 160-acre of ground has 160 shares of stock. We intend to raise our assessment to $110.00 per share to meet our IWRB loan obligation.

Technically, Producers has no existing debt. In 2007, Producers got a loan from IWRB. It was a 10-year loan with a current balance of $21077.27. This balance is the responsibility of a shareholder who will be transfered off the canal when the debt is paid off. For collateral, will pledge the assessment income, water rights, and the project itself.

We have no alternative financing considerations. IWRB terms are the most favorable.

CONCLUSION

1. Producers Irr. Co. is registered with the State of Idaho and has taken a vote of its sharehoders to allow it to proceed with loan contract with the IWRB for the purpose of obtaining funding for the consruction of a new well, piping, pump and controls.

2. Right-of-way easements are in place for the project.

3. This project will provide irrigation water at the point of use. There will be significant transmission loss of water savings. It will also replace two wells that no longer produce the water they should.

4. The total estimated cost of the project is $173000.00. Producers Irr. Co. is applying for a loan from the IWRB in the amount of $173000.00.

5. This project meets with the requirements of the State of Idaho Water Plan and is necessary to avoid water shortages and excess pumping costs. It should also help our company to meet the new use-reduction plan we are now mandated to do.

6. This project is technically and financially feasible.

Appendix B.

State of Idaho
DEPARTMENT OF WATER RESOURCES
900 N Skyline Dr., Ste A, Idaho Falls, Idaho 83402-1718
Phone: (208) 525-7161 FAX: (208) 525-7177 www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

September 25, 2015

PRODUCERS IRRIGATION CO
C/O MIKE OVERTON
800 E 2886 N
MONTEVIEW, ID 83435

Re: Transfer No: 80260
Water Right No(s).: 31-10669, 31-12253, 31-12255, 31-12257
Transfer Approval Notice

Dear Water Right Holder:

The Department of Water Resources has issued the enclosed approved Transfer of Water Right(s). Please be sure to thoroughly review the conditions of approval and remarks listed on the approval document.

The Transfer of Water Right(s) is a PRELIMINARY ORDER issued by the Department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action by the Department unless the APPLICANT petitions for reconsideration or files an exception and/or brief within fourteen (14) days of the service date as described in the enclosed information sheet.

ANY PERSON aggrieved by any decision, determination, order or action of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Department and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

If the transfer approval includes a condition requiring measuring and recording devices, such devices shall comply with specifications established by the Department Detailed specifications are available on the Department's home page on the Internet, or you can request a copy by contacting any office of the Department. Please be sure to thoroughly review the specifications to avoid unnecessary costs for reinstallation or modification due to non-conforming or improperly installed devices.

Please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a $100 late filing fee. Contact any office of the Department or visit the Department's homepage on the Internet to obtain the proper forms and instructions.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

TRANSFER OF WATER RIGHT
TRANSFER NO. 80260

This is to certify that: PRODUCERS IRRIGATION CO
C/O MIKE OVERTON
800 E 2886 N
MONTEVIEW, ID 83435

has requested a change to the water right(s) listed below. This change in water right(s) is authorized pursuant to the provisions of Section 42-222, Idaho Code. A summary of the changes is also listed below. The authorized change for each affected water right, including conditions of approval, is shown on the following pages of this document.

Summary of Water Rights Before the Proposed Changes

Water Right	Origin/Basis	Priority Date	Diversion Rate	Diversion Volume	Acre Limit	Total Acres	Source
31-10669	WR/DECREED	8/7/1962	17.270 cfs	N/A	N/A	2169.5	GROUND WATER
31-12253	WR/DECREED	7/25/1955	7.060 cfs	2996.8 af	2095.6	2169.5	GROUND WATER
31-12255	WR/DECREED	7/26/1961	4.480 cfs	1901.6 af	N/A	2169.5	GROUND WATER
31-12257	WR/DECREED	6/22/1953	32.210 cfs	6649.3 af	1899.8	2169.5	GROUND WATER

Purpose of Transfer (Changes Proposed)

Current Number	Split	POD	POU	Add POD	Period of Use	Nature of Use
31-10669	NO	NO	NO	YES	NO	NO
31-12253	NO	NO	NO	YES	NO	NO
31-12255	NO	NO	NO	YES	NO	NO
31-12257	NO	NO	NO	YES	NO	NO

Summary Of Water Rights After the Approved Change

Existing Right	New No. (Changed Portion)	Transfer Rate	Transfer Volume	Acre Limit	Total Acres	New No. (remaining portion)	Remaining Rate	Remaining Volume	Remaining Acre Limit	Remaining Total Acres
31-10669	31-10669	17.270 cfs	7330.6 af	N/A	2169.5	N/A	N/A	N/A	N/A	N/A
31-12253	31-12253	7.060 cfs	2996.8 af	2095.6	2169.5	N/A	N/A	N/A	N/A	N/A
31-12255	31-12255	4.480 cfs	1901.6 af	N/A	2169.5	N/A	N/A	N/A	N/A	N/A
31-12257	31-12257	32.210 cfs	6649.3 af	1899.8	2169.5	N/A	N/A	N/A	N/A	N/A
COMBINED TOTALS		**61.020 cfs**	**7593.3 af**	**2169.5**	**2169.5**		**N/A**	**N/A**	**N/A**	**N/A**

This water right(s) is subject to all prior water rights and shall be administered in accordance with Idaho law and applicable rules of the Department of Water Resources. Detailed Water Right Description(s) attached.

Dated this 25th day of September, 2015.

for Chief, Water Allocation Bureau

Transfer No. 80260

Appendix C

Total Project Cost

Well —— $ 75,000
Pump / Panel / Motor —— 63,000
Variable Speed Drive —— 35,000
$ 173,000.00

2

Mike Overton							
589-2529							
2846 North 900 East, Monteview, ID							
Irrigation Well							
	Our Estimate						
	Unit Price Written in Word			**Quantity**		**Price**	**Total Amount**
1	Mobilization/Demobilization			1	LS	$ 500.00	$ 500.00
2	Casing, 16 inch .375			158	LF	55	$ 8,690.00
3	Drilling, 16 inch			205	LF	125	25,625.00
4	Well Casing, 14 inch .375			348	LF	45	15,660.00
5	Drive Shoes, 16 and 14 inch			2	LS	500	1,000.00
6	Drilling, 14 inch			190	LF	95	18,050.00
7	Bentonite Seal			38	LF	75	2,850.00
8	Development			4	HR	400	1,600.00
9	Permit, Irrigation Well			1	LS	200	200.00
	Total						**$ 74,175.00**

↑

Denning Well Drilling
Idaho Falls, Id.

Golden West IRRIGATION

Estimate and Agreement

Customer: Mike Overton
Description:

Job#:

Date: 01/28/16
Salesman: Trent Angell
Terms: *10% down, 85% on delivery, Balance upon completion*

Pivot Quote

Qty	Description	Price

If we put a variable sped drive on this pump, the estimated cost would be $32000 to $35000 installed.

0.00

Ancillary Quote

	Description	Price
1	deep well pump	
1	14" bowl to do 2000gpm @ 370' TDH	
300'	10x 2-1/2 x1-11/16" column tube & shaft	
1	200hp motor	
1	cone strainer & oil can	43,100.00
1	concrete pump pad	
310'	set pump	3,900.00
1	200hp pump panel with safeties & motor saver	
1	install & wire panel	
1	power company meter base	15,930.00
*	**does not include any mainline or welding**	
		62,930.00
		62,930.00

10% down payment	6,293.00
85% upon delivery	53,491.00
5% upon completion	3,146.00
	62,930.00

NOTICE: SEE TERMS, CONDITIONS, AND PROVISIONS ON PAGES 2 AND 3 OF THIS CONTRACT.

Sales Representative's Initials: _____ Buyer's Initials: _____ Seller's Authorized Officer Initials: _____

Golden West Irrigation

By: _____ Purchaser _____ Date _____

Appendix E

Annual Statement

Producers Irrigation Company

2012

Cash on hand - 1 Jan 13	17,664
Water Assessments	138,614
Power Rebate (Enernoc)	22 850
Total Funds Available	$ 179,128.00

Expenses

Rocky Mtn Power	164,317
Pump/Panel Repair	17,775
Supplies (oil, etc.)	564
Jefferson/Clark Groundwater Dist. - Dues	4101
Total Expenses	$ 186757.00
2012 Deficit	- $ 7629.00

Annual Statement

Producers Irrigation Company

2013

Cash on hand 1 Jan 14	0
Water Assessments	150576
Funds available	$ 150576.00

Expenses

Rocky Mtn Power	143015
Pump / Panel Repair	3987
Jeff/Clark Ewdwtr Dist.	4101
Total Expenses	$ 151,103.00

Deficit	$ 527.00

Annual Statement

Producers Irrigation Company

2014

Cash on hand 1 Jan 15	0
Water Assessments	140500
Power Rebate - Enernoc (2013)	9408
Power Rebate - Enernoc (2014)	7741
Total Funds Available	$ 157,649.00

Expenses

Rocky Mtn Power	122,320
Supplies (oil, etc.)	580
Pump / Panel Repair	785
Jeff/Clark Cnductr Dist. Dues	4126
Total Expenses	$ 127,811.00

Cash on hand 12/31/14 $ 29838.00

Annual Statement

Producers Irrigation Company

2015

Cash on hand 1 Jan 15	$ 29838.00
Water Assessments	140500.00
Power Rebate - Enernuc (2015)	2275.00
Total Funds Available	$ 172613

Expenses

Rocky Mtn Power	$ 138055
Supplies (oil, etc.)	580
Panel/Pump Repair	465
Idaho Irr Pumpers Assn	100
Jeff/Clark Gdwtr Dist.	19762
Transfer Fee (IDWR)	980
Total Expenses	$ 159,942.00

Cash on hand 12/31/15	$ 12671.00

Appendix C.

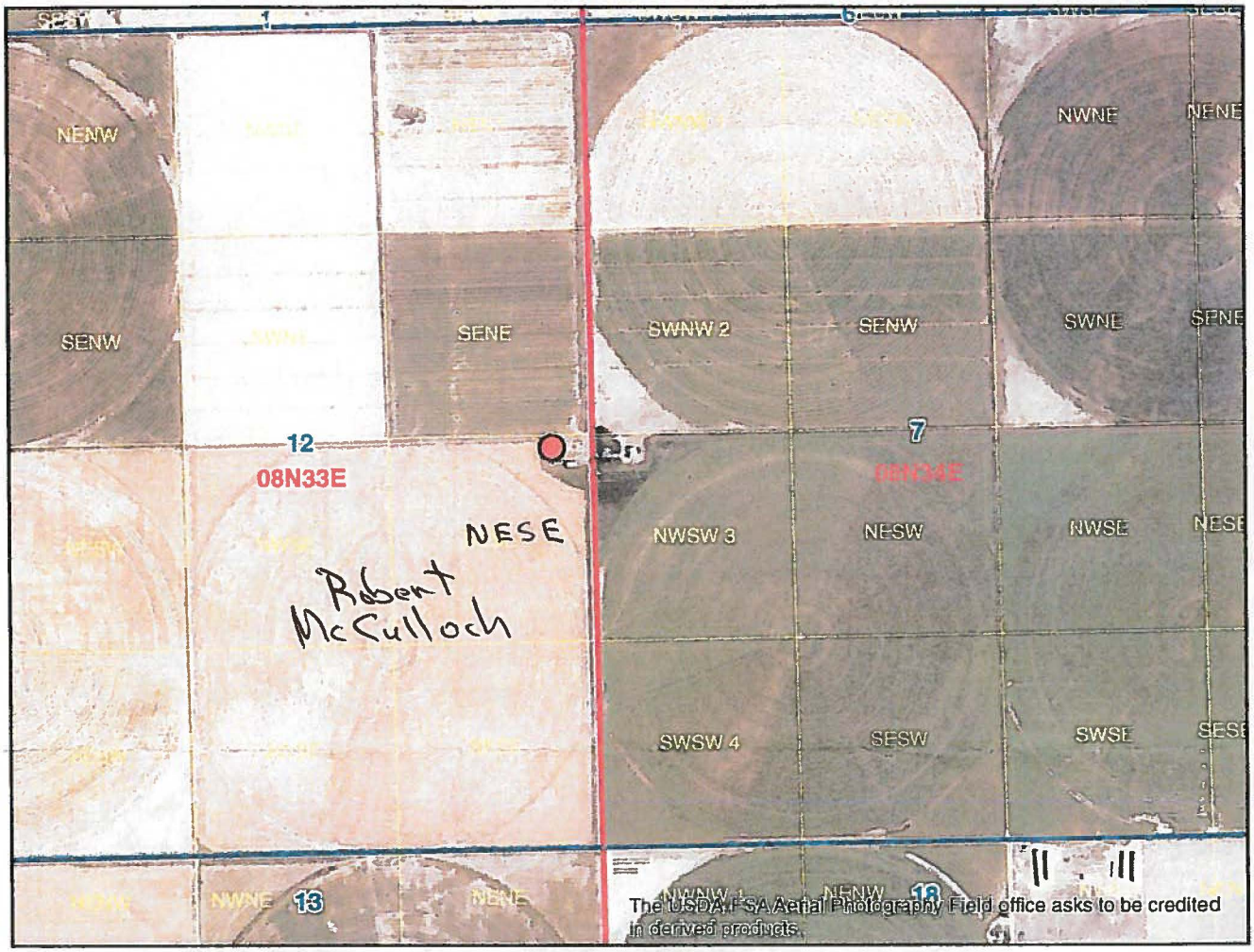
PRODUCERS IRRIGATION COMPANY

Robert McCulloch, a shareholder of Producers Irrigation Company, has agreed to provide an easement to Producers Irr. Co. for the purpose of drilling a new well. The proposed P.O.D. is noted on map provided.

Robert McCulloch

Robt McCulloch

WR 31-10669, 31-12253, 31-12255, 31-12257



Miles

0 0.1 0.2 0.4 0.6 0.8

Legend

- Producers Proposed POD
- Township/Range
- Sections
- QQ
- Wells

N
W E
S

Imagery: 2013 NAIP
Idaho Department of Water Resources, Eastern Region
Prepared by Allison Torres, July 9, 2015

Financial Ratios

Entity Name: Producers Irrigation Company

Loan amount requested: $173,000

The following information is required for the loan application with the Idaho Water Resource Board. Please fill out as completely as possible in the spaces provided. The sheet will do the calculations based on your input. This sheet will not save so you must print it out and attach it to the Loan Document. If you have any questions please contact the loan staff.

Number of units serviced (acres or residences) 2170

Interest rate 3.5%
(use 6% for residential and 5.5% for agriculture)

Total Debt $21,036.39

Current Assessment $100.00

Assessment Charged by Share
(How is current assessment charged? By share, acre, residence, etc.)

Is the assessment 1
(use 1 for yearly and 12 for monthly)

Yearly Expenditures, Revenues, and Cash - last 3 years required

Year	Revenue	Expenditures	Cash
2013	$150,576.00	$151,103.00	-$527.00
2014	$157,649.00	$127,811.00	$29,838.00
2015	$172,613.00	$159,942.00	$12,671.00
Average:	$160,279.33	$146,285.33	$13,994.00

Loan Term	Assessment after loan	Estimated Payment
5 years	$117.66	$38,316.28
10 years	$109.59	$20,801.76
15 years	$106.92	$15,020.74
20 years	$105.61	$12,172.47
25 years	$104.84	$10,496.61
30 years	$104.33	$9,406.24

Indicator	5 year	10 year	15 year	20 year	25 year	30 year
Revenue/Expenses	1.08	1.08	1.09	1.09	1.09	1.09
Debt Service ratio	1.37	1.67	1.93	2.15	2.33	2.49
Cash /Expenses	0.28	0.21	0.18	0.17	0.16	0.15
Debt/Unit	$17.66	$9.59	$6.92	$5.61	$4.84	$4.33

Financial Ratios

Entity Name: Producers Irrigation Company

Loan amount requested: $173,000

The following information is required for the loan application with the Idaho Water Resource Board. Please fill out as completely as possible in the spaces provided. The sheet will do the calculations based on your input. This sheet will not save so you must print it out and attach it to the Loan Document. If you have any questions please contact the loan staff.

Number of units serviced (acres or residences) 2170

Interest rate 3.5%
(use 6% for residential and 5.5% for agriculture)

Total Debt $21,036.39

Current Assessment $110.00

Assessment Charged by Share
(How is current assessment charged? By share, acre, residence, etc.)

Is the assessment 1
(use 1 for yearly and 12 for monthly)

Yearly Expenditures, Revenues, and Cash - last 3 years required

Year	Revenue	Expenditures	Cash
2013	$150,576.00	$151,103.00	-$527.00
2014	$157,649.00	$127,811.00	$29,838.00
2015	$172,613.00	$159,942.00	$12,671.00
Average:	$160,279.33	$146,285.33	$13,994.00

Loan Term	Assessment after loan	Estimated Payment
5 years	$127.66	$38,316.28
10 years	$119.59	$20,801.76
15 years	$116.92	$15,020.74
20 years	$115.61	$12,172.47
25 years	$114.84	$10,496.61
30 years	$114.33	$9,406.24

Indicator	5 year	10 year	15 year	20 year	25 year	30 year
Revenue/Expenses	1.08	1.08	1.09	1.09	1.09	1.09
Debt Service ratio	1.37	1.67	1.93	2.15	2.33	2.49
Cash /Expenses	0.28	0.21	0.18	0.17	0.16	0.15
Debt/Unit	$17.66	$9.59	$6.92	$5.61	$4.84	$4.33

Memorandum

To: Idaho Water Resource Board

From: Wesley Hipke and Neal Farmer

Date: May 10th, 2016

Re: ESPA Managed Recharge Program Status Report

Progress/Status of ESPA Managed Recharge Program

Contents

I. Introduction

The Idaho Water Resource Board (IWRB) has been tasked with developing a managed recharge program in the Eastern Snake Plain Aquifer (ESPA) capable of recharging 250,000 acre-feet per year to stabilize the ESPA. The ESPA has been losing approximately 200,000 acre-feet annually from aquifer storage since the 1950s resulting in declining groundwater levels and spring flows from the aquifer. Stabilizing the ESPA will assist in maintaining the minimum flow requirements on the Snake River and reduce conflicts between the water users.

The strategy of the IWRB is to maximize managed recharge to the ESPA using natural flow of the Snake River. The current IWRB recharge water right (approximately 1,200 cfs) authorizes diversion of water from the Snake River above the Milner Pool (Milner) including the Henry's Fork and the South Fork. Between American Falls Reservoir and Milner the IWRB water right is generally in priority during the winter months between irrigation seasons. The IWRB water right is junior to the refill of American Falls Reservoir (1921 priority) and the unsubordinated hydropower rights at Minidoka Dam (1909/1912 priority). Therefore, the IWRB's right is generally in priority and available for recharge only during flood control releases from the Upper Snake Reservoir System.

Water spills past Milner (minimally 500 cfs) every year during non-irrigation season and is available for recharge under the IWRB's current recharge water right resulting in a reliable "base-load" for recharge. To ensure this base-load is captured the IWRB is pursuing various plans to maximize non-irrigation season recharge including:

a. Long-term delivery agreements (5 years) with canals that divert from the Milner Pool.
b. Infrastructure modifications to improve recharge capacity over the winter months of the non-irrigation season.
c. Developing new winter-operational recharge sites that divert from the Milner Pool.

The volume and timing of water available for recharge during flood control releases can be very sporadic, but during above average water years, this water provides a "surplus supply" for recharge. The IWRB has developed the following plan to maximize opportunities to divert this water supply for recharge while ensuring that managed recharge does not interfere with filling the reservoir system:

a. Execution of agreements for the delivery of water for recharge when the IWRB's recharge water right is in priority.
b. Investigations of infrastructure modifications to improve late-winter/spring-time recharge capabilities and develop off-canal recharge sites.

c. Continue current opportunistic recharge efforts throughout the basin and manage adaptively to address changing circumstances.

The following report provides a summary of the current activities of the ESPA Managed Recharge Program.

II. ESPA Managed Recharge 2015/2016 Season

The IWRB 1980 recharge water right is "in priority" during different periods of the year in the Upper and Lower Snake River Valley (upstream and downstream of American Falls Reservoir respectively). The irrigation season in the Eastern Snake River Plain has historically been between October and April. Usually, after irrigation diversions have stopped, water passing below Milner Dam is available for recharge under the IWRB's water right in the Lower Valley.

Managed recharge in the Upper Valley is dependent on the availability of water to recharge. Reservoir fill and the unsubordinated hydropower water rights at Minidoka Dam have precedence over the IWRB's natural flow recharge water right. These constraints generally limit water available for recharge by the IWRB in the Upper Valley to flood control releases by the Bureau of Reclamation (BOR) usually in the spring. Historically the majority of excess water available for recharge in the Upper Valley is during the irrigation season (May through June).

The following section provides a current summary of the IWRB ESPA managed recharge program for the 2015-2016 season.

IWRB ESPA Managed Recharge 2015/2016 Summary

The IWRB's recharge water right was in priority for the 2015/2016 Recharge Season between October 23rd, 2015 and April 1st, 2016 in the Lower Valley and never came into priority in the Upper Valley. Table 1 provides a summary of the IWRB managed recharge that was conducted for the 2015/2016 recharge season. The volumes reported are preliminary and subject to change as the volumes are verified with the canal companies and Water District 01.

The canals in the Lower Valley did not start on October 23rd due to normal canal maintenance or other canal projects. A detailed summary of the individual entities that have conducted IWRB managed recharge for this season is provided below. Figure 1 provides a daily accounting of the flow available for IWRB recharge and the diversions by the various entities for IWRB recharge. The IWRB's recharge right may be in priority during the irrigation season if flows in the river exceed irrigation demand and are not retained in the reservoir system. In that scenario, only off-canal sites could be used for recharge.

Figure 2 shows the total monthly recharge for both seasons. The lower recharge at the start of the 2015/2016 season is a result of the Milner-Gooding Canal being off-line during the construction of the MP 28 hydro plant by-pass construction. The higher volume of recharge in the 2014/2105 season in February and March is a result of the IWRB recharge right being in priority in the Upper Valley during those months, accounting for over 14,000 af of IWRB recharge. Figures 2 and 3 provide a monthly comparisons between the 2014/2015 and 2015/2016 recharge seasons for the total IWRB recharge across the ESPA and just the Lower Valley.

Table 1. ESPA IWRB Managed Recharge from October 23rd, 2015 to April 1st, 2016					
ESPA Area	**Canal System**	**5-Year Retention Time[1] (%)**	**Average Recharge Rate (cfs)**	**Days Recharged**	**Volume Recharged[2] (af)**
Lower Valley	American Falls Reservoir District No. 2 (Milner-Gooding Canal)	~36	185	127	46,875
	North Side Canal Company	~37	81	58	9,355
	Southwest Irrigation District[2]	~54	21	21	886
	Twin Falls Canal Company[2]	~45	30	154	9,102
				TOTAL	**66,218**

[1] 5-year retention rate determined by the ESPAM2.1 groundwater model.

[2] Recharge Volumes are preliminary and subject to change upon verification of days and volumes delivered for recharge.

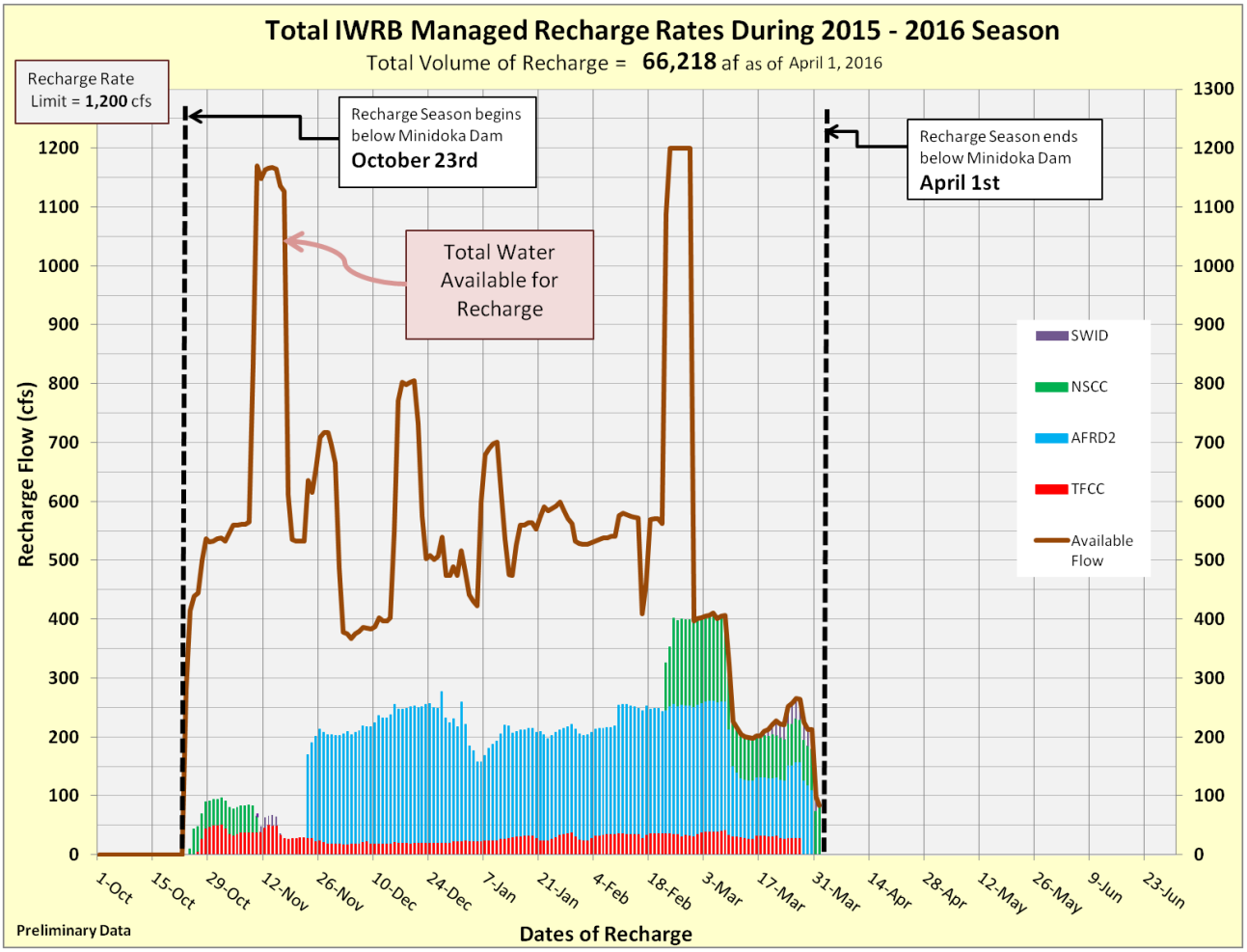


Figure 1. IWRB ESPA managed recharge.

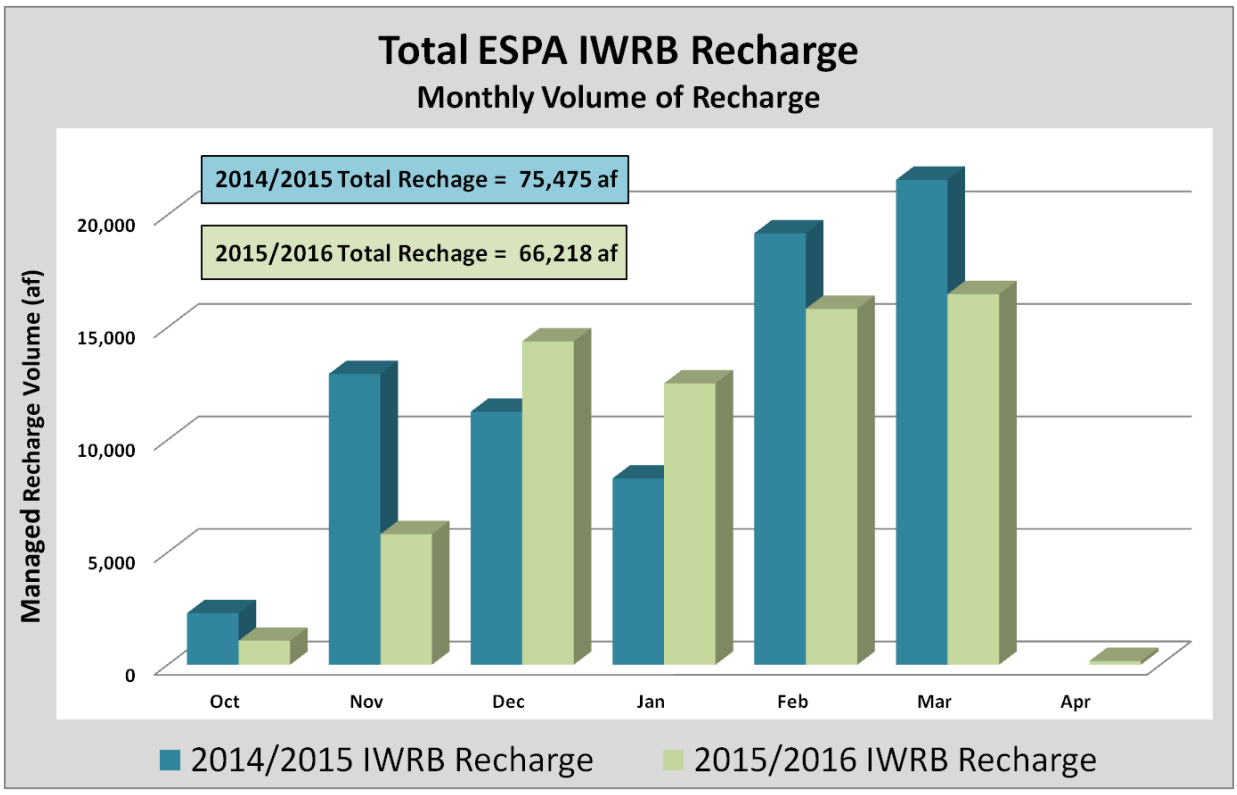


Figure 2. Total IWRB monthly recharge volumes between the 2014/2015 and 2015/2016 seasons.

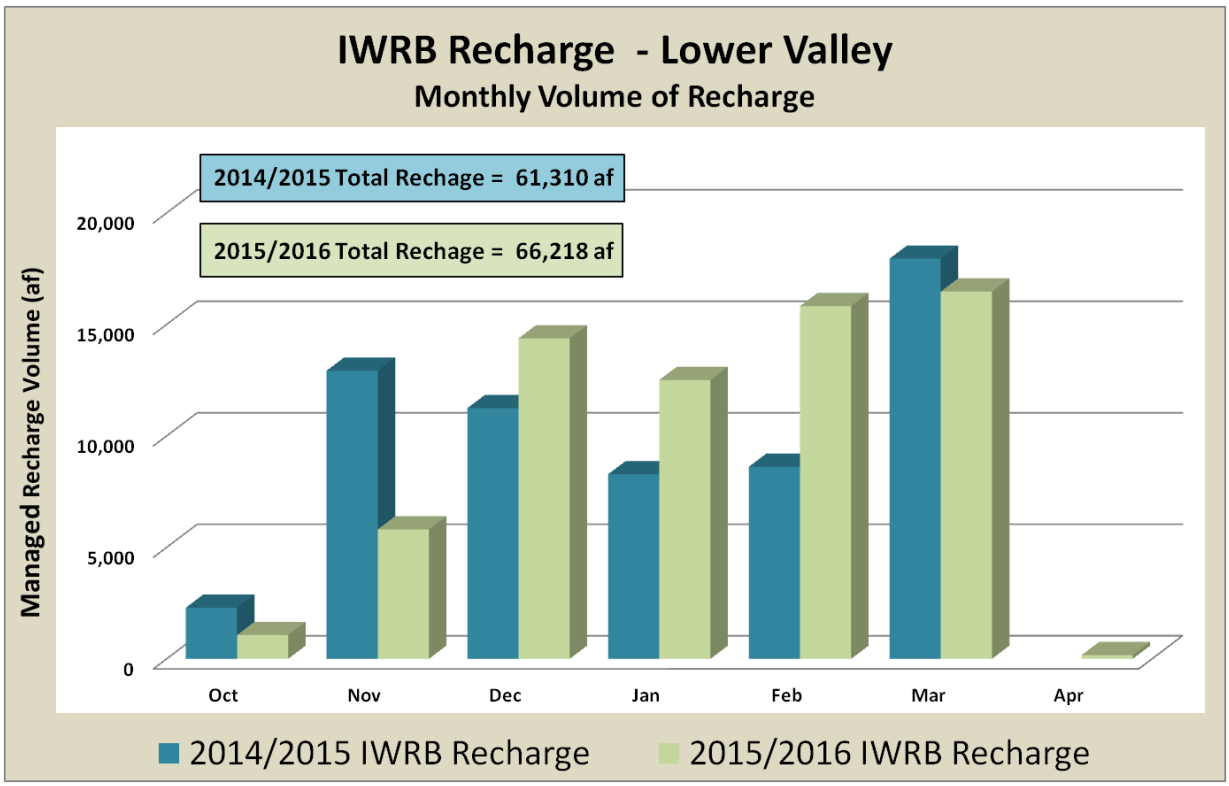


Figure 3. Lower Valley monthly volume of recharge between the 2014/2015 and 2015/2016 seasons.

Comparison of the two seasons in just the Lower Valley (Figure 3) shows an overall increase in the volume recharged per month during the 2015/2016 season. This is a result of IWRB's assistance in improving the infrastructure and the canal companies' efforts to conduct recharge during the winter months. Operations of the Milner Pool this last spring in response to A&B Irrigation District's construction of a new pump station limited the amount of water available for IWRB recharge in March.

Non-IWRB Recharge

Various entities have conducted managed recharge during the 2015/2106 recharge season. All of the non-IWRB entities recharged with water from storage reservoirs rather than natural flow from the Snake River. Table 2 provides a summary of the entities that conducted recharge last fall, where the recharge occurred, and the volumes recharged. Non-IWRB recharge is reported to have occurred this spring, however, exact locations and volumes have not been provided as the date of this report.

Table 2. Non-IWRB Managed Recharge 2015/2016

ESPA Area	Recharge Entity	Recharge Location	Volume Recharged (Acre-feet)
Lower Valley	Coalition of Cities	North Side Canal	**990**
	Southwest Irrigation District	Recharge Wells	**unknown**
Upper Valley	Association of Cities Surface Water Coalition Twin Falls CC	Eagle Rock/Progressive CC	6,196
		Farmers Friend CC	3,069
		Enterprize CC	1,527
		Great Feeder/Harrison	362
		TOTAL	**11,154**
	IGWA	Aberdeen Springfield CC	12,500
		Fremont-Madison ID	1,900
		New Sweden ID	1,745
		Snake River Valley ID	2,200
		TOTAL	**18,345**
		TOTAL	**30,489**

III. Recharge Delivery Operations Summary

To accommodate the difference in water availability for IWRB managed recharge in the Upper and Lower Valleys, separate conveyance payment structures were developed for the two areas.

Upper Valley ESPA Recharge

The following payment structure was adopted by the IWRB for conveyance of the IWRB recharge water in the Upper Valley:

1) **Base Rate** – determined by 5-year aquifer retention zone in which the contracted canal company or irrigation district is located using ESPAM2.1:
   - Greater than 40% retained in aquifer at 5 years $6.00/af delivered
   - 20% to 40% retained in aquifer at 5 years $5.00/af delivered
   - 15% to Less than 20% retained in aquifer at 5 years $4.00/af delivered
2) **Added Incentive for Delivery** – $1.00/af when recharge is conducted at least 75% of the time that IWRB recharge right is in priority and IWRB issues a Notice to Proceed.
3) **Added Winter-time Incentive for Delivery** – $1.00/af when IWRB recharge right is conducted between December 1st and March 30th and IWRB has issued a Notice to proceed.

Lower Valley ESPA Recharge

The payment structure for conveyance of the IWRB's recharge water stipulated in the 5-year conveyance contracts for the entities that recharge the IWRB's water is outlined in Table 3.

The following entities executed 5-year conveyance contracts in 2014:

- Twin Falls Canal Company (TFCC)
- American Falls Reservoir District 2 (ARFD2)
- Southwest Irrigation District (SWID)
- North Side Canal Company (NSCC)
- Big Wood Canal Company (BWCC)

Table 3. Lower Valley ESPA Payment Structure

Number of Days Recharge Water Delivered*	Payment Rate per AF Delivered	
1-to-25 days	$3/AF	An incentivized payment structure was adopted in 2014 to encourage canals to divert recharge water as long as possible during the non-irrigation season.
26-to-50 days	$5/AF	* Number of days between the date the recharge permit turns on in fall and the date it turns off following spring.
51-to-80 days	$7/AF	
81-to-120 days	$10/AF	
More than 120 days	$14/AF	

IV. Monitoring and Measurement Program

A monitoring and measurement program has been developed to assess results and impacts of recharge activities, and address regulatory requirements. The program consists of regional and site-specific monitoring to measure groundwater levels, surface water flows, recharge diversions, and water quality.

Recharge Water Quality Monitoring Program

Water quality monitoring is required if injection wells or land application methods are used to conduct managed recharge. Injection wells are permitted under IDWR's Underground Injection Control Program (UIC). Any other recharge conducted through land application methods (usually basins) requires a Groundwater Monitoring Program approved by the Idaho Department of Water Quality (IDEQ). In both cases, the recharge activity must meet specific standards to ensure the groundwater is protected and meets Idaho's Ground Water Quality Rule (IDAPA 58.01.11).

The Southwest Irrigation District (SWID) is the only entity that is currently using injection wells to conduct IWRB recharge. SWID has obtained injection well permits under IDWR's UIC program and is accountable for meeting the requirements under those permits. The MP 31 and Shoshone Recharge Sites are classified as land application. The IWRB has obtained IDEQ approved Groundwater Monitoring Programs for both of those sites.

The groundwater monitoring plans for the MP 31 and Shoshone Recharge Sites consist of:

- Approved monitoring schedule, dedicated sampling points, and a full suite of chemical, biological and physical elements that are analyzed to determine the source water and groundwater quality. Currently 130 constituents are analyzed along with the collection of field parameters.
- Idaho Bureau of Labs (IBL) is currently under a 5-year contract (started in Dec. 2014) to conduct the water quality sampling.

The MP 31 Recharge Site was the only site used for the 2015/2016 recharge season. IBL staff conducted seven sampling events over the recharge season. The sampling events included source water and groundwater sampling when recharge was occurring and pre / post recharge groundwater sampling. Analysis of results of the groundwater samples from the MP 31 Recharge Site has shown most of the constituents to be below the lab's detection limits. Any detection of a constituent above the lab's detection limit has been significantly below the Idaho Groundwater Standards (Idaho Administrative rule 58.01.11.105.01.200) and in compliance with the Groundwater Monitoring Program.

IDWR staff worked with the Bureau of Land Management (BLM) and the AFRD2 canal operator to deepen and improve the two groundwater quality monitor wells at the Shoshone Recharge Site.

Recharge Monitoring Program

The Recharge Monitoring Program is designed to verify the volumes of IWRB recharge water being delivered and to quantify the impact individual areas/sites have on the water level of the aquifer. The following provides a summary of the ongoing work for this program.

- Verification of Recharge Deliveries - Flow Measurements:
    - Quality assurance and control of recharge flow measurements has been conducted by TFCC, AFRD2, NSCC, Idaho Power Co., Water District 01, and IDWR staff during this recharge season.
    - Installed real time automated flow monitoring equipment at MP31 Recharge Site. This equipment has been extremely beneficial in monitoring the site and the check dam structure used to divert water into the site. The instrumentation of this site provides real time data to ensure the delivery system is working properly and to assess the recharge capacity of the site. Similar monitoring is scheduled for installation at the Shoshone Recharge Site.
- Water Level Monitoring:
    - An evaluation of the effects of recharge on the aquifer is being conducted by IDWR staff.
    - Installed real time automated water level monitoring equipment at the MP31 Recharge Site at one monitor well and in the basin. Similar monitoring is scheduled for installation at the Shoshone Recharge Site.

ESPA Regional Monitoring Program

IDWR's Hydrology Section (Hydrology) oversees the ESPA Regional Monitoring Program. Hydrology is actively expanding the existing monitoring program to respond to the need for more detailed information about the ESPA. The section is also accountable for the input and analysis of the data and for managing improvements to the ESPA groundwater flow model. The program requires management of an extensive monitoring network for:

- Groundwater measurements (440 sites)
- Stream gages
    - IDWR (33 sites)
    - USGS (35 sites)
- Spring flow measurements (64 sites)
- Return flow measurements (75 sites)

The following provides a summary of the ongoing work for this program:

- Monitoring port and transducer was installed at the recently deepened "Craters of the Moon" monitoring well.
- Spring 2016 ESPA synoptic water level measurements were successfully completed (water level measurements at approximately 400 sites). The data will be loaded into the database by the end of May.
- All but two of the Sentinel Wells in the Surface Water Coalition Settlement Agreement and Term Sheet have been equipped with data loggers. The remaining two wells will be equipped by the end of May.
- Letters to well owners have been sent to five of the ESPA tributary basins concerning conducting field measurements. Fieldwork to visit and measure the wells that permission has been receives is currently being scheduled.

V. ESPA Recharge Program Projects

A number of projects were undertaken in Fiscal Year 2016 (FY16) to enhance the IWRB's ability to recharge in the ESPA. A brief summary of the projects is provided below and in Table 4. The projects identified in this report have been approved by the IWRB or are included in the FY16 budget.

For managed recharge projects involving infrastructure improvements to which the IWRB provided funding, a Memorandum of Intent (MOI) was developed to establish a long-term agreement (twenty years) between the IWRB and the entity implementing the project. The MOI acknowledges: 1) the IWRB provided financial assistance for a project; and 2) the entity agrees to deliver the IWRB's recharge water as compensation for financial assistance from the IWRB. The MOI calls for automatic renewal for another twenty (20) year period unless one or both of the parties provide notice to terminate the agreement.

Project Status

1. American Falls Reservoir District 2 (AFRD2)/Milner-Gooding Canal:
    a. **MP 28 Hydro Plant By-pass** - The plant experienced complications from winter recharge flows in 2014?. Construction on the bypass wall began in October 2015 to route flows under 400 cfs around the plant. The IWRB, by resolution, authorized $60,000 for this project and entered into a contract with AFRD2 to complete the project for $45,000. While the final project cost was $48,000, the plant operator assumed the additional $3,000 cost. The project was completed on November 20th, 2015.

b. **Concrete Flume Improvements** – The IWRB's recharge water to the Shoshone Recharge Site (250 cfs estimated capacity) must travel through a 3-mile concrete flume within the Milner-Gooding Canal. The age and deteriorated condition of the concrete limited delivery of recharge water through the flume, particularly in winter. The IWRB worked with AFRD2 to assist in the financing of the project that would enable the flume to deliver water for irrigation and recharge into the future. The IWRB passed a resolution in July 2015 to provide a 50% cost-share with IWRB's contribution not to exceed $700,000. The lowest bid for the rehabilitation was $1,372,000. The project was completed on schedule with construction starting in mid-October 2015 and ending in March 2016. Once the concrete portion of the flume was cleaned more cracks were discovered that required repair than was originally estimated. The increased cost for repairing the cracks raised the original cost estimated to a final cost of $1,497,800.

c. **Road Improvement MP31 to Shoshone Recharge Site** – Improvements to the access road along the Milner-Gooding Canal were necessary to allow AFRD2 personnel and IDWR staff adequate/safe roads to monitor canal operations and the recharge site during the winter months. Estimated cost for resurfacing portions of the canal road is $120,000. A resolution was passed by the IWRB in July 2015 to authorize expenditure of the funds. The project is scheduled to be completed by the June of 2016.

d. **Dietrich Drop Hydropower Plant** – The Dietrich Drop hydro plant is on the Milner-Gooding Canal between the MP31 and the Shoshone Recharge Site. A study was completed in February 2016 to determine the options to prevent negative impacts to the plant during winter-time deliveries of recharge. In March, a resolution was passed by the IWRB to authorize expenditure up to $1,500,000 for the design and construction of the required infrastructure improvements to allow for the delivery of winter-time recharge past the hydro plant. The design phase is scheduled to be completed by August 2016. Construction is planned for the fall/winter of 2016.

e. **Expansion of the MP31 Recharge Site** – Capacity of the MP31 Recharge Site is currently limited by the maximum flow that can be diverted into the site. By installing a larger turnout structure, it is estimated the capacity of the site could be increased to 300 cfs. A resolution was passed by the IWRB in July to authorize expenditure up to $200,000 for the design and construction. To achieve the IWRB's goal to maximize the recharge potential at this site the potential of

including a new check dam structure is also being considered. This will have the added benefit of allowing for recharge as construction is taking place. The design process for a new diversion structure and check dam, if approved, is scheduled to be complete by August 2016 with construction in the fall of 2016.

2. North Side Canal Company (NSCC):

   Winter Recharge Feasibility Assessment – NSCC's assessment of the potential capacity of recharge at Wilson Lake and infrastructure improvements required for winter-time delivery of recharge water to Wilson Lake was finalized in February 2016. The assessment provided options and high-level cost estimates for infrastructure improvements to accommodate winter recharge delivery through the canal and four hydro plants. NSCC and IWRB staff agreed to move forward with development of a design to isolate the Hazelton A and B hydro plants along with other required improvements for winter-time recharge. NSCC has authorized its consultant to initiate the design phase. A resolution was passed by the IWRB in January to authorize expenditure up to $274,000 for the design portion of this project. The potential cost for the construction of this project is included in the FY17 budget and will require a resolution by the IWRB for approval at that time. The design of the project is scheduled for completion by August 2016 to accommodate construction during the fall/winter of 2016/2017.

3. Southwest Irrigation District (SWID):

   Cassia Pipeline Winter Recharge – An independent group (Buckhorn LLC) is working with SWID to develop a new pipeline to deliver water for conversion projects and to conduct managed recharge during the winter months. Buckhorn has contracted with Rumsey Engineering to design the new system with the intention of beginning construction in 2016. While Buckhorn LLC is funding the construction of the pipeline, SWID and Buckhorn LLC have proposed that the IWRB fund the construction of the infrastructure improvements that would allow for IWRB recharge through the winter months when the IWRB water right is in priority below Minidoka. The plan is to winterize the pumping station and pipeline to allow delivery of water to 11 injection wells with an estimated combined recharge capacity of 84.7 cfs. The cost for the additional infrastructure improvements has been estimated at slightly under $600,000.

4. Great Feeder Canal Company (GFCC):

   Recharge Conveyance Improvements - GFCC replaced the out-dated headworks to the Great Feeder Canal. The headworks are an integral part of the GFCC's diversion system and facilitate delivery of irrigation water and IWRB recharge water to other canal systems and potential off-canal recharge sites. A resolution was passed by the IWRB in July 2015 to authorize a cost-share of up to $500,000 for the construction of the project (estimated at the time to be 50% of the project cost). The project was completed during the first part of April for a final cost of $1,400,000. IWRB's final contribution to this project was the contracted amount of $500,000.

5. Fremont-Madison Irrigation District (FMID):

   Expansion of the Egin Lakes Recharge Area – FMID, in cooperation with Egin Bench Canal Co., has constructed a new recharge canal from the St. Anthony Canal to the Egin Lakes recharge area. The new recharge canal will significantly increase the volume of water that can be diverted to this recharge area. A resolution was passed by the IWRB in November 2015 to authorize expenditure of $1,030,000 for the construction of this project. As a condition of IWRB financing, IWRB will have exclusive rights to use this facility when its recharge water right is in priority. The project was completed at the end of March 2016.

6. Snake River Irrigation District (SRVID):

   Monitoring Equipment for the Monson Site – SRVID requested $5,000 for monitoring equipment on the Monson Site. This site is located in the Upper Valley were the volume and duration of the water available for IWRB recharge can be extremely variable. Monitoring equipment will improve measurement accuracy under variable conditions. Currently the project is on hold as SRVID is considering other improvements.

7. City of Blackfoot

   Jensen Grove – The City of Blackfoot is conducting infrastructure modifications at Jensen Grove to improve both their ability to deliver water to the site and to monitor the site. The preliminary study conducted by the city estimated the cost of the improvements at $53,054. The IWRB passed a resolution to assist the City of Blackfoot with an amount not to exceed $26,527, 50% of the cost of the original estimate. An updated estimate was submitted in March 16, 2016 for $55,280. The cost of the project above IWRB's allocated amount will be covered

by the City of Blackfoot and Snake River Valley Irrigation District. The project is scheduled to be completed in May 2015.

8. Other Projects:
    a. **Injection Well and Test** – Two potential injection well recharge sites are under investigation. The current phase of testing, $70,000 has been budgeted. The areas being studied and current status include:
        i. **Milner Dam Area** – Injection test well completed June 6th, 2015 to a depth of 500 ft. Observations during drilling and borehole video suggests very good conductivity for injection. A permit application has been submitted for an injection test and will be performed during the summer of 2016 if possible.
        ii. **Little Wood Recharge Site** (State Land South of Richfield) - A permit to drill a test injection well on state land south of the city of Richfield is complete. LSRARD is assisting with the acquisition of the permit and drilling process. This project is on hold until the engineering report is received concerning the 'Bifurcation' modification to divert Little Wood River water for recharge.

    b. **ESPA Managed Recharge Program Review** – IWRB contracted with CH2M to provide an independent review of the ESPA Managed Recharge Program for $91,850. The results of this analysis were presented at the IWRB Work Session in November 2015. The final report and updated scenario runs incorporating reduced limitations at the Minidoka Dam were complete in March 2016. Assuming no other work will be required on the project the final cost is $91,135.

    c. **De-Icing Study** – IWRB contracted with CH2M to evaluate the de-icing system deployed by TFCC on the Murtaugh Lake structures. This information will be used as a reference case for the development of de-icing systems at other facilities involved with winter-time recharge. The cost of the project was estimated to be $25,000. The project is scheduled to be completed in May 2016 and the report is currently in review.

Table 4. IWRB ESPA Recharge Program Projects					
Project Type	**Canal/Project**	**Project Type**	**Status**	**IWRB Cost Estimate**	**Completion Date**
ESPA Infrastructure	Milner-Gooding Canal				
	Concrete Flume Improv.	CNST	Complete	$750,000	March 2016
	Road Improv. MP31 to Shoshone Recharge Site	CNST	In-Progress	$120,000	Spring 2016
	Dietrich Drop Hydro Plant	Design/CNST	In-Progress	$1,500,000	Fall/Winter 2016
	MP31 Expansion	Design/CNST	In-Progress	$200,000	Fall 2016
	North Side Canal				
	Wilson Lake/Canal Improv.	Design	Proposed	$274,581	Aug. 2016
	Southwest I.D.				
	Winterized Pipeline/Recharge	Design/CNST	Proposed	$600,000	Fall/Winter 2016
	Great Feeder Canal				
	Canal Improvements	CNST	Complete	$500,000	Apr. 2016
	Fremont-Madison I.D.				
	Egin Lakes Recharge Canal	Study/CNST	Complete	$1,030,000	Mar. 2016
	Snake River I.D.				
	Monitoring Improvements	CNST	Proposed	$5,000	Fall 2016
	Jensen Grove				
	Infrastructure Improv.	CNST	In-Progress	$26,527	May 2016
	Injection Well &Test				
	Milner Dam Area	TEST	Proposed	$70,000*	Summer 2016
ESPA Program	Misc.				
	ESPA Program Review	Study	Completed	$91,135*	Mar. 2016
	De-icing Study	Study	In-Progress	$25,000	May 2016

CNST = Construction

* Original IWRB funds committed in FY15. Projects are in various stages of completion.

MEMO

To:	Idaho Water Resource Board
From:	Sandra Thiel
Subject:	Lower Red River Meadow Enhancement
Date:	May 20, 2016

Background
The South Fork Clearwater River Basin Comprehensive State Water Plan was adopted by the Idaho Water Resource Board in 2004 and approved by the legislature in 2005. The Red River, from its headwaters to its confluence with the American River, was designated as a recreational river under the Comprehensive Basin Plan.

According to the Plan, the IWRB desired that the South Fork Clearwater River Plan be a part of the various state and local processes that ultimately will lead to recovery of threatened and endangered fish species in the basin. The Board coordinated the planning process with other state and federal agencies and the Nez Perce Tribe and encouraged federal resource management agencies to work within the comprehensive state water planning process rather than pursuing federal protection of waters within Idaho.

The Plan specifies that alterations of the stream channel for construction and maintenance of channel reconstruction projects are allowed with approval by the Idaho Water Resource Board.

Proposed Project
The Lower Red River Meadow Project is located approximately five miles south of Elk City, and approximately 8 miles from Red River's confluence with the American River. Over the course of the last century, mining and agricultural operations in the lower Red River Meadow project area degraded fish and wildlife habitat. Construction of berms and dredge piles, along with channel straightening, significantly altered the natural process of the river. The Nez Perce Tribe Department of Fisheries Resource Management submitted an application for a Stream Channel Alternation permit. The permit is required to make improvements within the stream channel. The restoration plan was developed in collaboration with the Bonneville Power Administration, the National Marine Fisheries Service and the US Fish and Wildlife Service.

The project will remove berms and dredge piles and restore the stream to historic meanders. The new channel will help increase the abundance and complexity of fish habitat features and create a pool and riffle complex. The project also includes the installation of vegetated soils to stabilize the bank. When completed new river banks will match the natural channel topography and the river will provide 1.8 miles of quality spawning and rearing habitat for anadromous and resident fish species.

Proposed Recommendation
This project will provide improved fish habitat and riparian areas in an area identified by the comprehensive basin plan as needing improvement. The Stream Channel Alternation Program staff has reviewed the proposed project and support the approval of an SCA permit. Staff recommends to the Board that this project be approved.

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE	)	
LOWER RED RIVER MEADOW	)	RESOLUTION
STREAM/FLOODPLAIN	)	
ENHANCEMENT	)	

WHEREAS**,** on June 9, 2004, the Idaho Water Resource Board adopted the South Fork Clearwater River Basin Comprehensive State Water Plan and the Plan specifies that alterations to stream channel for constructions and maintenance of channel reconstruction projects are allowed with approval by the Idaho Water Resource Board; and

WHEREAS, the Nez Perce Tribe Department of Fisheries Resource Management is planning a stream improvement project on the Red River for the purposes of increasing abundance and diversity of fish habitat; and

WHEREAS, Joint Application for Permit to Alter a Stream Channel, No. 82-20061 was filed with the Idaho Department of Water Resources for this project; and

WHEREAS, it has been concluded that the proposed stream channel alteration would support the intent and goals of the South Fork Clearwater River Basin Comprehensive State Water Plan; and

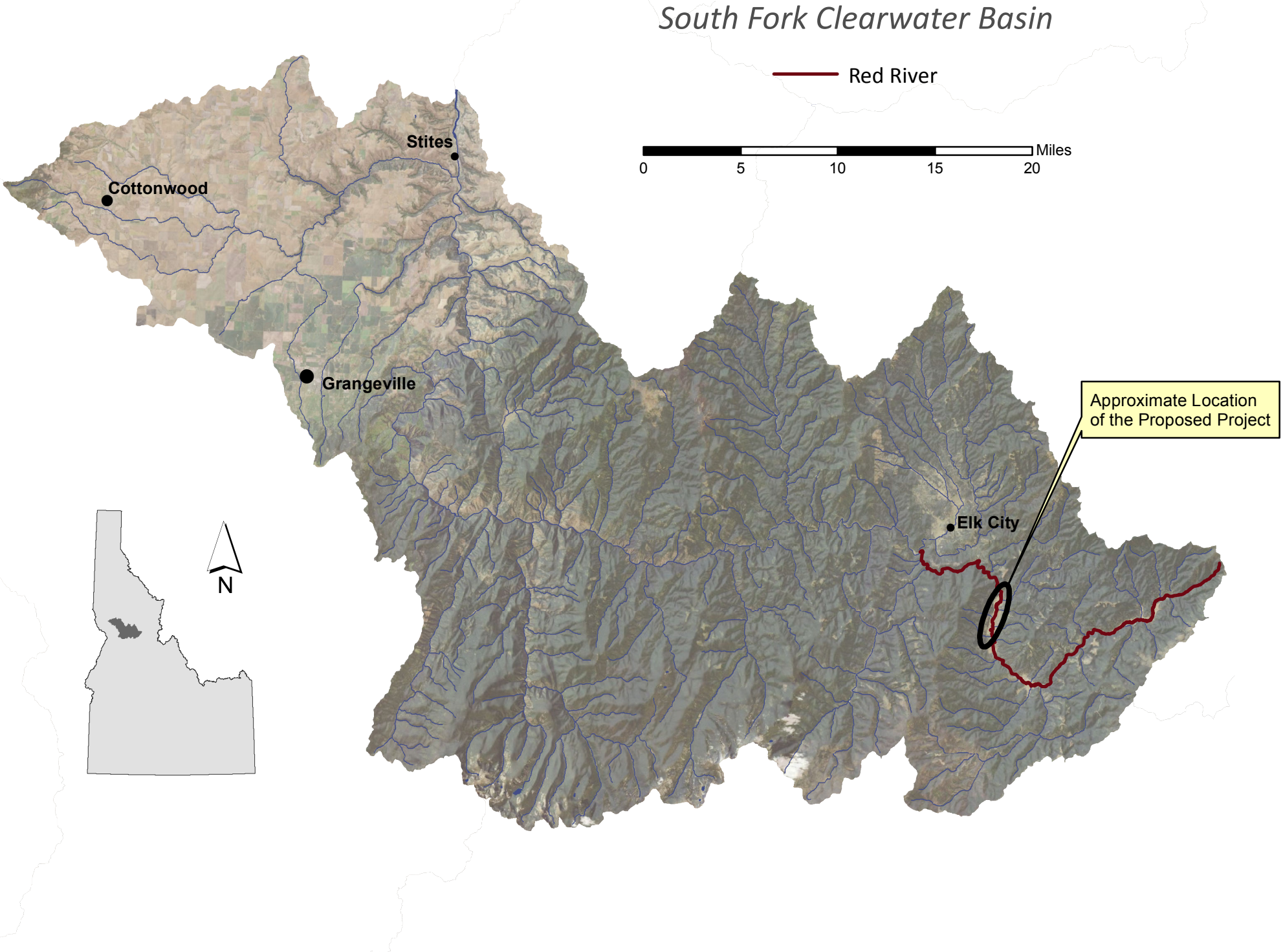
WHEREAS, the proposed project on the Red River is in the public interest.

NOW THEREFORE BE IT RESOLVED that the Board hereby approves the Red River Channel Restoration Project as filed with the Department through Permit No. 82-20061.

Dated this 20th day of May, 2016.

_____
ROGER CHASE
Chairman

Attest: _____
VINCE ALBERDI
Secretary


South Fork Clearwater Basin
Red River
Miles
0
5
10
15
20
Stites
Cottonwood
Grangeville
Elk City
Approximate Location
of the Proposed Project
N

JOINT APPLICATION FOR PERMITS

U.S. ARMY CORPS OF ENGINEERS - IDAHO DEPARTMENT OF WATER RESOURCES - IDAHO DEPARTMENT OF LANDS

Authorities: The Department of Army Corps of Engineers (Corps), Idaho Department of Water Resources (IDWR), and Idaho Department of Lands (IDL) established a joint process for activities impacting jurisdictional waterways that require review and/or approval of both the Corps and State of Idaho. Department of Army permits are required by Section 10 of the Rivers & Harbors Act of 1899 for any structure(s) or work in or affecting navigable waters of the United States and by Section 404 of the Clean Water Act for the discharge of dredged or fill materials into waters of the United States, including adjacent wetlands. State permits are required under the State of Idaho, Stream Protection Act (Title 42, Chapter 38, Idaho Code and Lake Protection Act (Section 58, Chapter 13 et seq., Idaho Code). In addition the information will be used to determine compliance with Section 401 of the Clean Water Act by the appropriate State, Tribal or Federal entity.

Joint Application: Information provided on this application will be used in evaluating the proposed activities. Disclosure of requested information is voluntary. Failure to supply the requested information may delay processing and issuance of the appropriate permit or authorization. **Applicant will need to send a completed application, along with one (1) set of legible, black and white (8½"x11"), reproducible drawings that illustrate the location and character of the proposed project / activities to both the Corps and the State of Idaho.**

See Instruction Guide for assistance with Application. Accurate submission of requested information can prevent delays in reviewing and permitting your application. Drawings including vicinity maps, plan-view and section-view drawings must be submitted on 8-1/2 x 11 papers.

Do not start work until you have received all required permits from both the Corps and the State of Idaho

FOR AGENCY USE ONLY			
USACE NWW-	Date Received:	☐ Incomplete Application Returned	Date Returned:
Idaho Department of Water Resources No.	Date Received:	☐ Fee Received DATE:	Receipt No.:
Idaho Department of Lands No.	Date Received:	☐ Fee Received DATE:	Receipt No.:

INCOMPLETE APPLICATIONS MAY NOT BE PROCESSED

1. **CONTACT INFORMATION - APPLICANT** Required:			2. **CONTACT INFORMATION - AGENT:**		
Name: Marcie Carter			Name: Stephanie Bransford		
Company: Nez Perce Tribe Department of Fisheries Resource Management			Company: Nez Perce Tribe Department of Fisheries Resource Management		
Mailing Address: P.O Box 365			Mailing Address: 416 W. Main, Suite 2		
City: Lapwai	State: ID	Zip Code: 83540	City: Grangeville	State: ID	Zip Code: 83530
Phone Number *(include area code)*: 208-983-0675	E-mail: stephanieb@nezperce.org		Phone Number *(include area code)*: 208-983-0675	E-mail: stephanieb@nezperce.org	

3. PROJECT NAME or TITLE: Lower Red River Meadow Stream/Floodplain Enhan	4. PROJECT STREET ADDRESS: Red River Rd (FS Road #223

5. PROJECT COUNTY: Idaho	6. PROJECT CITY: Elk City	7. PROJECT ZIP CODE: 83525	8. NEAREST WATERWAY/WATERBODY: Red River

9. TAX PARCEL ID#:	10. LATITUDE: 45'45'24.43 N LONGITUDE: 115'26'46.24 W	11a. 1/4:	11b. 1/4:	11c. SECTION: 18	11d. TOWNSHIP: 28	11e. RANGE: 9

12a. ESTIMATED START DATE: Jul 1, 2016	12b. ESTIMATED END DATE: Sep 30, 2016	13a. IS PROJECT LOCATED WITHIN ESTABLISHED TRIBAL RESERVATION BOUNDARIES? ☒ NO ☐ YES Tribe:

13b. IS PROJECT LOCATED IN LISTED ESA AREA? ☐ NO ☒ YES	13c. IS PROJECT LOCATED ON/NEAR HISTORICAL SITE? ☒ NO ☐ YES

14. DIRECTIONS TO PROJECT SITE: Include vicinity map with legible crossroads, street numbers, names, landmarks.

The Lower Red River Meadow Project is located approximately 5 miles south of Elk City, Idaho and approximately 8 miles from its confluence with the American River.

15. PURPOSE and NEED: ☐ Commercial ☐ Industrial ☐ Public ☐ Private ☒ Other Steam and Floodplain Restoration

Describe the reason or purpose of your project; include a brief description of the overall project. Continue to Block 16 to detail each work activity and overall project.

The purpose of this project is to increase the abundance and diversity of fish habitat features by restoring the existing "straightened" channel to its historic river bends, and to increase floodplain connectivity that has been isolated due to historic land-use practices.

16. DETAILED DESCRIPTION OF EACH ACTIVITY WITHIN OVERALL PROJECT. Specifically indicate portions that take place within waters of the United States, including wetlands: Include dimensions; equipment, construction, methods; erosion, sediment and turbidity controls; hydrological changes: general stream/surface water flows, estimated winter/summer flows; borrow sources, disposal locations etc.:

This project consists of:
- Remove constructed push-up berms and dredge piles to restore flow into historic meander bends, return main river channel to historic river bends (a total of 7 historic meander bends to be re-connected).
- Fill the existing, straightened channel, - Increase abundance and complexity of fish habitat features in the treatment reach (increasing pools from 2% of relative availability to 44%).
- Enhance the historic channel by creating a pool/riffle/glide/run complex.
- Shape new river banks to match natural channel topography and function (increasing stream sinuosity from 1.1 to 1.9 & adding an additional 1,689 ft. of channel length).
- Install vegetated soil lifts to stabilize the bank while simultaneously creating fish habitat. Soil lifts will be composed of layers of soil, geo-textile, and 1 gallon nursery planting stock (thinleaf alder).
- Establish a riparian corridor that will provide for bank stability, shade, and habitat complexity / cover.

Two temporary coffer dam structures (see typical drawing provided) will be used to sequentially to re-water the new channel. Rewatering will be sequenced from downstream working upstream in order to provide for fish passage.

17. DESCRIBE ALTERNATIVES CONSIDERED to AVOID or MEASURES TAKEN to MINIMIZE and/ or COMPENSATE for IMPACTS to WATERS of the UNITED STATES, INCLUDING WETLANDS: See Instruction Guide for specific details.

See attached water management plan.

18. PROPOSED MITIGATION STATEMENT or PLAN: If you believe a mitigation plan is not needed, provide a statement and your reasoning why a mitigation plan is NOT required. Or, attach a copy of your proposed mitigation plan.

See attached water management plan.

19. TYPE and QUANTITY of MATERIAL(S) to be discharged below the ordinary high water mark and/or wetlands:

Dirt or Topsoil:		cubic yards
Dredged Material:		cubic yards
Clean Sand:		cubic yards
Clay:		cubic yards
Gravel, Rock, or Stone:		cubic yards
Concrete:		cubic yards
Other (describe): Dredge pile/berms	18,777	cubic yards
Other (describe):		cubic yards
TOTAL:	18,777	cubic yards

20. TYPE and QUANTITY of impacts to waters of the United States, including wetlands:

Filling:	1.14	acres	49,964	sq ft.	18,777 cubic yards
Backfill & Bedding:		acres		sq ft.	cubic yards
Land Clearing:		acres		sq ft.	cubic yards
Dredging:		acres		sq ft.	cubic yards
Flooding:		acres		sq ft.	cubic yards
Excavation:	2.3	acres	99,926	sq ft.	28,681 cubic yards
Draining:		acres		sq ft.	cubic yards
Other: Coffer Dams (2 total)	0.01	acres	288	sq ft.	21.4 cubic yards
TOTALS:	3.45	acres	150,178	sq ft.	47,479.4 cubic yards

21. HAVE ANY WORK ACTIVITIES STARTED ON THIS PROJECT? [X] NO [ ] YES If yes, describe ALL work that has occurred including dates.

22. LIST ALL PREVIOUSLY ISSUED PERMIT AUTHORIZATIONS:

HIP III Programmatic Consultation
NEPA - BPA FWIP
SHPO

23. [ ] YES, Alteration(s) are located on Public Trust Lands, Administered by Idaho Department of Lands

24. SIZE AND FLOW CAPACITY OF BRIDGE/CULVERT and DRAINAGE AREA SERVED: 120.7 Square Miles

25. IS PROJECT LOCATED IN A MAPPED FLOODWAY? [X] NO [ ] YES If yes, contact the floodplain administrator in the local government jsrisdiction in which the project is located. A Floodplain Development permit and a No-rise Certification may be required.

26a WATER QUALITY CERTIFICATION: Pursuant to the Clean Water Act, anyone who wishes to discharge dredge or fill material into the waters of the United States, either on private or public property, must obtain a Section 401 Water Quality Certification (WQC) from the appropriate water quality certifying government entity.
See Instruction Guide for further clarification and all contact information.

The following information is requested by IDEQ and/or EPA concerning the proposed impacts to water quality and anti-degradation:

[X] NO [ ] YES Is applicant willing to assume that the affected waterbody is high quality?
[X] NO [ ] YES Does applicant have water quality data relevant to determining whether the affected waterbody is high quality or not?
[X] NO [ ] YES Is the applicant willing to collect the data needed to determine whether the affected waterbody is high quality or not?

26b. BEST MANAGEMENT PRACTICTES (BMP's): List the Best Management Practices and describe these practices that you will use to minimize impacts on water quality and anti-degradation of water quality. All feasible alternatives should be considered - treatment or otherwise. Select an alternative which will minimize degrading water quality

Several measures will be taken to minimize impacts to aquatic species and habitat areas including: assuring qualified stream restoration specialists/engineers will be on site for channel reconstruction, an in-stream work window of July 15-August 15, on-site turbidity monitoring & work adjustments (see attached water management plan), spill prevention control plan, equipment/supply storage area outside of floodplain, weed-free inspection on all equipment prior to mobilizing to work site.

Through the 401 Certification process, water quality certification will stipulate minimum management practices needed to prevent degradation.

27. LIST EACH IMPACT to stream, river, lake, reservoir, including shoreline: Attach site map with each impact location.

Activity	Name of Water Body	Intermittent Perennial	Description of Impact and Dimensions	Impact Length Linear Feet
Fill existing channel	Red River	Perennial	Filling in old channel with native river material	1,000
Excavation of new channel	Red River	Perennial	Reconnecting historic meanders to Red River	1,689
			TOTAL STREAM IMPACTS (Linear Feet):	2,689

28. LIST EACH WETLAND IMPACT include mechanized clearing, fill excavation, flood, drainage, etc. Attach site map with each impact location.

Activity	Wetland Type: Emergent, Forested, Scrub/Shrub	Distance to Water Body (linear ft)	Description of Impact Purpose: road crossing, compound, culvert, etc.	Impact Length (acres, square ft linear ft
			TOTAL WETLAND IMPACTS (Square Feet):	

29. ADJACENT PROPERTY OWNERS NOTIFICATION REQUIREM: Provide contact information of ALL adjacent property owners below.

Name: USFS - Red River Ranger District, Nez Perce Clearwater National Forest Mailing Address: P.O. Box 416 City: Elk City State: ID Zip Code: 83525 Phone Number (include area code): 208-842-2245 E-mail:	Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail:
Name: Earl and Jeanette Johnson Mailing Address: Red River Road City: Elk City State: ID Zip Code: 83525 Phone Number (include area code): 208-842-2387 E-mail:	Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail:
Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail:	Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail:
Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail:	Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail:

30. SIGNATURES: STATEMENT OF AUTHORIAZATION / CERTIFICATION OF AGENT / ACCESS

Application is hereby made for permit, or permits, to authorize the work described in this application and all supporting documentation. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein; or am acting as the duly authorized agent of the applicant (Block 2). I hereby grant the agencies to which this application is made, the right to access/come upon the above-described location(s) to inspect the proposed and completed work/activities.

Signature of Applicant: Marie Carter *Date:* March 3, 2016

Signature of Agent: Stephanie Bransford Digitally signed by Stephanie Bransford DN: cn=Stephanie Bransford, o=Nez Perce Tribe, ou=Fisheries Watershed, email=stephanieb@nezperce.org, c=US Date: 2016.02.22 10:20:59 -08'00' *Date:* 2/22/16

This application must be signed by the person who desires to undertake the proposed activity AND signed by a duly authorized agent (see Block 1, 2, 30). Further, 18 USC Section 1001 provides that: "*Whoever, in any manner within the jurisdiction of any department of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both*".

HIP III PROGRAMMATIC - CONSULTATION
PROJECT NOTIFICATION FORM
HIP III No: 2016015

Lead Action Agency: BPA			
NMFS Tracking #: 2013/9724	**Statutory Authority:** ☒ ESA & EFH ☐ ESA		**USFWS Tracking #:** 01EOFW00-2013-F-0199
Date of Request:	2/18/2016		
Project Title:	**Lower Red River Meadow Enhancement**		
BPA Project #:	**2002-072-00**	**Contract #:**	**70635A**
BPA EC Contact:	**Michelle Guay**	**Phone:**	**503.230.3459**
Project Sponsor Contact:	**Stephanie Bransford**	**Phone:**	**208.983.0675**
Project Affiliation:	**Nez Perce Tribe Fisheries Watershed**		
NMFS Branch Office:	**Northern Snake Branch - Kenneth.Troyer@noaa.gov**		
USFWS Field Office:	**Northern Idaho Field Office (Spokane) – Scott_Grunder@fws.gov**		
Lat/Long: (in decimal degrees, WGS84)	**45.758781/-115.394897**	**County:**	IDAHO, ID
6th Field HUC:	**170603050103**	**HUC Name:**	**Middle Red River**

Project Start Date:	7/1/2016	**Project End Date:**	9/30/2016	**Completed Form Due Date:**	11/30/2016

(Project Completion Form and/or Herbicide Use Form due ≤60-days after Project End Date)

Does the project consist of Invasive Plant Control only?	Yes ☐	No ☒
Does the project require near- and/or in-water construction?	Yes ☒	No ☐
Does the project require near- and/or in-water work (no construction)?	Yes ☐	No ☒
Does the project require work area isolation/fish salvage?	Yes ☒	No ☐
Does the project require a variance?	Yes ☒	No ☐

Project Description

List the project activities and describe the intended result(s); tell when the project is to occur; describe how the activities will be implemented; provide any other pertinent information. Please include Work Element for each activity.

Over the course of the last century, mining and agricultural operations in the lower Red River Meadow project area have resulted in fish and wildlife habitat degradation. Constructed push-up berms and dredge piles along with channel straightening have significantly altered the natural processes of the river.

This project will reconnect the stream and floodplain processes and provide habitat complexity similar to the river stretch that is just downstream from the treatment reach (located on the same property parcel, see Sheet 2.1 on the plan set). If completed, this property will provide 1.8 miles of quality spawning and rearing habitat for anadromous and resident fish species.

Specifically, the action will:

- Remove constructed push-up berms and dredge piles to restore flow into historic meander bends (a total of 7 historic meander bends to be re-connected)
- Fill the existing, straightened channel
- Enhance the historic channel by creating a pool/riffle/glide/run complex
- Shape new river banks to match natural channel topography and function (increasing stream sinuosity from 1.1 to 1.9 & adding an additional 1,689 ft. of channel length)
- Install vegetated soil lifts to stabilize the bank while simultaneously creating fish habitat. Soil lifts will be composed of layers of soil, geo-textile, and alder stakes.
- Install trees and shrubs in the riparian area, including native sedges, rushes, grasses, and alders.

The Nez Perce Tribe and their consulting engineers (Geo Engineers, Inc.) developed a detailed flow management, fish salvage, and turbidity monitoring plan, which will greatly minimize take to listed fish while keeping turbidity within limits specified under in the HIP 3. The plan was developed in collaboration with, and with the approval of: BPA hydrologic engineer Sean Welch, NMFS consultation biologist Aurele LaMontagne, NMFS hydrologic engineer Jeff Brown, and USFWS consultation biologist Laura Williams. Please see the Red River Meadows Water Management Plan at the end of this document for specific detail on the re-watering and fish salvage for this project.

The project is planned for implementation during the summer of 2016. The project is expected to be built over 63 days between the dates of July 1 and September 30. Work below OHW will be limited to the in-water work window for the Red River (July 15 to August 15).

Listed fish occurring in the action area include steelhead and bull trout. (Chinook also occur in the action area, but they are not listed in this stream.) Of the listed fish, only juvenile steelhead are likely to be present at the time of the in-water work, as evidenced by snorkel surveys conducted by the Nez Perce Tribe in July 2014 and July 2015. No adults of either species are likely to be present because the in-water work window does not co-occur with adult migration and spawning in the project area. Additionally, juvenile bull trout are unlikely to be present due to high temperatures that typically occur during the summer construction season (14 to 18°C). The snorkel surveys indicated that only approximately 3 to 7 juvenile steelhead are likely to be present and directly affected by the construction work.

All metrics, construction specifications, baseline data, and rationale for the project are given in the Basis of Design report and plan sheets, available upon request.

Variance Request

Describe how the effects of the requested variance fall within the range of effects described for the proposed activities in the HIP III Opinion, by addressing the following:

1) Define the requested variance and the relevant criterion by page number.

We are requesting a variance fish passage specifically in reference to item #1 under Construction & Post-Construction Conservation Measures, page 15 of the HIP III Handbook, version 2.9. The flow management plan will cause a short, temporary interruption in fish passage, for up to 12 to 14 hours at each meander bend.

2) Environmental conditions anticipated at the time of the proposed work (flow and weather conditions).
Work will be done during low-flow conditions. The overall contract period will be July 1 – September 30, with the in-water work window of July 15 – August 15. Temperatures (both water and ambient air) are anticipated to be high (water temp in the range of 14 to 18°C, based on temperature data taken at time of snorkeling in July 2014 and July 2015); therefore de-fishing/fish salvage efforts will be done in the early morning while temperatures are at the coolest for the day.

3) Biological justification as to why a variance is necessary and a brief rationale why the variance will either provide a conservation benefit or, at a minimum, not cause additional adverse effects beyond the scope of the Opinion.
We are requesting an interruption in providing fish passage within the mainstem Red River channel (2,240') while re-watering 7 new meander bends. Fish passage typically will be delayed 12-14 hours per meander, not to exceed 24 hours. Re-watering efforts will begin in the early morning and commence (depending upon meeting turbidity criteria) in the late afternoon/evening, therefore, re-opening the channel for fish passage during night time hours. The biological justification for the interruption in passage is twofold: to reduce turbidity and to avoid stranding fish. The project area must be re-watered slowly and in phases to remain within the HIP 3 turbidity standards. During some phases of the slow rewatering, there will only be a very small amount of water in the channel, posing a risk for fish stranding and incidental take. NFMS biologists Jeff Brown and Aurele LaMontagne both agreed that the short interruption in fish passage was much lower risk to fish than was the stranding risk. Also, because so few listed fish are likely to occur in the action area at the time of the in-water work, only a few will be exposed to this effect.

Please note that we are not requesting a variance from USFWS for an interruption in passage for bull trout. Since no bull trout are anticipated to be present at the time of the work, no interruption in passage will occur.

A specific re-watering management plan and fish salvage plan has been prepared cooperatively by BPA, NPT, GeoEngineers, & NMFS (1/21/2016) (included at the end of this document). Pre-washing the new channel and discharging turbid water onto the floodplain as well as slowly re-watering the new channel in 1/3 increments will minimize disruption to fish movement, stranding risk, and exposure to turbidity.

4) Include as attachments any necessary approvals from state agencies.
n/a

NMFS Species/Critical Habitat Present in Action Area:

Anadromous Fish:

- ☐ Lower Columbia River Chinook
- ☐ Lower Columbia River coho
- ☐ Lower Columbia River steelhead
- ☐ Middle Columbia River steelhead
- ☐ Upper Columbia River spring-run Chinook
- ☐ Upper Columbia River steelhead
- ☐ Columbia River chum
- ☐ Green sturgeon
- ☐ Upper Willamette River Chinook
- ☐ Upper Willamette River steelhead
- ☐ Snake River spring/summer-run Chinook
- ☐ Snake River fall-run Chinook
- ☒ Snake River Basin steelhead
- ☐ Snake River sockeye
- ☐ Pacific eulachon

Essential Fish Habitat Species:

- ☒ Salmon (West Coast Salmon FMP)
- ☐ Estuarine Composite (Ground fish, pelagics)

USFWS Species/Critical Habitat Present in Action Area:

Freshwater Fish Species:

- ☒ Bull Trout

Mammalian Species:

- ☐ Canada lynx*
- ☐ Columbia white-tailed deer*
- ☐ Gray wolf*
- ☐ Grizzly bear*
- ☐ North American wolverine
- ☐ Pygmy rabbit*
- ☐ Northern Idaho ground squirrel*
- ☐ Woodland caribou*

Avian Species:

- ☐ Marbled murrelet
- ☐ Northern spotted owl
- ☐ Streaked horned lark*
- ☐ Western snowy plover

Invertebrate Species:

- ☐ Banbury Springs limpet
- ☐ Bliss Rapids snail*
- ☐ Bruneau Hot springsnail*
- ☐ Fender's blue butterfly
- ☐ Taylor's checkerspot butterfly
- ☐ Snake River physa snail*
- ☐ Oregon silverspot butterfly

Plant Species:

- ☐ Bradshaw's lomatium
- ☐ Cook's lomatium
- ☐ Gentner's fritillary
- ☐ Golden paintbrush
- ☐ Howell's spectacular thelypody
- ☐ Kincaid's lupine
- ☐ Large-flowered wooly meadowfoam
- ☐ Malheur wire-lettuce
- ☐ McFarlane's four o'clock
- ☐ Nelson's checkermallow
- ☐ Rough popcorn flower
- ☐ Showy stickseed
- ☐ Slickspot peppergrass
- ☐ Spalding's catchfly
- ☐ Umtanum Desert buckwheat
- ☐ Ute ladies' tresses
- ☐ Water howellia
- ☐ Wenatchee Mountain checkermallow
- ☐ Western lily
- ☐ White Bluffs bladderpod
- ☐ Willamette daisy

Types of Action:

Identify the types of action(s) proposed.

1. Fish Passage Restoration (Profile Discontinuities)

- ☐ a. Dams, Water Control or Legacy Structure Removal
- ☐ b. Consolidate, or Replace Existing Irrigation Diversions
- ☐ c. Headcut and Grade Stabilization
- ☐ d. Low Flow Consolidation
- ☐ e. Providing Fish Passage at an Existing Facility

Fish Passage Restoration (Transportation Infrastructure)

- ☐ f. Bridge and Culvert Removal or Replacement
- ☐ g. Bridge and Culvert Maintenance
- ☐ h. Installation of Fords

2. River, Stream, Floodplain, and Wetland Restoration

- ☐ a. Improve Secondary Channel and Wetland Habitats
- ☒ b. Set-back or Removal of Existing, Berms, Dikes, and Levees
- ☒ c. Protect Streambanks Using Bioengineering Methods
- ☐ d. Install Habitat-Forming Natural Material Instream Structures (Large Wood, Boulders, and Spawning Gravel)
- ☒ e. Riparian Vegetation Planting
- ☒ f. Channel Reconstruction*

3. Invasive and Non-Native Plant Control

- ☐ a. Manage Vegetation using Physical Controls
- ☐ b. Manage Vegetation using Herbicides

4. Piling Removal.

- ☐ Piling Removal

5. Road and Trail Erosion Control, Maintenance, and Decommissioning

- ☐ a. Maintain Roads
- ☐ b. Decommission Roads

6. In-channel Nutrient Enhancement

- ☐ In-channel Nutrient Enhancement

7. Irrigation and Water Delivery/Management Actions

- ☐ a. Convert Delivery System to Drip or Sprinkler Irrigation
- ☐ b. Convert Water Conveyance from Open Ditch to Pipeline or Line Leaking Ditches or Canals
- ☐ c. Convert from Instream Diversions to Groundwater Wells for Primary Water Sources
- ☐ d. Install or Replace Return Flow Cooling Systems
- ☐ e. Install Irrigation Water Siphon Beneath Waterway
- ☐ f. Livestock Watering Facilities
- ☐ g. Install New or Upgrade/Maintain Existing Fish Screens

8. Fisheries, Hydrologic, and Geomorphologic Surveys

- ☒ Fisheries, Hydrologic, and Geomorphologic Surveys

9. Special Actions (Terrestrial Species)

- ☐ a. Install/develop Wildlife Structures
- ☐ b. Fencing Construction for Livestock Control
- ☐ c. Implement Erosion Control Practices
- ☒ d. Plant Vegetation
- ☐ e. Tree Removal for LW Projects

NMFS Hydro Division Review

Does the project require approval from NMFS Hydro Division for:

Fish Passage Restoration **(Profile Discontinuities)**	Yes ☐	No ☒	Approval Date: DATE
Install New or Upgrade/Maintain Existing Fish Screens	Yes ☐	No ☒	Approval Date: DATE
Channel Reconstruction	Yes ☒	No ☐	Approval Date: 1/22/2016

USFWS Terrestrial Species Review

Does the project require confirmation of NLAA Effects determination for:

Mammalian Species	Yes ☐	No ☒	Approval Date: DATE
Invertebrate Species	Yes ☐	No ☒	Approval Date: DATE
Avian Species	Yes ☐	No ☒	Approval Date: DATE
Plant Species	Yes ☐	No ☒	Approval Date: DATE

RRT REVIEW (for medium or high risk projects only)

Medium Risk Project requiring internal RRT review	Yes ☐	No ☒
High Risk project requiring inter-agency review?	Yes ☒	No ☐

Date of RRT submittal: 12/1/2014 Date of RRT Approval: 2/18/2016 RRT Reviewer: Michelle Guay

BPA Determination of Consistency with all Requirements of the HIP III Consultation

The BPA must certify that the proposed project is consistent with all requirements and applicable terms and conditions of the HIP III Consultation.

BPA EC Contact (constitutes your electronic signature): Michelle Guay

Date of Certification: 2/18/2016

Turbidity will be managed by using a staged re-watering plan, as developed through collaboration with BPA hydraulic engineer Sean Welch, NMFS hydraulic engineer Jeff Brown, NMFS consultation biologist Aurele LaMontagne, NPT's contract engineers Jeff Fealko and Ryan Carnie, and NPT project manager Stephanie Bransford:

1. NPT will pre-wash the newly excavated channel before rewatering. Turbid wash water will be detained and pumped to the floodplain, rather than discharging to fish-bearing waters.
2. Prepare new channel for water by installing seine at upstream end to prevent fish from moving downstream into new channel until 2/3 of total stream flow is available in that channel. Starting in the early morning, introduce 1/3 of the flow into the new channel over a period of 1-2 hours.
3. Perform monitoring according to HIP 3 standards.
    a. If turbidity exceeds 10% of background, modify the activity to reduce turbidity. In this case, this might mean decreasing the amount of flow entering the new channel and/or correcting any other issues that are causing turbidity (for example – correct a bank that is sloughing, install or correct a BMP, etc.)
    b. Monitor every 2 hours as long as the in stream activity is occurring.
    c. If exceedances occur for more than 2 monitoring intervals in a row (4 hours), then the activity must stop until turbidity reaches background levels. This means that the contractor may have to plug off water supply to the new meander until turbidity is within acceptable levels.
    d. Once turbidity meets the standard, move on to the next watering stage
4. Prepare to introduce the second 1/3 of the flow (up to a total of 66%) to the new channel by installing seine at upstream end of old channel in order to prevent fish from moving into a partially dewatered channel. Introduce the second 1/3 of the flow over the next 1-2 hours. Salvage fish from the old channel at this time, so that the old channel is fish-free before dropping below 1/3 of the flow. {Note that fish will be temporarily blocked from moving downstream into either channel until 2/3 of the flow has been transitioned to the new channel. This blockage to downstream fish passage is expected to persist for roughly 12 to 14 hours, but fish will still be able to volitionally move out of the channel in the downstream direction.}
5. Perform monitoring as in #2 above.
6. After the second 1/3 of flow is introduced over 2 hours, and if turbidity criteria are met, then remove seine nets from the new channel and allow fish to move downstream into that channel.
7. Introduce the final 1/3 of flow. Once 100% of the flow is in the new channel, plug/pull nets from old channel.

From:	Castro, Janine
To:	Guay,Michelle (CONTR) - ECF-4; Aurele LaMontagne - NOAA Federal; Welch,Sean P (BPA) - EWL-4; Jeff Brown; Bryon Holt
Subject:	Red River Meadows
Date:	Wednesday, February 17, 2016 11:53:58 AM

Hi Michelle,

I have reviewed all of the Red River Meadow documents, including the most up-to-date designs and MAMP. This looks like a great project and I have no further substantive comments; however, I do have a few recommendations for consideration.

1. It might be worth adding a visual assessment for surface flow and fish passage over the constructed riffles to the MAMP just to ensure they are not subbing out.

2. During construction, identify any remnant channels adjacent to the new channel and consider slightly lowering the streambank to improve the connection. This will help to activate the floodplain over a range of flows and reduce unit stream power during moderate flow events.

Thanks and best of luck on implementation,
Janine

--
Janine Castro, Geomorphologist
US Fish and Wildlife Service
National Marine Fisheries Service
Portland, Oregon
503.231.6977

If you dam the river it stagnates.
Running water is beautiful.
So be a channel.
-- D.H. Lawrence

From: Aurele LaMontagne - NOAA Federal
To: Guay,Michelle (CONTR) - ECF-4
Subject: Red River RRT Review
Date: Thursday, January 21, 2016 1:51:44 PM

Michelle, I have completed my RRT review and am satisfied that my comments have been incorporated into the project actions. If you are going to request a variance request, please send the request to me and Ken Troyer.
Aurele

--
Aurele LaMontagne

Hydrologist
Snake Basin Office
NOAA Fisheries West Coast Region
U.S. Department of Commerce

208-378-5686

From: Kosterman, Megan
To: Guay,Michelle (CONTR) - ECF-4
Cc: STEPHANIEB@nezperce.org
Subject: Red River Meadows Restoration Project
Date: Wednesday, February 17, 2016 5:48:00 PM

Dear Michelle,

The U.S. Fish and Wildlife Service (Service) has received your request for the Red River Meadows Restoration Project (Project) RRT review as required by the HIP III Programmatic and the additional project information provided in emails on January 14, 2016 and January 26, 2016. The comments the Service provided to you have been appropriately incorporated into the Project, including the Red River Meadows Water Management Plan, and thus concludes the RRT process. Please use Service Reference number 01EIFW00-2016-TA-0373 when referring to this action in the future.

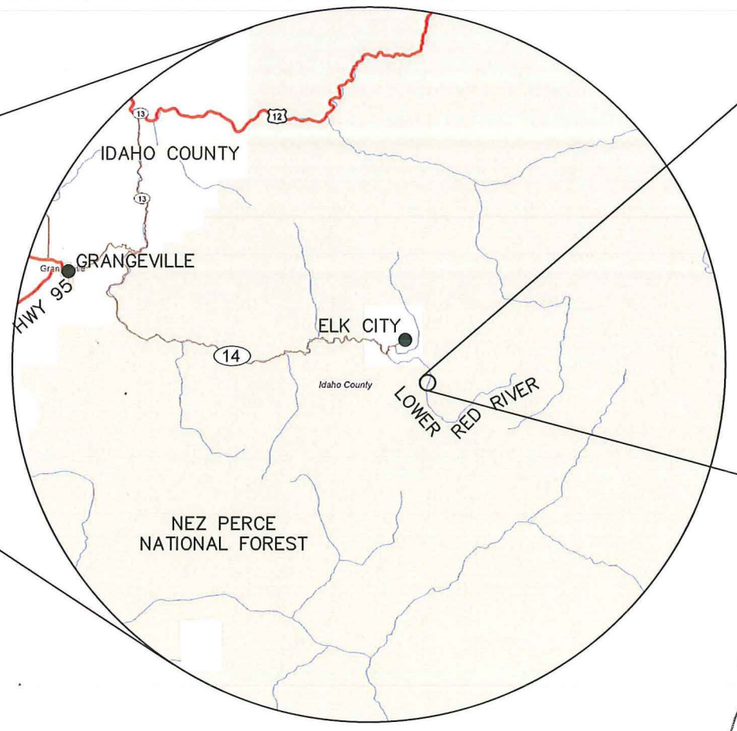
Thank you,

Megan Kosterman

--
Megan Kosterman
Endangered Species Biologist
U.S. Fish and Wildlife Service
Northern Idaho Field Office
11103 East Montgomery Drive
Spokane Valley, WA 99206
megan_kosterman@fws.gov
Office: 509-893-8013

LOWER RED RIVER MEADOW

STREAM AND FLOODPLAIN ENHANCEMENT CONSTRUCTION PLANS



SHEET INDEX

PROFESSIONAL ENGINEER LICENSED 11547 STATE OF IDAHO RYAN S. CARNIE 10/27/2014

DIRECTIONS TO THE PROJECT SITE:

FROM GRANGEVILLE, TAKE E MAIN ST/STATE HIGHWAY 13 EAST 0.7 MILES. TURN RIGHT ONTO MT IDAHO RD AND CONTINUE 0.2 MILES. KEEP LEFT AND CONTINUE ON MT IDAHO GRADE RD FOR 9.5 MILES. MERGE RIGHT ON TO STATE HIGHWAY 14 EAST AND TRAVEL 38.1 MILES TO RED RIVER RD. TAKE A SLIGHT RIGHT ON TO RED RIVER ROAD AND CONTINUE 9.2 MILES UNTIL RED RIVER PROJECT SITE ON THE WEST SIDE OF THE ROAD. TURN RIGHT ONTO AN UNNAMED, UNPAVED, ROAD AND TRAVEL 0.3 MILES. THE LOCATION OF THE BRIDGE CROSSING OVER RED RIVER IS 45°45'24.43" N, 115°26'46.24" W.

CONTACT INFORMATION

NEZ PERCE TRIBE
STEPHANIE BRANSFORD
416 SOUTH MAIN STREET
GRANGEVILLE, ID 83530
PH: (208) 983-0675

GEOENGINEERS INC.
RYAN CARNIE, PE
3501 WEST ELDER ST, SUITE 300
BOISE, ID 83705
PH: (208) 258-8326
FAX: (208) 433-8092

WHITE SHIELD, INC.
STUART FRICKE, PLS
320 NORTH 20TH AVENUE
PASCO, WA 99301
PH: (509) 547-0100
FAX: (509) 547-8292

Reference: Base maps obtained from ESRI maps and data.

Revision No:	Date:	Description:	Initials:	Designed: RSC, ESM
				Drawn: MGF
		BID DOCUMENTS		Checked: JRS
				Date: 10/24/14
				Project No: 0571-012-00

Lower Red River Meadow Stream and Floodplain Enhancement Idaho County, ID

GeoEngineers
3501 West Elder Street, Suite 300
Boise, Idaho 83705

Cover Sheet

Lower Red River Meadow Enhancement

Sheet 1.1

RSC : MGF

P:\0057101200\CAD\DWG\057101200-S1.1.dwg\TAB:S1.1 modified on Oct 27, 2014 - 2:19pm

RSC : MGF

P:\0\0571012\00\CAD\DWG\0571012200-S3.1-S3.6.dwg|TAB:S3.1 modified on Oct 27, 2014 - 2:30pm

Control Point Table

Point #	Elevation	Northing	Easting	Description
100	4211.32	1497483.40	2717326.76	CAPPED REBAR (RED)
101	4199.39	1497159.38	2717180.03	CAPPED REBAR (RED)
102	4200.36	1496826.55	2717312.59	CAPPED REBAR (RED)
103	4199.66	1496476.52	2716886.65	CAPPED REBAR (RED)
104	4202.07	1495997.19	2716490.48	CAPPED REBAR (RED)
105	4203.66	1495547.94	2716162.24	CAPPED REBAR (RED)
106	4213.67	1496577.72	2717575.24	CAPPED REBAR (RED)
107	4205.48	1496016.44	2717438.34	CAPPED REBAR (RED)
108	4205.78	1495532.16	2717065.72	CAPPED REBAR (RED)
109	4210.31	1493745.28	2716580.50	CAPPED REBAR (RED)
110	4239.91	1493788.64	2717148.22	CAPPED REBAR (RED)
111	4246.15	1493431.29	2717142.69	CAPPED REBAR (RED)
112	4242.34	1492982.41	2717067.76	CAPPED REBAR (RED)
1616	4257.81	1494782.02	2716920.94	MONUMENT FOUND, CAPPED REBAR (YELLOW)

PROPOSED ALIGNMENT STA 10+00 = EXISTING ALIGNMENT STATION 52+93

TOP OF LEFT BANK

APPROXIMATE UPSTREAM LIMIT OF PROJECT

APPROXIMATE DOWNSTREAM LIMIT OF STREAM ENHANCEMENT

LOWER RED RIVER

AREA OF BERM REMOVAL

APPROXIMATE DOWNSTREAM LIMIT OF PROJECT

SHEET 3.2

SHEET 3.3

SHEET 3.4

SHEET 3.5

SHEET 3.6

TOP OF RIGHT BANK

PROPOSED THALWEG (TYP)

EXISTING THALWEG

RED RIVER ROAD

Reference: Aerial image obtained from ESRI maps and data. Base survey file obtained from White Shield, Inc. See general note #12, sheet 1.2 for datum information.

400 0 400
FEET

PROFESSIONAL ENGINEER LICENSED 11547 STATE OF IDAHO RYAN S. CARNIE

10/27/2014

Revision No:	Date:	Description:	Initials:
BID DOCUMENTS			

Designed: RSC, ESM
Drawn: MGF
Checked: JRS
Date: 10/24/14
Project No: 0571-012-00

Lower Red River Meadow Stream and Floodplain Enhancement
Idaho County, ID

NEZ PERCE TRIBE FISHERIES

BONNEVILLE POWER ADMINISTRATION

GeoEngineers
3501 West Elder Street, Suite 300
Boise, Idaho 83705

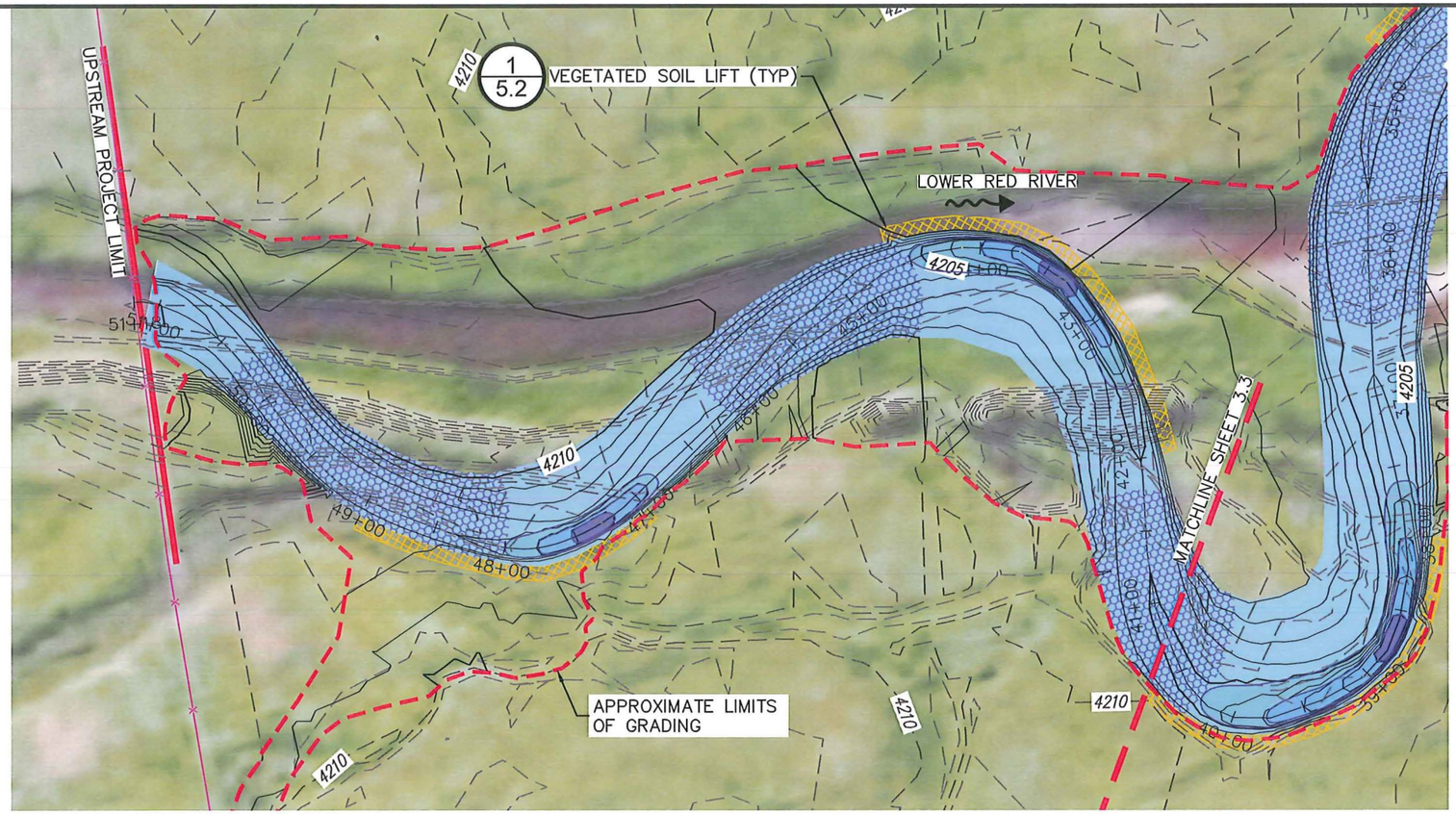
Proposed Project and Sheet Index

Lower Red River Meadow Enhancement

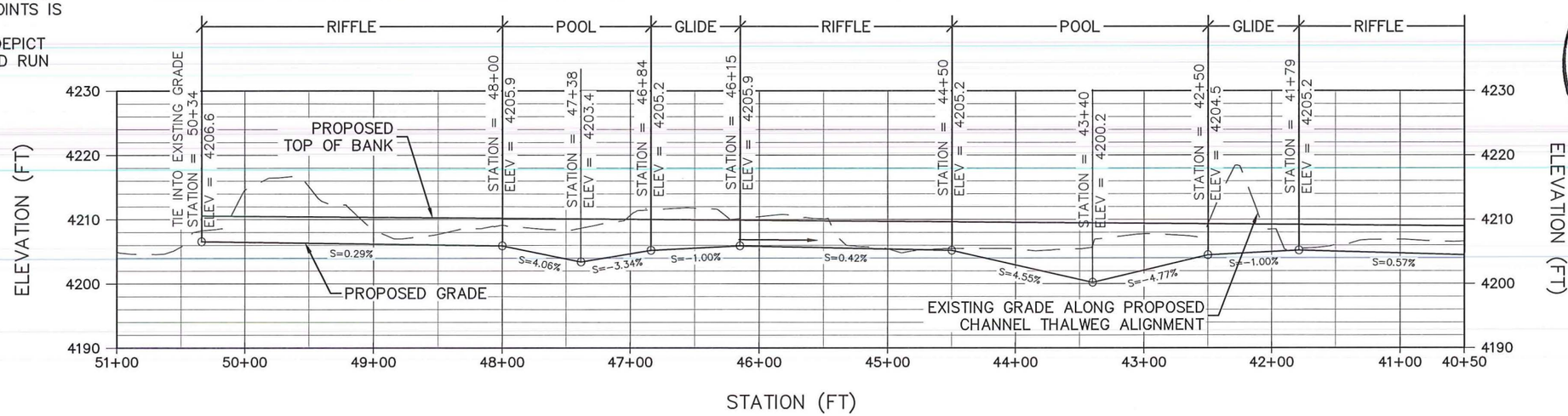
Sheet 3.1

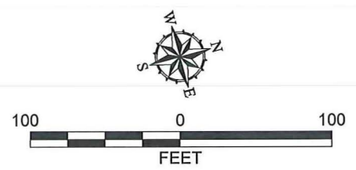
VEGETATED SOIL LIFT TABLE		
START STA.	END STA.	BANK
47+00	49+00	RIGHT
42+02	44+60	LEFT

NOTE: LEFT AND RIGHT BANK ARE BASED ON VIEWING THE CHANNEL IN A DOWNSTREAM DIRECTION.

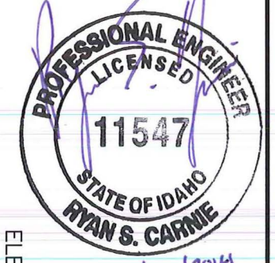


NOTES:
1. AVERAGE SLOPE BETWEEN RIFFLE CONTROL POINTS IS 0.16%.
2. RIFFLE CALLOUTS DEPICT TYPICAL RIFFLE AND RUN HABITAT.





HORIZONTAL SCALE: 1"= 100'
VERTICAL SCALE: 1"= 20'
VERTICAL EXAGGERATION: 5X



Reference: Aerial image obtained from ESRI maps and data. Base survey file obtained from White Shield, Inc.
See general note #12, sheet 1.2 for datum information.

Revision No:	Date:	Description:	Initials:
BID DOCUMENTS			

Designed: RSC, ESM
Drawn: MGF
Checked: JRS
Date: 10/24/14
Project No: 0571-012-00

Lower Red River Meadow Stream and Floodplain Enhancement
Idaho County, ID

NEZ PERCE TRIBE FISHERIES
BONNEVILLE POWER ADMINISTRATION

GEOENGINEERS
3501 West Elder Street, Suite 300
Boise, Idaho 83705

Proposed Channel Plan and Profile
Lower Red River Meadow Enhancement

Sheet 3.2

RSC : MGF

P:\0571012\00\CAD\DWG\0571012000-S3.1-S3.6.dwg\TAB:S3.2 modified on Oct 27, 2014 - 2:29pm

MEMO

To: Idaho Water Resource Board

From: Neeley Miller & Rick Collingwood

Date: May 20, 2016

Subject: Ground Water Conservation Grants

Action Item: Consider request to provide grant funding ($10,000) to the City of Ketchum to conduct irrigation system audits in the City's municipal parks and implement infrastructure upgrades to improve operating efficiency and conserve water.

INTRODUCTION

Reducing water consumption is a stated goal in the City of Ketchum's Comprehensive Plan. In order to conserve water, the City is seeking to increase the operation efficiency of the irrigation systems in each of the City's municipal parks.

In April 2016, Board staff received an application from the City of Ketchum seeking a Ground Water Conservation Grant that met the criteria established by the Idaho Water Resource Board (IWRB) at the September 2015 Board meeting. The City of Ketchum is requesting a $10,000 ground water conservation grant for conducting irrigation audits at the City's nine (9) municipal parks to improve operating efficiency and conserve water. Upon completion of the irrigation audits, the City is proposing to implement irrigation infrastructure upgrades at four (4) of the nine City parks. The City is planning on completing the infrastructure improvements for the remaining five (5) municipal parks in 2017. See attached application.

PROPOSED PROJECT:

The City of Ketchum has consulted with an irrigation specialist to perform irrigation audits for the City's nine (9) municipal parks. Previous work performed by the irrigation specialist discovered that most irrigation systems in the Wood River Valley are functioning at low uniformity, 45% or less, which result in significant overwatering. The irrigation specialist stated that a well designed and properly installed irrigation system, using smart clocks, will reduce water use between 20% and 60%. Included with each audit will be an analysis of soil types, holding capacity and infiltration rates, precipitation rates, and root depths. The total cost for conducting the irrigation audits is $10,000.

This project will focus on the irrigation infrastructure upgrades for the irrigation systems in four (4) smaller parks, which comprise a total of 2.52 acres. It is anticipated that the infrastructure upgrades will be approximately $5,000 for each park. The City has allocated $20,000 for the infrastructure upgrades.

If the ground water conservation grant is approved, the irrigation audits for the nine municipal parks will proceed this spring. Irrigation infrastructure upgrades at the four designated parks will be completed this summer. Assuming the City can reduce irrigation by 40% for all nine parks, it is estimated that the proposed irrigation upgrades will reduce ground water consumption by one-million gallons per irrigation season.

FUNDING BREAKDOWN

The total project cost estimate is $30,000. The funding breakdown will be $10,000 from the Idaho Water Resource Board grant, and $20,000 from the City of Ketchum.

BENEFITS

The City of Ketchum's irrigation system upgrades will decrease the consumption of ground water, increase resiliency to drought and possible curtailments, demonstrate how landscapes can retain, or improve aesthetic appeal when using less water, and educate the public on how to use water more efficiently. The proposed municipal park irrigation upgrades and the resulting water usage reductions will be shared with the community through the City's news letter.

RECOMMENDATION:

The project will benefit the City of Ketchum by reducing the demand on the current City water system, and conserve ground water for all water users in the Wood River Valley. Staff recommends providing funding for this project through the attached resolution.

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF GROUND WATER CONSERVATION GRANTS) A RESOLUTION

WHEREAS, House Bill 547 passed and approved by the 2014 legislature allocated $5 million annually from the Cigarette Tax to the Idaho Water Resource Board ("IWRB") for statewide aquifer stabilization; and

WHEREAS, many aquifer across Idaho are declining and have existing or potential conjunctive administration water use conflicts, including the Eastern Snake Plain Aquifer, the Wood River Aquifer, the Mountain Home Aquifer, the Treasure Valley Aquifer, the Palouse Basin Aquifer, the Rathdrum Prairie Aquifer and others; and

WHEREAS, on March 20, 2015 the IWRB Water Resource Planning Committee met and recommended the IWRB Finance Committee include funds for the creation of a ground water conservation grant in their recommended Fiscal Year 2016 budget; and

WHEREAS, on April 29, 2015 the IWRB Finance Committee met and recommended a Fiscal Year 2016 budget that included $200,000 for ground water conservation grants; and

WHEREAS, on May 22, 2015 the IWRB adopted by resolution a budget for Fiscal Year 2016 authorizing the use of continuously appropriated Secondary Aquifer Planning and Management and Implementation Fund for ground water conservation grants; and

WHEREAS, the budget resolution adopted on May 22, 2015 by the IWRB required the IWRB to develop a criteria for the award of ground water conservation grants prior to any grants being awarded; and

WHEREAS, on September 18, 2015 the IWRB adopted by resolution a criteria for the award of ground water conservation grants for Fiscal Year 2016.

WHEREAS, the City of Ketchum submitted a ground water conservation grant application in April 2016 that proposes conducting irrigation system audits and implementing irrigation infrastructure improvements for the City's municipal parks, and is requesting $10,000 from the IWRB to match other funding support for the project; and

WHEREAS, the City of Ketchum grant application meets the criteria established by the IWRB on September 18, 2015; and

NOW THEREFORE BE IT RESOLVED that the IWRB authorizes expenditures for the following project up to the identified amount from the Secondary Aquifer Planning and Management and Implementation Fund:

1) Up to $10,000 to the City of Ketchum to conduct irrigation system audits for the City's nine municipal parks and irrigation infrastructure improvements for four of the parks.

BE IT FURTHER RESOLVED that approval of this expenditure is contingent on the IWRB and the grant recipients entering into a cost reimbursement agreement.

DATED this 20th day of May 2016.

_____

ROGER CHASE, Chairman

Idaho Water Resource Board

ATTEST_____

VINCE ALBERDI, Secretary

Idaho Water Resource Board

IDAHO WATER RESOURCE BOARD
322 East Front Street, Statehouse Mail
Boise, Idaho 83720
Tel: (208) 287-4800
FAX: (208) 287-6700

APPLICATION FOR A GROUND WATER CONSERVATION GRANT

Answer the following questions and provide the requested material as directed. All pertinent information must be provided. Additional information may be requested by the Idaho Water Resource Board (IWRB) depending on the scope of the project and amount of funding requested.

Incomplete documents will be returned and no further action taken will be taken by IWRB staff. All paperwork must be in twenty eight (28) working days prior to the next bi-monthly Board meeting.

Board meeting agendas can be found at: http://www.idwr.idaho.gov/waterboard/

I. Overview:

This form applies to the *Water Board Groundwater Conservation Grant*. The Groundwater Conservation Grant Program provides financial assistance to municipal providers and other eligible entities interested in pursuing groundwater conservation/efficiency projects. Pursuing groundwater conservation/efficiency projects can help water providers reduce water demands, lower operational costs such as pumping and water treatment, and reduce or postpone the need for additional water supplies.

Grants amounts can range from $5,000 to $20,000. All grants require a 66% match of the total costs. In-kind services can account for 33% of the total project costs.

Unless directed otherwise by the Water Board funds will be distributed in the following manner:
25% - after signing of grant contract by both parties
25% - at the mid-point of the contract upon submittal of Mid-Point Progress Report
50% - upon completion of project and submittal of the Grant Performance Report

Prepare and attach a "Grant Document" to this application.

The Grant Application Document requirements are outlined in the Water Project Grant Program Guidelines. The guidelines can be found at:
http://www.idwr.idaho.gov/waterboard/Financial%20program/financial.htm
You can also obtain a copy by contacting IWRB staff.

II. General Information:

A. Type of organization: (Check box)

- [X] Municipality
- [ ] Irrigation District
- [ ] Irrigation Company
- [ ] Private Corporation
- [ ] Homeowner's Association

☐ Water Users Association ☐ Ground Water District

City of Ketchum
Organization name

Robyn Mattison, Public Works Director
Name and title of Contact Person

PO Box 2315
PO Box/Street Address

(208) 727-5080
Contact telephone number

Ketchum, ID 83340
City, County, State, Zip Code

rmattison@ketchumidaho.org
e-mail address

82-6000-1390
Taxpayer ID#

Project location/ legal description Various city parks within city of Ketchum.

B. Is your organization registered with the Idaho Secretary of State's office? Yes ☑ No ☐

C. Purpose and name of project for this grant application.

☐ New Project
☒ Rehabilitation or replacement of existing facility
☐ Other _____

III. WATER PROJECT/ACTIVITY:

A. Source of water:

☐ Surface ☒ Groundwater
☐ Reservoir ☐ Other

B. Describe the Water Project/Activity - What is the primary purpose of this grant application?

The city's goal is to increase irrigation efficiency at various city parks. The project consists of a detailed irrigation audit of nine parks and irrigation infrastructure improvements at four target parks.

C. Does this project/activity address multiple purposes? If so explain.

The city plans to use this project as a demonstration project to help educate the public regarding water conservation. Park improvements and resulting reduction in water usage will be shared with the community through the city's newsletter.

D. Is this project primarily a study or implementation of a water project/activity?

~1/3 ☑ Study ~2/3 ☑ Implementation

Amount of funds requested: $10,000

By signing this document you verify that all information provided is correct and the document is filled out to the best of your ability.

Authorized signature& date: Robyn L. Mattson 4/15/2016

City of Ketchum

Ground Water Conservation Grant Document

Municipal Park Irrigation Improvements

April 15, 2016

Prepared by:

City of Ketchum
480 East Ave. / PO Box 2315
Ketchum, ID 83340
(208) 726-7825

Water Futures, Inc.
PO Box 3814
Hailey, ID 83333
(781) 962-1583

1.0 BACKGROUND INFORMATION

1.1 Purpose

The groundwater resources of the Wood River Valley have come under increasing pressure as population has increased and the region has developed. A recent study by the U.S. Geological Survey shows statistically significant declines in groundwater elevations between "partial development" and "current" conditions in some places in the Valley, and decreases in streamflow at certain locations and times of year. Further, calculated water budgets suggest that groundwater pumpage by all users constitutes some one-half of all outflows from the Big Wood River system aquifer.

In February 2016, a water call was made by senior surface water users in the southern portion of Basin 37 on the upstream, junior groundwater users in the Wood River Valley. The City of Ketchum is keenly aware of the need to steward the water resources of the Valley. In keeping with this understanding, reducing water consumption is a stated goal of Ketchum's Comprehensive Plan. Ensuring the City uses its water as efficiently as possible is one way to do so.

This project aims to increase the efficiency by which the City irrigates its municipal parks. Ketchum owns nine city parks, ranging in size from less than one-quarter acre to about twelve acres. Much of the area within these parks consists of irrigated turfgrass. The City has consulted with an irrigation specialist who is poised to conduct irrigation audits for each or the nine parks. The audits will evaluate the uniformity of irrigation water application, the spacing and pressure of sprinkler heads, and the extent to which watering schedules are matched to precipitation rates. Discussions with the contractor suggest that his previous work shows most irrigation systems within the Valley are functioning at low uniformity (< 45%), resulting in significant overwatering to keep hotspots green. With good system design, proper installation, and effective use of smart clocks, this contractor has been able to reduce water use on these properties by 20 to 60 percent. He expects the same to be possible at the City's parks.

The City will use audit results to determine what irrigation infrastructure upgrades are necessary at each park. Based on conversations with the contractor, we expect that irrigation upgrades can be completed for four smaller parks for approximately $5,000 per park, for a total of approximately $20,000. We assume that we can reduce groundwater irrigation use at each of these parks by a minimum of 40 percent. The four targeted parks are the Ketchum Bike Park (~0.35 acres), the Guy Coles Skate Park (~1.12 acres), Edelweiss Park (~0.30 acres), and the Forest Service Park (0.80 acres). Estimates suggest that these irrigation upgrades will save more than one million gallons of potable water derived from groundwater sources.

The City is requesting $10,000 from the Idaho Water Board's Ground Water Conservation grant program. The City will match these funds with a minimum of $20,000. City funds have already been approved and allocated for this purpose. The City anticipates that it will undertake a similar effort for next fiscal year as well.

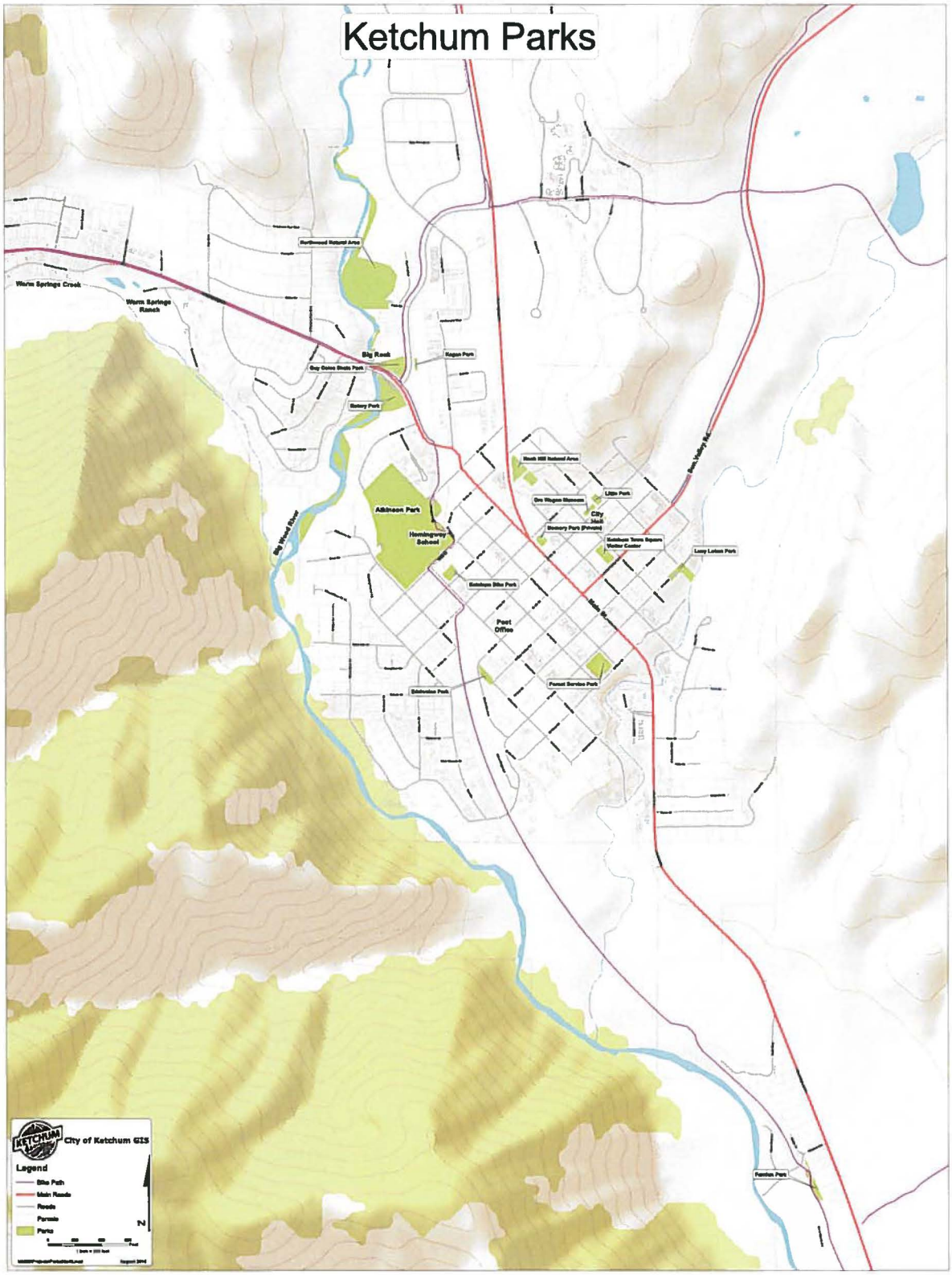
1.2 Project Area Description

The park project areas are located within the boundaries of the City of Ketchum, in Blaine County, Idaho. Ground cover for the majority of the area within these parks consists of irrigated turfgrass. The Big Wood River, Warm Springs, and Trail Creek all run through the City. Table 1 lists the City park facilities for which irrigation audits will be conducted. These parks serve more than 2,600 people who permanently reside in Ketchum and another 2,700 people who work in the City, along with thousands of visitors and second homeowners. The four small parks for which irrigation upgrades will be completed are marked with asterisks. Map 1 shows the location of the parks within the City.

Table 1. City Park Facilities

Park Name	Typical Uses	Park Size (acres)
Atkinson Park	Playing fields, playground, picnic tables	11.5
*Edelweiss Park	Benches, installed art, picnic tables	0.3
*Forest Service Park	Concerts, community events	0.8
*Guy Coles Stake Park	Skate park, grills, river access	1.12
*Ketchum Bike Park	Pump park	0.35
Town Square	Public gathering space, community events	0.25
Little Park	Playground, picnic tables, installed art	0.19
Northwood Planting Strip	Aesthetics, open space	0.25
Rotary Park	Playground, picnic tables, grills, installed art, river access	1.2

* Denotes parks targeted for irrigation upgrades.



Map 1. Location of City of Ketchum Parks.

1.3 Previous Studies

The U.S. Geological Survey has undertaken a multi-year, multi-phase study to evaluate the water resources of the Wood River Valley (including Bartolino (2009) and Skinner et al. (2007)). These studies have documented statistically significant declines in groundwater elevations between "partial-development" (1970-86) and "current" (2006) conditions in some places in the Valley, and decreases in streamflow at certain locations and times of year. Further, calculated water budgets suggest that groundwater pumpage by all users constitutes some one-half of all outflows from the Big Wood River system aquifer. Given this context, judicious use of our groundwater resources is imperative.

2.0 PROJECT SPONSOR

The City of Ketchum is the project sponsor. Ketchum became a township on July 27, 1881. On February 10, 1947, it was incorporated as a village and on October 16, 1961, it was incorporated as a city.

The Ketchum Water Division currently serves 1,950 customers. On an annual basis the city pumps approximately 900 to 1,000 million gallons of water. The Ketchum Comprehensive Plan anticipates likely population growth, and concurrent water demand, of 2% per year.

The Ketchum City Water System consists of six groundwater wells, two booster pump stations, three one million gallon storage tanks, and a vast grid of distribution lines. The system is divided into two pressure zones, and provides for both domestic and irrigation water demands.

3.0 WATER RIGHTS

3.1 Water Availability

The City of Ketchum has a portfolio of water rights consisting of nine groundwater rights and two surface water rights. The nine groundwater rights have priority dates ranging from 1954 to 1989 and provide a total of 15.7 cfs of water for a combination of municipal, irrigation and fire protection purposes. Park irrigation use consumes only a very small portion of the City's water rights.

3.2 Water Supply Demand

The City of Ketchum's 2010 Municipal Water Master Plan shows the City's water use peaked in 2003 and has since declined. The study calculates average water demand of 3.06 mgd for 5,377 people in 2008. This demand is projected to increase to 3.85 mgd at build-out in 2028 to serve a population of 6,764 full-time residents. The City's existing water rights portfolio is sufficient to

serve this level of demand. Park irrigation use consumes only a small portion of the City's water supply.

4.0 PROJECT DESCRIPTION

4.1 Project Description

4.1.1 Project Description

This project aims to increase the efficiency by which the City irrigates its municipal parks. Ketchum owns nine city parks, ranging in size from less than one-quarter acre to about twelve acres. Much of the area within these parks consists of irrigated turfgrass. The City has consulted with an irrigation specialist who is poised to conduct irrigation audits for each of the nine parks. The audits will evaluate the uniformity of irrigation water application, the spacing and pressure of sprinkler heads, and the extent to which watering schedules are matched to precipitation rates. Discussions with the contractor suggest that his previous work shows most irrigation systems within the Valley are functioning at low uniformity (< 45%), resulting in significant overwatering to keep hotspots green. With good system design, proper installation, and effective use of smart clocks, this contractor has been able to reduce water use on these properties by 20 to 60 percent. He expects the same to be possible at the City's parks.

The City will use audit results to determine what irrigation infrastructure upgrades are necessary at each park. As part of this grant project, the City will upgrade the irrigation systems for four target parks: the Ketchum Bike Park (~0.35 acres), the Guy Coles Skate Park (~1.12 acres), Edelweiss Park (~0.30 acres), and the Forest Service Park (0.80 acres). Audit results for the remaining parks will be used to direct future efforts by the City.

Upgrades will include installation of smart clocks at each of the four parks plus any required system redesign and installation of pipes, heads, and other components necessary to ensure system pressures are sufficient and uniform enough to increase watering uniformity, decrease hot spots, and reduce overall water consumption. Further, soil type, holding capacity, and infiltration rates, precipitation rates, and root depths will all be considered to design a highly efficient irrigation schedule. Based on conversations with the contractor, we expect that irrigation upgrades can be completed for four smaller parks for approximately $5,000 per park, for a total of approximately $20,000. Assuming we can reduce groundwater irrigation use at each of these parks by a minimum of 40 percent, these irrigation upgrades will save more than one million gallons of potable water derived from groundwater sources.

4.1.2 Map

Please see Map 1.

4.1.3 Conceptual Plan/Cross Section

N/A.

4.1.4 Conceptual Design Features

N/A.

4.1.5 Right-of-Way / Land

The City owns these parcels.

4.2 Cost Estimate

We estimate that irrigation audits will cost $10,000, and irrigation upgrades can be completed at four small parks for approximately $5,000 per park, for a total project cost of $30,000.

4.3 Implementation Schedule

Irrigation audits of the nine parks will proceed this spring as soon as grant funds are approved. Irrigation infrastructure upgrades at the four parks will be completed this summer so that water conservation gains can begin to be realized during the 2017 irrigation season.

5.0 FINANCIAL FEASIBILITY ANALYSIS

5.1 Grant Amount

The City is requesting $10,000 from the Idaho Water Board's Ground Water Conservation grant program.

5.2 Financing Sources

The City will match funds provided by the grant program with a minimum of $20,000. City funds have already been approved and allocated by the City Council for this purpose. The City anticipates that it will undertake a similar effort for next fiscal year as well.

TO: Idaho Water Resource Board (IWRB)

FROM: Neeley Miller, Planning & Projects Bureau

DATE: May 9, 2016

RE: Proposed Sustainability section of the State Water Plan

ACTION: Consider resolution to accept for formal public comment and testimony the proposed change to the SWP by the addition of a Sustainability section

The Water Resource Planning Committee ("WRP Committee") has developed a proposed Sustainability section for the Idaho State Water Plan ("SWP"). The Committee is providing the Board with a copy of the SWP with the proposed Sustainability section of the SWP inserted for consideration.

Background

Governor Otter discussed the development of a Sustainability policy for the SWP in his recent State-of-the-State address. The Governor indicated the Board will be conducting public meetings throughout Idaho in the coming year to gather comments and suggestions on incorporating the Sustainability policy into the SWP.

The current SWP was adopted in 2012. It was the fifth revision since the original SWP policies were adopted in 1976. The current plan includes the several policy sections:

1. Optimum Use (14 policies)
2. Conservation (9 policies)
3. Management (7 policies)
4. Snake River Basin (10 policies)
5. Basin Bear River Basin (4 policies)
6. Salmon/Clearwater River Basins (2 policies)
7. Panhandle River Basins (3 policies)

Proposed New Sustainability Section of SWP

The proposed Sustainability section is the result of a robust public involvement process that was initiated by a request from the Governor in late 2012. The Board's WRP Committee has completed their effort and recommended that the proposed Sustainability policy be added to a newly proposed Sustainability section of the SWP as follows:

1. Sustainability (1 policy)
2. Optimum Use (14 policies)
3. Conservation (9 policies)
4. Management (7 policies)
5. Snake River Basin (10 policies)

6. Basin Bear River Basin (4 policies)
7. Salmon/Clearwater River Basins (2 policies)
8. Panhandle River Basins (3 policies)

Path Forward

The Board is required to obtain formal public comment before adopting any changes associated with SWP. Staff is proposing the Board hold seven (7) information meetings/hearings each in different areas of the state. The public hearings will include a brief informational presentation by staff immediately preceding each hearing. The following schedule is proposed:

Hearing #	Dates	Time	Location	City
1	June 7	6:30 – 8:30 pm	Idaho Water Center; Rm 602 C & D	Boise
2	June 13	6:30 – 8:30 pm	Community Campus, Minnie Moore Rm	Hailey
3	June 28	6:30 – 8:30 pm	CSI Campus, Shields Bldg., Rm 118	Twin Falls
4	July 20	6:30 – 8:30 pm	Edgewater Resort	Sandpoint
5	August 23	6:30 – 8:30 pm	TBD	Lewiston
6	August 30	6:30 – 8:30 pm	City Council Chambers, City Annex	Idaho Falls
7	September 14	6:30 – 8:30 pm	City of Chubbuck, City Council Chambers	Chubbuck

In addition to holding hearings, the formal public comment process requires at least a 60-day public comment period during which written comments will be accepted. Staff proposes a public comment period that commences on May 20th and will close on September 16. Comments can be submitted at the hearings, via e-mail, or by standard mail. Upon completion of these information meetings/hearings and the close of the public comment period, the WRP Committee will convene to consider the comments and testimony received. The Committee will submit a final recommendation to the Board for consideration and adoption at the November 2016 Board meeting. The intent is the change to the through the addition of a Sustainability section will be submitted to the legislature in January 2017.

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF)
PROPOSED REVISION TO THE) A RESOLUTION
IDAHO STATE WATER PLAN)
_____)

WHEREAS, the Idaho Water Resource Board (Board), pursuant to its planning authorities in Article XV, Section 7 of the Idaho Constitution, and Idaho Code 42-1734 has developed a proposed Sustainability section for the Idaho State Water Plan (Plan) adopted on November 28, 2012; and

WHEREAS, the Board has sought substantial public participation and comment throughout the planning process as required under Idaho Code 42-1734A, and is proposing a change to the Plan by the addition of a Sustainability section; and

WHEREAS, the Board is required to hold public hearings regarding the proposed change to give the public opportunity to provide oral and written testimony regarding the change to the Plan; and

NOW, THEREFORE, BE IT RESOLVED that the IWRB hereby accepts the attached proposed Idaho State Water Plan for consideration and public comment as required by Idaho Code 42-1734.

DATED this 20th day of May, 2016

_____
Roger Chase, Chairman
Idaho Water Resource Board

ATTEST_____
Vince Alberdi, Secretary

Table of Contents

Table of Contents (cont.)

LIST OF TABLES

LIST OF FIGURES

Photo: Wheat Field
Photo Courtesy of Idaho Department of Agriculture

THE WATER PLANNING PROGRAM

The Idaho Comprehensive State Water Plan ("State Water Plan" or "Plan") was adopted by the Idaho Water Resource Board ("Idaho Water Resource Board" or "Board") to guide the development, management, and use of the state's water and related resources. The wise use and management of the state's water is critical to the state's economy and to the welfare of its citizens. The Plan seeks to ensure that through cooperation, conservation, and good management, future conflicts will be minimized and the optimum use of the state's water resources will benefit the citizens of Idaho. The Plan is subject to change so as to be responsive to new opportunities and needs.

Constitutional Authority

Article XV, section 7 of the Idaho Constitution provides the authority for the preparation of a State Water Plan. This constitutional amendment was adopted in November 1964 following a statewide referendum and states:

> *There shall be constituted a Water Resource Agency, composed as the Legislature may now or hereafter prescribe, which shall have power to formulate and implement a state water plan for optimum development of water resources in the public interest; to construct and operate water projects; to issue bonds, without state obligation, to be repaid from revenues of projects; to generate and wholesale hydroelectric power at the site of production; to appropriate public waters as trustee for Agency projects; to acquire, transfer and encumber title to real property for water projects and to have control and administrative authority over state land required for water projects; all under such laws as may be prescribed by the Legislature.*

Article XV, section 3 of the Idaho Constitution provides for the appropriation and allocation of water. Section 3 provides that:

> *The right to divert and appropriate the unappropriated waters of any natural stream to beneficial uses, shall never be denied, except that the state may regulate and limit the use thereof for power purposes. Priority of appropriation shall give the better right as between those using the water; but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for domestic purposes shall (subject to such limitations as may be prescribed by law) have the preference over those claiming for any other purpose; and those using the water for agricultural purposes shall have preference over those using the same for manufacturing purposes. And in any organized mining district those using the water for mining purposes or milling purposes connected with mining have preference over those using the same for manufacturing or agriculture purposes. But the usage by such subsequent appropriators shall be subject to such provisions of law regulating the taking of private property for public and private use, as referred to in section 14 of article I of this Constitution.*

Legislative Authority

Article XV, section 7 of the Idaho Constitution provided for the creation of a "Water Resource Agency" but did not establish the agency. In 1965, the 38th legislature established the Idaho Water Resource Board, and directed that (as amended):

> *The board shall, subject to legislative approval, progressively formulate, adopt and implement a comprehensive state water plan for conservation, development, management and optimum use of all unappropriated water resources and waterways of this state in the public interest… In adopting a comprehensive state water plan the board shall be guided by these criteria:*
>
> > *(a) Existing rights, established duties, and the relative priorities of water established in article XV, section 3, of the constitution of the state of Idaho, shall be protected and preserved;*
> > *(b) Optimum economic development in the interest of and for the benefit of the state as a whole shall be achieved by integration and coordination of the use of water and the augmentation of existing supplies and by protection of designated waterways for all beneficial purposes;*
> > *(c) Adequate and safe water supplies for human consumption and maximum supplies for other beneficial uses shall be preserved and protected;*
> > *(d) Subject to prior existing water rights for the beneficial uses now or hereafter prescribed by law, minimum stream flow for aquatic life, recreation and aesthetics and the minimization of pollution and the protection and preservation of waterways in the manner hereafter provided shall be fostered and encouraged and consideration shall be given to the development and protection of water recreation facilities;*
> > *(e) Watershed conservation practices consistent with sound engineering and economic principles shall be encouraged.*

Idaho Code § 42-1734A(1).

These criteria recognize that exclusive authority over the appropriation of public surface and ground waters of the state is vested in the Department of Water Resources ("Department") [Idaho Code § 42-201(7)] and require that the Plan be consistent with state law.

To assist the Board in its duties, the legislature also provided for the Director of the Department:

> *To perform administrative duties and such other functions as the Board may from time to time assign to the Director to enable the Board to carry out its powers and duties*.

Idaho Code § 42-1805(6).

Article XV, section 7 was amended by the electorate during the general election of November 6, 1984. The amendment provides that:

> *The Legislature of the State of Idaho shall have the authority to amend or reject the state water plan in a manner provided by law. Thereafter any change in the state water plan shall be submitted to the Legislature of the State of Idaho upon the first day of a regular session following the change and the change shall become effective unless amended or rejected by law within sixty days of its submission to the Legislature.*

Chapter 17 of Title 42, Idaho Code, was amended in 1988 to designate the Plan as the Comprehensive State Water Plan Part A. Plans developed for specific geographic areas became components of the Comprehensive State Water Plan Part B.

> *The board may develop a comprehensive state water plan in stages based upon waterways, river basins, drainage areas, river reaches, ground-water aquifers, or other geographic considerations.*

Idaho Code § 42-1734A(2).

> *As part of the comprehensive state water plan, the board may designate selected waterways as protected rivers as provided in this chapter.*

Idaho Code § 42-1734A(1).

Legislation in 2008 provided for the development of a statewide comprehensive aquifer management planning and management effort and fund. Idaho Code §§ 42-1779 and 42-1780.

> *Pursuant to the provisions of Idaho law and legislative funding approval, the Idaho water resource board and the Idaho department of water resources shall conduct a statewide comprehensive aquifer planning and management effort over a ten (10) year period of time beginning in fiscal year 2009.*

Idaho Code § 42-1779.

Idaho Water Resource Board Programs

Pursuant to its constitutional and statutory authorities, the Board:

1. Formulates, adopts, and implements the State Water Plan, River Basin Plans, and Comprehensive Aquifer Management Plans ("CAMPs").

2. Designates natural and protected rivers and files applications for and holds minimum stream flow water rights.

3. Provides financial assistance for water development and conservation projects in the form of revenue bonds, loans, and grants.

4. Establishes programs that address specific water resource issues at the direction of the Idaho legislature.

5. Adopts rules governing:
    - Well Construction
    - Well Driller Licensing
    - Construction and Use of Injection Wells
    - Drilling for Geothermal Resources
    - Mine Tailings Impoundment Structures
    - Safety of Dams
    - Stream Channel Alteration

    The Department administers these programs.

6. Hears appeals challenging the Department's administrative decisions pursuant to programs administered under the Board's administrative rules.

7. Administers the Idaho Water Supply Bank.

8. At the request of the Governor, appears on behalf of and represents the state in proceedings, negotiations, or hearings involving the federal government, Indian tribes, or other states.

9. Files applications and obtains permits to appropriate, store, or use unappropriated waters, and acquires water rights subject to the provisions of applicable law.

10. Investigates, undertakes, and promotes water resource projects deemed to be in the public interest. While all state agencies are required to exercise their duties in a manner consistent with this Plan [Idaho Code § 42-1734B], the Plan contemplates the implementation of water resource projects through cooperation and collaboration with the numerous units of state and local governments with statutory responsibilities for the conservation of Idaho's water resources.

11. Cooperates and enters into contracts with federal, state, and local units of governmental and private entities for water studies, planning, research, and activities.

12. Studies water pollution and advises the Idaho State Board of Environmental Quality regarding the establishment of water quality criteria in the context of the optimum development of the state's water resources.

13. Formulates and recommends legislation for water resource conservation, development, and utilization.

Comprehensive State Water Plan Formulation

Formulation of the State Water Plan is a dynamic process. Adoption of The State Water Plan – Part One, The Objectives, in 1974, and The State Water Plan - Part Two, in 1976,

provided an initial state water policy. The purpose of Part One was to identify and define policies and objectives adopted by the Board to govern the planning, development, and conservation of the state's water and related lands. Part Two identified and evaluated projects and programs necessary to implement the objectives of Part One and delineated those areas where legislative action was required, identified the programs to be implemented by the Board, and described programs requiring the cooperation of public and private interests. The Plan was updated and re-adopted in 1982 and was amended in 1985 in connection with the Swan Falls settlement. The Plan was revised in 1986, 1992, and 1996 to reflect changing social and economic conditions and water resource needs. The Plan continues to evolve and provides a framework for the adoption and implementation of policies, programs, and projects that develop, utilize, conserve, and protect the state's water supplies.

Planning Process

The planning process encompasses five steps:

1. A comprehensive public involvement program to determine public views and interests regarding resource problems, needs, and opportunities as they relate to water use and management;

2. An ongoing evaluation of the state's water resources and uses and estimation of the future availability and demands on the resource;

3. A comprehensive evaluation of the effects resulting from the development and protection of the state's water resources;

4. Adoption of the Plan by the Board as required by Article XV, section 7 of the Idaho Constitution; and

5. Approval by the Idaho legislature as provided by law.

Public involvement is an essential part of the planning process. Scoping meetings, comment periods, and formal hearings provide opportunity for public input during plan development. After adoption and approval, public comment on the effectiveness of the Plan is encouraged.

COMPREHENSIVE STATE WATER PLAN

The Comprehensive State Water Plan represents the state's position on water development, management, and conservation. Accommodating Idaho's growing and changing water needs and the increasing demands on both surface and ground water presents a significant challenge. The Plan seeks to meet that challenge through the establishment of policies on water development, management, and conservation with accompanying strategies that may be implemented as funds become available and milestones which will assist in ongoing Plan review.

Objectives

The following objectives of the State Water Plan are formulated for the conservation, development, management, and optimum use of all unappropriated water resources and waterways of this state in the public interest. Idaho Code § 42-1734A.

1. **Water Management** - Encourage the quantification of water supplies, water uses, and water demands for all water rights within the state. Encourage integrated, coordinated, and adaptable water resource management and the prudent stewardship of water resources.

2. **Public Interest** - Ensure that the needs and interests of the public are appropriately considered in decisions involving the water resources of the state.

3. **Economic Development** - Encourage and support economic development through the optimum use of water resources. Promote the integration and coordination of the use of water, the augmentation of existing supplies, and the protection of designated waterways for all beneficial purposes. Idaho Code § 42-1734A(1)(b).

5. **Environmental Quality** - Maintain, and where possible enhance water quality and water-related habitats. Study and examine the quality of rivers, streams, lakes, and ground water [Idaho Code § 42-1734(15)], and ensure that due consideration is given to the needs of fish, wildlife, and recreation in managing the water resources of the state. Where appropriate, initiate state protection of waterways or water bodies with outstanding fish and wildlife, recreation, geologic, or aesthetic values.

6. **Public Safety** - Encourage programs ensuring that life and property within the state are not threatened by the management or use of the state's water resources.

Policies

A main goal of this document is to help water managers, planners, and users formulate management strategies and policies needed to meet growing and changing water use needs.

The Board adopts the following policies for the conservation, development, management, and optimum use of all the unappropriated water resources and waterways of this state in the public interest. Idaho Code § 42-1734A.

Photo: Falls on the Teton River in Eastern Idaho (*IDWR Photo*)

1. SUSTAINABILITY

Sustainability focuses on the overall stewardship of the State's water resources for the good of the people of the State of Idaho.

1A – SUSTAINABILITY OF IDAHO'S WATER RESOURCES

Sustainability is the active stewardship of Idaho's water resources to satisfy current uses and assure future uses of this renewable resource in accordance with State law and policy.

Discussion:

Water is the foundation of Idaho's economy and culture; the lives and livelihoods of Idahoans depend on a reliable supply of water. Stewardship of Idaho's water resources begins with the realization that the water resources of the State are not inexhaustible and therefore it is necessary to manage, administer, and take action to sustain, maintain and enhance the resource. Stewardship, by necessity, also includes taking affirmative steps to address declining trends in the resource where those trends exist and to establish policies that will prevent future unsustainable declines. The goal must be overall stewardship of the State's water resources for the good of the people of the State of Idaho.

The State of Idaho encompasses some of the most diverse and awe inspiring physical and geological features in the country. From the depths of Hells Canyon to the peak of Mount Borah, from sage brush deserts, to the extensive agricultural farm and ranch land, to alpine forests and meadows, to the cities and towns, the ecosystems of each of these varied areas all rely on the water resources of the State. The people of the State interact with and depend upon the water resources in these different landscapes in many different ways. Therefore, the water sustainability policy of the state of Idaho must embrace the diversity of the State, while recognizing the potential for a use or activity in one place to affect the water resources in another part of the State.

Sustainable water management strategies to meet current and future needs must be based on adequate knowledge regarding available supplies, existing use, competing economic and social demands, and future needs. Planning and management actions to promote water sustainability must be designed and implemented to ensure that existing water rights are protected and the economic vitality of Idaho is optimized.

The goal of sustainable use of water resources of the State must recognize that the goals of sustainable economic growth and protection of existing rights must coexist and are enhanced by measures that protect and maintain surface and ground water resources and the aquatic, riparian and human resources that depend on these water resources. Recognizing these needs will promote economic and environmental security and enhance the quality of life for the people of the State of Idaho.

Formatted: Normal

Implementation Strategies:

- Ensure that all actions taken toward a sustainable water future protect and respect private property rights, both in the land and water rights
- Inventory Idaho's water supply, current uses, and future water supply needs
- Evaluate long-term and short-term trends in water availability for present and future uses
- Identify areas where present water supplies are either inadequate for present uses or not sustainable, and develop management plans to address supply in an appropriate timeframe respecting private property rights
- Identify management alternatives and projects that optimize existing and future water supplies without compromising water quality
- Prioritize and implement management alternatives and projects where competing demands and future needs are most critical
- Enhance water transfer mechanisms in Idaho law, policy and regulations to allow future economic opportunities to utilize existing water supplies, while protecting existing uses
- Utilize the Idaho Water Resource Board's Funding Program and prioritize allocation of funds for projects that ensure water sustainability across the state
- Identify water conservation measures that water users, municipalities, governmental agencies and other entities can undertake to help protect the water resources of the State and provide guidance to those entities on best practices to implement those conservation measures
- Recognize that conservation measures may reduce water supplies utilized by others in other parts of the resource
- Identify and provide funding for aquifer stabilization strategies throughout the state with due regard to the priorities of basin specific Comprehensive Aquifer Management Plans
- Pursue enhancement of surface water storage supply as a mechanism for meeting Idaho's future water needs
- Use a grassroots approach to identify problems and developing optimal solutions. The needs of individual basins must be taken into consideration in how the resource should be managed while recognizing the potential for decisions in one basin to affect the resources of another basin. An integrated and collaborative approach to water resource management is critical for the sound and efficient use of Idaho's water resources. The State of Idaho when appropriate should work together with, water users, tribes, local communities, neighboring states, and the federal government to resolve water issues
- Protection of the quality of existing water supplies, particularly those ground water resources that are used for drinking water supplies, to ensure the vitality of local communities. This goal requires other state and local agencies to

exercise their appropriate authorities to protect the water resources and to assist in meeting the goal of sustainable economic growth

Milestones:

- Respect for private property rights in accordance with State law and policy
- Identify number of basins where water supply and demand have been inventoried
- Identify number of basins where management alternatives have been identified and implemented to optimize existing and future water supplies, including surface water storage, ground water recharge, conservation measures and weather modification
- Obtain more accurate water supply, water measurement, and forecasting information
- Disseminate water supply forecasts to water users in cooperation with other federal and state agencies
- Measure utilization of water bank and transfer procedures to allow sustainable use of the resource
- Determination and implementation of measures and policies to enhance the utility of the water bank and transfer procedures
- Financial programs and funding strategies that meet the future water resource needs of the State of Idaho. Secure funding and resources in cooperation with the Governor and legislature. Reliable on-going, long-term funding will be needed to enable and support active stewardship of Idaho's water resources.
- Basin aquifer stabilization - stabilization of ground water levels in basins where declines are occurring to restore and maintain sustainable aquifer levels
- Initiate and facilitate construction of additional surface water storage to meet current and future needs
- Use of adaptive management to identify and address uncertainties for success, including those related to data, modeling, and impacts of climate variability
- Balance water supply and demand – supply and demand must be in balance to support current and future use within a particular basin
- Improve data management – accurate and abundant data is necessary to assist with ensuring stewardship of Idaho's water resources to satisfy current and future uses
- Coordination with State and local entities on measures to protect and enhance ground water and surface water resources so that these resources are available for use by the people of the State of Idaho

21. OPTIMUM USE

It is in the public interest to establish policies, initiatives, and programs that lead to optimum use of the water resources of the state. Water is essential to the vitality and prosperity of the state.

21A - STATE SOVEREIGNTY

The State asserts sovereignty over the development and use of Idaho's water resources for the benefits of its citizens. Any action by the federal government or other states that would impair Idaho's sovereignty over its water resources is against state policy.

Discussion:

The Idaho Water Resource Board is responsible for the formulation of state water policy through the State Water Plan. The state's position on existing and proposed federal policies and actions affecting Idaho's waters is coordinated by the Board to ensure the state retains its sovereign right to control its water resources. Idaho Code § 42-1734B(4). The State Water Plan is filed with the Federal Energy Regulatory Commission ("FERC"), the Pacific Northwest Electric Power and Conservation Planning Council, and other federal agencies as Idaho's plan for the conservation, development, management and optimum use of the state's water resources. Idaho Code § 42-1734C.

Implementation Strategies:

- Take legal action when necessary to protect the state's sovereignty over its water resources.
- Implement and maintain cooperative water resource agreements and partnerships with neighboring states, the federal government, and Indian tribes for the benefit of Idaho's citizens.
- Work with the office of the Governor, state agencies, and the legislature to ensure the development and implementation of a unified state position on water resource issues.

Milestones:

- Partnerships established with neighboring states, federal agencies, and Indian tribes to anticipate and plan for water resource conflicts that may occur.
- Protocols established ensuring coordination of the state's position on water resource issues.

21B - BENEFICIAL USE OF WATER

The concept of beneficial use must necessarily evolve with changing conditions.

Discussion:

Idaho Code § 42-104 provides that an appropriation of water must be for "some useful or beneficial purpose" but does not define beneficial purpose. Except for the constitutionally protected beneficial uses which are domestic, agricultural, manufacturing, and mining, the concept of what constitutes a beneficial use of water has evolved over time based upon societal needs. For example, use of water for hydropower, the protection of fish and wildlife habitat, aquatic life, recreation, aesthetics, municipalities, navigation, water quality, and managed ground water recharge are recognized as beneficial uses. A broad definition of beneficial use has and will continue to allow for the optimum use of the state's water resources.

Implementation Strategies:

- Review existing state policies and programs to ensure that traditional and emerging water use needs are recognized as beneficial uses of water.
- Establish or participate in local and regional advisory groups to formulate recommendations regarding traditional and emerging water use needs and priorities.

Milestones:

- Policies and rules revised to accommodate emerging water use needs.
- Reports submitted on advisory group recommendations.
- Statutory and/or regulatory changes made to accommodate emerging beneficial uses of water.

21C – CHANGE IN USE

Changes in the use of a water right should be allowed to meet changing needs and to provide for optimum use of the state's water resources.

Discussion:

The demand for water increases every year while the volume of unappropriated water within the state continually decreases. Many basins do not provide a dependable water supply for current uses. Allowing for changes in the use of water rights provides flexibility in water allocation to meet changing conditions. Idaho Code §§ 42-108 and 42-222 provide for changes in point of diversion, place of use, period of use, or nature of use with the approval of the Department, while also providing for the protection of other water users, the agricultural base of a region, and the local public interest. Pursuant to state law, priority dates are retained when other water right holders are not injured. The Board is responsible for the implementation of voluntary programs also designed to meet changing water use needs.

Implementation Strategies:

- Review existing statutes and regulations and recommend revisions as necessary to establish a more efficient process for changes in the use of water rights.
- Review Department policies and procedures and recommend revisions as necessary to implement a more efficient process for changes in the use of water rights.

Milestones:

- Number of changes in the use of water rights that meet emerging needs.

21D - WATER SUPPLY BANK

The sale or lease of water is critical to the efficient management and optimal use of the state's water resources. Thus, use of the state's Water Supply Bank should be expanded to meet traditional and emerging needs for water.

Discussion:

As the state approaches the time when there is little or no unappropriated water, the Water Supply Bank, established by Idaho Code § 42-1761, provides an efficient mechanism for the sale or lease of water from natural flow and storage. The purpose of the Water Supply Bank is to obtain the highest duty of water, provide a source of adequate water supplies to benefit new and supplemental water users, and provide a source of funding for improving water use facilities and efficiencies. By aggregating water available for lease, rental pools operating under the authority of the Water Supply Bank can supply the water needs of many users, provided there is no injury to other right holders, or enlargement of the use of the water rights, and the change is in the local public interest. Idaho Code § 42-1763.

Photo: Shoshone Falls near Twin Falls (*IDWR Photo*)

The Idaho Water Resource Board has adopted rules governing the sale or lease of water through the Water Supply Bank. IDAPA 37.02.03. Pursuant to state law, the Board has authorized local entities to operate storage and natural flow rental pools in numerous water districts that meet regional needs. The Shoshone-Bannock Tribes are also authorized by the state to operate a storage water rental pool.

The scope of existing and future water use needs requires further development of flexible water banking systems that address local water use needs and ensure the optimum use of the state's water resources. The Water Supply Bank should provide for efficient mechanisms that are responsive to traditional and emerging needs for water.

Implementation Strategies:

- Monitor existing procedures, statutes, and rules of the Water Supply Bank to determine whether additional strategies are needed to meet current and future water use demands.
- Establish through state action, natural flow and storage rental pools in basins where local water users have identified the need for rental pools.
- Develop a public information and education program to promote use of the Water Supply Bank.

Milestones:

- Increased use of the Water Supply Bank.
- New storage and natural flow rental pools established.
- Efficient mechanisms in place that facilitate the optimum use of water.

21~~1~~E - CONJUNCTIVE MANAGEMENT

Where a hydraulic connection exists between ground and surface waters, they should be conjunctively managed to maintain a sustainable water supply.

Discussion:

Region-specific factors impact the available supply of ground and surface water and effect changes in regional water budgets. This can result in insufficient water supplies to satisfy beneficial uses and may result in increased administrative curtailment, conflict among water users, and litigation.

This policy addresses conjunctive management and not water rights administration. Water rights administration is the enforcement of the relative rights of water right holders under the prior appropriation doctrine. By comparison, conjunctive management encompasses actions other than water rights administration that can be taken to optimize the benefits and value of Idaho's water resources. While conjunctive management is not a substitute for water rights administration, the legislature has determined that it is in the public interest to adopt plans and policies that facilitate and encourage a resolution of

conflicts that occur in water basins where there is a hydraulic connection between ground and surface waters. Quantification and monitoring is a key component of conjunctive management and necessary for the development of plans and projects designed to maintain a stable balance between supply and demand.

Implementation Strategies:

- Continue to quantify the hydraulic relationship between ground and surface water supplies in designated river basins.
- Develop prioritized list of basins where additional technical information is needed to assess ground and surface water interaction.
- Develop enhanced technical tools for evaluating the interaction between surface and ground water resources for use in planning.
- On a continuing basis, assess conditions and trends of ground water levels in primary aquifers to estimate the rate of future aquifer recharge and withdrawal under various climatic conditions.
- Procure funding for studies and project implementation.

Milestones:

- Number of studies initiated and completed to quantify ground water/surface water relationships.
- Increased effectiveness of technical tools used to evaluate the hydraulic relationship between ground water and surface water and other water supply data.
- Region-specific projects implemented that contribute to a stable balance between supply and demand.

21F - GROUND WATER WITHDRAWAL

Withdrawals from an aquifer should not exceed the reasonably anticipated average rate of future natural recharge to that aquifer.

Discussion:

Idaho Code § 42-226 protects senior ground water appropriators in the maintenance of reasonable pumping levels in order to obtain full economic development of the state's underground water resources. The Director of the Department is authorized to establish reasonable ground water pumping levels when necessary to protect prior appropriations of ground water. Idaho Code § 42-237a provides that the Director may prohibit or limit the withdrawal of water from a well if withdrawal would result in diversion of the ground water supply at a rate beyond the reasonably anticipated average rate of future natural recharge. The Director may allow withdrawals to exceed natural recharge if a program exists to increase recharge or decrease withdrawals and senior water rights are protected. Idaho Code §§ 42-233a and 42-233b authorize the Director to designate areas as either Critical Ground Water Areas or Ground Water Management Areas. Designating a ground water basin as a Critical Ground Water Area or Ground Water Management Area

provides management options to prevent excessive withdrawals from an aquifer. Where such designations are made, the Department requires additional measurement and reporting to determine available ground water supplies and use.

The comprehensive aquifer management planning initiated by the Idaho Water Resource Board discussed in Policy 21E provides opportunities for stakeholder participation in ground water management. Local advisory committees help the Board establish goals, objectives, and strategies to maximize available water supplies and assist with plan implementation. Public participation is key to the development of innovative approaches for meeting current and future demands on the state's ground water resources.

Implementation Strategies:

- Monitor ground water levels to estimate the rate of future natural aquifer recharge and withdrawal under various climate conditions.
- Develop region-specific water budgets for aquifers.
- Establish local advisory committees and solicit recommendations for ground water management.
- Identify opportunities for conducting cooperative ground water studies with state, federal and local agencies.
- Implement management strategies to maximize available water supply.

Milestones:

- Number of water budgets developed.
- Number of advisory committees active in ground water management and critical ground water areas.
- Number of ground water management plans adopted for all administratively designated areas.
- Number of basins with adequate monitoring networks.

Photo: Alfalfa field near Glenns Ferry
Photo Courtesy of Idaho Department of Agriculture

21G - INTERSTATE AQUIFERS

Cooperative arrangements with neighboring states should be developed for shared aquifers to avoid water supply conflicts and to optimize utilization of the resource for the citizens of Idaho.

Discussion:

The growing demand for water increases competition between states with shared aquifers. Cooperative agreements to jointly develop, manage, and protect shared aquifers are necessary to avoid water supply conflicts, to ensure economic development, and to provide a mechanism for the exchange of technical information.

Implementation Strategies:

- Establish cooperative agreements with neighboring states to gather data and conduct studies to assess ground water conditions and trends.
- Develop coordinated aquifer management plans with neighboring states that resolve interstate conflict and protect Idaho's water supplies.

Milestones:

- Approval and implementation of cooperative agreements, which may include coordinated aquifer management plans, that ensure Idaho's water supply meets current and future needs.
- Cooperative technical studies conducted.

21H - QUANTIFICATION AND MEASUREMENT OF WATER RESOURCES

Quantification and measurement of Idaho's water supply and use is essential for sound water resource planning, management, and administration.

Discussion:

The Director of the Department is required to maintain an inventory of the state's water resources. Idaho Code § 42-1815. The measurement of water availability and use is necessary to administer and regulate existing water uses and to promote optimal water resource planning and management.

Chapters 6 and 7, Title 42, Idaho Code, provide for water use measurement and reporting throughout the state. New instrument technologies for the measurement of water availability and use will continue to improve the accessibility and reliability of data collection and interpretation. These new technologies, such as automated electronic data recording equipment and transfer of data through wireless systems provide transparency and instantaneous access to data, improve calibration of models used for administration and planning, and educate the public about regional and statewide water use.

Implementation Strategies:

- Assess existing measurement network and facilities and develop plan for improving data collection and reporting.
- Prioritize projects for conversion to automated electronic data collection and reporting systems.
- Provide technical assistance and participate in securing funding for improved measurement and reporting systems.

Milestones:

- Number of assessments completed.
- Number of automated data collection systems in use.
- Number of improved measurement and reporting strategies implemented.

2~~1~~I - AQUIFER RECHARGE

Aquifer recharge should be promoted and encouraged, consistent with state law.

Discussion:

Managed aquifer recharge: Managed recharge projects may be an appropriate means for enhancing ground and surface water supplies, providing mitigation for junior ground water depletions, or to help maintain desirable aquifer levels. In addition, managed recharge may help optimize existing water supplies by changing the timing and availability of water supplies to meet demand. Managed recharge may also be used as an adaptive mechanism for minimizing the impacts of variability in climate conditions. Idaho Code § 42-234(4) requires that managed recharge projects do not injure existing water rights and gives the Director authority to approve, disapprove, or require alterations in the methods employed to achieve ground water recharge. The effects on ground water and surface water budgets from managed recharge projects must be monitored to determine the effectiveness of such projects after implementation..

The Board supports and assists in the development of managed recharge projects that further water conservation and increase water supplies available for beneficial use. Projects involving the diversion of natural flow water appropriated pursuant to Idaho Code § 42-234 for managed recharge in excess of ten thousand (10,000) acre-feet on an average annual basis must be submitted to the Idaho Water Resource Board for approval prior to construction. Idaho Code § 42-1737.

Aquifer storage and recovery: The use of managed recharge to store surface water in a confined underground area could be an important element in meeting future water use needs. Further understanding of the economic, legal, ecological, and technical feasibility of using confined underground aquifers for water storage in Idaho is required for the purpose of policy development and planning and to avoid injury to existing water rights.

Incidental aquifer recharge: The incidental recharge of aquifers occurring "as a result of water diversion and use that does not exceed the vested water right of water right holders is in the public interest." Idaho Code § 42-234(5)]. Incidental recharge may be an important component of some aquifer water budgets.

Implementation Strategies:

- Cooperate with public and private entities to develop, implement, and evaluate managed recharge projects.
- Identify and propose changes to statutes, rules, and policies that will assist the development and implementation of managed recharge projects.
- Identify river basins where the use of managed recharge projects should be evaluated as a potential strategy for addressing increased demand on water supplies.
- Monitor and evaluate recharge projects to document effects on water supply and water quality.
- Appoint an Aquifer Storage and Recovery Task Force.

Milestones:

- Managed recharge projects that optimize water supplies implemented.
- Effects of managed recharge projects on water supply and water quality documented.
- Aquifer Storage and Recovery Task Force recommendations submitted.

21~~1~~J - WATER QUALITY

The citizens of Idaho will be best served by a cooperative effort involving public and private entities to assure that the state's surface and ground water sources meet state water quality standards and maintain designated beneficial uses.

Discussion:

Water quality impacts the usability of water for a variety of purposes and it is essential that the quality of Idaho's water resources be protected for public safety and economic stability and growth. The Department of Environmental Quality ("DEQ") is the lead state agency charged with maintaining and improving surface and ground water quality through regulatory and permitting programs and coordination with other state agencies. DEQ's Surface Water Program measures and assesses the levels of pollutants in surface waters. Pursuant to the Ground Water Quality Protection Plan, adopted by the legislature in 1992, the Department administers a statewide ambient ground water quality monitoring network and the Environmental Data Management System. The system collects, and makes available to the public, data obtained from ground water monitoring networks across the state.

When water quality fails to meet state standards, DEQ works with communities, industry, agricultural interests, state and federal agencies, and other stakeholders to develop water quality improvement plans, known as total daily maximum loads or TMDLs. These plans outline actions needed to restore impaired water bodies so that they support designated uses.

The use of water flow to dilute pollution is not a substitute for adequate water quality treatment. The Idaho Agriculture Pollution Abatement Plan ("Ag Plan") is a guidance document that describes the state's process for the control and abatement of agricultural nonpoint source pollution as it relates to water quality. The Ag Plan provides for the review and identification of specific watershed management strategies that contribute to the full support of beneficial uses through enhancement and maintenance of the quality of surface and ground water, to the extent they are impacted by nonpoint source agricultural pollutants. Water quality improvement strategies for non point sources are implemented through voluntary programs. Numerous state agencies and local units of government participate in plan implementation, including: the Idaho Soil and Water Conservation Commission, DEQ, Soil Conservation Districts, Idaho State Department of Agriculture ("ISDA"), University of Idaho – Cooperative Extension System, the Department, the Board, IDFG, the Idaho Department of Lands, and the Office of Species Conservation ("OSC"). Where the quality of surface and ground water depends on land and water-use practices within a watershed, water users, land managers, state and federal agencies, and other units of local government are working together to implement through voluntary mechanisms best management practices and other strategies that reduce impairments to beneficial uses.

Implementation Strategies:

- Coordination and integration of monitoring programs with public and private entities.
- Ongoing analysis of statewide water quality monitoring programs to identify need for modifications.
- Participate with state agencies to integrate water management programs and policies that promote the improvement of the quality of the state's surface and ground water through voluntary mechanisms.
- Ongoing monitoring of baseline conditions and trends.

Milestones:

- Collaborative projects implemented that protect and enhance the water quality of the state's surface and ground water.

21~~K~~ - COMPREHENSIVE AQUIFER MANAGEMENT PLANS

The Idaho Water Resource Board will complete and implement comprehensive aquifer management plans to address the changing demands on the state's water supply.

Discussion:

Idaho Code §§ 42-1779 and 42-1780 established the Statewide Comprehensive Aquifer Planning and Management Program and the Aquifer Planning and Management Fund, which are designed to provide the Board and the Department with the necessary information to develop comprehensive aquifer management plans, ("CAMPs") throughout the state. The program will be implemented in three phases. First, technical information describing the hydrology of the ground and surface water systems and the relationship between surface and ground water in a designated basin will be compiled. Second, the Board, with the assistance of an advisory committee, will develop a management plan, based on an assessment of current and projected water uses and constraints, to address water supply and demand issues specific to each basin. Finally, the Board will be responsible for implementing the CAMPs to obtain sustainable water supplies and provide for the optimum use of a region's water resources.

Idaho's first CAMP was developed for the Eastern Snake River Plain Aquifer ("ESPA CAMP"). The ESPA CAMP was adopted by the Idaho Water Resource Board and approved by the legislature in 2009. The ESPA CAMP sets forth actions designed to stabilize and improve spring flows, aquifer levels, and river flows across the Eastern Snake River Plain. The ESPA CAMP uses a phased approach to achieve a designated water budget change through a mix of management actions, including but not limited to, aquifer recharge, ground-to-surface water conversions, and demand reduction strategies. The Board is responsible for implementation of the plan with the assistance of an advisory committee made up of representatives of stakeholders who rely upon the Eastern Snake River Plain Aquifer to supply water for beneficial use.

Statewide comprehensive aquifer planning was initiated in 2008. The Rathdrum Prairie plan was completed in 2011 and the Treasure Valley plan is expected to be completed in 2012. Additional aquifers will be designated for the development of comprehensive plans as funding and conditions allow.

Implementation Strategies:

- Develop and implement CAMPs for selected basins that establish goals, objectives, and implementation strategies to maximize available water supplies.
- Secure funding for technical studies and planning activities.

Milestones:

- Number of CAMPs completed.
- Number of CAMPs implemented.

21~~1~~L - SURFACE WATER SUPPLY ENHANCEMENT

Surface water development will continue to play an important role in meeting Idaho's future water needs.

Discussion:

Future economic development, population growth, and evolving priorities will bring additional demands on Idaho's water resources, and surface water development will continue to play an important role in the state's future. The construction of new reservoirs, enlargement of existing reservoirs, and development of off-stream storage sites could increase water supplies necessary to meet increased demand. These strategies are also important for flood management, hydropower generation, and recreation use.

Engineering, economic, legal, political, and environmental issues associated with water development projects affect decisions concerning the construction of reservoir facilities. In addition, changes in climate conditions will likely be an important factor in determining the costs and benefits of additional storage. As required by Idaho Code § 42-1736B(3)(c), the Idaho Water Resource Board maintains an inventory of potential storage sites. An inventory of reservoir sites with apparent high potential for development is set forth in Table 1.

Implementation Strategies:

- Concentrate assessment and evaluation of potential storage facilities on projects with the highest potential for development. Major considerations in defining high-potential projects are: cost per unit of storage, extent of public support, environmental considerations, adequacy of existing information and studies, extent and availability of funding sources for evaluation and assessment, and expected benefits that would accrue from the development of additional storage.
- Review inventory and prioritize potential projects annually.
- Initiate feasibility/construction design studies for sites determined to be high priority.
- Identify potential funding sources for project evaluation and construction.
- Develop collaborative processes and partnerships with private entities, concerned stakeholders, local governments, and federal agencies to evaluate, design, and construct water storage projects.
- Provide recommendations regarding potential storage sites to private and public entities to ensure that land and resource development associated with these sites is consistent with the State Water Plan.

Milestones:

- Complete annual review of potential storage site inventory and revise as appropriate.
- Initiate construction of additional storage to meet current and expected needs by 2025.

Table 1 Reservoir Sites with Apparent High Potential for Development

Potential Reservoir	Stream	Reservoir Capacity (AF)	Potential Purpose	Status of Study
Upper Snake Minidoka (enlargement)	Snake River	67,000	Irrigation, Power, Flood Control, Flow Augmentation, Recharge, Recreation	*Minidoka Dam Raise Special Study* (USBOR, Dec. 2009). Raise determined to be feasible. No action by the IWRB at this time.
Teton (or alternative)	Teton River	300,000	Irrigation, Power, Flood Control, Flow Augmentation, Recreation	*Henrys Fork Basin Study* ongoing. Multiple on- and offstream sites within basin under consideration.
Southwest Idaho Twin Springs (or alternative)	Boise River	70,000 to 300,000	Irrigation, Power, Flood Control, Flow Augmentation, Recreation	*Lower Boise Interim Feasibility Study* ongoing. Three sites prioritized for further analysis: (1) replacement of existing Arrowrock Dam, (2) new dam at Alexander Flats site, and (3) new dam at Twin Springs site.
Lost Valley (enlargement)	Lost Valley Creek	20,000 (increase)	Irrigation, Recreation	Not currently under investigation.
Galloway	Weiser River	900,000	Irrigation, Power, Flood Control, Flow Augmentation, Recreation	Weiser-Galloway Studies currently ongoing: *Geologic Investigation and Analysis Project* and *Snake River Operational Analysis Project*.
Bear Caribou	Bear River	48,000	Irrigation, Power, Flood Control, Recreation	Last study update completed in 1996. Not currently under investigation.

21M - WEATHER MODIFICATION

Weather modification offers the possibility of augmenting water supplies.

Discussion:

Weather modification, primarily winter cloud seeding to increase snowpack, has been practiced in Idaho and across the western states for many years. Increasing challenges, including a changing climate, growing population, and water allocation conflicts related to the presence of threatened and endangered species magnify pressures on a variable water supply. While the specific water quantities resulting from weather modification remain unknown, additional investigation should be conducted and pilot projects implemented to determine where and under what circumstances weather modification is a feasible strategy for increasing water supplies. A number of cloud seeding programs and studies have been conducted in Idaho with positive overall results, including programs funded by the Board and Idaho Power Company.

Weather modification has the potential to raise legal issues related to the effect of weather modification activities outside state boundaries, potential adverse environmental effects, and intergovernmental conflicts where projects occur on or near public lands. Addressing these issues through legislation, rulemaking, and interstate agreements will help avoid future conflicts and litigation.

Under Idaho law, any person who intends to conduct weather modification activities is required to register with the ISDA and file a log of activities upon completion of the program. Idaho Code §§ 22-3201, 22-3202. Idaho law also provides for the creation of weather modification districts. Idaho Code §§ 22-4301, 22-4302.

Implementation Strategies:

- Support the continued evaluation of existing weather modification projects.
- Develop criteria for the development and implementation of additional weather modification projects.
- Collect baseline data and continue effectiveness research.
- Coordinate weather modification research and pilot projects with neighboring states.
- Ensure that state-funded projects are scientifically sound and include robust monitoring and evaluation components.

Milestones:

- Number of weather modification projects implemented that increase water supply.
- Increase in annual runoff resulting from weather modification projects.

- Increase in baseline data and effectiveness research.
- Agreements in place with neighboring states and federal agencies addressing research and implementation of weather modification projects.

21~~N~~ - HYDROPOWER

Appropriation of water for hydropower should be subordinated to subsequent upstream beneficial uses to assure an adequate supply of water for all future beneficial uses and minimum stream flows for hydropower projects should be established by state action.

Discussion:

The relationship of hydropower water rights to future upstream uses was the subject of an ongoing debate from statehood until the 1985 Swan Falls Settlement, when the Idaho legislature enacted Idaho Code § 42-203B to resolve the debate. Pursuant to section 3 of Article XV of the Idaho Constitution, the legislature determined that it was in the public interest to specifically implement the state's power to regulate and limit the use of water for power purposes. Through enactment of Idaho Code § 42-203B, the legislature sought to avoid future Swan Falls-like controversies by creating a framework for balancing the use of water for hydropower and other beneficial uses. This framework provides for the subordination of appropriations of water for hydropower purposes to assure an adequate supply of water for all future upstream beneficial uses. The framework also provides for protection of base flows for hydropower and other instream uses through minimum stream flows established by state action. The establishment of minimum stream flows through an open and transparent public process ensures a balance between sustaining economic growth, maintaining reasonable electric rates, protecting and preserving existing water rights, and protecting water quality and other environmental values.

Small hydropower projects using existing water flows and infrastructure can be cost-effective and provide for the optimum utilization of the water resource. Recognizing the benefits of such projects, loans are available through the Board's programs to study the feasibility and for development of such projects. The FERC provides a permitting exemption to certain qualifying facilities. The National Hydropower Association's Small Hydro Council recently issued a set of recommendations that would streamline FERC's conduit and small hydropower permitting process.

Implementation Strategies:

- Ensure that all future applications, permits and licenses for the appropriation of water for hydropower purposes contain a subordination provision.
- Establish minimum stream flows through state action to protect base flows for future hydropower water rights as necessary.
- Define, through agreements with the holders of existing hydropower water rights, the relationship between such rights and existing and future depletionary water rights.

Milestones:

- Execution of subordination agreements and establishment of minimum stream flows through state action for existing hydropower facilities.
- Loans provided to study the feasibility and development of small hydropower projects.

Photo: Swan Falls Dam (*photo by IDWR Dam Safety Program)*

32. CONSERVATION

The Conservation policies focus on careful planning and prudent management of Idaho's water. The policies in this section encourage water conservation practices and efficient management of water resources for the benefit of Idaho citizens. Conservation and water efficiency practices should be implemented through voluntary, market-based programs, when economically feasible.

32A - WATER USE EFFICIENCY

Water conservation and water use efficiency should be promoted.

Discussion:

The legislature, in Idaho Code § 42-250(1) determined that voluntary water conservation practices and projects can advance the policy of the state to promote and encourage conservation, development, augmentation, and utilization of Idaho's water resources. "Water conservation practice" means any practice, improvement, project, or management program that results in the diversion of less than the authorized quantity of water while maintaining the full beneficial use(s) of the water right. Idaho Code § 42-250(2). Water conservation practices include, but are not limited to, practices that reduce consumptive use as defined in Idaho Code § 42-220B, reductions in conveyance losses, and reductions in surface and seepage losses occurring at the place of use. Idaho Code § 42-223 encourages conservation of water resources by providing that no portion of any water right shall be lost or forfeited for nonuse if the nonuse results from a water conservation practice which maintains the full beneficial use(s) authorized by a water right. As water efficiencies increase, conserved water may be available to supply existing uses, new demands, or improve instream flows. Conservation and water efficiency practices may offset the need for new water supply enhancement projects. Policies that promote water conservation and efficiency should be encouraged, where such practices do not result in adverse consequences to other users of the resource.

Photo: Idaho Irrigation (*IDWR Photo*)

Implementation Strategies:

- Review existing laws and regulations and identify inconsistencies or constraints to implementing water efficiency practices.
- Develop partnerships with local, state, and federal governments and non-governmental organizations to coordinate and support water conservation programs.
- Establish a public information program and conservation guidelines for a range of water uses.
- Evaluate opportunities for conservation and water efficiency practices in conjunction with the evaluation of new water supply enhancement facilities, including existing and new water metering for all municipalities that provide public drinking water and water for other uses.
- Identify localized opportunities for water conservation.

Milestones:

- Number of conservation guidelines implemented.
- Number of partnerships developed to coordinate water conservation.
- Number of water use efficiency practices implemented.
- Effects of conservation efforts quantified.

32B - FEDERALLY LISTED AND OTHER AQUATIC SPECIES

The state asserts primacy over the management of its fish and wildlife and water resources. Accordingly, any reintroduction or introduction of federally listed species or other aquatic species without state consultation and approval is against the policy of the State of Idaho because it would impair or impede the state's primacy over its water resources.

Discussion:

The intersection between state water rights and the Endangered Species Act ("ESA") requires development of integrated solutions to water allocation conflicts. Pursuant to Idaho Code § 36-103, the Idaho Fish and Game Commission, through the IDFG, is responsible for the preservation, protection, perpetuation, and management of all wildlife, including aquatic species, within Idaho. IDFG also maintains a list of Species of Greatest Conservation Need, species that are low in numbers, limited in distribution, or have suffered significant habitat losses. The OSC is responsible for the coordination of all state activities affecting endangered, threatened, and candidate species, and species petitioned to be listed under the ESA, and rare and declining species. Idaho Code § 67-818. OSC coordinates state implementation and response to federal recovery plans and participates in regional efforts with state and federal agencies and tribes on issues related to such species. Idaho Code § 67-818. Pursuant to Chapter 19, Title 22, Idaho Code, the ISDA is responsible for the regulation of aquatic invasive species. All activities related to the introduction or reintroduction of aquatic species that would affect Idaho's fish and

wildlife and water resources should be coordinated through these agencies, including species listed under the ESA.

In enacting the ESA, Congress contemplated a state-federal alliance to advance the recovery of listed species and provided for the development of state-led recovery efforts. Congress has directed federal agencies to "cooperate with state and local agencies to resolve water resource issues in concert with conservation of endangered species." 16 U.S.C. § 1531(c)(2). Cooperative community-based conservation programs can be more effective in providing on-the-ground habitat benefits than enforcement actions. With site-specific information about water and land use practices and habitat requirements, targeted and effective conservation strategies can be developed and implemented that protect private property rights and assure state primacy over water resources while, at the same time, providing natural resource protection.

The Idaho Water Resource Board holds minimum stream flow water rights for 205 river reaches important to ESA-listed species and established as part of the Snake River Water Rights Settlement Act of 2004 ("2004 Snake River Water Rights Agreement"). The minimum stream flow water rights provide significant protection for ESA-listed species in the Salmon and Clearwater River basins. The water rights for streams in watersheds with substantial private land ownership and private water use were established after consultation with local communities. Where the minimum stream flow water rights are higher than existing flows, the state works with water users on a voluntary basis to rent or otherwise acquire water to return to the streams. The Water Supply Bank and Idaho Water Transactions Program are used to achieve these objectives. In conjunction with the minimum stream flows, the state agreed to work with local stakeholders and communities to address habitat concerns on a limited number of streams with degraded habitat. The work plans include measures to remove barriers to fish passage, revegetate stream banks, and restore wetlands to proper functioning. These programs also assist in the implementation of the Columbia Basin Fish Accords in which the state, the Bonneville Power Administration, and the U.S. Army Corps of Engineers ("USACE") agreed to address issues associated with the direct and indirect effects of the Federal Columbia River Power System and U.S. Bureau of Reclamation's ("USBOR") Upper Snake River Project on the fish and wildlife resources in the Columbia River Basin. As discussed in Policy 6B, these projects target flow-related limiting factors in the Lemhi and Pashimeroi rivers.

The 2004 Snake River Water Rights Agreement also provides for the development of agreements to assist in the recovery of ESA-listed species, under Section 6 of the ESA. The plans are to be developed in collaboration with local landowners and water users, affected Indian tribes, and state and federal natural resource agencies. Section 6 agreements will provide incentives for conservation through the granting of incidental take coverage to participants in the program. Such agreements would provide participating water users with protection against uncertainty and regulatory delays while contributing to the recovery of listed species. Section 6 of the ESA may also provide opportunities for the implementation of voluntary conservation plans developed in collaboration with local water users and stakeholders in other regions of the state. The Board, in collaboration with other state agencies and local units of government, develops

local and regional conservation strategies that contribute to the recovery of ESA-listed species and Species of Greatest Conservation Need.

Implementation Strategies:

- Participate in the development and implementation of habitat conservation plans pursuant to Section 6 agreements.
- Collaborate with OSC, IDFG, other state and federal agencies, affected Indian tribes, local units of government and local stakeholders to develop and implement conservation programs that preclude the need for listing of species and contribute to listed species' recovery.
- Coordinate with OSC and IDFG to integrate water resource programs with species protection and recovery, including the establishment of minimum stream flows and state designation of protected rivers.

Milestones:

- Number of Section 6 agreements implemented.
- Number of voluntary conservation agreements and measures implemented.
- Number of strategies implemented that preclude the need for listing under the ESA and result in listed species' recovery.

32C – MINIMUM STREAM FLOWS

The Idaho Water Resource Board will exercise its authority to establish and to protect minimum stream flow water rights on those water bodies where it is in the public interest to protect and support instream uses.

Discussion:

Minimum stream flows protect and support many nonconsumptive beneficial uses of water such as fish and wildlife habitat, aquatic life, recreation and aesthetic values, transportation, navigation, hydropower generation, and water quality. These uses contribute to Idaho's economy and the well being of its citizens.

In 1925 and 1927, the legislature declared that the preservation of certain lakes for scenic beauty, health, and recreation was a beneficial use of water. In 1971, the legislature authorized the first formal appropriation of minimum stream flows by directing the Idaho Department of Parks and Recreation to appropriate a specific reach of Niagara Springs in the Malad Canyon area for instream flow purposes. The 1976 State Water Plan called for, and eventually legislation was enacted, creating a state-wide minimum stream flow program. Chapter 15, Title 42, Idaho Code, authorizes the Idaho Water Resource Board to appropriate the minimum flow of water required to protect designated uses if the appropriation is in the public interest and will not interfere with any vested water right, permit, or water right application with a senior priority. Idaho currently has 297 licensed or permitted water rights for minimum stream flow purposes, including six minimum

lake level water rights held by the state. At the legislature's direction, 205 of the minimum stream flow water rights were adopted pursuant to the 2004 Snake River Water Rights Agreement which, as discussed more fully in Policy 76B, provided a programmatic approach to addressing the needs of species listed under the ESA. Similarly, the legislature has authorized the Board to appropriate minimum stream flow water rights in the Lemhi and Wood River basins where the rights are maintained through operation of a Water Supply Bank. These locally managed programs are used to maintain or enhance instream flow in a manner that respects water use practices and addresses community concerns.

The Water Supply Bank and local rental pools are tools that can be used to improve instream flows through voluntary cooperation and to meet local needs. It is important to monitor existing mechanisms for establishing local rental pools to determine whether additional strategies are required to meet local needs. It is also important to monitor whether existing mechanisms for meeting instream flow needs are adequate.

Implementation Strategies:

- Monitor whether existing mechanisms for meeting instream flow needs are adequate.
- Coordinate with state and federal agencies and stakeholders to identify potential minimum stream flow needs.
- Submit applications for minimum stream flow water rights that are in the public interest.
- Monitor existing mechanisms for establishing local rental pools to determine whether additional strategies are required to meet local needs.
- Establish local rental pools to meet instream flow needs as requested.

Milestones:

- Annual inventories of minimum flow water rights completed.
- Minimum stream flow water rights established.
- Instream flow needs met.

32D - STATE PROTECTED RIVER SYSTEM

The Idaho Water Resource Board will exercise its authority to protect the unique features of rivers where it is in the public interest to protect recreational, scenic, and natural values.

Discussion:

Idaho Code § 42-1734A(1) authorizes the Board to protect highly valued waterways as state protected rivers. The authority to designate "protected rivers" derives from the state's ownership of the beds of navigable streams and the state's right to regulate all

waters within the state. The Idaho Water Resource Board has consistently recognized the value of free-flowing waterways by designating specific streams and rivers as natural or recreational rivers.

Although rivers can be protected under the federal Wild and Scenic Rivers Act, the Board works with federal officials to seek protection of streams and rivers through the Comprehensive State Water Planning process. The state planning process ensures coordinated and efficient water planning for Idaho rivers and streams and avoids potential state/federal sovereignty conflicts.

Implementation Strategies:

- Coordinate with local governments and federal agencies to identify specific waterways for consideration as protected rivers.
- Develop priority list of potential rivers for consideration in comprehensive basin planning.
- Establish agency policy and procedures to ensure requirements of the protected rivers program are addressed when the Department reviews water right permit applications and stream channel alteration permits.
- Ensure that permits issued include provisions for the protection, restoration, or enhancement of designated river reaches.

Milestones:

- Ongoing review of state rivers and streams to determine whether they should be designated as part of the protected river system.
- Number of state/federal agreements to coordinate river planning implemented.
- Designation of streams or rivers determined to warrant protected status.

32E - RIPARIAN HABITAT AND WETLANDS

Protecting the ecological viability of riparian habitat and wetlands within the state is a critical component of watershed planning.

Discussion:

Functional riparian zones and wetlands contribute to water quality protection, storm water control, and ground water protection and provide important habitat for fish and wildlife. Riparian and wetlands areas provide support to numerous species across much of the state. Riparian zones and wetlands should be protected to preserve their ecological values and functions. The Board supports voluntary efforts to restore riparian zones and wetlands.

The integration of water resource and land use planning activities that affect riparian zones and wetlands requires coordination among various local, regional, and state authorities. The Department regulates the alteration of stream channels and stream beds

below the mean high watermark. Idaho Code §§ 42-3801 - 42-3812. Local governments are authorized to regulate land use and development. The DEQ administers the state's Nonpoint Source Management Program which is based upon strong working partnerships and collaboration with state, tribal, regional, and local entities, private sector groups, citizens' groups, and federal agencies and the recognition that a successful program must be driven by local wisdom and experience.

In 2008, the Idaho Wetlands Working Group developed a Draft Wetlands Conservation Strategy that sets out a framework for protecting, restoring, and enhancing wetlands through collaborative, voluntary approaches. The Board supports voluntary watershed-based conservation strategies for the protection of riparian and wetland areas above the mean high water mark developed and implemented through collaboration with water users, land managers, local governments, and state and federal agencies.

Implementation Strategies:

- Support collaborative watershed planning and the implementation of voluntary strategies to protect Idaho's wetlands and riparian areas.
- Support the development of guidelines and strategies to assist in the implementation of projects that protect, restore, and enhance wetlands and riparian areas.
- Evaluate whether the Stream Channel Protection Act, [Idaho Code §§ 42-3801 - 42-3812], adequately assists in the protection of wetlands and riparian areas and propose statutory changes as appropriate.
- Assist state and federal agencies and stakeholders in the acquisition of funding for project implementation.

Milestones:

- Project and funding proposals submitted.
- Projects implemented.

32F - STREAM CHANNEL REHABILITATION

The Idaho Water Resource Board will support cost-effective stream channel rehabilitation where past activities adversely affect or could affect the ecological goods and services of the state's watersheds.

Discussion:

Functional stream channels provide ecological goods and services desired by the public. Ecological goods are those qualities that have economic value, such as timber resources, habitat that supports fishing and hunting, and aesthetic qualities of landscapes that would attract tourists. Ecological services include systems that best manage water resources, such as the regulation of runoff and flood waters, or the stabilization of landscapes to prevent erosion. Damage and destruction of stream channels can result from natural and

human-caused changes and disturbances. Where current practices, legacy effects of past activities, or natural disturbances threaten public safety, private property, or the overall quality and quantity of water produced in the affected watershed, it is in the state's interest to take remedial action in a cost-effective manner. In many instances, historical targets for restoration are not practical and therefore restoration efforts should be designed to be sustainable in a rapidly-changing environment. Preventing damage to a stream channel and adjacent property is more cost effective than restoration. In addition, it is in the state's interest to ensure that the stream channels of the state and their environments are protected and restored through the implementation of voluntary restoration projects.

Implementation Strategies:

- Conduct a statewide inventory of streams where natural events or human activities have altered channels and the disturbances threaten the public safety, private property, or other water resource values.
- Conduct cost/benefit analyses for rehabilitation of affected streams.
- Prioritize projects.
- Obtain funding for restoration of prioritized streams.

Milestones:

- Inventory conducted.
- Cost/benefit analyses conducted and priorities established.
- Funding obtained.
- Projects implemented.

32G - SAFETY MEASURES PROGRAM

Owners of water distribution and storage facilities are encouraged to establish or continue safety initiatives including construction and maintenance of safety features and development of public awareness programs to educate residents about hazards associated with these facilities.

Discussion:

Fatal accidents occur in waterways at or near water distribution and storage facilities in Idaho because of the inherent dangers of these facilities. With the increasing urbanization of rural areas, there has been a greater effort to provide public awareness programs and, where feasible, implement measures designed to prevent such occurrences. The Idaho Water Resource Board supports these voluntary initiatives.

Implementation Strategies:

- Secure and provide funding for the construction and maintenance of safety features at water distribution and storage facilities.

- Encourage the implementation of public safety awareness programs.

Milestones:

- Reduced number of accidents associated with water distribution and storage facilities.

32H - FLOOD HAZARD AREAS

Protection of floodplains through effective floodplain management and pre-disaster mitigation is essential to reducing and preventing flood damages.

Discussion:

Floods are the most frequent and costly disasters in Idaho and can occur in most any area of the state. With population growth, there will be increased interest in the development of lands subject to periodic flooding. The Federal Emergency Management Agency ("FEMA") administers the National Flood Insurance Program ("NFIP"), which many Idaho communities have joined by adopting and enforcing flood damage prevention ordinances. Although FEMA has prepared Flood Insurance Rate Maps ("FIRMs") for some of the waterways within Idaho, the majority of FIRMs are more than 20 years old and require updating. In order to create safer communities and reduce the loss of life and property due to flood events, local governments are encouraged to use land use controls, building practices, and other tools to protect the natural function of floodplains. Land use controls on additional development in flood plains can also preserve storage water supplies by reducing the need for additional flood control releases.

Implementation Strategies:

- Assist local governments in securing funding to update or develop digital FIRMs.
- Provide technical information on flood plain management and flood risk to elected officials, public and private organizations, and land developers.

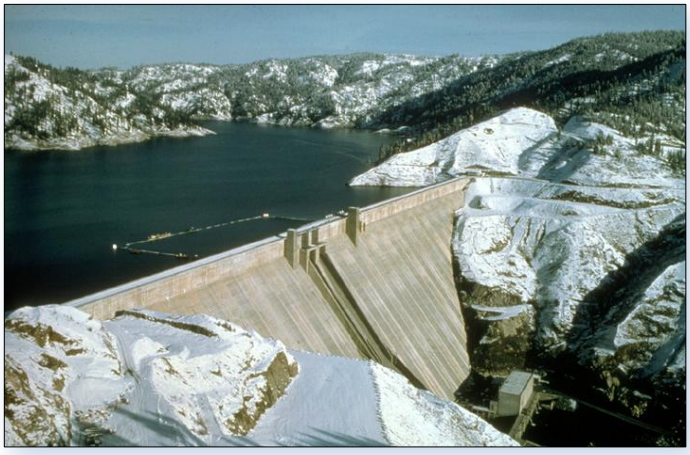


Photo: Dworshak Dam on the North Fork of the Clearwater River (*IDWR Photo*)

Milestones:

- Increased participation in NFIP by communities.
- Decreasing trends in annual flood damages.

32I - FLOOD DAMAGE REDUCTION LEVEE REGULATION

Levees should be designed, constructed, and maintained to meet the intended purpose of reducing water and flood damage for the useful life of the levee.

Discussion:

Pursuant to Idaho Code § 42-1717, the Department regulates nearly 600 water storage dams and more than 20 mine tailing impoundment structures throughout the state. Levees are exempted by statute from the Department's dam safety regulations, and the construction, maintenance, and safety of levees is, for the most part, left to local entities. Presently, there is no state agency that is authorized to regulate levees for the protection of public health or safety.

The Board supports the development of a comprehensive state program governing the design, construction, and maintenance of new flood reduction levees, and the periodic safety inspection of existing levees. A state flood reduction levee program should focus on the use of sound technical practices in levee design, construction, and operation. This should include the establishment of a safety program that helps ensure public education and awareness of the capacities and limitations of levees during flood events.

Implementation Strategies:

- Develop a state safety program to regulate the design, construction, and maintenance of new flood reduction levees.
- Investigate the implementation of a state levee safety program consistent with the standards and guidelines recommended by the Draft National Levee Safety Program.
- Provide testimony upon request to the legislature regarding the benefits offered to Idaho citizens resulting from implementation of a state levee safety inspection program.
- Participate in the development of a National Levee Safety Program with other state and federal agencies, as appropriate.
- In the event a National Levee Safety Program is adopted, obtain certification as a state levee safety program and assist with development of levee criteria for use by the states and the federal government.

Milestones:

- State levee safety program established.
- Levee failures in Idaho decreased.
- Reduction in property loss resulting from levee failures.

43. MANAGEMENT

The Management policies focus on maintaining and enhancing administrative programs and practices related to current and future demands on Idaho's water and energy resources.

43A - REVIEW OF FEDERAL RESERVOIR WATER ALLOCATION

It is in the state's interest that proposed water allocations and reallocations of water in federal reservoirs be consistent with the State Water Plan.

Discussion:

Historically, the Board has reviewed federal water allocations proposed by the USBOR to determine whether the proposed allocations are consistent with state water resource planning and management objectives. In 1988, this cooperative arrangement was formalized through an agreement providing for Idaho Water Resource Board review of proposed water allocations from federal reservoirs in excess of 500 acre-feet annually, within an existing approved water right not otherwise reviewable by the Department. This state and federal partnership ensures that water resource and management issues are addressed in a comprehensive way, thereby providing for optimal use of the state's resources. It will become even more important to coordinate state and federal management strategies as demands on the state's water supply increase.

Implementation Strategies:

- Review status of existing cooperative agreements related to review of proposed allocations and revise accordingly.
- Identify opportunities for additional agreements providing for review of proposed allocations.
- Work with the USACE to determine if cooperative agreements addressing water allocations in other parts of the state would be in the state's interest.

Milestones:

- Existing agreements maintained and revised as necessary.
- Additional cooperative agreements executed that promote optimal use of the state's water resources.

Photo Courtesy of Idaho Department of Agriculture

43B - HYDROPOWER SITING

The expansion of hydropower capacity and generation consistent with the state water plan can help meet the need for affordable and renewable energy resources.

Discussion:

Hydropower provides a clean, efficient, and renewable energy source and has contributed significantly to the state's energy supply. The state and region's power demand is expected to increase substantially over the next several decades as the population continues to grow. Although most cost effective and flexible sites have been developed, there will be opportunities for increasing hydroelectric generating capacity, while preserving environmental protection. These include enhancing incremental capacity at existing sites through new technologies that yield greater energy efficiency, adding generation capacity at existing dams, and the development of generation capacity in conjunction with the construction of new water storage projects. Development of small hydropower generation at existing facilities is also an important strategy for contributing to the state's energy supply. The Board provides loans to assist irrigation entities interested in studying the feasibility and development of such projects.

The 2012 Idaho Energy Plan recommends that energy conservation and energy efficiency should be the highest priority resource. The 2012 Idaho Energy Plan also recommends development of in-state renewable resources that will contribute to a secure, reliable energy system for the state. The Board supports the promotion of a more efficient use of energy throughout Idaho's economy, implementation of efficiency improvements at existing sites, and retrofitting existing dams. Hydropower development should be considered when planning new water storage projects. Feasibility studies for new storage projects should include evaluation of the costs, benefits, and adverse consequences of hydropower generation.

Under 16 U.S.C. § 803, the FERC must determine that proposed projects are consistent with Idaho's comprehensive water plans when making licensing decisions. The Board will review hydropower development proposals to determine whether they are consistent with the State Water Plan, including the comprehensive basin and river plans, which address region-specific siting issues. The Board agrees with the 2012 Idaho Energy Plan recommendation to establish an Energy Facility Site Advisory Team that would provide technical expertise and assistance upon request from local officials considering energy facility siting proposals.

Implementation Strategies:

- Provide information and technical assistance to local communities through participation in an Energy Facility Site Advisory Team.
- Include evaluation of hydropower generation potential in feasibility studies for water storage projects.

- Provide information and technical assistance to proponents of projects that increase energy efficiency, increase generation capacity, or retrofit existing dams or other facilities for hydroelectric generation.

Milestones:

- Hydropower siting proposals and projects comply with the State Water Plan.
- Efficiency improvements implemented at existing hydropower facilities.
- Generation capacity increased at existing hydropower projects, while protecting the environment.
- Existing dams retrofitted with generation capacity, while protecting the environment.
- Development of small hydropower generation at existing facilities, while protecting the environment.

43C - RESEARCH PROGRAM

Focused research is necessary to support water resource planning and collaborative solutions that address changing demands on the state's water supplies.

Discussion:

Research and data gathering are essential to the state's efforts to meet future water challenges in a sustainable way. Adequate data on water availability, use and efficiencies, surface and ground water interaction and relationships, and emerging water management technologies is needed to help water managers and end users make sound decisions and develop adaptive strategies for responding to the impacts of climate variability. Data collection and research is conducted by numerous public and private entities. A cooperative exchange of information contributes to more efficient use of limited financial resources for research and monitoring necessary to further the state's water supply objectives. Research priorities include: water use efficiency; water use monitoring; ground and surface water relationships, specifically the timing and spatial distribution of pumping and recharge efforts; ground water flow models; and system operation modeling methods for Idaho river basins. Environmental considerations should be addressed as studies are designed and implemented.

Implementation Strategies:

- Facilitate coordination and dissemination of research and data among state and federal agencies, local units of government, universities, and private entities.
- Identify and prioritize research needs.
- Identify dedicated funding sources for basic and applied research.

Milestones:

- Cooperative research activities implemented.
- Completed research projects.
- Application of research results to planning and management.

43D - FUNDING PROGRAM

Funding mechanisms to support the development, preservation, conservation, and restoration of the water resources of the state should be based on flexible strategies that provide equitable benefits.

Discussion:

The water resources of the state are essential to Idaho's economy and its citizens. There is no single strategy for successfully financing water resource projects. Instead, funding mechanisms for water planning and management should be based on flexible strategies that are broad-based and provide equitable benefits. Strategies for financing water resource programs may include state appropriations, the establishment of water management improvement or conservancy districts, targeted user fees, the development of a state water fund supported by power franchise fees, targeted sales, property, or special product and services taxes, and revenue bonds. While the existing institutional and legal framework may be adequate for some projects, it is important to develop innovative approaches that are responsive to future needs. Transparency and clarity about the intent and limitations of any particular funding strategy will help ensure that a strategy is used and evaluated appropriately. Projects proposed for funding must be in the public interest and in compliance with the State Water Plan.

The Board's Revolving Development Fund and Water Management Account are supported by appropriations from the state's general fund, federal funds, and other revenue sources. These programs have and will continue to provide financial assistance to project sponsors for water development and conservation, system rehabilitation, and treatment projects. The Board is also authorized to finance water projects with revenue bonds. The issuance of revenue bonds does not constitute a general obligation of the state or the Idaho Water Resource Board.

Sources of funding for programs focused on the protection and restoration of species listed under the ESA include 2004 Snake River Water Rights Agreement appropriations, the Columbia Basin Water Transaction Program, the Pacific Coast Salmon Recovery Fund, and the 2008 Columbia Basin Fish Accords.

The ESPA CAMP provides for a water-user fee in conjunction with state appropriations. Implementation of strategies for addressing regional water use issues on the Eastern Snake River Plain Aquifer will assist in the development of comprehensive aquifer management implementation plans in other areas of the state.

The Board will continue to pursue opportunities for partnerships with the federal government and private entities to determine the feasibility of increasing water supplies through development of additional storage capacity. As discussed in Policy 4E, the Board has entered into agreements with the USACE and the USBOR for studies in the Boise River and Snake River basins. As demands increase on Idaho's water storage and delivery systems, the need for additional water storage feasibility studies and funding partnerships will be assessed.

Implementation Strategies:

- Review existing authorities and identify changes needed to optimize financing for water resource projects.
- Evaluate Idaho Water Resource Board financial program procedures to determine whether revisions are needed to improve efficiency and accessibility.
- Pursue opportunities for private funding partnerships.
- Pursue opportunities for local, federal, and intra-state funding partnerships and projects.

Milestones:

- Financial programs and funding strategies meet the future water resource needs of the state.

43E - WATER RESOURCE PLANNING PROGRAM

Comprehensive water planning will help ensure sufficient water supplies to satisfy Idaho's future water needs.

Discussion:

Idaho Code § 42-1734A(1) directs the Idaho Water Resource Board to formulate and adopt a comprehensive state water plan for conservation, development, management and optimum use of all unappropriated water resources and waterways of the state. The legislature also authorized the Idaho Water Resource Board to develop plans for specific geographical areas. Comprehensive plans for individual hydrologic river basins include state protected river designations and basin-specific recommendations concerning water use and resource values. Basin plans also assure that the state's interests will be considered in federal management agency decisions. Public review and comment ensures that the state water plan serves the public interest.

As demands for water increase, the need for water-related planning escalates. The planning process provides opportunities for involving all affected parties – water users, resource managers, and policymakers, identifies problems, alternatives, and solutions, and allows for continuous updating and revisions in light of new problems and opportunities.

In exercising its responsibilities for water resource planning, the Board will focus on the coordination of local, state and federal planning activities to minimize duplication and to promote the optimum use of Idaho's water resources.

Implementation Strategies:

- Review and update existing agreements for coordinated water resource planning.
- Develop new cooperative planning agreements.
- Secure funding to complete CAMPs for priority aquifers consistent with the schedule established by the Board.

Milestones:

- Cooperative planning agreements executed and implemented.
- Adoption of Treasure Valley and Rathdrum Prairie CAMPs.
- Completion and adoption of CAMPs for remaining priority aquifers.

43F - WATER RIGHTS ADJUDICATION

Adjudication of water rights through the state courts should be completed to fully define and quantify all state, tribal, and federal water rights.

Discussion:

The purpose of a general stream adjudication is to provide certainty and predictability in the administration and distribution of water diverting from hydraulically connected water sources. "A general adjudication is an action for both the judicial determination of the extent and priority of the rights of all persons to use water from any water system within the state of Idaho that is conclusive as to the nature of all rights to the use of water in the adjudicated water system, except as provided in section 42-1410, Idaho Code and for the administration of those rights." Idaho Code § 42-1401A(5). The need for a general adjudication of water rights in the Snake River Basin became apparent as the spring flows in the Thousand Springs reach began to decline and disputes arose over the availability of water supplies on the Snake River Plain. As part of the 1984 Swan Falls Agreement, the state agreed to commence the Snake River Basin Adjudication ("SRBA"), the largest legal proceeding in the history of the state. The SRBA is the cornerstone for the long-term management of the Snake River Basin within Idaho. At the conclusion of the SRBA, the state will have a listing of all water rights within the basin, which is the predicate for establishing water districts to administer all water rights. Pursuant to Idaho Code § 42-1734(3), the Idaho Water Resource Board is authorized to represent the state, when requested to do so by the Governor, in proceedings, negotiations, and hearings involving the federal government. In the SRBA, the Board coordinated state participation in the negotiation of federal reserved water rights, including tribal claims. Successful agreements were negotiated resolving federal reserved water right claims including those filed by the Shoshone-Bannock, Nez Perce, and Shoshone-Paiute tribes as well as the claims of numerous federal agencies. The final settlement of the Nez Perce

Tribe's claims reflected the tribe's and the state's shared interest in addressing environmental concerns and addressed the conflicting demands for consumptive and nonconsumptive uses. Consistent with state law, the Board should serve as the lead agency for coordinating state participation in all general stream adjudications.

On November 12, 2008, the district court ordered the commencement of an adjudication in the Coeur d'Alene Spokane River water system. Like the SRBA, the determination of all existing water rights from the water basins in Northern Idaho will provide the basis for administration of water rights.

Implementation Strategies:

- As requested by the Governor, provide coordination and negotiation of adjudication activities.
- As determined by state and local support, encourage general adjudications in unadjudicated basins in northern Idaho and the Bear River Basin in eastern Idaho.

Milestones:

- Issuance of final unified decree in the SRBA.
- Coeur d'Alene Spokane River Basin adjudication completed.

43G - CLIMATE VARIABILITY

Preparedness strategies should be developed to account for the impact of climate variability on the state's water supplies.

Discussion:

Evidence suggests that currently the Earth's climate is warming and that warming may continue into the foreseeable future. While recognizing the uncertainties inherent in climate prediction, it is important to anticipate how a warming climate can potentially affect water supplies and plan accordingly.

Climate experts are less confident about how continued warming will affect the overall amount of precipitation Idaho receives, but changes in seasonal stream flows and increased annual variability have been documented. It is expected that seasonal flows in snowmelt-fed rivers will occur earlier, summer and fall stream flows will be reduced, and water temperatures will increase. Increased precipitation in the form of rain and fewer, but more intense, storm events are expected to result in more severe droughts and greater flooding. Potential impacts could also include more evaporation, reduced ground water recharge, water quality challenges, reduced productivity of hydropower facilities, and irreversible impacts on natural ecosystems. Water resource managers must evaluate and plan for these possibilities.

Planning for the potential impacts of climate variability requires increased flexibility in water management and the identification of existing tools that can be adapted to address

climate-induced changes in water supplies. Increased monitoring and data collection as well as conducting an initial vulnerability analysis for watersheds will help managers develop adaptive approaches to changes in the hydrologic regime that may accompany an increase in climate variability. Increasing public awareness and strengthening community and regional partnerships to manage shared water resources are proactive steps that should be taken now to provide for the optimum use of Idaho's water resources.

Implementation Strategies:

- Evaluate existing legal and institutional tools and constraints that can be adapted to provide flexibility for water resource managers.
- Implement a collaborative approach to the analysis of reservoir operation rule curves that adequately considers past and current hydrologic data.
- Pursue expansion and diversification of water supplies, including increased surface and ground water storage.
- Develop and update flood-risk assessments and environmental impact mitigation measures.
- Identify and implement adaptive mechanisms to address the impact of climate variability on water supplies.
- Establish stakeholder forums involving state and local water supply managers, scientists, state and federal agencies, and water users to enhance understanding about the science of climate variability, to share information about existing and potential tools for ameliorating the impact of climate variability, and to increase understanding of the challenges facing water users and managers.

Milestones:

- Completion and implementation of updated flood control rule curves.
- Construction or expansion of water supply projects.
- Finalization of risk assessment studies.
- Documentation of legal and institutional framework and water management tools that anticipate and respond to climate variability.
- Establishment of regional forums that encourage the development of collaborative programs and decision making.
- Funding mechanisms in place for climate variability preparedness and risk assessment.

54. SNAKE RIVER BASIN

The Snake River was described in the 1960s as "A Working River" by Senator (and former Idaho Governor) Len B. Jordan. This description accurately portrays the development of the river since the earliest settlement and irrigation of the semiarid lands of southern Idaho.

The Snake River has had – and continues to have – many competing demands for its water that affect the management of the river, among them: irrigation, hydroelectricity, municipal supply, flood control, recreation, fish, and wildlife management. Multiple governmental agencies regulate activities that affect the use of the waters of the Snake River, among them: the Idaho Water Resource Board (water policy), Idaho Department of Water Resources (water administration), U.S. Bureau of Reclamation (irrigation, water storage, and hydroelectricity), U.S. Army Corps of Engineers (flood control), National Marine Fisheries Service (anadromous fisheries management), U.S. Fish and Wildlife Service (resident fisheries), Bonneville Power Administration (federal power), and the Federal Energy Regulatory Commission (hydropower). The Snake River policies in this Plan provide essential guidance for the management of the Snake River in the public interest. When competing demands for Idaho's unappropriated water resources arise, the laws of the State of Idaho and the policies in this Plan establish the blueprint for management of the resource.

This plan sets forth ten Snake River Basin policies. Policy 54A describes the minimum stream flow management framework that provides for the optimum development of the water resources of the Snake River Basin. Policy 54B reaffirms the Milner Zero minimum average daily flow policy that guides the optimum development of unappropriated flows of the Snake River Basin above Milner Dam. Policy 54C addresses reallocation of Snake River trust water in the Milner to Murphy reach of the Snake River Basin. Policy 54D addresses conjunctive management of the Eastern Snake Plain Aquifer and the Snake River. Policy 54E addresses the need for development of storage in the Snake River Basin. Finally, Policies 54F through 54J set forth policies for agriculture, DCMI (domestic, commercial, municipal and industrial), hydropower, navigation, fish, wildlife, recreation, and scenic values.

Photo: Milner Dam
Photo Courtesy of IDWR Dam Safety Program

54A - SNAKE RIVER MINIMUM STREAM FLOWS

The main stem Snake River above Hells Canyon Dam will be managed to meet or exceed the following minimum average daily flows at the designated stream gaging stations:

Gaging Station	Minimum Average Daily Flow
Milner	0 cfs
Murphy	3,900 cfs (4/1 through 10/31) 5,600 cfs(11/1 through 3/31)
Weiser	4,750 cfs
Johnson Bar	5,000 cfs
Lime Point	13,000 cfs

These minimum stream flows provide the management framework for the optimum development of water resources of the Snake River Basin. The minimum stream flow water rights shall be administered in priority with other water rights.

Discussion:

Approximately 57%[1] of the surface area of the State of Idaho is within the Snake River Basin. Although the Snake River Basin represents 50% of the water resources of the State, it is the water supply for 76% of Idaho's population. Thus, the Snake River Basin is the backbone of Idaho's economy. Effective management of this resource is essential to protecting existing water rights, supporting agriculture, sustaining economic growth, maintaining base flows for hydropower generation, and preserving fish, wildlife, and other environmental values.

The Milner, Murphy and Weiser minimum stream flows have been an integral part of the State Water Plan since their adoption in 1976. They establish a balance between diversion of water for consumptive uses and preservation of Snake River flows for instream uses. The Johnson Bar and Lime Point minimum flows were added in 1978 and 1985, respectively, to address navigational concerns below the Hells Canyon Complex (HCC).

The Snake River minimum stream flow policy evolved over the course of the 20th Century in connection with efforts to reconcile the conflict between irrigation, which requires diverting water out of the stream, and hydropower, which relies on retaining water in the stream. A brief overview of the evolution of the Snake River minimum stream flow framework is provided as context for the Snake River policies that follow.

The inherent tension between diversion of water for consumptive uses and retention of flows for instream uses became apparent with the simultaneous development of the irrigable lands within the Snake River Basin and the development of the hydropower

[1] The Salmon and Clearwater Basins are not included in this calculation because they are treated as separate basins for purposes of the State Water Plan.

potential of the main stem Snake River. The inevitable conflict between these two uses was recognized as early as the 1889 Constitutional Convention, and the tension continued through the 20th Century.

The initial effort to create a balance between irrigation and hydropower development arose out of a 1920 plan prepared by the Board of Engineers "for the development of the remaining resources of the Snake River water supply on a broad and comprehensive basis which would insure to the state the maximum utility of the possibilities of the stream." Report of Board of Engineers (dated April 10, 1920). The Board of Engineers consisted of the State Commissioner of Reclamation and engineers representing the U.S. Reclamation Service and private irrigation interests. The plan was based on the physical division of the Snake River Basin at Milner Dam. Upstream from Milner Dam the Snake River is not deeply entrenched, but below the dam the river enters a deep canyon. This physical characteristic of the Snake River led the Board of Engineers to propose that the Snake River above Milner Dam be dedicated to irrigation because of the ease of diverting the flow through gravity irrigation. The Board of Engineers proposed that the main stem Snake River below Milner Dam should be devoted to hydropower because the flow of the river was largely inaccessible for agricultural development at that time.

The Board of Engineers' plan proposed the construction of storage capacity, to the extent economically feasible, to capture flows above Milner Dam for existing and future agricultural development. Because it would take a number of years to develop the water supply above Milner Dam for agricultural purposes, the Board of Engineers' report recommended hydropower water rights be conditioned to prevent them from interfering with future upstream development. This limitation on hydropower water rights was integral to the Board of Engineers' plan for the "maximum utility" and "greatest use" of the water resources of the Snake River. The Board of Engineers' viewed the plan as not greatly impacting hydropower development because the Snake River soon reconstituted itself downstream from Milner Dam from irrigation return flows, tributary springs, and surface water sources.

The physical differences in the reaches above and below Milner Dam, and the corresponding differences in existing and anticipated development above and below Milner Dam, evolved over time to the commonly-held view of the Snake as consisting of "two rivers." The "two rivers" concept recognizes that separating water administration at Milner Dam and precluding downstream calls for the water above Milner, the optimum development of the water supply above Milner Dam can be achieved. The "two rivers" concept has been repeatedly reaffirmed as part of every major Snake River water project and resolution of every major water controversy. For example, Idaho Power Company's "HCC" water rights were subordinated to upstream consumptive uses, consistent with the "two rivers" concept.

The "two rivers" concept was formally recognized in the 1976 State Water Plan, which set a "protected flow" of zero cfs at the Milner U.S.G.S. Gaging Station. The purpose for establishing a zero flow at Milner Dam was to allow for existing uses to be continued and for some new uses to be developed. The 1986 State Water Plan, however, recognized that the Milner zero minimum average daily flow policy meant "that river flows downstream from that point to Swan Falls Dam may consist almost entirely of ground-

water discharge during portions of low-water years." The 1992 State Water Plan further clarified that the Milner zero minimum stream flow "is not a target or goal to be achieved, and may not necessarily be desirable." The 1996 State Water Plan was amended by the Idaho Legislature to provide that "the exercise of water rights above Milner Dam has, and may reduce flow at the dam to zero."

The 1976 State Water Plan established minimum average daily flows[2] at the Murphy gage of 3,300 cfs, and the Weiser gage of 4,750 cfs "to maintain water for production of hydropower and other main stem uses." In 1985, the Murphy minimum stream flow was increased to an average daily flow of 3,900 cfs during the irrigation season and 5,600 cfs during the non-irrigation season as part of the resolution of the Swan Falls controversy, which dealt with whether Idaho Power Company's hydropower water rights were subordinate to upstream uses. The 1986 State Water Plan described the Murphy and Weiser minimum stream flows as "management constraints" to "insure that minimum flow levels of Snake River water will be available for hydropower, fish, wildlife and recreational purposes." The 1986 Plan also recognized the hydraulic connection between the Eastern Snake Plain Aquifer and directed that it "be managed as an integral part of the river system."

In 1978, the Idaho Legislature established a minimum stream flow of 5,000 cfs at the Johnson Bar Gaging Station "to retain the stream flows and hydro-base." Chapter 345, 1984 Idaho Sess. L. 884, 886. As part of the Swan Falls Settlement, a minimum flow of 13,000 cfs was established at the Lime Point Gaging Station. These minimum stream flows were initially established to protect navigational flows below the HCC, but now serve to protect flows of the main stem Snake River below the HCC for instream uses. As discussed in Policy 54I, however, the Johnson Bar and Lime Point minimum stream flows are not enforceable against water rights diverting from the waters of the Snake River or surface or ground water tributary to the Snake River upstream of the HCC. Additionally, the Lime Point minimum stream flow cannot be enforced against water rights diverting waters of the Salmon River or surface or ground water tributary to the Salmon River.

To summarize, the Milner, Murphy and Weiser minimum stream flows establish the management framework for optimum development of the water resources of the Snake River Basin above the HCC. The Johnson Bar and Lime Point minimum stream flows protect main stem Snake River flows below the HCC for instream uses.

Implementation Strategies:

- Develop a monitoring program by 2014 to account for fluctuations resulting from the operation of Idaho Power Company's hydropower facilities in the calculation of the Murphy minimum average daily flow.
- Develop tools to predict Snake River flows at the Murphy Gage based on ESPA ground water level trends, precipitation patterns, new appropriations, and changes in conservation practices.

[2] An average daily flow is the average of multiple flow measurements taken during a 24-hour period.

- Develop by 2014 management scenarios to ensure that Snake River flows at the Murphy and Weiser Gages remain above established minimum stream flow levels.

Milestones:

- Snake River minimum stream flows maintained.
- Tools developed to predict Snake River flows at the Murphy Gage.
- Management strategy developed to ensure that Snake River minimum stream flows at the Murphy and Weiser Gages are maintained.

54B - SNAKE RIVER MILNER ZERO MINIMUM FLOW

Water resource policy, planning, and practice should continue to provide for full development of the Snake River above Milner Dam recognizing that the exercise of water rights above Milner Dam has and may reduce flow at the Dam to zero.

Discussion:

Idaho Code § 42-203B(2) provides that "[f]or the purpose 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." This provision was enacted in 1986 to confirm and clarify the Milner zero minimum stream flow and the "two rivers" concept. Policy 4B reaffirms the Milner zero minimum stream flow and the "two rivers" concept, which have appeared in each successive revision of the Idaho State Water Plan.

Figure 1 shows the annual volume of natural flow passing Milner Dam from 1980 through 2011. Because of year-to-year variability of the natural flow passing Milner Dam, the optimum development of the natural flow will be achieved through storage in surface water reservoirs above Milner Dam and in the ESPA.

Implementation of managed recharge will have an effect on the flow characteristics of the Snake River above and below Milner Dam. Accordingly, while the Eastern Snake Plain Aquifer Comprehensive Management Plan established a long-term annual hydrologic target of 150,000 to 250,000 acre-feet of managed recharge, this target should be phased in to allow for informed water management and planning." The Phase I managed recharge hydrologic target for the Snake River Basin above Milner is to recharge between 100,000 and 175,000 acre-feet on an average annual basis. Based upon data gathered during this initial phase of managed recharge, the Board will consider in 2019 whether to implement the ESPA long-term managed recharge hydrologic target.[3]

[3] The Board entered into a Memorandum of Agreement with Idaho Power Company as part of the 2009 Framework Reaffirming the Swan Falls Settlement dated May 6, 2009, that sets forth additional understandings between the Idaho Power Company and the Board regarding implementation of managed recharge.

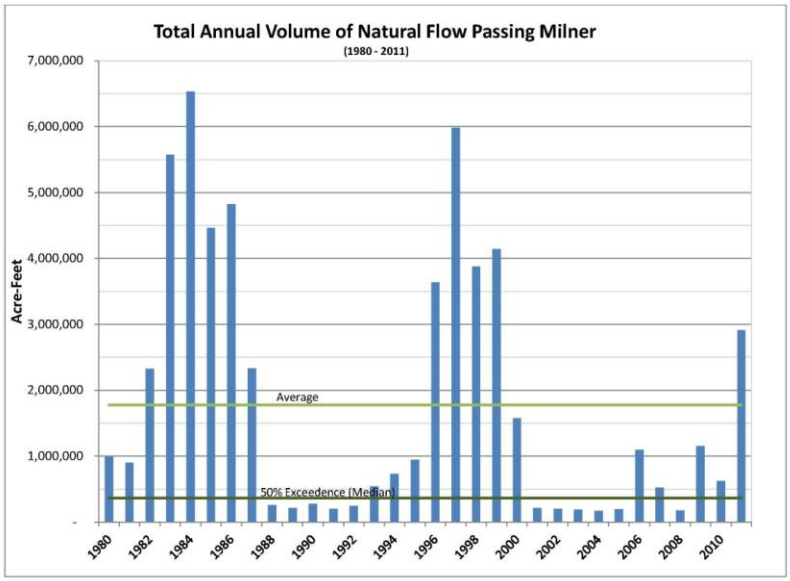


Figure 1 Total Annual Volume of Natural Flow Passing Milner Dam

As discussed in Policy 54E, development of new surface storage will take time. In the interim, the Board will cooperate with stakeholders to explore ways to optimize the management of flows that are currently passing over Milner Dam to first meet water supply needs above Milner Dam, and second to shape any remaining unappropriated flows for hydropower and other uses below Milner Dam.

Consistent with Idaho Code § 42-203B(2), no use of unappropriated flows passing Milner Dam by downstream users establishes a right to call on such flows now or in the future.

Implementation Strategies:

- Develop and maintain a reliable supply of water for existing uses and future beneficial uses above Milner Dam.
- Assess the feasibility of construction of new on-stream and off-stream storage in the Snake River Basin above Milner Dam.
- Implement a sustainable aquifer recharge program.
- Address water management and reservoir operation needs through the Upper Snake River Advisory Committee.
- Measurement and Monitoring Implementation Strategy:
  - Continuously improve the Eastern Snake River Aquifer Model ("ESPAM"), the Snake River Planning Model ("SRPM"), and the Snake River Water Right Accounting Program.

  - Promote linkage of the models and their use in evaluation of impacts of various management decisions on Snake River flows, aquifer levels, and reservoir operations.
  - Undertake measurement and monitoring of the combined river and aquifer system to facilitate water management and planning in the Snake River Basin above Milner Dam.
  - Investigate, test, and adopt new water measurement and modeling methods and technologies that improve water management capabilities.
- Implement and maintain cooperative water resource agreements and partnerships with neighboring states, the federal government, and Indian tribes in managing the water resources of the Snake River above Milner Dam.

Milestones:

- Process in place that provides recommendations to optimize the management of the water resources and the reservoir system above Milner Dam.
- A managed aquifer recharge program above Milner Dam implemented that recharges between 100,000 and 175,000 acre-feet on an average annual basis by 2019 and data gathered to assess the efficacy of the program.
- Projects implemented that enhance the water supply above Milner Dam.

54C - REALLOCATION OF SNAKE RIVER TRUST WATER

Water made available for reallocation to new uses in the Snake River trust water area pursuant to Idaho Code § 42-203B shall be allocated in accordance with criteria established by Idaho Code §§ 42-203A and 42-203C.

Discussion:

The term "trust water" refers to water made available for future development as a result of the 1984 Swan Falls Settlement, which resolved the long-standing conflict between use of the flow of the Snake River for hydropower purposes and for agriculture and other depletionary uses. The details of this century-long conflict are chronicled in two Idaho Supreme Court decisions and the SRBA District Court's Memorandum Decision and Order on Cross-Motions for Summary Judgment dated April 18, 2008, and therefore, are not repeated here. A brief overview of the trust created by Idaho Code § 42-203B(2), however, is provided as context for this policy.

A core principle of the Swan Falls Settlement is that flows of the Snake River downstream from Milner Dam in excess of the Murphy minimum average daily flow of 3,900 cfs during the irrigation season and 5,600 cfs during the non-irrigation season are available for future development in accordance with state law. The Settlement, however, recognized development would occur over time and that in the interim it was in the public interest to allow Idaho Power Company to continue to use such flows up to the licensed amount of the hydropower water rights "pending approval of depletionary future beneficial uses."

These dual objectives were implemented through, a trust, established by Idaho Code § 42-203B(2), which operates for the joint benefit of Idaho Power Company and the people of the State of Idaho. The statutory trust consists of twenty-five hydropower water rights originally appropriated by Idaho Power Company for flows in excess of the Murphy minimum flow, and now held by the State, by and through the Governor. Idaho Power Company uses the flows available under the water rights held in trust for hydropower purposes until those flows are appropriated to new uses approved pursuant to state law, including Idaho Code §§ 42-203A and 42-203C. The "reallocation" is accomplished through subordination of the hydropower water rights held in trust to the new uses, pursuant to Idaho Code § 42-203B(2).

While the water made available for future development as a result of the trust is often referred to as "trust water," this term is a misnomer. The trust consists of "water rights" as opposed to "water." Trust Water is simply a shorthand term referring to flows above the minimum stream flow at the Murphy Gage, which were originally appropriated under water rights for hydropower generation at Idaho Power Company's facilities located between Milner Dam and the Murphy Gage. Additionally, the term refers only to water sources tributary to the Snake River below Milner Dam, as shown on Figure 2 (the "Trust Water Area").[4]

The Swan Falls Settlement and the implementing statutes did not attempt to define the specific amount of trust water available for future development. Rather, the availability of trust water is linked to the Murphy minimum flow and a number of other statutory factors. "The actual amount of development that can take place without violation of the [Murphy] minimum stream flows will depend on the nature and location of each new development, as well as the implementation of new practices to augment the stream flow."

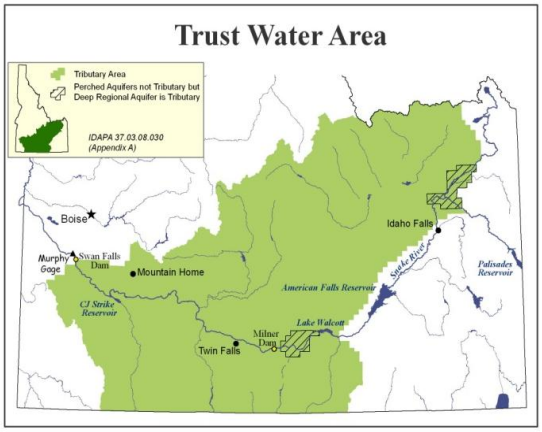


Figure 2 Trust Water Area

[4] Pursuant to the Swan Falls Settlement and Idaho Code § 42-203B(2) "water rights for hydropower purposes on the Snake river or its tributaries downstream from Milner dam shall not place in trust any water from the Snake river or surface or ground water tributary to the Snake river upstream from Milner Dam." Thus, the hydropower water rights held in trust carry no right to seek administration of the rights to the use of the waters of the Snake or its tributaries upstream from Milner Dam.

Figure 3 shows the portions of the hydrograph at Murphy deemed to be "minimum stream flows" and "trust water." [5] A similar hydrograph was prepared in 1988 in connection with the implementation of the Swan Falls Settlement, and included the 1961 average daily flow at the Murphy Gage as representative of the then-existing low flow year. Figure 3 includes average daily flow data from 1984 through 2011 to show the relative change in flow at the Murphy Gage since implementation of the Swan Falls Settlement.

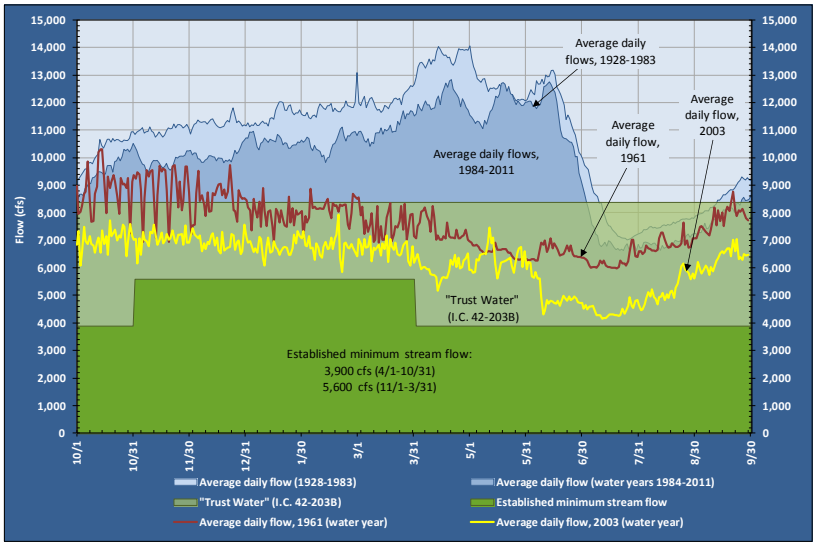


Figure 3 Swan Falls Trust Water Flows

While flows are beginning to approach the minimum average daily flow at the Murphy Gage at certain times in low flow years, Snake River flows in most years are significantly above the Murphy minimum average daily flow.

[5] Figure 3 updates Figure 3 contained in the IDWR Policy and Implementation Plan for Processing Water Right Filings in the Swan Falls Area, dated November 3, 1988, which depicted water made available for appropriation above the Murphy Gage as a result of the Swan Falls Settlement. The 1988 graph plotted average monthly flows, but since that time, technology has made it easier to graph average daily flows. Thus, Figure 3 uses average daily flows as reported by the USGS to provide a more accurate depiction of flow conditions at the Murphy Gage. Specifically, Figure 2 shows average daily flows for 1961 and 2003 and the average of the average daily flows for the years 1928 through 1983 and 1984 through 2010. (The Swan Falls Settlement excludes fluctuations resulting from the operation of Idaho Power Company facilities from the calculation of the minimum average daily flow at Murphy. The methodology for calculating the minimum average daily flow is currently being refined.) The upper limit of the "trust water" portion of the hydrograph at any given location between Milner and Murphy is defined by the hydropower water rights held in trust by the State for the corresponding Idaho Power Company facility. Figure 3 applies only to Murphy, where trust water is limited to that flow between the Murphy minimum stream flow and 8,400 cfs, the amount of the Swan Falls hydropower water right held in trust. The "trust water" available at locations upstream from Murphy is the difference between the Murphy minimum stream flow and the amount of the water rights held in trust for each upstream facility.

The opportunity for further development of trust water is currently limited by three factors. First, there is uncertainty regarding the administration of surface and ground water rights other than hydropower. While the Swan Falls Settlement subordinated the use of the flows of the Snake River for hydropower purposes, it did not address the rights of other senior water right holders. Second, the amount of trust water that remains to be developed is uncertain because some trust water rights were issued for a term of years. Those permits are nearing the end of their terms and are subject to review by the Director. Third, in almost all cases, a moratorium precludes issuance of new water rights within the trust water area. Until these issues are resolved, it is not possible to make informed decisions regarding the allocation of any remaining trust water.

Implementation Strategies:

- Conduct hydrologic studies to determine the amount of additional development possible within the Murphy minimum stream flow constraint.
- Develop a conjunctive management plan setting forth measures necessary for future development of trust water.
- Review term limited trust water rights.

Milestones:

- Quantification of the amount of additional development possible within the Milner to Murphy reach of the Snake River consistent with maintaining the Murphy minimum stream flow.
- Adoption of a conjunctive management plan for the Milner to Murphy reach of the Snake River.
- Complete review term limited trust water rights.

54D - CONJUNCTIVE MANAGEMENT OF THE ESPA AND SNAKE RIVER

The Eastern Snake Plain Aquifer and the Snake River below Milner Dam should be conjunctively managed to provide a sustainable water supply for all existing and future beneficial uses within and downstream of the ESPA.

Discussion:

The ESPA is approximately the size of Lake Erie and underlies more than 10,800 square miles of southern Idaho, stretching from St. Anthony to King Hill. It is one of the largest and most productive aquifers in the world, estimated to contain 1 billion acre feet of water. Most of the ESPA is in direct hydraulic connection with the Snake River. The Snake River alternately contributes water to and receives water from the ESPA.

The volume of water stored in the ESPA derives from natural inputs (precipitation, tributary underflow, seepage from rivers) and from irrigation related inputs (seepage from canals and farm fields). The volume of water stored in the ESPA increased dramatically during the first half of the 20th century as large irrigation canals transported millions of

acre feet of water from the Snake River out on to the Eastern Snake River Plain. Crops were irrigated by flood irrigation, and the water not consumed by the crops percolated into the ESPA as "incidental recharge. As a result, the groundwater table rose across the ESPA by as much as 30-50 feet. The flow of springs near American Falls and in the Thousand Springs reach also increased dramatically. Thousand Springs flows increased from 4,200 cfs prior to irrigation to about 6,800 cfs by the late 1950s. Since then spring flows have declined as a result of more efficient surface water irrigation practices, the termination of winter canal flows, ground water pumping, and drought. Spring flows in the Thousand Springs reach currently are about 5,200 cfs, a decline of just over 20% over the past sixty years. While spring discharges from the ESPA remain above pre-irrigation levels, the decline from peak levels has created conflicts between surface and groundwater users, and in some instances between senior and junior groundwater users.

In most years when irrigation demands exceed water being accumulated to upstream storage reservoirs, flows at Milner Dam are reduced to zero until the end of the irrigation season. At these times the Snake River flow at the Murphy Gage consists mostly of ESPA discharge from the Thousand Springs area.

Recognizing a hydraulic connection between the ESPA and the Snake River, the 1986 State Water Plan identified the need conjunctive management of ground and surface water resources. In recent years, the State has implemented scientific measures to increase knowledge of the hydraulic connection between the ESPA and the Snake River, and implemented measures to improve aquifer conditions in, and spring discharge from, the ESPA. Continuation of these efforts is fundamental to ensuring an adequate water supply for existing and future water demands within the Eastern Snake River Basin.

Conjunctive management of the Snake River Basin water resources is also key to meeting the Murphy minimum stream flows. The 1984 Swan Falls Settlement explicitly recognized effective water management of the ESPA and Snake River – and associated policies and recommendations laid out in the State Water Plan – as the means of ensuring the Murphy minimum average daily flow while optimizing the development of the Snake River Basin: "[t]he State Water Plan is the cornerstone of the effective management of the Snake River and its vigorous enforcement is contemplated as a part of the settlement." [6]

Building on the existing conjunctive management efforts, the Idaho Legislature in 2006, adopted Senate Concurrent Resolution 136, which requested the Idaho Water Resource Board to develop a CAMP for the Eastern Snake River Plain Aquifer. In January 2009, the Board adopted the ESPA CAMP the goal of which is to "[s]ustain the economic viability and social and environmental health of the Eastern Snake Plain by adaptively managing the balance between water use and supplies." The objectives of the plan are to

[6] This policy addresses conjunctive management of the Eastern Snake River Aquifer and the Snake River and not water rights administration. Water rights administration is the enforcement of the relative rights of water right holders under the prior appropriation doctrine. As noted in Policy 1E conjunctive management is broader and encompasses actions that can be taken to optimize the benefits and value of Idaho's water resources. While conjunctive management is not a substitute for water rights administration, it is in the public interest to conjunctively manage the ESPA and the Snake River to lessen or obviate the need for broad-scale water rights administration to accomplish general water-management goals.

increase predictability for water users by managing for a reliable supply, creating alternatives to administrative curtailment, managing overall demand for water within the Eastern Snake Plain, increasing recharge to the aquifer, and reducing withdrawals from the aquifer.

The long-term objective of the ESPA CAMP is to effectuate a net annual ESPA water budget change of 600 thousand acre-feet (kaf) by the year 2030. This change is to be achieved through implementation of measures designed to reduce demand on and to augment the water supply of the ESPA. Approximately 100 kaf of demand reduction is to be achieved through groundwater to surface water conversions, and another 250-350 kaf of demand reduction is to be achieved through various measures designed to retire existing water rights. Aquifer recharge is expected to increase the ESPA water supply by 150-250 kaf.

The ESPA CAMP uses a phased approach to achieving the long-term change in the water budget. The goal of Phase I of the ESPA CAMP is to implement measures that will result in a net annual change in the ESPA water budget of between 200 kaf and 300 kaf. The recommended actions to achieve this change include ground- to-surface water irrigation conversions, managed aquifer recharge, and augmentation of supplies through demand reduction and weather modification. ESPA CAMP Phase I strategies are to be implemented by 2018 with ongoing monitoring and evaluation of the intended and unintended effects of the strategies. The Phase I monitoring and evaluation studies will be used to select, design, and implement Phase II strategies that will lead to an additional 300-400 kaf water budget change.

Policy 54D embraces the conjunctive management goals and objectives of the ESPA CAMP. Implementation of the ESPA CAMP will improve the opportunities to adaptively manage and optimize water supplies within and downstream of the ESPA, may result in: increased gains in some river reaches; improved storage carryover; increased aquifer levels; opportunities for municipal and industrial growth; reductions in overall consumptive use; increased spring discharge rates; and an ongoing public process for assessing the hydrologic, economic, and environmental issues related to the implementation of management strategies.

Most of the human made changes to the ESPA water balance during the past decades are reflected in current aquifer levels and spring flows. Continued changes in irrigation practices (e.g., conversion from gravity irrigation to sprinkler irrigation) and future climate variability, however, may create additional impacts to ESPA aquifer levels and aggregate spring discharge. Such impacts affect not only the ESPA area but also the Snake River downstream of the ESPA, because aggregate spring discharge from the Thousand Springs reach is the primary source of river flows in the Milner to Murphy reach during portions of some years.

To date, efforts to monitor and measure ESPA groundwater levels, diversion volumes, and river reach/gains have focused on the ESPA, individual springs discharging water from the ESPA, and reaches of the Snake River hydraulically-connected with the ESPA. Because of the importance of the ESPA discharge on downstream reaches of the Snake River, however, it is imperative that an enhanced spring-flow monitoring program be

developed to provide the information necessary for identifying, tracking, and predicting future spring discharge trends. Such a monitoring program needs to include long-term measurements of aggregate annual spring discharge (as opposed to point-in-time discharge from individual springs) and ESPA ground water levels.

Sustaining Snake River minimum stream flows downstream of the ESPA may require short-term and long-term adaptive management measures. A monitoring program aimed at identifying long-term spring discharge trends in the Snake River Thousand Springs reach should be designed to support the development of one or more adaptive management "triggers" based on pre-determined observed or predicted change in aggregate spring discharge rate, aquifer levels, and/or Snake River flow. The triggers should be used to initiate adaptive management measures that address the cause – or impacts – of any unacceptable decline in Snake River flow downstream of the ESPA.

Monitoring efforts and adaptive management measures are crucial to sustaining the economic viability and social and environmental health of the ESPA and the Snake River. Successful adaptive management strategies, built on the principles of conjunctive management of ground and surface water, supported by scientific understanding and reliable data that take into account the complex and interrelated nature of Snake River subbasins, will accomplish two goals: 1) ensure an adequate and sustainable water supply for existing and future uses, and 2) reduce conflicts between ground and surface water users.

Implementation Strategies:

- Implement actions delineated in the ESPA CAMP that will enhance aquifer levels and spring flows.
- Continue existing efforts to measure and monitor ground and surface water diversions, water levels, spring discharge rates, and Snake River reach gains/losses, and quantify ground and surface water interactions.
- Develop and implement a monitoring program to better predict the occurrence and duration of future low flows in the Snake River.
- Create a working group to assist in the development of a spring monitoring program.
- Update the Snake River: Milner Dam to King Hill Part B State Water Plan to incorporate ESPA CAMP goals and objectives and to account for water management developments since its adoption.

Milestones:

- ESPA CAMP hydrologic conjunctive management targets met or exceeded.
- Snake River flows at the Murphy and Weiser Gages remain at or above established minimum stream flows.
- Reduced water-related conflict in the Snake River Basin.
- Revision of Part B of the State Water Plan.

54E - SNAKE RIVER BASIN NEW STORAGE

Development of new on-stream, off-stream, and aquifer storage is in the public interest; provided, however, applications for large surface storage projects in the Milner to Murphy reach of the Snake River should be required to mitigate for impacts on hydropower generation.

Discussion:

ESPA Managed Recharge Pilot program

Recharging aquifers as a water supply alternative has significant potential to address water supply needs, in addition to addressing conjunctive management issues. Pursuant to the ESPA CAMP, the Board is undertaking a five-year pilot program of managed aquifer recharge to the Eastern Snake Plain Aquifer. One of the potential benefits of managed recharge in the ESPA is increased water storage in the aquifer. Effectiveness monitoring and evaluation results will be used to select and design future managed recharge strategies and projects.

Surface Water Projects

New Snake River surface storage projects should be investigated and constructed if determined to be feasible. Although there are major dams and reservoirs designed for water storage, flow regulation, and flood control on the Snake River and its tributaries, their existing capacity is insufficient to provide the water supply and management flexibility needed for the myriad of existing and future beneficial uses.

Diversion of water from the main stem of the Snake River between Milner and the Murphy Gaging station for storage during the period November 1 to March 31 will have a significant impact on hydropower generation. Thus, any new storage projects in this reach should be coupled with provisions that mitigate for the impact of such storage depletions on hydropower generation. The term "mitigation" is defined as causing to become less harsh or hostile, and is used here rather than "compensate" which connotes equivalence. Methodology will be developed for use in calculating impacts on hydropower generation as part of any application to construct new storage within this reach of the Snake River.

A number of studies focusing on water storage as one potential measure for addressing water supply demand and flood risk reduction are underway. This section provides a brief description of the most significant studies that have been initiated or are in the planning process.

Henry's Fork Project/Teton River Basins

The Board and the U.S. Bureau of Reclamation are conducting a study of water resources in the Henry's Fork/Teton River Basins to develop alternatives for improving water supply conditions in the Eastern Snake Plain Aquifer and upper Snake River Basin. These alternatives include new water storage projects, enlargement of existing reservoirs,

and conservation and water management strategies, including managed aquifer recharge and automated water delivery systems.

Minidoka Dam Enlargement

In the 1980s, the Bureau of Reclamation and irrigation districts initiated the required planning process and feasibility studies to replace the spillway and two canal headworks due to the state of deterioration and potential for ongoing damage to sections of the Minidoka Dam. In 2008, the Board partnered with the Bureau of Reclamation to also evaluate the structural raising of Minidoka Dam to accommodate a 5-foot rise in normal reservoir surface elevation, in conjunction with planned spillway repairs. The study found that a 5-foot rise is technically feasible, and would provide an additional 67,000 acre-feet of storage with an average annual yield of 33,000 acre-feet. Funding for the enlargement of Minidoka Dam, however, is currently not available. If economic or other conditions change, the Board will consider further evaluation of this storage option.

ESPA Managed Recharge Pilot program

Recharging aquifers as a water supply alternative has significant potential to address water supply needs, in addition to addressing conjunctive management issues. Pursuant to the ESPA CAMP, the Board is undertaking a five-year pilot program of managed aquifer recharge to the Eastern Snake Plain Aquifer. One of the potential benefits of managed recharge in the ESPA is increased water storage in the aquifer. Effectiveness monitoring and evaluation results will be used to select and design future managed recharge strategies and projects.

Lower Boise River Interim Feasibility Study

The lower Boise River corridor, from Lucky Peak Dam to its confluence with the Snake River has experienced rapid population growth and significant urban development over the past several decades. As a consequence, there is renewed interest in addressing water supply and flood control issues. Interest has also been expressed in environmental restoration, to include habitat preservation, aesthetics and recreation along the Boise River.

In 2009, the Board and the U.S. Army Corps of Engineers partnered to conduct an Interim Feasibility Study focused on water storage potential and flood reduction in the Boise River Basin. A preliminary analysis ranked an enlargement of Arrowrock Reservoir as the highest priority alternative, followed by the construction of a new reservoir at the Alexander Flat site and a new reservoir at the Twin Springs site. A preliminary analysis completed in 2011 concluded that based on existing information, raising Arrowrock Dam is technically feasible. The evaluation identified a number of uncertainties that will be addressed during future study and data collection efforts, as funding becomes available.

Weiser-Galloway Gap Analysis, Economic Evaluation and Risk-Based Cost Analysis (Gap Analysis)

Water storage on the Weiser River and at the Galloway site has been studied for decades. In 1954, the Corps received a study authorization resolution for the Galloway Project

from the U.S. Senate Public Works Committee. In the early 1970s, federal lands for the potential Galloway dam and reservoir site were classified and withdrawn for hydropower purposes by the Federal Power Commission (now FERC). In 2008, Idaho House Joint Memorial 8 directed the Board to investigate water storage projects statewide, including the Weiser-Galloway Project. The Board and the Corps partnered to conduct a "Gap Analysis" which was completed in March 2011. The Gap Analysis was designed to inform decision makers of critical information gaps that need to be addressed before deciding whether to move forward with comprehensive new environmental, engineering, and economic feasibility studies. The analysis identified two critical information gaps that must be resolved before moving forward:

1. Determine the safety, suitability, and integrity of geologic structures at the potential dam and reservoir site.
2. Evaluate whether basin and system benefits would be realized by analyzing a series of system operating scenarios with a range of new storage options on the Weiser River. Potential benefits include flood risk reduction, hydropower, additional water storage, pump back, irrigation, recreation, and flow augmentation requirements for anadromous fish recovery. On July 29, 2011, the Idaho Water Resource Board authorized expenditure of up to $2 million to address these questions, and the required studies are currently underway.

Implementation Strategies:

- Implement a long-term managed aquifer recharge program to achieve an average annual recharge of 250,000 - 300,000 acre feet. In recognition that implementation of managed recharge will have an effect on the flow characteristics of the Snake River above and below Milner Dam and in order to confirm the relative merits of managed recharge, the Board's managed recharge program will be limited to not more than 175,000 acre-feet on an average annual basis until January 1, 2019.
- Evaluate the economic, social and environmental benefits and costs of the proposed surface projects.

Milestones:

- Aquifer recharge program implemented.
- Actions taken to determine feasibility of identified storage projects.

54F - SNAKE RIVER BASIN AGRICULTURE

Development of supplemental water supplies to sustain existing agricultural development is in the public interest.

Discussion:

Agricultural use accounts for about 85% of the total diversions of the water of the Snake River Basin. Approximately 3.4 million acres of land are irrigated with surface water and

1.13 million acres of land are irrigated with ground water. As discussed more fully in Policy 54B, it has been the policy of the State since the adoption of the first state water plan to encourage the development of on-stream and off-stream storage above Milner Dam to capture unappropriated flows to the extent economically feasible for existing and future agricultural development and other beneficial uses in the Snake River Basin above the Dam.

As a result of the Swan Falls Settlement, the flow of the Snake River between Milner Dam and the Murphy Gage in excess of the Murphy minimum stream flow is available for future agricultural and DCMI development. As discussed in Policy 54C, however, the opportunity for additional agricultural development of the waters of the Snake River and surface and ground water tributary to the Snake River between Milner Dam and the Murphy Gage is limited because of the conflicts over conjunctive management of Thousand Springs flows and a moratorium on the issuance of new permits within this reach of the Snake River issued on April 30, 1993.

In summary, agricultural development for the foreseeable future is likely to be limited because of the absence of a reliable water supply. To the extent new agricultural development occurs, it is likely to be located on streams tributary to the main stem Snake River. Appropriation of water for agriculture likely will be for a supplemental water supply to address existing water shortages.

Implementation Strategies:

- Identify and develop opportunities to acquire water to address existing agricultural water supply shortages.
- Encourage the more efficient use of existing water supplies where such action will provide water to address existing agricultural water supply shortages.

Milestones:

- Existing water supply maintained.
- Supplemental water supply developed.
- Enrollment of agricultural lands into Conservation Reserve Enhancement Program (CREP).
- Implementation of water conservation projects that reduce demand.
- Acres in agricultural production maintained.

54G - SNAKE RIVER DOMESTIC, COMMERCIAL, MUNICIPAL AND INDUSTRIAL USES (DCMI)

It is in the public interest to ensure the availability of water for future DCMI uses in the Snake River Basin.

Discussion:

While most DCMI water uses are largely nonconsumptive, future growth in Idaho's population and commercial and industrial expansion require a sustainable water supply.

Snake River Above the Murphy Gage

As discussed in Policy 54C, the flow of the Snake River between Milner Dam and the Murphy Gage is approaching the Murphy minimum flow of 3,900 cfs at certain times in low flow years. Implementation of the strategies in Policy 54D is essential to identifying the amount of trust water available to meet future DCMI uses in this reach of the Snake River.

Snake River Below the Murphy Gage

DCMI demands on the Snake River downstream of the Boise River drainage are anticipated to grow at a slow to moderate rate but the increased demands are not as pressing as in the lower Boise River area.

Boise River Basin

As discussed in Policy 54E, the lower Boise River area has experienced rapid population growth over the past several decades with land-use changing from agriculture to urban use. Water supply for DCMI uses is forecasted to be one of the most pressing water supply issues in this area. Additional DCMI demands are particularly pressing upstream of Star located on the Boise River.

The principle source of water for DCMI in the Boise River Basin is ground water, however, there is unappropriated water during the spring runoff that could be captured and stored. Thus, while increased demand for DCMI use may be partially met by water conservation and some decrease in or conversion from agricultural production, additional strategies, such as aquifer and surface water storage, efficient water marketing systems, and water re-use must be evaluated. Because the Treasure Valley water system is a complex system of ground and surface water, further studies are underway to determine the contribution of surface water to aquifer recharge and the importance of aquifer discharge to surface water systems.

Implementation Strategies:

- Maintain existing surface irrigation distribution system and establish dual-use residential systems to preserve incidental recharge to aquifers.
- Develop flexible water marketing tools to facilitate rental and/or acquisition of water rights for new uses on a willing buyer/willing seller basis. Water acquisition strategies, however, must account for any adverse hydrologic, economic, and social impacts.
- Evaluate opportunities to enhance water supplies including but not limited to, ground water conservation, additional storage, and water re-use.
- Support programs that protect water quality for DCMI use.

Milestones:

- Completion of water supply enhancement projects.
- Infrastructure in place to distribute surface irrigation water to lands undergoing conversion from agricultural to residential.

54H - SNAKE RIVER HYDROPOWER USE

Hydropower generation is a beneficial use of the flow of the Snake River, and it is in the public interest to protect the minimum average daily flows set forth in Policy 54A as a base flow for hydropower use.

Discussion:

The Snake River and related tributaries provide Idaho with significant hydropower energy resources. Hydropower generation is a beneficial use of the waters of the Snake River, supplying approximately 65% of the State's energy production and ensuring that Idaho electric rates are among the lowest in the nation. Through enactment of Idaho Code § 42-203B the State established the framework for balancing the use of the flow of the Snake River for hydropower and other instream purposes and the diversion of flow for depletionary uses.

As discussed in Policy 54C, the Swan Falls Settlement recognized the Snake River minimum stream flows set forth in Policy 54A provide an adequate base flow for hydropower use. While hydropower water rights in excess of the Murphy minimum average daily flow are subject to subordination to future consumptive uses approved in accordance with state law, the Swan Falls Settlement allows Idaho Power Company to use up to the decreed amount of the hydropower water rights held in trust by the State of Idaho for power generation pending reallocation of such flows for future consumptive uses.

The HCC, which represents the majority of Idaho Power's hydropower generation capacity, is the largest privately owned hydroelectric project in the United States. The FERC license for the HCC expired in 2005, and Idaho Power is currently operating the project under annual licenses while FERC processes Idaho Power's pending relicense application. The new license for the HCC will determine the operating conditions for the project and address the protection and enhancement of recreational, aesthetic, navigation, and fish and wildlife resources in the reach of the Snake River affected by the project. The Board is participating in the FERC licensing proceeding to ensure the new license for the HCC includes operational conditions that preserve and enhance the generation capacity of the project in a manner consistent with the State Water Plan.

Implementation Strategies:

- Develop technical tools capable of assessing the impact of actions within the Snake River hydrologic system on the minimum stream flows of the Snake River.

- Evaluate management and administrative activities to determine the intended and unintended consequences of meeting the minimum stream flows on the Snake River.

Milestones:

- Minimum flows are maintained for power generation.

54I - SNAKE RIVER NAVIGATION

The minimum stream flows set forth in Policy 4A are sufficient for commercial and recreational navigation on the Snake River.

Discussion:

Above Milner Dam the flow of the Snake River is completely regulated; therefore, no base flow for navigation is proposed for this reach of the Snake River. The Murphy and Weiser minimum stream flows set forth in Policy 4A provide a sufficient base flow for recreational and commercial navigation in the Snake River between Milner Dam and the Hells Canyon Dam.

Below HCC, the Snake River flows into a steep and spectacular gorge that cuts through the Salmon River Mountains and Blue Mountains of Idaho and Oregon. Hells Canyon is one of the most rugged and treacherous portions of the Snake River. The river flows 8,000 feet below the He Devil Peak of Idaho's Seven Devils Mountains. The Salmon River is a major tributary in this reach of the Snake River.

The Hells Canyon reach of the Snake River below the HCC provides unique recreational opportunities, including rafting, fishing, private and commercial jet boating, hiking, camping, and wildlife viewing. The area is a tourist destination that positively contributes to the local and regional economy. As such, providing adequate navigation conditions for private and commercial boating below the HCC is in the public interest.

Photo: Rafting on the Snake River in Hells Canyon
(*Photo Courtesy of IDWR Staff*)

The license issued by the Federal Power Commission for the HCC in 1955 addressed navigational flows below the HCC. Article 43 of the power HCC license provides that:

> *The project shall be operated in the interest of navigation to maintain 13,000 cfs flow in the Snake River at Lime Point (river mile 172) a minimum of 95 percent of the time, when determined by the Chief of Engineers to be necessary for navigation. Regulated flows of less than 13,000 cfs will be limited to the months of July, August, and September, during which time operation of the project would be in the best interest of power and navigation, as mutually agreed to by the Licensee and the Corps of Engineers. The minimum flow during periods of low flow or normal minimum plant operations will be 5,000 cfs at Johnson's Bar, at which point the maximum variation in river stage will not exceed one foot per hour. These conditions will be subject to review from time to time as requested by either party . . . .*

This license article has governed navigation flows since the original licensing of the HCC in 1955.

In the 1976 State Water Plan, the Board concluded that there was sufficient water in excess of the minimum flows established at the Milner, Murphy, and Weiser gaging stations to provide for additional uses and development and also allow for the navigation flow targets in Article 43 of the HCC license to be met without significantly affecting hydropower production. Based upon these conclusions, the 1976 State Water Plan found providing flows consistent with Article 43 was in the public interest. The 1976 Plan, however, did not establish minimum stream flows at Johnson Bar or Lime Point.

In 1978, the Idaho Legislature, through enactment of Idaho Code § 42-1736A, created a minimum stream flow at Johnson Bar to provide for "stream flows and hydro-power base" below the HCC. Through the adoption of the 1986 Idaho State Water Plan a minimum stream flow was established at Lime Point. Both minimum stream flows were recognized as providing a sufficient base flow for recreational and commercial navigation below the HCC. Consistent with the HCC FERC license, the Johnson Bar and Lime Point minimum stream flows, however, are subordinated to upstream consumptive uses above the HCC and carry no right to seek the release of water from the HCC other than that required to be released by the terms of the FERC license.

As discussed in Policy 5~~4F~~H, FERC is in the process of relicensing the HCC. Various state and federal agencies exercise jurisdiction over resources in Hells Canyon and each of these agencies, together with private interests are parties to the HCC relicensing proceedings pending before FERC. Section 10(a)(1) of the Federal Power Act requires that a FERC licensed project "be best adapted to a comprehensive plan for improving and developing a waterway"; which requires a balancing of public interest factors. The FERC will set forth navigational flow conditions in the final license for the HCC. The Board will participate in the FERC relicensing process to ensure navigational flow conditions are consistent with the State Water Plan.

Implementation Strategies:

- Participate with state and federal agencies in FERC relicensing proceedings to ensure the new FERC license for the HCC is consistent with the State Water Plan.

Milestones:

- When issued, FERC license consistent to Idaho State Water Plan.

54J - SNAKE RIVER FISH, WILDLIFE, RECREATION, AND SCENIC RESOURCES

The minimum stream flows set forth in Policy 54A provide adequate flows for Snake River fish, wildlife, recreation, and scenic values in the main stem Snake River below Milner Dam. Protection for fish, wildlife, recreation, and scenic uses in tributaries to the Snake River should be addressed through Part B of the State Water Plan and the establishment of minimum stream flows pursuant to Chapter 15, Title 42, Idaho Code. The Board finds that implementation of the collaborative agreements provide benefits for fish, wildlife, recreation, and scenic values.

Discussion:

In addition to the Policy 54A main stem Snake River minimum stream flows, over fifty minimum stream flows have been established in the Snake River Basin above the HCC and protected rivers have been designated through the adoption of Part B state water plans. Additional protections for fish, wildlife, recreation, and scenic resources in Snake River tributary streams should be pursued through the Board's minimum stream flow and water planning processes.

The State has entered into a number of voluntary agreements that benefit fish, wildlife, recreation, and scenic values while protecting existing water rights and uses and providing for economic stability. The agreements described below.

Snake River Flow Augmentation

The State of Idaho, as part of the 2004 Snake River Water Rights Agreement, established a flow augmentation program that provides water for salmon and steelhead listed under the ESA. Pursuant to the provisions of the biological opinion for the Federal Columbia River Power System ("FCRPS"), and the 2004 Snake River Water Rights Agreement, the U.S. Bureau of Reclamation annually seeks to rent up to 487,000 acre-feet of water from willing lessors in Idaho for Snake River flow augmentation to assist in offsetting the impact of the FCRPS. Although flow augmentation from the upper Snake River has proven to be controversial because of the uncertainty regarding specific benefits to ESA-listed fish, the State of Idaho cooperates with the federal program (see Idaho Code § 42-1763B) as a means of providing incidental take coverage for U.S. Bureau of Reclamation project operations in Idaho.

This flow augmentation program consists of two tiers. Tier 1 minimum flows are those established through implementation of the Swan Falls Settlement. Tier 2 provides for the rental of up to 427,000 acre feet of storage water in accordance with the provisions of Idaho Code § 42-1736B and the Snake River flow component of the 2004 Snake River Water Rights Agreement. The 2004 Snake River Water Rights Agreement also allows for the United States to rent up to 60,000 acre feet of consumptive natural flow water rights through the Board's water bank in accordance with state law. The Board acquired the natural flow water rights of the Bell Rapid's irrigation project and is leasing a portion of those water rights to the U.S. Bureau of Reclamation to provide the 60,000 acre feet of natural flow water. The rental agreement provides that "protection of the Leased Water . . . will result in the protection of 48,320 acre-feet during the period of April 10 through August 31 of each year for the term of the Agreement."

The state agreed to the implementation of the flow augmentation program for the term of the Biological Opinion as a means of protecting existing water rights and uses and providing for economic stability. It is important, however, that evaluation of the efficacy of flow augmentation be conducted in conjunction and/or cooperation with other State and Federal agencies and regional interests.

Hells Canyon National Recreation Area

The early controversy over the development of Hells Canyon gave rise to emerging concerns about the preservation of the region's natural features and ultimately led to enactment of the Hells Canyon National Recreation Area Act of 1975, which precluded future hydropower development in the Hells Canyon reach of the Snake River. The Act also designated the Snake River as "wild" (Hells Canyon Dam to Pittsburg Landing) and "scenic" (Pittsburg Landing to 37 miles south of Lewiston) to preserve the free-flowing character and unique environment while providing for continued public use. While providing protection to these important resources, the Act also protects present and future uses of the waters of the Snake River for consumptive or non-consumptive beneficial uses, including domestic, municipal, stock water, irrigation, mining, power, and industrial uses. The Act specifically provides that no flow requirements of any kind may be imposed on the waters of the Snake River below Hells Canyon Dam under the provisions of the Act, or any rules, regulations, or guidelines adopted pursuant to the Act. Pursuant to an agreement between the state and the federal government, the United States' federal reserved water rights associated with the HCNRA are limited to the tributary streams of the Snake River within the HCNRA. The decrees quantifying the federal reserved water rights on streams tributary to the main stem Snake River contain subordination provisions that protect existing rights and allow for a limited amount of future development on the tributary streams.

Owyhee Initiative

In 2009, Congress enacted the Owyhee Public Land Management Act, Pub. L. 111-11, 123 Stat. 1037. This Act set aside certain lands in southwestern Idaho as wilderness. The Act was the result of a collaborative effort initiated by the Owyhee County Commissioners to resolve decades-old land management issues in Owyhee County. The goal was to develop and implement a landscape-scale program that preserves the natural character of the area while providing for economic stability and growth. Central to local

support for enactment of the Act was the 2006 Owyhee Initiative Water Rights Agreement, which provided for a balance between instream and out-of-stream water uses within the Owyhee River Basin. The 2006 Agreement recognizes the ecological importance of stream and river flows in this arid region and recognizes local citizens' desire to maintain and protect their current way and quality of life. The 2006 Agreement calls for memorializing this balance through subordination language in the decreed federal reserved water rights for the designation of river segments that sets aside a certain amount of water for future development. The Agreement was signed by a local collaborative group that included ranchers, conservationists, landowners, business interests, outfitters, and off-road recreationists. Implementation of this water rights agreement will provide additional fish and wildlife benefits for the Owyhee River Basin.

Implementation Strategies:

- Maintain existing minimum stream flows and evaluate the need for additional minimum stream flows.
- Ensure the flow augmentation plan of the 2004 Snake River Water Rights Agreement is implemented consistent with the Agreement.
- In conjunction and/or cooperation with other state and federal agencies and regional interests, evaluate the efficacy of the flow augmentation program.
- Ensure the federal reserved water rights decreed as part of the implementation of the Owyhee Public Land Management Act contain subordination provisions consistent with the 2006 Owyhee Initiative Water Rights Agreement.
- Ensure new appropriations of water are consistent with the subordination provisions of the reserved water rights for the HCNRA and the Owyhee wild and scenic rivers.

Milestones:

- Minimum stream flows maintained and new minimum stream flows are established as needed.
- Snake River flow augmentation is conducted in accordance with the terms of the 2004 Snake River Water Rights Agreement.
- Flow augmentation evaluation studies underway or completed.
- Federal reserved water rights decreed for Owyhee wild and scenic rivers contain subordination provisions consistent with the 2006 Owyhee Water Rights Agreement.
- New appropriations of water in the streams tributary to the Snake River within the Hells Canyon National Recreation Area satisfy the subordination requirements contained in the federal reserved water right decrees.
- New appropriations within the Owyhee River Basin satisfy the subordination requirements contained in the federal reserved water right decrees for the Owyhee wild and scenic river reaches.

65. BEAR RIVER BASIN

65A - BEAR RIVER COMPACT IN THE BEAR RIVER BASIN

Water use and management in the Bear River Basin shall conform to the allocations agreed to in the Bear River Compact.

Discussion:

The original Bear River Compact was signed into law on March 17, 1958, and amended on February 8, 1980. Idaho Code § 42-3402. The Compact was negotiated to provide for the efficient use of water for multiple purposes, to permit additional development, to promote interstate comity, and to accomplish the equitable apportionment of the waters of the Bear River among Idaho, Utah, and Wyoming. Water allocations for the Bear River Basin were adopted in 1978. The Compact is administered by an interstate administrative agency, the Bear River Commission, which is comprised of three members from each state and a non-voting federal chairman. The Bear River Commission must review the Compact at intervals of not more than twenty years and may propose amendments.

The Compact divides the Bear River into three divisions and treats allocation differently in each. The Upper Division of the river extends from its source in the Uinta Mountains, to and including Pixley Dam Wyoming. The Central Division includes the portion of the Bear River from Pixley Dam to, and including Stewart Dam. The Lower Division of the Bear River includes the flow from Stewart Dam to the Great Salt Lake and encompasses Bear Lake and its tributary drainage. The Compact makes allocations for the diversions of surface water, the storage of water above Bear Lake, ground water depletion, and future development. The allocation provisions for the three divisions of the Bear River apply only during times of shortage.

Idaho and Utah are implementing conjunctive management of surface and ground water. Idaho's Bear River Conjunctive Management Plan guides the development of ground water in the Bear River Ground Water Management Area. Although initial estimates of ground water depletions in the Lower Division indicate equal depletions in Idaho and Utah, the Idaho Water Resource Board encourages the Bear River Commission to prioritize additional studies to determine the effects of ground water use on the Bear River system.

Implementation Strategies:

- Encourage and assist the Bear River Commission to initiate further study and consideration of the effects of ground water use on Bear River surface flow.
- Ongoing review of Bear River Compact implementation and related issues, including depletion calculation procedures.

Milestones:

- Studies completed on the interaction between ground water and surface water in the Bear River Basin.

65B - BEAR RIVER BASIN WATER MANAGEMENT IN THE BEAR RIVER BASIN

The Idaho Water Resource Board supports enhancing water supplies, increasing water use efficiency, and implementing water supply bank mechanisms to help meet future water needs in the Bear River Basin.

Discussion:

The Bear River Compact designates how the undeveloped water supplies of the Bear River are to be allocated among Idaho, Utah, and Wyoming. The Compact allocates a first right to development and depletion of water not currently allocated in the Lower Division to Idaho, in the amount of 125,000 acre feet. In addition to the efficient use of existing developed water supplies, the state should move forward with the development of Idaho's depletion allocations as provided for in the Compact.

Ground water is available for development, but its development cannot injure existing senior water rights. In 2001, the Department established the Bear River Ground Water Management Area and created an advisory committee to provide guidance in the preparation of a ground water management plan. The Bear River Ground Water Management Plan, adopted in 2003, provides for managing the effects of ground water withdrawals to accommodate projected growth and water demand in the Bear River Basin, while protecting senior priority surface and ground water rights from injury. In addition to the use of mitigation plans that protect existing rights, the plan encourages flexible strategies for making water available for new development including new surface storage, ground water recharge projects, and transfers of existing rights through water banking and other marketing mechanisms. The ground water management plan encourages the wise use of available water supplies and continues the involvement of a local advisory committee in the development of management policies for the area. To address declining ground water levels, the Bear River Basin has been designated as a priority basin for the development and implementation of a comprehensive aquifer management plan.

Idaho Code § 42-1765 authorizes the Idaho Water Resource Board to create a local rental pool to facilitate marketing of stored water. A Bear River rental pool would provide the advantage of being locally managed and controlled, with the flexibility to develop specific procedures designed to address special conditions existing in the basin. Use of water supply banks also provides protection from forfeiture for unused water rights in Idaho and a source of funding for improving water management. Cooperation between Idaho, Utah, and PacifiCorp will be required to establish a storage rental pool for Bear Lake.

Implementation Strategies:

- Initiate further discussion concerning the development of a Bear River storage water rental pool with the Bear River Commission, Utah, and PacifiCorp.
- Develop strategies to improve water supplies and reduce demand through the implementation of a CAMP, in coordination with Utah, Wyoming, and PacifiCorp.

Milestones:

- Bear River Basin comprehensive aquifer management planning underway.
- Strategies developed to meet future water needs.
- Local storage rental pool established.
- Development of Idaho's depletion allocation.

65C - INTERSTATE WATER DELIVERY IN THE BEAR RIVER BASIN

Idaho water users in the Lower Division of the Bear River Basin must be protected from inequitable water allocation in the event of a water emergency and the scheduling of interstate water deliveries.

Discussion:

The Bear River Compact authorizes the Bear River Commission to implement a water delivery schedule in the Lower Division without regard to state boundaries if the Bear River Commission finds that a "water emergency" exists. Idaho Code § 42-3402. This provision was intended to apply only to true emergency conditions which must be determined using comprehensive accounting processes. Idaho and Utah have developed separate, but similar water accounting models that incorporate the rights identified in the Commission Approved Lower Division Water Delivery Schedule. Absent a water emergency, Idaho water users are not required to accept delivery based upon interstate accounting allocation. Both states, however, have worked to reconcile their respective accounting models to reduce conflict over water delivery.

The "Bear Lake Settlement Agreement" was signed and voluntarily adopted by Lower Division water users and PacifiCorp in 1995 and amended in 2004. The agreement established, among other things, an "Irrigation Water Allocation and Lake Recovery Proposal" for Bear Lake. The proposal provides for an "Annual Allocation" which represents the total, estimated quantity of water available to be delivered to storage contract holders. This agreement and the state water accounting models have resulted in a process by which Lower Division water users have voluntarily agreed to water delivery by water right priority without regard to state boundaries.

Implementation Strategies:

- Continue work with Utah and Lower Division water users to improve water right accounting models.

- Facilitate and promote improved water delivery and measurement, including gage and diversion automation.

Milestones:

- Continued cooperation in interstate water administration.
- Completion of technical upgrades to water delivery and measurement infrastructure.

65D - BEAR LAKE IN THE BEAR RIVER BASIN

The outstanding recreational, aesthetic, and fish and wildlife resource values of Bear Lake should be preserved, while recognizing the existing storage allocations for irrigation and hydroelectric power generation.

Discussion:

Bear Lake, noted for its unique coloration and endemic fish species, provides an abundance of recreational opportunities. To protect these values, the Idaho Water Resource Board obtained a minimum lake level water right for Bear Lake of 5902 feet.

The 2004 Amended and Restated Bear Lake Settlement Agreement between PacifiCorp and several water users and private interests confirmed that Bear Lake must be operated primarily as a storage reservoir to satisfy contracts for existing irrigation uses and flood control needs in the three states, with the use of water for hydropower generation being incidental to other purposes. Bear Lake storage is allocated based on lake elevation with reduced allocations occurring when Bear Lake falls below the irrigation reserve of 5914.7 feet. The settlement agreement also provides for a portion of the active storage in Bear Lake to be voluntarily retained to enhance recreation and water quality values.

Pursuant to the 2002 Settlement Agreement Resolving the Relicensing of the Bear River Hydroelectric Projects and the FERC licenses issued for PacifiCorp's Bear River projects, protection, mitigation, and enhancement measures are being implemented to benefit fish and wildlife and recreational resources in the Bear River Basin. The settlement agreement established a committee to guide implementation of these measures, with a primary focus on protecting and improving habitat for Bonneville Cutthroat Trout. The settlement agreement confirms that PacifiCorp's ability to regulate Bear Lake reservoir levels and provide instream flows at the projects for these purposes is restricted by and subject to historic practices, water rights, and flood control responsibilities that are memorialized in water contracts, water agreements, and judicial decrees and opinions.

The Bear River Compact provides for cooperation with state and federal agencies in matters relating to water pollution of interstate significance. The Idaho Water Resource Board supports the Bear River Commission's efforts to develop opportunities for more integrated watershed management throughout the basin.

Implementation Strategies:

- Cooperate with the Bear River Commission to address interstate issues of concern related to Bear Lake, including water quality, threatened or endangered species and species of special concern, and recreation.

Milestones:

- Bear Lake operations are consistent with 2004 Bear Lake Settlement Agreement.
- Cooperative programs addressing interstate issues of concern related to water quality, recreation, and sensitive species implemented.

Photo: Last Chance Canal over the Bear River *(Photo Courtesy of Liz Cresto)*

76. SALMON/CLEARWATER RIVER BASINS

76A - CONSERVATION PLANS IN THE SALMON/CLEARWATER RIVER BASINS

Voluntary, community-based conservation plans and strategies for the benefit of ESA-listed species and other species of concern are key components of water planning and management in the Salmon and Clearwater River Basins.

Discussion:

The Salmon and Clearwater River basins support a thriving agricultural industry and significant tourism. Because a number of fish species in the Salmon and Clearwater River basins have been listed as threatened or endangered under the ESA, numerous programs are being implemented to improve fish habitat, while protecting existing water rights. A significant portion of freshwater habitat important to ESA-listed fish is located on private lands. As a consequence, local support is key to implementing conservation measures that advance species' recovery. Federal agencies are encouraged to cooperate with state and local landowners to develop voluntary, incentive-based conservation plans. Any water required for instream uses must be obtained in compliance with state law.

In the Snake River Basin Adjudication, the state entered into two agreements that provide for water management within the basin that supports agricultural-based communities, while encouraging the voluntary implementation of flow-related conservation measures that improve instream conditions for ESA-listed fish. The agreements are based upon improving instream flow conditions pursuant to state law.

- **2004 Snake River Water Rights Agreement**

The 2004 Snake River Water Rights Agreement resolved all of the issues related to the Nez Perce Tribe's water right claims in the SRBA. In the Salmon and Clearwater basins, the primary goal of the settlement agreement provisions is to conserve and enhance fish habitat in order to address ESA concerns. There are three cornerstones to such efforts: the establishment of state minimum flows, the establishment of a voluntary forestry program with standards to improve fish habitat, and the establishment of voluntary programs by irrigators and other water users to improve instream flow.

The state and local water users are working with the federal agencies, tribes, and other stakeholders to advance the recovery of listed species through the development of conservation agreements under Section 6 of the ESA. In coordination with the OSC, the state has begun early implementation of voluntary conservation measures that provide immediate benefits to ESA-listed fish and provide the foundation for implementation of long-range plans.

As a result of the 2004 Snake River Water Rights Agreement, the Idaho Water Resource Board holds minimum stream flow water rights on 205 streams that provide significant protection for steelhead, salmon, and bull trout. Most of the streams flow through federal public lands and have minimal use. Twenty-four streams, however, are in basins with

substantial private ownership and significant private water use. The flows for those streams were established after consultation with local communities. Where the minimum stream flow water rights are higher than existing flows, the Idaho Water Resource Board works with water users on a voluntary basis to rent or otherwise acquire water to return to streams, in accordance with state law.

- **Wild and Scenic Rivers Agreement**

The Wild and Scenic Rivers Agreement resolved issues related to federal reserved water right claims filed by the federal government under the Wild and Scenic Rivers Act. The agreement provides for the quantification of the wild and scenic federal reserved water rights and state administration of those rights. To protect existing rights and allow for some future development, the United States agreed to subordinate the federal rights to certain existing and future water right uses.

Implementation Strategies

- Ensure that the water right application review process considers basin conservation plans and limiting factors for ESA-listed fish.
- Ensure that the stream channel alteration permit process considers basin conservation plans and limiting factors for ESA-listed fish.
- Develop flow-limited reach GIS maps for use in water administration.
- Continue early implementation of conservation measures.
- Develop and implement conservation projects and plans based on local problem-solving and support.

Milestones

- Conservation measures implemented.
- Conservation plans approved pursuant to Section 6 of the ESA and implemented.
- Approved water right transfers address limiting factors for ESA-listed fish.
- Water right permits address limiting factors for ESA-listed fish.
- Flow-limited reach GIS maps completed and in use.

76B - INSTREAM FLOW PROGRAM IN THE SALMON/CLEARWATER RIVER BASINS

The Idaho Water Resource Board will promote, provide, and where possible, expand opportunities for voluntary, market-based transactions to improve instream flow for the benefit of ESA-listed aquatic species.

Discussion:

The Idaho Water Resource Board administers and participates in a variety of programs to improve instream flows throughout the Salmon and Clearwater River basins. This programmatic approach to addressing the needs of ESA-listed and other sensitive species includes a suite of water supply acquisition tools including short and long-term leases, permanent purchases, partial season leases, diversion reduction agreements, and water use efficiency measures, all of which are market-based and voluntary. The Board works collaboratively with organizations committed to voluntary, market-based conservation strategies, such as conservation easements, to maximize instream flow programs. These partnerships benefit targeted fish species and support local economies.

- **Columbia Basin Water Transaction Program**

The Columbia Basin Water Transactions Program was initiated in 2002 to support innovative, voluntary, grassroots strategies to improve flows in the Columbia River Basin's streams and rivers. The majority of funding is provided by the Bonneville Power Administration in cooperation with the Northwest Power and Conservation Council. Continued implementation of the Columbia Basin Water Transactions Program in the Salmon and Clearwater basins will keep agriculture productive and improve instream flows for ESA-listed and other sensitive fish species.

- **Section 6 Conservation Fund**

Section 6 of the ESA directs "that Federal agencies shall cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species." 16 U.S.C.A. § 1531(C)(2). Pursuant to the 2004 Snake River Water Rights Agreement of 2004, in addition to the establishment of minimum stream flow water rights, the state agreed to work with local stakeholders and communities to develop work plans for addressing limiting factors for fish on streams with degraded habitat. The state also agreed to develop cooperative agreements under Section 6 of the ESA with the assistance of local land owners, federal agencies, and tribes to establish long-term conservation goals and conservation measures that will contribute to the recovery of anadromous and resident fish in the Upper Salmon River Basin. The Board's instream flow programs are central to the development and implementation of Section 6 Conservation Plans.

- **Pacific Coast Salmon Restoration Fund**

The Pacific Coast Salmon Restoration Fund provides grants to state agencies and treaty Indian tribes for salmon recovery efforts. The Idaho Water Resource Board works with agencies, tribes, and stakeholders to use Pacific Coast Salmon Restoration Fund monies for early implementation of conservation measures in the basins.

- **2008 Columbia Basin Fish Accords**

The Columbia Basin Fish Accords are designed to supplement biological opinions for listed salmon and steelhead and the Northwest Power and Conservation Council's fish and wildlife program. The agreement between the state of Idaho, the Bonneville Power Administration, the USACE, and the USBOR addresses issues associated with the direct and indirect effects of construction, inundation, operation and maintenance of the Federal

Columbia River Power System, and USBOR's Upper Snake River Project on the fish and wildlife resources in the Columbia River Basin.

Under the agreement, the Bonneville Power Administration committed to funding a suite of habitat quality improvement projects designed to address limiting factors within the basins affecting ESA-listed salmon and steelhead. The Idaho Water Resource Board uses these funds to develop projects that improve instream flow and freshwater survival of ESA-listed salmon and steelhead. The program targets flow-related projects that reconnect tributaries and increase flow in the mainstem Lemhi and Pashimeroi rivers to improve fish passage conditions and increase the quantity and quality of fish habitat.

Implementation Strategies:

- Continue implementation of programs to improve instream flows in the Salmon and Clearwater River basins.
- Pursue opportunities for partnerships with local water users and other stakeholders to implement programs that improve instream flows and support local economies.

Milestones:

- Number and scope of instream flow improvement projects implemented.
- Number of participants in instream flow improvement projects.
- Degree of habitat improvement resulting from instream flow programs.

Photo: Scenic Central Idaho near Salmon *(Photo Courtesy of Shari Ferree)*

87. PANHANDLE RIVER BASINS

87A - INTERSTATE AQUIFERS IN THE PANHANDLE RIVER BASINS

Completion of comprehensive aquifer management plans and the Northern Idaho Adjudication and implementation of interstate agreements are central to the optimum use of the Panhandle Basin's water resources.

Discussion:

The Panhandle's rivers and lakes are key to continued economic development and provide for multiple uses of water including irrigation, domestic supplies, mining, and commercial uses. These lakes and rivers also provide significant recreation, fish and wildlife, and aesthetic resources important for the region's economy. In average water years, Idaho's Panhandle region has a stable water supply. A growing population and the urbanization of agricultural lands, however, have resulted in increased ground water use which has resulted in conflicts over water quantity and quality within the region and across state boundaries.

- **Spokane Valley-Rathdrum Prairie Aquifer**

The Rathdrum Prairie Aquifer ("RPA") extends south from Bonner County through Kootenai County toward the cities of Coeur d'Alene and Post Falls and west to the Idaho-Washington state line. The aquifer extends into Washington and becomes part of the larger Spokane Valley-Rathdrum Prairie ("SVRP") Aquifer. The area includes the rapidly growing cities of Spokane, Washington and Coeur d'Alene and Post Falls, Idaho. The SVRP Aquifer was designated a "Sole Source Aquifer" by the U.S. Environmental Protection Agency in 1978 and a sensitive source aquifer by the state of Idaho.

In 2002, the Director of the Department, pursuant to Idaho Code § 42-233b, designated the Rathdrum Prairie Ground Water Management Area and created the Rathdrum Prairie Ground Water Management Area Advisory Committee, composed of members representing the interests of citizen groups, municipalities, counties, and other irrigation, commercial, and industrial water users within the designated area. On September 15, 2005, the Director issued a final order adopting the Ground Water Management Plan for the Rathdrum Prairie Ground Water Management Area. The plan, based in large part on the recommendations of the advisory committee, sets forth goals, strategies, and actions for managing the ground water resources of the SVRP Aquifer. Goals include obtaining adequate technical data and quantification of water availability and water use, managing the ground water resource efficiently and fairly for all users, and encouraging planning and water conservation efforts.

Although the states of Idaho and Washington have primary responsibility for water allocation and water quality, local governments are increasingly being called upon to consider water supply and water quality implications in land use planning. To address these challenges, a study of the SVRP Aquifer was conducted jointly by the Department, the Washington State Department of Ecology, and the United States Geological Service. Begun in 2003 with broad community support, the purpose of the project is to provide a

scientific foundation to assist the states in water administration. The SVRP Aquifer study established a collaborative modeling committee of experts from both states. Significant new information from the study refined earlier estimates of hydrologic information. The data, computer model, water budget, and other information are available to the public and provide a detailed, up-to-date basis for assessing all aspects of ground water use, including water development, establishing well head protection zones, and local and regional land use planning. A 2007 agreement between the Department and the Washington State Department of Ecology establishes a collaborative framework to maintain and enhance the model to inform state management decisions.

Pursuant to Idaho Code § 42-1779, which established the Statewide Comprehensive Aquifer Planning and Management Program, a comprehensive aquifer management plan was adopted on July 29, 2011 for the Rathdrum Prairie Aquifer by the Idaho Water Resource Board. The Board will be responsible for implementing the plan to obtain sustainable water supplies and optimum use of the region's water resources.

- **Palouse Basin Aquifers**

The development of a CAMP for the Palouse Basin is also a priority. The Grande Ronde and Wanapum aquifers underlie the Palouse Basin. The Pullman-Moscow area of eastern Washington and northern Idaho relies almost entirely on ground water for its supply of municipal, institutional, and domestic water. The Palouse Basin Aquifer Committee consists of representatives from the cities of Moscow, Pullman, Colfax, Latah, and Whitman counties, the University of Idaho and Washington State University and was formed to address concerns about declining ground water levels and coordinate studies to further inform water management decisions. In 1992, with the assistance of the states and pursuant to several intergovernmental agreements, a Pullman-Moscow Ground Water Management Plan was completed. The plan provides technical information about the general response of the Wanapum and Grande Ronde aquifers to pumping withdrawals and recommendations for future use that limit ground water depletion and protect water quality through conservation practices and other measures. Additional studies are needed to better understand the hydrology of the aquifers.

Managing cross-boundary conflicts requires an accounting of the state's water resources. Adjudication of water rights in the Panhandle region should therefore be completed to fully define and quantify existing water rights. The determination of all existing water rights from the river basins in northern Idaho will provide the basis for administration of water rights and for interstate cooperation. Pursuant to Idaho Code § 42-1406B, the Director of the Department filed a petition in the district court to commence an adjudication for northern Idaho. On November 12, 2008, the district court ordered the commencement of adjudication in the Coeur d'Alene Spokane River water system. The estimated date for completion of the adjudication is Fiscal Year 2018.

Idaho Code § 42-1734(3) authorizes the Idaho Water Resource Board to appear on behalf of the state in negotiations with the federal government. Consistent with state law, the Idaho Water Resource Board should serve as the lead agency for coordinating state participation in the Northern Idaho Adjudication.

Implementation Strategies:

- Implement the CAMP for the Rathdrum Prairie.
- Evaluate timing for developing a CAMP for the Palouse River Basin that establishes goals, objectives, and strategies to address the increasing demand on water supplies, reduce cross-boundary conflicts, and provide for effective conjunctive management of hydraulically connected water resources.
- Complete the Northern Idaho Adjudication.
- Implement and maintain the cooperative agreement between Idaho and Washington for maintenance of the SVRP Aquifer ground water model.
- Advise and provide technical support to Palouse Basin Aquifer Committee and other stakeholders to promote the wise use of the region's water supply.
- Provide technical support for the completion of aquifer studies that will assist in water management.

Milestones:

- Cooperative agreements approved and implemented by Idaho and Washington.
- Implementation of Rathdrum Prairie CAMP action items.
- Development and implementation of Palouse CAMP.
- Aquifer studies completed.
- Northern Idaho Adjudication completed.

8~~7~~B - MINIMUM STREAM FLOWS IN THE PANHANDLE RIVER BASINS

The Idaho Water Resource Board will establish and protect minimum stream flow and lake level water rights to preserve the scenic and recreational water bodies in the Panhandle river basins.

Discussion:

The Panhandle contains some of the most significant scenic and recreational water bodies in the state. The Idaho Water Resource Board holds 19 minimum stream flow water rights on reaches of the Pend Oreille, St. Maries, Pack, Moyie, St. Joe, Coeur d'Alene, and Spokane rivers that protect approximately 17,600 cfs total flow. In 1927, the state established minimum lake levels for Priest, Pend Oreille and Coeur d'Alene lakes. These water rights protect and support many beneficial uses of water such as fish and wildlife habitat, aquatic life, recreation and aesthetic values, and navigation in the Panhandle basins and make a significant contribution to the economy of the region and the state.

Population growth and new water demands may increase the need to obtain additional minimum stream flows in the Panhandle region. The establishment and use of local water supply banks and rental pools should be considered as a strategy for addressing the

need for meeting minimum stream flow water rights or new water rights in the Panhandle region, including minimum lake levels for the protection of navigation and transportation, fish and aquatic resources, and aesthetic and recreational values.

Implementation Strategies:

- Coordinate with state and federal agencies and stakeholders to identify potential minimum stream flow needs.
- Submit applications for minimum stream flow water rights that are in the public interest.
- Monitor activities that could impair minimum stream flows.
- Evaluate the need for establishment of local water supply banks.

Milestones:

- Minimum stream flow water rights established.

87C - NAVIGATION, FISHERIES, AND RECREATION IN THE PANHANDLE RIVER BASINS

Water management decisions in the Panhandle Region should minimize, where feasible, adverse effects on navigation, fisheries, and recreation.

Discussion:

The Panhandle's lakes and rivers provide for commercial and recreational navigation and important habitat for numerous fish and wildlife species. These resources are also affected by the operation of private and federal hydropower projects. Avista's Clark Fork projects, located in Montana and Idaho, are operated pursuant to a FERC license based upon a comprehensive settlement agreement executed by Idaho, Montana, federal agencies and Indian tribes, and other stakeholders. The Post Falls project license is also based, in part, upon a settlement agreement between Avista, the IDFG and the Idaho Department of Parks and Recreation. The Post Falls license requires a summer full-pool elevation and fall draw-down protocol for Lake Couer d'Alene that is protective of fishery needs, while providing adequate lake levels for summer recreation activities and navigation.

On the Pend Oreille River, the USACE operates Albeni Falls Dam, which controls the level of Lake Pend Oreille. Lake Pend Oreille has been designated a Special Resource Water, a special body of water recognized by the state as needing intensive protection. Since 1996, consistent with a U.S. Fish and Wildlife Service Biological Opinion on the operation of the Federal Columbia River Power System, winter lake levels have been managed for the protection of the lake's kokanee population, an important forage base for ESA-listed bull trout. Winter lake level management also directly affects the amount of erosion and sedimentation that occurs, waterfowl habitat, water quality, navigation, and shoreline infrastructure. Cooperation between the state and federal government and

community stakeholders is essential for making sound management decisions regarding the operation of Albeni Falls Dam.

In 2003, the Idaho legislature created the Lake Pend Oreille, Pend Oreille River, Priest Lake and Priest River Commission ("Lakes Commission") to address water quantity and water quality issues affecting the state's and local communities' interests, while recognizing existing authorities. The Idaho Water Resource Board supports the Lakes Commission's participation in regional water management decisions and efforts to minimize adverse effects on navigation, water quality, and fish, wildlife, and recreational resources.

Implementation Strategies:

- Identify proposed actions that may affect navigation, water quality, and fish, wildlife, and recreation resources, in coordination with state and federal agencies and stakeholders.
- Provide technical assistance to assist the Lake Commission's participation in regional water management decisions.

Milestones:

- Collaborative water management decisions made that minimize adverse effects on navigation, water quality, and fish, wildlife, and recreational resources.

Photo: Mackay Lost River Range *(Photo Courtesy of Mike McVay)*

MATERIALS MAY BE PROVIDED AT THE

IWRB MEETING

WATER RESOURCE BOARD EXECUTIVE SESSION MOTIONS

Motion to resolve into Executive Session: Pursuant to Idaho Code § 74-206(1) subsection (f) I request that the Board resolve into executive session for to communicate with legal counsel regarding legal ramifications of and legal options for pending litigation, or controversies not yet being litigated but imminently likely to be litigated. I request that a roll call vote be taken and that the Secretary record the vote in the minutes of the meeting.

Motion to Resolve into Public Session: I move that the Board resolve out of executive session and that the official minutes of the meeting reflect that no action was taken during the executive session.