



AGENDA

IDAHO WATER RESOURCE BOARD

Streamflow Enhancement & Minimum Streamflow Committee Meeting No. 1-22

Monday, March 14, 2022
1:00 PM (MT)

Brad Little
Governor

Jeff Raybould
Chairman
St. Anthony
At Large

Roger W. Chase
Vice-Chairman
Pocatello
District 4

Jo Ann Cole-Hansen
Secretary
Lewiston
At Large

Dale Van Stone
Hope
District 1

Albert Barker
Boise
District 2

Dean Stevenson
Paul
District 3

Peter Van Der Meulen
Hailey
At Large

Brian Olmstead
Twin Falls
At Large

Water Center
Conference Room 602 C & D / Online Zoom Meeting
322 E. Front St.
BOISE

Board Members & the Public may participate via Zoom

[Click here to join our Zoom Meeting](#)

Dial in Option: 1(253) 215-8782

Meeting ID: 898 3336 0756 Passcode: 370708

1. Introductions and Attendance
2. CBWTP/IWTP Program Updates
3. Upper Salmon Transactions*
4. Teton River Transactions*
5. Other Items
6. 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: John Loffredo
Date: March 1, 2022
Re: Water Transaction Program – Lemhi at L-6 Agreements – Annual Subordination and Drought Response Contingency Fund



REQUIRED ACTION: The Committee is asked to consider a 2022 annual agreement and two resolutions to maintain the minimum stream flow at the Lemhi L-6 diversion. With the Committee's recommendation, the attached funding resolutions will be presented to the full Board on April 1, 2022.

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 Salmon 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% 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 15 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 33.54 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 | 14.29 cfs |
| City of Salmon Transfer and Mitigation | 2.42 cfs |
| Total Protected | 33.54 cfs |

2022 Annual Agreement Opportunity:

In order to maintain current flow targets, Board staff proposes the renewal of one annual subordination agreement for 2022 with Lowell and Mary Cerise. Water Right Nos. 74-318B and 74-318C total 6.00 cfs, and the Cerise's are interested in subordinating a portion of those rights totaling 3.00 cfs. This amount would not change the total amount of annually subordinated water at L-6 as listed in the table above, just maintaining the status quo.

The cost of the annual subordination transaction is \$90.00 per cfs per day of subordination with a contract max of 100 days. Total price for the transaction is as follows:

| Water Right Nos. | CFS | Payment \$90 per cfs per day (100-day max) | TOTAL |
|------------------|------|---|-------------|
| 74-318B, 74-318C | 3.00 | \$270.00 | \$27,000.00 |

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

Drought Response Contingency Fund

In 2021, the Lemhi River basin experienced some of the lowest flows in recorded history. The combination of early season irrigation withdrawal, lack of precipitation, and higher than normal temperatures resulted in a very early start for contracted water to meet the MSF at L-6. Both the annual and permanent agreements have a contract maximum of 100 days of restricted delivery. Due to the persistent drought conditions, low base flows, and high demand for diverted water in spring 2021, it was evident that additional days were likely needed to provide fish passage at L-6.

In 2021, Board staff received commitments from three water users willing to participate beyond their 100 days maximum, contributing approximately 15.6 cfs to the 25 cfs target flow at L-6. Two of the water users hold permanent subordination agreements and agreed to a payment of the current annual rate – \$90.00 per cfs per day – for each day they restricted their delivery beyond the 100 days maximum, up to an additional 30 days. The third water user agreed to an additional 30 days under their annual subordination agreement of 100 days. These additional agreements were critical to maintaining passage flows in the Lower Lemhi in 2021.

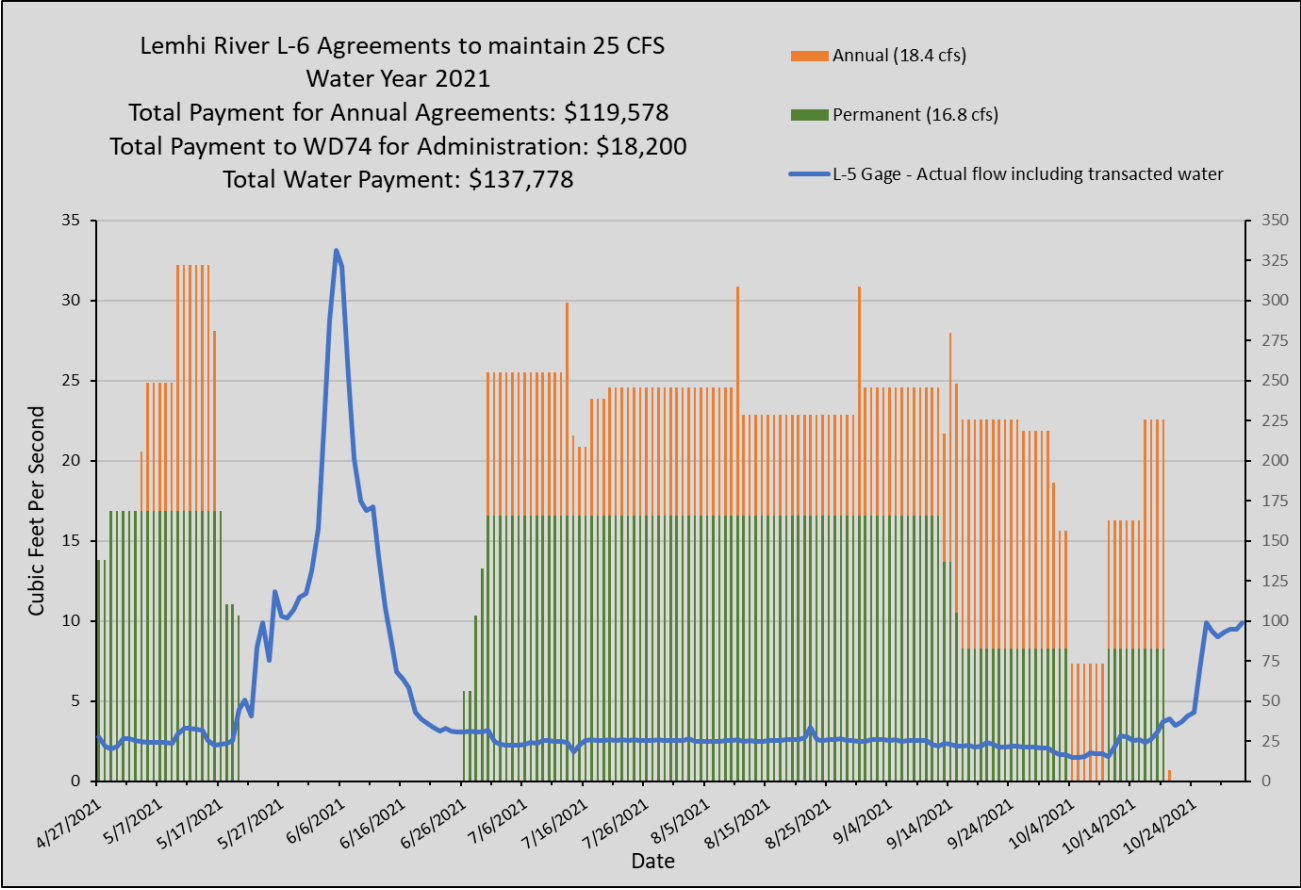
Taking the long-term view that 2021 was not a one-off year and considering that Lemhi Basin SNOTEL sites are currently reading below average snowpack levels, Board staff would like to work with CBWTP to secure a drought contingency fund that will provide the flexibility to enter into additional annual agreements that are time-sensitive and necessary to maintain passage flows at L-6. CBWTP's Technical Advisory Committee (TAC) will review this proposal in April 2022 and if this proposal is approved, a fund of approximately \$200,000 will be available for the next five years (2023 – 2027) to secure additional agreements as needed and in a timely manner if drought conditions persist.

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

Attachments:

1. Attachment 1 – Lemhi at L-6 Map
2. Attachment 2 – Total Water Payments for L-6 MSF in 2021
3. Draft Resolutions





BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE
LOWER LEMHI 2022 WATER RIGHT
SUBORDINATION AGREEMENT

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

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 to improve flow for anadromous and resident fish; and
20

21 WHEREAS, the Board is authorized to expend Bonneville Power Administration funds for
22 flow restoration through the Columbia Basin Water Transaction Program and the Bonneville Fish
23 Accord Water Transaction Fund; and
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 an additional one-year subordination agreement,
29 also known as a Lemhi Subordination Agreement, with a local water user to improve stream flow
30 for anadromous and resident fish; and
31

32 WHEREAS, the water user has agreed to limit up to (3) cfs of his total diversion under
33 Water Right Nos. 74-318B and 74-318C during times of low flow; and
34

35 WHEREAS, the water user will continue to irrigate his full place of use when flows exceed
36 the flow targets; and

37
38 WHEREAS, the Lemhi Subordination Agreement is in the public interest and in compliance
39 with the State Water Plan; and
40

41 WHEREAS, funding is available through the Idaho MOA/Fish Accord Water Transaction
42 Program to fund the cost of said agreement in 2022; and
43

44 NOW THEREFORE BE IT RESOLVED that the Board authorizes the Chairman to enter into
45 an agreement for 2022 with a Lower Lemhi River irrigator to not divert up to three (3) cfs out of
46 the Lemhi River, for an amount not to exceed twenty-seven thousand dollars (\$27,000); and
47

48 NOW THEREFORE BE IT FURTHER RESOLVED that this resolution is subject to the condition
49 that the Board receives the requested funding from the Bonneville Power Administration through
50 the Idaho MOA/Fish Accord Water Transaction Program in an amount up to twenty-seven
51 thousand dollars (\$27,000).
52
53

DATED this ____ day of April, 2022.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
JO ANN COLE-HANSEN, Secretary

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE
LOWER LEMHI WATER RIGHT
SUBORDINATION AGREEMENTS

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

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 to improve flow for anadromous and resident fish; and
20

21 WHEREAS, the Board is authorized to expend Bonneville Power Administration funds for
22 flow restoration through the Columbia Basin Water Transaction Program and the Bonneville Fish
23 Accord Water Transaction Fund; and
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

35 WHEREAS, the 2021 irrigation season experienced extremely low flows and exceptional
36 drought conditions in the Lemhi River Basin; therefore, Resolution No. 23-2021 was adopted by

Resolution No. _____

37 the Board to authorize the Chairman to enter into additional agreements with local water users
38 that compensated them for subordination of their water rights beyond the 100-day contract
39 maximum; and
40

41 WHEREAS, drought response annual agreements with local water users may be necessary
42 in future drought years in order to secure additional water beyond the 100 days maximum and
43 prevent impassable low flows or dewatering conditions in the Lower Lemhi River; and
44

45 WHEREAS, diversion restrictions are necessary to maintain the 25 - 35 cfs target minimum
46 flow at the L-6 Diversion; and
47

48 WHEREAS, funding is available through the Idaho MOA/Fish Accord Water Transaction
49 Program to fund the cost of said agreements; and
50

51 NOW THEREFORE BE IT RESOLVED that, in order to meet the 35 cfs target flow from March
52 15 through June 30, and 25 cfs target flow from July 1 through November 15, the Board
53 authorizes the Chairman to enter into drought response annual agreements with Lower Lemhi
54 River irrigators to not divert out of the Lemhi River when the total days of subordinated water
55 will exceed the contract maximum of 100 days.
56

57 NOW THEREFORE BE IT FURTHER RESOLVED that this resolution is subject to the condition
58 that the Board receives the requested funding from the Bonneville Power Administration through
59 the Idaho MOA/Fish Accord Water Transaction Program and the Columbia Basin Water
60 Transaction Program.
61
62

DATED this ____ day of April, 2022.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
JO ANN COLE-HANSEN, Secretary

MEMORANDUM

To: IWRB Streamflow Enhancement and Minimum Streamflow Committee

From: Sarah Lien, Friends of the Teton River

Date: March 1, 2022

Re: Teton River Basin – Canyon Creek 3-year Water Transaction



Required Action: The Committee is asked to consider the three-year water transaction on Canyon Creek. With the Committee's recommendation, the attached funding resolution will be presented to the full Board on April 1, 2022.

Transaction Summary:

Canyon Creek is a tributary to the Teton River and is one of the few Yellowstone cutthroat trout (YCT) strongholds with an intact fluvial spawning run. Canyon Creek Canal Company (CCCC) operates a large unlined canal system located ~10.25 miles upstream from the mouth of Canyon Creek. During this three-year project, CCCC will close the canal and enter into a water management agreement whereby its water rights will be diverted at four downstream points of diversion. The transaction will increase flow between the months of April 15 - July 31 by as much as 70 cfs, with benefits of the transaction decreasing as base flow decreases and irrigation demand increases during the summer.

Transaction Overview:

Canyon Creek is a wild and remote tributary to the Teton River Canyon, with its headwaters and the majority of its 45 stream miles lying within the Caribou-Targhee National Forest. Among the prioritized tributaries in the Teton River Watershed, Canyon Creek ranks at the top due to its valuable high-elevation habitat, historic productivity, importance as a YCT spawning tributary, lack of hybridization, and the ability to comprehensively address limiting factors in the drainage. Significantly, it is one of the few YCT strongholds with an intact fluvial spawning run (Schrader 2002; Mabey 2009) in the Teton River Watershed and within the Greater Yellowstone Ecosystem. As a result, FTR and partners IDFG, USFS, US Fish and Wildlife Service, the Idaho Governor's Office of Species Conservation, National Forest Foundation, Western Native Trout Initiative, and Bureau of Reclamation, have made Canyon Creek a high-priority stream for watershed restoration.

FTR has been working to address limiting factors on Canyon Creek for nearly a decade. From 2010 to 2015 FTR worked to address several conservation goals, including passage, connectivity, habitat, and function. Specifically, through a series of stream restoration projects, fish passage was re-established at three locations serving to reopen 35 miles of upstream habitat to fish and rehabilitate and stabilize 1,400 feet of eroding bank/altered habitat that existed in a 2.5 mile reach, between the completed fish passage projects and pristine spawning reaches that lie within the National Forest upstream. Having addressed fish passage, habitat, and stream function constraints, FTR sought to work on restoring flow and addressing fish entrainment issues.

CCCC operates a large unlined canal system located ~10.25 miles upstream from the mouth of Canyon Creek. Historically, 70 cfs of water was diverted into the canal to provide water for over 10,000 acres of high value farm ground. Since the mid-1970's, in addition to the unlined canal, the water rights owned by CCCC have been diverted at four other locations. Three of these points of diversion are located on Canyon Creek, one located ~7.75 miles upstream of from the mouth and two located ~6.75 miles upstream from the mouth. The final point of diversion is located on the Teton River near the historic Teton Dam. See, attached map.

In 2019 FTR and CCCC began working together to identify a water management strategy that would improve flow in Canyon Creek and address the fish entrainment issues associated with the canal. In 2020 and 2021 FTR and the CCCC implemented a 2-year pilot project, under which CCCC agreed to close the canal and, instead, divert water at the other points of diversion associated with its water rights. The pilot transaction was quite successful, serving to prevent fish from being entrained in the canal and significantly increasing the quantity of water in Canyon Creek during portions of the irrigation season.

Throughout the 2-year pilot project FTR collected flow, fisheries, and diversion data, and, together, FTR and CCCC have used that information to develop a long-term flow restoration strategy. The strategy involves increasing diversion capacity at four points of diversion located on the Teton River, thereby allowing the majority, if not all, of the CCCC water rights to be diverted out of the Teton River. This will restore ecologically significant flow to Canyon Creek for the benefit of Yellowstone cutthroat trout and improve water availability and reliability for CCCC shareholders. To fund the infrastructure improvements at three of the Teton River points of diversion, FTR and CCCC applied for a Bureau of Reclamation WaterSMART grant in the fall of 2021 which, if awarded, will fund 75% of the infrastructure costs (total cost at time of grant submission was ~\$3.5 million), with construction expected to occur between 2022-2024. The fourth Teton River point of diversion will be addressed in a second phase of work. Determining what changes need to be made to the fourth diversion will be determined in 2022 and driven by two factors: (1) analysis of Canyon Creek flow/temperature model data; and (2) analysis of fisheries needs in Canyon Creek, particularly in the lower reach between July 15-September 15. FTR and CCCC will then apply for grant funding in 2022 or 2023 to support the identified infrastructure needs for the fourth point of diversion, with hopes of commencing construction in 2024. See, attached, the Bureau of Reclamation WaterSMART project map and project summary for a more detailed explanation.

To bridge the gap until the infrastructure improvements are funded and completed, FTR proposes continuation of the short-term agreement with CCCC for an additional three-year term. During the three-year term, CCCC will keep the unlined canal closed and enter into a water management agreement, just as it did during the 2-year pilot. This will: (1) address the entrainment issues associated with the canal system; and (2) increase the quantity of water in Canyon Creek between April 15 - July 31st. The CCCC water rights will instead be diverted at downstream points of diversion. CCCC has unanimously voted to support this three-year strategy and has developed an approach for distribution of transaction funding which is equitable among its shareholders.

Transaction Costs:

Two hundred eighty-five dollars (\$285,000) is available through the Columbia Basin Water Transaction Program to support this three-year transaction. The cost of this transaction aims to compensate CCCC members for increased pumping costs associated with closing the unlined canal through the project period, thereby requiring water to be pumped (rather than gravity fed) from the other points of diversion. Throughout the project period all shareholders will experience increased pumping costs,

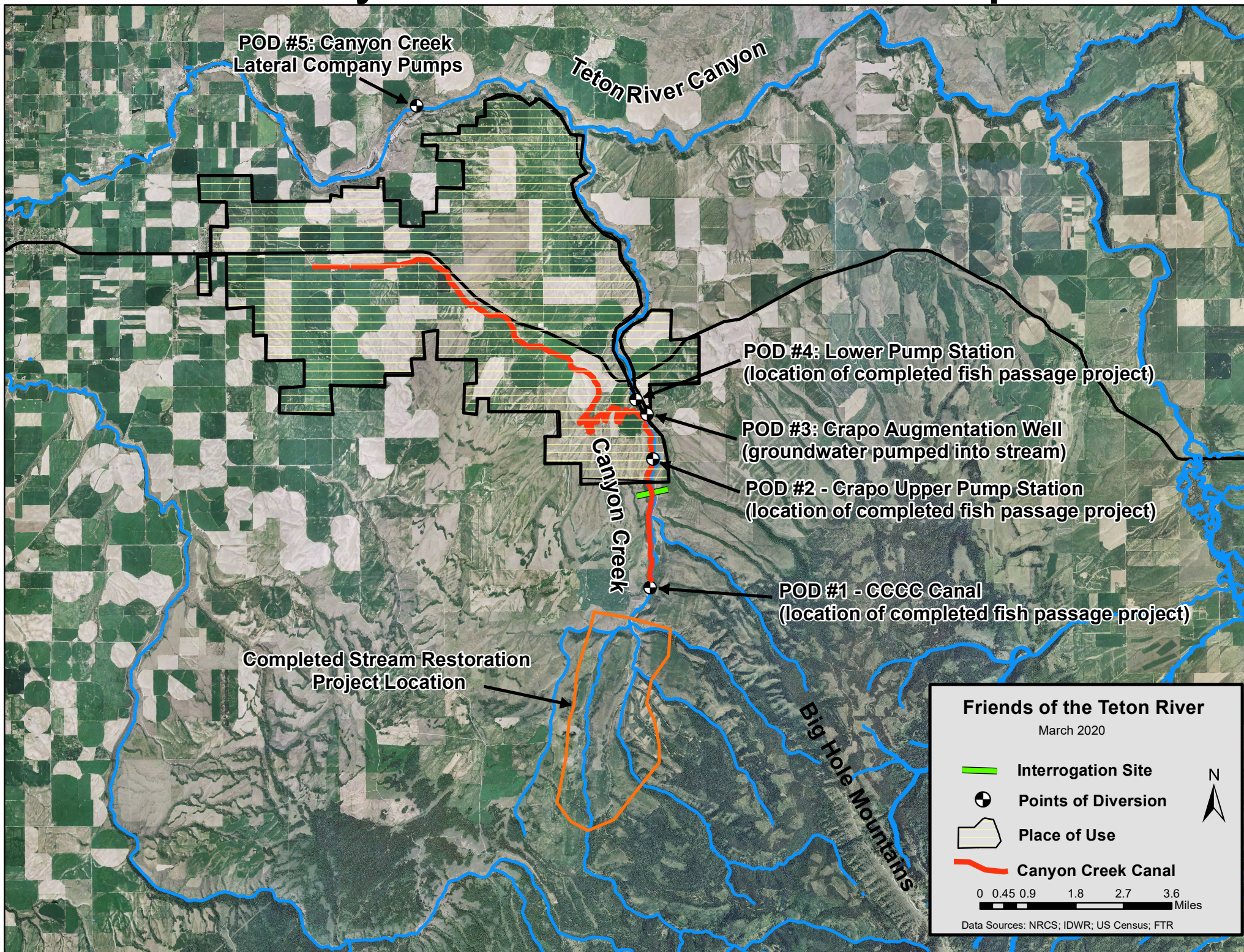
some greater than others due to the location and lift associated with each point of diversion. As such, each year of the project a payment in the amount of ninety-five thousand dollars (\$95,000) will be paid to CCCC, to be divided equitably among the shareholders.

The transaction has been reviewed by the Columbia Basin Water Transaction Program's Technical Advisory Committee (TAC) and funding to support the transaction has been authorized.

Attachments:

1. Attachment 1 – Map of Canyon Creek Transaction
2. Draft Resolution

Canyon Creek Flow Restoration Map



BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE
CANYON CREEK WATER
TRANSACTION AGREEMENT

RESOLUTION TO MAKE A FUNDING
COMMITMENT

1 WHEREAS, Canyon Creek, tributary to the Teton River provides quality habitat for fluvial
2 and resident Yellowstone cutthroat trout, but is flow limited at certain times of the year; and
3

4 WHEREAS, it is in the interest of the State of Idaho to increase stream flow in the Teton
5 River and its tributaries, including Canyon Creek, to encourage the recovery of Yellowstone
6 cutthroat trout, which are managed as an Idaho Species of Greatest Conservation Need; and
7

8 WHEREAS, the Idaho Water Resource Board (IWRB) has the authority to enter into water
9 right agreements and undertake water projects; and
10

11 WHEREAS, the IWRB is authorized to expend Bonneville Power Administration funds for
12 flow restoration through the Columbia Basin Water Transaction Program and the Bonneville Fish
13 Accord Water Transaction Fund; and
14

15 WHEREAS, the IWRB promotes water transactions that maintain the local agricultural
16 economy by retaining irrigated agriculture; and
17

18 WHEREAS, Idaho Water Resource Board staff has developed a three-year agreement not
19 to divert (agreement) to improve flow conditions for Yellowstone cutthroat trout in Canyon
20 Creek; and
21

22 WHEREAS, a proposal in the amount of \$285,000.00 has been submitted to the Columbia
23 Basin Water Transaction Program to be used to fund the agreement; and
24

25 WHEREAS, staff anticipates the funds being placed into the IWRB's Revolving
26 Development Account for annual payment to support the agreement; and
27

28 WHEREAS, the agreement not to divert is in the public interest and in compliance with
29 the State Water Plan.
30

31 NOW THEREFORE BE IT RESOLVED that the IWRB authorizes the Chairman to enter into a
32 three-year agreement not to divert for the purpose of improving flow in Canyon Creek, tributary
33 to the Teton River, using an amount not to exceed \$285,000.
34

35 NOW THEREFORE BE IT FURTHER RESOLVED that this resolution is subject to the condition
36 that the IWRB receives the requested funding from the Columbia Basin Water Transaction

Resolution No. _____

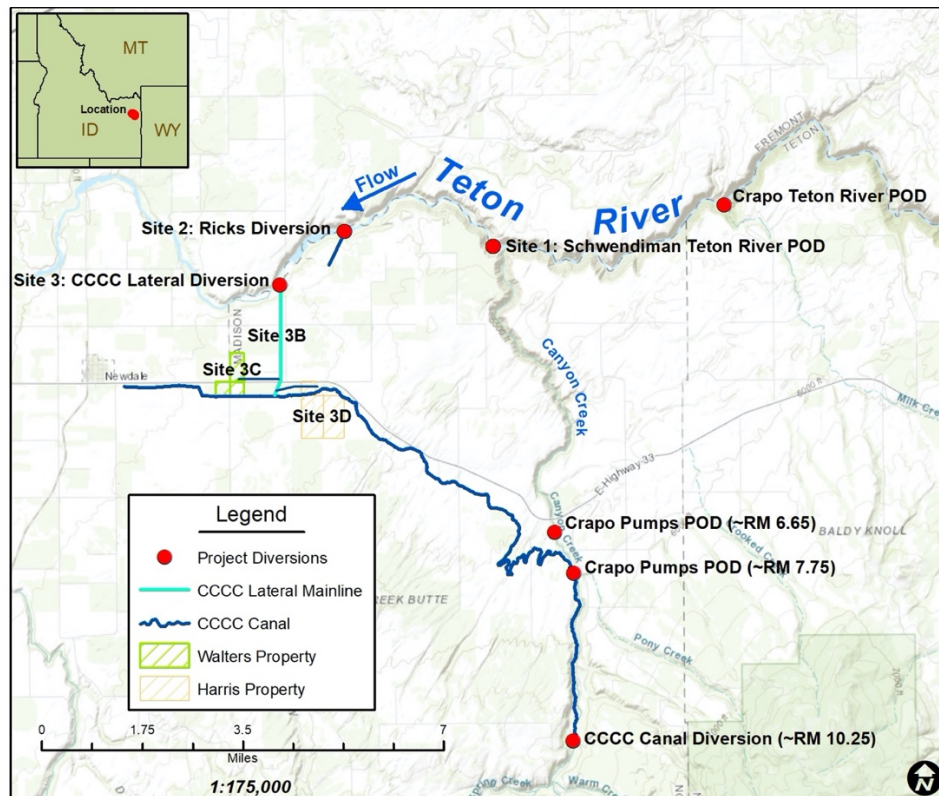
37 Program in the amount of \$285,000.

DATED this ____ day of April, 2022.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
JO ANN COLE-HANSEN, Secretary

Bureau of Reclamation WaterSMART Project Map and Project Summary



If the Bureau of Reclamation WaterSMART grant is awarded, infrastructure improvements will be made to three irrigation diversion systems including: (1) Site 1 – Schwendiman Irrigation System; (2) Site 2 – Ricks Irrigation System; and (3) Site 3 - Canyon Creek Lateral Irrigation System. The location of each site is depicted in the map, above. The changes will address the specific capacity constraints unique to each system which, once addressed, will allow for 10 of the 11 CCCC shareholders to divert their CCCC shares (in addition to their other water rights) at their Teton River points of diversion. Implementation of the project will allow the CCCC Canal Diversion, located on Canyon Creek, to be closed, addressing the entrainment issues associated with this diversion and restoring flow to Canyon Creek and portions of the Teton River.

A second phase of work will address the needs of the 11th, and final, CCCC shareholder. This shareholder diverts water from the three CCCC points of diversion located on Canyon Creek and is, therefore, an integral part of fully restoring flow to Canyon Creek at the times and in the quantities needed to benefit native YCT. The details of this second phase of work will be defined in early 2022. The shareholder owns and operates a point of diversion on the Teton River (Crapo Teton River POD), and thus FTR and the CCCC expect that this phase of work will address capacity constraints at this point of diversion, enabling at least a portion of the shareholder's CCCC water shares to be diverted at that location instead of diverting the water from Canyon Creek. However, that project is still being developed and will occur at a future date.