

Idaho MOA/Fish Accord Water Transactions Program Annual Report

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A. Introduction/Background Information

The MOA Idaho Water Transactions Program complements the Columbia Basin Water Transactions Program (CBWTP) and utilizes the transaction tracking and procedural aspects of CBWTP to enhance the effectiveness of implementation. The primary goal of the Idaho Water Transactions Program is to fund the acquisition of interests in water rights for use in restoring stream flow to ecologically significant reaches in the Lemhi and Pahsimeroi River basins.

As a result of legal water withdrawals during the peak irrigation season, stretches of the mainstem Lemhi and Pahsimeroi Rivers and their tributaries run low - and sometimes dry - in summer and early fall with significant consequences for imperiled salmon, steelhead, trout, and other aquatic species. The Upper Salmon Subbasin Plan and other habitat assessment plans cite inadequate stream flows as a key factor limiting the productivity of both anadromous and resident fish species. Often, the inadequate stream flows are the result of the competing consumptive water uses, primarily crop irrigation. Voluntary, market-based water transactions provide an effective, appropriate, and fair response to balance the competing consumptive uses of water with the need to address this key limiting factor. Restored stream flows benefit multiple species including Chinook salmon, steelhead, and bull trout.

Water transaction development under the Idaho MOA/Fish Accord Water Transaction Program utilizes the transaction tracking and procedural aspects of CBWTP to enhance the effectiveness of implementation. The program uses temporary and permanent acquisition of water rights and other incentive-based approaches to assist landowners who wish to voluntarily restore flows to key fish habitat.

Restoring flow for fish through water transactions includes acquiring temporary and permanent interests in water rights. These interests are secured through a variety of mechanisms including the conversion of agricultural practices (e.g. source switches), the conversion of agricultural lands to other land uses, or the acquisition of land or interests in land for riparian restoration. The IWRB focuses its efforts in areas where restoring stream flow will benefit critical life history stages of anadromous and resident species in priority areas throughout the Lemhi and Pahsimeroi River basins.

Between 2008 and 2018, the IWRB in cooperation with OSC, NFWF, BPA and a multitude of other program partners and cost share sources have completed a total of 43 water right transactions that have restored over 242 cubic feet per second of flow to key streams in the Lemhi and Pahsimeroi River Basins. These transactions have included a number of innovative methods, including short and long-term leases, source switches, permanent purchases, and voluntary diversion reduction agreements. The term of these deals has varied from short-term to permanent.

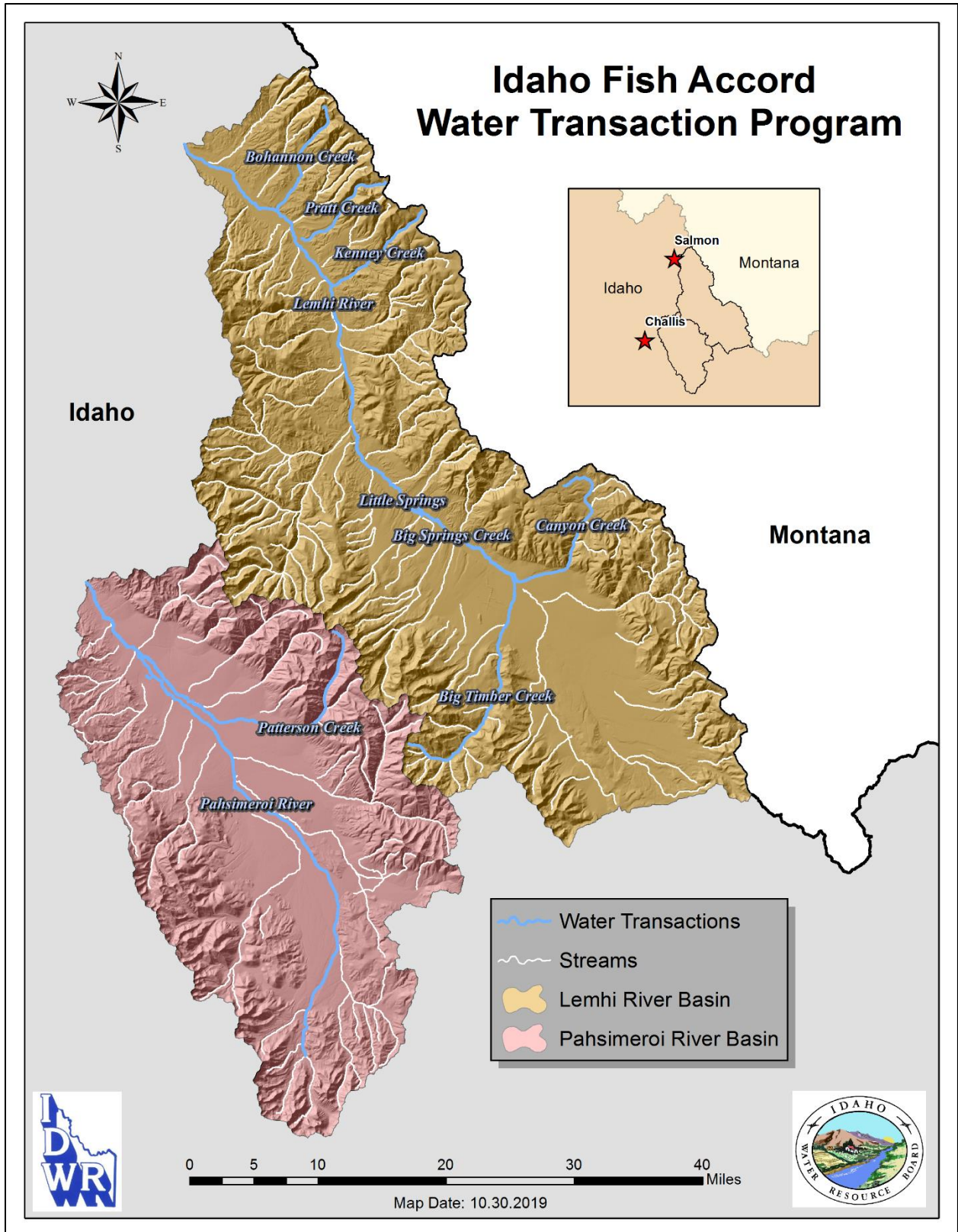
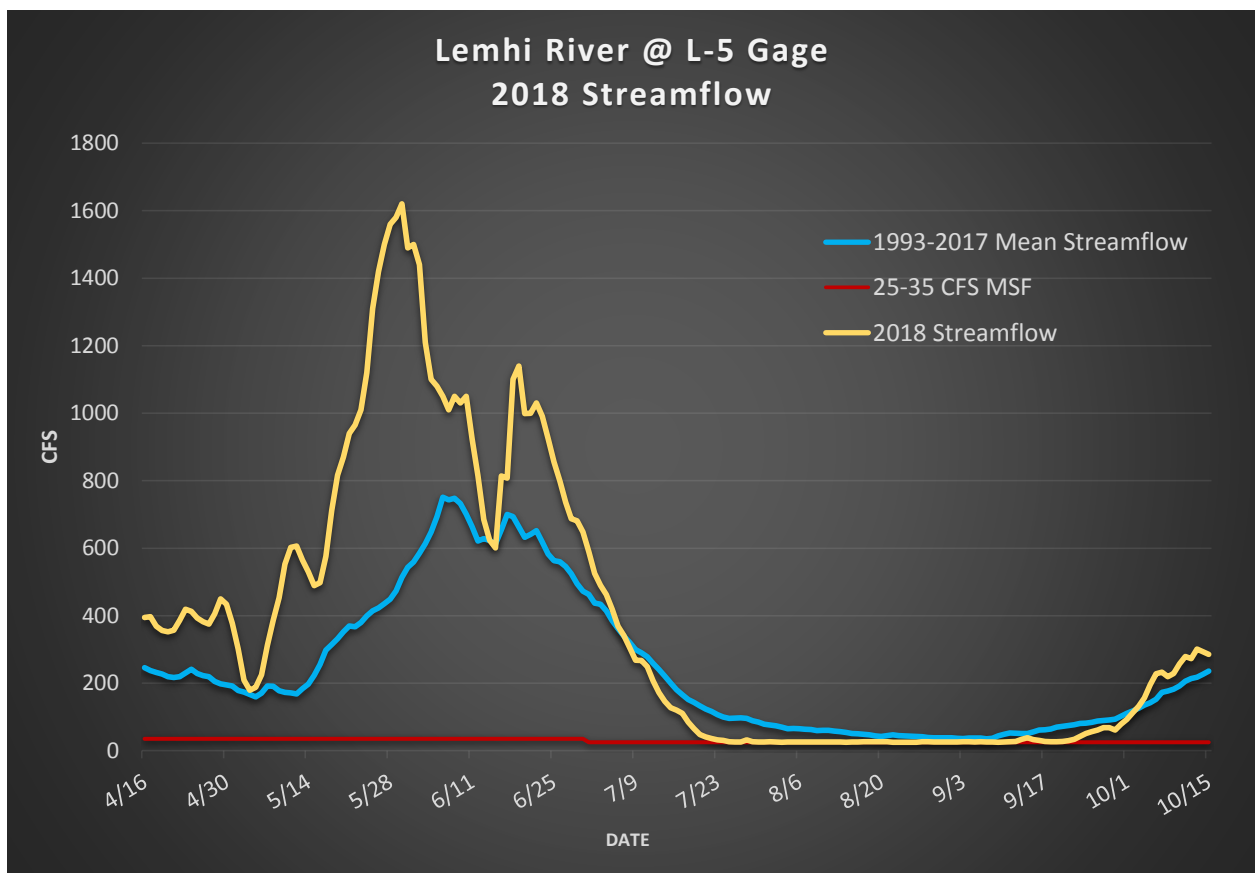


Figure 1. Project Area

B. Completed Work

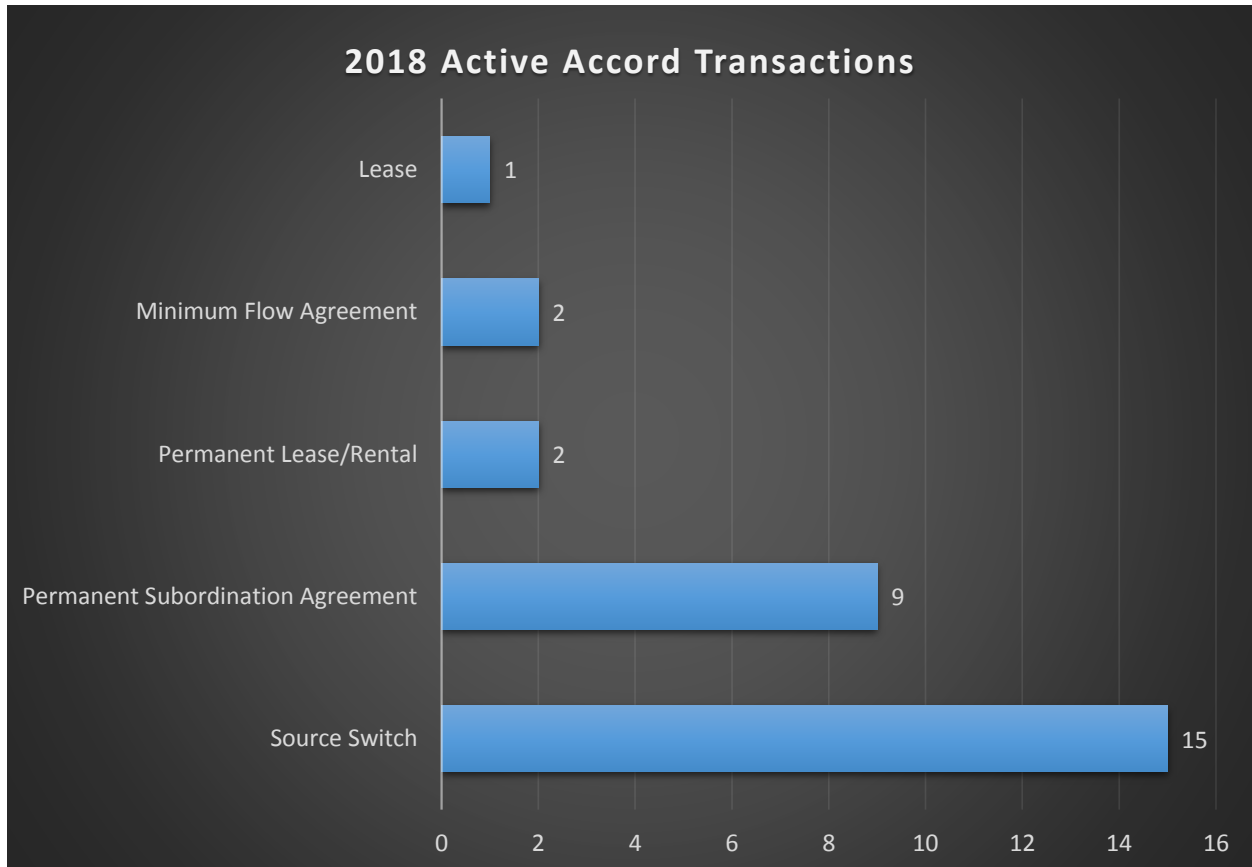
The IWRB completed two 20-year agreements not to divert on Bohannon Creek, securing a total of 8.5 cfs of flow in the lowest reach of Bohannon. These long-term agreements follow a series of short-term minimum flow agreements that were in place on Bohannon Creek from 2014 to 2017. In 2014, the Idaho Department of Fish and Game identified a total of 21 steelhead redds and 9 adult steelhead in Bohannon Creek, and most of them were located in the lowest reach. While those short-term agreements prevented the dewatering of the reach occupied by steelhead redds, 20-year agreements not to divert were necessary to secure long-term participation by the water users. With the addition of Bohannon Creek in 2018, the IWRB has now completed water transactions to reconnect six tributaries of the Lemhi River.

In addition to the Bohannon Creek transaction, the Board completed the Lower Lemhi Annual 2018 transaction to maintain 25- 35 cfs in the Lower Lemhi River. While the early season flows were much higher than average on the Lemhi River at the L-5 gage, the hydrograph dropped rather precipitously in mid-June and the Board had to call for transacted water starting July 21st in order to meet the Minimum Stream Flow at L-6 (see graph below).



2018 Lemhi River streamflow at the L-5 gage compared to the 1993-2017 mean streamflow at the same location.

Program staff monitored 29 active Accord transactions pursuant to the Columbia Basin Water Transactions Program Accounting Framework. Stream gaging stations on Big Timber Creek, Kenney Creek, Bohannon Creek, Lemhi Little Springs Creek, Pratt Creek, Pahsimeroi River at P-9, Patterson Big Springs Creek, and Canyon Creek were maintained for the 2018 irrigation season and contributed to the monitoring and enforcement of the transactions on those streams. The 29 active Accord transactions contribute 115 cfs over 57 stream miles in the Lemhi and Pahsimeroi River basins.



The active transactions and monitoring align with the project objectives and NOAA Fisheries Ecological Concern Category Limiting Factor 9.2 Decreased Water Quantity by increasing flow through defined reaches and improving the total volume of water restored to those reaches. Project data was shared through the CBWTP and project partners to help evaluate whether increased stream flow is improving available habitat and improving the egg to smolt survival ratio.

C. Lessons Learned & Adaptive Management

The priority in the Lemhi River basin is to secure a minimum of 25 cfs of permanent water at the L-6 diversion, and to date (2018) 15.53 cfs is secured in perpetuity. Because these agreements are limited to location (Lemhi River diversions L-6, L-7, and L-8A) and priority (1800's), the number of water users that can participate is quite small (approximately 7-10 total). Negotiations with these water users are ongoing and some creative approaches are being considered.

Flow restoration in the Pahsimeroi River Basin continues to be a challenge because the only minimum stream flow water right on the lower Pahsimeroi River is always met. That limits the ability of the Board to call for rented water through dewatered stream reaches. Instead, projects must be developed where there is no risk of junior water users diverting transacted flows out of the ecological reach. Staff continues to work with the Water Supply Bank Coordinator and Board members to investigate some novel ideas to open up restoration opportunities in the Pahsimeroi River Basin.