



IDAHO WATER RESOURCE BOARD

MEETING NO. 2-18

January 25-26, 2018

Boise



Shoshone
Recharge Site
November 2017



Master



AGENDA

IDAHO WATER RESOURCE BOARD

C.L. "Butch" Otter
Governor

Roger W. Chase
Chairman
Pocatello
District 4

Jeff Raybould
Vice-Chairman
St. Anthony
At Large

Vince Alberdi
Secretary
Kimberly
At Large

Peter Van Der Meulen
Hailey
At Large

John Rusche
Lewiston
At Large

Albert Barker
Boise
District 2

John "Bert" Stevenson
Rupert
District 3

Dale Van Stone
Hope
District 1

Work Session for Board Meeting No. 2-18

January 25, 2018

8:30 a.m.

Idaho Water Center
Conference Rooms B, C & D
322 E Front Street
BOISE

1. Roll Call
2. Executive Session – Board will meet pursuant to Idaho Code §74-206(1) subsection (d), to consider records that are exempt from disclosure as provided by law. Executive Session is closed to the public. Topics: Legal Analysis of Interstate Waters
Following adjournment of Executive Session – meeting reopens to the public.
3. Financial Update
4. Boise River Feasibility Study
5. ESPA Recharge Report
6. Lost Valley Reservoir
7. Legislation of Interest
8. Priest Lake Water Management Project

** The Board will break for lunch at approximately 11:45 a.m.*

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 nikki.regent@idwr.idaho.gov or by phone at (208) 287-4800.

MEMO



To: Idaho Water Resource Board
From: Brian Patton
Subject: Financial Status Report
Date: December 28, 2017

As of **November 30** the IWRB's available and committed balances are as follows:

Secondary Aquifer Fund:

Committed/earmarked but not disbursed	\$19,642,614
Loan principal outstanding	\$0
Uncommitted Balance	\$8,301,594

Revolving Development Account:

Committed/earmarked but not disbursed	\$20,765,404
Loan principal outstanding	\$24,883,449
Uncommitted Balance	\$1,678,503
Anticipated loanable funds available next 1 year	\$5,178,503

Water Management Account

Committed/earmarked but not disbursed	\$111,376
Uncommitted Balance	\$9,915

Total committed/earmarked but not disbursed	\$40,519,394
Total loan principal outstanding	\$24,883,449
Total uncommitted balance	\$9,990,012

- The uncommitted balance in the Secondary Aquifer Fund is currently about \$8.3M. This is the result of 1) moving the ESPA Ground Water Districts loan from the Secondary Aquifer Fund to the Revolving Development Account through the refinancing of the loan, paying \$4M (plus interest) back to the Secondary Fund, and 2) the receipt of about \$3.5M in Cigarette Tax proceeds so far this fiscal year, which will be allocated by the IWRB in its FY19 budget for the Secondary Aquifer Fund.

- An IWRB Finance Committee meeting is scheduled for January 16, 2018. The primary purpose will be to review how cash flows associated with the Mountain Home Air Force Base Sustainable Water Project will work, although other items may be discussed as well.
- Potential loan applications that we are tracking are shown. These loans would be from the Revolving Development Account.

Potential Applicant	Project	Loan Amount	Comment
Goose Lake Reservoir Company	Goose Lake Dam repairs	\$200,000	Goose Lake Dam repair
Base Line Canal Company	Repair headgate	\$37,500	Result of Wood River floods in 2017
Salem Irrigation Canal Company	Exchange wells	\$140,000	
North Fremont Canal Company (Marysville)	Continue installing gravity-pressure delivery system (Phase 3)	\$2.5M	Anticipate NRCS match. IWRB financed prior phases of project.

Idaho Water Resource Board
Budget and Committed Funds
as of November 30, 2017

SECONDARY AQUIFER PLANNING, MANAGEMENT, & IMPLEMENTATION FUND

FYE 2017 Cash Balance..... 18,459,951.08

FY 2018 Revenue

Interest.....	115,578.97
HB547 - State Recharge & Aquifer Stabilization (SRAS).....	3,460,427.40
SB1176, Section 4 - Water Sustainability.....	5,000,000.00
Department of Energy Grant.....	250.00
Loan Interest.....	15,861.10
Loan Principal.....	4,000,000.00
TOTAL FY 2018 REVENUE.....	12,592,117.47

FY 2018 Expenditures

SRAS Equipment & Supplies - FY 17	(12,305.00)
SRAS Equipment & Supplies - FY 18	(10,167.11)
SRAS Conveyance Costs - FY 17	(1,990,409.86)
South Fork Engineering & Site Evaluation (CON01163, 1164, 1165).....	(30,624.02)
Butte Market Lake (CON01168).....	(14,511.38)
AFRD2 - Dietrich Drop Study (CON01139).....	(1,281.25)
Field Trip Costs.....	(3,190.00)
North Side Canal Company (CON01199).....	(141,868.57)
SRAS Site Monitoring	(42,422.64)
SRAS Regional Monitoring - FY 17	(61,417.28)
SRAS Regional Monitoring - FY 18	(28,473.16)
The Ferguson Group	(40,147.06)
Steve Stuebner - Media Services	(7,639.19)
WS Hydrology Monitoring - FY 17	(8,694.44)
WS Hydrology Monitoring - FY 18	(31,414.96)
Grants.....	(11,500.00)
University of Idaho - (CON01152)	(19,025.60)
ESHMC Meeting Refreshments	(65.85)
USGS - 6601 (Wood River Modeling)	(22,062.07)
USGS - 6605 (Treasure Valley Modeling)	(96,888.44)
Department of Energy Grant expenditures.....	(18,844.04)
Ralston Hydrologic Services.....	(11,453.31)
Egin Bench Canals Inc (CON01166).....	(20,000.00)
NRCS Snow Survey contribution (USDA CON01177).....	(50,000.00)
Quadrant Consulting Inc (CON01238, CON01240).....	(14,524.11)
Caribou Inc (CON01247).....	(11,800.00)
New Sweden Irrigation District (CON01212).....	(2,500.00)
Southwest Irrigation District (CON01172).....	(399,308.54)
Brown & Caldwell (CON01234).....	(5,322.50)
TOTAL FY 2018 EXPENDITURES.....	(3,107,860.38)

FY 2018 Cash Balance..... 27,944,208.17

FY 2014 - FY 2017 Committed Funds	Budget	Amended	Obligated	Expenditures	Carry forward	Committed
Water User Contribution.....	109,493.16		109,493.16	(106,537.50)		2,955.66
Measurement devices for AWEPP conversion projects.....	200,000.00		200,000.00	(16,455.21)		183,544.79
Cooperative Weather Modification Program (Cloud Seeding - CON01109).....	492,000.00		492,000.00	(354,917.64)		137,082.36
FY 2017 Conveyance Cost.....	1,500,000	1,150,000.00	2,650,000.00	(2,476,461.83)		173,538.17
FY 2017 Equipment & Supplies.....	87,000		87,000.00	(61,668.70)	25,331.30	0.00
FY 2017 Regional Monitoring.....	200,000		200,000.00	(200,000.00)		0.00
Milner-Gooding Dietrich Drop hydro plant bypass.....	50,000	1,450,000.00	1,500,000.00			1,500,000.00
NSCC Wilson Lake Infrastructure Project (CON01199).....	4,000,000	800,000.00	4,800,000.00	(141,868.57)		4,658,131.43
SWID Recharge Project (CON01172).....	1,000,000		1,000,000.00	(399,308.54)	400,000.00	200,691.46
South Fork Engineering & Site Evaluation (CON01163, 1164, 1165).....	200,000		200,000.00	(52,906.30)	34,000.00	113,093.70
NSID Recharge Feasibility (CON01212).....	200,000		200,000.00	(40,783.75)		159,216.25
Butte Market Lake			39,000.00	(31,302.46)		7,697.54
Woodville			17,000.00			17,000.00
Treasure Valley Modeling (USGS 6605).....	500,000		500,000.00	(301,893.23)		198,106.77
Wood River Valley Aquifer GW Model (USGS 6601).....	200,000		200,000.00	(32,306.66)		167,693.34
Aquifer monitoring network enhancements in priority aquifers.....	100,000		100,000.00	(100,000.00)		0.00
NRCS Snow Survey contribution USDA CON01177.....	100,000	100,000.00	200,000.00	(100,000.00)		100,000.00
Mountain Home Air Force Base	1,000,000		1,000,000.00			1,000,000.00
TOTAL FY 2014 - FY 2017 COMMITTED FUNDS.....	9,938,493.16	100,000.00	13,494,493.16	(4,416,410.39)	459,331.30	8,618,751.47
FY 2018 Budget	Budget	Amended	Obligated	Expenditures	Carry forward	Committed
ESPA Managed Recharge Operations						
Conveyance Cost.....	2,500,000		2,500,000.00			2,500,000.00
Equipment & Supplies.....	100,000		100,000.00	(10,167.11)		89,832.89
Site Monitoring.....	150,000		150,000.00	(42,422.64)		107,577.36
Regional Monitoring.....	200,000		200,000.00	(28,473.16)		171,526.84
Total ESPA Managed Recharge Operations.....	2,950,000	0.00	2,950,000.00	(81,062.91)	0.00	2,868,937.09
ESPA Managed Recharge Infrastructure						
Northside Canal Recharge Site (CON01238, CON01240).....	1,600,000		1,600,000.00	(14,524.11)		1,585,475.89
Richfield Site Development (CON01234).....	150,000		150,000.00	(5,322.50)		144,677.50
AFRD2 MP 28 Hydro Plan Tailbay (CON01247).....	200,000		200,000.00	(11,800.00)		188,200.00
SF Recharge Site Development.....	250,000		250,000.00			250,000.00
Butte Market Lake Site Development.....	250,000		250,000.00			250,000.00
NSID Recharge Site Development.....	250,000		250,000.00			250,000.00
Egin Lakes Phase II.....	500,000	80,000.00	580,000.00	(20,000.00)		560,000.00
Reserved for Additional Recharge Projects.....	1,000,000	(80,000.00)	920,000.00			920,000.00
Total ESPA Managed Recharge Infrastructure.....	4,200,000	0.00	4,200,000.00	(51,646.61)	0.00	4,148,353.39
Managed Recharge Investigations						
AFRD2 - MP 34 Investigation.....	100,000		100,000.00			100,000.00
BWCC Star Lake.....	60,000		60,000.00			60,000.00
Reserved for additional investigations and engineering.....	300,000		4,471.25	(4,471.25)		0.00
Total Managed Recharge Investigations.....	460,000	0.00	164,471.25	(4,471.25)	0.00	160,000.00
TREASURE VALLEY						
Treasure Valley Modeling (USGS 6605).....	500,000		500,000.00			500,000.00
Boise River Storage Studies	1,000,000		1,000,000.00			1,000,000.00
Treasure Valley DCM Water Conservation Study.....	200,000		200,000.00			200,000.00

TREASURE VALLEY TOTAL.....	1,700,000	0.00	1,700,000.00	0.00	0.00	1,700,000.00
ELMORE COUNTY						
Canyon Creek Recharge Site	50,000	90,000.00	140,000.00			140,000.00
WOOD RIVER VALLEY TOTAL.....	50,000	90,000.00	140,000.00	0.00	0.00	140,000.00
WEISER BASIN						
Weiser River Basin Project	100,000		100,000.00			100,000.00
WEISER BASIN TOTAL.....	100,000	0.00	100,000.00	0.00	0.00	100,000.00
BEAR RIVER BASIN						
Bear River Aquifer Study	50,000		50,000.00			50,000.00
BEAR RIVER BASIN TOTAL	50,000	0.00	50,000.00	0.00	0.00	50,000.00
NORTHERN IDAHO AQUIFERS						
Lewiston Study Phase II	109,273		109,273.09	(11,453.31)		109,273.09
NORTHERN IDAHO AQUIFERS TOTAL.....	109,273	0.00	109,273.09	(11,453.31)	0.00	109,273.09
STATE-WIDE						
Aquifer monitoring network enhancements in priority aquifers.....	100,000		100,000.00	(31,414.96)		68,585.04
Cooperative Cloud Seeding Program.....						
Operations & Maintenance (1/3 of total)	600,000	18,000.00	618,000.00			618,000.00
Cloud Seeding Modeling Project	540,000		540,000.00			540,000.00
Cloud Seeding Benefit Allocation Study	200,000		200,000.00			200,000.00
Ground water conservation grants in priority aquifers.....	200,000		200,000.00	(11,500.00)		188,500.00
Administrative expenses (public information, staff training, etc).....	80,000		80,000.00	(7,639.19)		72,360.81
Professional Assistance for securing Federal Funding.....	100,000		100,000.00	(40,147.06)		59,852.94
STATE-WIDE TOTAL.....	1,820,000	18,000.00	1,838,000.00	(90,701.21)	0.00	1,747,298.79
Unspecified Projects in Other Areas or Carry-over.....	1,368,166	(108,000.00)				1,260,166.00
NRCS Snow Survey contribution.....						
Boise Project Board of Control.....						
MP31 Check Dam.....						
TOTAL FY 2018 BUDGETED FUNDS.....	12,807,439	0.00	11,251,744.34			
TOTAL FY 2018 COMMITTED FUNDS.....						11,023,862.36
PROJECTED FY 2018 CARRY FORWARD.....					0.00	
PROJECTED TOTAL FUNDS AVAILABLE FOR FY 2019 BUDGET.....						8,301,594.34

IDAHO WATER RESOURCE BOARD
Sources and Applications of Funds
as of November 30, 2017
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.....	\$9,827,905.32
Interest Earned State Treasury (Transferred).....	\$1,838,566.86
Filing Fee Balance.....	\$47,640.20
Bond Fees.....	\$1,469,601.45
Arbitrage Calculation Fees.....	(\$12,000.00)
Protest Fees.....	(\$995.00)
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.....	\$21,107.59
Attorney fees for Jughandle LID.....	(\$3,600.00)
Attorney fees for A&B Irrigation.....	(\$4,637.50)
Water Supply Bank Receipts.....	\$5,547,519.01
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.....	(\$1,533,047.30)
Boise River Storage Feasibility Study.....	(\$333,000.00)
Geotech Environmental (Transducers).....	(\$6,402.61)
Priest Lake Improvement Study (16-Mar-16).....	(\$260,168.62)
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.....	(\$948,047.74)
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)
Island Park Enlargement (HB 479).....	(\$181,690.15)
Water Supply Bank Computer Infrastructure (HB 479).....	(\$497,350.75)
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)
Lemoynes Appraisal for Aqualife facility.....	(\$10,500.00)
Loan payments received.....	\$2,900,000.00
Loans Outstanding	
ESPA Ground Water Districts (Aqualife purchase).....	\$0.00
Total Loans Outstanding	\$0.00
Balance Aqualife Hatchery Sub-Account.....	\$1,117,800.85
Bell Rapids Water Rights Sub-Account	
Legislative Appropriation 2005, HB392.....	\$21,300,000.00
Interest Earned State Treasury.....	\$695,178.18
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.....	\$7,117,971.18
Payment to US Bank for Alternative Financing Note.....	(\$7,118,125.86)
Payment for Water District 02 Assessments.....	(\$44,088.60)
Payment for Ongoing Bell Rapids Finance Costs (trustee fees, water bank, etc.).....	(\$6,740.10)
Commitments	
Ongoing Bell Rapids Finance Costs (trustee fees, WD02).....	\$138,949.02
Committed for alternative finance payment.....	\$0.00
Total Commitments.....	\$138,949.02
Balance Bell Rapids Water Rights Sub-Account.....	(\$0.00)
Pristine Springs Project Sub-Account	
Legislative Appropriation 2006, SB1511, Pristine Springs.....	\$10,000,000.00
Legislative Appropriation 2006, HB870, Water Right Purchases.....	\$5,000,000.00
Interest Earned State Treasury.....	\$50,578.74
Loan Interest.....	\$2,117,507.93
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.....	\$4,483,708.42	
Appraisal.....	(\$25,500.00)	
Insurance.....	(\$47,500.25)	
Recharge District Assessment.....	(\$26,605.25)	
Water District 130 Annual Assessment.....	(\$3,841.45)	
Hydro Plants Engineering Certification (Straubhar).....	(\$4,200.00)	
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 Construction.....	(\$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).....	(\$9,980.95)	
Rental Payments.....	\$1,767,694.18	
Payments to Scott Kaster.....	(\$180,196.67)	
Utility Payments (Idaho Power).....	(\$38,509.38)	
Costs for property maintenance.....	(\$203,267.04)	
Travel costs for property maintenance.....	(\$517.31)	
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)	
Transferred to Aquifer Planning Fund (2016 Legislature; SB 1402, Sec 3).....	(\$716,000.00)	
Transferred to Aquifer Planning Fund (2017 Legislature; SB 1176, Sec 3).....	(\$716,000.00)	
Pristine Springs Hydropower Projects		
Net power sales revenues.....		\$721,375.59
Pristine Springs Committed Funds		
To be transferred to Aquifer Planning Fund.....	\$0.00	
Repair/Replacement Fund.....	\$0.00	
TOTAL COMMITTED FUNDS.....	\$0.00	
Loans Outstanding		
North Snake and Magic Valley Ground Water Districts.....	\$5,516,291.58	
Total Loans Outstanding.....	\$5,516,291.58	
Funds to RP CAMP & TV CAMP Sub-Account.....	\$271,672.34	
Pristine Springs Revenues Into Main Revolving Development Account.....		\$831,363.36
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.....	(\$18,000.00)	
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)	
Idaho Washington Aquifer Collaborative.....	(\$10,000.00)	
Committed Funds.....		
Kootenai-Shoshone Soil & Water Cons. Dist. - Agrimet Station.....	\$0.00	
Spokane River Forum.....	\$0.00	
Rathdrum Prairie-Spokane Valley Aquifer Pumping Study.....	\$0.00	
Treasure Valley Water Quality Summit.....	\$0.00	
Idaho Washington Aquifer Collaborative.....	\$0.00	
TOTAL COMMITTED FUNDS.....	\$0.00	
Balance Rathdrum Prairie CAMP & Treasure Valley CAMP Sub-Account.....	\$153,745.45	
Upper Salmon/CBWWTP Sub-Account		
Water Transaction Projects Payment Advances from CBWWTP/ Accord.....	\$4,042,714.77	
PCSRF Funds for Administration of Non-Diversion Easements on Lemhi River.....	\$222,257.16	
Interest Earned State Treasury.....	\$146,022.34	
Transfer to Water Supply Bank.....	(\$99,894.84)	
Change of Ownership.....	(\$600.00)	
Granite Creek Appraisal.....	(\$4,000.00)	
Alturas Lake Creek Appraisal.....	(\$8,989.23)	
Payments for Water Acquisition.....	(\$1,155,053.23)	
Committed Funds		
Administration of Non-Diversion Easements on Lemhi River.....	\$129,089.39	
Alturas Lake Creek (Breckenridge).....	\$0.00	
Bayhorse Creek (Peterson Ranch).....	\$30,508.94	
Badger Creek (OWBP).....	\$18,634.10	
Beaver Creek (DOT LLP).....	\$120,558.78	
Big Hat Creek.....	\$0.26	
Big Timber Tyler (Leadore Land Partners).....	\$445,695.89	
Canyon Creek/Big Timber Creek (Beyeler).....	\$415,872.49	
Carmen Creek (Bill Slavin).....	\$205,121.60	
Carmen Creek (Bruce Slavin).....	\$128,715.39	
Fourth of July Creek (Vanderbilt).....	\$15,671.59	
Iron Creek (Phillips).....	\$0.00	
Iron Creek (Koncz).....	\$207,922.32	
Kenney Creek Source Switch (Gail Andrews).....	\$23,409.27	
Lemhi - Big Springs (Merrill Beyeler).....	\$57,834.68	
Lemhi River & Little Springs Creek (Kauer).....	\$19,969.16	
Little Springs Creek (Snyder).....	\$266,688.22	
Lower Eighteenmile Creek (Ellsworth Angus Ranch).....	\$1,777.78	
Lower Lemhi Thomas (Robert Thomas).....	\$1,200.00	
Pahsimeroi-Little Mud Creek (Bar G Farm).....	\$4,978.71	
P-9 Bowles (River Valley Ranch).....	\$272,388.79	
P-9 Charlton (Sydney Downton).....	\$18,029.50	
P-9 Downton (Western Sky LLC).....	\$216,050.70	
P-9 Elzinga (Elzinga).....	\$267,237.07	
Patterson-Big Springs (PBSC9).....	\$176,627.56	
Pole Creek (Salmon Falls Land).....	\$572,284.85	

Pratt Creek (Mulkey).....	\$80,306.87	
Spring Creek (Richard Beard).....	\$542.88	
Spring Creek (Ella Beard).....	\$795.69	
Whitefish (Leadore Land Partners).....	\$162,188.81	
Total Committed Funds.....	\$3,860,099.28	
Balance CBWTP Sub-Account.....		(\$717,642.31)
Water District 02 WaterSmart Grant Sub-Account		
Received from BOR for BORWS2.....	\$118,058.42	
Received from BOR for BORWS3.....	\$59,960.43	
Payments made to contractors for BORWS2.....		(\$118,058.42)
Payments made to contractors for BORWS3.....		(\$59,960.43)
Committed Funds:		
Grant Approval for BORWS2.....	\$29,866.58	
Grant Approval for BORWS3.....	\$316,169.29	
Total Committed Funds.....	\$346,035.87	
Balance WaterSmart Grant Sub-Account.....		\$0.00
Water Supply Bank Sub-Account		
Interest Earned State Treasury.....	\$8,409.24	
Payments received from renters.....	\$2,871,047.80	
Payments made to owners.....		(\$2,311,540.26)
Water Supply Bank Sub-Account Subtotal.....		\$567,916.78
Committed Funds:		
Owners Share.....	\$559,507.54	
Total Committed Funds.....	\$559,507.54	
Balance Water Supply Bank Sub-Account.....		\$8,409.24
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.....	\$1,956,887.01	
Loan Interest.....	\$246,084.05	
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.....		(\$3,518,216.22)
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).....	\$68,065.91	
Bonneville Jefferson GWD (CREP).....	\$42,625.18	
Magic Valley GWD (CREP).....	\$64,949.29	
North Snake GWD (CREP).....	\$32,129.59	
TOTAL ESP LOANS OUTSTANDING.....	\$207,769.97	
Uncommitted Balance Eastern Snake Plain Sub-Account.....		\$609,311.10
Dworshak Hydropower Project		
Dworshak Project Revenues		
Power Sales & Other.....	\$8,588,137.73	
Interest Earned State Treasury.....	\$555,492.93	
Total Dworshak Project Revenues.....		\$9,143,630.66
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.....	\$2,414,063.75	
Powerplant Repairs.....	\$58,488.80	
Bond payoff.....	\$391,863.11	
Capital Improvements.....	\$318,366.79	
FERC Payments.....	\$74,332.91	
Total Dworshak Project Expenses.....		(\$3,946,208.17)
Dworshak Project Committed Funds		
Emergency Repair/Future Replacement Fund.....	\$1,314,575.00	
FERC Fee Payment Fund.....	\$6,039.00	
Total Dworshak Project Committed Funds.....		\$1,320,614.00
Excess Dworshak Funds into Main Revolving Development Account.....		\$3,876,808.49
TOTAL.....	Amount	Principal
		\$31,338,016.13

Loans Outstanding:	Loaned	Outstanding
A&B Irrigation District (18-July-14; pipeline and conversion project).....	\$3,500,000.00	\$3,241,869.89
A&B Irrigation District (18-July-14; pipeline and conversion project).....	\$3,500,000.00	\$3,240,797.39
Aberdeen-Springfield Canal Company (WRB-491; Diversion structure).....	\$329,761.00	\$71,665.88
Bee Line Water Association (Sep 23, 2014; System Improvements).....	\$600,000.00	\$545,842.06
Bonnie Laura Water Corporation (14-Jul-06; Well repairs).....	\$71,000.00	\$0.00
Canyon County Drainage District No. 2 (28-Nov-12; Drain tile pipeline	\$35,000.00	\$19,733.66
Challis Irrigation Company (28-Nov-07; river gate replacement).....	\$50,000.00	\$3,725.59
Chaparral Water Association (21-Jan-11; Well deepening & improvem	\$68,000.00	\$13,795.21
Cleanview Water Company.....	\$50,000.00	\$41,261.58
Cloverdale Ridge Water Corp. (irrigation system rehab 25-sep-09).....	\$106,400.00	\$19,226.65
Consolidated Irrigation Company (July 20, 2012; pipeline project).....	\$500,000.00	\$468,835.82
Consolidated Irrigation Company (July 20, 2012; pipeline project).....	\$1,500,000.00	\$0.00
Country Club Subdivision Water Association (18-May-07, Well Project).	\$102,000.00	\$11,452.55
Enterprise Irrigation District (14-Jul-06; Pipeline project).....	\$37,270.00	\$660.60
Enterprise Irrigation District (North Lateral Pipeline).....	\$105,420.00	\$8,438.62
Foothill Ranch Homeowners Association (7-oct-11; well rehab).....	\$150,000.00	\$101,088.16
Goose Lake Reservoir Corp.....	\$20,000.00	\$6,975.00
Harvest Valley Homeowners Association (22-Mar-13; Pump Replacem	\$4,500.00	\$0.00
Idaho Ground Water Appropriators (IGWA).....	\$3,208,115.35	\$3,208,115.35
Jefferson Irrigation Company (9-May-2008 Well Replacement).....	\$81,000.00	\$22,994.95
King Hill Irrigation District (24-Sep-10; Pipeline replacement.....	\$300,000.00	\$51,675.92
Lake Reservoir Company (29-July-11; Payette Lake-Lardo Dam Outle	\$594,000.00	\$61,094.80
Last Chance Canal Company (14-July-2015, diversion dam rebuild).....	\$2,500,000.00	\$2,053,889.63
Lava Hot Springs, City of.....	\$347,510.00	\$51,346.67
Lindsay Lateral Association (Engineering Design Project & Pipeline Stu	\$19,700.00	\$10,353.68
Marsh Center Irrigation Company (13-May-05; Hawkins Dam).....	\$236,141.00	\$80,262.78
Marysville Irrigation Company (18-May-07, Pipeline Project Phase 1)....	\$625,000.00	\$94,810.32
Marysville Irrigation Company (9-May-08, Pipeline Project Phase 2)....	\$1,100,000.00	\$299,629.27
North Fremont Canal Systems (25-Jan-13; Marysville Project).....	\$2,000,000.00	\$1,337,693.80
North Side Canal Company (16-sep-16; canal rehab project).....	\$3,600,000.00	\$1,846,092.61
Outlet Water Association (22-Jan-16; new well & improvements).....	\$100,000.00	\$94,024.52
Pinehurst Water District (23-Jan-15).....	\$100,000.00	\$66,171.05
Point Springs Grazing Association (July 20, 2012; stock water pipeline)	\$48,280.00	\$31,403.98
Preston-Whitney Irrigation Company (29-May-09; Fairview Lateral Pipe	\$800,000.00	\$37,895.96
Producers Irrigation Company.....	\$173,000.00	\$102,127.50
Skin Creek Water Association.....	\$186,258.00	\$27,551.12
Spirit Bend Water Association.....	\$92,000.00	\$6,647.65
St. Johns Irrigating Company (14-July-2015; pipeline project).....	\$1,429,775.00	\$1,095,665.10
Sunset Heights Water District (17-May-13; Exchange water project)...	\$48,000.00	\$20,597.40
Twin Lakes Canal Company (Windar Lateral Pipeline Project).....	\$500,000.00	\$203,423.58
Valley County Local Improvement District No. 1/Jughandle HOA (well p	\$907,552.00	\$560,351.45
TOTAL LOANS OUTSTANDING		\$19,159,387.75
Loans and Other Funding Obligations:		
Legislative Appropriation 2014, HB 479 Sec 1 and 2		
Mountain Home AFB Water Rights (HB479).....	\$575,901.92	
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).....	\$2,374,617.82	
Water Supply Bank Computer Infrastructure (HB 479).....	\$2,649.25	
Senate Bill 1511 - Telon 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).....	\$110,224.64	
Bee Line Water Association (Sep 23, 2014; System Improvements).....	\$54,157.94	
Dover, City of (23-Jul-10; Water Intake project).....	\$194,063.00	
Goose Lake Reservoir Corp.....	\$13,025.00	
Idaho Ground Water Appropriators (IGWA).....	\$0.00	
North Side Canal Company (16-sep-16; canal rehab project).....	\$3,353,907.39	
Producers Irrigation Company (23-May-16; new wells).....	\$70,872.50	
St. Johns Irrigating Company (14-July-2015; pipeline project).....	\$334,109.90	
TOTAL LOANS AND OTHER FUNDING OBLIGATIONS		\$11,271,591.09
Uncommitted Funds		\$907,037.29
TOTAL		\$31,338,016.13

(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 November 30, 2017
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
Bonnors 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 Tamar 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 - Whitney 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	Principal
	Loaned	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

Memorandum

To: Idaho Water Resource Board
From: Cynthia Bridge Clark
Date: January 10, 2018
Re: Boise River Feasibility Study



REQUIRED ACTION: No action is required at this time.

On October 24, 2017, the Idaho Water Resource Board (IWRB) passed a resolution to partner with U.S. Bureau of Reclamation (Reclamation) to complete a feasibility study of new surface water storage options on the Boise River (Study). The study will incorporate results of previous studies, including analyses recently performed by the U.S. Corps of Engineers of a large raise of Arrowrock Dam. Reclamation will evaluate potential smaller raises of the existing dams on the Boise River including Anderson Ranch, Arrowrock and Lucky Peak Dams to provide additional water supply and flood control to the Treasure Valley.

The total study cost is estimated to be \$6 million. Costs of the study will be shared equally between Reclamation and the IWRB and the IWRB's share may be provided in part as in-kind services. IWRB staff is currently coordinating with Reclamation to finalize a Memorandum of Agreement (MOA) between the IWRB and Reclamation to complete the study.

Roland Springer, Manager of Reclamation's Snake River Area Office, will provide an update on the progress of the study. Topics will include the following:

- MOA status
- Update on recent planning activities
- Tasks and schedule for 2018
- Overall project schedule

RECLAMATION

Managing Water in the West

Boise System Feasibility Study Status Update to IWRB



January 25, 2018



U.S. Department of the Interior
Bureau of Reclamation

Boise Feasibility Study Updates

- **Funding Availability for First Year**
- **Strategy for Activities in First Year**
- **Planning Session / Internal Kickoff Meeting 1/17/2018**
- **Schedule for First Year**
- **Status of MOA Between IWRB and Reclamation**
- **Reclamation's Authority to Perform Feasibility Study**

RECLAMATION

Boise Feasibility Study Schedule – 2018

TASK		Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	Develop Field Exploration Request (FER)												
	Document Review (Lucky Peak)												
	Preliminary Risk Analysis (Lucky Peak)												
	Design Data Collection												
	Site Visit												
	Screening Level Sketches and Designs												
	Dam Raise Sensitivity Evaluation												
	Develop Service Agreements for FY19+												
	Prepare Technical Report of Findings												
	Frequency Floods and Flood Routings (may begin in 2018)												
LiDAR and Topography													
	Finalize SOW for Data Collection (UC IDIQ)												
	Finalize SOW for Analysis (PN A/E IDIQ)												
	Award Task Order for Data Collection (UC IDIQ)												
	Award Task Order for Analysis (PN A/E IDIQ)												
	Data Collection												
	Analysis												
Go / No-Go Discussions and Decisions													

RECLAMATION

Questions

Points of Contact

Area Manager:

Roland Springer

Snake River Area Office

208-383-2246 (work)

rspringer@usbr.gov

Study Manager:

Selena Moore

Program Manager, SRAO Project Management Program

Snake River Area Office

208-383-2207 (work)

samoore@usbr.gov

RECLAMATION

Memorandum

To: Idaho Water Resource Board
From: Wesley Hipke
Date: January 12th, 2018
Re: ESPA Managed Recharge Program Status Report



I. 2017/2018 Recharge Season Status

IWRB Water Available for Recharge:

- Storage Water donated by the Surface Water Coalition (SWC): 61,100 af
- Natural Flow (NF)
 - Snake River - Water Rights
 - 01-7482 (1,200 cfs)
 - 01-7142 (2,831 cfs)
 - 01-10609 (3,738 cfs)
 - Big/Little Wood Rivers - Water Right 37-7054 (250 cfs)

IWRB Recharge 2017/2018:

A summary of IWRB recharge for the 2017/2018 season is provided in Table 1 and Figure 1 as of January 11th, 2018.

Table 1. IWRB Recharge Summary – 2017/2018*						
System	Area	Start of Recharge	Duration of Recharge (Days)	Median Recharge Rate (cfs)	Current Recharge Rate (cfs)	Volume Recharged (Acre-feet)*
Snake River	Lower Valley	Sept 14 th	120	385	269	101,461
	Upper Valley	Aug 30 th	135	364	94	102,691
	Snake River Total		135	749	463	204,151
Big/Little Wood River	Big Wood Canal Co.	Nov 30 th – Dec 31 st	32	19	0	1,307
ESPA TOTAL			135	768	463	205,458

* As of Jan 11th, 2018 – IWRB recharge data are preliminary and subject to change.

Upper Valley Summary:

IWRB Recharge started above Minidoka Dam on August 30th and has continued through the winter. Recharge in the Upper Valley began early due to the donation of 61,100 af of storage water from the Surface Water Coalition (SWC). The SWC received the storage water as part of the SWC's settlement agreements with various parties: 50,000 af from the Idaho Ground Water Appropriators, 8,500 af from the Water Mitigation Coalition, and 2,600 af from cities party to the agreement. Most of the 61,100 af was recharged in the Upper Valley by the first part of November.

The Recharge Program was notified on October 31st that the IWRB's natural flow water right was in priority above Minidoka Dam. The IWRB has active contracts with eight entities in the Upper Valley to conduct recharge. Canal partners conducting recharge at the time were able to continue using the natural flow right after the full volume of donated storage water had been recharged.

The maximum daily IWRB recharge in the Upper Valley to date has been 966 cfs in mid-October. Since that time, IWRB recharge diversions have steadily decreased in the Upper Valley due to canal maintenance and freezing conditions. As of December 19th, IWRB recharge in the Upper Valley has been limited to the Fremont-Madison Irrigation District, who has recharged continuously since August 30th. IWRB recharge diversions are expected to increase once temperatures rise and canals are clear of snow, freezing conditions are no longer a concern, and the IWRB water rights are still in priority.

Lower Valley Summary:

IWRB Recharge started below Minidoka Dam on September 14th with SWID recharging some of the donated storage water. The Recharge Program was informed that the IWRB water rights were in priority below Minidoka Dam on October 16th.

SWID switched from recharging the storage water to recharging natural flow on October 16th after having recharged a total of 2,241 af of storage water. SWID continued recharging natural flow until November 13th at which time the shutdown to conduct pipeline winterization and pump station repair. SWID plans to resume recharge activities after construction of the pump station and other pipeline buildings are complete.

AFRD2 and TFCC began recharging continuously on October 25th and 30th, respectively, once fall canal maintenance was complete on their canals. TFCC has recharged approximately 30 cfs continuously since beginning recharge.

AFRD2 recharged an average of 800 cfs until mid-December, utilizing the MP31 and Shoshone recharge sites. AFRD2 stopped delivering water to the Shoshone site on December 11th due to ice issues at the Dietrich Hydropant. Recharge was further reduced to almost 140 cfs due to ice

related problems at the MP28 Hydroplant that began on December 24/25th. AFRD2 has since been able to increase recharge flows up almost 340 cfs.

The median recharge in the Lower Valley is 385 cfs with the maximum delivers occurring in the first part of November at 907 cfs.

Big/Little Wood River Summary:

On the Big/Little Wood River the watermaster determined that flow past Magic Dam was available for recharge under IWRB water right 37-7842. The Big Wood Canal Company started recharging on November 30th utilizing the Devil's Headgate site. Relatively small volumes of water were also recharged utilizing the Shoshone site and to test the new Richfield site. To maximize recharge opportunities, the IWRB's recharge water was delivered to additional locations in 2017 through a Water Supply Bank lease/rental which expired on December 31, 2017. A new application was filed with the Water Supply Bank, but has not yet been approved by the Idaho Department of Water Resources (IDWR). As a result, IWRB recharge was stopped on December 31, 2017. Staff is coordinating with IDWR in order to resume recharge as soon as possible.

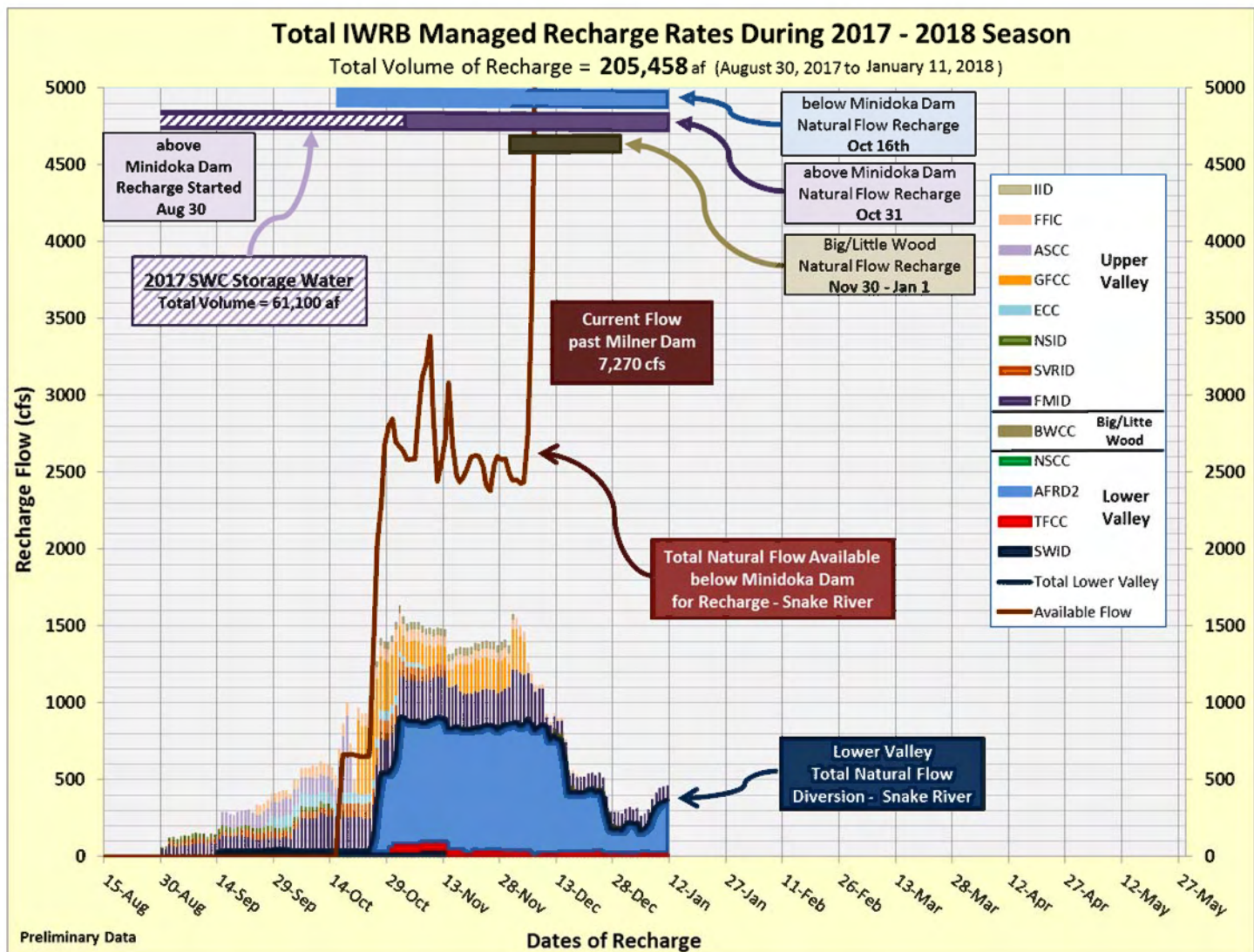


Figure 1. IWRB 2017/2018 ESPA Managed Recharge.

II. ESPA Recharge Program Projects and Buildout Activities

A number of projects have been undertaken to enhance the IWRB's ability to recharge in the ESPA. The following summary is a brief overview of the projects the IWRB is currently pursuing to meet the managed recharge goal of an average 250,000 af/yr.

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 and prioritize delivery of the IWRB's recharge water as compensation for financial assistance from the IWRB.

ESPA Managed Recharge Infrastructure Project Summary

The IWRB has allocated over \$14 million dollars from 2013 through fiscal year 2018 for infrastructure improvements to increase managed recharge throughout the ESPA. A summary and status of the current projects in the Lower Valley and Upper Valley are included in Tables 2 and 3, respectively.

IWRB staff is focused on the development of additional recharge capacity throughout the ESPA. In the Lower Valley, this includes development of recharge capacity on the North Side Canal system below Wilson Lake, investigation of potential recharge sites along the Milner-Gooding canal, and pursuit of other opportunities as they arise. In the Upper Valley, design and construction of recharge sites or infrastructure to facilitate recharge are planned for this fall based on the findings of several IWRB sponsored investigations. A summary of the projected projects is provided in Tables 4 and 5 for the Lower and Upper Valleys, respectively.

Table 2. Current IWRB ESPA Managed Recharge Projects - Lower Valley

IWRB Partner	Project Name	Project Type	Status	Approved Funds	Scheduled Completion	Description / Key Items
AFRD2	Dietrich Drop Hydro Plant Winter By-pass	Design / Construction	On Hold	\$1,500,000	2018	Winter recharge by-pass of the Dietrich Drop Hydro plant <ul style="list-style-type: none"> • ENEL is in the process of developing plans to isolate the hydro plant to enable winter-time delivery of recharge water.
North Side CC	Hydro Plants (4) Improvements for Winter By-pass	Design / Construction	Active	\$5,074,581	2018	Winter recharge by-pass of the hydro plants between the Milner Pool and Wilson Lake <ul style="list-style-type: none"> • 100% Design complete - Feb 2018 • Submittal to FERC Regional office – Feb 2018 • Non FERC related construction complete – Mar 2018 • Contractor hired - Jun 2018 • Project complete – Nov 2018
Southwest ID	Buckhorn Pipeline	Construction	Active	\$600,000	Feb 2018	\$15 million dollar new pipeline - IWRB funding recharge related infrastructure <ul style="list-style-type: none"> • Pipeline complete – Summer 2017 • Construction of Buildings - Jan 2018
Big Wood CC	Richfield Recharge Site	Construction	Active	\$150,000	Spring 2018	Construction and development of the Richfield Site <ul style="list-style-type: none"> • Construction and development of site – Spring 2018 • Groundwater Monitoring plan submittal to DEQ – Dec 2017 • Monitor Well drilled for Hydrology & site – Nov 2017 • Dept. of State Lands lease application – Oct 2017

Table 3. Current IWRB ESPA Managed Recharge Projects - Upper Valley

IWRB Partner	Project Name	Project Type	Status	Approved Funds	Scheduled Completion	Description / Key Items
South Fork canal companies	South Fork Managed Recharge Site Evaluations	Evaluation	Active	\$166,000	Oct 2017	Working with Great Feeder, Farmers Friend, & Enterprize canals to evaluate potential recharge sites in the South Fork area <ul style="list-style-type: none"> • Infiltration testing complete – Nov 2017 • Report complete – Jan 2018
Fremont-Madison ID	Egin Lakes Phase II	Construction	Active	\$580,000	Summer 2018	Construction of Egin Lakes Phase II Recharge Capacity Expansion <ul style="list-style-type: none"> • Submittal of EA/Evaluation – Oct 2017 <ul style="list-style-type: none"> ◦ Est. BLM approval – Spring 2018 • Construction of weir on Recharge Canal – Fall 2017 • Construction on new recharge areas – after BLM approval
New Sweden ID	New Sweden Site Testing & Groundwater Monitoring Plan	Evaluation of Sites	Active	\$200,000	Fall 2017	Preliminary survey of the New Sweden system and hydraulic modeling <ul style="list-style-type: none"> • Approved \$200,000 for testing of sites and a Groundwater Quality Monitoring Program – May 2017 • Spring 2018 – Testing and evaluation of potential recharge sites
Butte Market Lake Co.	Managed Recharge Canal System Evaluation	Evaluation	Active	\$39,000	Oct 2017	Evaluation of potential recharge sites and canal infrastructure improvements <ul style="list-style-type: none"> • Report – Jan 2017
Woodville CC	Managed Recharge Site Evaluation	Evaluation	Active	\$17,000	Oct 2017	Evaluation of potential recharge site <ul style="list-style-type: none"> • Report – Jan 2017

Table 4. Projected Lower Valley - IWRB ESPA Managed Recharge Projects

IWRB Partner	Project Name	Project Type	Status	Approved Funds	Scheduled Completion	Description / Key Items
AFRD2	MP 28 Hydro Plant Tailbay	Design / Construction	Planning	None at this time	Dec 2018	Isolating tailbay and improving forebay of the hydro plant during winter recharge <ul style="list-style-type: none"> • Minor Modification to current tailbay and forebay – Oct 2017 • Working with AFRD2 and Hydro Plant owner considering various long-term options - Jan 2018
AFRD2	New Recharge Site Identification	Survey	Planning	None at this time	Winter 2018	Preliminary Survey and analysis to determine potential recharge site at MP29, MP34, and others <ul style="list-style-type: none"> • Survey Completed - Nov 2017 • Processed Data – Spring 2018
North Side CC	New Recharge Site Development and Identification	Survey, Design / Construction	Planning	None at this time	2018	Design, Construction, and development of a Groundwater Quality Monitoring Program for site(s) below Wilson Lake <ul style="list-style-type: none"> • Alternative Analysis – Dec 2017 • NSCC meeting to discuss Alternatives – Jan 2018 • Design and construction of Wilson Canyon site - 2018 • Design and construction of other site(s) – 2018/2019

Table 5. Projected Upper Valley - IWRB ESPA Managed Recharge Projects

IWRB Partner	Project Name	Project Type	Status	Approved Funds	Scheduled Completion	Description / Key Items
South Fork canal companies	South Fork Managed Recharge Site Constructions	Construction	Planning	None at this time	2018	Design and Construction of proposed recharge sites <ul style="list-style-type: none"> • Soliciting recharge sites development projects from the various canal companies
Butte Market Lake Co.	Managed Recharge Canal System Evaluation	Construction	Planning	None at this time	Fall 2018	Design and Construction of proposed recharge sites <ul style="list-style-type: none"> • Soliciting recharge sites development projects
New Sweden ID	Managed Recharge Canal sites	Construction	Planning	None at this time	Fall 2018	Design and Construction of proposed recharge sites <ul style="list-style-type: none"> • Construction of a recharge site along with corresponding Groundwater Monitoring Plans and monitor wells – Fall 2018



ESPA Managed Recharge Program Update

Idaho Water Resource Board

Wesley Hipke, P.G.

January 25, 2018



ESPA Aquifer Recharge Program

- IWRB ESPA Recharge Update - 2017/2018
- IWRB Project Updates





IWRB Recharge Summary – 2017/2018*

(as of Jan 23, 2018)

System	Area	Start of Recharge	Duration Recharge (Days)	Median Recharge Rate (cfs)	Current Recharge Rate (cfs)	Volume Recharged (Acre-feet)*
Snake River	Lower Valley	Sept 14 th	132	416	475	111,688
	Upper Valley	Aug 30 th	147	299	163	104,218
	Snake River Total		147	715	616	215,905
Big/Little Wood River	Big Wood Canal Co.	Nov 30 th – Dec 31 st	32	19	0	1,307
ESPA TOTAL			147	768	616	217,212



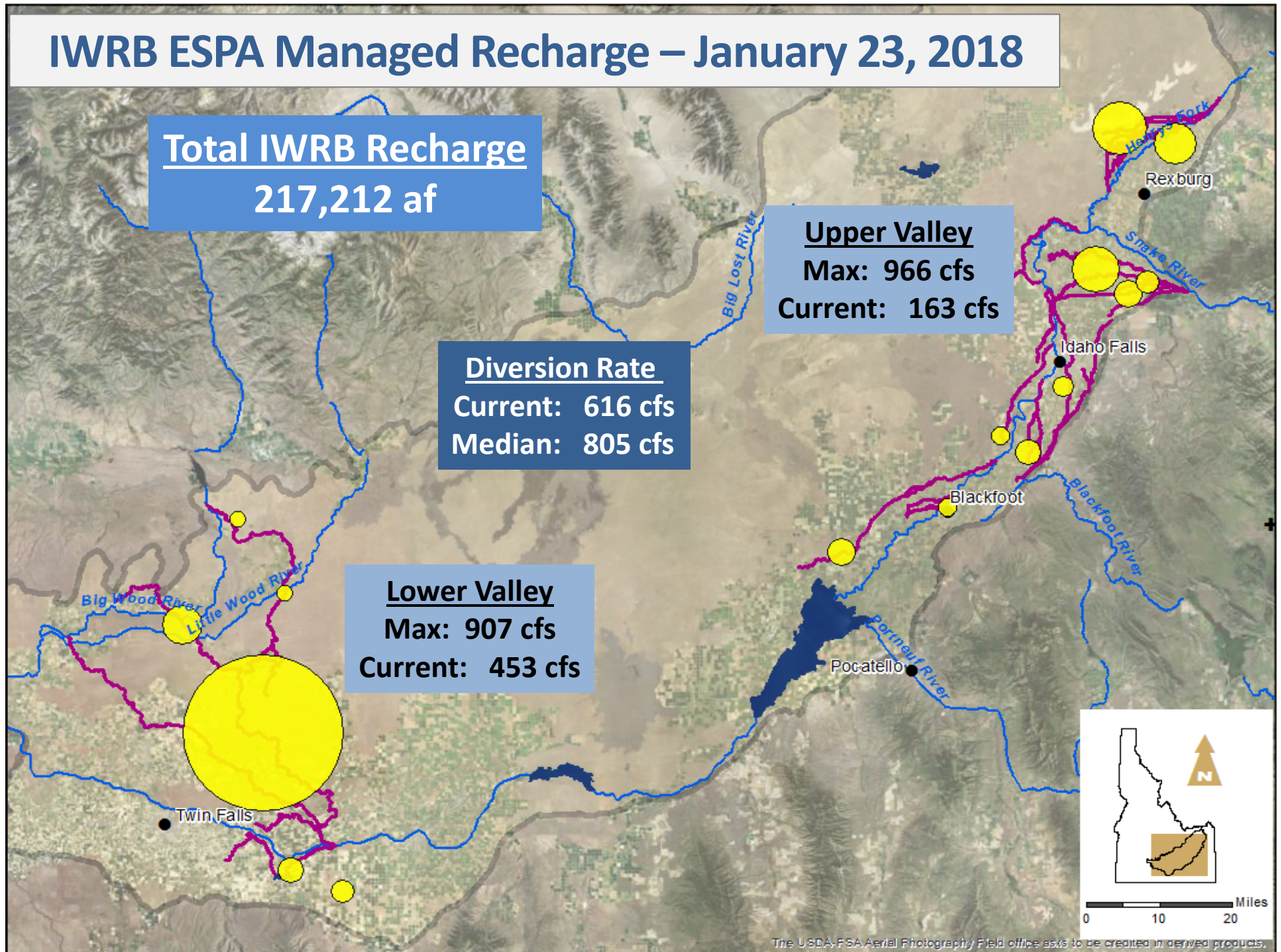
IWRB ESPA Managed Recharge – January 23, 2018

Total IWRB Recharge
217,212 af

Upper Valley
Max: 966 cfs
Current: 163 cfs

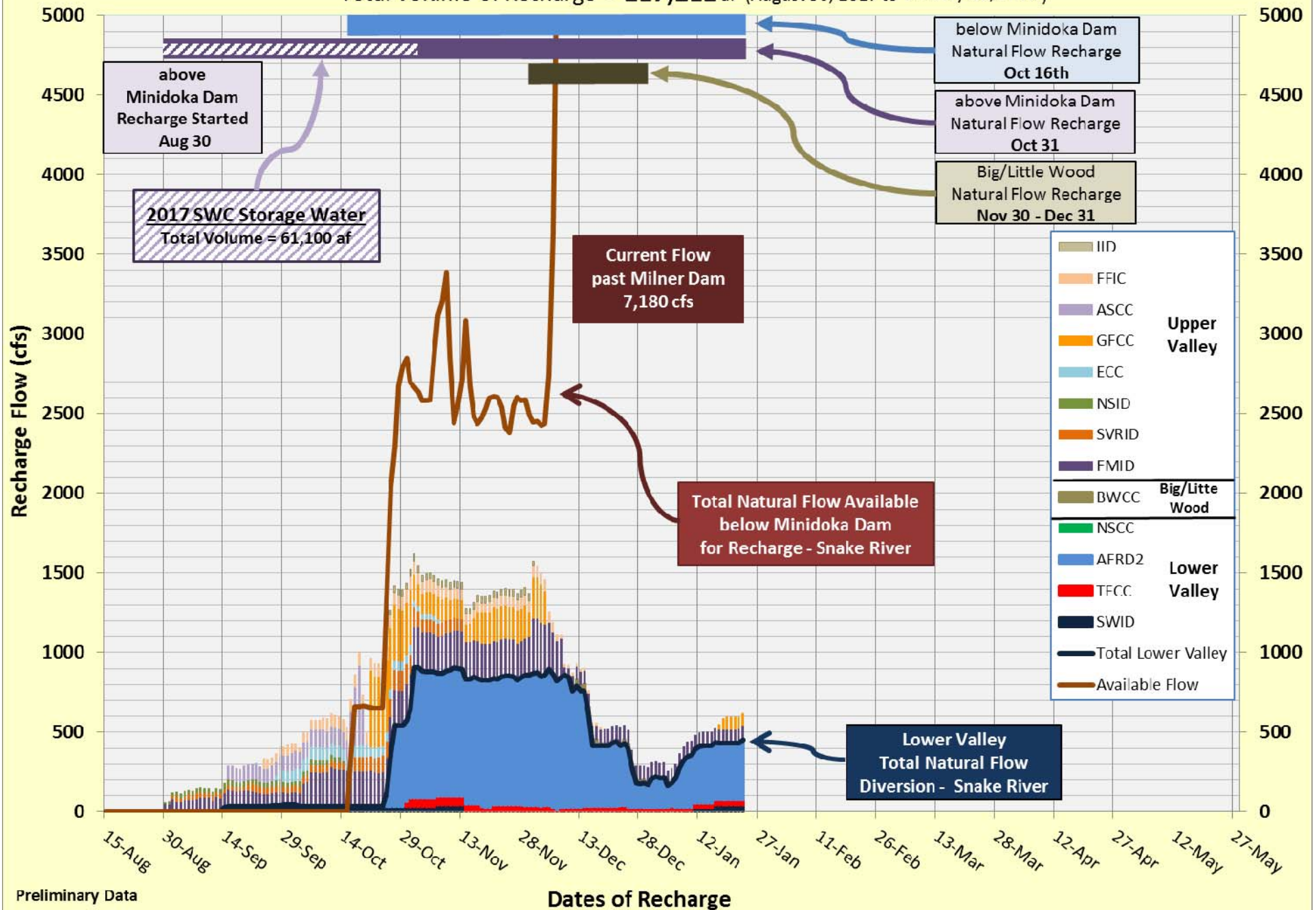
Diversion Rate
Current: 616 cfs
Median: 805 cfs

Lower Valley
Max: 907 cfs
Current: 453 cfs

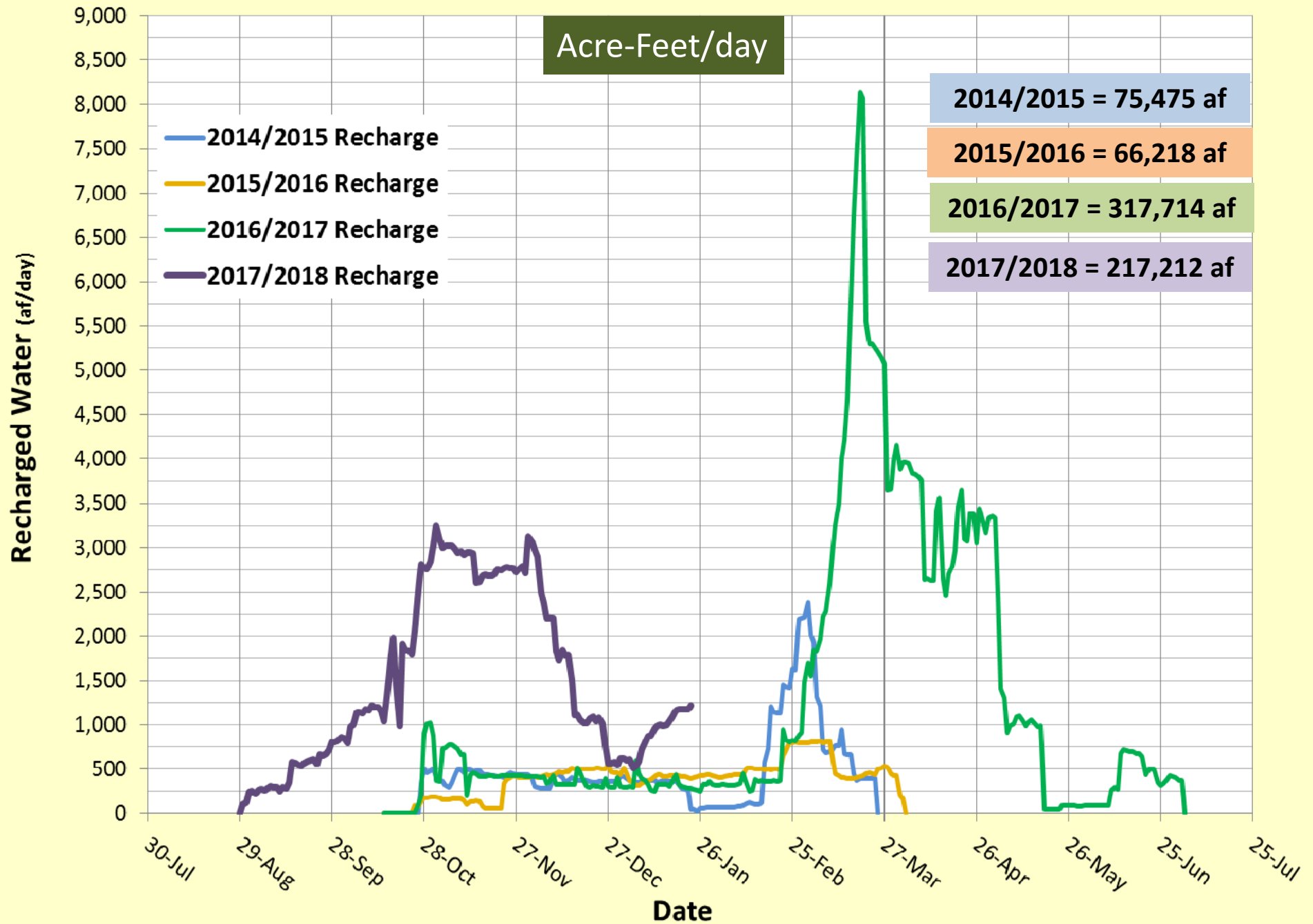


Total IWRB Managed Recharge Rates During 2017 - 2018 Season

Total Volume of Recharge = **217,212 af** (August 30, 2017 to January 23, 2018)

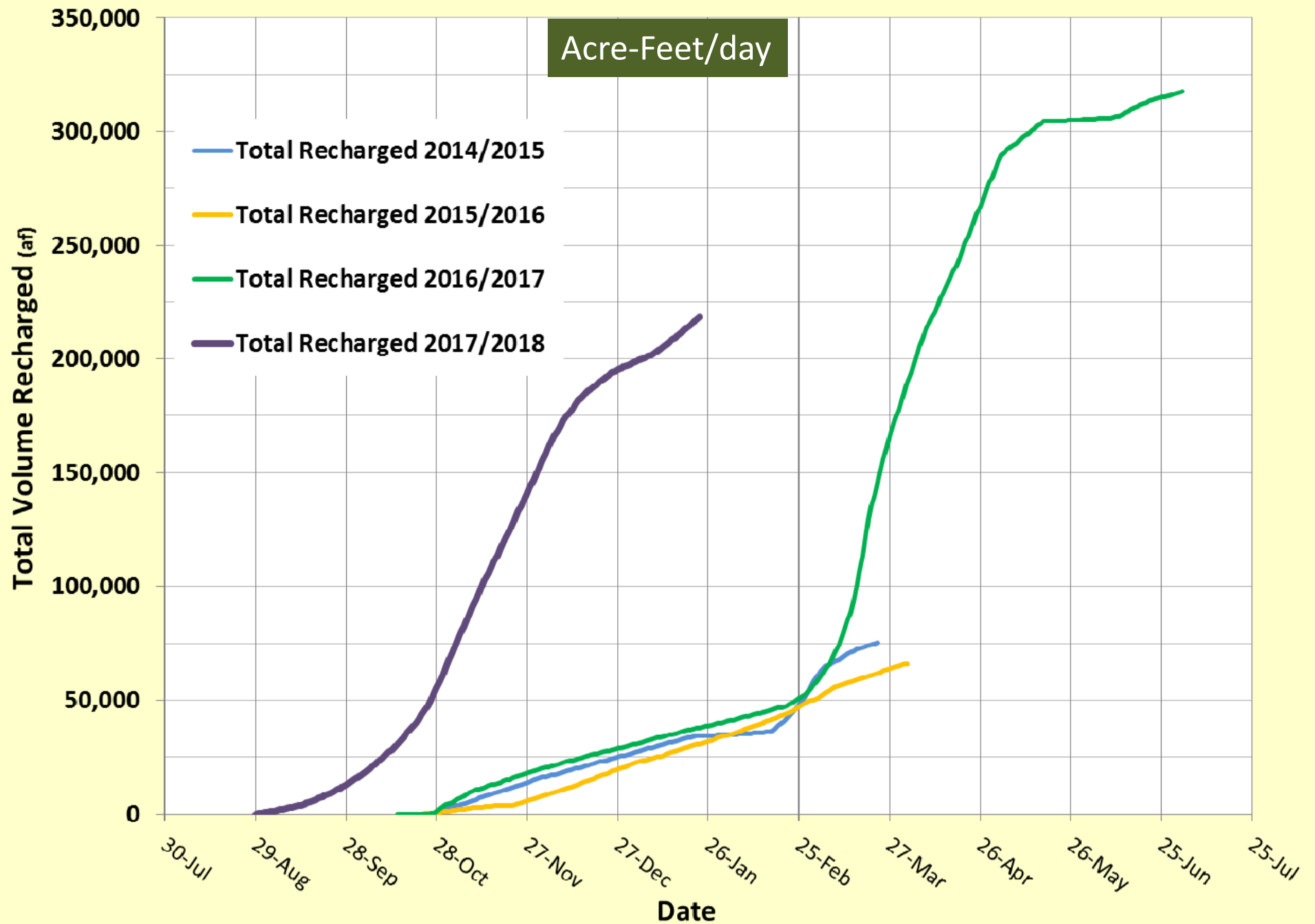


ESPA Managed Recharge - Daily Recharge



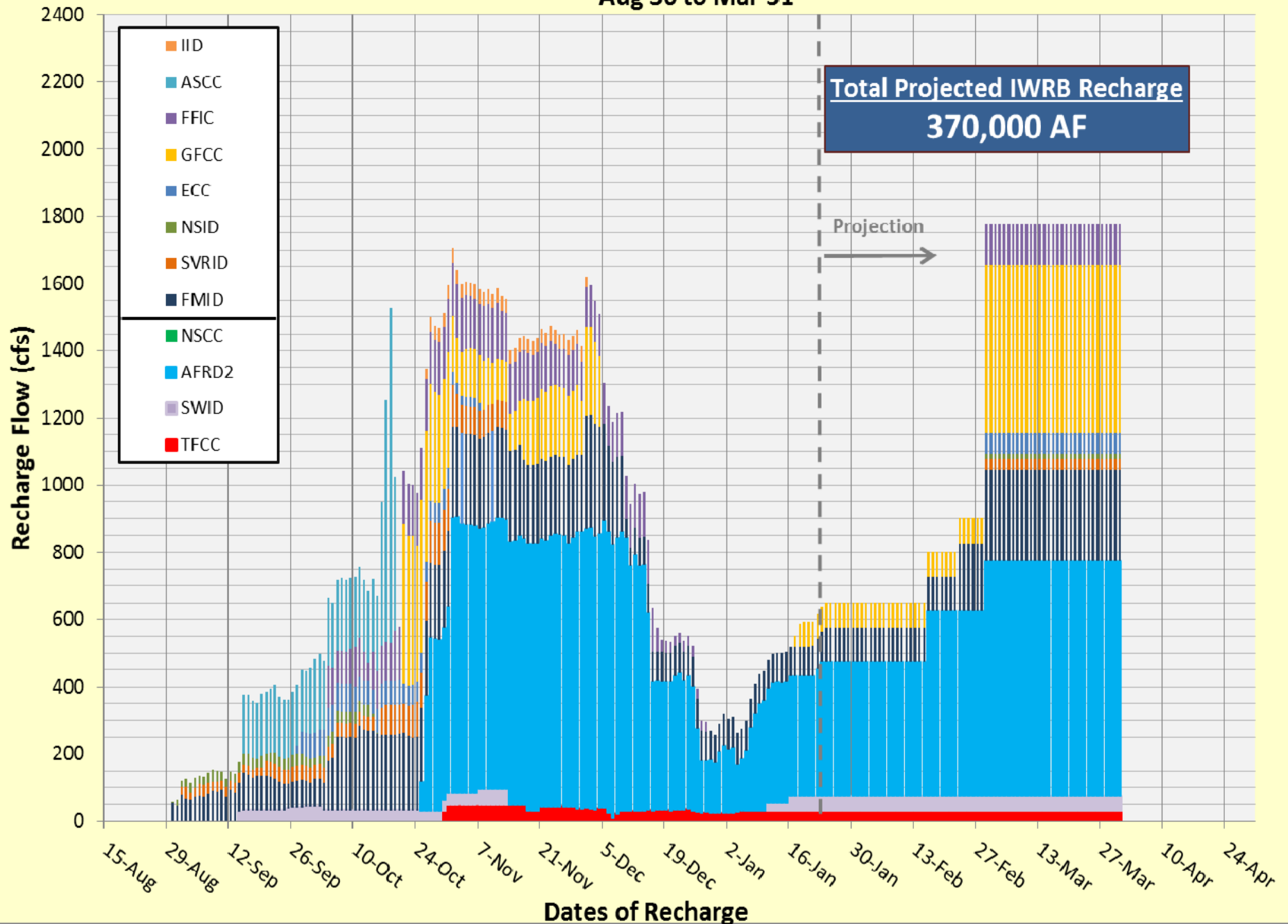
ESPA Managed Recharge - Cumulative

Acre-Feet/day



Projected IWRB Recharge - During 2017/2018

Aug 30 to Mar 31



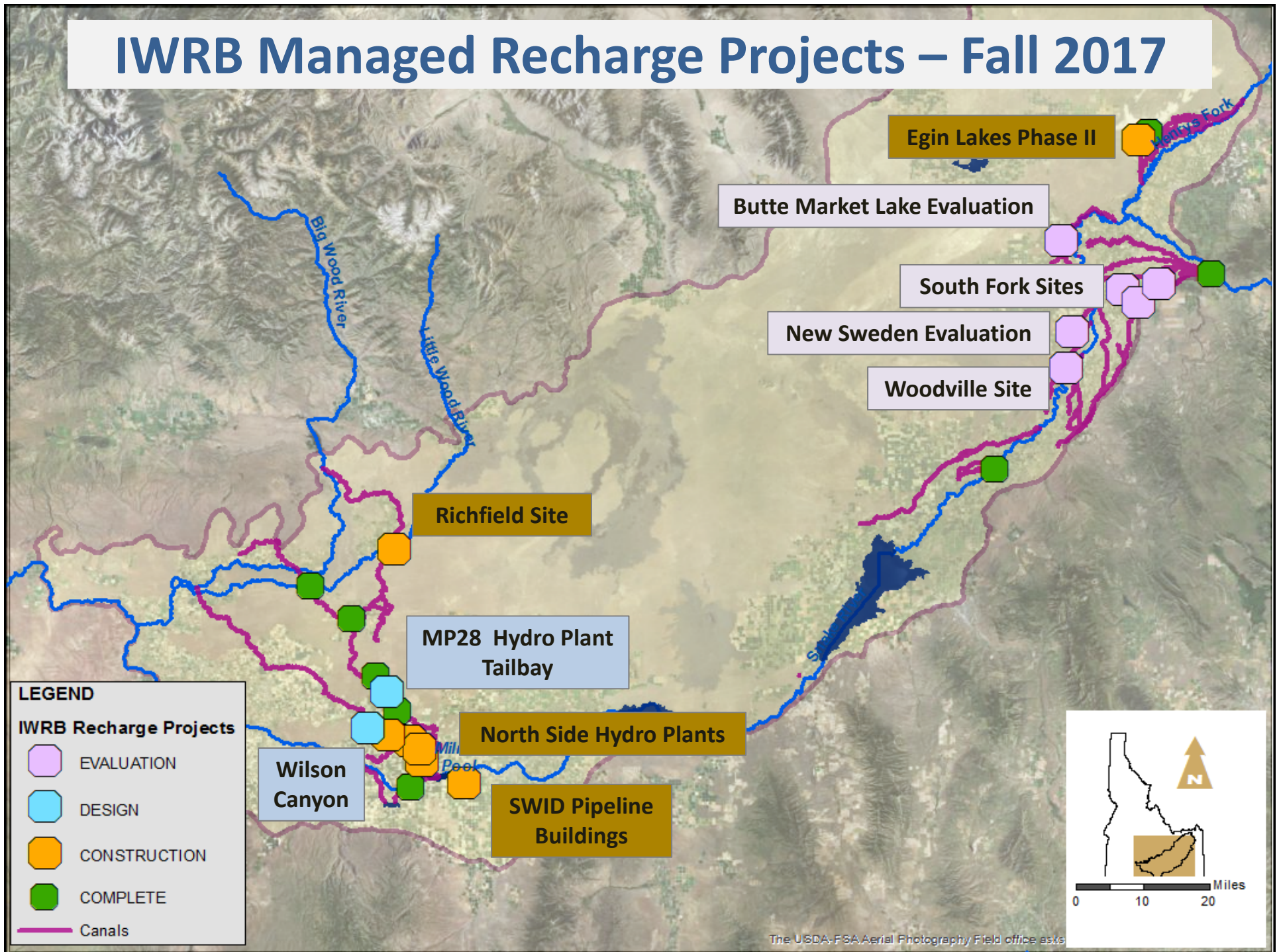


ESPA Aquifer Recharge Program

- IWRB ESPA Recharge Update - 2017/2018
- IWRB Project Updates

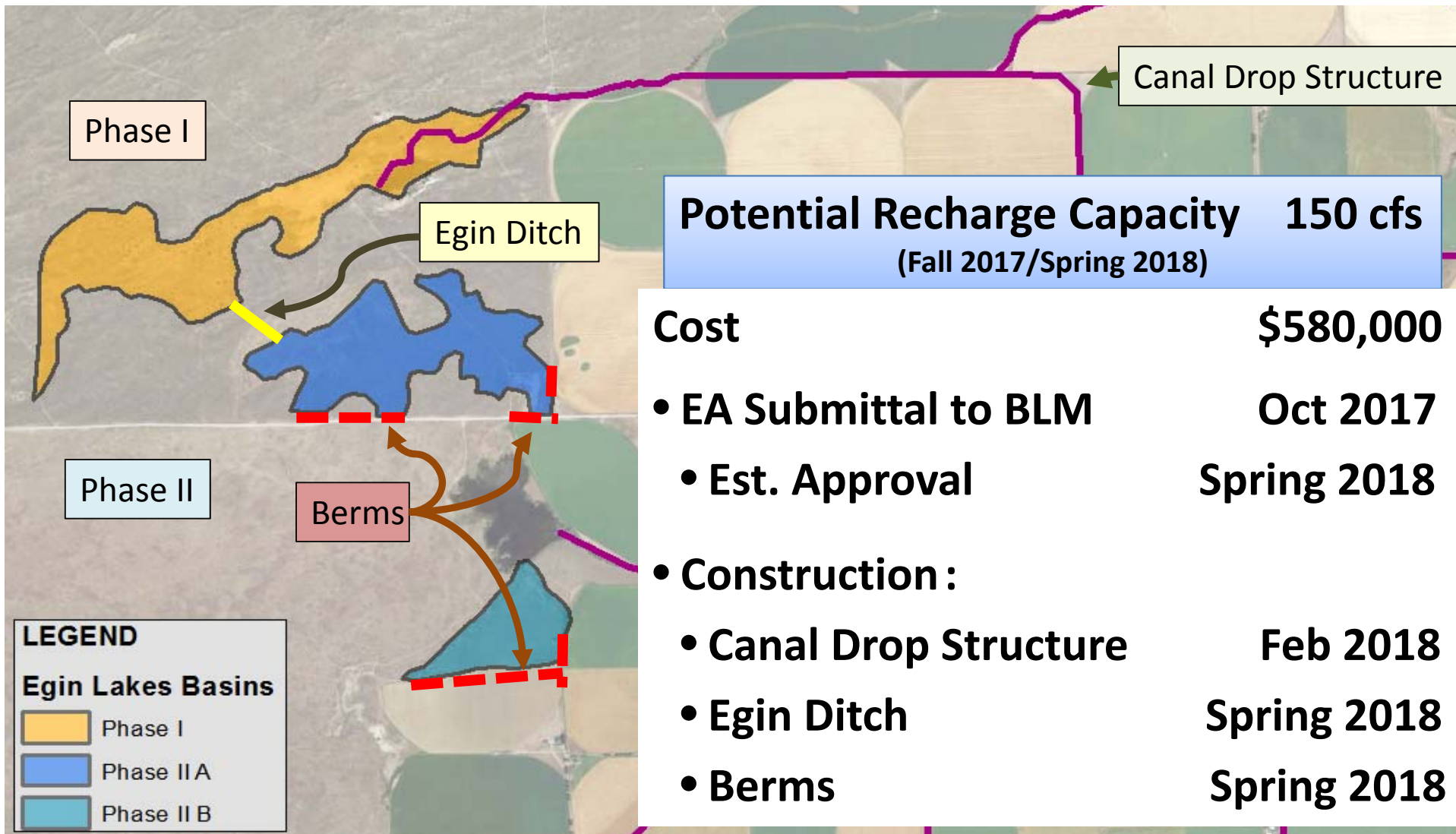


IWRB Managed Recharge Projects – Fall 2017





Egin Lakes Phase II



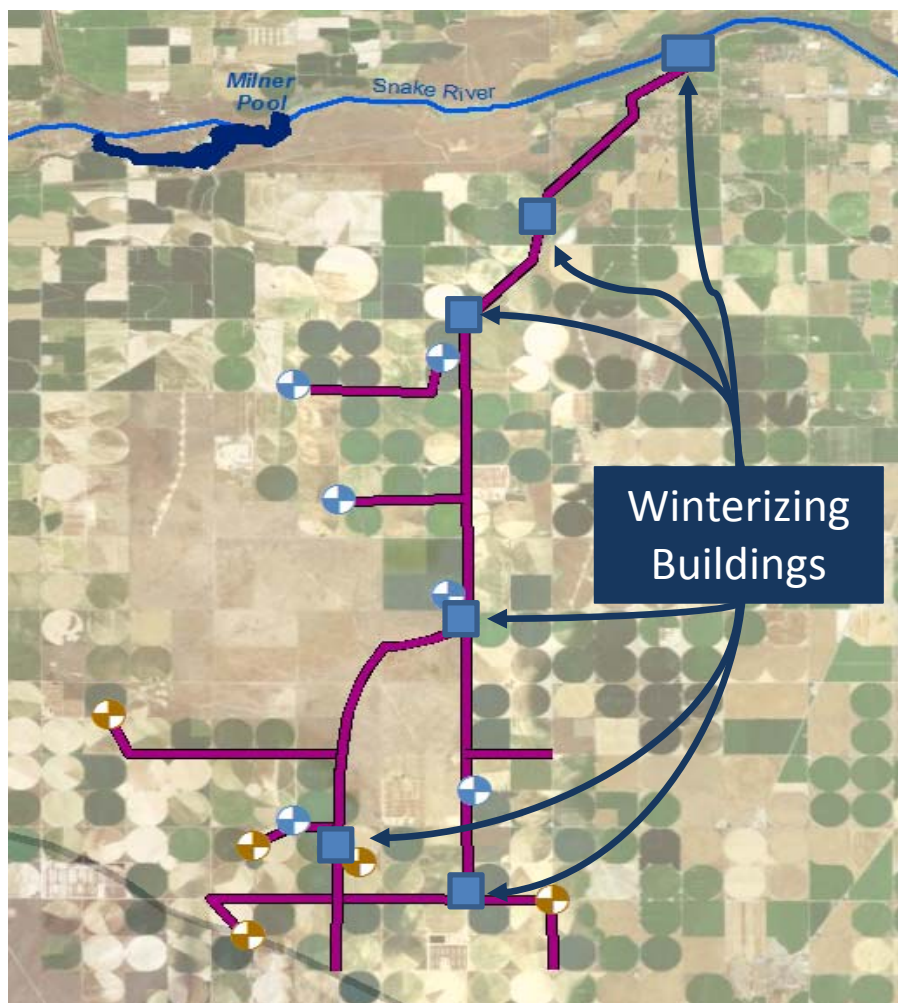


Egin Lakes Phase II



Recharge Canal Drop Structure – Jan 11, 2018

SWID New Pipeline Project



Recharge Capacity
(2017/2018)

50 cfs

- **Pipeline Complete** **June 2017**
- **Pipeline Cost** **\$10,064,335**
- **IWRB Recharge Portion** **\$600,000**
- **Construction of Buildings** **Feb 2018**
- **Currently Recharging** **45 cfs**



SWID New Pipeline Project



Booster Station #2 Building Construction – Jan 11, 2018





North Side Canal Hydro-Bypass Projects

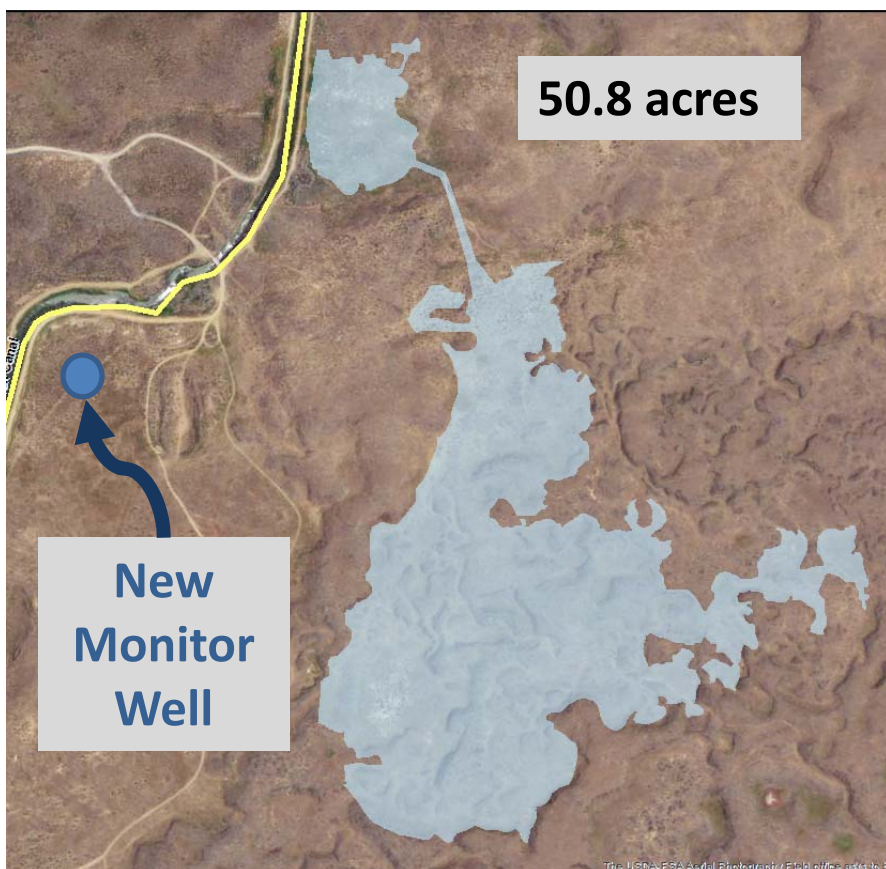


Recharge Capacity
130 cfs
(2017/2018)

- 90% design completed Jan-Feb 2017
- FREC Regional Office Feb 2018
- Work to be completed Mar 2018
 - Bridge Caisson
 - Wilson Lake Dam infrastructure
- Major Construction Bids May 2018
- Construction Complete Nov 2018



Richfield Site – Dietrich Canal



Potential Recharge Capacity
100 cfs - Big/Little Wood Rivers
(Fall/Winter 2017/2018)

- **Monitoring Plan** **Dec 2017**
 - IDEQ Review **Jan-Feb 2018**
- **Design** **Jan 22, 2018**
- **Construction** **Jan/Feb 2018**
- **Monitor Wells** **Winter 2017/2018**
 - First Monitor Well – Hydrology **Nov 2017**
- **State Land Easement** **Feb-Mar 2018**



MP 28 Hydro Plant - Tailbay



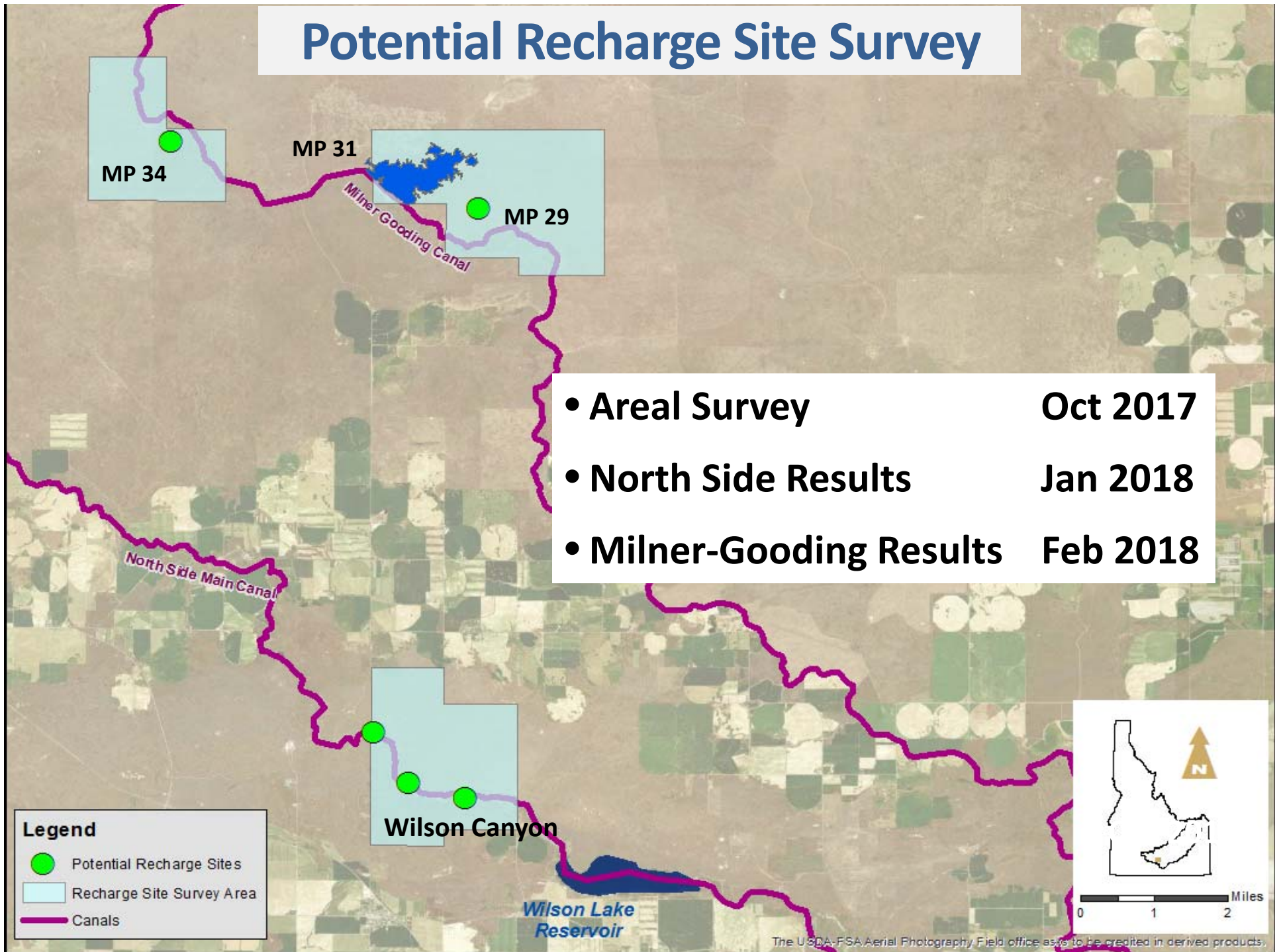
Milner-Gooding Canal

(2017/2018)

- **Minor Infrastructure Improvements** **Oct 2017**
- **Survey** **Oct 2017**
- **Delivery Option/
Cost Estimates:** **Spring 2018**



Potential Recharge Site Survey



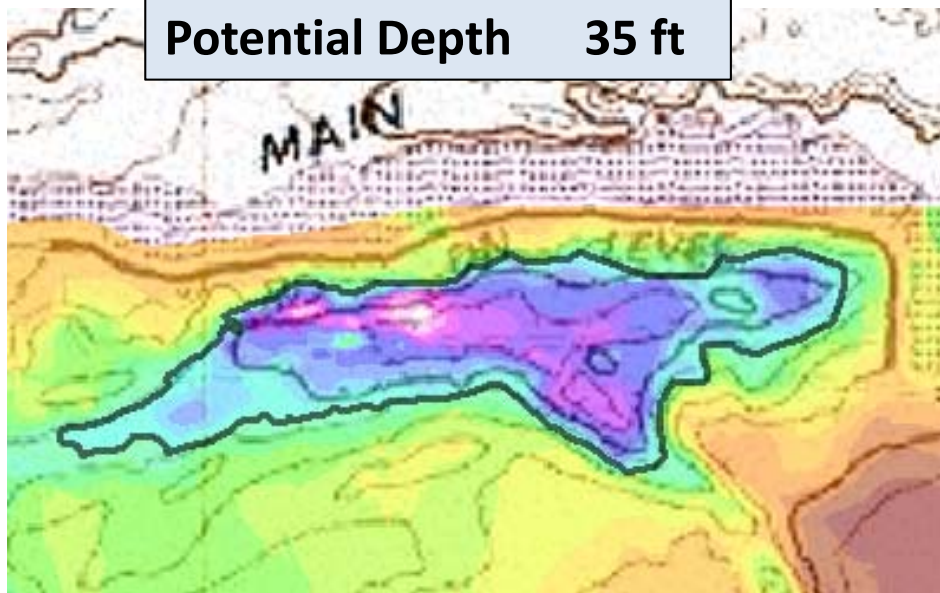


North Side Canal - Wilson Canyon Site

Size	19 ac
Potential Depth	35 ft

Recharge Capacity	50 - 200 cfs
(Fall/Winter 2017/2018)	

- Areal Survey Oct 2017
- 4 Delivery Option/
Cost Estimates: Jan 2018
- Design Spring 2018
- Construction: Fall 2018
- BLM Easement Fall 2018



North Side Canal - Wilson Canyon Site

Delivery Options



4. Reservoir Diversion - \$2,570,000

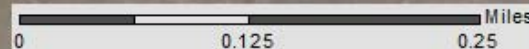
Options 4

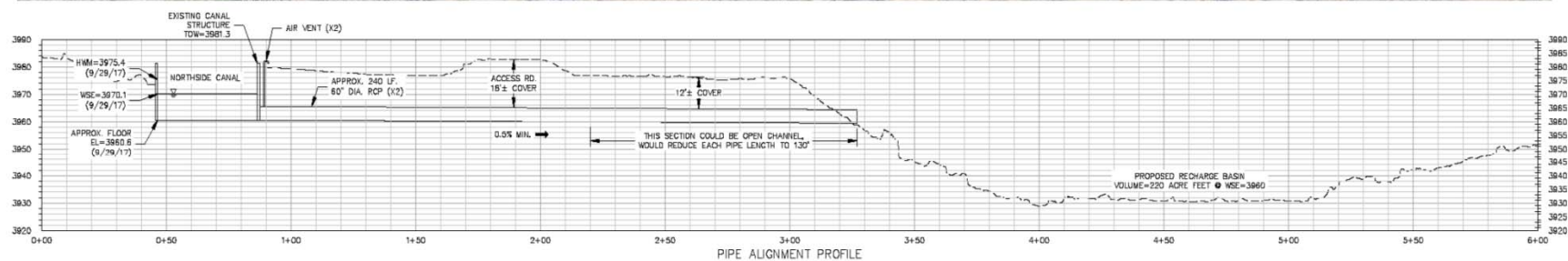
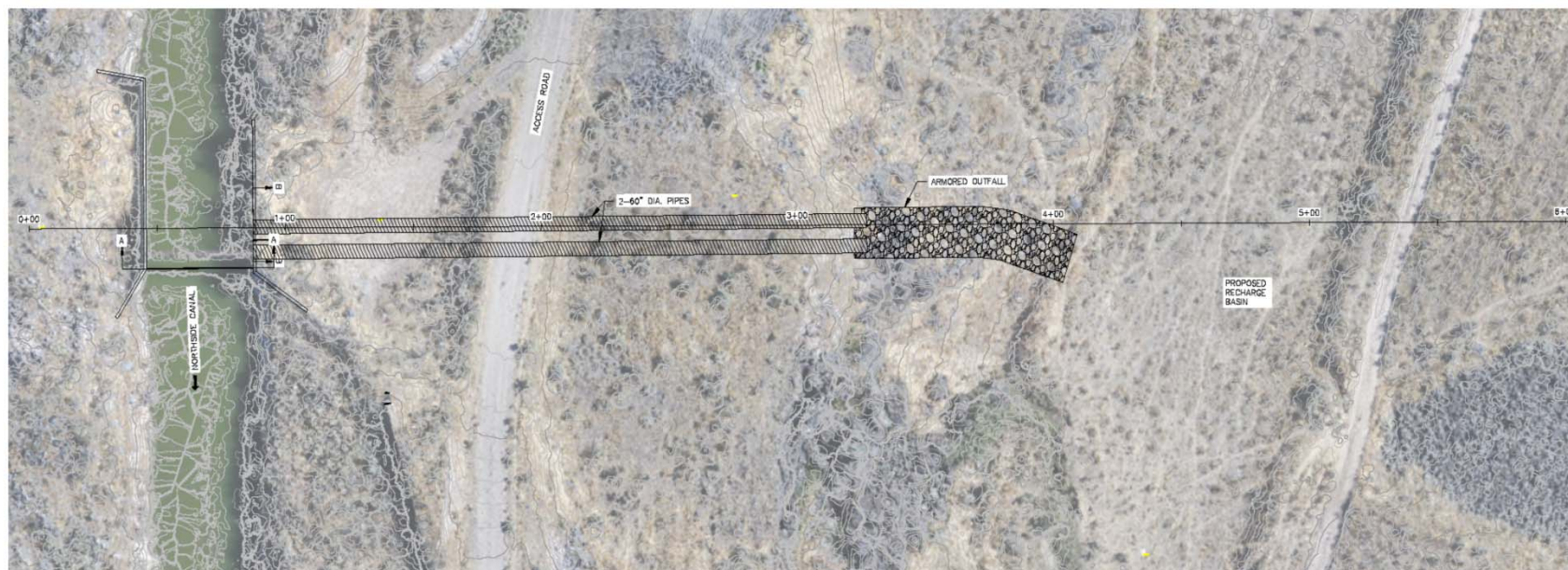
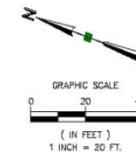
Options 1-3

- 1. Check Board Diversion - \$1,170,000**
- 2. Slide Gate Diversion - \$1,560,000**
- 3. Inverted Siphon - \$1,120,000**

Legend

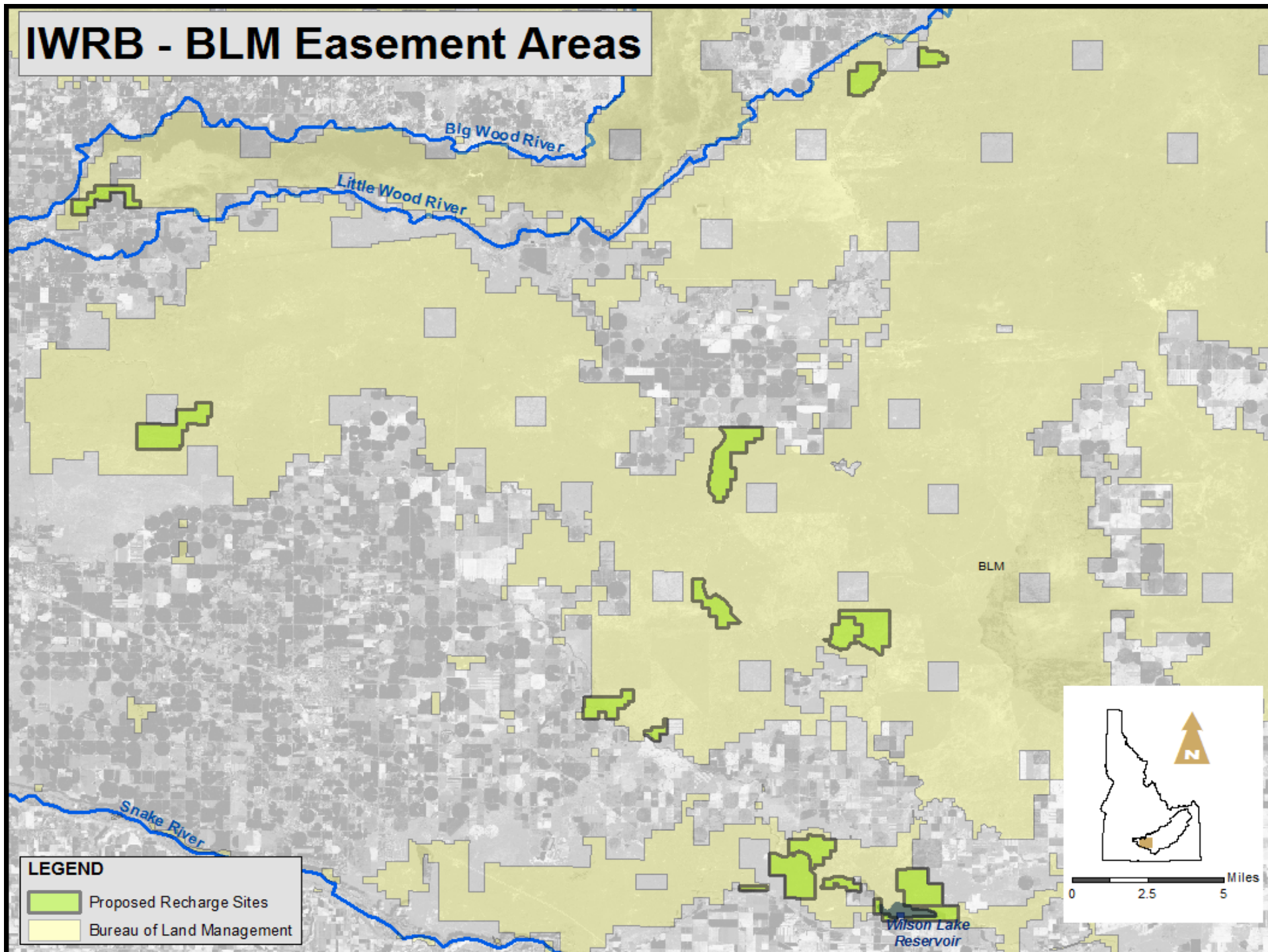
-  Potential Recharge Sites
-  North Side Canals





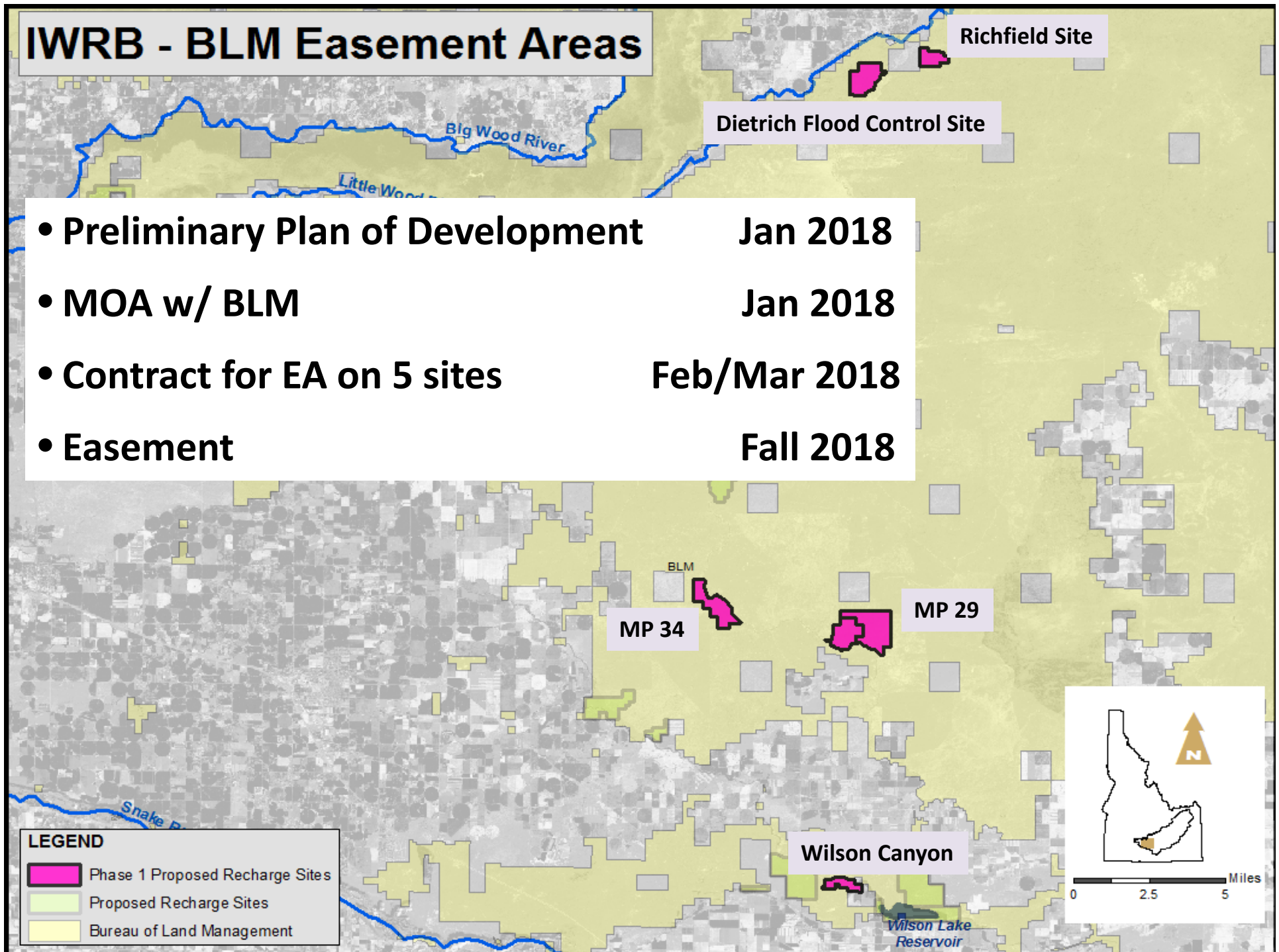
DESIGN PARAMETERS:
Q_{TOTAL}=200 CFS
MAX. PIPE VELOCITY=9.0 FT/S
TOTAL PIPE LENGTH=480 LF

IWRB - BLM Easement Areas

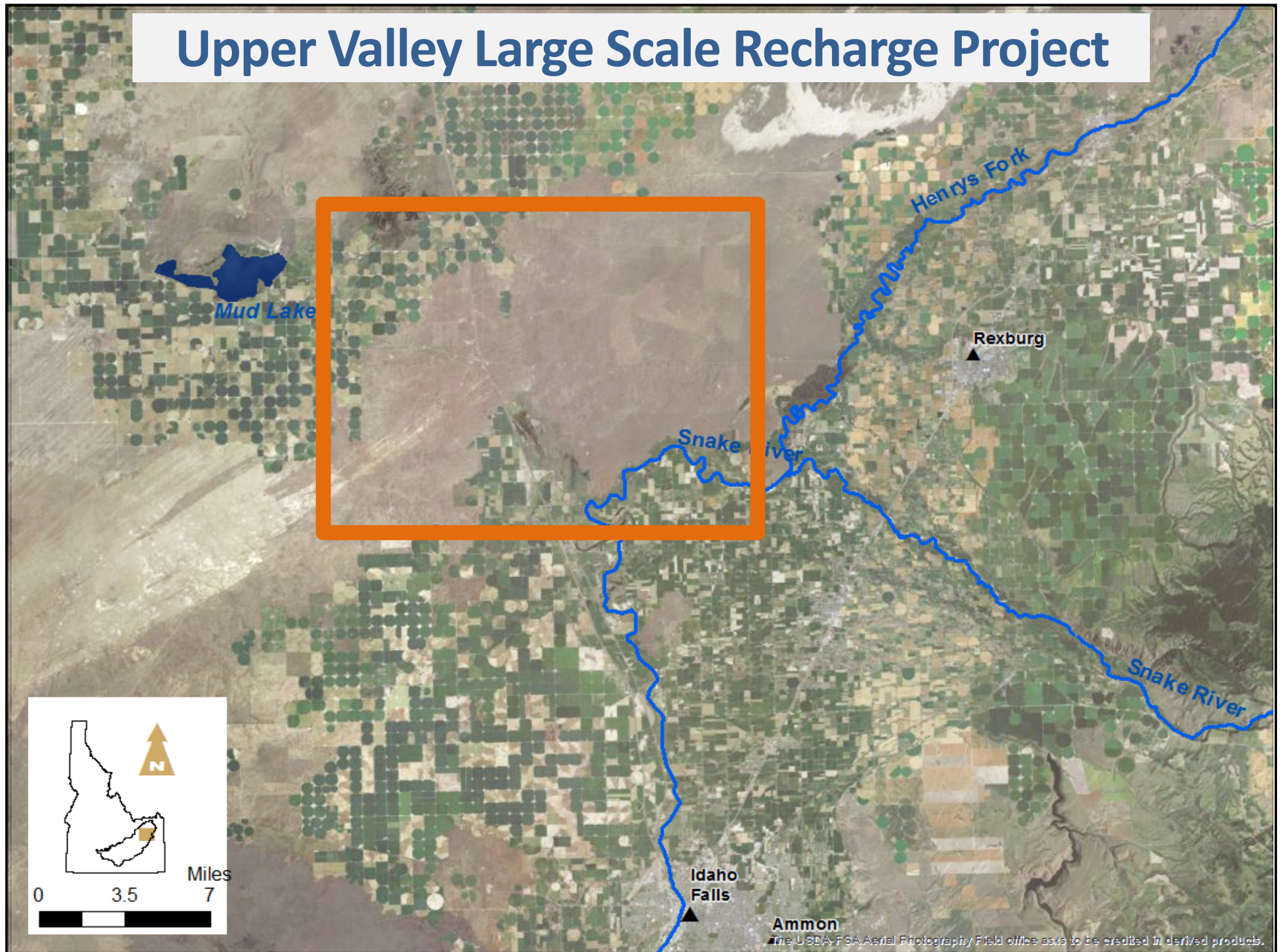


IWRB - BLM Easement Areas

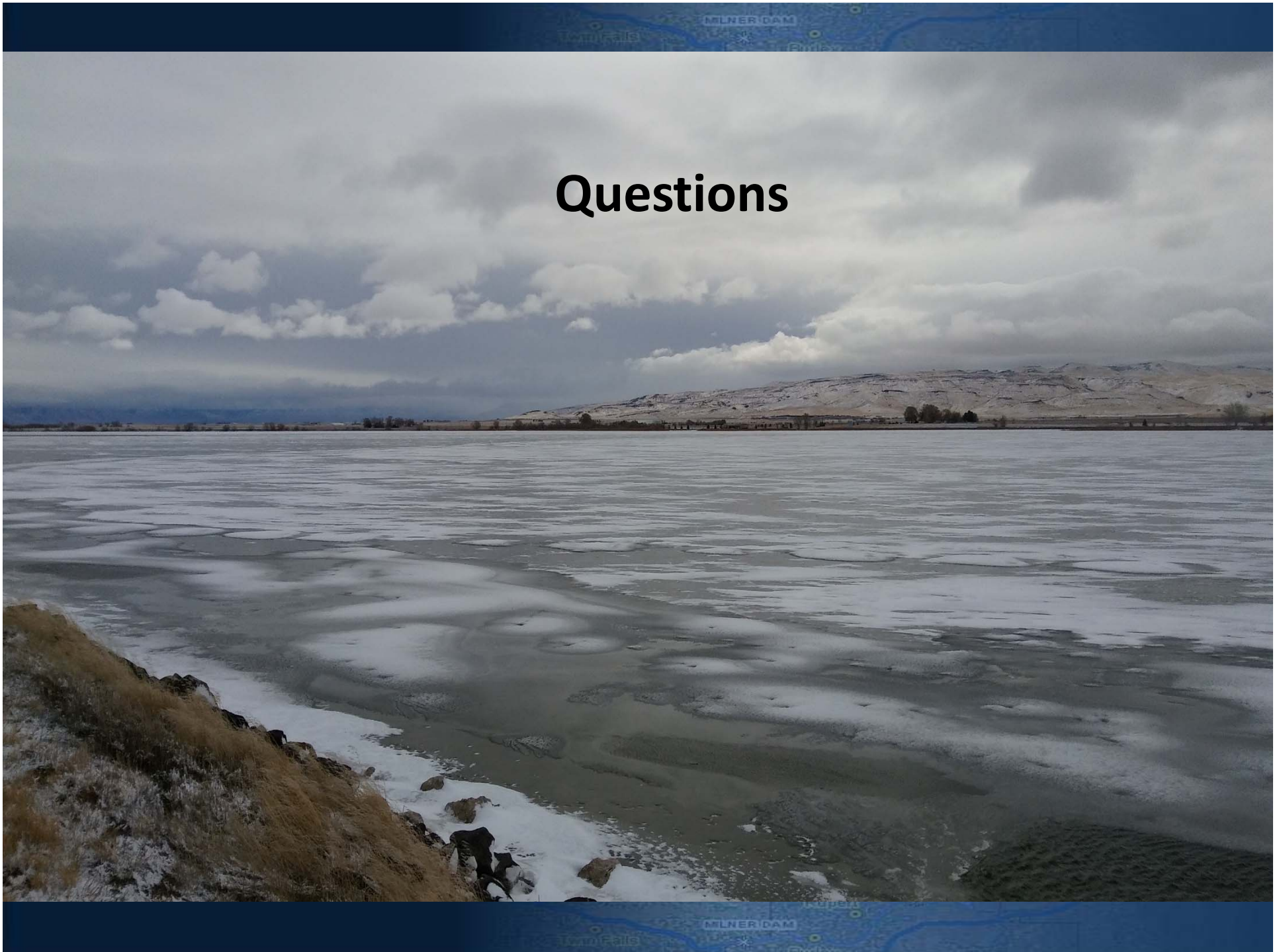
- Preliminary Plan of Development Jan 2018
- MOA w/ BLM Jan 2018
- Contract for EA on 5 sites Feb/Mar 2018
- Easement Fall 2018



Upper Valley Large Scale Recharge Project



Questions



Memorandum



To: Idaho Water Resource Board
From: Brian Patton and Cynthia Bridge Clark
Date: January 11, 2018
Re: Lost Valley Reservoir Expansion Project – Proposal by Idaho Water Engineering

REQUIRED ACTION: No action is required at this time. However, feedback from the IWRB is requested to respond to the attached proposal.

As you may recall, Idaho Water Engineering (IWE) presented a proposal at the November 7, 2017 Idaho Water Resource Board (IWRB) meeting regarding the IWRB's participation in the proposed Lost Valley Reservoir Enlargement. IWE submitted a revised proposal in response to comments and questions from the IWRB. Copies of the letter outlining the new proposal and the original presentation are attached.

Project Background

Lost Valley is an existing 10,000 AF reservoir located in the headwaters of the Weiser River Basin near Council. It is owned by the Lost Valley Reservoir Company, whose shareholders include both individuals and canal companies throughout the Weiser Basin, mostly in the Council, Cambridge, and Midvale areas. The water is used on about 10,000 acres and is mostly supplemental to natural flow rights owned by the shareholders.

Lost Valley Reservoir has long been recognized as having potential to be expanded from 10,000 AF to approximately 30,000 AF. An expansion has been studied at various times by the U.S. Bureau of Reclamation, Idaho Water Resource Board, and the Lost Valley Reservoir Company. Although much smaller than the proposed Galloway Reservoir lower downstream in the Weiser Basin, in short water years there would not be enough water to fill both.

There are at least two major factors that make raising Lost Valley challenging: 1) the reservoir enlargement would inundate U.S. Forest Service Land, and 2) the reservoir enlargement would inundate habitat inhabited by the ESA listed Northern Idaho ground Squirrel.

In the project's favor, a relatively small dam enlargement would be required, and there is likely a need for additional water in the Weiser Basin for the right price.

Actions requested of IWRB by Idaho Water Engineering

The actions anticipate IWRB participation in the proposed project, and potential IWRB ownership of a portion of the water. It is assumed that the total enlargement would be 20,000 AF.

- 1) Subordinate (a portion) of the IWRB's Galloway Reservoir water right to a junior-priority Lost Valley Reservoir water right. It is important to note that both water rights are still in the application stage.
- 2) Contribute \$20,000 toward a proposed "Phase 1 of the EIS" focused on listed squirrel species that inhabit the proposed reservoir basin. The total estimated cost of Phase 1 is \$35,000 (water user contribution \$10k, IWE in-kind contribution \$5k).

- 3) The letter further states that the total cost for the full EIS would be \$200,000 to \$300,000 and the IWRB would be expected to participate.
- 4) This would allow the IWRB to acquire potentially 4,000 AF of storage (a minimum of 20% of the total new storage) in the enlarged reservoir from IWE.

Potential Issues with Proposal by Idaho Water Engineering

While the IWRB supports new water storage projects, there are some potential issues with this proposal that that should be carefully considered.

- 1) The letter by IWE states that the total cost for the EIS would be \$200,000 –to- \$300,000. This cost estimate is like very low given the project would inundate federal lands and a listed species is present. In addition, consultation under the Endangered Species Act, a separate process, would likely be costly.
- 2) Although Galloway Reservoir may not be built soon, the IWRB would need to decide if subordinating the senior-priority Galloway water right application to the junior-priority Lost Valley water right application is in the public interest, and whether the IWRB would want something in exchange for a subordination agreement.
- 3) The organizational relationship between IWE and the Lost Valley Reservoir Board is concerning. As stated in the November 17 letter, IWE will be compensated for their work on this project with a portion of the new water stored in the enlarged reservoir – effectively they are working on commission. This poses potential issues for state investment in this project. Given that IWE is a private-for-profit firm, there is also some question about whether the IWRB could participate in this project with IWE if the project falls under state procurement rules for competitive solicitations.

Conclusion

Several potential issues are identified. It appears that enough information has not yet been provided by IWE for the IWRB to make an informed decision on whether to participate in this project, to what extent, and under what organizational structure.

Attachment(s)

- Proposal Regarding Storage Space in the Enlarged Lost Valley Reservoir (November 17, 2017)
- Lost Valley Reservoir Enlargement Proposal PPT presentation (November 7, 2017)
- Lost Valley Reservoir Northern Idaho Ground Squirrel Study Proposal, Rio ASC (November 6, 2017)



2918 N. El Rancho Place, Boise ID 83704
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Fax: (888) 538-7703
www.idahowaterengineering.com
info@idahowaterengineering.com

November 17, 2017

Mr. Roger Chase, Chairman
Idaho Water Resource Board

Sent via Email

RE: Proposal Regarding Storage Space in the Enlarged Lost Valley Reservoir

Dear Chairman Chase:

Thank you for the interest expressed by the members of the Idaho Water Resource Board (IWRB) during the presentation by Mr. Doug McAlvain and myself on November 7, 2017. The purposes of this letter are to respond to some concerns raised by members of the Board during the presentation, to propose an alternative list of priorities, and to suggest the basis of an agreement. This letter has been reviewed by members of the Lost Valley Reservoir Company Board and by members of the Idaho Water Engineering (IWE) Lost Valley Reservoir Team. The elements of this letter have been endorsed by both groups.

First, as you recall the chart of flows in Lost Valley Creek below the reservoir that was presented on November 7th included only flows from March 9 – August 9, 2017. Some questions arose regarding the flows later in the season. Accordingly, Table 1 below provides an updated flow chart, including flows from March 9 – October 20, 2017. Note the total flow through the measurement point during this period is shown to have been 31,295 acre-feet. This appears to be reasonable, given the estimates of annual basin yield in acre-feet are 29K (by Joe Jordan) and 27K and 28K by Steve Lipscomb using two different techniques, and given the 2017 snowpack appears to have been somewhat above average in this area.

Second, as another point of clarification and in answer to a question from a member of the IWRB, Mr. McAlvain has determined that presently there are 74 shareholders in Lost Valley Irrigation Company. The larger number provided by Mr. McAlvain in response to this question in the meeting referred to the actual number of users, given some of the shareholders like Middle Valley Ditch Company provide water to a number of users.

STREAM NAME- Lost Creek												2017
OWNER: Lost Valley Reservoir Board												
DATE	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC
1				90	175	73	4	75	53	3		
2				90	169	68	5	75	51	3		
3				90	165	58	9	75	50	3		
4				91	166	58	5	81	47	3		
5				91	181	58	6	85	44	3		
6				91	215	58	3	85	43	3		
7				101	238	59	20	85	42	3		
8				120	238	58	46	85	40	3		
9			4	125	229	58	50	84	38	3		
10			4	129	219	57	47	84	36	3		
11			4	127	221	57	49	84	33	3		
12			4	126	237	48	53	85	31	3		
13			4	135	226	3	55	83	28	3		
14			4	157	209	3	62	82	24	3		
15			4	164	189	3	64	85	18	3		
16			4	164	172	3	65	80	11	3		
17			5	165	163	3	72	79	6	3		
18			15	166	153	3	75	78	4	3		
19			46	170	142	3	76	76	4	3		
20			47	178	100	3	75	75	6	6		
21			64	184	78	4	78	74	6			
22			88	181	78	5	80	73	5			
23			90	182	76	6	80	71	4			
24			91	192	72	5	80	70	4			
25			90	213	72	5	79	67	3			
26			89	220	73	5	75	64	3			
27			89	220	72	5	75	63	3			
28			89	211	72	5	70	61	3			
29			89	197	73	5	71	60	3			
30			88	182	72	4	75	58	3			
31			89		73		75	54				
Total	0	0	1101	4552	4618	783	1679	2336	646	63	0	
MEAN	0	0	48	152	149	26	54	75	22	3	0	
ACRE FT	0	0	2184	9029	9160	1553	3330	4633	1281	125	0	
YEARLY CFS						15778						
YEARLY ACRE FEET						31295						
TOTAL NO OF DAYS						226						
YEARLY MEAN						70						

Table 1. Flows in Lost Valley Creek below Lost Valley Dam, 2017

Third, some IWRB members expressed concerns about the proposed priority of water offerings. As you recall, the priorities offered in the presentation were as follows:

Priorities Offered during the Meeting on November 7, 2017

1. Existing shareholders
2. Dead storage to the State of Idaho
3. Other water users in the Weiser River Basin
4. IWRB
5. Others

As a result of discussions after the IWRB meeting and subsequently with members of the Lost Valley Reservoir Company Board, we propose the following priorities:

Revised Proposed Priorities

1. Existing shareholders (Class D)
2. Other water users in the Weiser River Basin (Class E)
3. IWRB (Class F) (Min of 20% of total new storage)
4. Others (Class G)

In this way the first priorities go to users within the Weiser River Basin – and the next opportunity goes to the IWRB.

Presently the shareholders in Lost Valley Reservoir Company hold Class A, B and C shares. These shares are to remain as the first priority shares in the reservoir. We propose class D through G shares for the enlarged space. All are proposed to have the same date of priority of fill, but the classes of priority will have different voting capabilities, to ensure the existing shareholders retain control of the reservoir as it is expanded to more than twice its existing size.

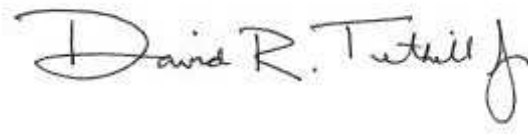
Here are some additional considerations that we anticipate will be needed for this proposal to proceed into an agreement:

1. The IWRB will need to provide a Letter of Intent to subordinate its Galloway water right to the Lost Valley Reservoir expansion water right, if Lost Valley Reservoir is expanded.
2. The IWRB will need to contribute \$20,000 toward Phase 1 of the EIS (focused on squirrels), as a match to \$15,000 in dollars and in-kind services as described in the November 7th meeting.
3. The IWRB will be asked to participate in Phase 2 of the EIS – if found to be warranted after the completion of Phase 1, on a pro-rata basis for the percentage of the additional storage space that it will be acquiring. Phase 2 will include all of the EIS except for what is provided in Phase 1. The total cost of Phases 1 and 2 is anticipated to be in the range of \$200,000 to \$300,000 based on earlier discussions with CH2M.
4. As provided in a 2013 contract between the Lost Valley Reservoir Company Board and IWE, IWE is providing its services at no charge except it will receive as compensation twenty percent of the water of the enlargement. IWE agrees to provide first right of refusal to the IWRB to acquire this twenty percent of the storage space at fair market value estimated at

this time to be around \$1,000.00 per acre-foot. Thus, if the reservoir is enlarged by the proposed amount of 20 KAF (thousand acre-feet), the IWRB would be able to acquire 4 KAF as a minimum and possibly more than double that amount.

We recognize this letter is merely a proposal and not a contract. Thus, we request that this letter be considered the basis of an agreement to be prepared as a three way document to be signed by the Lost Valley Reservoir Company Board, the IWRB and IWE. Additional considerations are invited in this regard.

Sincerely,

A handwritten signature in black ink that reads "David R. Tuthill, Jr." The signature is written in a cursive, flowing style with a large initial 'D' and a trailing flourish.

David R. Tuthill, Jr., Ph.D., P.E.

Consultant for Lost Valley Reservoir Company



IDAHO


Water
Resource Board

Lost Valley Reservoir Enlargement Proposal




Dave Tuthill
Doug McAlvain
November 7, 2017





Outline

- Brief History
- Hydrology
- Subordination
- Next Steps
- Proposal





Proposed Enlargement

- Raise water level by 30 feet
- Increase storage from 10,000 acre-feet to 30,000 acre-feet
- Provide a minimum pool of 3,000 to 5,000 acre-feet



Form 202
8/88

Ident. No. 67-7938

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name of applicant Lost Valley Reservoir Co. Phone 253-4751
Post office address P.O. Box 10 Fruitvale ID 83620

2. Source of water supply Lost Creek which is a tributary of Weiser River Dist. Fr

3. Location of point of diversion is _____ ¼ of SE ¼ of NW ¼, Govt. Lot _____
Sec. 28 Township 19N Range 1W B.M. Adams County, additional
points of diversion if any: _____

4. Water will be used for the following purposes:

Amount 20,000 for Irrigation Storage purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)

Amount 20,000 for Irrigation from Storage purposes from 4/15 to 10/15 (both dates inclusive)
(cfs or acre-feet per annum)

Amount 20,000 for Retention Storage purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

5. Total quantity to be appropriated is (a) _____ and/or (b) 20,000
cubic feet per second acre feet per annum

Images from the Water Right Application File

Images of Lost Valley*



The existing dam at Lost Valley was built in
1910 to provide irrigation water to the
orchards in nearby Mesa



Lost Valley Reservoir is a popular recreation
spot, with good fishing, although camping around the lake is lacks the facilities of
developed campgrounds

Projected Flows in Weiser River From the Lost Valley Expansion

Average Water Year

Location of Measurement*	July		August		September	
	Current	Proposed	Current	Proposed	Current	Proposed
Lost Creek	43	109	60	129	41	93
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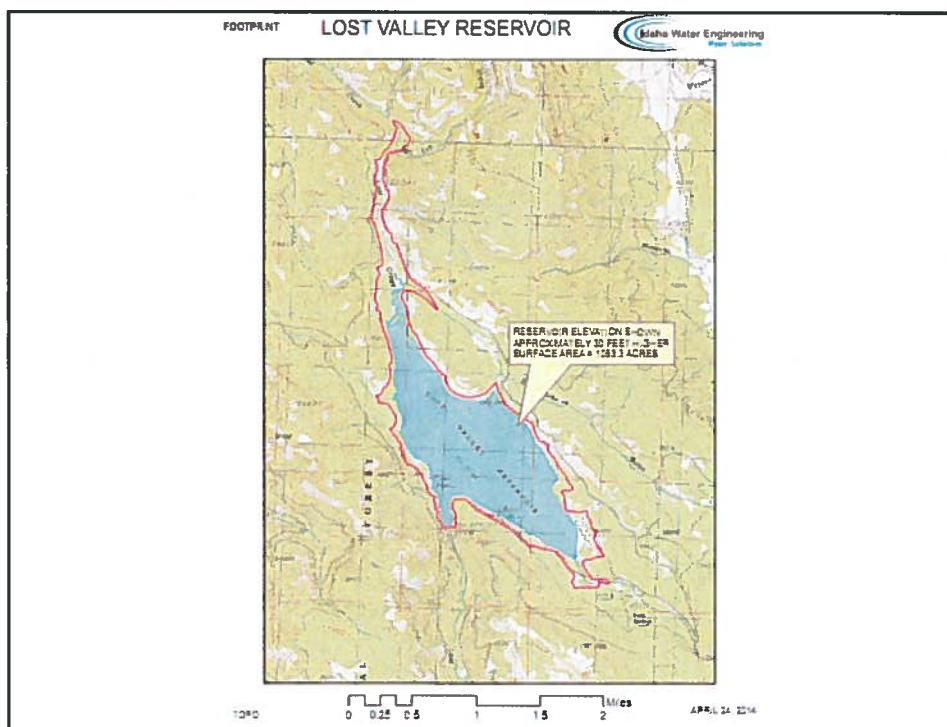
Very Low Water Year**

Location of Measurement*	July		August		September	
	Current	Proposed	Current	Proposed	Current	Proposed
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* All flows are expressed in "cubic feet per second" (cfs)

**1937 for Lost Creek and 1977 for Cambridge and Mouth of Crane Cr.
Apparently, 1977 was drier than 1939, but there is no '77 data for Lost Creek
and no '39 data for Cambridge or Mouth of Crane Cr.

***Below Galloway flows do not reflect any irrigation returns



Timeline of Lost Valley Reservoir



- Jun 2, 1993 Application filed
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 - Some comments in favor
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 - Middle Valley Ditch Corp.
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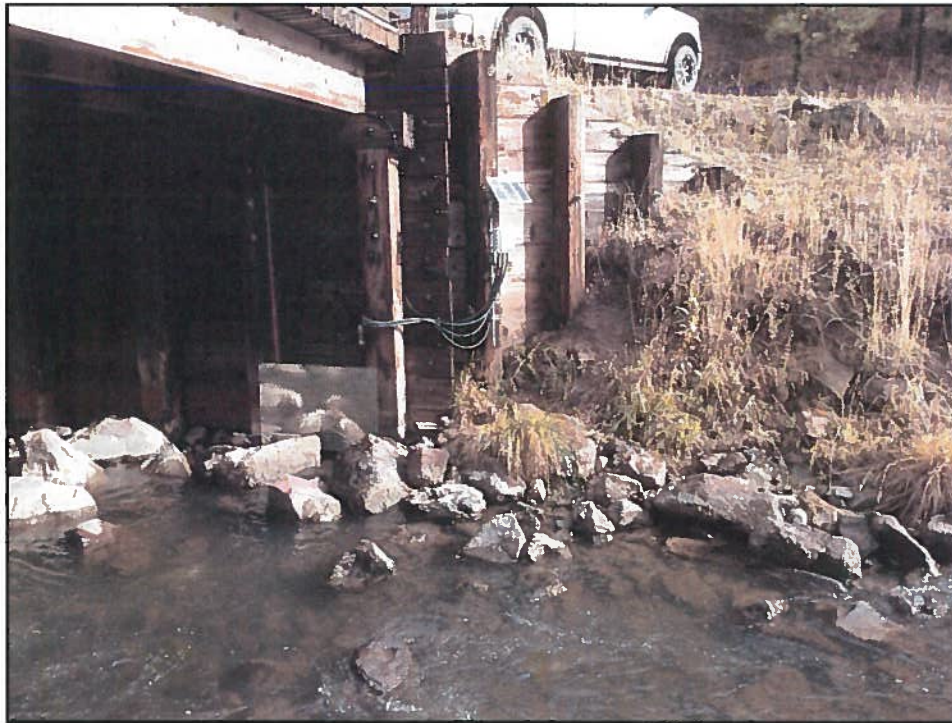
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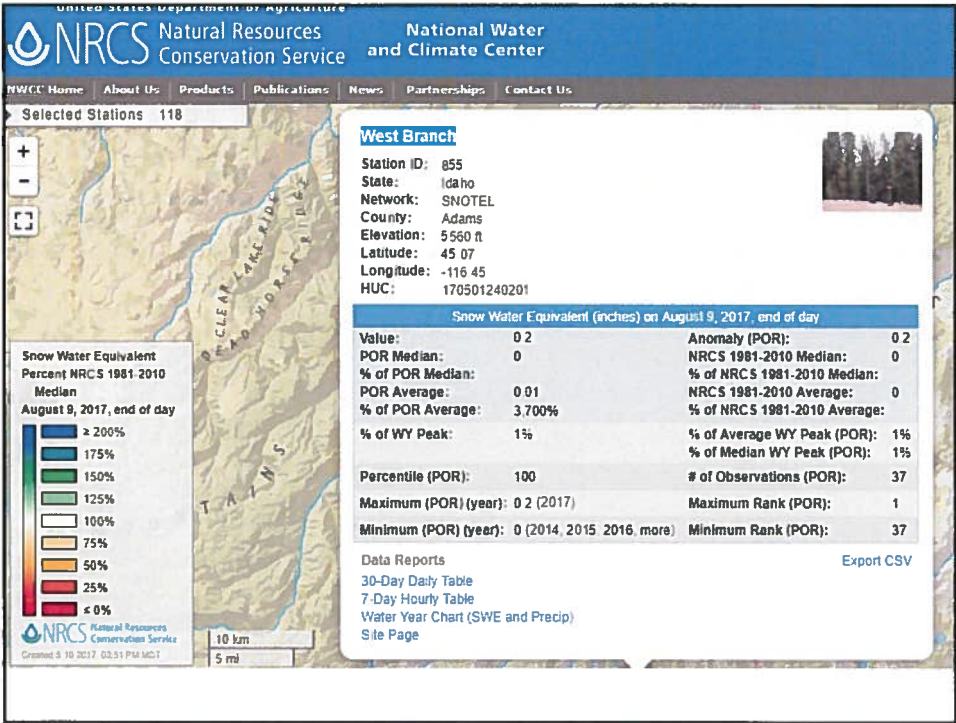
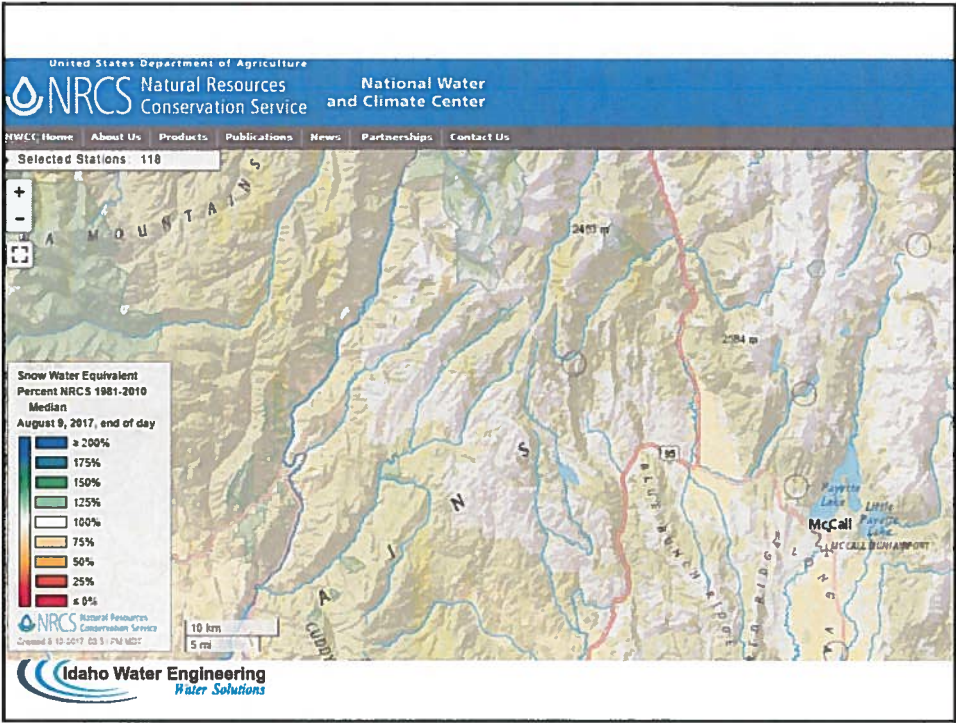
- Fall 2016 Survey of reservoir topography collected using drone technology
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- 2017 Measurements collected and remote operation refined
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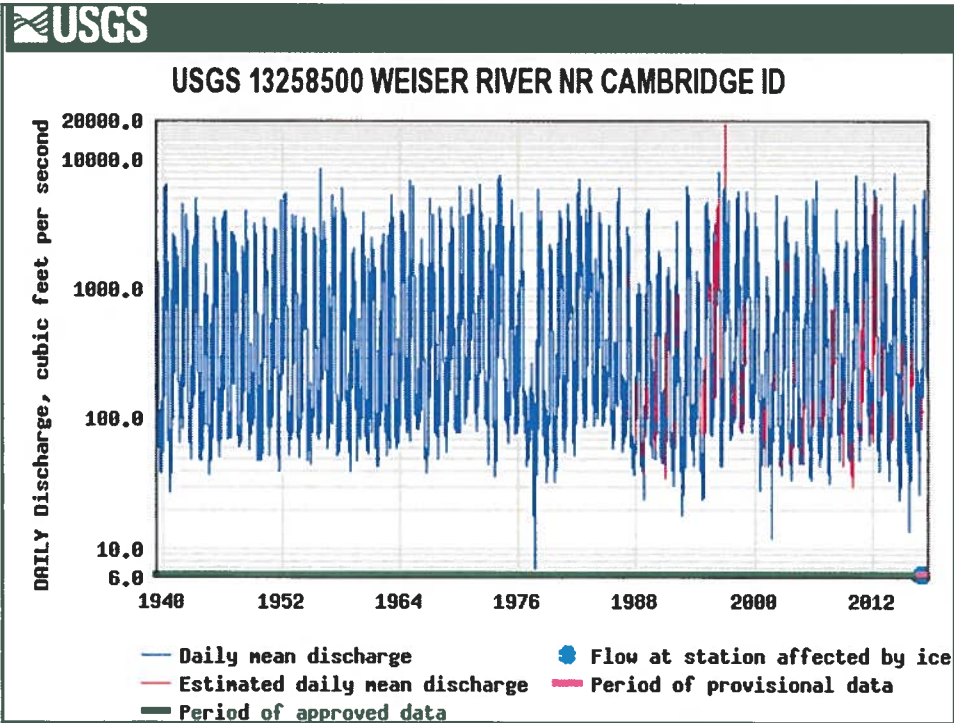
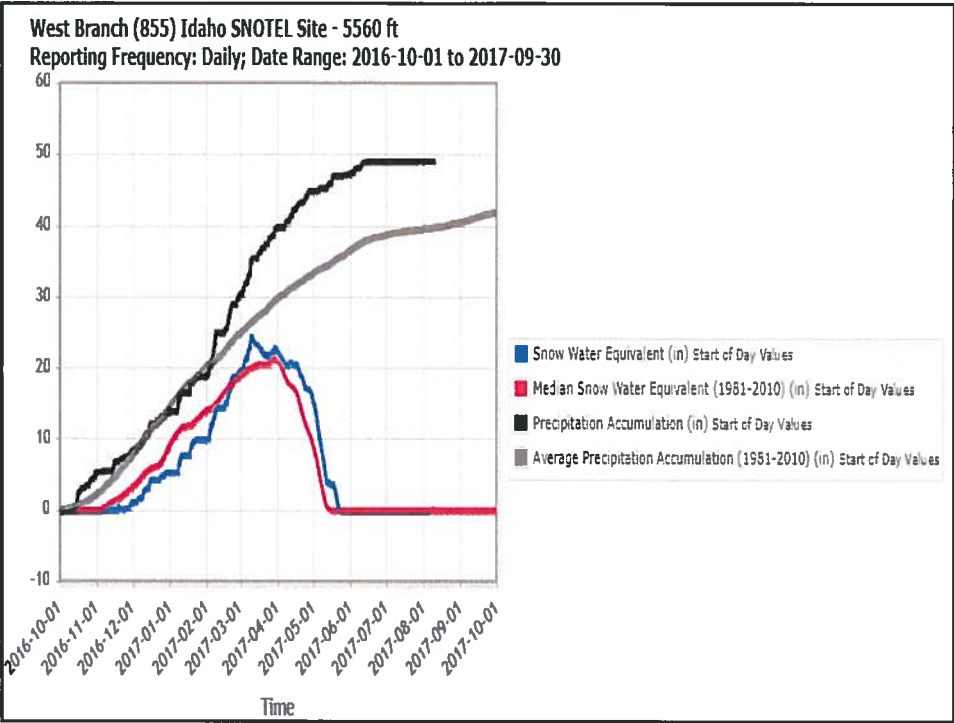


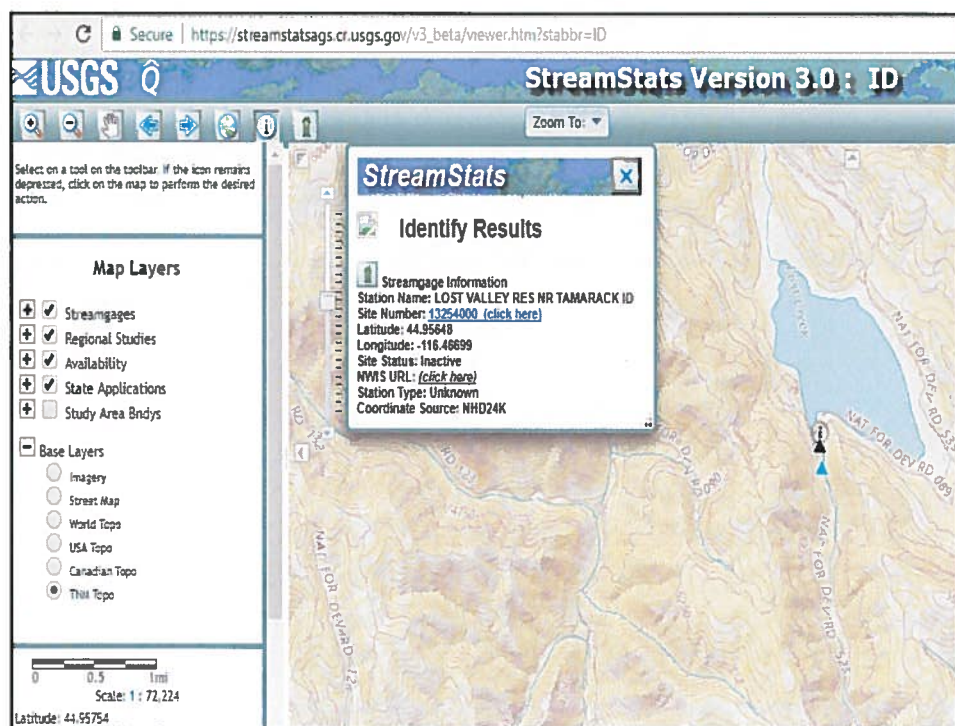
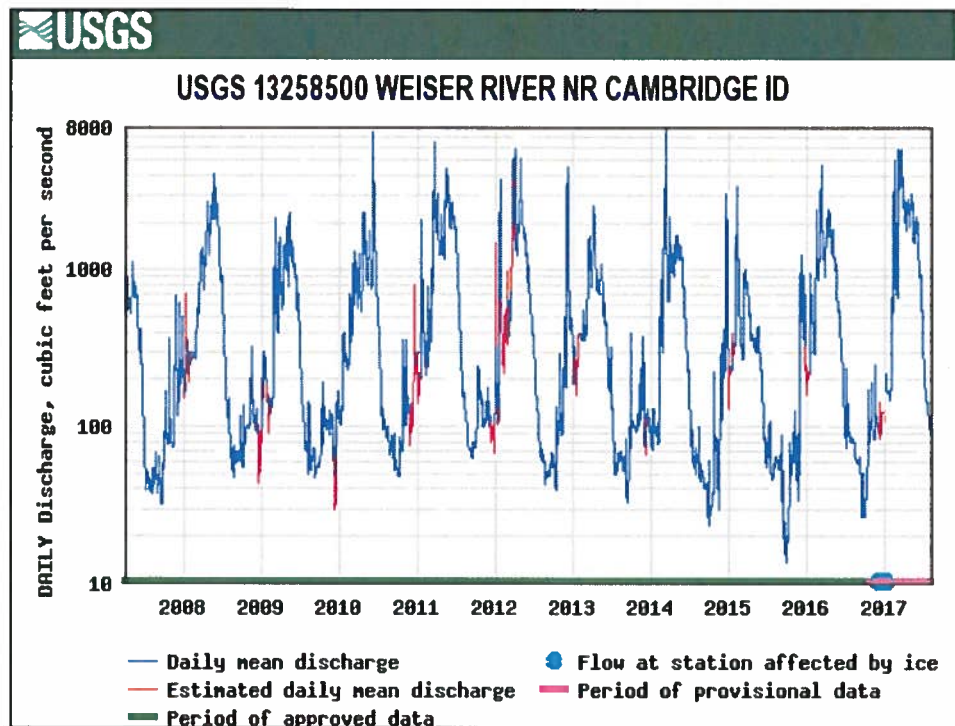




Water District												
CANAL NAME- Lost Valley Res.												CANAL NO.
2017												
OWNER												
DATE	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC
1				90	175	73	4	75				
2				90	169	68	5	75				
3				90	165	58	9	75				
4				91	166	58	5	81				
5				91	181	58	6	85				
6				91	215	58	3	85				
7				101	238	59	20	85				
8				120	238	58	46	85				
9			4	125	229	58	50	84				
10			4	129	219	57	47					
11			4	127	221	57	49					
12			4	126	237	48	53					
13			4	135	226	3	55					
14			4	157	209	3	62					
15			4	164	189	3	64					
16			4	165	172	3	65					
17			5	166	163	3	72					
18			15	168	153	3	75					
19			46	170	142	3	76					
20			47	178	100	3	75					
21			64	184	78	3	78					
22			88	191	78	5	80					
23			90	182	76	6	80					
24			91	192	72	5	80					
25			90	213	72	5	79					
26			89	220	73	5	75					
27			89	220	72	5	75					
28			89	211	72	5	70					
29			89	197	73	5	71					
30			88	182	72	4	75					
31			89		73		75					
Total	0	0	1101	4556	4618	782	1679	730	0	0	0	0
MEAN			48	152	149	26	54	81				
ACRE FT	0	0	2184	9037	9160	1551	3330	1448	0	0	0	0
YEARLY CFS						13466						
YEARLY ACRE FEET						26710						
TOTAL NO OF DAYS						154						
YEARLY MEAN						87						







Results of New Hydrographic Study

- 1993 Report predicts the average annual yield of the basin above Lost Valley Reservoir Dam is 29KAF.
- Mr. Steve Lipscomb (former Director of USGS Water Center in Idaho) computed the average annual yield to be 28KAF and 27KAF using two different techniques.



Subordination of Galloway to Lost Valley

- Date of Priority of Galloway – 7/9/1982
- Date of Priority of Lost Valley – 6/2/1993

Options	Type	Basin	Sequence	Suffix	Application Number	Basis	Status	Priority Date	Div. Rate (cfs)	Source	Water Use	Owner
Details More Options	Water Application	67	7590		44040		Active	07/09/1982	7800	WEISER RIVER	FISH PROPAGATION FROM STORAGE, FISH PROPAGATION STORAGE, IRRIGATION FROM STORAGE, IRRIGATION FROM STORAGE, POWER, POWER FROM STORAGE, POWER STORAGE, RECREATION STORAGE	STATE OF IDAHO
Details More Options	Water Application	67	7938		43593		Active	06/02/1993	20000	LOST CREEK	IRRIGATION FROM STORAGE, IRRIGATION STORAGE, RECREATION STORAGE	LOST VALLEY RESERVOIR CO



Subordination

- Lost Valley Reservoir requests subordination of Galloway by the IWRB.
- Without this subordination further studies for Lost Valley Reservoir are not warranted.



Advantages to IWRB

- Beneficial to summer flows.
- Carry-over storage will enhance the fishery in Lost Valley Reservoir and downstream.
- Additional storage to work in tandem with Galloway, if built.
- This is a low-cost storage project for Idaho, and provides an opportunity for the IWRB to acquire some of the storage.



Lost Valley Reservoir Trout Improvement Project Planned

By Evin Oneale, Regional Conservation Educator

Tuesday, September 26, 2017 - 10:06 PM MDT



Lost Valley Reservoir, located 16 miles north of Council Idaho, is nearly dry and Fish and Game plans to take advantage of that condition to improve trout populations at the popular fishing hole.

The Lost Valley Reservoir Company has lowered the reservoir to the lowest pool possible for outlet valve repairs and is cooperating to keep the pool down until later in October.

A large population of yellow perch now occupies the reservoir, effectively limiting the growth of rainbow trout stocked by Fish and Game. "Lost Valley is simply too small to support a quality yellow perch population," Fish and Game fisheries biologist Paul Janssen noted. "The perch can never grow to acceptable size for anglers and by consuming nearly all of the available food supply in the reservoir, perch also limit trout growth." Trout fishing is also made more difficult by perch that quickly consume baits intended for trout.

Offerings of the 20,000 acre-feet of additional storage

1. Existing shareholders
2. Dead storage to the State of Idaho
3. Other water users in the Weiser River Basin
4. IWRB
5. Others





Lost Valley Reservoir Projected Construction Costs, for 20KAF of Additional Storage

- 1992 -- \$2.3M
- 2017 -- \$4.0 M (per Govt Consumer price index from <https://data.bls.gov>)

Per former IWRB Chairman: "Enlargement of Lost Valley Reservoir is the least cost new storage in Idaho"



Process

- Discuss recreation, wildlife, fishery and infrastructure alternatives if reservoir is expanded.
- Discuss tradeoffs between moving recreation areas and providing an increased water supply.
- Discuss potential mitigation strategies for Northern Idaho Ground Squirrels.
- Result in a proposal for USFS.





Composition of Proposal Team

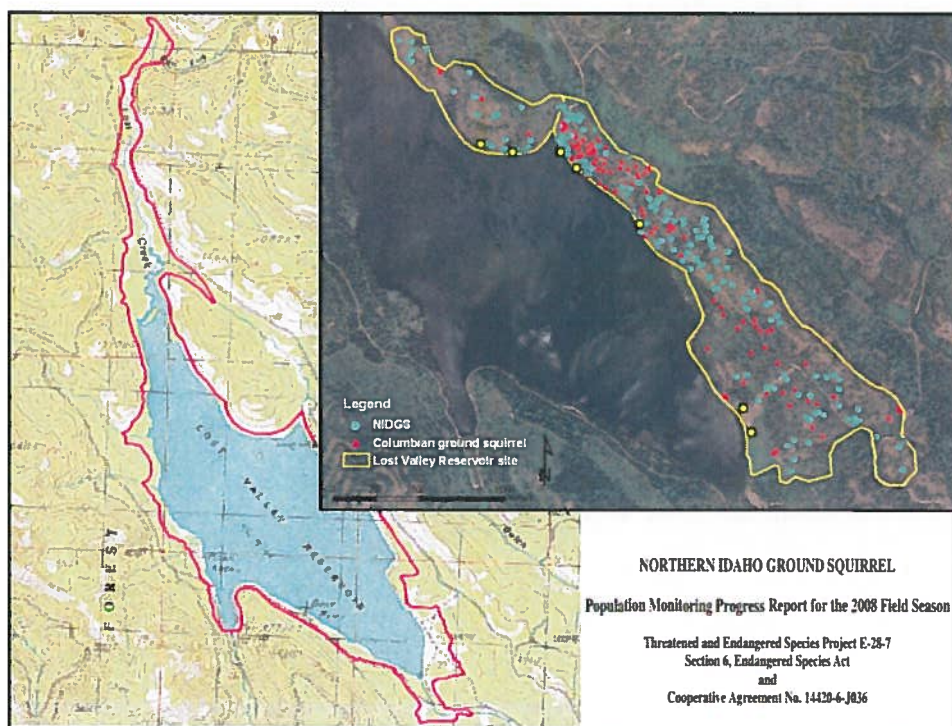
- Lost Valley Reservoir Company
- Weiser Basin Water Users
- Adams and Washington Counties
- US Forest Service
- Northern Idaho Ground Squirrel Recovery Team
- Idaho Water Resource Board
- USDA – Rural Development
- Facilitated by Idaho Water Engineering



Assistance Needed from the US Forest Service and the Idaho Water Resource Board

- Participate in the proposal development process as a stakeholder (beneficiary of carry-over pool and higher summer flows)





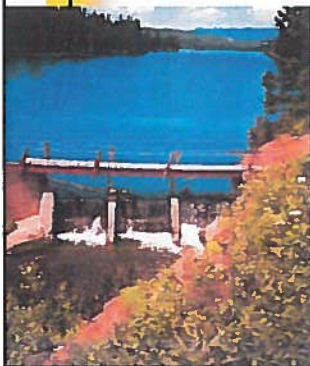


Next Steps

- Initiate a two part Environmental Impact Statement process:
 1. Northern Idaho Ground Squirrel mitigation opportunities -- 2018
 2. Remainder of EIS -- 2019
- IWRB is invited to participate (Public Private Partnership)



Thank you.



208-378-1513
Website:
Idahowaterengineering.com
Email:
info@idahowaterengineering.com

Proposal by Lost Valley Reservoir Company -- 2018

- Subordination of this project to the Galloway
- Financial participation in the project:
 - Requests participation by IWRB in the 2018 Squirrel Study
 - Total proposed cost - \$35,000
 - Cost of Squirrel Study -- \$25,000
 - All other Admin costs -- \$10,000
 - IWRB – \$20,000
 - Water Users of New Storage -- \$10,000
 - IWE in-kind: \$5,000

Cover Letter

November 6, 2017

Idaho Water Engineering, LLC
Attn: Dave Tuthill, Jr.
2918 N. El Rancho Pl.
Boise, ID 83704



2449 S. Vista Ave. Ste. B
Boise, Idaho 83705
208-841-0733
Denny@RioASE.com

RE: Lost Valley Reservoir Northern Idaho Ground Squirrel Study Proposal

Dear Dave,

Rio Applied Science and Engineering (Rio ASE) proposes to provide technical science and services to The Lost Valley Board for an evaluation of northern Idaho ground squirrel (NIGS) habitat within the proposed new pool of Lost Valley Reservoir. The proposed study would include an evaluation of mitigation possibilities and coordination with the NIGS Technical Recovery Team. We believe that Rio ASE, in combination with our subcontractor, Dr. Eric Yensen, provides the resources for this study which is critical for the success of the proposed Lost Valley Reservoir enlargement project.

Dr. Mengel, our project manager has over 30 years of ecological consulting experience in Idaho, the Pacific Northwest, and North America, as well as other countries. Dr. Yensen is a well-respected and acknowledged NIGS expert and first discovered NIGS at Lost Valley Reservoir. He is one of two NIGS experts accepted by the Idaho Department of Fish and Game to survey for NIGS in Idaho.

Our attached statement of proposal includes a detailed scope, schedule and budget as per your request. We hope you will consider Rio ASE for this project.

Regards,

A handwritten signature in black ink that reads 'Denny L. Mengel'. The signature is written in a cursive, flowing style.

Denny Mengel, PhD
Senior Ecologist, Rio ASE

Project Background

The 2000-acre Lost Valley Reservoir is in Valley County approximately 4 miles east of Tamarack Mill north of Council, Idaho. The reservoir is used to store irrigation water managed by the Lost Valley Reservoir Company and its Board. The Board is proposing to raise the dam by 30-feet to increase the storage capacity of the reservoir to match the hydrologic yield of the watershed. This proposal addresses a study to be conducted prior to preparation of an National Environmental Policy Act document.

Project Scope

This scope of work is being prepared for the Lost Valley Board (Board) and addresses a study to identify occupied northern Idaho ground squirrel (*Urocitellus brunneus*) habitat within the proposed new pool for Lost Valley Reservoir. It also includes development of potential mitigation strategies, if required, and natural resource agency coordination.

Task 1: Project Management

Rio ASE (Denny Mengel) will lead the project management effort for this project. He will work with the Board and its partners to develop a concise and practical Project Management Plan (PMP) including a Communications Plan and Quality Control Plan outlining proposed meeting schedule and review schedule to ensure appropriate communication and collaboration throughout the project life. Occasional coordination calls with the Board or the Board's representative will be held by phone. Up to 2 coordination meetings with the Recovery Team by phone will be required. Subcontractor coordination and management will also fall within Task 3. A kickoff meeting with the Board or the Board's representative will be held within 3 weeks of the notice to proceed. The proposed schedule in this scope of work may be adjusted as conditions on the ground change due to weather.

ASSUMPTIONS:

- ▲ PMP will consist of two parts – Communications Plan outlining meetings (who, what and when) as well as a Quality Control Plan outlining the design review process (who, what and when).
- ▲ The project will last 10-months and require 10 monthly reports and invoices.
- ▲ There will be 2 Board or the Board's representative coordination meetings; each 1-hour long and conducted by phone.
- ▲ There will be 2 Recovery Team coordination meetings; each 1-hour long and conducted by phone.
- ▲ The kickoff meeting will last 2 hours and be held in Rio's Boise office and be attended by 2 Rio staff and the NIGS expert and the Board or the Board's representative.

DELIVERABLES:

- ▲ Completed PMP
- ▲ Phone logs of client and agency coordination meetings
- ▲ Kickoff meeting summary
- ▲ Monthly progress updates and detailed invoices

Task 2: Survey

This task will begin with a literature search to locate and obtain existing data on the northern Idaho ground squirrel (NIGS) in the vicinity of Lost Valley Reservoir. NIGS were originally discovered in the vicinity during the 1990s. Several additional surveys have been conducted since that time. This data will help to focus on areas to survey.

A survey will be conducted within the proposed new pool area. Nearby areas where construction activities could occur will also be surveyed. Rio ASE (Denny Mengel) will work with the Board to delineate the areas to be surveyed. Locations of observed NIGS and potential burrows will be marked using a resource-grade, hand-held Global Positioning System (GPS) units such as Trimble GeoXT or similar. Only 2 biologists have been designated by Idaho Department of Fish and Game (IDFG) to survey for NIGS. Rio ASE will subcontract with one of those individuals, Eric Yensen with the College of Idaho, who has done work previously around the reservoir location.

A report will be prepared to present the results of the survey. The report will include data from previous surveys, as appropriate, and new survey results. Maps showing the distribution of NIGS in the project area will be provided. The draft report will be submitted to the Board or the Board's representative for review. Review comments will be addressed and incorporated into the final report.

ASSUMPTIONS:

- ▲ Existing data are in the public domain and available.
- ▲ Lost Valley Board will provide maps showing the proposed inundation areas and possible construction locations on an aerial photo.
- ▲ The survey will be conducted between May 1 and June 15, 2018 during good weather when NIGS are active above ground.
- ▲ The survey will be conducted in two 10-hour days, plus travel from Boise and lodging.
- ▲ The survey team will have 2 members.
- ▲ There will be one review of the draft report by the Board or the Board's representative over a 3-week period.

DELIVERABLES:

- ▲ Two hard copies and one electronic copy of the draft report.
- ▲ Two hard copies and one electronic copy of the final report.

Task 3 - Mitigation Strategies

Rio ASE and subject matter expert Eric Yensen (Subcontractor) will develop potential mitigation measures for NIGS located within the proposed new pool area and potential construction areas. If possible, several strategies will be proposed. The mitigation measures will be discussed in a meeting with the Board or the Board's representative to determine the appropriate course of action.

The mitigation measures will then be discussed in a meeting with the NIGS Technical Recovery Team (Recovery Team) to determine the appropriate course of action.

A meeting will be scheduled on-site to discuss the project and proposed mitigation with the Recovery Team. The potential project's NIGS effects will be presented. Rio will lead a discussion on proposed mitigation measures and come to a consensus on how to address NIGS mitigation.

Notes will be taken during the meeting and a meeting summary prepared. The Board or the Board's representative will review and approve the meeting summary. The approved meeting summary will be distributed to the Recovery Team for their concurrence.

Following Recovery Team concurrence, a report will be prepared that summarizes survey results, presents potential mitigation scenarios, describes results of the agency consultation, and outlines future actions including recommendations.

ASSUMPTIONS:

- ▲ NIGS are found in the affected area.
- ▲ Internal meeting with the Board or the Board's representative to discuss possible mitigation will last 4 hours and be attended by 1 Rio staff and the NIGS expert. The meeting will be held in Rio ASE's office in Boise.
- ▲ The Recovery Team will come to consensus on mitigation measures.
- ▲ The Recovery Team field meeting will be 4 hours plus travel and be attended by 1 Rio staff, the NIGS expert, and the Board or the Board's representative.
- ▲ One review each of the meeting summary and draft NIGS report.
- ▲ Board or the Board's representative review of deliverables will take up to 3 weeks.

DELIVERABLES:

- ▲ Two hard copies and one electronic copy of the draft agency meeting minutes.
- ▲ Two hard copies and one electronic copy of the final agency meeting minutes.
- ▲ Two hard copies and one electronic copy of the draft NIGS Report.
- ▲ Two hard copies and one electronic copy of the final NIGS Report.

Proposed NIGS Study Schedule

The proposed schedule may be adjusted as conditions on the ground change due to weather.

Task Activity	Start Date	End Date
Contract award	December 1, 2017	December 1, 2017
Kick-off meeting	December 15, 2017	December 15, 2017
Prepare PMP Plan	December 15, 2017	January 15, 2018
Research existing data	January 15, 2018	February 15, 2018
Field survey	May 1, 2018	June 15, 2018
Draft Survey Report	June 29, 2018	June 29, 2018
Final Survey Report	July 27, 2018	July 27, 2018
Mitigation planning	June 1, 2018	June 29, 2018
Internal mitigation meeting	July 9, 2018	July 9 2018
Resource agency field meeting	July 18, 2018	July 18, 2018
Agency mitigation approach approval	August 1, 2018	August 1, 2018
NIGS Draft Report	August 15, 2018	August 15, 2018
NIGS Final Report	September 5, 2018	September 5, 2018
Project closeout	September 2018	September 2018

Detailed Cost Proposal

Rio ASE has prepared our cost estimate to be price-competitive by offering our lowest price in order to meet the project goals and to provide adequate due diligence. If selected, we will work with the Board to refine any part of the scope, schedule, and/or budget as needed to meet expectations and available funding.

Lost Valley Reservoir Northern Ground Squirrel Study Proposal		Denny Mengel (PM, Senior Ecologist)	Joe Young (Senior Engineer/Reviewer)	Administrative Assistant	Eric Yensen (Subcontractor)	Cost (\$)	Assumptions
Billing Rate (\$/hr):		\$110.00	\$120.00	\$65.00	\$60.00		
Task		Hrs	Hrs	Hrs	Hrs		
Task 1	Project Management	32	2	16	2	\$4,920	
	Prepare PMP and Communications Plan	4				\$440	
	Kickoff Meeting	2	2		2	\$580	
	Client Coordination Meetings (2)	2				\$220	
	Recovery Team Coordination Meetings (2)	2				\$220	
	Project Coordination Activities	8				\$880	
	Monthly Report and Invoices	10		12		\$1,880	
	Project Closeout	4		4		\$700	
Task 2	Survey	50	2	0	33	\$7,720	
	Literature Search	4				\$440	
	Site Visit Preparation	4				\$440	
	Site Survey	24			24	\$4,080	650 total travel miles (2 vehicles); 1 night hotel (2 people); 4 days per diem; GPS rental
	Draft Survey Report	16	2		8	\$2,480	
	Final Survey Report	2			1	\$280	
Task 3	Mitigation Strategies	66	4	0	35	\$9,840	
	Develop Proposed Measures	16			8	\$2,240	
	Presentation to Board	4			4	\$680	
	Recovery Team Meeting	4			4	\$680	
	Site Visit with Recovery Team	8			8	\$1,360	650 travel miles (2 vehicles)
	Draft Recovery Team Consultation Memo	4	1		1	\$620	
	Final Recovery Team Consultation Memo	2				\$220	
	Draft NIGS Report	24	3		8	\$3,480	
	Final NIGS Report	4			2	\$560	
Labor Sub Totals:		148	8	16	70	\$22,480	
Expenses							
				Units	Rate	Cost (\$)	
	Travel expenses (mileage)			1,300	\$0.54	\$702	
	Travel expenses (meals)			4	\$65.00	\$260	
	Travel expenses (lodging)			2	\$120.00	\$240	
	Survey equipment (per day)			2	\$100.00	\$200	
Expenses Subtotal:						\$1,402	
Grand Total:						\$23,882	



IDAHO


Water
Resource Board

Lost Valley Reservoir Enlargement Proposal




Dave Tuthill
Doug McAlvain
November 7, 2017





Outline

- Brief History
- Hydrology
- Subordination
- Next Steps
- Proposal



Proposed Enlargement

- Raise water level by 30 feet
- Increase storage from 10,000 acre-feet to 30,000 acre-feet
- Provide a minimum pool of 3,000 to 5,000 acre-feet



Form 202
8/88

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

Ident. No. 67-7938

To appropriate the public waters of the State of Idaho

1. Name of applicant Lost Valley Reservoir Co. Phone 253-4751
Post office address P.O. Box 10 Fruitvale ID 83620

2. Source of water supply Lost Creek which is a tributary of Weiser River Dist. Fr

3. Location of point of diversion is _____ ¼ of SE ¼ of NW ¼, Govt. Lot _____
Sec. 28 Township 19N Range 1W B.M. Adams County, additional
points of diversion if any: _____

4. Water will be used for the following purposes:

Amount 20,000 for Irrigation Storage purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)

Amount 20,000 for Irrigation from Storage purposes from 4/15 to 10/15 (both dates inclusive)
(cfs or acre-feet per annum)

Amount 20,000 for Retention Storage purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

5. Total quantity to be appropriated is (a) _____ and/or (b) 20,000
cubic feet per second acre feet per annum

Images from the Water Right Application File

Images of Lost Valley*



The existing dam at Lost Valley was built in
1910 to provide irrigation water to the
orchards in nearby Mesa



Lost Valley Reservoir is a popular recreation
spot, with good fishing, although camping around the lake is lacks the facilities of
developed campgrounds

Projected Flows in Weiser River From the Lost Valley Expansion

Average Water Year

Location of Measurement*	July		August		September	
	Current	Proposed	Current	Proposed	Current	Proposed
Lost Creek	43	109	60	129	41	93
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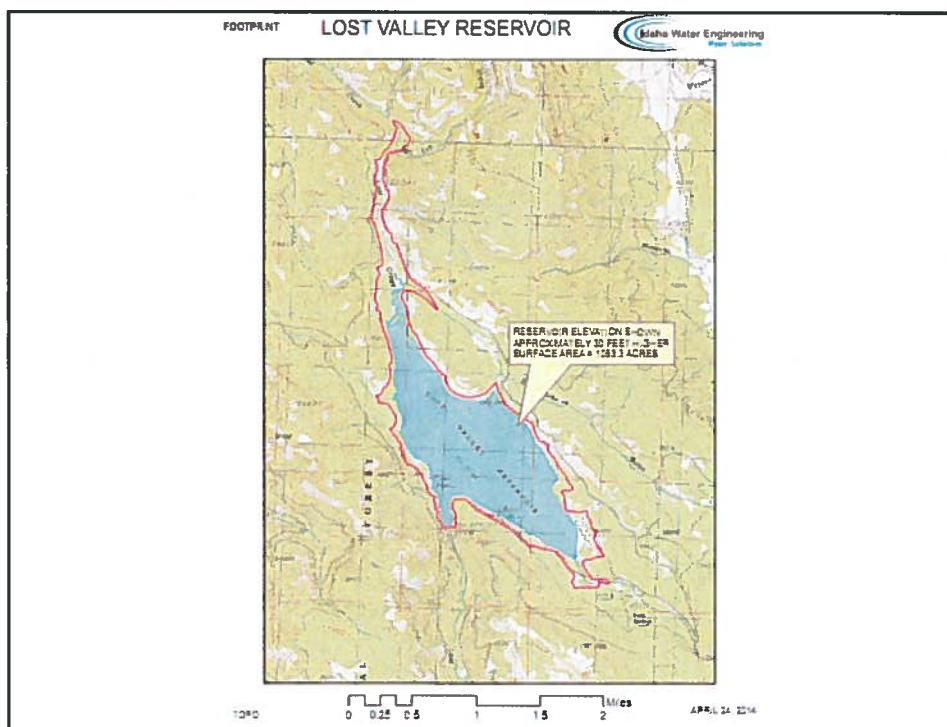
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**1937 for Lost Creek and 1977 for Cambridge and Mouth of Crane Cr.
Apparently, 1977 was drier than 1939, but there is no '77 data for Lost Creek
and no '39 data for Cambridge or Mouth of Crane Cr.

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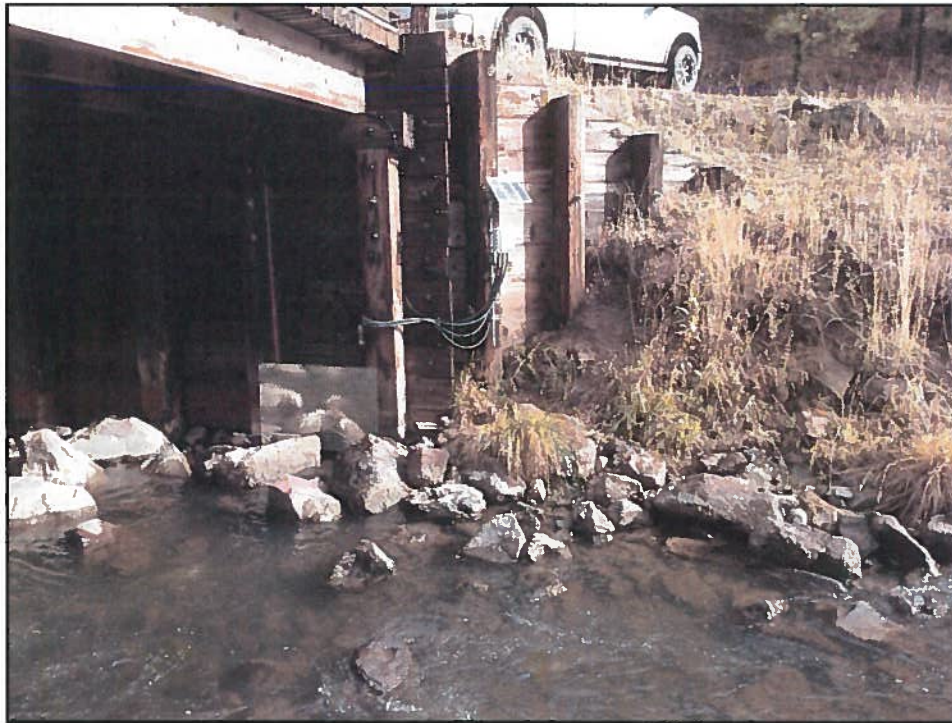
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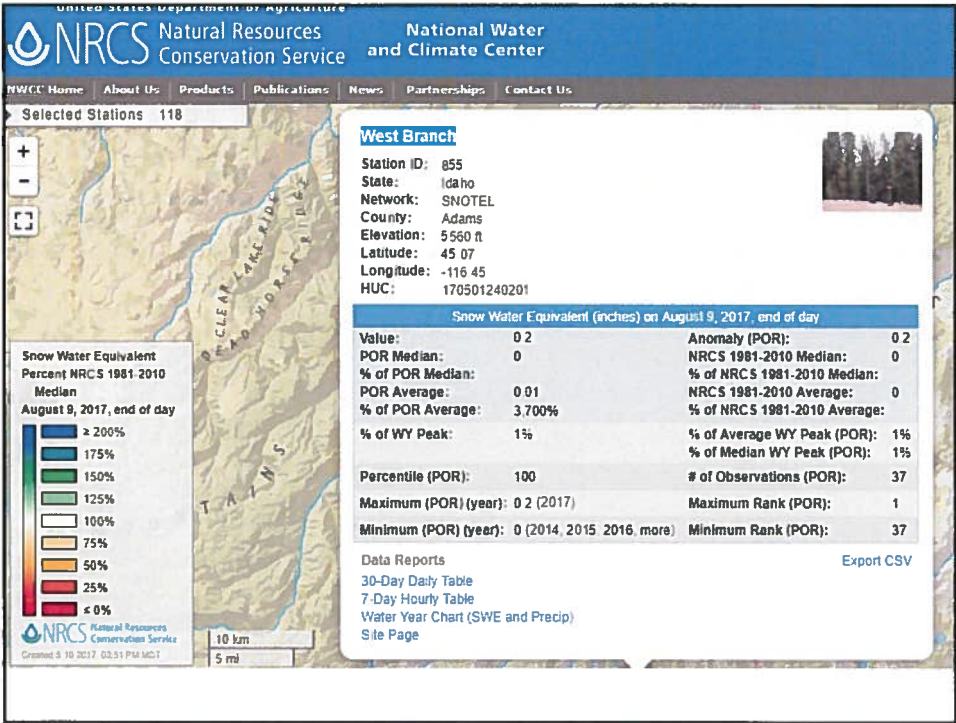
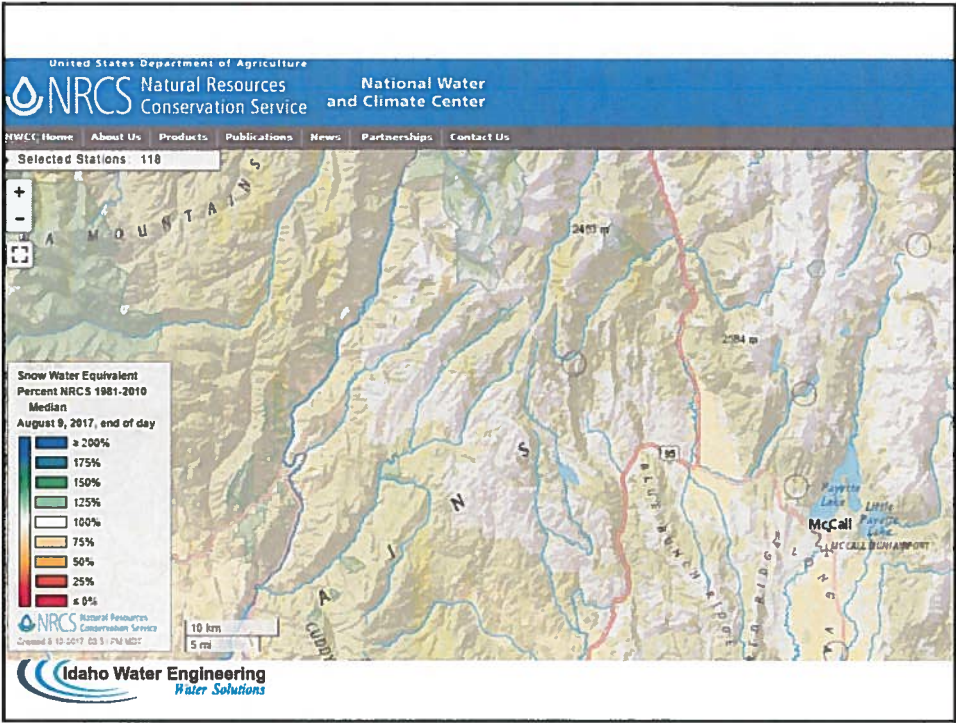
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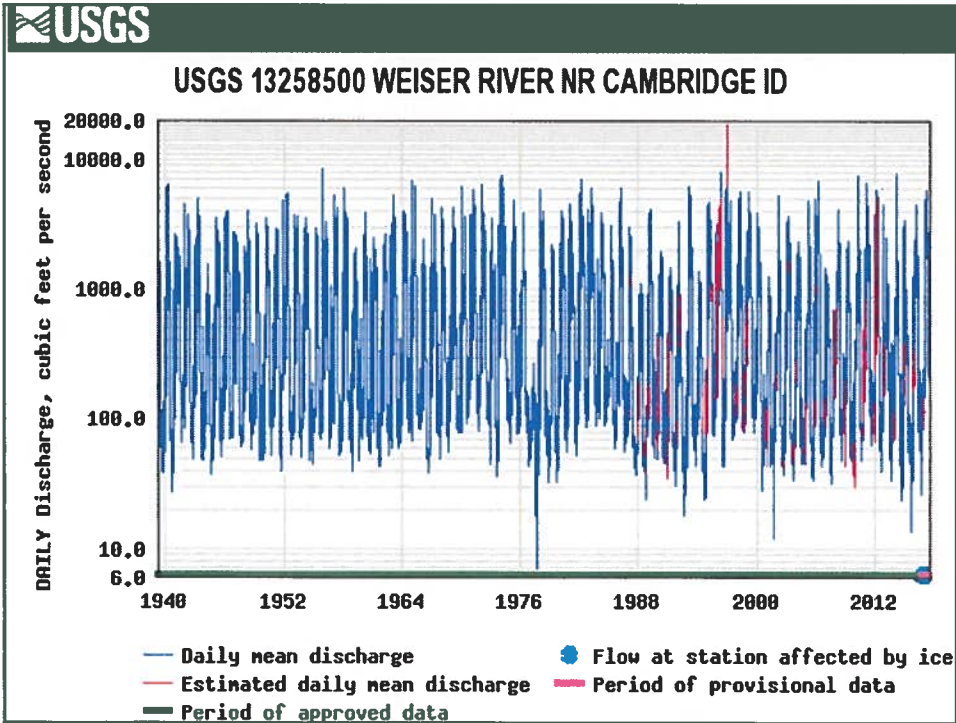
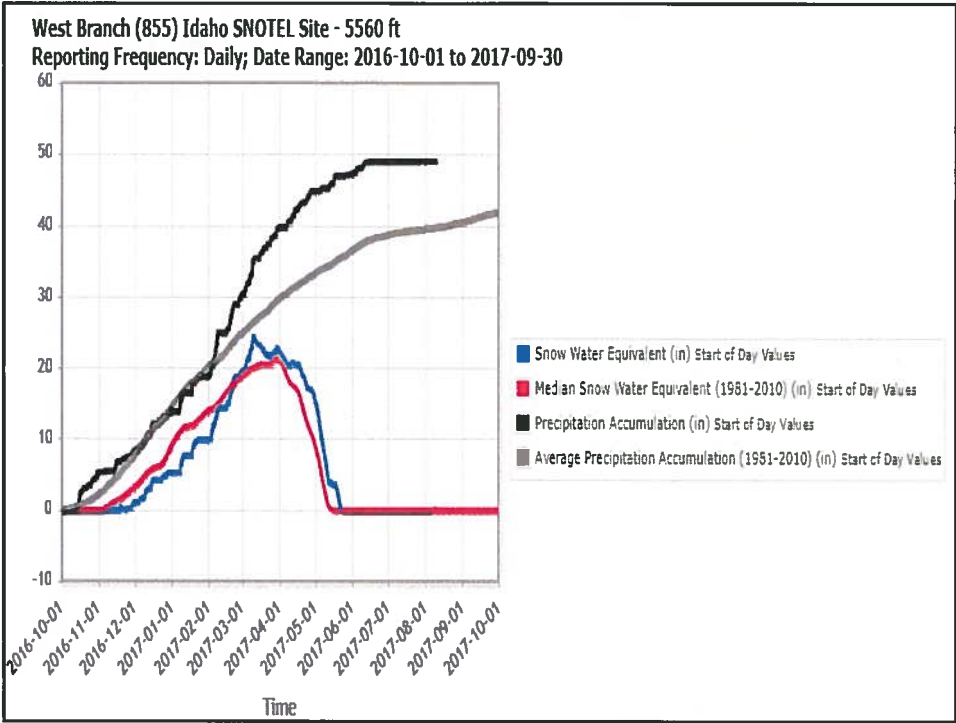


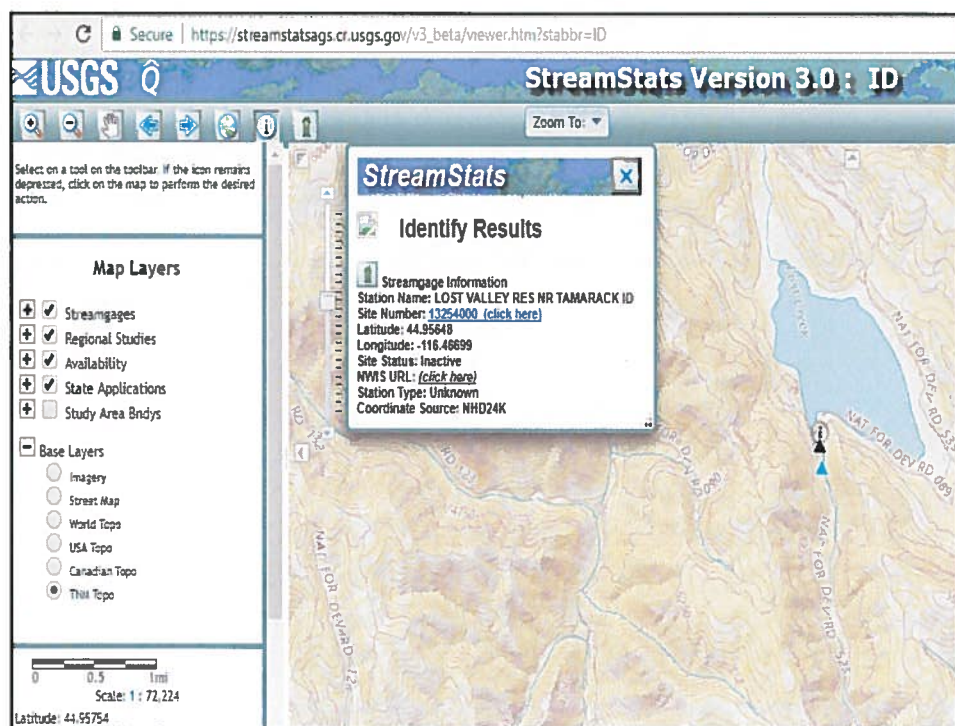
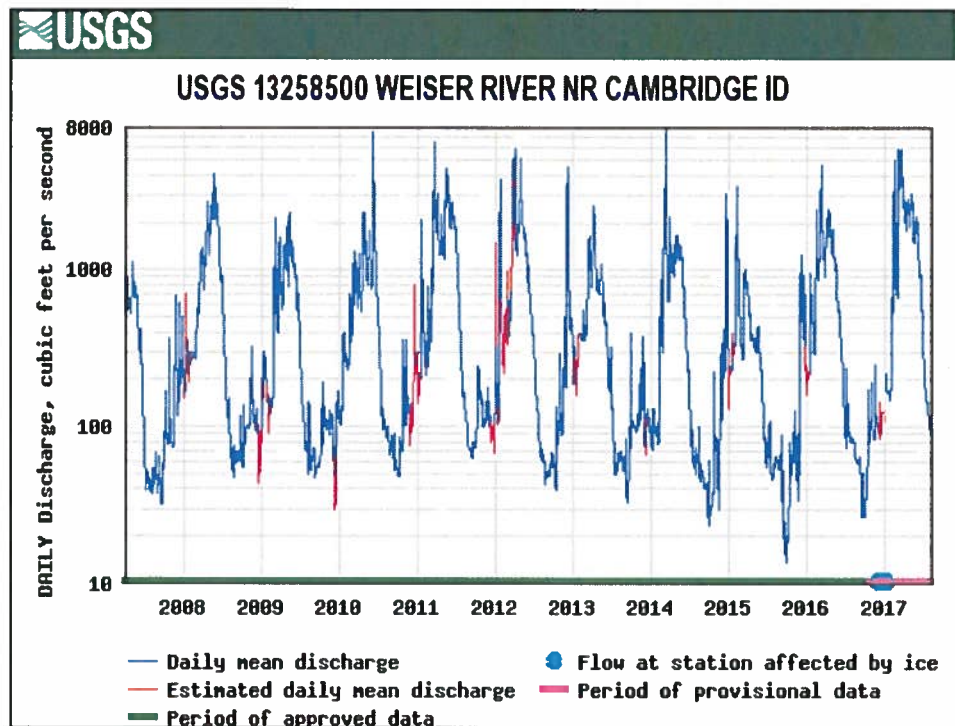




Water District												
CANAL NAME- Lost Valley Res.	CANAL NO.											
OWNER	2017											
DATE	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC
1				90	175	73	4	75				
2				90	169	68	5	75				
3				90	165	58	9	75				
4				91	166	58	5	81				
5				91	181	58	6	85				
6				91	215	58	3	85				
7				101	238	59	20	85				
8				120	238	58	46	85				
9			4	125	229	58	50	84				
10			4	129	219	57	47					
11			4	127	221	57	49					
12			4	126	237	48	53					
13			4	135	226	3	55					
14			4	157	209	3	62					
15			4	164	189	3	64					
16			4	165	172	3	65					
17			5	166	163	3	72					
18			15	168	153	3	75					
19			46	170	142	3	76					
20			47	178	100	3	75					
21			64	184	78	3	78					
22			88	191	78	5	80					
23			90	182	76	6	80					
24			91	192	72	5	80					
25			90	213	72	5	79					
26			89	220	73	5	75					
27			89	220	72	5	75					
28			89	211	72	5	70					
29			89	197	73	5	71					
30			88	182	72	4	75					
31			89		73		75					
Total	0	0	1101	4556	4618	782	1679	730	0	0	0	0
MEAN			48	152	149	26	54	81				
ACRE FT	0	0	2184	9037	9160	1551	3330	1448	0	0	0	0
YEARLY CFS						13466						
YEARLY ACRE FEET						26710						
TOTAL NO OF DAYS						154						
YEARLY MEAN						87						







Results of New Hydrographic Study

- 1993 Report predicts the average annual yield of the basin above Lost Valley Reservoir Dam is 29KAF.
- Mr. Steve Lipscomb (former Director of USGS Water Center in Idaho) computed the average annual yield to be 28KAF and 27KAF using two different techniques.



Subordination of Galloway to Lost Valley

- Date of Priority of Galloway – 7/9/1982
- Date of Priority of Lost Valley – 6/2/1993

Options	Type	Basin	Sequence	Suffix	Application Number	Basis	Status	Priority Date	Div. Rate (cfs)	Source	Water Use	Owner
Details More Options	Water Application	67	7590		44040		Active	07/09/1982	7800	WEISER RIVER	FISH PROPAGATION FROM STORAGE, FISH PROPAGATION STORAGE, IRRIGATION FROM STORAGE, IRRIGATION FROM STORAGE, POWER, POWER FROM STORAGE, POWER STORAGE, RECREATION STORAGE	STATE OF IDAHO
Details More Options	Water Application	67	7938		43593		Active	06/02/1993	20000	LOST CREEK	IRRIGATION FROM STORAGE, IRRIGATION STORAGE, RECREATION STORAGE	LOST VALLEY RESERVOIR CO



Subordination

- Lost Valley Reservoir requests subordination of Galloway by the IWRB.
- Without this subordination further studies for Lost Valley Reservoir are not warranted.



Advantages to IWRB

- Beneficial to summer flows.
- Carry-over storage will enhance the fishery in Lost Valley Reservoir and downstream.
- Additional storage to work in tandem with Galloway, if built.
- This is a low-cost storage project for Idaho, and provides an opportunity for the IWRB to acquire some of the storage.



Lost Valley Reservoir Trout Improvement Project Planned

By Evin Oneale, Regional Conservation Educator

Tuesday, September 26, 2017 - 10:06 PM MDT



Lost Valley Reservoir, located 16 miles north of Council Idaho, is nearly dry and Fish and Game plans to take advantage of that condition to improve trout populations at the popular fishing hole.

The Lost Valley Reservoir Company has lowered the reservoir to the lowest pool possible for outlet valve repairs and is cooperating to keep the pool down until later in October.

A large population of yellow perch now occupies the reservoir, effectively limiting the growth of rainbow trout stocked by Fish and Game. "Lost Valley is simply too small to support a quality yellow perch population," Fish and Game fisheries biologist Paul Janssen noted. "The perch can never grow to acceptable size for anglers and by consuming nearly all of the available food supply in the reservoir, perch also limit trout growth." Trout fishing is also made more difficult by perch that quickly consume baits intended for trout.

Offerings of the 20,000 acre-feet of additional storage

1. Existing shareholders
2. Dead storage to the State of Idaho
3. Other water users in the Weiser River Basin
4. IWRB
5. Others





Lost Valley Reservoir Projected Construction Costs, for 20KAF of Additional Storage

- 1992 -- \$2.3M
- 2017 -- \$4.0 M (per Govt Consumer price index from <https://data.bls.gov>)

Per former IWRB Chairman: "Enlargement of Lost Valley Reservoir is the least cost new storage in Idaho"



Process

- Discuss recreation, wildlife, fishery and infrastructure alternatives if reservoir is expanded.
- Discuss tradeoffs between moving recreation areas and providing an increased water supply.
- Discuss potential mitigation strategies for Northern Idaho Ground Squirrels.
- Result in a proposal for USFS.





Composition of Proposal Team

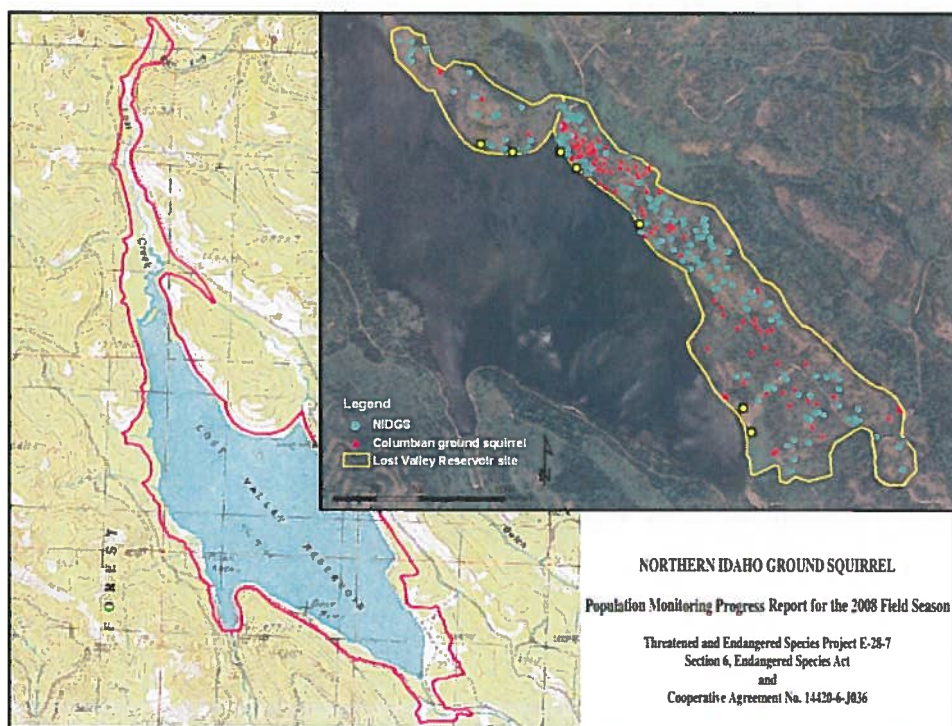
- Lost Valley Reservoir Company
- Weiser Basin Water Users
- Adams and Washington Counties
- US Forest Service
- Northern Idaho Ground Squirrel Recovery Team
- Idaho Water Resource Board
- USDA – Rural Development
- Facilitated by Idaho Water Engineering



Assistance Needed from the US Forest Service and the Idaho Water Resource Board

- Participate in the proposal development process as a stakeholder (beneficiary of carry-over pool and higher summer flows)





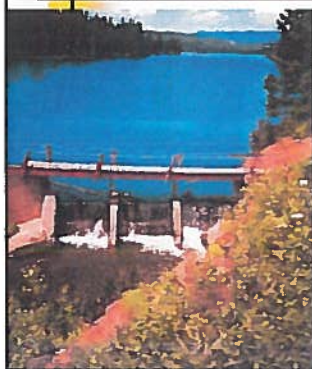


Next Steps

- Initiate a two part Environmental Impact Statement process:
 1. Northern Idaho Ground Squirrel mitigation opportunities -- 2018
 2. Remainder of EIS -- 2019
- IWRB is invited to participate (Public Private Partnership)



Thank you.



208-378-1513
Website:
Idahowaterengineering.com
Email:
info@idahowaterengineering.com

Proposal by Lost Valley Reservoir Company -- 2018

- Subordination of this project to the Galloway
- Financial participation in the project:
 - Requests participation by IWRB in the 2018 Squirrel Study
 - Total proposed cost - \$35,000
 - Cost of Squirrel Study -- \$25,000
 - All other Admin costs -- \$10,000
 - IWRB – \$20,000
 - Water Users of New Storage -- \$10,000
 - IWE in-kind: \$5,000

MEMO



To: Idaho Water Resource Board
From: Brian Patton
Subject: Legislation of Interest
Date: January 11, 2018

Garrick Baxter with the Attorney General's Office will provide the Water Resource Board with an update on proposed legislation of interest. More information will be provided during the Board meeting, after the Idaho Water Users Legislative Committee meets.

SEE TAB 6 IN THE BOARD MEETING MATERIALS SECTION



AGENDA

IDAHO WATER RESOURCE BOARD

C.L. "Butch" Otter
Governor

Roger W. Chase
Chairman
Pocatello
District 4

Jeff Raybould
Vice-Chairman
St. Anthony
At Large

Vince Alberdi
Secretary
Kimberly
At Large

Peter Van Der Meulen
Hailey
At Large

John Rusche
Lewiston
At Large

Albert Barker
Boise
District 2

John "Bert" Stevenson
Rupert
District 3

Dale Van Stone
Hope
District 1

Board Meeting No. 2-18

January 26, 2018

10:30 a.m.

Idaho Water Center
Conference Rooms B, C & D
322 E Front Street
BOISE

1. Roll Call
2. Public Comment
3. Agenda & Approval of Minutes
4. MHAFB Water Sustainability Project
5. Bear River
6. Priest Lake Water Management Project
7. Committee Assignments
8. Director's Report
9. 2018 Calendar
10. Non-Action Items for Discussion
11. Next Meeting & 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 nikki.regent@idwr.idaho.gov or by phone at (208) 287-4800.



IDAHO WATER RESOURCE BOARD

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Hailey
At Large

Charles "Chuck" Cuddy
Orofino
At Large

Albert Barker
Boise
District 2

John "Bert" Stevenson
Rupert
District 3

Dale Van Stone
Hope
District 1

MINUTES MEETING NO. 3-17

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

March 23, 2017
Work Session

Chairman Chase called the work session meeting to order at 8:30 a.m. All Board members were present. **IDWR staff members present were:** Brian Patton, Cynthia Clark Bridge, Neeley Miller, Wesley Hipke, Rick Collingwood, Randy Broesch, Sean Vincent, Ken Neely, Craig Tesch, Liz Cresto, Matt Anders, Tim Luke, Tom Neace, Gary Spackman and Mat Weaver. **Guests present were:** Kyle Radek, Markus Green, Will Patterson, Donald Barksdale, John Simpson, Todd Glindeman, Doug McAlvain, Kevin Boggs, Randy Macmillan, Sarah Hijek, Rich Reavis, Ray Houston, John Roldan, Hal Anderson, Peter Anderson, Mark Solomon, Lynn Tominaga, Ed Squires, Charles Honsinger, Douglas Jones, Dan Ayers, Teresa Molitor, Eric Landsberg, Marie Kellner, Rob Van Kirk, Shaun Parkinson, Jon Bowling

During the Work Session the following items were discussed:

- A water supply update was given by Liz Cresto (IDWR)
- A discussion, led by Brian Patton (IDWR), of the Pristine Springs facility and the Board's intent to sell the facility to the College of Southern Idaho
- A status report on the Mountain Home Air Force Base (MHAFB) Water Sustainability Project by Randy Broesch (IDWR). Randy introduced a resolution for consideration by the Board on March 24.
- An update on the North Side Canal Company Canal Lining Update by Rick Collingwood (IDWR)
- An update on the ESPA Managed Recharge Program by Wes Hipke (IDWR).
- A presentation on Residential Irrigation Best Practices by a consortium of Wood River Valley interests.
- A status report on Surface Water Storage projects provided by Cynthia Bridge Clark.(IDWR)
- A status report on the Priest Lake Water Management Study by Neeley

Miller (IDWR)

- A presentation by Shaun Parkinson (Idaho Power) on the Cooperative Cloud Seeding Program.

No action was taken by the Board during the Work Session. The session adjourned at 3:45 p.m.

March 24, 2017

Board Meeting No. 3-176

At 8:00 a.m. Chairman Chase called the meeting to order. All members were present.

Agenda Item No. 1: Roll Call

Board Members Present

Roger Chase, Chairman
Vince Alberdi, Secretary
Bert Stevenson
Chuck Cuddy

Jeff Raybould, Vice-Chairman
Pete Van Der Meulen
Dale Van Stone
Albert Barker

Staff Members Present

Gary Spackman, Director
Cynthia Bridge Clark, Water Projects Section Manager
Ann Vonde, Deputy Attorney General
General

Brian Patton, Bureau Chief
Neeley Miller, Senior Planner
Meghan Carter, Deputy Attorney

Agenda Item No. 2: Executive Session

Mr. Alberdi moved that the Board resolve into Executive Session. Chairman Chase seconded the motion. At approximately 8:00 am the Board resolved into Executive Session by unanimous consent pursuant to Idaho Code Section 74-206(1) subsections (f), for the purposes 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. All members were present. Topics discussed were: Water Rights Protests, Recharge Water Rights.

No action was taken by the Board during the Executive Session. The Board resolved out of Executive Session and into Regular Session at approximately 9:00 am.

Agenda Item No. 3: Agenda and Approval of Minutes

There were no changes to the agenda. Mr. Van Stone suggested the meeting minutes show Mr. Cuddy in attendance since he arrived late in the meeting for the 2-17 minutes. Mr. Barker reviewed the minutes and made a motion to approve the minutes. Seconded by Mr. Cuddy. Voice vote. All were in favor. Motion passed.

Agenda Item No. 4: Public Comment

Chairman Chase opened the meeting for public comment. Mr. Don Smith, member of 10 Mile Mining District addressed some concerns with the board regarding the State Water Plan and protection of dredge mining in the South Fork of the Clearwater River.

Chairman Chase approved Mr. Ron Miller's request to address his concerns during Agenda Item 9.

Mr. Hal Anderson discussed the status of the proposed Cat Creek Energy project with the Board.

Agenda Item No. 5 Protest Settlement

Ms. Ann Vonde presented a potential settlement to resolve the Board's protest of water right application no. 37-22924. The application was for diversion of 0.32 cfs from groundwater in the Big Wood River Basin for irrigation of 15 acres and a 0.5 acre pond. The Board protested the application because residual pumping depletions could impact the Board's minimum streamflow right in the Big Wood River. Ms. Vonde presented details of a potential settlement that had been negotiated with the applicant. Mr. Raybould made a motion to accept the proposed settlement and to authorize Ms. Vonde to sign the stipulation. Mr. Van Der Meulen seconded the motion. Voice vote: 7 were in favor, 1 abstained. Motion passed.

Ms. Vonde discussed the status of efforts to resolve protests to the Board's lower valley Snake River recharge water right application nos. 01-10609 and 01-7142. To resolve the protests, the Board was required to show it had permission from the irrigation entities from Minidoka to Milner to conduct the recharge in their canal systems. Memorandums of Intent (MOI) between the Board and each entity were developed which allow recharge to be conducted in each conveyance system. The MOIs are annual agreements that will renew in perpetuity unless cancelled by either party with 30 days notice. Mr. Raybould made a motion to approve the MOIs and to provide signatory authority to Chairmen Chase. Mr. Barker seconded the motion. Voice vote: 8 were in favor. Motion passed.

Agenda Item No. 6 Committee Assignments

Mr. Patton presented committee assignments to the Board for approval.

Mr. Van Stone moved to adopt the committee assignments. Mr. Stevenson seconded the motion. Voice vote: All were in favor. Motion passed.

Agenda Item No. 7 Financial Update

Mr. Patton provided updates as of March 2nd on the Board's account balances. Mr. Patton indicated that the Board's various accounts and subaccounts have a total of \$35.6 million committed or ear-marked for projects. Additionally, he indicated the Board has a total loan principal outstanding of \$25.5 million. Mr. Patton also indicated that the Board has a total uncommitted balance of \$8.3 million dollars, which includes \$5 million dollars allocated from cigarette tax revenue from House Bill 547.

Mr. Patton informed the Board of three loan applications: Big Wood Canal Co., North Fremont Canal Co., and Samaria Irrigation Co. expected to be paid off within six months to one year.

Agenda Item No. Pristine Springs Report

Mr. Patton gave a brief background on Pristine Springs, including the executed letter of intent for the facility to be sold to the College of Southern Idaho. A new appraisal was conducted by Integra Resources and estimated the value at \$2.4 million. Senate Bill 1402, passed by 2016 legislature, required the proceeds from selling Pristine Springs be returned to the legislature. Mr. Patton presented a resolution to the Board to authorize the execution of the purchase and sale agreement.

Ms. Carter explained that the Board placed water right 36-2063c, with a place of use at Pristine Springs, into the Pristine Springs Trust for Water Right No. 36-2063C for the benefit of the Ground Water Districts, the City of Twin Falls and the Board. The Board is currently listed as the beneficiary. Ms. Carter highlighted language that has been included in the resolution that would change the beneficiary from the Board to the current legal owner of Pristine Springs. The water right will remain in the name of the Board and the Board will also be the trustee. Ms. Carter

confirmed the resolution will not change the contract between the state and the ground water districts.

Mr. Alberdi moved to adopt the resolution. Mr. Stevenson seconded the motion. Roll call vote: Alberdi: Aye; Barker: Abstain; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 7 Ayes. Motion passed

Agenda Item No. 9 Stream Channel Alteration Permits on South Fork Clear Water River

Mr. Baxter introduced the findings and recommended orders issued by Hearing Officer James Cefalo regarding four stream channel alteration permits for suction dredging on the South Fork of the Clearwater River. Mr. Baxter provided background information on the permits reminding the Board that requests for hearing were filed by the applicants as they did not agree with the conditions placed on the permits. He explained that hearings associated with stream alteration permits must go before the Board in accordance with the corresponding Rules of Procedures and that the Board is required to take final action on the recommended order issued by the hearing officer.

Mr. Baxter reviewed the Hearing Officer's findings and discussed how the Board could address the three recommended orders where no petitions for reconsideration or exemptions were filed (stream channel alteration permits nos. S82-20058, S82-20059, and S82-20060) and how the Board could separately address the recommended order where a petition for reconsideration and exceptions were filed (stream channel alteration permit no. S82-20057). A resolution was presented for Board consideration regarding the first three permits which resolved to adopt the recommended orders as issued by the hearing officer.

With regard to stream channel alteration permit no. S82-20057, in the name of Ron Miller, Mr. Baxter described the potential options for Board response to the recommended order including the following: adopt the resolution provided to the Board for consideration affirming the hearing officer's decision; take additional time and finalize a decision at a later date; or remand the matter back to the hearing officer for further evidentiary hearings if the Board determines additional factual development of the record is necessary.

Mr. Miller was in attendance and explained reasons for his protest to the Board, including concern about the use of the word "recreational" in the 380b small commercial dredge mining license permit as well as aspects of the South Fork Plan. He also requested the Board increase the number of dredge permits and the length of the dredging season.

Mr. Barker moved to adopt the resolution pertaining to stream channel alteration permits nos. S82-20058, S82-20059, and S82-20060. Mr. Van Stone seconded the motion. Roll call vote: Alberdi: Aye; Barker: Abstain; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 7 Ayes. Motion passed

Mr. Barker further moved to adopt the resolution pertaining to stream channel alteration permit no. S82-20057 as drafted, affirming the hearing officer's decision. Mr. Van Stone seconded the motion. Roll call vote: Alberdi: Aye; Barker: Abstain; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 7 Ayes. Motion passed.

Agenda Item No. 10 ESPA Recharge

Mr. Hipke provided an update on the status of the ESPA recharge program and current recharge activities. He also discussed potential recharge opportunities within the New Sweden Irrigation District (NSID). He explained that NSID operates and maintains an irrigation delivery system that conveys water from the Snake River through various canals to areas with potential recharge sites. An evaluation is required to determine what infrastructure improvements would be required to increase the system's managed recharge capacity.

Mr. Hipke presented a resolution to the Board for consideration to authorize funding of up to \$330,000 from the Secondary Aquifer Fund, for an evaluation of managed recharge in the NSID system. The work would include evaluation of a minimum of three recharge basins and two injection well locations along with development of a Ground Water Quality Monitoring Program Application for the NSID Recharge Site. The Board expressed concerns about funding the project. Mr. Hipke suggested the Board postpone its decision on the resolution for a later Board meeting. The Board agreed to address this resolution in the July Board meeting.

Agenda Item No. 11 Update on Legislation of Interest

Mr. Baxter presented a few pieces of legislation of interest. House Bill 96- Bill authorizes alternate commissioners to the Bear River Commission and provides authority for alternates to vote. The bill has been passed by the House and Senate and has also been signed by the Governor.

House Bill 140 – Bill revised Board notification requirements associated with the State Water Plan. The revised bill states that the Board should use its best efforts to notify each member of the Legislature of changes in the State Water Plan on or before the first day of the Legislative Session following a change. The bill has been passed by the House and Senate, but no action has been taken by the Governor.

In response to an attempt by the State of Oregon to require Idaho Power to implement fish passage and re-introduction of endangered species above the Hells Canyon Project of Idaho Power, a number of bills are being considered by the legislature. Mr. Baxter explain the purpose and status of House Bills 169 and 170. Each bills have been passed by the House and Senate and are awaiting action by the governor.

Agenda Item No. 12 Water Supply Bank

Mr. Buyer presented two resolutions to the Board. The first resolution addressed annual evaluations of water supply bank rentals of ground water within the ground water management area for the Eastern Snake Plain Aquifer. The Water Supply Bank Committee believes the Board should exercise caution when approving rentals of ground water within the designated ground water management area. It was proposed that staff at the IDWR draft a condition that will allow the Board annually to reconsider whether the rental approval process conflicts with the groundwater management ESPA plan.

Mr. Barker suggested the third whereas in the resolution be re-written as “Whereas the director has designated ground water management area for the ESPA.”

Mr. Barker moved to adopt the resolution with changes. Mr. Raybould seconded the motion. Voice vote: All were in flavor. Motion passed.

Mr. Buyer discussed a proposal and introduced a resolution for Board consideration to pursue a WaterSMART grant at the request of the Water Supply Bank committee members. Funding from the U.S. Bureau of Reclamation’s WaterSMART grant program) can be utilized to contract for meeting facilitation, strategic planning, business analysis and software architecting services, which will augment the capacity of IDWR staff and water supply bank stakeholders to study, develop and implement strategies and projects to increase workflow efficiencies and improve water marketing opportunities within Idaho.

Mr. Barker moved to adopt the resolution. Mr. Stevenson 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.

Agenda Item No. 13 Ground Water Conservation Grants – City of Hailey

Mr. Collingwood presented a resolution to the Board to fund a ground water conservation grant for the City of Hailey (City). He explained that the City proposed to continue the current Water Conservation Rebate Program through 2018. The program would continue to target irrigation, which comprises approximately 70% of the annual water consumption in the City.

Mr. Collingwood also explained the details of the proposal as described in the materials provided to the Board. It included an offer of rebates for removing turf and replacing it with no-or low-water demand materials, such as drought-tolerant plants or hardscape elements. The City has also partnered with the Wood River Land Trust to hold water conservation workshops and to assist with public outreach. The City will monitor the water user accounts of the applicants and will track and report results of the project in 2018 and 2019. Results will be documented in a program booklet, which will include before and after photos of the transformed areas. A copy of the booklet will be submitted to the Idaho Water Resource Board at the end of the program.

Mr. Van Stone moved to adopt the resolution. Mr. Barker seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Aye; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Abstain; Van Stone: Aye; Chairman Chase: Aye. 7 Ayes. Motion passed.

Agenda Item No. 14 MHAFB Water Sustainability Project

Mr. Broesch provided an update on the Mountain Home Air Force Base Water Sustainability Project and is seeking a funding resolution from the Board to finance the next 10 months of work for the Owner's Advisor, Bond Counsel, and services to change the water right from agricultural use to DCMI use.

Mr. Barker 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.

Agenda Item No. 15 Director's Report

Mr. Spackman discussed highlights from the proposed 2017 Budget including stream gaging, additional funding for staff to address stock water claims and authorize a ground water modeler to the IDWR staff (as per the Governor's recommendations). Given the high runoff, Safety of Dams was a topic of interest. IDWR has worked closely with operators of Oakley Dam as the amount of flow that can be discharged has been restricted due gate limitations Mackey Dam is also being watched closely after the director asked them create more space in the reservoir due to the large snow pack.

Director Spackman discussed ongoing contested cases and informed the Board of a Water District 1 and Committee of Nine proposal for an amendment to the rental pool procedures to address the use of storage water to irrigate new acres. The amendment was tabled, but a significant amount of time was spent on the topic and it was seen as a high importance to the Water District.

Agenda Item No. 16 Non-Action Items for Discussion

Mr. Patton discussed a resolution passed by Water District 1 using the language "the water users of Water District 1 urge the Idaho Water Resource Board to evaluate and if necessary develop

new policies or rules to address new consumptive uses of water that can impact water supplies.” Mr. Patton suggested the Board think about how they would like to handle the resolution as it will be a topic in the future.

He also discussed the sale of Pristine Springs to the College of Southern Idaho. The House and Senate have passed a bill in support of the sale. Mr. Patton also noted that he and Mr. Miller met with the Forest Service recently for the Wild and Scenic Eligibility Plan. Mr. Patton expects it may take many years to pass a new plan.

Agenda Item No. 17 Next Meeting and Adjourn

Mr. Van Der Meulen motioned to adjourn the meeting. Mr. Stevenson seconded. Voice vote: All were in flavor. Motion passed

Respectfully submitted this 26th day of January 2018.

Vince Alberdi, *Secretary*

Nikki Regent, *Administrative Assistant II*



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District 3

Dale Van Stone
Hope
District 1

MINUTES MEETING NO. 4-17

Idaho Water Center
Director's Conference Room 648A
322 East Front Street, 6th Floor
BOISE

April 13, 2017
Board Meeting No. 4-17

At 3:00 p.m. Chairman Chase called the meeting to order. All members were present.

Agenda Item No. 1: Roll Call

Board Members Present

Roger Chase, Chairman
Vince Alberdi, Secretary
Bert Stevenson
Chuck Cuddy

Jeff Raybould, Vice-Chairman
Pete Van Der Meulen
Dale Van Stone
Albert Barker

Staff Members Present

Brian Patton, Bureau Chief
Cynthia Bridge Clark, Water Projects Section Manager
Wesley Hipke, Recharge Program Manager
Ann Vonde, Deputy Attorney

Agenda Item No. 2: Executive Session

Mr. Alberdi made a motion for the Board to resolve into Executive Session. Mr. Van Der Meulen seconded. Roll call vote: Mr. Alberdi: Yes; Mr. Barker: Yes; Mr. Cuddy: Yes; Mr. Raybould: Yes; Mr. Stevenson: Yes; Mr. Van Der Meulen: Yes; Mr. Van Stone: Yes; and Chairman Chase: Yes. 8 Ayes.

At approximately 3:00 p.m. the Board resolved into Executive Session by unanimous consent pursuant to Idaho Code Section 74-206(1) subsection (f), for the purposes 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. Topics discussed were: Recharge Water Rights

No actions were taken by the Board during the Executive Session. Mr. Alberdi moved to exit out of Executive Session. Mr. Raybould seconded the motion. Voice vote: All were in favor. Motion carried. The Board resolved out of Executive Session at approximately 3:30 p.m.

Agenda Item No. 3: Recharge Water Rights Settlement

Ann Vonde presented the details of a potential stipulated settlement for protests associated with Board's Snake River recharge water right applications 1-7142 and 1-10609 and a potential Memorandum of Intent (MOI) with the U.S. Bureau of Land Management (BLM) regarding conveyance of recharge water across federal land associated with Big Wood River water right permit number 37-7842. Mr. Patton asked the Board to pass a motion to authorize execution of (1) the stipulated settlement of protestant's protests of Board's two lower valley Snake River recharge water right applications, (2) the stipulated settlement with the BLM regarding the protests of the Board's two lower valley Snake River recharge water right applications, and (3) the MOI between the BLM and the Board regarding water right permit 37-7842. ~~cccc~~

Mr. Raybould made a motion to accept the three resolutions as recommended. Mr. Van Der Meulen seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Absent; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. Motion passed. The resolution was adopted.

Agenda Item No. 4 Non-Action Items for Discussion

Mr. Raybould updated the Board about conversations with Mark Limbaugh, with the Ferguson Group, LLC, regarding projects that may be eligible for federal funding under President Trump's infrastructure program. Mr. Patton will coordinate with Mr. Limbaugh to refine the potential projects.

Mr. Barker and Chairman Chase met with dredge miners, Senator Crabtree and Representative Shepherd and the local Sherriff ~~cc(2)~~ in Grangeville. During the meeting, Mr. Barker and Chairman Chase were able to clarify the language specified in the recreational dredge mining permits issued by the Idaho Department of Water Resources and the Idaho State Water Plan.

Agenda Item No. 15 Next Meeting and Adjourn

The next meeting was confirmed for May 18-19, 2017 in Lewiston, Idaho. Mr. Raybould moved to adjourn. Mr. Stevenson seconded. Voice Vote: all in favor. The meeting adjourned.

Respectfully submitted this 26th day of January, 2018

Vince Alberdi, *Secretary*

Nikki Regent, *Administrative Assistant II*



IDAHO WATER RESOURCE BOARD

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Albert Barker
Boise
District 2

John "Bert" Stevenson
Rupert
District 3

Dale Van Stone
Hope
District 1

MINUTES **MEETING NO. 5-17**

Lewis-Clark State College
Williams Conference Center
837 4TH STREET
LEWISTON, ID

May 18, 2017
Work Session

Chairman Chase called the work session meeting to order at 8:30 a.m. All Board members were present. IDWR staff members present were: Brian Patton, Cynthia Clark Bridge, Neeley Miller, Randy Broesch, and Amy Cassel.

During the Work Session the following items were discussed:
Proposed FY 18 Budget
MHAFB Water Sustainability Project Update
Palouse Basin Water Supply Study
Lewiston Deep Aquifer Investigation

At noon the Board broke for lunch. A tour of the Port of Lewiston and Lewiston Aquifer sites of interest followed lunch. No action was taken by the Board during the Work Session. The field trip ended at 4:45 p. m.

May 19, 2017
Board Meeting No. 5-17

At 8:00 a.m. Chairman Chase called the meeting to order. All members were present.

Agenda Item No. 1: Roll Call

Board Members Present

Roger Chase, Chairman
Vince Alberdi, Secretary
Bert Stevenson
Albert Barker

Jeff Raybould, Vice-Chairman
Pete Van Der Meulen
Dale Van Stone

Staff Members Present

Gary Spackman, Director

Brian Patton, Bureau Chief
Cynthia Bridge Clark, Water Projects Section Manager
Neeley Miller, Senior Planner
Amy Cassel, Program Manager

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

Meeting Minutes 2-16 were not completed in time for approval but will be provided at a subsequent Board meeting.

Agenda Item No. 3: Public Comment

John Williams, Bonneville Power Administration (BPA), thanked the Board for allowing him to participate in the work session field trip and updated the Board about ongoing BPA activities

Agenda Item No. 4: Financial Status

Mr. Patton provided updates as of May 1 on the Board's account balances. Mr. Patton informed the Board of five- loan applications in early stages of preliminary planning, including the Ground Water Districts loan.

Mr. Patton informed the Board of the status of the sale of Pristine Springs. As of May 19, 2017, the purchase and sale agreement has been signed by both the College of Southern Idaho and Board. On Monday, May 21, 2017, the documents will be delivered to the title company and funds will be transferred to the Board's account by the trustee.

Agenda Item No. 5: Loan Interest Rate

Mr. Patton presented options for modification of Board's loan program interest rate per the recommendation of the Board Finance Committee. The Committee's recommendation was to change the loan interest rate from 3.4% to 4.5%, effective the beginning of fiscal year 2018. Mr. Barker suggested the rate change take effect as of May 19, 2017 (day of the Board Meeting).

Mr. Barker made a motion to accept the resolution as recommended. Mr. Stevenson seconded the motion. Roll call vote: Alberdi: Aye; Barker: absent; Cuddy: Absent; Raybould: Abstain; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. Motion passed. The resolution was adopted.

Agenda Item No. 6: FY 2018 Secondary Aquifer Fund Budget

Mr. Patton briefly updated the Board on the FY 2018 Secondary Aquifer Fund resolution recommended by the Finance Committee during the May 2nd meeting in Jerome, ID. He noted- that changes recommended by the Board during the work session will be made to the final resolution.

Mr. Alberdi made a motion to accept the resolution with changes as recommended. Mr. Van Stone seconded the motion. Roll call vote: Alberdi: Aye; Barker: absent; Cuddy: Absent; Raybould: Abstain; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. Motion passed. The resolution was adopted.

Agenda Item No. 7 Lewiston Deep Aquifer Investigation

Mr. Miller presented a brief history of the one-time appropriation from 2014 House Bill 479 setting aside funds for Northern Idaho Aquifers. He discussed how in March 2016 the Board authorized funding for Phase One (completed April 1, 2017) of the Lewiston Deep Aquifer Investigation. Phase one included a hydrological analysis of the eastern and southern Lewiston plateau ground water management area producing important data that was used to identify additional work needed to address questions of the sustainability of the aquifers. Mr. Miller discussed a proposed phase Two designed to collect more hydrologic and geological data. The final product of Phase Two is expected to be completed by June of 2018.

Mr. ~~XXX~~ Van Stone made the motion to accept the resolution as presented authorizing the expenditure of up to \$109,000 from the Northern Idaho allocation in the Secondary Aquifer Planning, Management, and Implementation fund to undertake Phase Two of the study targeted at improving the understanding of the Lewiston regional deep aquifer. [CC(1)]

Agenda Item No. 8: Priest Lake

Mr. Miller presented a status report of the Priest Lake Water Management Study, including updates to the schedule and public meeting dates throughout the summer.

Agenda Item No. 9: Goat & Meadow Creek

Ms. Cassel proposed two resolutions to the Board regarding Goat and Meadow Creek funding. The first resolution covered the cost of water based on the appraisal (before and after analysis) by Knipe Realty in Boise, ID. Knipe was hired by Western Rivers Conservancy. The cost of water was \$929,745.60 with a Water Supply Bank one-time rental fee of \$1,435.50.

The second resolution before the Board authorized payment of the permanent Water District 71 administration fee of \$14,620. The resolution ensures Water District 71 will permanently administer water to the minimum streamflow in Goat and Meadow Creeks. The acquisition will be paid out in two lump sum payments.

Mr. VanDerMeulen made a motion to accept the resolution as recommended. Mr. Barker seconded the motion. Roll call vote: Alberdi: Aye; Barker: absent; Cuddy: Absent; Raybould: Abstain; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. Motion passed. The resolution was adopted.

Agenda Item No.: ESPA Recharge

Mr. Patton presented updated recharge amounts as of May 17, 2017. The Lower Snake River Valley recharged 38, 736 af for 189 days. The Upper Snake River Valley recharged 136,000 af for 78 days. The Wood River Valley has recharged 38,127 af for the past 85 days and is continuing to recharge water. Mr. Patton introduced a resolution to the Board recommended by the Aquifer Stabilization Committee that would allocate up to \$200,000 for testing one potential recharge basin, drilling and testing on infiltration well in the New Sweden Irrigation District (NSID) system and a Ground Water Quality Monitoring Program Application for the NSID reservoir recharge site.

Mr. Raybould made a motion to accept the resolution as recommended. Mr. Stevenson seconded the motion. Roll call vote: Alberdi: Aye; Barker: absent; Cuddy: Absent; Raybould: Abstain; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. Motion passed. The resolution was adopted.

Agenda Item No. 11: Securing Federal Funding

Mr. Patton addressed the Board proposing a resolution to enter into a contract with the Ferguson Group, LLC, to provide assistance in securing federal funding for large-scale water projects. The Ferguson Group represents water interests in Washington D.C. Mark Limbaugh has served as a Watermaster in Payette, Deputy Commissioner for U.S. Bureau of Reclamation, and Assistant Secretary of Interior for Water and Science under the Bush Administration. He currently serves as President of Ferguson Group. Mr. Patton stated that he has confidence in Mr. Limbaugh's ability to assist with Idaho's water interests.

Mr. Raybould made a motion to accept the resolution with changes as recommended. Mr. Van Stone seconded the motion. Roll call vote: Alberdi: Aye; Barker: absent; Cuddy: Absent; Raybould: Abstain; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. Motion passed. The resolution was adopted.

Agenda Item No. 12 Director's Report

Direct Spackman expressed his appreciation to Commissioner Zenner and the Board for establishing a ground water management supported by technical services by Dale Rawlston on the Lewiston Plateau. IDWR has been tracking various dams such as the Oakley, Big Lost and Mackey Dams. The department has requested the dams pass at least the minimum streamflow, but have halted due to floods in the surrounding cities. As the floods subside, Dams are expected to continue their efforts.

Director Spackman informed the Board of an issue regarding which losses are accounted for on the Snake River. Aberdeen Springfield and a few other canal companies filed a petition with the Director after the natural flow was assigned by the department to the reach above Blackfoot.

Agenda Item No. 13 Non-Action Items for Discussion

No items were discussed

Agenda Item No. 14 Executive Session

Agenda Item No. 15-14 Next Meeting and Adjourn

[CC(2)] Mr. Van Stone motioned to adjourn the meeting. Mr. Barker seconded. Voice vote: All were in flavor. Motion passed. Next meeting is scheduled for July 27-28th in Idaho Falls.

Respectfully submitted this 19th day of May, 2016 ~~(cc(3))~~ 26th day of January, 2018.

Vince Alberdi, *Secretary*

Nikki Regent, *Administrative Assistant II*



IDAHO WATER RESOURCE BOARD

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Boise
District 2

John "Bert" Stevenson
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District 3

Dale Van Stone
Hope
District 1

MINUTES **MEETING NO. 6-17**

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

June 6, 2017
Board Meeting No. 6-17

At 10:00 a.m. Chairman Chase called the meeting to order. Six out of the eight Board Members were present.

Agenda Item No. 1: Roll Call

Board Members Present

Roger Chase, Chairman
Vince Alberdi, Secretary
Dale Van Stone

Jeff Raybould, Vice-Chairman
Bert Stevenson
Albert Barker

Staff Members Present

Gary Spackman, Director
Cynthia Bridge Clark, Water Projects Section Manager
Senior Planner
Clive Strong

Brian Patton, Bureau Chief
Neeley Miller,
Daryl Early

Agenda Item No. 2: Executive Session

Mr. Alberdi made a motion for the Board to resolve into Executive Session. Mr. Stevenson seconded. Roll call vote: Mr. Alberdi: Yes; Mr. Barker: Yes; Mr. Cuddy: absent; Mr. Raybould: Yes; Mr. Stevenson: Yes; Mr. Van Der Meulen: Absent; Mr. Van Stone: Yes; and Chairman Chase: Yes. 6 Ayes.

At approximately 3:01 p.m. the Board resolved into Executive Session by unanimous consent pursuant to Idaho Code Section 74-206(1) subsections (f), for the purposes 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. Topics discussed were: Recharge Water Rights

No actions were taken by the Board during the Executive Session. Mr. Alberdi moved to exit out of Executive Session. Mr. Barker seconded the motion. Voice vote: All

were in favor. Motion carried. The Board resolved out of Executive Session at approximately 10:15 a.m.

Agenda Item No. 3 Non-Action Items for Discussion

Mr. Barker informed the Board of an opportunity to help Steve Sweet from Boise River Flood District #10. He is asking for \$5,000 to help fund a fly-over of the Boise River to view the crest of the flood that is expected. Information from the fly-over may assist with the Boise River study and possible recharge efforts.

No action was taken by the Board.

Agenda Item No. 4 Next Meeting and Adjourn

The next meeting was confirmed for May 18-19, 2017 in Lewiston. Mr. Stevenson moved to adjourn. Mr. Raybould seconded. Voice Vote: all in favor. The meeting adjourned.

Respectfully submitted this 26th day of January, 2018

Vince Alberdi, *Secretary*

Nikki Regent, *Administrative Assistant II*



IDAHO WATER RESOURCE BOARD

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Orofino
At Large

Albert Barker
Boise
District 2

John "Bert" Stevenson
Rupert
District 3

Dale Van Stone
Hope
District 1

MINUTES MEETING NO. 7-17

Idaho Water Center
Conference Rooms 602 D
322 East Front Street, 6th Floor
BOISE

June 9, 2017
Board Meeting No. 7-17

At 9:00 a.m. Chairman Chase called the meeting to order. Seven out of the eight Board Members were present.

Agenda Item No. 1: Roll Call

Board Members Present

Roger Chase, Chairman
Vince Alberdi, Secretary
Dale Van Stone
Pete Van Der Meulen

Jeff Raybould, Vice-Chairman
Bert Stevenson
Albert Barker

Staff Members Present

Brian Patton, Bureau Chief
Cynthia Bridge Clark, Water Projects Section Manager
Rick Collingwood, Staff Engineer
Nikki Regent, Administration Assistant

Guests Present

Steve Sweet, Boise River Flood Control District No. 10

Agenda Item No. 2: Treasure Valley High Water Documentation Funding Request

Mr. Steve Sweet, representing the Boise River Flood Control District No. 10 (BRFD 10), presented a funding request to the Board to partially fund a project to collect information about the impacts of high water flood patterns along the Boise River below Lucky Peak Dam. Mr. Sweet and the Board discussed the unprecedented flows in the Boise River in 2017 with flow rates measured at the USGS Glenwood gage at or higher than flood stage (7,000 cfs or more) for more than 117 days since February 13, 2017.

Mr. Sweet explained that the U.S. Army Corps of Engineers had obtained aerial photographs of the Boise River on May 22, 2017 when flows at the Glenwood gage were measured at 8,810 cfs and it was anticipated that flows could increase to 10,000 cfs in the near future. Mr. Sweet stated that BRFD 10, BRFD 11 and the City of Boise were attempting to obtain aerial photography and survey for a peak water event should river flows exceed 10,000 cfs. The total cost of the effort was estimated to be \$20,000, which would be shared between the three entities and the Board. The funding request to the Board was \$5,000.

Mr. Chase requested that the information generated from the project be made available to the Board. Staff presented a resolution to authorize disbursement of the funds for the Board's consideration. Mr. Barker suggested adding "up to \$5,000" to the resolution.

Mr. Van Der Meulen made a motion to pass the resolution with the addition of "up to \$5,000". Mr. Barker seconded the motion. Roll call vote: Alberdi: Aye; Barker: Aye; Cuddy: Absent; Raybould: Aye; Stevenson: Aye; Van Der Meulen: Aye; Van Stone: Aye; Chairman Chase: Aye. 7 Ayes. Motion passed.

Agenda Item No. 3 Non-Action Items for Discussion

Mr. Patton informed the Board of the Upper Snake River flood control operations, noting that 12,000 cfs was spilling past Milner Dam. He also noted that the Board's recharge partners have been allowed to start recharge.

Agenda Item No. 4 Next Meeting and Adjourn

The next meeting was confirmed for July 27-28, 2017 in Idaho Falls. Mr. Stevenson moved to adjourn. Mr. Raybould seconded. Voice Vote: all in favor. The meeting adjourned.

Respectfully submitted this 26th day of January 2018.

Vince Alberdi, *Secretary*

Nikki Regent, *Administrative Assistant II*

Memorandum



To: Idaho Water Resource Board
From: Randall Broesch P.E.
Date: January 11, 2017
Re: Mountain Home Air Force Base Water Sustainability Project

The following is a status report on the Mountain Home Air Force Base (MHAFB, base) Water Sustainability Project (Project).

Project Concept

The MHAFB currently relies on groundwater for its water supply, but diverts its water from a critical declining aquifer. The Idaho Water Resource Board (Board) intends to develop a pipeline and water treatment facility to deliver water from the Snake River to the MHAFB as an alternate water supply to their existing use of groundwater. In 2014, with support from the Governor and Idaho State Legislature, the Board purchased senior Snake River water rights from the Simplot Corporation to provide a water supply to the MHAFB. The surface water will be diverted out of the C.J. Strike Reservoir and delivered to the MHAFB where it will be treated and used for municipal purposes on the base. The Board is expected to retain the senior water rights and enter into a water utility service contract with the MHAFB for the delivery of the municipal water. The Board will undertake the financing, design, construction, and maintenance methods to bring the project to fruition. The Governor's office, the State Legislature, and the Board recognize and are committed to supporting the MHAFB as a \$1 Billion annual economic generator in the local Idaho economy.

Project Status

The following project components are progressing in parallel:

IDEQ/Raw Water Characteristic Study/Pilot Study-Staff has been coordinating with Idaho Department of Environmental Quality (IDEQ) to complete identified project requirements and processes required to deliver the proposed project. Priority project development activities include development of a facility plan report, identification of the raw water characteristics for the C.J. Strike Reservoir, completion of a pilot study of various treatment technologies, and preparation of a preliminary engineering report. IDEQ continues to support the project by providing technical guidance to both Board staff and the Brown & Caldwell team (the Board's Owner's Advisor).

Brown & Caldwell initiated a raw water characterization study and a pilot study to identify both the raw water characteristics of the water to be treated and the treatment technology process that will be used to best treat the raw water. Brown and Caldwell is piloting two treatment technologies: conventional and direct filtration types. Testing the different treatment types this spring went according to plan, while a changed condition during the summer months complicated the pilot testing process. Water in the reservoir is generally considerably warmer water in the reservoir during the summer months, resulting in a higher likelihood of algae blooms. Staff and Brown Caldwell coordinated with IDEQ and proposed suspending the pilot study in December to save funding on unnecessary testing through the winter months, and proposed instead to pilot test during the summer of 2018 to identify critical water quality characteristics related to the algae present in the C.J. Strike Reservoir. IDEQ concurred with the proposal, and the pilot plant was returned in December of 2017.

The data collected from the pilot plant and the raw water characteristic study will aid in identifying the necessary treatment processes to deliver a safe and reliable municipal water supply to the MHAFB.

Design-Build-Operator (DBO) Procurement-In August 2017, the Board initiated a two-part procurement process to secure a DBO for the project. Short listed respondents to the Request for Qualifications (RFQ) process were CH2M, McMillen Jacobs, and RSCI. These respondents have been invited to participate in the Request for Proposal phase of the procurement. Staff is currently working with Brown and Caldwell to prepare the RFP and plans to release it to the short listed respondents in April of 2018 and expects to Award the DBO Contract in October of 2018.

Environmental Assessment (EA)-The majority of the property between the Snake River and the MHAFB is federal land administered by the U.S. Bureau of Land Management (BLM). Since the Board holds the water rights and is responsible for developing the infrastructure to convey water to the base, it is required to submit an application to the BLM to secure an easement for the project. The MHAFB rules require an Environmental Assessment (EA) be completed as the recipient of the Board's water. To expedite the EA process, the MHAFB and the BLM entered into a cooperative agreement to co-lead the EA for the project, and the MHAFB hired a private consultant to prepare the EA for both agencies. A kickoff meeting for the EA was held on December 6, 2016 and a scoping meeting was held on January 17, 2017 from 4-6 pm at the City of Mountain Home Public Library.

A draft EA and draft Findings of No Significant Impact (FONSI) was issued for public comment by the BLM and the MHAFB on July 12, 2017. The public comment period on these items closed on August 12 and a final EA was issued on December 6 with the signed FONSI and Record of Decision. The 30-day public comment period on the Final EA ended on January 6, 2018. At the time this memo was prepared, no comments had been submitted to the MHAFB or the BLM on the final EA. Staff continues to work with the BLM to issue the final Right-of-Way Grant to the Board.

Water Utility Service Contract (WUSC) and Project Financing-The WUSC will establish the long-term utility relationship between the Board and the MHAFB, and will serve as the revenue commitment needed to pursue the issuance of revenue bonds to finance the project. On January 16, 2018, staff will meet with the Board's Finance Committee to discuss the terms, conditions and layout of the WUSC and to discuss anticipated financing approaches with project financing team.

Board staff and the MHAFB have been working together to move through the process of procuring the utility services. On December 21, 2017, the MHAFB issued "business clearance" (or authorization) to enter into negotiations with the Board. Negotiations are ongoing and staff anticipates execution of the WUSC by late March 2018.

Geotechnical Investigation-A geotechnical investigation began in December and will be completed by late February 2018. Two types of geotechnical investigations are being conducted: 1. A geotechnical baseline report that will be used to identify the depth to rock every 50 ft along the pipeline alignment, and 2. A detailed or conventional geotechnical investigation which will determine the engineering properties and strength of the materials encountered along the pipeline, at the water treatment plant site, and at the intake location.

Permits and Easements-Staff is submitting applications for permits to the following agencies or entities: ITD encroachment permit, Mountain Home Highway District utility permit, Idaho Department of Lands Utility Easement, Simplot Utility Easement, Idaho Power-Project Planning for Power Supply, and the U.S. Army Corps 404 permit.

Water Right Transfer-Staff has been preparing a water right transfer and new water right application and plans to submit the application in January now that the final EA has been issued by the BLM and the MHAFB.

Schedule -The following is an estimated timeline for milestones in the next 6-months:

6-Month Milestones**Date**

End Public Comment Period on the Final EA

January 2018

Execution of the WUSC

March 2018

File Water Right Transfer and New Water Right
Applications

January 2018

Begin Utility and Permitting Coordination

January 2018

Issue Request for Proposals (RFP) to Short Listed
DBO Respondents

April 2018

Proposal Submittal from Respondents

July-August 2018

REQUIRED ACTIONS: No actions from the Board are required at this time.

IDAHO

Water Resource Board



Mountain Home Air Force Base (MHAFB) Water Sustainability Project

Idaho Water Resource Board Meeting January 26th, 2018

Randall A. Broesch P.E. • Water Projects Section • Staff Engineer



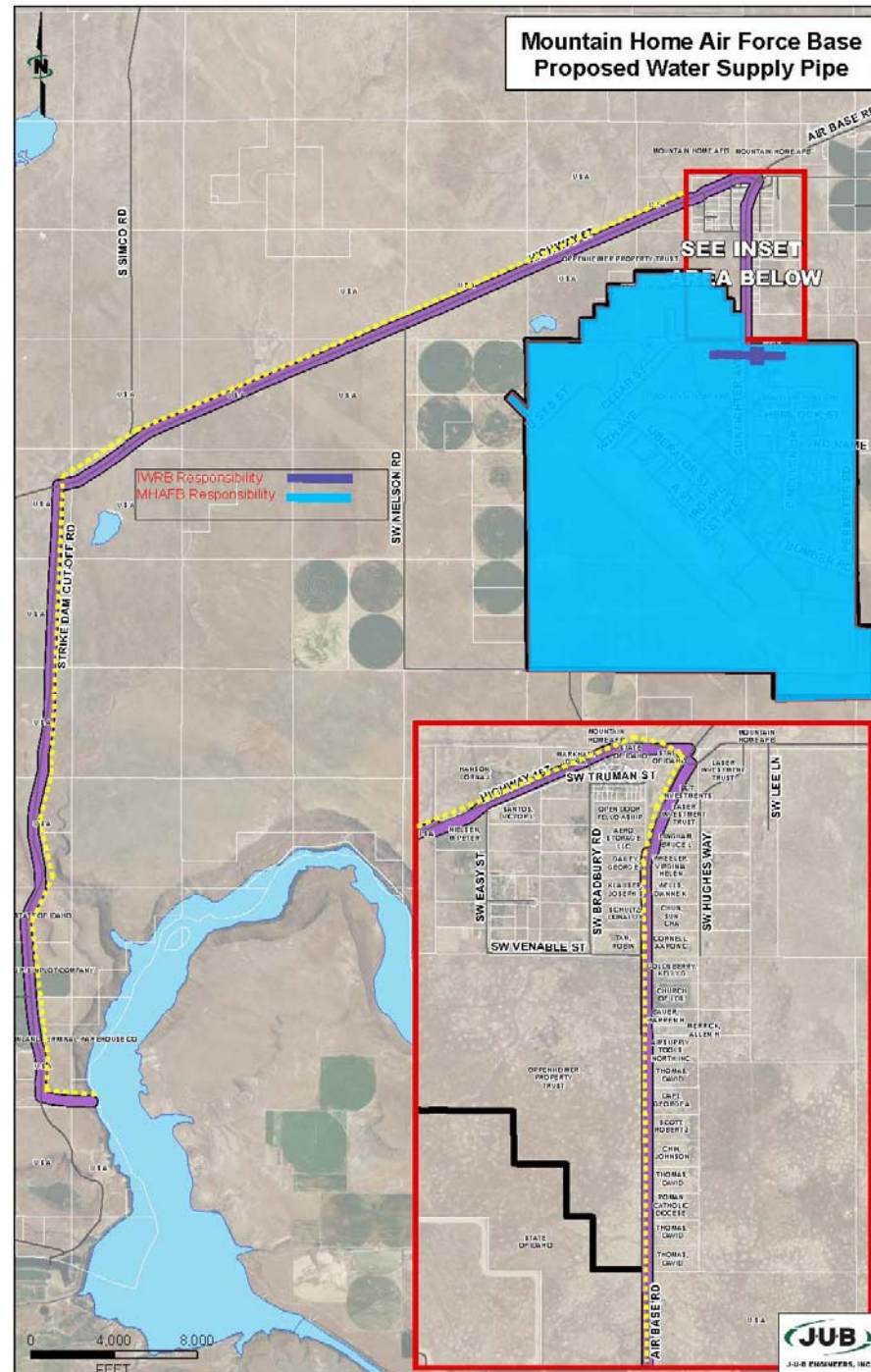
MHAFB Water Supply & Pipeline Project

Project Update

- Water Utility Service Contract Negotiations
- Water Rights Applications
- Easements/Permits
- 2018 Treatment Technology Pilot Testing



Mountain Home Air Force Base Proposed Water Supply Pipe





Air-Track Drilling Depth to Bedrock Record						TR
Project Number: 62165079		Recorded by: K. Nichols				
Project Name: MHAFB Water Supply & Pipeline		Drilling Subcontractor: Superior Blasting				
Station	Elevation	Approx. Hor. Offset	Approx. Vert. Offset	Depth to Bedrock (ft)	Notes	
10 + 00	2758.34			1	Near Canyon Rim	
10 + 50	2759.46			5		
11 + 00	2759.76			5		
11 + 50	2760.29			2	Soil layer from 6' to 8'	
12 + 00	2761.43			0		
12 + 50	2758.33			3	Cemented from 0' to 3'	
13 + 00	2759.89			5	Cemented from 0' to 5'	
13 + 50	2758.67			1.5		
14 + 00	2757.76			Not Encountered		
14 + 50	2756.59			4	Partially cemented from 0' to 4'	
15 + 00	2756.64			2	Partially cemented from 0' to 2'	
15 + 50	2756.59			6		
16 + 00	2759.89			4		
16 + 50	2760.62			4.5		
17 + 00	2760.24			6	Boulders at surface	
17 + 50	2762.56			5.5	Boulders at surface	
18 + 00	2769.07			3.5		
18 + 50	2767.28			Not Encountered	Cemented soil	
19 + 00	2772.93			3.5	Boulders at surface	
19 + 50	2769.76			Not Encountered	Boulder at 5'	
20 + 00	2769.42			Not Encountered	Cemented soil	
20 + 50	2768.09			2	Cemented from 0' to 2'	
21 + 00	2769.20			3	Cemented from 0' to 3' and soil below 7"	
21 + 50	2767.08			7		
22 + 00	2764.68			9.5		
22 + 50	2763.20			11.5	Gravel or fractured rock at 7.5'	
23 + 00	2761.75			5.5		
23 + 50	2760.99			3		
24 + 00	2762.86			3		
24 + 50	2763.58			4		
25 + 00	2763.63			4	Boulders at 1'	
25 + 50	2763.61			9.5	Boulders at 4'	
26 + 00	2763.30			3	Cemented soils from 1' to 3'	
26 + 50	2762.73			4		
27 + 00	2762.20			8.5		
27 + 50	2763.22			4	Boulder at 1'	
28 + 00	2762.94			3		
28 + 50	2762.73			6		
29 + 00	2762.95			3		
29 + 50	2763.48			2		
30 + 00	2763.68			3		
30 + 50	2763.45			4.5		
31 + 00	2763.34			7	Cemented soils from 4.5' to 7'	
31 + 50	2763.38			5.5	Cemented soils from 3' to 5.5'	
32 + 00	2763.95			6	Cemented soils from 3' to 6'	
32 + 50	2764.94			7.5	Cemented soils and boulder above 7.5'	
33 + 00	2765.48			7		
33 + 50	2766.00			3.5	Cemented from 2' to 3.5'	
34 + 00	2766.63			5.5		
34 + 50	2766.80			5.5		
35 + 00	2768.03			5.5 to 7	Boulder or rock layer from 5.5' to 7'	
35 + 50	2769.83			2.5	Soil layer from 4' to 7'	
36 + 00	2770.51			Not Encountered	Cemented soils below 4'	
36 + 50	2772.63			Not Encountered		
37 + 00	2774.16			1 to 2	Boulder or rock layer from 1' to 2'	
37 + 50	2775.64			Not Encountered	Cemented soil below 6'	
38 + 00	2777.47			Not Encountered		
38 + 50	2779.58			Not Encountered	Cemented soil from 5.5' to 9.5'	
39 + 00	2781.36			Not Encountered		
39 + 50	2783.75			Not Encountered	Cemented soil from 3.9' to 10'	

Demonstration of Technical, Financial, and Managerial Capacity for a New Public Water System

Mountain Home Air Force Base Water Supply
Idaho Water Resource Board

Elmore County,
Idaho



October 2017

Prepared By:

J-U-B Engineers
250 S. Beechwood Dr.
Suite 201
Boise, Idaho 83709

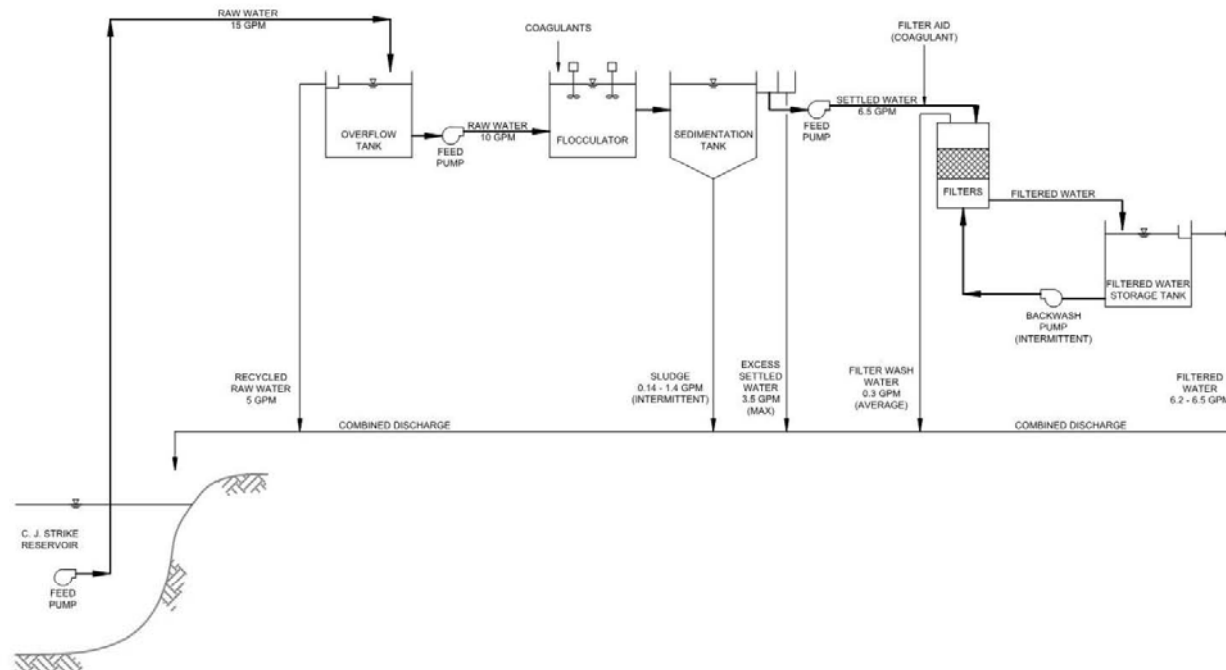


Figure 1-1. Pilot plant process schematic

MATERIALS FOR THIS SECTION MAY BE PROVIDED AT THE MEETING.

Memorandum



To: Idaho Water Resource Board (IWRB)
From: Neeley Miller, IDWR Planning & Projects Bureau
Date: January 11, 2018
Re: Priest Lake Water Management Project

Background:

- The Idaho Department of Water Resources (IDWR) owns the existing Priest Lake Dam (dam) which was constructed in 1978 as an outlet control structure to maintain lake levels in the Priest River in accordance with Idaho Code §70-507. Idaho Code §70-507 authorizes the director of IDWR to contract operation and maintenance of the dam, and requires that the water surface level of Priest Lake be maintained at 3.0 feet on the USGS Priest Lake Outlet gage (located upstream of the dam) after run-off of the winter snowpack until the close of the main recreational season.
- As a result of limited water supply and drought conditions in northern Idaho in 2015 and 2016, it was difficult to maintain required pool levels and downstream flow in the Priest River during the recreational season.
- The IWRB subsequently authorized expenditure of up to \$300,000 from the Revolving Development Account to complete the Priest Lake Water Management Study (study) to evaluate strategies to meet long-term water management objectives for the Priest Lake and Priest River system.
- A Request for Proposals was issued to solicit consultant services to complete the study. The proposal submittal period closed in October 2016. Several proposals were submitted and staff review proposals and selected a consultant to perform the study: Mott MacDonald (MM).

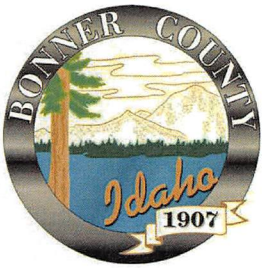
Study Recommendations and Costs:

- The work on the study has been completed and includes the following recommendations:
 - Temporarily raising surface level of Priest Lake 3 to 4 inches during the recreational season of dry years and integrating real-time streamflow data to allow more flexibility
 - Outlet structure improvements to the scour apron, modifying and strengthening gates
 - Replace the current existing porous breakwater with a sediment retention feature with some dredging included
- The estimated cost to implement these recommendations is approximately \$5 million (\$2.4 million for outlet structure improvements, and \$2.4 - \$2.6 million for Thorofare improvements).
- IWRB passed a resolution on November 8, 2017 accepting and endorsing the recommendations of the project and recommended proceeding with the project if and when funding becomes available.

Next Steps/Discussion

- The Governor's FY2019 Budget includes a proposed appropriation of \$2.4 million for the Priest Lake Water Management Project to the Board's Revolving Development Account. The Governor's budget then recommends *"that the Idaho Water Board and impacted local communities collaborate to identify sources for the remaining funds."*
- Staff will discuss options with the IWRB for bridging the gap between the Governor's recommendation and the total project cost.

Attachment(s): Project support letters from Bonner County and Lakes Commission



Bonner County

Board of Commissioners

Glen Bailey

Daniel McDonald

Jeff Connolly

November 21, 2017

Governor C.E. "Butch" Otter
Office of the Governor
State Capitol
P.O. Box 83720
Boise, ID 83720

Funding for Priest Lake Management Infrastructure Improvements

Dear Governor Otter,

Bonner County is appreciative of the effort and resources the Idaho Water Resources Board put into the Priest Lake Water Management Study over the past year. Through considerable historic research, data collection, observations, and public interaction, the consultants have presented some reasonable options for continued navigation of the waterway thoroughfare to Upper Priest Lake. As well as ideas for the monitoring and management of the lake's water level in years of severe drought. Unfortunately the funding for these proposed alternatives is beyond the fiscal capability of Bonner County and the local Priest Lake community.

Bonner County is pleased to hold up to 20% of Idaho's navigable waters and our Priest Lake is recognized as an extraordinary boating playground. Recreational use of these waters is an integral part of Bonner County's business community and contributes some \$35,000,000 to our economy. With this in mind we ask you to find a funding mechanism within the Governor's State Budget to help with the estimated \$5,000,000 of infrastructure improvements that are needed to preserve boaters access to Upper Priest Lake and promote a healthy flow of water into the Priest River during dry years.

Despite our County's budgetary limitations we will commit \$50,000 for the engineering of the Priest Lake thoroughfare enhancements in FY 2019. We have collaborated throughout this process with a group of Priest Lake property owners who have been privately raising funds and gathering commitments for this project as well.

Priest Lake is truly one of Idaho's crown jewels and is worthy of significant investment by the State of Idaho in its future.

Thank you for your consideration,

BONNER COUNTY BOARD OF COMMISSIONERS


Glen Bailey, Chairman


Dan McDonald, Commissioner


Jeff Connolly, Commissioner

Cc: Senator Shawn Keough
Representative Sage Dixon
Representative Heather Scott
Chairman Roger Chase, Idaho Water Resources Board



MEMORANDUM

To: Senator Shawn Keough
Senator Chuck Winder, Assistant Majority Leader
Representative Sage Dixon
Representative Heather Scott

cc: Katie Brodie, Governor's Assistant
Idaho Water Resource Board

From: Ford Elsaesser, Chair
Lake Pend Oreille, Pend Oreille River, Priest Lake and Priest River Commission

Date: October 31, 2017

Re: Priest Lake Water Management Improvements

Dear Senators and Representatives:

On behalf of the Lake Pend Oreille, Pend Oreille River, Priest Lake and Priest River Commission (Lakes Commission), I highly encourage the Idaho Legislature to fund the recommended improvements to Outlet Dam and the Thorofare determined under the recent Priest Lake Water Management Study funded by Idaho Department of Water Resources.

During the drought of 2015, Priest Lake and the Priest River saw the lowest water flows on record. In response to great concern, voiced from the Priest Lake community and regional water managers, the Lakes Commission held a special meeting in Priest Lake to address what was an unfamiliar situation. This meeting ultimately stimulated the funding for the Priest Lake Water Management Study that took place over the past year and was finalized last week. The study, conducted by Mott McDonald Engineering, focused on managing minimum lake levels during dry years, maintaining minimum discharge flow requirements downstream, and promoting sustainable access, navigability and water quality to the Thorofare.

On Friday, the Lakes Commission held a public meeting, where Steve Klatt, Bonner County Parks and Waterways Director, presented the results of the study. We learned that Priest Lake stakeholders and the public overwhelmingly support improving Outlet Dam to accommodate a 3 inch lake level increase during dry years and the option of replacing the existing Thorofare breakwater with an improved structure in combination with dredging the channel to restore navigation. As participants in the study's process, we feel the study adequately considered a diverse group of local stakeholders, environmental impacts, and the sustainability of the project into the future.

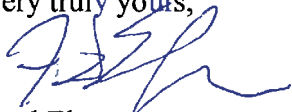
Memorandum
October 31, 2017
Page 2

We are truly thankful for your efforts this year in securing emergency funding for the Idaho Department of Agriculture to operate the Watercraft Inspection Program to the highest level and we are here again to ask for your support to Idaho's water resources. As you know, Idaho's economy is entirely dependent on the responsible management of our natural resources. In the Pend Oreille Basin, water is vital to our economy, which is dependent on boating, recreation, sport fishing and hunting, scenic beauty and overall quality of life.

Again, we encourage the State of Idaho to support funding for the recommended improvements to Outlet Dam and the Thorofare determined under this thorough study. We unanimously support this project as an important investment for future water management and recreational opportunities in the Priest Basin.

Please do not hesitate to contact me with any questions. Thank you.

Very truly yours,



Ford Elsaesser

Chair

Lake Pend Oreille, Pend Oreille River, Priest Lake and Priest River Commission
ford@eaidaho.com

The Lake Pend Oreille, Pend Oreille River, Priest Lake and Priest River Commission ("Lakes Commission") is an advisory group formed in 2003 by Governor Kempthorne and the Legislature of the State of Idaho. The Commission is comprised of five local community leaders, as well as representatives from U.S. Fish & Wildlife Service, the Attorney General's Office, and the State of Montana. The Commission is charged with "studying, investigating, and selecting ways and means of controlling the water quality and quantity as they relate to waters of Lake Pend Oreille, Pend Oreille River, Priest Lake, and Priest River for the communities' interests and the interests of the State of Idaho, and for the survival of native species of fish contiguous to the Pend Oreille Basin" (House Bill No. 110).

DRAFT IWRB COMMITTEES AND MEMBERSHIP 2018

<p>Financial Programs</p> <p><u>Purpose:</u> Develops policy and direction for the IWRB's financial programs including loans, grants, revenue bonds, and project expenditures. Develops guidance for standard interest rates and terms for loans. Oversees revenue generating features of IWRB's programs. Recommends loan approvals to full Board.</p> <p>Vince Alberdi, Chair Dale Van Stone</p> <p>Roger Chase Al Barker</p>	<p>Water Storage Projects</p> <p><u>Purpose:</u> Develops policy and direction for Idaho's efforts to increase water storage capacity, including surface storage and underground storage. Oversees studies of potential storage projects, and considers future steps for potential storage projects. Oversees IWRB's operational managed recharge program on ESPA, and investigations of managed recharge in Treasure Valley and other areas.</p> <p>Chair to be determined at a later date Pete Van Der Meulen Jeff Raybould</p> <p>Bert Stevenson</p>
<p>Water Resource Planning</p> <p><u>Purpose:</u> Develops policy and direction for the IWRB's planning programs, including State Water Plan, Basin Plans, and CAMPs. Oversees progress and completion of State Water Plan, Basin Plans, and CAMPs. Oversees plan implementation progress. Makes recommendations about new planning efforts and approaches.</p> <p>Jeff Raybould, Chair Al Barker</p> <p>Bert Stevenson Pete Van Der Meulen</p>	<p>Streamflow Enhancement and Minimum Streamflow</p> <p><u>Purpose:</u> Develops policy and direction for the Upper Salmon Streamflow Enhancement (Water Transactions) Program together with program partners, including review of project proposals. Develops policy and direction for the IWRB's minimum streamflow program, including development of new MSF water rights and protection and administration of existing MSF water rights.</p> <p>Pete Van Der Meulen, Chair Roger Chase</p> <p>Vince Alberdi Dale Van Stone</p>
<p>Cloud Seeding Committee</p> <p><u>Purpose:</u> Develops policy and direction to determine Board Support and participation in clouding seeding projects statewide. Reviews project proposals and monitors program effectiveness.</p> <p>Al Barker, Chair Pete Van Der Meulen</p> <p>Jeff Raybould</p>	<p>Upper Snake River Advisory Committee</p> <p><u>Purpose:</u> A committee chaired by a Water Board member to discuss Upper Snake Basin reservoir, river, and recharge operations with relevant parties that make up the committee.</p> <p>Roger Chase, Chair Pete Van Der Meulen</p>
<p>Water Supply Bank and Mitigation Bank</p> <p><u>Purpose:</u> Develops policy and direction for the Water Bank. Recommends changes, and oversees operations. Oversees operation of rental pools in cooperation with local committees appointed by IWRB. Reviews proposed changes to rental pool procedures. Makes recommendations about establishment of new rental pools. Develops framework for potential mitigation credit bank</p> <p>Al Barker, Chair Dale Van Stone</p> <p>Vince Alberdi Roger Chase</p>	<p>Aquifer Stabilization Committee</p> <p><u>Purpose:</u> Develops policy and direction to determine Board support and participation in aquifer stabilization activities in the ESPA, Big Wood, Treasure Valley and other areas. Reviews project proposals and monitors program effectiveness.</p> <p>Bert Stevenson, Chair Jeff Raybould Vince Alberdi</p> <p>Al Barker Roger Chase</p>

IWRB 2018 Calendar

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 State Holidays

 Board Meetings

 Comm of Nine

 Bear River Comm

 IWUA

 WSWC

 IWRB Tour

 IWRB Committee Meeting

 Hearings

updated 12/10/17

2018 Calendar Items

<u>Date</u>	<u>Event</u>
1-Jan	State Holiday
8-Jan	Legislative Session begins
15-Jan	State Holiday
18-Jan	Committee of Nine Meeting
22-25-Jan	IWUA Annual Convention
25-26-Jan	Board Meeting (Boise)
19-Feb	State Holiday
5-Mar	Committee of Nine Meeting
14-15-Mar	Western States Water Council Spring Meeting
22-23-Mar	Board Meeting (Boise)
17-18-May	Board Meeting (Moscow)
28-May	State Holiday
11-12-Jun	IWUA Summer Water Law Seminar (Sun Valley)
4-Jul	State Holiday
26-27-Jul	Board Meeting (Salmon)
3-Sep	State Holiday
13-14-Sep	Board Meeting (Boise)
8-Oct	State Holiday
8-9-Nov	Board Meeting (Boise)
22-Nov	State Holiday
25-Dec	State Holiday

<u>Date</u>	<u>Event</u>
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