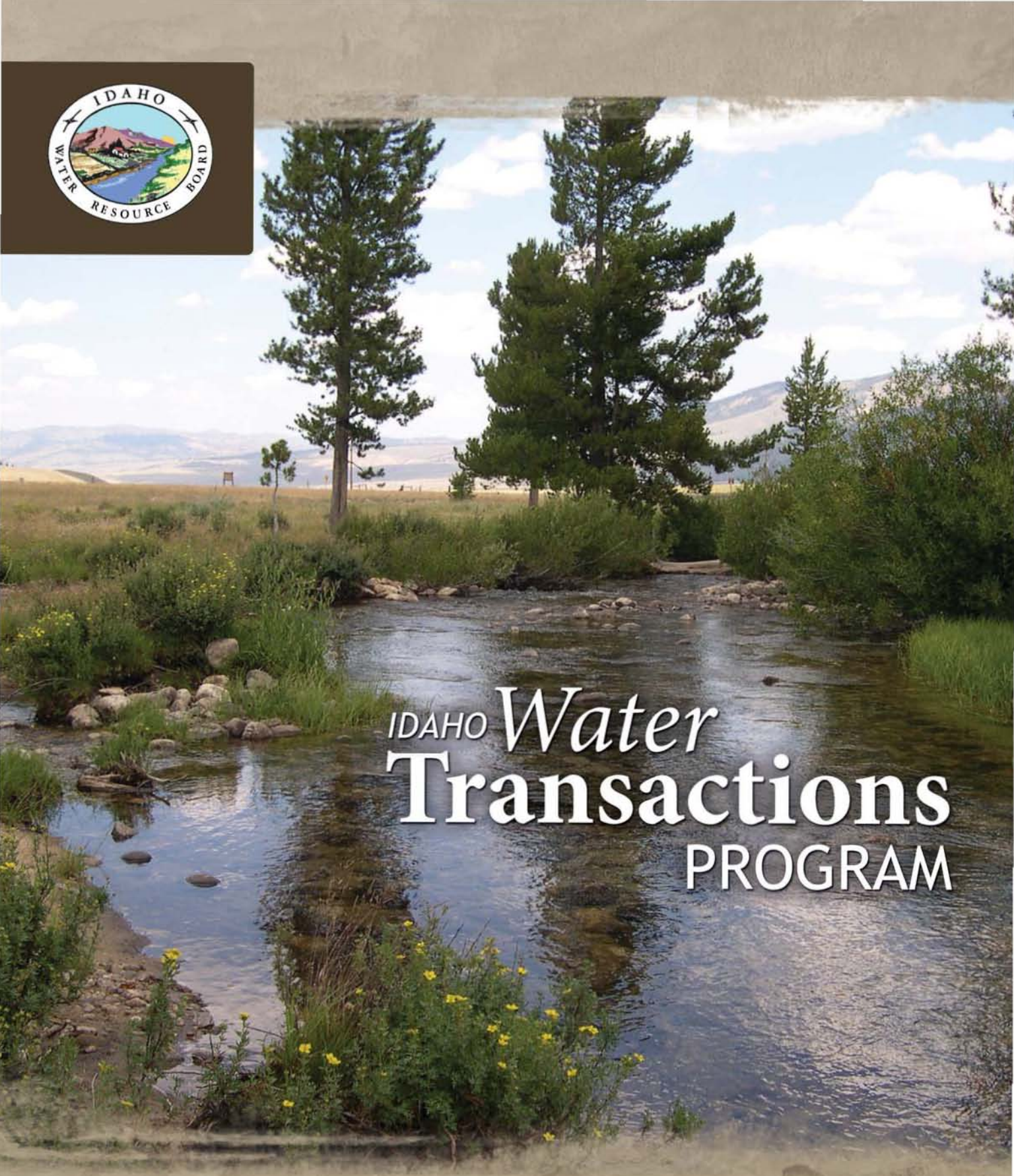


IDAHO *Water* Transactions PROGRAM

Improving flows in streams & rivers in the Upper Salmon River Basin

Mission:

To support innovative, voluntary, grassroots water transactions that improve flows to tributary streams and rivers in the Upper Salmon River Basin.

Purpose

With committed partners in the Upper Salmon River Basin, the Idaho Water Resource Board implements the Idaho Water Transactions Program. The program is restoring water to our streams and rivers, revitalizing the habitats that imperiled salmon, steelhead, and native trout need for survival and recovery, and building resilience in tributaries facing a changing climate, while protecting the local agricultural community.

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*

UPPER SALMON REGION

HISTORY

The Idaho Water Resource Board became a Qualified Local Entity (QLE) of the Columbia Basin Water Transactions Program (CBWTP) in 2003. The Board has successfully implemented over 55 transactions in the Upper Salmon River Basin, restoring over 100 cubic feet per second (cfs) of flow to tributaries that provide habitat for endangered and threatened fish.

The Board has leveraged CBWTP funds from the Bonneville Power Administration (BPA) with grants from the Pacific Coast Salmon Recovery Fund. In 2008, the Board was given the opportunity to implement water transactions in the Lemhi and Pahsimeroi River basins with funding from the Columbia Basin Fish Accords, through a BPA and Idaho Office of Species Conservation agreement.

CBWTP

The Columbia Basin Water Transactions 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 streams and rivers run low — and sometimes dry — with significant consequences for imperiled salmon, steelhead, trout and other creatures. Using permanent acquisitions, leases, investments in efficiency and other incentive-based approaches, the CBWTP supports program partners in Oregon, Washington, Idaho and Montana to assist landowners who wish to restore flows to existing habitat.

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

TOOLS

- Lease — Partial or full-season lease that dries up irrigated ground and protects the consumptive use by delivery to an existing IWRB minimum stream flow water right.
- Minimum Flow Agreement — A contractual agreement to maintain a specific flow in a river reach. Participants are compensated for each day they are not allowed to divert. These agreements ensure that impacts to irrigation are minimized by reducing irrigation only when the flow is needed.
- Change in source — Moving a point of diversion from a flow-limited reach to a reach that has adequate flow for fish and irrigation. These contractual agreements are usually long-term and are intended to compensate water right holders for the increased cost of pumping water from a new point of diversion.
- Purchase/Conservation Easement — Transaction that permanently restricts (as in a minimum flow agreement) or retire water rights.

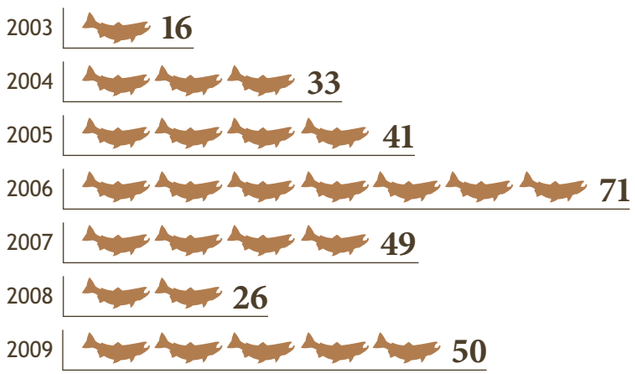
Partnership

The IWRB works closely with the Upper Salmon River Basin Watershed Program technical team consisting of local ranchers, state and federal resource managers, and non-profit conservation organizations. Together, the technical team reviews projects to ensure that transactions are developed on high priority stream reaches that will result in improvements to fish habitat and populations. Technical team partners also help to coordinate efforts to monitor the effects of increased stream flow.

Bull Trout Return as Long-term Lease Restores Water to Creek

Fourth of July Creek, tributary to the Salmon River upstream of Stanley, provides high quality habitat for large fluvial bull trout and juvenile Chinook salmon. Irrigation diversions at the lower end of the creek reduced flow and restricted fish passage to the habitat upstream. In 2004, the Idaho Water Resource Board entered into a full-season water transaction with the Vanderbilt family. The Vanderbilts leased half of their water rights out of Fourth of July to the Water Supply Bank and the Board rented the water for delivery to a minimum stream flow water right on the Salmon River. Flows in Fourth of July Creek increased by at least 2.9 cfs throughout the irrigation season. The Vanderbilts were compensated for the agricultural production losses on the 43.1 acres that are not being irrigated. The Board has renewed the leases with the Vanderbilts several times — the current lease is for 20 years (2009-2028). In addition to documented increases in flow, the Idaho Department of Fish and Game has documented an increasing trend in fluvial bull trout redd (fish nests) counts in Fourth of July Creek (see chart).

BULL TROUT REDDS
FOURTH OF JULY CREEK NEAR STANLEY



"We owe this success to the IWRB's partnering with us to guarantee that half our water rights will remain in Fourth of July Creek, providing a reconnect to the Salmon River and helping a threatened species."

— Bill & Annie Vanderbilt

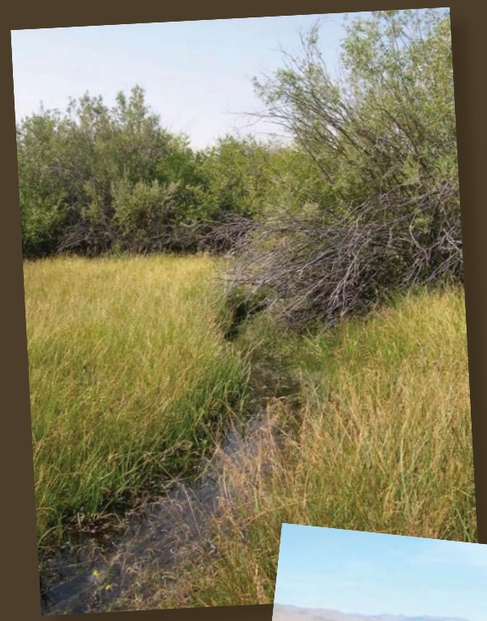
Changes to Irrigation Diversion Lead to Immediate Results

In 2008, the Idaho Water Resource Board, in partnership with the CBWTP, completed its largest and most complex project in Idaho, and the first water transaction in the Pahsimeroi Basin. The 20-year agreements reopened 10 miles of high-quality, spring-fed creek habitat previously impassable to fish.

IWRB staff worked with the Custer County Soil and Water Conservation District to remove the P-9 irrigation ditch and an associated cross ditch. These diversions drained a creek with prime Chinook salmon habitat and intercepted two springs that would otherwise feed cold water to the Pahsimeroi.

With support from the CBWTP, the IWRB negotiated agreements with four landowners to change their points of diversion to the mainstem Pahsimeroi River, where flow is not limited. As part of the project, the irrigators receive payment for leaving their water instream which they use to off-set the increased pumping costs. The project restores nearly 30 cubic feet per second — or more than 13,000 gallons per minute — of clean, clear water.

The Idaho Department of Fish and Game monitors Chinook salmon activity in the Pahsimeroi River tributaries. In 2008, they observed two Chinook salmon redds (nests) and eight adult fish in Patterson-Big Springs Creek, one of the previously flow-limited tributaries affected by the transactions. In 2009, they observed 69 Chinook redds and over 50 adults, a clear message from the fish that they prefer clear, cold water in quantities that allow them to freely migrate.



BEFORE

AFTER

"The Water Transactions Program is the thing that pushed us 'over the edge' to complete our commitment to enhancing habitat for Chinook Salmon in the Pahsimeroi River. Although I consider Caryl and myself to be exceptionally conservation minded ranchers, it is difficult for us to be the sole contributor in an effort like Salmon recovery on and near our ranch as we are constantly haunted by the bottom line like so many folks in Northwest agriculture. Transaction funds offset the high power costs that we would have to come up with to pump water from our new lower elevation location, and made something not economically viable into something doable.

Incorporating other partners is a natural solution for something like Salmon recovery, as it has far reaching benefits that go way beyond the piece of the Pahsimeroi that flows through Alderspring Ranch."

— Glenn Elzinga, Alderspring Ranch, May, Idaho

Stream Flowing, Rancher Irrigating

Big Timber Creek is a tributary to the Upper Lemhi River that has been seasonally dewatered due to irrigation withdrawals. Upper reaches of Big Timber Creek contain high quality habitat suitable for Chinook salmon and steelhead rearing and spawning. The IWRB worked with Leadore Land Partners and the Idaho Department of Fish and Game (IDFG) to change their point of diversion from Big Timber Creek to the Lemhi River. Leadore Land Partners operations were improved with the installation of a pivot system and pumping station allowing them to spill 4.5 cfs from their diversion to reconnect lower Big Timber Creek and then pump out of the Lemhi River. A 20-year transaction involving an agreement not to divert provides compensation to the irrigator for the increased costs incurred through pumping. IDFG has an program that will monitor whether targeted fish populations begin moving into and out of the previously disconnected habitat.

BEFORE

AFTER

> "The State of Idaho has determined that, for the Lemhi Basin, the reconnection of tributaries is one of the most biologically beneficial actions we can take to recover ESA-listed fish. Big Timber Creek, without a doubt, is the highest priority tributary based on potential to support all listed species in the basin. The Water Transactions Program is critical to providing flows in the dewatered section of Big Timber Creek, thus allowing all ESA-listed species fish to access the high quality habitat in this tributary."

— Jeff Lutch, IDFG Staff Fisheries Biologist

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OUR PARTNERS

Balance in the Basin — Columbia Basin Water Transactions Program

Bonneville Power Administration

National Fish and Wildlife Foundation

Northwest Power and Conservation Council

Governor's Office of Species Conservation