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Paul District 3

**Peter Van Der Meulen** Hailey At Large

#### **Brian Olmstead**

Twin Falls At Large

### AGENDA

### IDAHO WATER RESOURCE BOARD

Streamflow Enhancement & Minimum Streamflow Committee Meeting No. 1-21 Tuesday, July 6, 2021 11:00 a.m. (MST)

Water Center Conference Room 648A / Online Zoom Meeting 322 E. Front St. BOISE

#### Board Members & the Public may participate via Zoom

<u>Click here to join our Zoom Meeting</u> <u>Dial in Option</u>: 1(253) 215-8782 <u>Meeting ID</u>: 912 2741 0285 <u>Passcode</u>: 962350

- 1. Introductions and Attendance
- 2. Lemhi River at L-6 Permanent Subordination Agreement\*
- 3. Upper Salmon Basin Minimum Stream Flow Update
- 4. Other Items
- 5. Adjourn

Committee Members: Chair Pete Van Der Meulen, Dean Stevenson, Roger Chase, and Dale Van Stone.

\* Action Item: A vote regarding this item may be made this meeting. Identifying an item as an action item on the agenda does not require a vote to be taken on the item.

#### Americans with Disabilities

The meeting will be held telephonically. If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email jennifer.strange@idwr.idaho.gov or by phone at (208) 287-4800.

#### Memorandum

To: IWRB – Streamflow Enhancement and Minimum Streamflow Committee

From: Amy Cassel Date: June 29, 2021



Re: Water Transaction Program – Lemhi at L-6 Agreements – Permanent and Annual

**REQUIRED ACTION:** The Committee is asked to consider the two permanent agreements and a 2021 annual agreement. With the Committee's recommendation, the attached funding resolutions will be presented to the full Board and staff will proceed with project approval and contracting through the Idaho Water Transaction Program Process.

#### Background:

The Lemhi River Basin is an important basin for the spawning, migration and rearing of Chinook salmon, summer steelhead, westslope cutthroat trout, and bull trout. During the irrigation season, low flows at the Lemhi River L-6 diversion, which is located approximately seven river miles upstream from the confluence with the Samon River, can cause migration barriers for out-migrating juvenile Chinook salmon and in-migrating adult Chinook salmon and steelhead (see map below). In April 2001, the Idaho Legislature passed HB 358 which authorized the IWRB to appropriate a Minimum Stream Flow (MSF) water right in the reach below the L-6 diversion. The protected flow is 35 cfs 80 percent of the time between March 15 and June 30, and 25 cfs 100 percent of the time between March 15 and November 15 each year.

For the past 14 years, the IWRB has been working to meet the 25-35 cfs target through both annual and permanent agreements. These agreements allow water users to irrigate their full irrigated acreage unless the IWRB's minimum stream flow water right is not being met. When flows cannot be met naturally, the contracted water users agree to restrict the delivery of their water right. As identified below, a total of 32.27 cfs is currently protected through permanent or short-term agreements:

Flow Target:	35 cfs
Currently protected:	
Permanent Subordination Agreements	16.83 cfs
2019-2022 Annual Subordination Agreements	15.54 cfs
Total Protected	32.37 cfs

#### Permanent Agreement Opportunity:

In order to move towards the goal of protecting 35 cfs instream in perpetuity, Board staff proposes the development of two additional permanent subordination agreements with Lowell and Mary Cerise. Water Right Nos. 74-318B, 74-318C, 74-820, and 74-826 total 10.77 cfs, and the Cerises are interested in permanently subordinating a portion of those rights totaling 7.32 cfs. This amount would increase the total amount of permanently protected flow at L-6 to 24.15 cfs.

The cost of the two permanent transactions is based on a 2018 appraisal completed by Henri LeMoyne Appraisal Services which established a price of \$100,000 per cfs. An additional \$12,000 per cfs will be placed in the water transaction sub-account of the IWRB's Revolving Development Account to pay for contracts with Water District 74 for administration of the subordination agreements. Total price for the two transactions is as follows:

Water Right Nos.	CFS	Payment \$100,000	Administration	TOTAL
		per cfs	\$12,000 per cfs	
74-318B, 74-318C	3.00	\$300,000	\$36,000	\$336,000
74-820, 74-826	4.32	\$432,000	\$51,840	\$483,840
		·	TOTAL	\$819,840

Funding for the transactions will come from the Idaho Fish Accord Water Transactions Fund and the Columbia Basin Water Transactions Fund.

#### 2021 Drought Response – additional annual agreements

The Lemhi River basin is experiencing some of the lowest flows in recorded history and the combination of early season irrigation withdrawal, lack of precipitation, and higher than normal temperatures required use of contracted water to meet the MSF at L-6 early in the 2021 season. Both the annual and permanent agreements allow contracting a maximum of 100 days of restricted delivery. However, it is likely additional days beyond the 100 days maximum will be needed this year to prevent impassable low flows or a dewatering incident at L-6. Funding is available through the Idaho MOA/Fish Accord Water Transaction Program to fund the cost of additional contracts and payments to water users willing to provide water beyond the maximum.

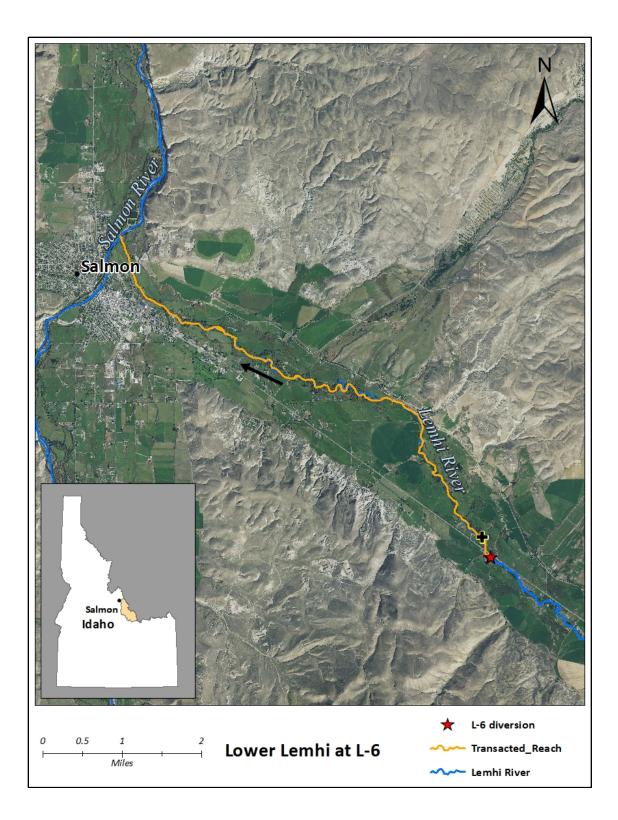
Board staff has received verbal commitments from three water users willing to participate beyond their 100 days maximum and those water users can contribute 10.8 cfs. These three water users all hold permanent subordination agreements and staff has negotiated a payment of the current annual rate – \$90.00 per cfs per day – for each day they restrict their delivery beyond the 100 days maximum. A fourth water user may contribute an additional 7.32 cfs. The combined rate for all of the associated water rights would maintain approximately 18 cfs for an additional 30 days. The goal is to meet the 25 cfs MSF target between March 15 and November 15. Board staff will continue to look for additional water users willing to restrict diversions and asks the IWRB's Streamflow Committee to consider authorization to enter into the necessary agreements and secure the associated funding from Bonneville Power Administration through the Idaho MOA/Fish Accord Water Transaction Program.

Water Right Nos.	CFS	Payment \$90.00 per cfs per day – 30 days
74-15245, 74-14995, 74-15010, 74-	10.8	\$29,160.00
14994, 74-15241, 74-15865, 74-324A,		
74-325K, 74-326B, 74-839,		
74-318B, 74-318C, 74-820, 74-826	7.32	\$19,764.00
Additional water rights to meet 25 cfs	6.88	\$18,576.00
MSF		
TOTAL	25 cfs	\$67,500

Funding for this transaction will come from the Idaho Fish Accord Water Transaction Fund.

#### Attachments:

- 1. Attachment 1 Lemhi at L-6 Map
- 2. Draft Resolutions



#### **BEFORE THE IDAHO WATER RESOURCE BOARD**

IN THE MATTER OF THE LOWER LEMHI RIVER PERMANENT SUBORDINATION AGREEMENTS FOR WATER RIGHT NOS. 74-318B, 74-318C, 74-820, and 74-826

### RESOLUTION TO MAKE A FUNDING COMMITMENT

1	WHEREAS, Chinook salmon, steelhead, and bull trout habitat in the Lemhi River Basin is
2	limited by low flow in the Lower Lemhi River; and
3	
4	WHEREAS, it is in the interest of the State of Idaho to permanently reconnect the Lower
5	Lemhi River to encourage recovery of ESA-listed Chinook salmon, steelhead, and bull trout; and
6	
7	WHEREAS, the State of Idaho committed to maintaining flows of 25 cfs to 35 cfs at the L-
8	6 Diversion on the Lower Lemhi River in the Lemhi Framework which was developed as part of
9	the 2004 Snake River Water Rights Agreement; and
10	MUEDEAC, the Lengh's Francescult environ forward toward people which were included in
11	WHEREAS, the Lemhi Framework carries forward target goals which were included in
12	earlier conservation agreements developed and approved by local water users, and state and
13	federal agencies; and
14	WUEDEAG they show the Idebe Code 5 42 1500 and 5 42 17054, the Idebe Locialeture
15	WHEREAS, though enacting Idaho Code § 42-1506 and § 42-1765A, the Idaho Legislature
16	directed the Board to establish a minimum streamflow water right of 35 cfs in the Lower Lemhi
17	River to be met through water right rentals or other appropriate methods under state law; and
18 19	WHEREAS, the Idaho Water Resource Board has the authority to enter into water right
19 20	agreements and undertake water projects; and
20 21	agreements and undertake water projects, and
21	WHEREAS, the Idaho Water Resource Board (Board) is authorized to expend Bonneville
22 23	Power Administration funds for flow restoration through the Columbia Basin Water Transaction
23 24	Program and the Bonneville Fish Accord Water Transaction Fund; and
24 25	riogram and the bonnevine rish Accord Water Transaction Fund, and
25 26	WHEREAS, the Board promotes water transactions that maintain the local agricultural
20 27	economy by retaining irrigated agriculture; and
28	
28 29	WHEREAS, Board staff has developed short-term and permanent subordination
2) 30	agreements, also known as the Lemhi Subordination Agreements (agreements) with local water
31	users to improve stream flow for anadromous and resident fish; and
32	

Resolution No. \_\_\_\_\_

WHEREAS, the water right owners desire to enter into subordination agreements that 33 permanently limit their diversions during times of low flow; and 34 35 WHEREAS, under these agreements, the water users will continue to irrigate to the full 36 37 extent of their water rights when flows exceed the flow targets; and 38 WHEREAS, the Lemhi Subordination Agreements are in the public interest and in 39 40 compliance with the State Water Plan; and 41 42 WHEREAS, \$732,000 is available through the Idaho Memorandum of Agreement (MOA) Fish Accord Water Transaction Program or the Columbia Basin Water Transaction Program to 43 44 fund the cost of said agreements; and 45 46 WHEREAS, \$87,840 is available through the Idaho (MOA)/Fish Accord Water Transaction 47 Program or the Columbia Basin Water Transaction Program to fund the administration of said 48 agreements by Water District 74; and 49 NOW THEREFORE BE IT RESOLVED that the Board authorizes the Chairman to enter into 50 permanent subordination agreements with the current or subsequent owners of water rights 74-51 318B, 74-318C, 74-820, and 74-826 to subordinate their diversions from the Lemhi River to the 52 53 Board's Lemhi River minimum streamflow water right, and expenditures not to exceed \$732,000. 54 NOW THEREFORE BE IT RESOLVED that the Board authorizes the Chairman to enter into 55 contracts with Water District 74 using administration funds in the amount of \$87,840. 56 57 58 NOW THREFORE BE IT FURTHER RESOLVED that this resolution is subject to the condition 59 that the Board receives the requested funding from the Bonneville Power Administration through the Idaho (MOA)/Fish Accord Water Transaction Program or the Columbia Basin Water 60 Transaction Program in the amount of \$819,840. 61 62 DATED this 23rd day of July, 2021.

> JEFF RAYBOULD, Chairman Idaho Water Resource Board

ATTEST

JO ANN COLE-HANSEN, Secretary

Resolution No. \_\_\_\_\_

#### **BEFORE THE IDAHO WATER RESOURCE BOARD**

#### IN THE MATTER OF THE LOWER LEMHI 2021 WATER RIGHT SUBORDINATION AGREEMENTS

RESOLUTION TO MAKE A FUNDING COMMITMENT

1 2	WHEREAS, Chinook salmon, steelhead, and bull trout habitat in the Lemhi River Basin is limited by low flow in the Lower Lemhi River; and
2	innited by low now in the lower lennin River, and
4	WHEREAS, it is in the interest of the State of Idaho to permanently reconnect the Lower
5	Lemhi River to encourage recovery of ESA-listed Chinook salmon, steelhead, and bull trout; and
6	
7	WHEREAS, the State of Idaho committed to maintaining flows of 25 cfs to 35 cfs at the L-
8	6 Diversion on the Lower Lemhi River in the Lemhi Framework which was developed as part of
9	the 2004 Snake River Water Rights Agreement; and
10	
11	WHEREAS, the Lemhi Framework carries forward target goals which were included in
12	earlier conservation agreements developed and approved by local water users, and state and
13	federal agencies; and
14	
15	WHEREAS, through enacting Idaho Code § 42-1506 and § 42-1765A, the Idaho Legislature
16	directed the Idaho Water Resource Board (Board) to establish a minimum streamflow water right
17	of 35 cfs in the Lower Lemhi River to be met through water right rentals or other appropriate
18	methods under state law; and WHEREAS, the Board has the authority to enter into agreements
19 20	to improve flow for anadromous and resident fish; and
20 21	WHEREAS, the Board is authorized to expend Bonneville Power Administration funds for
21	flow restoration through the Columbia Basin Water Transaction Program and the Bonneville Fish
22	Accord Water Transaction Fund; and
23 24	
25	WHEREAS, the Board promotes water transactions that maintain the local agricultural
26	economy by retaining irrigated agriculture; and
27	
28	WHEREAS, Board staff has developed short-term subordination agreements, also known
29	as the Lemhi Subordination Agreements (agreements) with local water users to improve stream
30	flow for anadromous and resident fish; and
31	
32	WHEREAS, for all agreements, the water users have agreed to limit their diversions during
33	times of low flow for a maximum of 100 days; and
34	

Resolution No.

35	WHEREAS, the 2021 irrigation season is experiencing extremely low flows and drought
36	conditions in the Lemhi River Basin; therefore, subordination of water rights beyond the 100 days
37	maximum may be necessary; and

- WHEREAS, additional contracts and payments to water users, beyond the currently contracted 100 days maximum, are necessary in order to secure additional water and prevent impassable low flows or dewatering conditions in the Lower Lemhi River; and
- WHEREAS, diversion restrictions to maintain the 25 cfs target minimum flow at the L-6
  Diversion for an additional 30 days at the current annual rate of \$90 per cfs per day would result
  in expenditures up to \$67,500; and
- WHEREAS, funding is available through the Idaho MOA/Fish Accord Water Transaction
  Program to fund the cost of said agreements; and
- 50 NOW THEREFORE BE IT RESOLVED that the Board authorizes the Chairman to enter into 51 additional agreements with lower Lemhi River irrigators to not divert out of the Lemhi River, and 52 total expenditures not to exceed \$67,500; and
- 54 NOW THEREFORE BE IT FURTHER RESOLVED that this resolution is subject to the condition 55 that the Board receives the requested funding from the Bonneville Power Administration through 56 the Idaho MOA/Fish Accord Water Transaction Program in an amount up to \$67,500.
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DATED this 23rd day of July, 2021.

JEFF RAYBOULD, Chairman Idaho Water Resource Board

ATTEST \_\_\_\_\_\_

JO ANN COLE-HANSEN, Secretary

Resolution No. \_\_\_\_\_

#### Memorandum

- To: IWRB Streamflow Enhancement and Minimum Streamflow Committee
- From: John Loffredo
- Date: June 29, 2021
- Re: Water Transaction Program Upper Salmon Basin Minimum Stream Flow Water Rights Presentation

#### **REQUIRED ACTION:** Comments and guidance from the Committee are requested.

#### Background:

In 1978, Minimum Stream Flows (MSF) were declared a beneficial use to preserve fish, wildlife, scenic, and recreational values. The Idaho Water Resource Board (IWRB) currently holds MSF water rights for 29 points and reaches on 24 streams in the Upper Salmon Basin (USB) (Water Districts: 71–75). When these water rights are not capable of being maintained using existing flows, Idaho Code § 42-1507 authorizes the IWRB to maintain minimum flow through the operation of the water supply bank authorized by Idaho Code § 42-1761 through § 42-1765, and by other available methods consistent with Idaho Law.

The upper Salmon River reach, tributaries, and associated MSFs between Water District 71 and 75 is a migration corridor utilized by Snake River Spring Chinook Salmon and Snake River Steelhead, both listed as threatened under the Endangered Species Act (ESA). This reach of the Salmon River is also utilized by Snake River Sockeye Salmon, which are listed as endangered under ESA.

There are currently only five active stream gages for the 29 MSFs in the USB. Active stream gages are operated by USGS, IWRB, and Idaho Power. Additionally, of the 29 MSFs in the USB, 14 MSFs have some historic stream gage data from USGS and IWRB. Ten MSFs in the USB have no stream gage data and only 1 of 6 MSF reaches (ranging from 6 to 40 river miles) in the USB have active stream gages for quantification at the top and bottom of the reach. The period of record for the USB stream gage network ranges from 100+ years for two gages (e.g. Salmon @ Salmon) to 2 -27 years for most gages (e.g. Lemhi @ L5). The historic gages with shorter data sets provide a snapshot of instream flows from the early 20<sup>th</sup> century, 1970s, and early 2000's, respectively.

The water transaction program has used all available gage data to determine if the 29 MSF in the USB are currently being met. Upon a quick analysis of the monthly mean flow recorded at the five current, and fourteen historic gage locations (1911–2021) minimum stream flows were met early-season (May-July) at 9 of 19 USB MSFs. Late-season (August-October) minimum stream flows were met at 12 of 19 USB MSFs. Ten of 29 USB MSFs have no associated gage data and it is unknown whether or not MSFs are met at these locations.

While further analysis of the gage data is needed to refine those numbers, preliminary results conclude that less than half of the Board's upper Salmon River Basin Minimum Stream Flow water rights are being met during much of the irrigation season, and it is unknown whether or not a third of the MSF water rights are being met due to lack of adequate streamflow data.

Board staff have reviewed the MSF list and have prioritized five locations that would benefit from the installation of continuous stream flow gages. These proposed locations either 1) currently have water rights



leased into the water supply bank, or 2) are locations where there is the potential for future water transactions to help met MSFs. In order of highest to lowest priority: Alturas Lake Creek (71-10890), Salmon River above the East Fork Salmon River (72-16664), Panther Creek (75-14186), North Fork Salmon River (75-14184), and Iron Creek (71-10896). Discussions with USGS regarding the installation and maintenance of a new stream gage on the Salmon River above the East Fork Salmon River have occurred and install is tentatively scheduled for spring 2022. Cost share between USGS, IWRB, IDFG, and NPT could provide the necessary funding for additional stream gages, especially in locations where streamflow data is pertinent to multiple stakeholders.

# Upper Salmon River Basin Minimum Stream Flow Water Rights

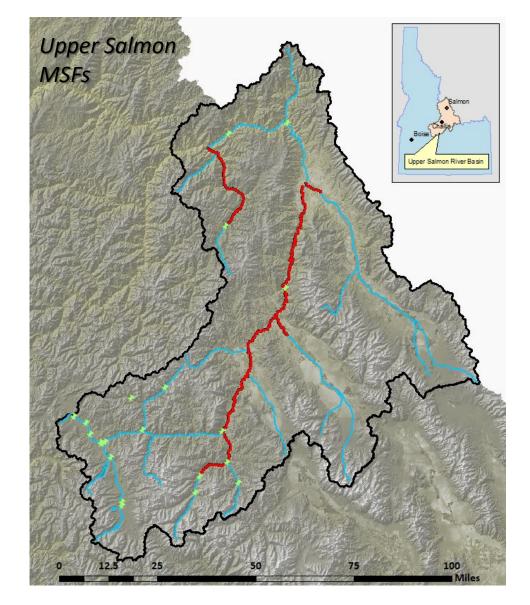
Idaho Water Resource Board Streamflow Committee July 6, 2021

John Loffredo Project Coordinator Idaho Water Transaction Program



# 2004 Snake River Basin Adjudication

- MSFs throughout SRB requested by NPT during adjudication.
- IWRB promulgated 27 Upper Salmon River Basin minimum stream flow water rights in 2005.
- Lemhi River and Pahsimeroi River MSFs promulgated in 2001 and 1979, respectively.
- 29 total MSFs (23 points, 6 reaches) in 5 water districts.

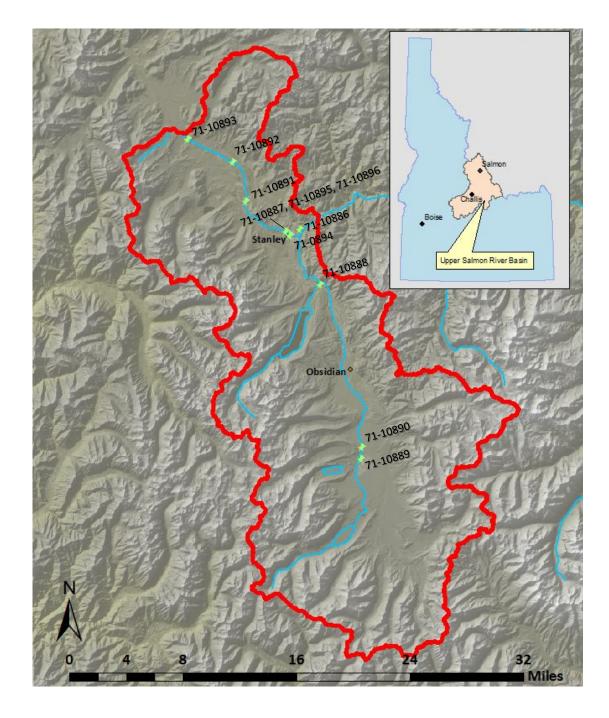


## Are These MSFs being meet?

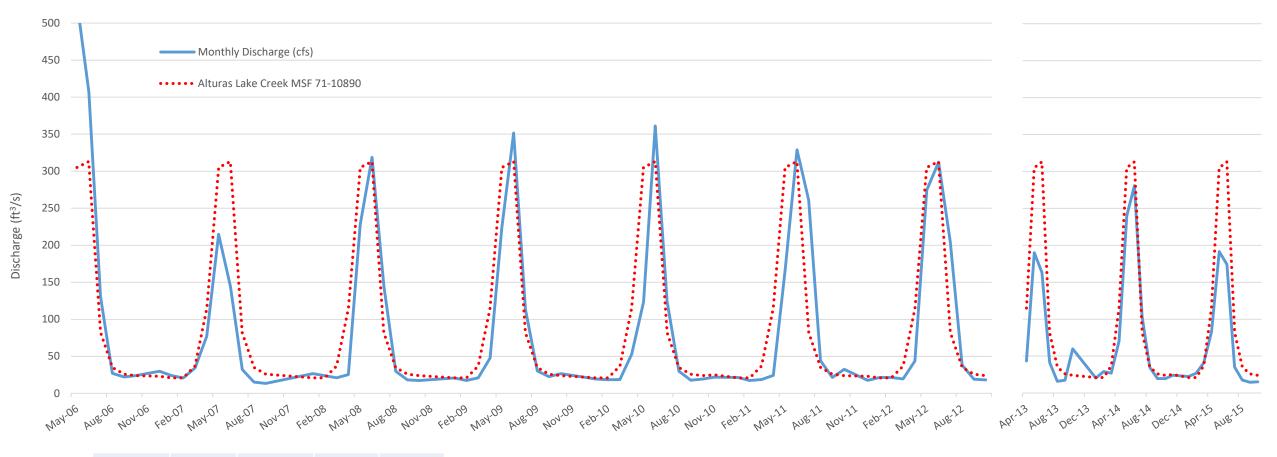
- 5 active stream gages on 29 MSFs (USGS, IWRB, Idaho Power)
- 14 MSFs has some historic stream gage data (USGS, IWRB)
- 10 MSFs with no stream gage data
- 1 of 6 MSF reaches have active stream gages for quantification at top and bottom of reach

#### Water District 71 (Stanley Area) Minimum Stream Flow Water Rights

MSF	Water Right	Flow (cfs)	Tributary Of	Stream Gage Data	MSF Met?
Valley Creek	71-10886	48-787	Salmon River	Current	Yes
Stanley Lake Creek	71-10887	6-88	Valley Creek	None	-
Redfish Lake Creek	71-10888	17-287	Salmon River	Historic	Yes
Yellow Belly Lake Creek	71-10889	5-75	Alturas Lake Creek	None	-
Alturas Lake Creek	71-10890	21-313	Salmon River	Historic	No
Elk Creek	71-10891	11-119	Valley Creek	Historic	Yes
Meadow Creek	71-10892	4.1-59	Valley Creek	None	-
Trap Creek	71-10893	2.2-32	Valley Creek	None	-
Meadow Creek	71-10894	4.2- 24.5	Goat Creek	Current	No
Goat Creek	71-10895	2.1- 10.5	Valley Creek	Current	Yes
Iron Creek	71-10896	3.8- 22.5	Valley Creek	Historic	Yes



### Alturas Lake Creek MSF – Alturas Lake Cr at Mouth - IDWR



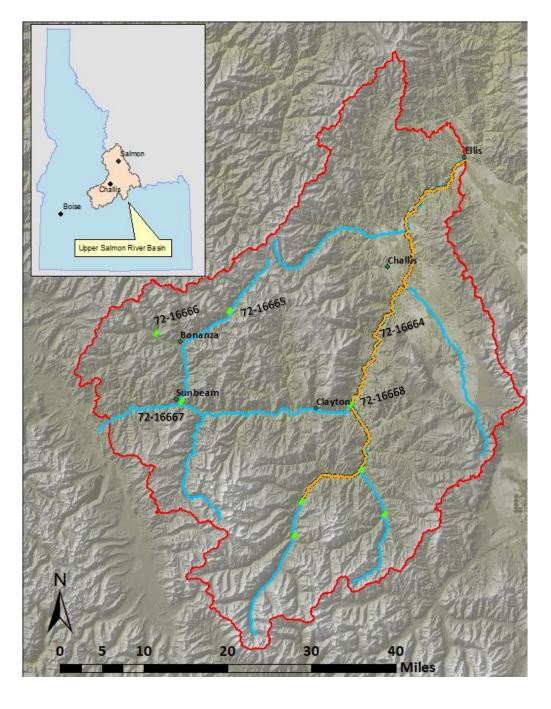
Water				
Right	Source	CFS	Volume	Acres
71-59	Salmon	25.6		
71-61	Salmon	40		
71-64B	Alturas	6.25		
71-66	Alturas	10.75		
71-68	Alturas	12.32		
Combine	ed Limit	94.9	5608.2	1869.4

Rental Term	Instantaneous Rate of Flow
90	20.98
60	31.47
45	41.96

Month	Avg Flow	MSF	Difference
June	284.27	313	-28.73
July	119.15	82	37.15
August	28.32	35	-6.68
September	18.63	26	-7.37
October	25.85	24	1.85

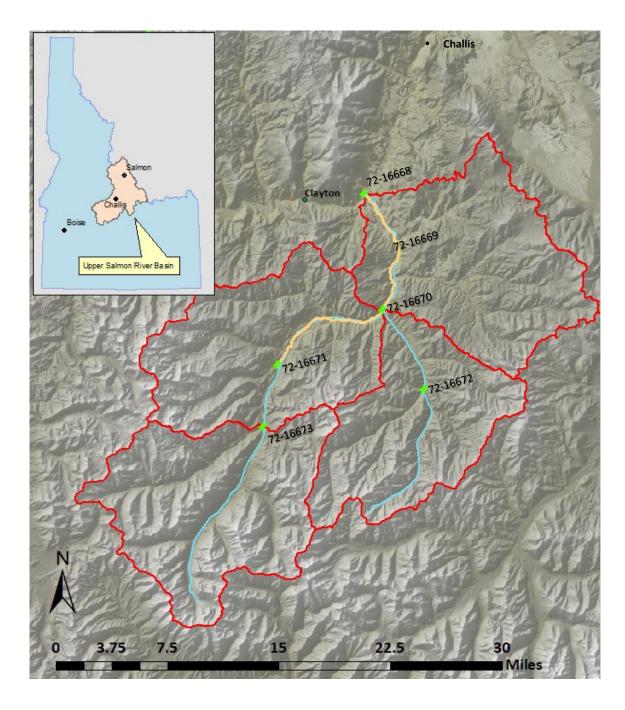
#### Water District 72 (Upper Salmon River Basin) Minimum Stream Flow Water Rights

MSF	Water Right	Flow (cfs)	Tributary Of	Stream Gage Data	MSF Met?
Salmon River (EFSR to Pahsimeroi – 39 mi reach)	72-16664	566- 4910	Snake River	Current (Estimate)- None	No
Eightmile Creek	72-16665	3.7- 56	Yankee Fork	None	-
Lightning Creek	72-16666	4-59	West Fork Yankee Fork	None	-
Yankee Fork	72-16667	37- 702	Salmon River	Current	No
Salmon River (above EFSR)	72-16668	364- 3310	Snake River	Current (Estimate)	Yes



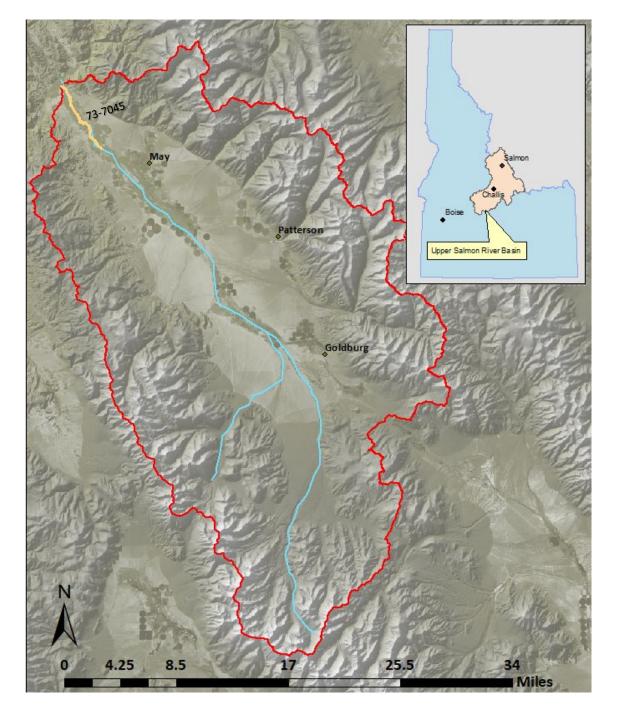
#### Water District 72D (Clayton Area Sub-District) Minimum Stream Flow Water Rights

MSF	Water Right	Flow (cfs)	Tributary Of	Stream Gage Data	MSF Met?
East Fork Salmon River (Little Boulder Cr to Mouth – 20 mi)	72-16669	91- 1014	Salmon River	Historic-Current	Yes
Herd Creek	72-16670	19- 217	East Fork Salmon River	Historic	No
East Fork Salmon River @ Little Boulder Creek	72-16671	35- 528	Salmon River	Historic	Yes
East Pass Creek	72-16672	8-91	Herd Creek	None	-
Germania Creek	72-16673	15- 238	East Fork Salmon River	Historic	No



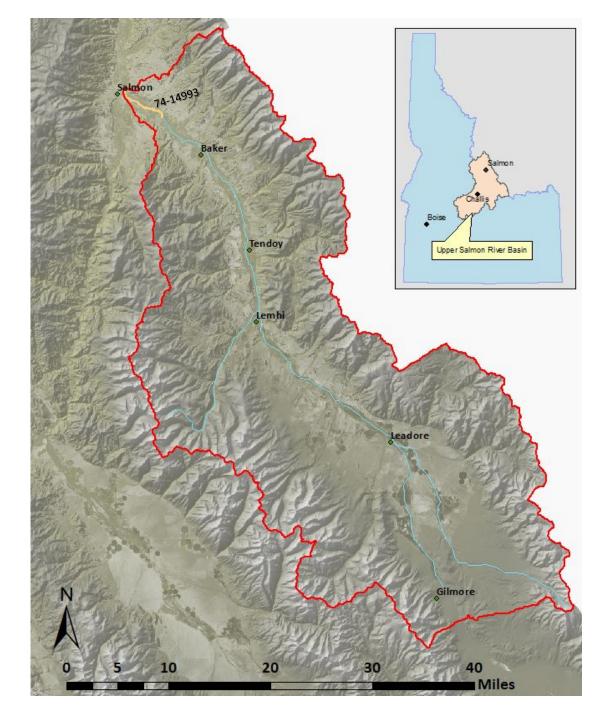
#### Water District 73 (Pahsimeroi River) Minimum Stream Flow Water Rights

MSF	Water	Flow	Tributary	Stream	MSF
	Right	(cfs)	Of	Gage Data	Met?
Pahsimeroi River (Hatchery Lane to Mouth – 8.6 mi Reach)	73-7045	74	Salmon River	Current	Yes- No



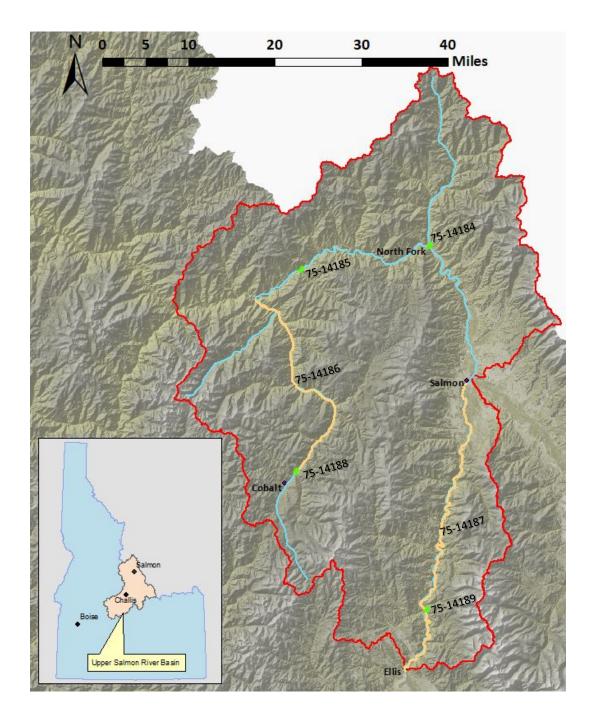
#### Water District 74 (Lemhi River) Minimum Stream Flow Water Rights

MSF	Water Right	Flow (cfs)	Tributary Of	Stream Gage Data	MSF Met?
Lemhi River (L-6 Diversion to Mouth – 5 mi reach)	74-14993	35	Salmon River	Current- Historic	Yes*



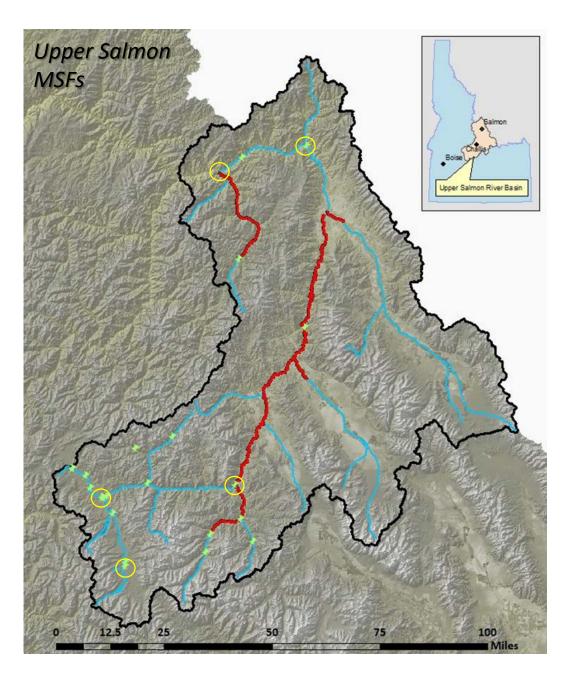
#### Additional Water District 170 (Upper Salmon River Basin) Minimum Stream Flow Water Rights

MSF	Water Right	Flow (cfs)	Tributary Of	Stream Gage Data	MSF Met?
North Fork Salmon River	75-14184	41- 366	Salmon River	Historic	Yes
Pine Creek	75-14185	6-54	Salmon River	None	-
Panther Creek (Deep Cr to Mouth – 29 mi reach)	75-14186	111- 1297	Salmon River	Historic- Historic	No
Salmon River (Pahsimeroi to Salmon – 45 mi reach)	75-14187	948- 5700	Snake River	None- Current	Yes
Panther Creek	75-14188	22- 193	Salmon River	Historic	Yes
Hat Creek	75-14189	9-108	Salmon River	None	-



### Next Steps

- Five additional stream gages for USB
- Prioritized by banked rights in water supply bank and potential for future water transactions
- Cost sharing opportunities for additional gages.



# Questions?