



Idaho Water Transactions Program

Amy Cassel
September 13, 2018

Upper Salmon River Basin

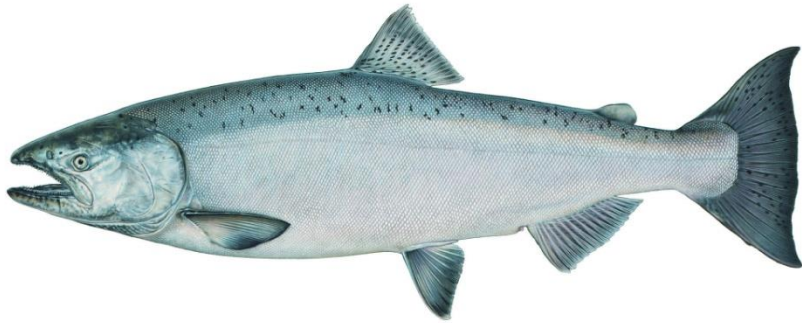
Issue:

- Local economies depend on the diversion of tributary water, but diversions can dewater streams and lead to migration barriers and habitat degradation for Endangered Species Act listed fish.

Solution:

- Implement a voluntary program that compensates water right owners for changes in irrigation practices that protect the local economy while providing the flows required for recovery of ESA-listed species in accordance with Idaho water law.

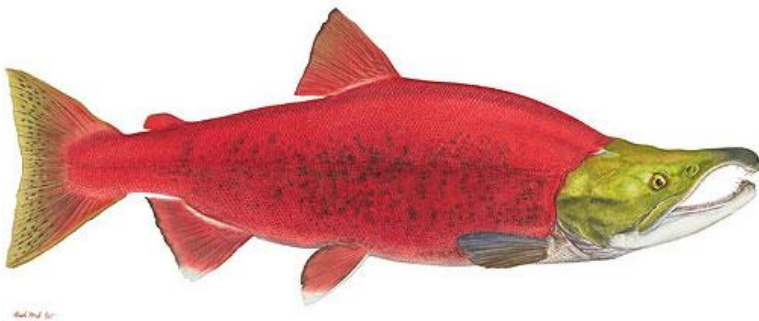
ESA – Listed Species



Chinook Salmon



Steelhead



Sockeye Salmon



Bull Trout

Water Transactions Philosophy

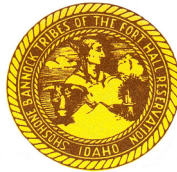
- 
- **Improve ESA-listed fish habitat with flow restoration**
 - **Respect private property rights using a voluntary cooperative approach**
 - **Respect the values of irrigated agriculture**
 - **Use market-based strategies**
 - **Take a balanced approach**

Benefits for the State of Idaho

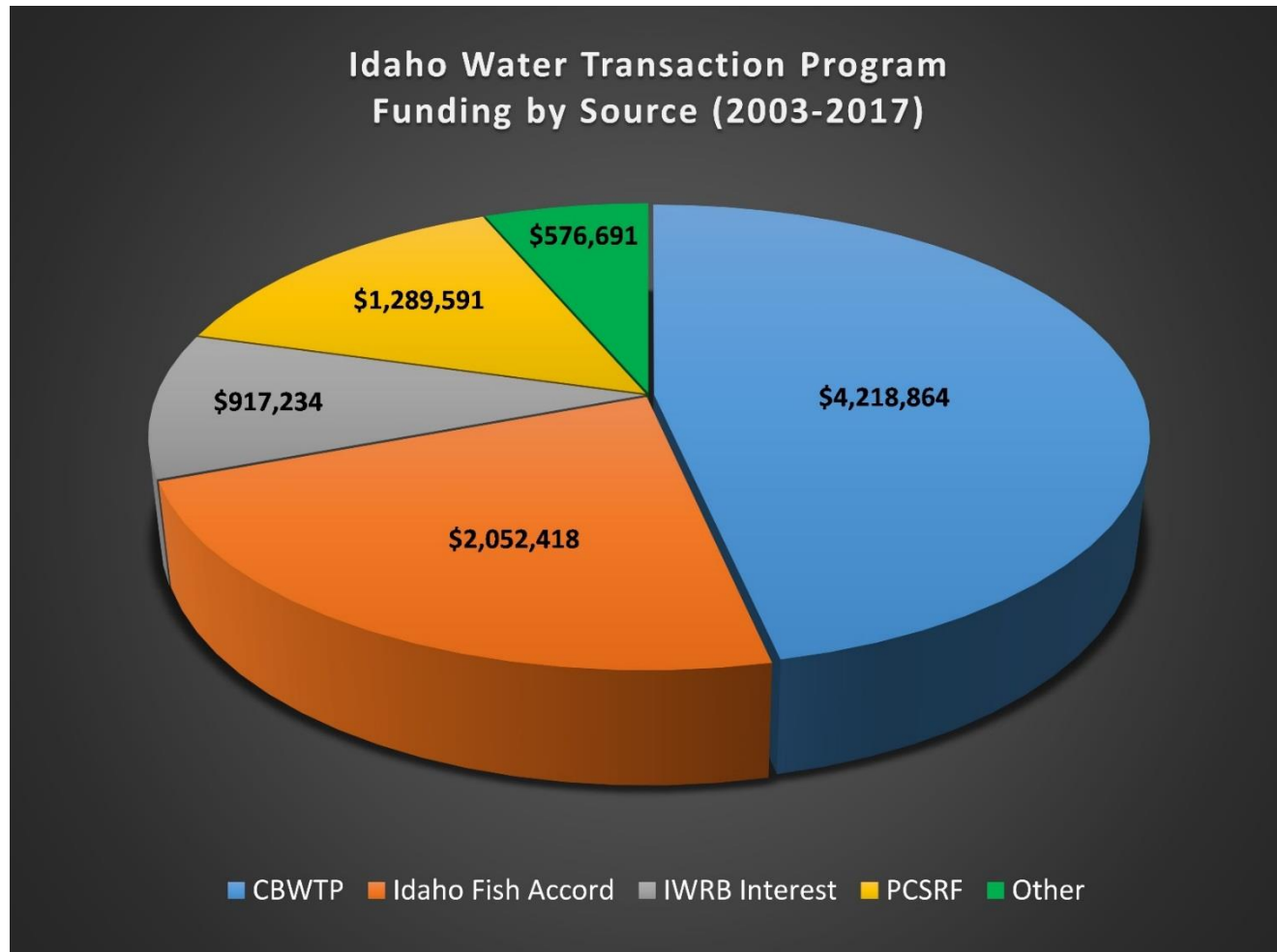
- Maintain local economies
- Protect individuals from third party ESA “take”
- Recovery of ESA-listed species & state management
- Improved recreation opportunities
- Improved natural resources for the State

Upper Salmon Basin Watershed Program Technical Team

aka “the Tech Team”

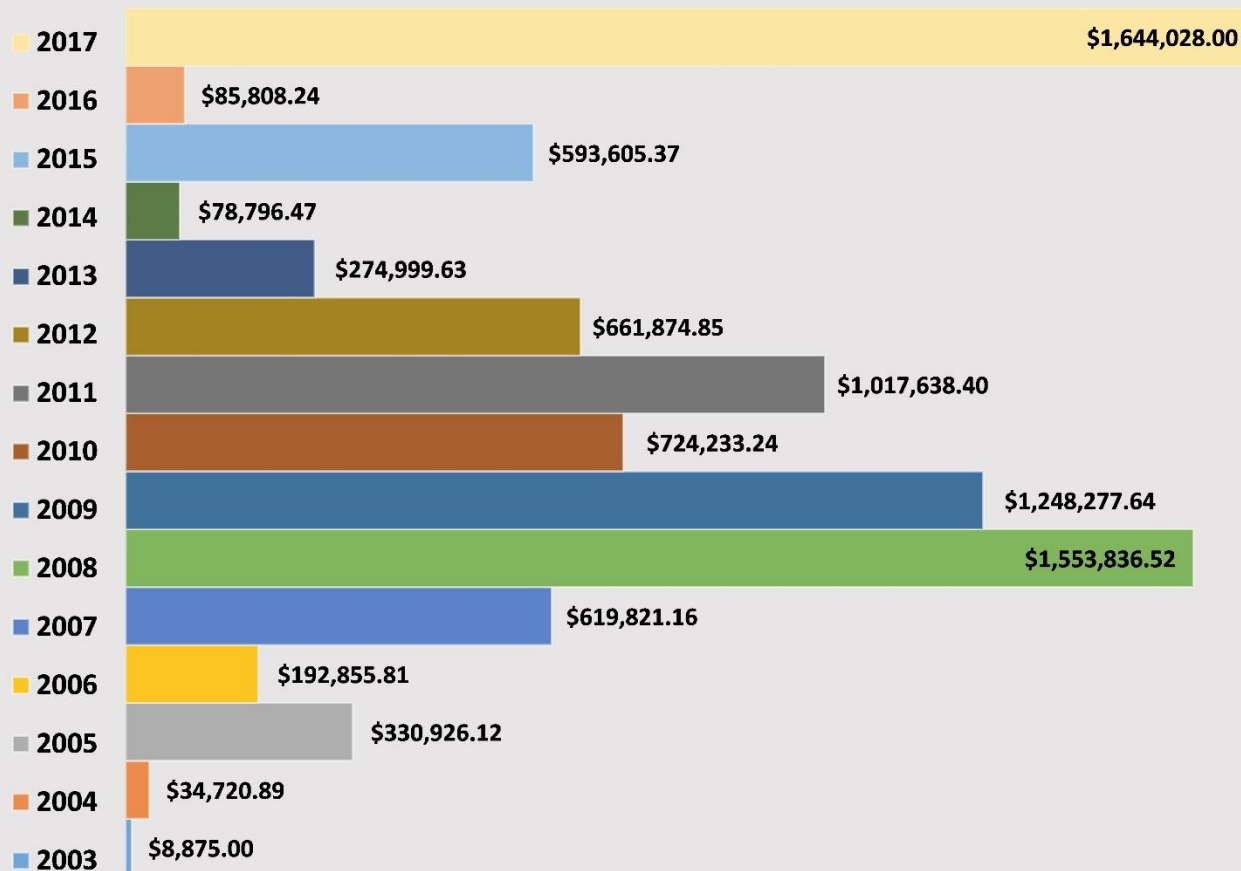


Program Funding

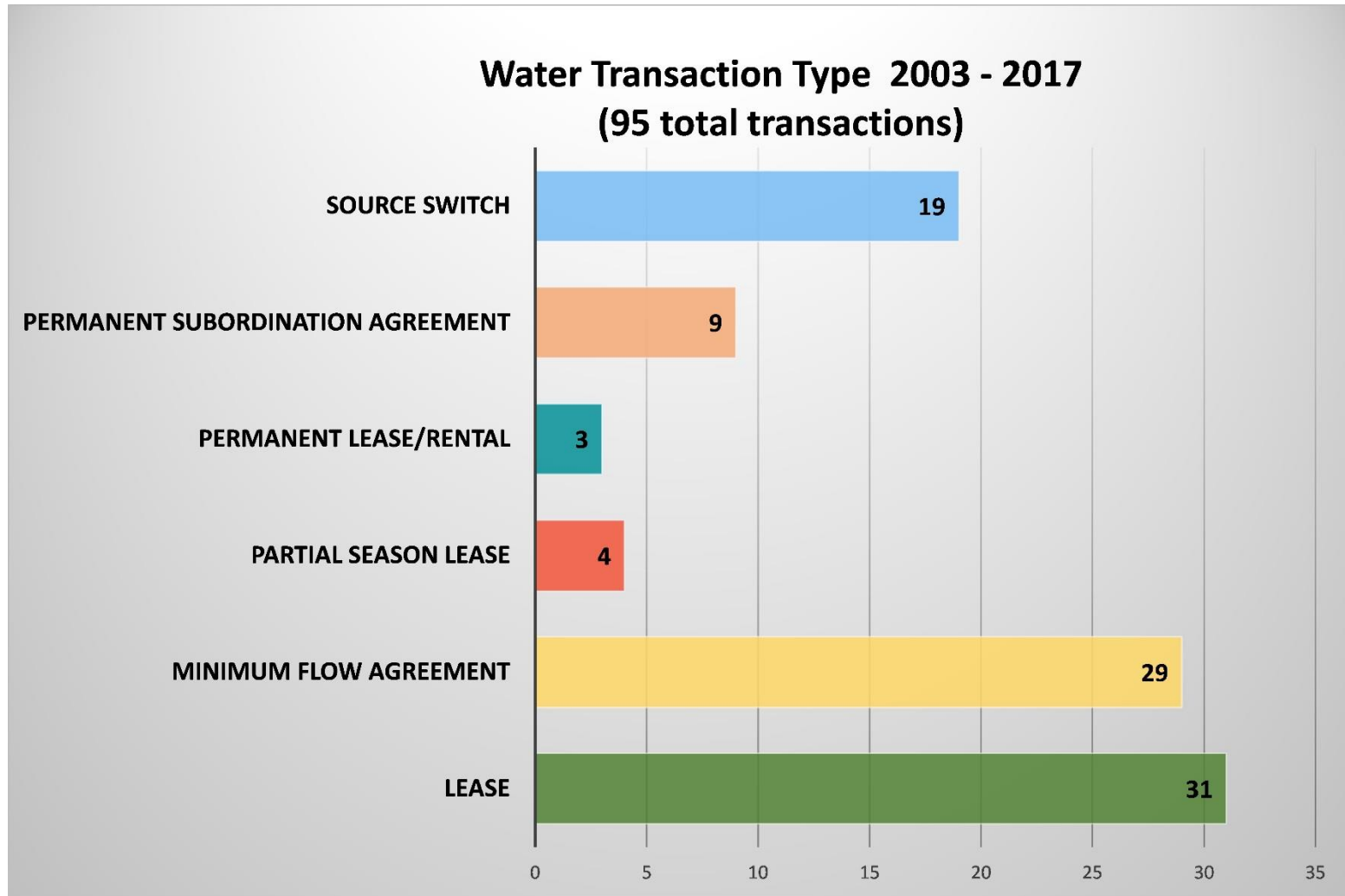


Program Funding

Water Transaction Annual Expenditures (2003-2017)



Progress to Date



Progress to Date

Source Switches

- Reconnect tributaries; involves new irrigation infrastructure

Lemhi Permanent Subordination & Annual Agreements

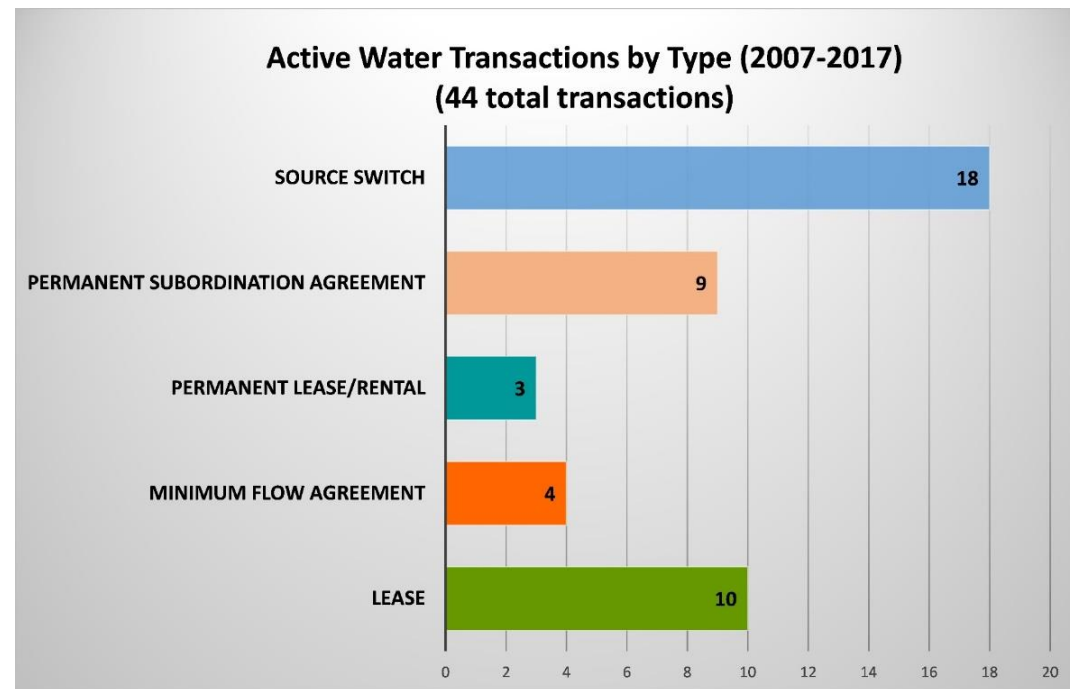
- Maintain passage at the Lemhi-6 diversion

Lease

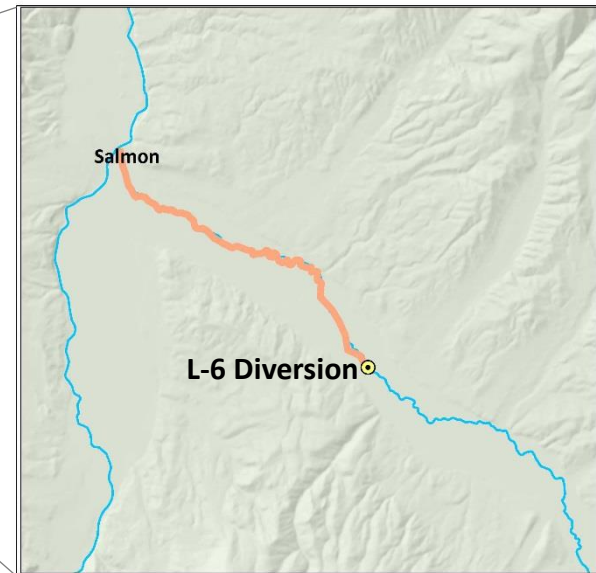
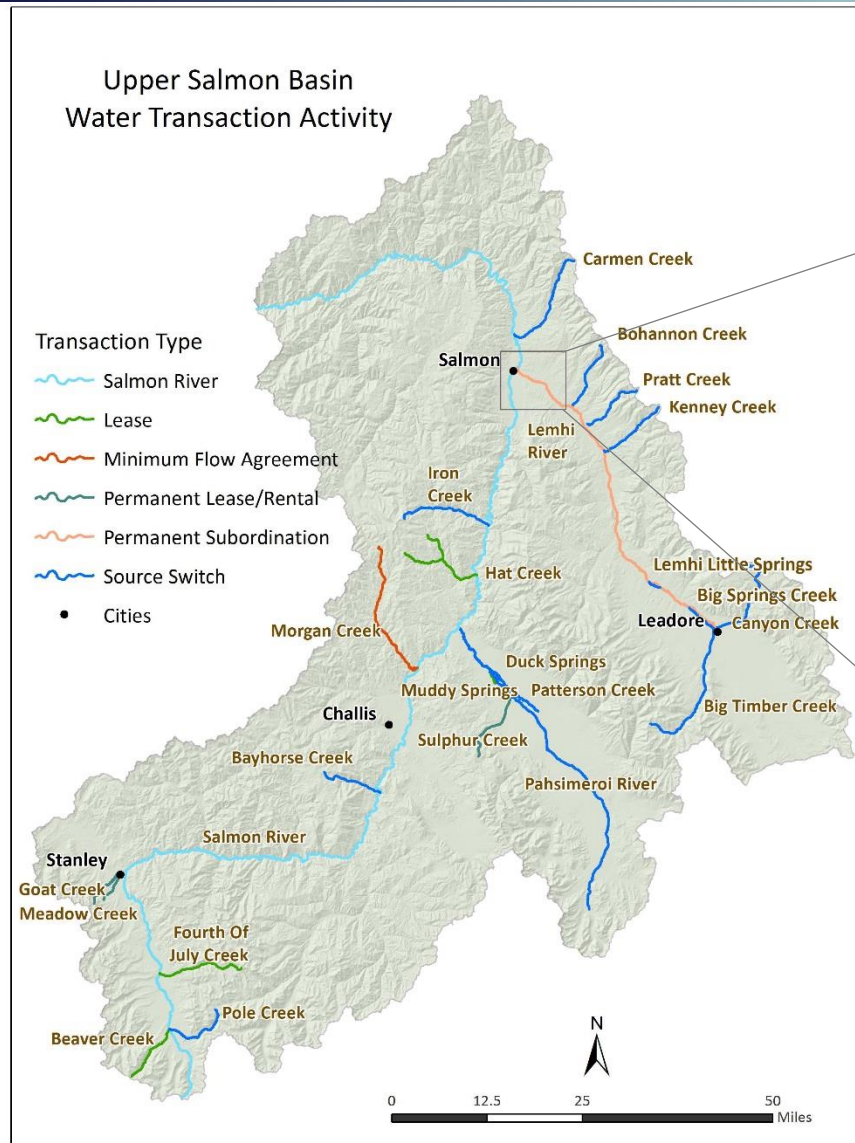
- Idle irrigated acres to increase flow, primarily to connect tributaries to mainstem habitat

Permanent Lease/Rental

- Acquisitions of irrigated acreage; water rights now owned by IWRB and water delivered to meet a minimum stream flow; increased flow allows for juvenile rearing habitat



Progress to Date



Lower Lemhi Agreements

- Permanent Subordination
- Annual Subordination

Conservation Strategies for Lemhi River Tributaries

Goal: The goal is to reconnect at least 10 tributaries with the mainstem Lemhi River during the first 20 years of the MOA to benefit both anadromous and resident salmonids by providing access to historical spawning and rearing habitat.

Timeframe for Implementation: As funding is available, the State will work with local landowners and water users to reconnect ten (10) tributaries during the first twenty years of the MOA. Four (4) tributaries will be reconnected during the first five (5) years of the MOA to provide immediate benefits to Chinook salmon, steelhead, and bull trout. The remaining six (6) tributaries will be reconnected by year twenty of the MOA, taking into consideration the biological benefits and criteria for each tributary.

Progress towards Obligations

Lemhi River Basin – Goal of 10 reconnects in first 20 years

2018 Fully re-connected tributaries

- Bohannon Creek *
- Pratt Creek *
- Kenney Creek *
- Lee Creek
- Lemhi Little Springs Creek *
- Big Timber Creek *
- Canyon Creek *
- Eighteenmile Creek

Partially reconnected tributaries

- Hawley Creek

*Transacted Reconnects

Progress to Date – Nez Perce Agreement Sect. II.A.8 of the Term Sheet

Lemhi River – Mouth to L-6

Objective. The objective is to provide passage conditions for juvenile and adult Chinook salmon, steelhead, and bull trout that are adequate to allow upstream and downstream movement without undue stress or delay

- During the first 10 years of the MOA, an interim strategy of 35 cfs (average daily flow) not less than 80% of the time and 25 cfs not more than 20% of the time from March 15 through June 30 will be maintained. A flow of 25 cfs will be maintained from July 1 to November 1.
- By year 10 of the MOA, the goal is to maintain a minimum stream flow of 35 cfs throughout the irrigation season.

Progress towards goals – Lower Lemhi

9 Permanent Subordination Agreements

- 15.83 cfs permanently protected in Lower Lemhi River (additional 1.14 cfs expected in 2018)

6 Annual Agreements

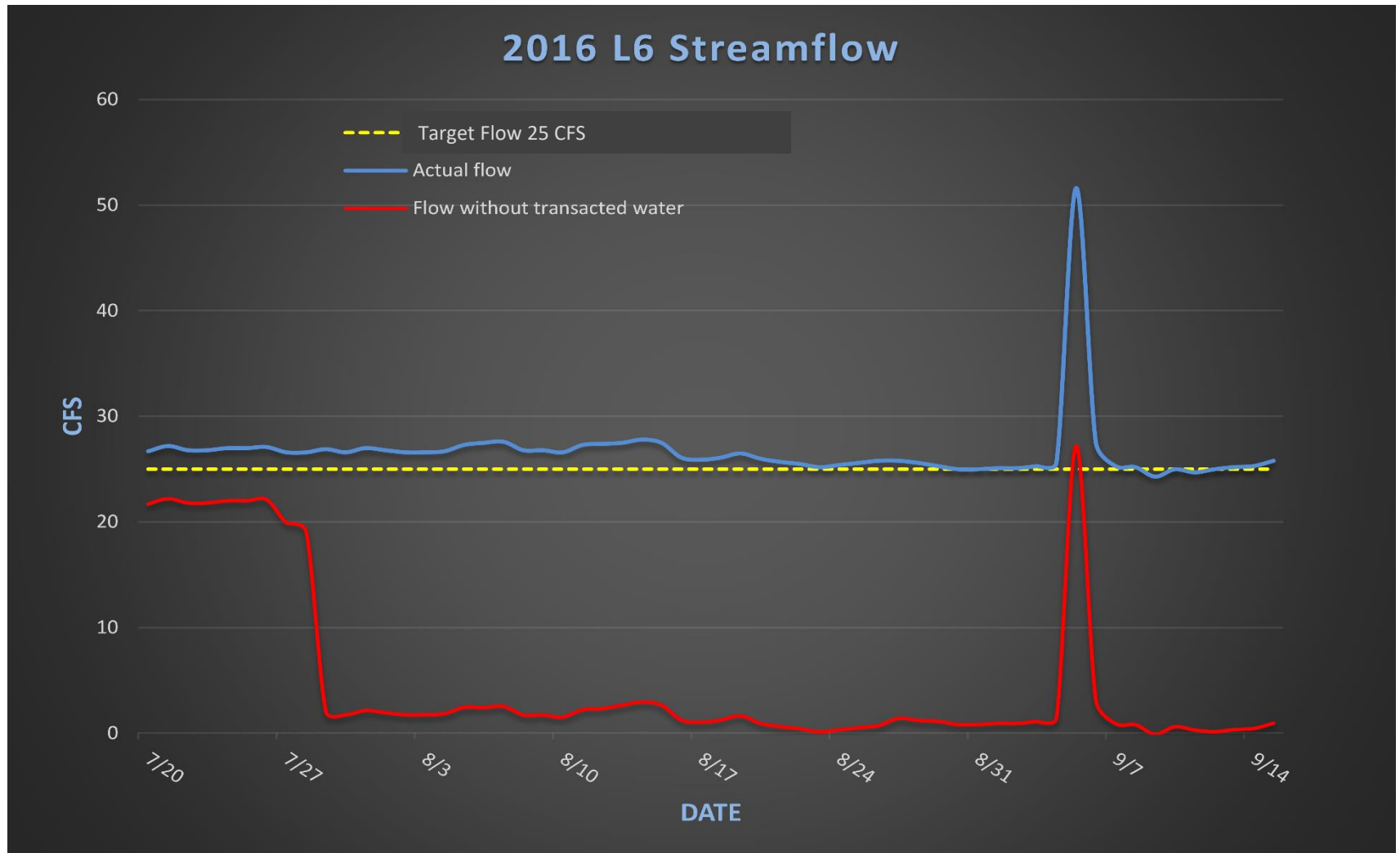
- 16.21 cfs protected through annual agreements

2 Long-term Agreements

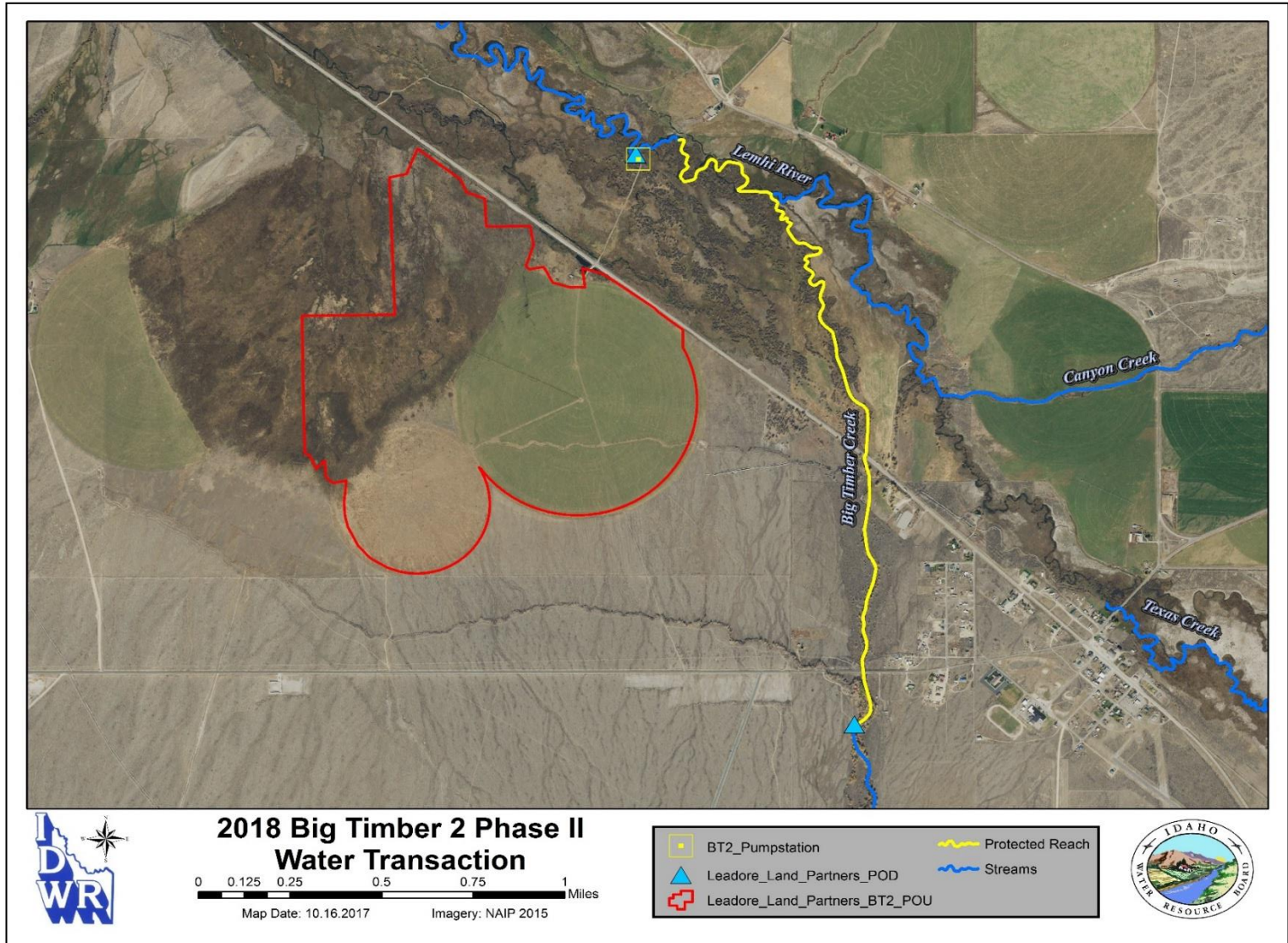
- 3.56 cfs



Lower Lemhi 2016 Gage Data



Big Timber Creek – Source Switch Tributary Reconnect



Big Timber Creek – Source Switch Tributary Reconnect



- 5.8 cfs
- 2 senior water users
- 20-year agreements



Monitoring

Idaho Water Transaction Program Stream Gage Monitoring

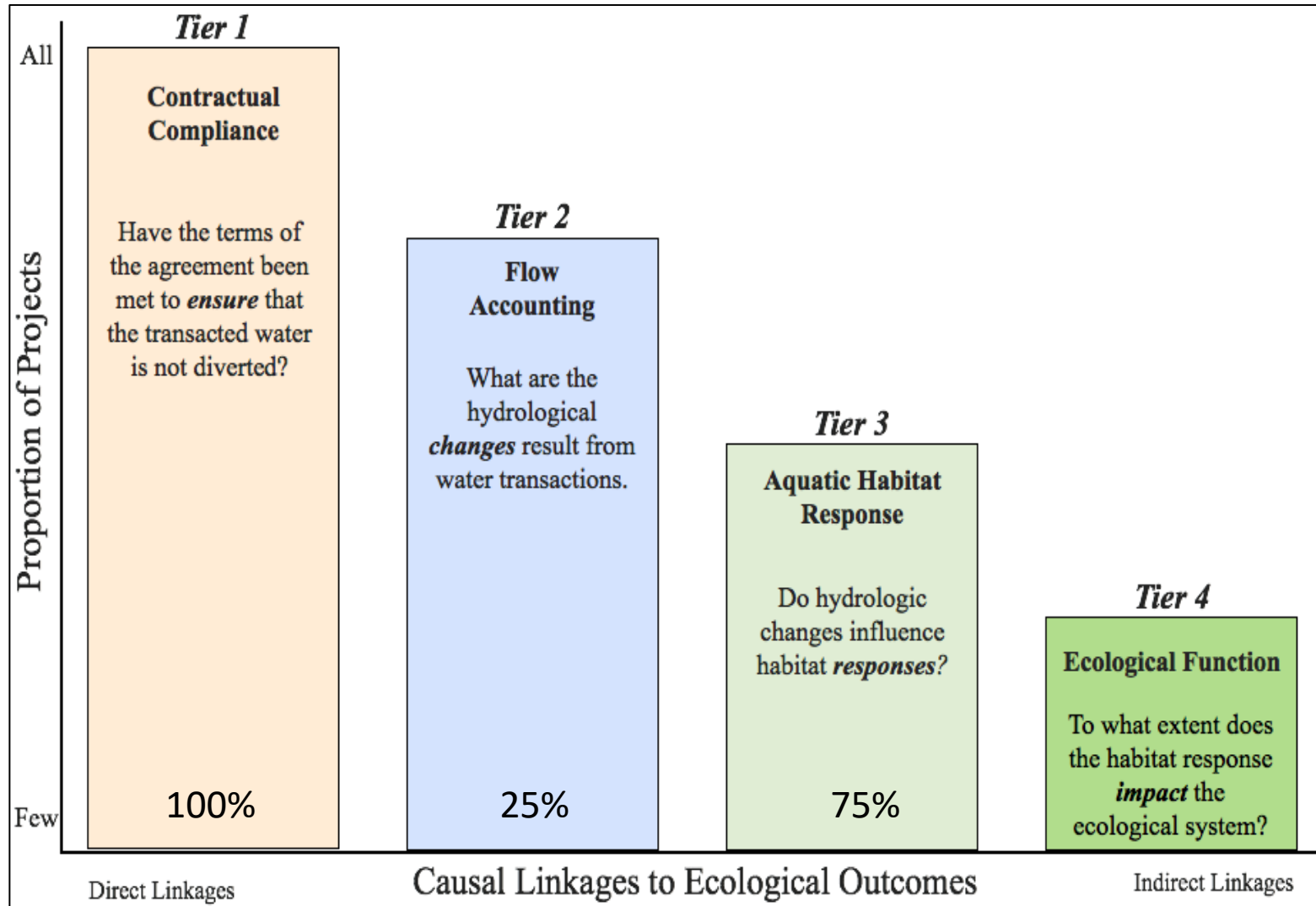


18 Total Gages Funded by
the Idaho Fish Accord &
Columbia Basin Water Transaction Program

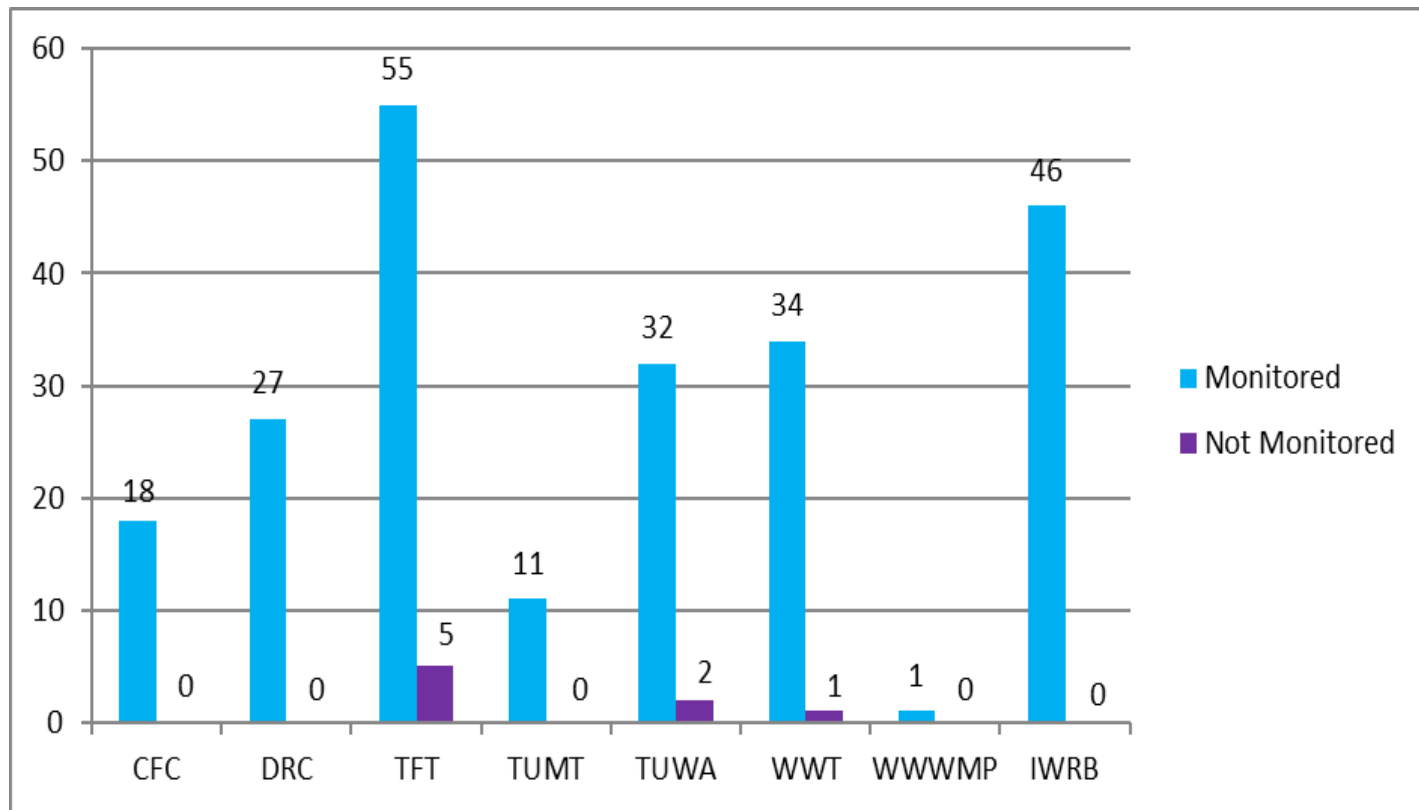


Photo by Paddy Murphy

Monitoring – *Flow Restoration Accounting Framework*



Monitoring – Compliance Reporting



Future Challenges

Source Switches

- funding after 20 years??
- Ability for water user to go back to original POD
- Applications to transfer back to POD – IWRB response? Protest?

Minimum Stream Flows

- MSF is being met (Pahsimeroi) or lacking entirely (Upper Salmon)

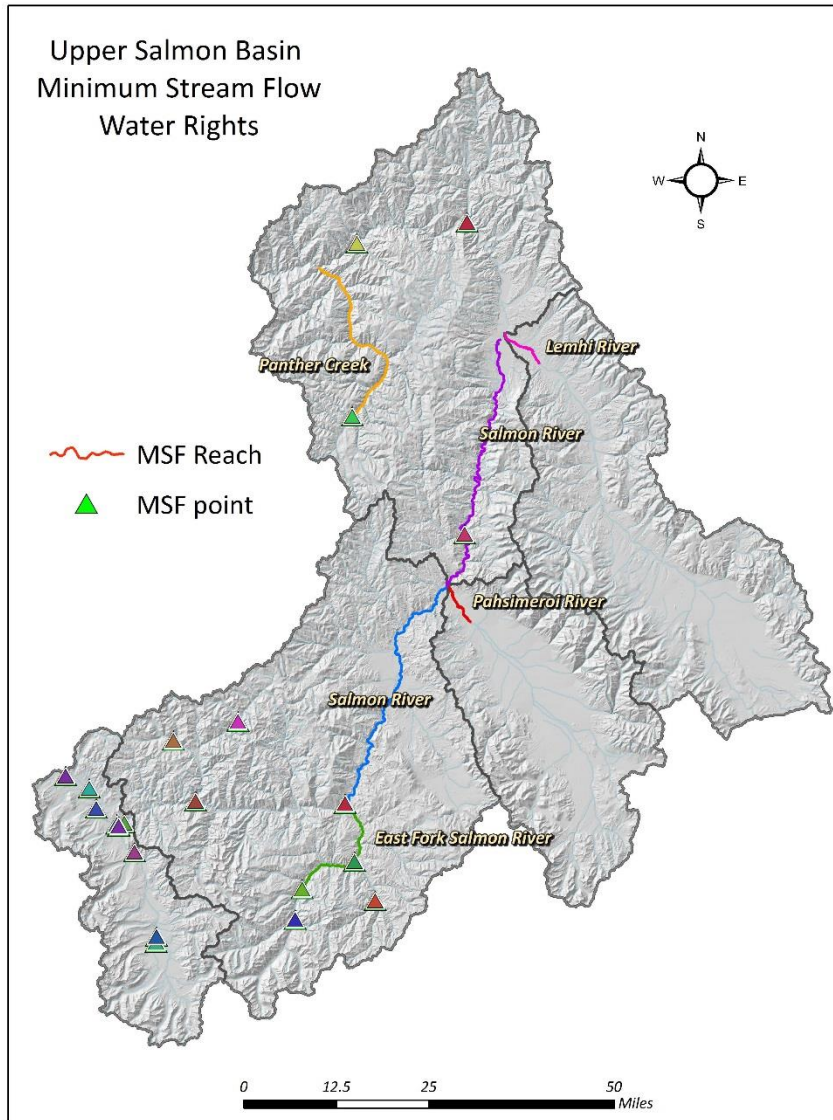
New Transactions

- Low-hanging fruit has been picked
- Projects are becoming increasingly complex and expensive

Gaging and Monitoring Costs

- Programmatic budgets (expected to remain static) are used to cover streamflow gaging contracts
- Additional gages for new transactions will have to be managed internally to save on contracting costs
- Equipment costs for new gages will have to come out of programmatic budgets
- Some gages may need to be eliminated or shifted to other agencies/partners for funding

Future Challenges



Upper Salmon Basin Minimum Stream Flow Water Rights

- Most points are located on tributaries in Stanley Basin; most are not measured and so unknown if they are being met
- Many of the reaches are being met

Looking Forward

Lemhi Basin

- Priority is maintaining flows at the L-6 diversion
 - Work towards 25 cfs of permanent subordination agreements
 - Continue to enter into annual agreements to meet our flow objectives
 - Source switch opportunities increasing flow at L-6

Pahsimeroi Basin and Upper Salmon Basin

- Investigate Minimum Stream Flow strategies
 - Additional Minimum Stream Flow water rights?
 - New beneficial uses for banked water rights such as streamflow maintenance?
 - Increasing the minimum stream flows on existing MSF's?

General Objectives

- Emphasis will be placed on long-term and permanent transactions, including leases, acquisitions, and permanent subordination agreements
- Prioritize continuous streamflow gages and manage new gages internally