

**Idaho Water Transactions Program
Annual Report
Fiscal Year 2020**



Active beaver complex on Iron Creek near Salmon, Idaho. Photo taken May 21, 2020

Idaho Water Transactions Program

MISSION: To support innovative, voluntary, grassroots water transactions that improve flows to tributary streams and rivers in the Upper Salmon River Basin for Chinook salmon, steelhead, and bull trout, all listed as threatened under the Endangered Species Act.

The Water Transactions Program **PHILOSOPHY** is simple:

- Improve fish and wildlife habitat
- Respect private property rights
- Respect the values of irrigated agriculture
- Work locally using market-based strategies
- Take a balanced approach

About the Idaho Water Transactions Program

The Columbia Basin Water Transaction Program (CBWTP) was started in 2002 to address a chronic regional challenge. As a result of legal water withdrawals during the peak growing season, stretches of many Columbia Basin streams and rivers run low, and sometimes dry, with significant consequences for imperiled salmon, steelhead, trout and other aquatic species. Using permanent acquisitions, leases, investments in efficiency, and other market-based incentives, the CBWTP supports program partners in Idaho, Oregon, Washington, and Montana to assist landowners who wish to restore flows to existing habitat.

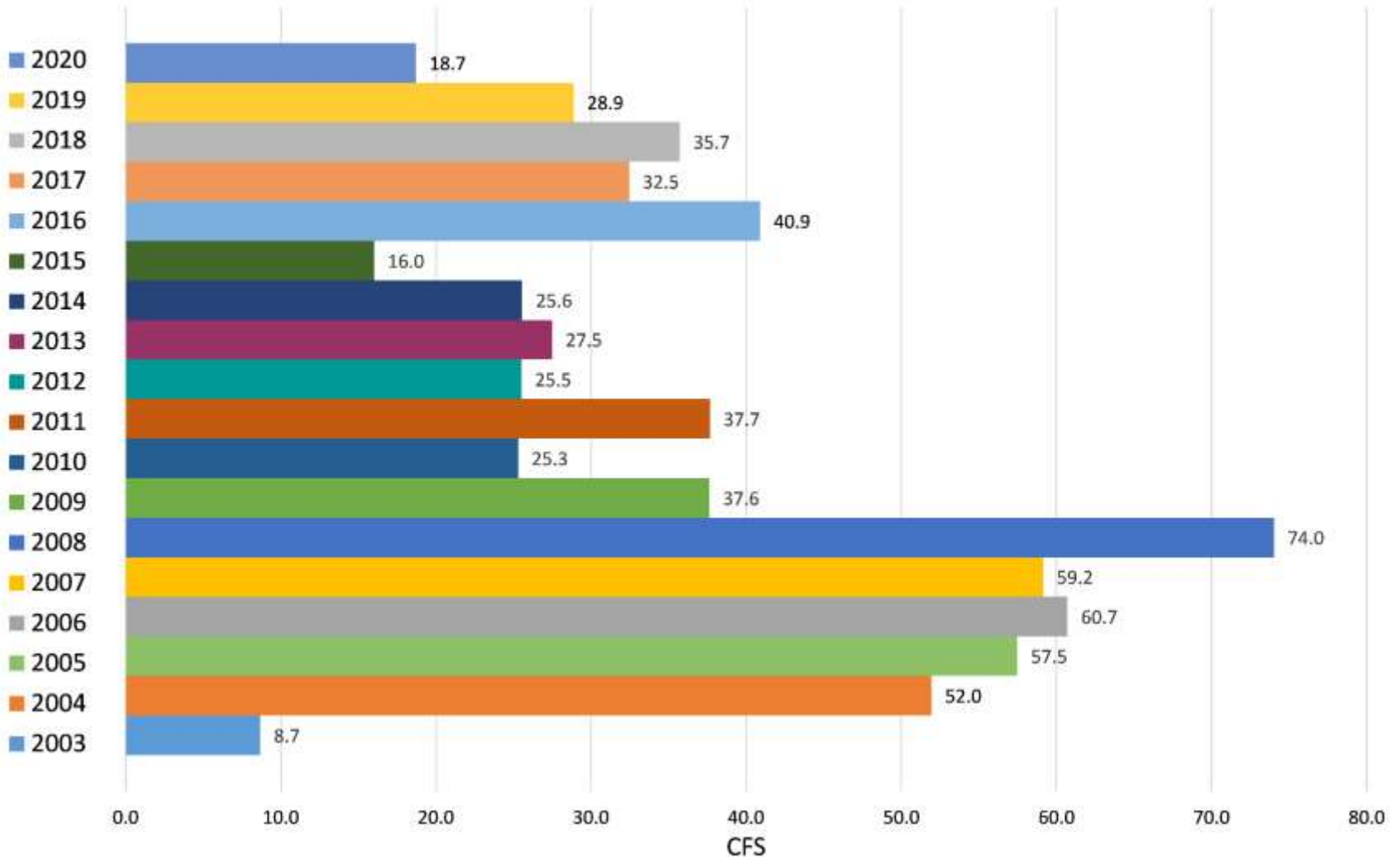
The Idaho Water Resource Board (IWRB) became a Qualified Local Entity (QLE) of the CBWTP in 2003. Between 2003 and 2020, the IWRB implemented over **105** transactions in the Upper Salmon River Basin and the Middle Fork Salmon River Basins, restoring over **664** cubic feet per second (cfs) of flow to tributaries that provide habitat for endangered and threatened fish. Fish species listed under the Endangered Species Act in the Upper Salmon and Middle Fork Salmon basins are as follows: Chinook Salmon – threatened; steelhead – threatened; bull trout – threatened; and Sockeye Salmon – endangered.

The CBWTP is managed by the National Fish and Wildlife Foundation (NFWF), a non-profit organization dedicated to the conservation of fish and wildlife. The foundation works in partnership with the Bonneville Power Administration (BPA). The majority of funding for the Idaho Water Transaction Program is provided by BPA in cooperation with the Northwest Power and Conservation Council.

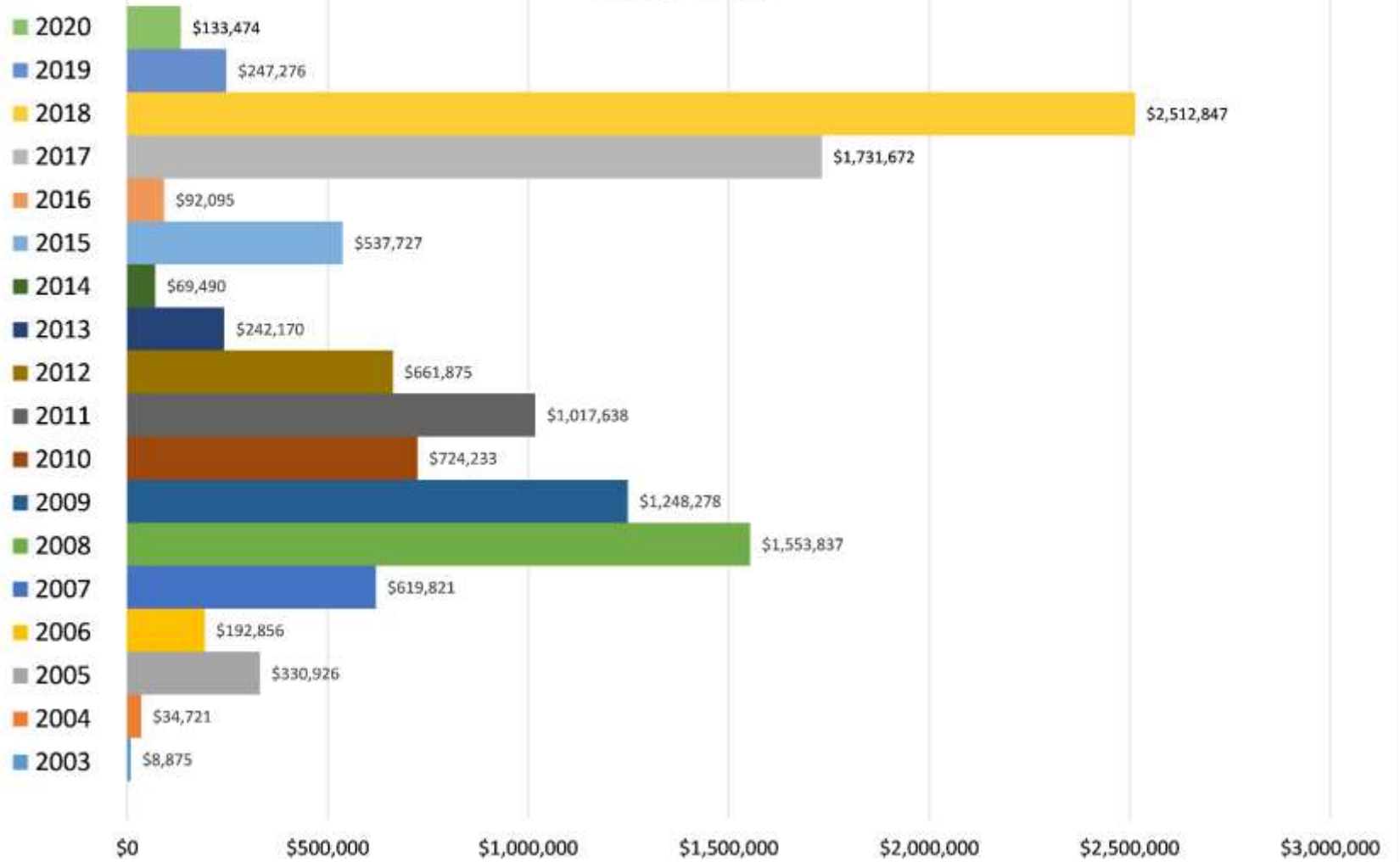
The Idaho Water Transactions Program leverages funding from the following sources:

- Bonneville Power Administration through the Columbia Basin Water Transaction Program (CBWTP)
- Bonneville Power Administration through the Idaho Fish Accords, as administered by the Idaho Governor's Office of Species Conservation
- Pacific Coastal Salmon Recovery Fund
- Earned interest from the Idaho Water Resource Board's Revolving Development Account
- Other: donated and in kind values

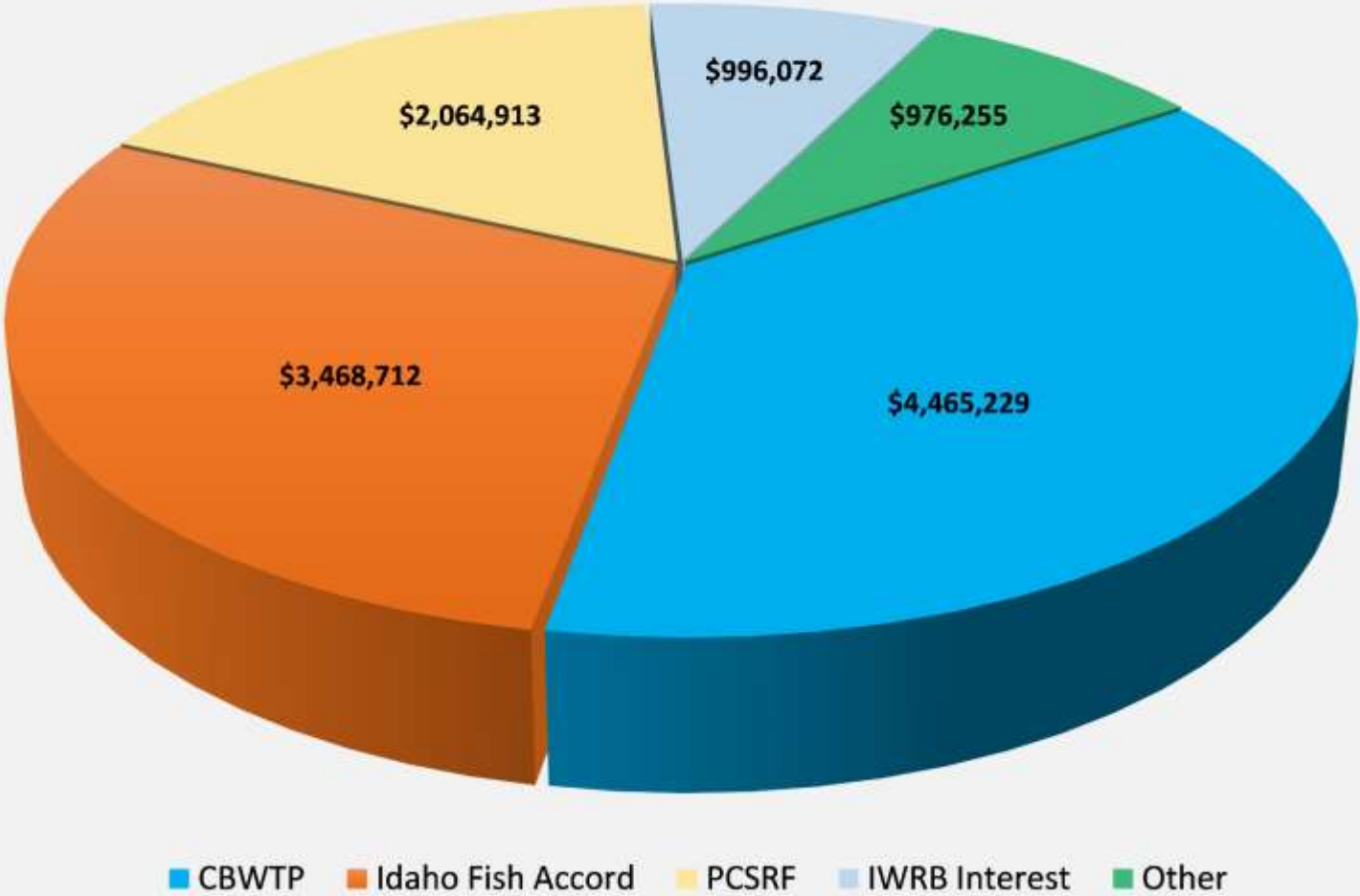
Idaho Water Transactions Program Total CFS protected by year 2003-2020



Idaho Water Transactions Program Total Expenditures by Year Cost of Water



Idaho Water Transactions Program
Funding by Source 2003 - 2020
Total \$11,971,181



*Other category includes cost of donated water and in-kind contributions

Water Year 2019-2020

Snow Water Equivalent (SWE) – A measurement of the amount of water contained in snowpack.

SWE on April 1, 2020 indicates that the Upper Salmon and Upper Middle Fork Salmon Basins experienced lower than average snowpack, while the Lower Salmon Basins (Lemhi, Pahsimeroi, Middle Salmon-Panther) experienced average or above average snowpack.

Lemhi Basin

- 115%

Pahsimeroi Basin

- 102%

Upper Salmon Basin

- 90%

Upper Middle Fork Salmon Basin

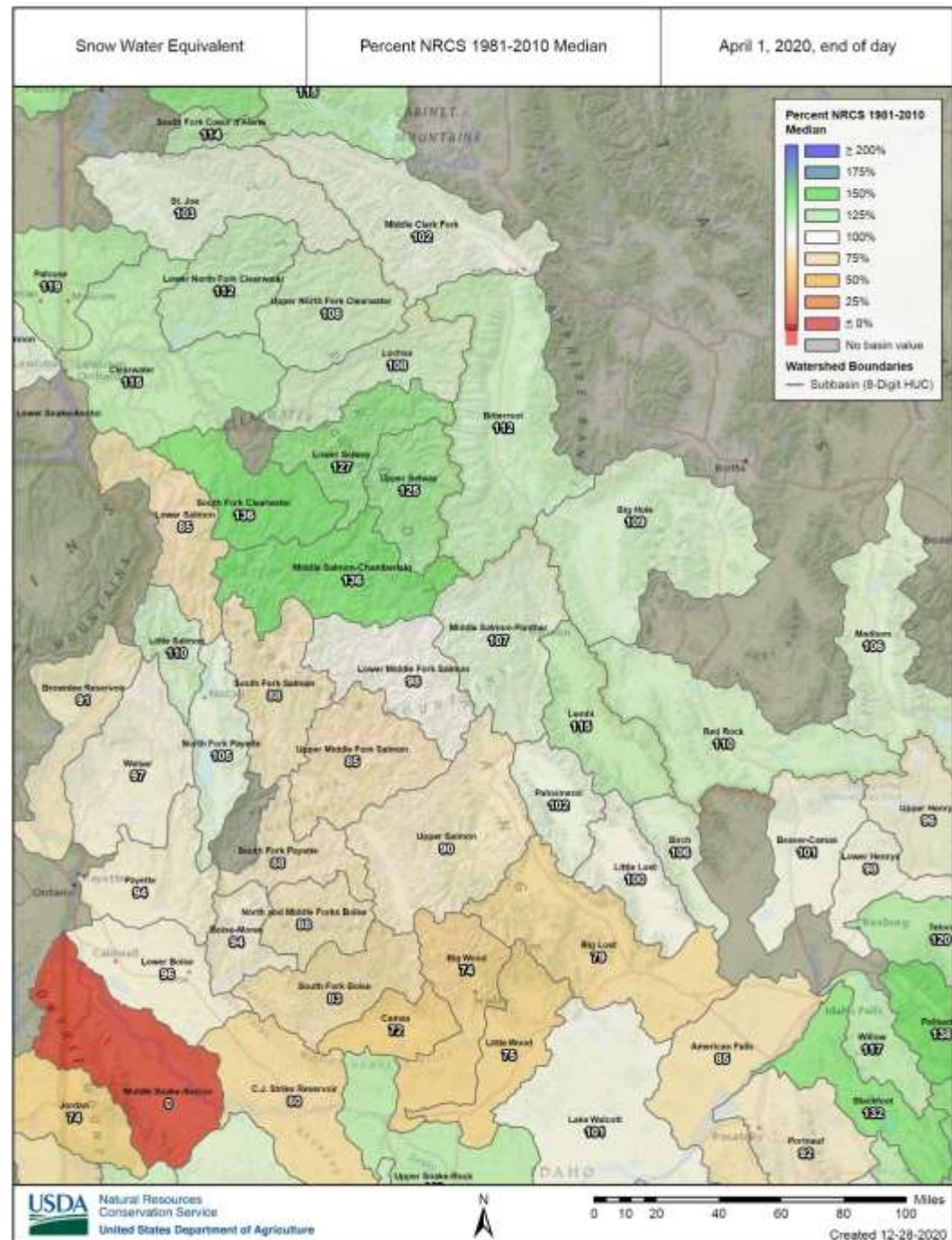
- 85%

Lower Middle Fork Salmon Basin

- 98%

Middle Salmon-Panther Basin

- 107%



Water Year 2020

Streamflow – Adjusted Volume – Observed
April 1, 2020 – September 30, 2020

➤ Volume of streamflow that would occur without the influences of major upstream reservoirs or diversions, otherwise known as unregulated or naturalized flow. Reservoirs and diversions are used as an adjustment based on size of reservoir/diversion relative to total streamflow volume and availability of historical records. Adjusted Volume datasets include streamflow points that are adjusted due to the presence of major upstream reservoirs/diversions with historical records. Note that not all basins in the Upper Salmon and Middle Fork Salmon have streamflow datasets. The following USGS stream flow gages reported less than average adjusted volume streamflow in the following basins between April 1, 2020 and September 30, 2020:

Lemhi River at Lemhi

USGS 13305000 LEMHI RIVER NR LEMHI ID

- 87%

Middle Salmon - Panther

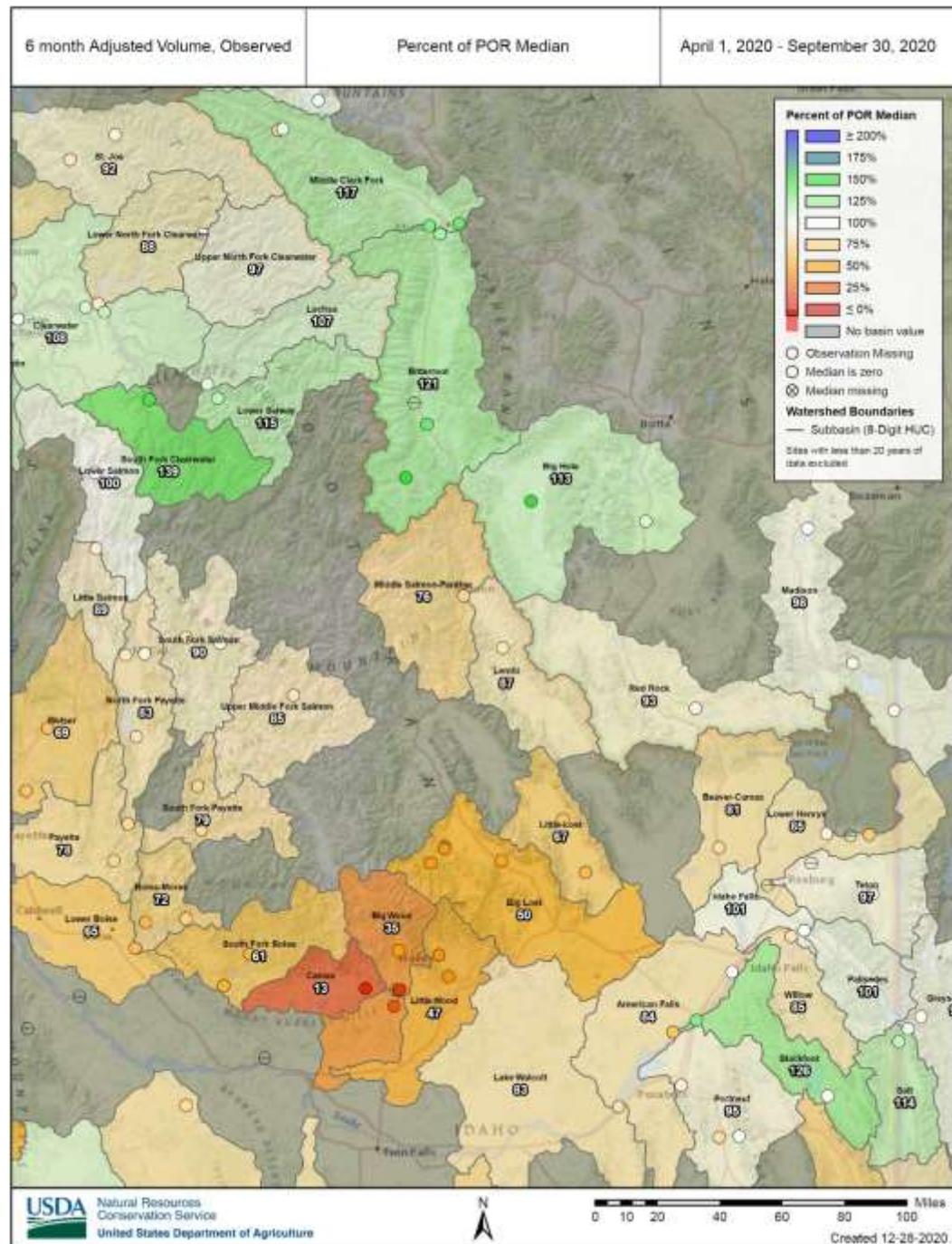
USGS 13307000 SALMON RIVER NR SHOUP ID

- 76%

Upper Middle Fork Salmon

USGS 13309220 MF SALMON RIVER AT MF LODGE NR YELLOW PINE ID

- 85%



2020 Water Transactions

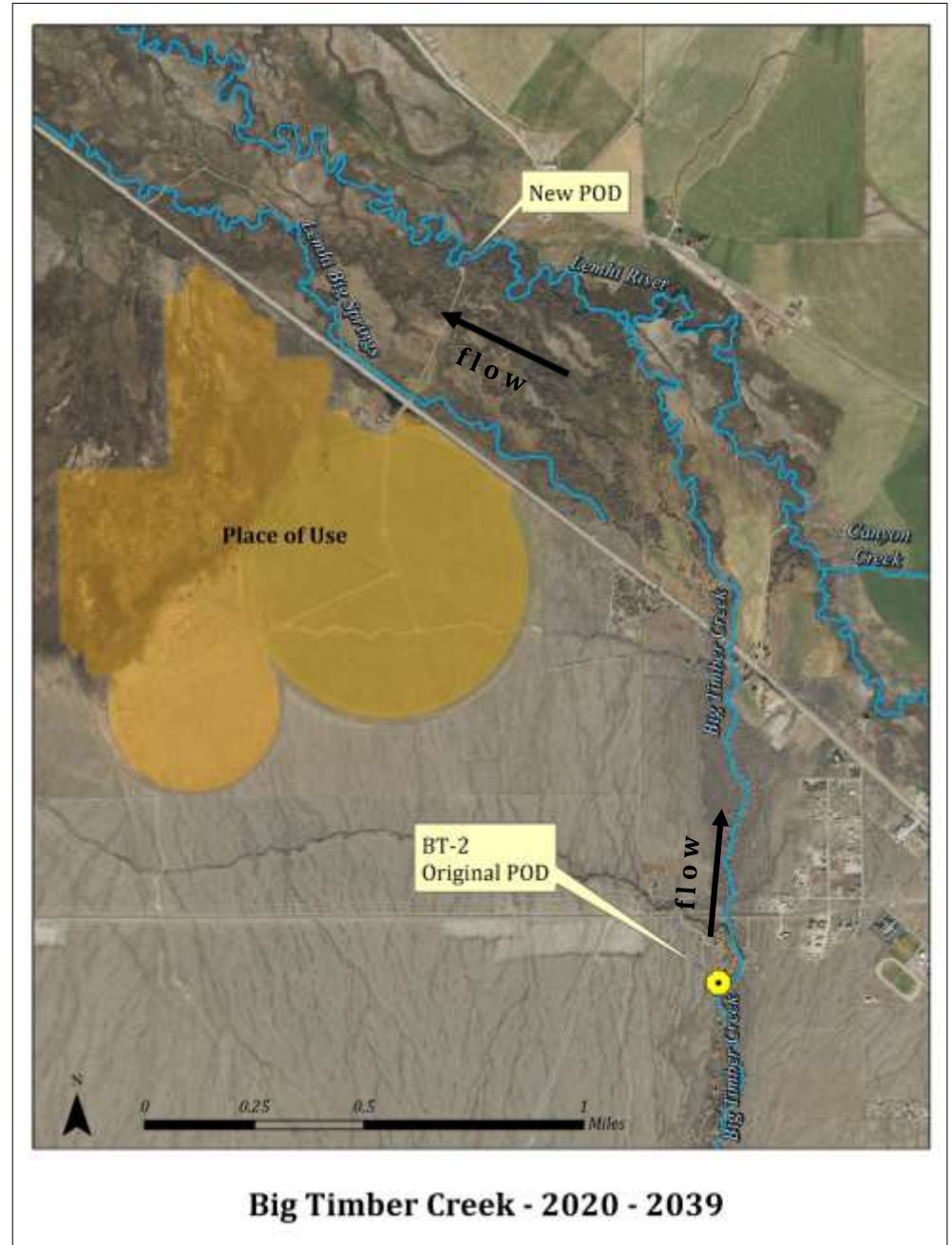
The following transactions were completed in FY'20:

285b-17 Big Timber Creek-LLP

This transaction added an additional 1.38 cfs to the existing 5.8 cfs of transacted water on Big Timber Creek. The 20-year agreement not to divert (2020-2039) is the final of three total water transactions on Big Timber. As of FY'20, total transacted flow on Big Timber is 7.2 cfs.

This transaction compensates the water user for spilling their water at the original point of diversion (Big Timber-2) and diverting at a new pump station on the Lemhi River. The cost of water is estimated based on the increased costs associating with pumping the spilled water at the new point of diversion.

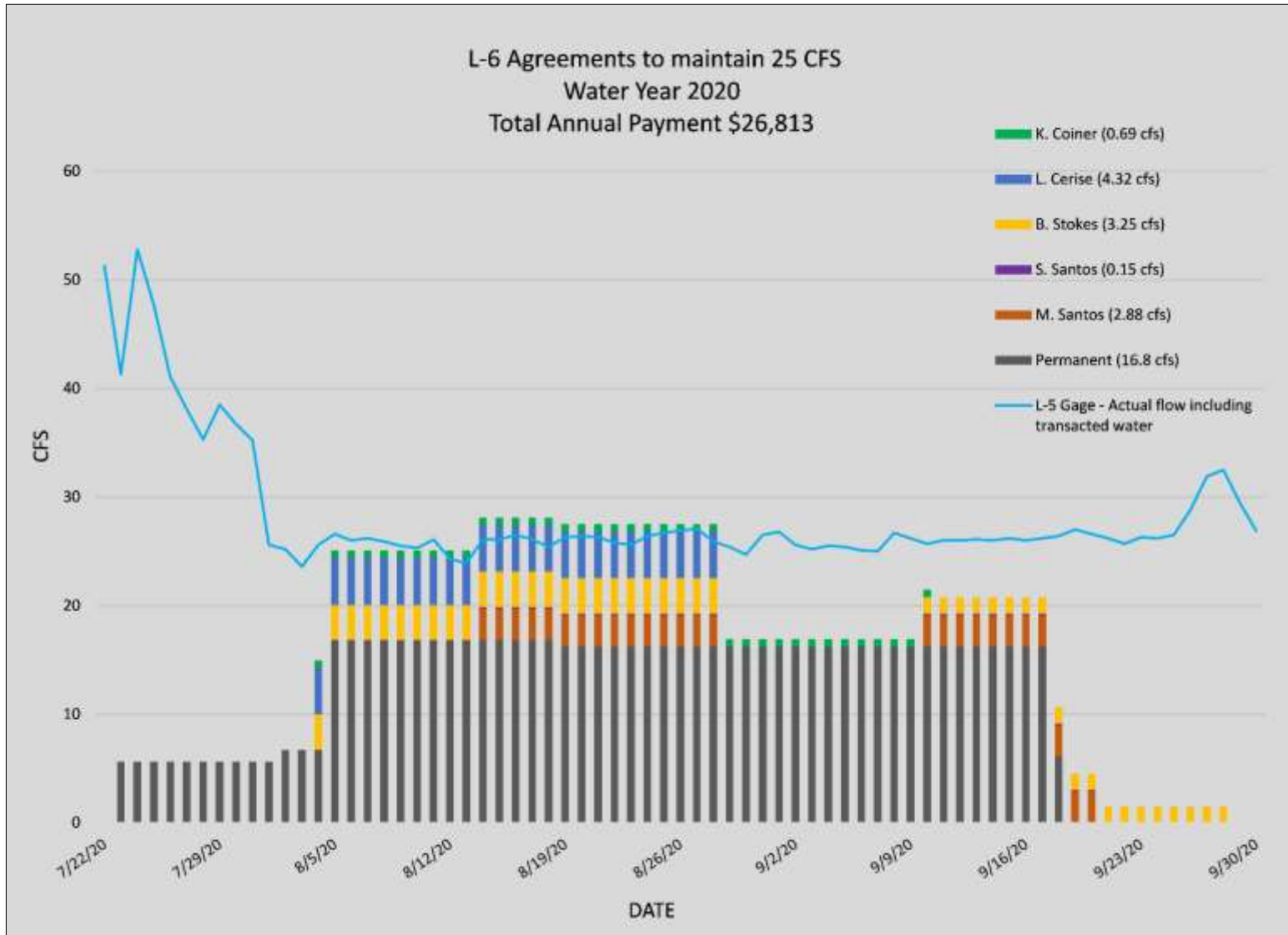
The transaction was funded by the Idaho Fish Accord and IWRB will make annual payments to the water user to cover the increased costs associated with pumping the at the new point of diversion on the Lemhi River. Total payment to the water user over the next 20 years is \$96,292.79.



Big Timber Creek - 2020 - 2039

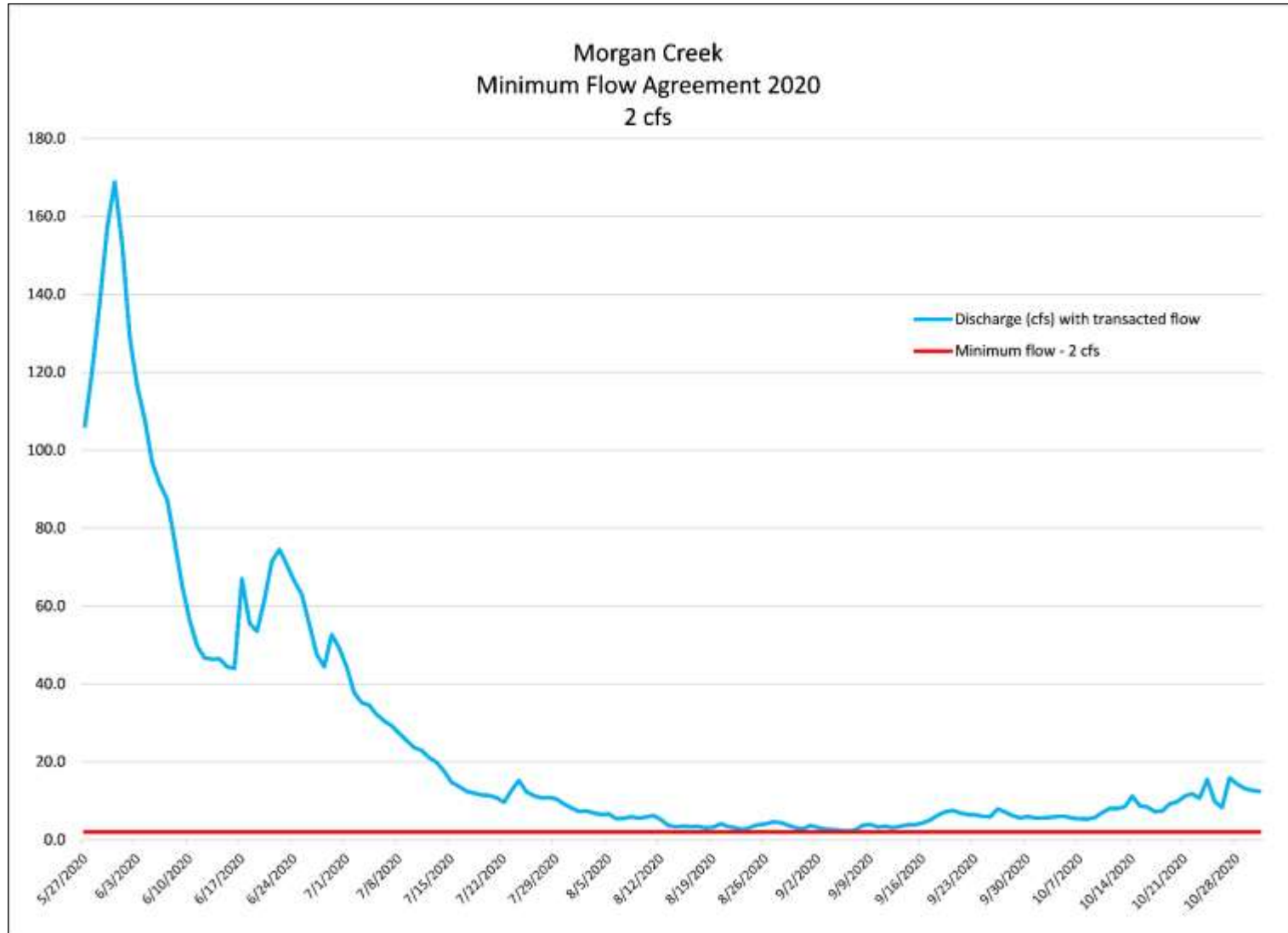
72p-20-IWRB-2020-Lemhi River-annual 2020 2022

This transaction provided the additional 15.4 cfs needed to meet the minimum stream flow of 25-35 cfs on the Lemhi River at the L-6 diversion. Permanent water transactions at L-6 provide 16.8 cfs, so the short-term agreements are critical to maintain the 25-35 cfs passage flows in the Lemhi River. Five water users participated in FY'20 and were compensated at a rate of \$90.00 per cfs per day, for a total of \$26,813.00. This transaction was funded by the Idaho Fish Accord.



127i-19 IWRB-2020-Morgan Creek -RJ-DH

This transaction maintained a minimum streamflow of 2 cfs on Morgan Creek, which provided full season connectivity between Morgan Creek and the Salmon River. Two water users on the lowest diversion on Morgan Creek participated in this transaction, which provided compensation of \$80.00 per cfs per day. Water users are compensated for the days that they spill, which was approximately 45 days in FY'20 (mid-August through September). This transaction was funded by the Columbia Basin Water Transaction Program. Total payment to the water users was \$10,368.00.





Morgan Creek
August 19, 2020



Big Timber Creek
July 27, 2020



Lemhi River
August 29, 2020

Stream Flow Monitoring

In FY'20, the Idaho Water Transactions Program monitored 44 active transactions on 26 streams in the Upper Salmon and Middle Fork Salmon Basins.

Continuous stream flow is monitored on 18 streams in the Upper Salmon Basin. Below is a list of the continuous stream flow gaging locations that are funded by the IWTP:

- Bayhorse Creek
- Beaver Creek
- Big Springs Creek
- Big Timber Creek
- Bohannon Creek
- Canyon Creek
- Carmen Creek
- Fourth of July Creek
- Goat Creek
- Iron Creek
- Kenney Creek
- Little Springs Creek
- Meadow Creek
- Morgan Creek
- Pahsimeroi River @ P-9
- Patterson-Big Springs
- Pole Creek Pratt Creek

On streams that do not have an active gaging station, flow measurements are taken periodically throughout the irrigation season.

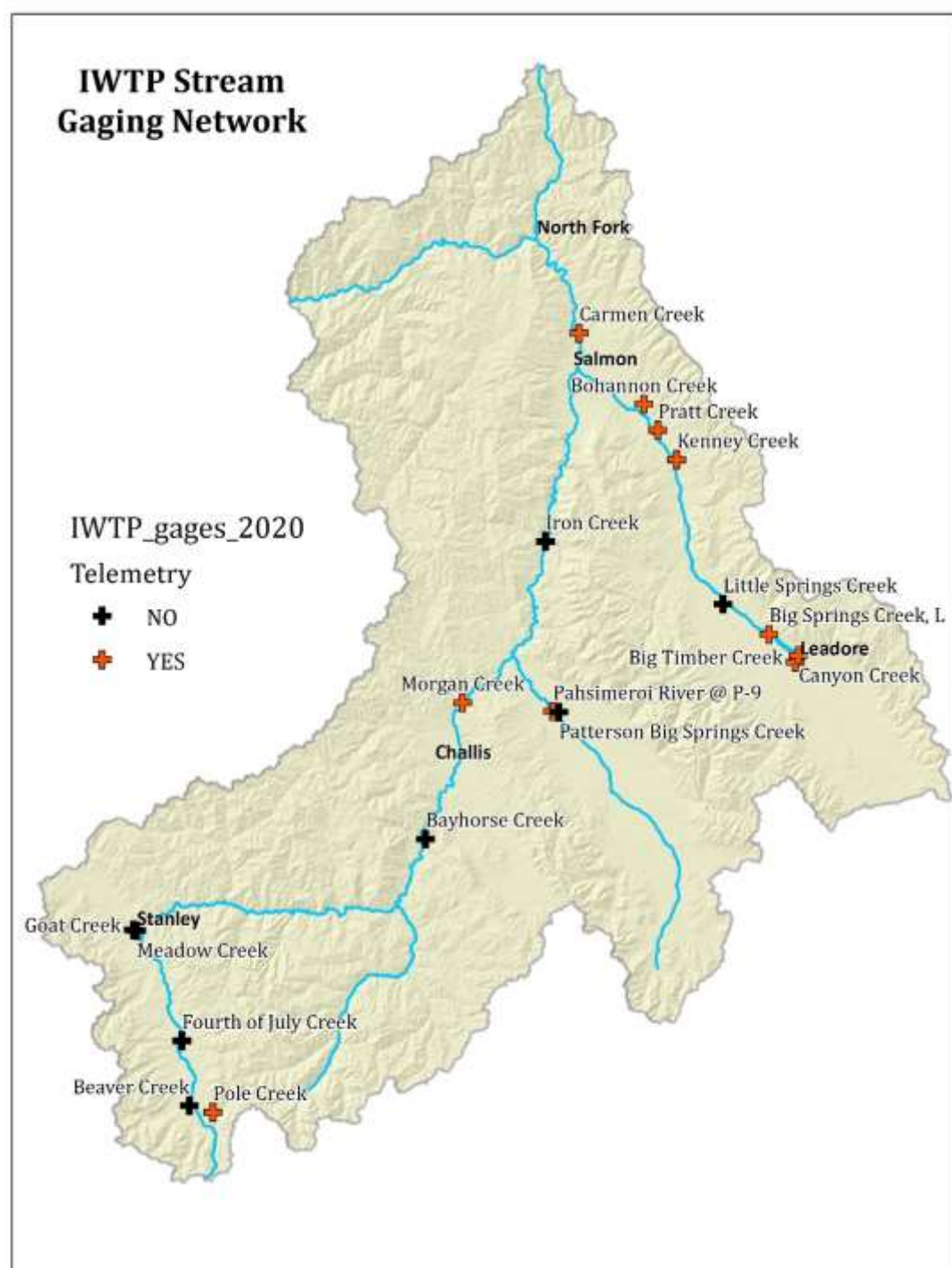




Photo of the Bear Creek Wildfire from Canyon Creek near Leadore, Idaho. August 11, 2020.

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