



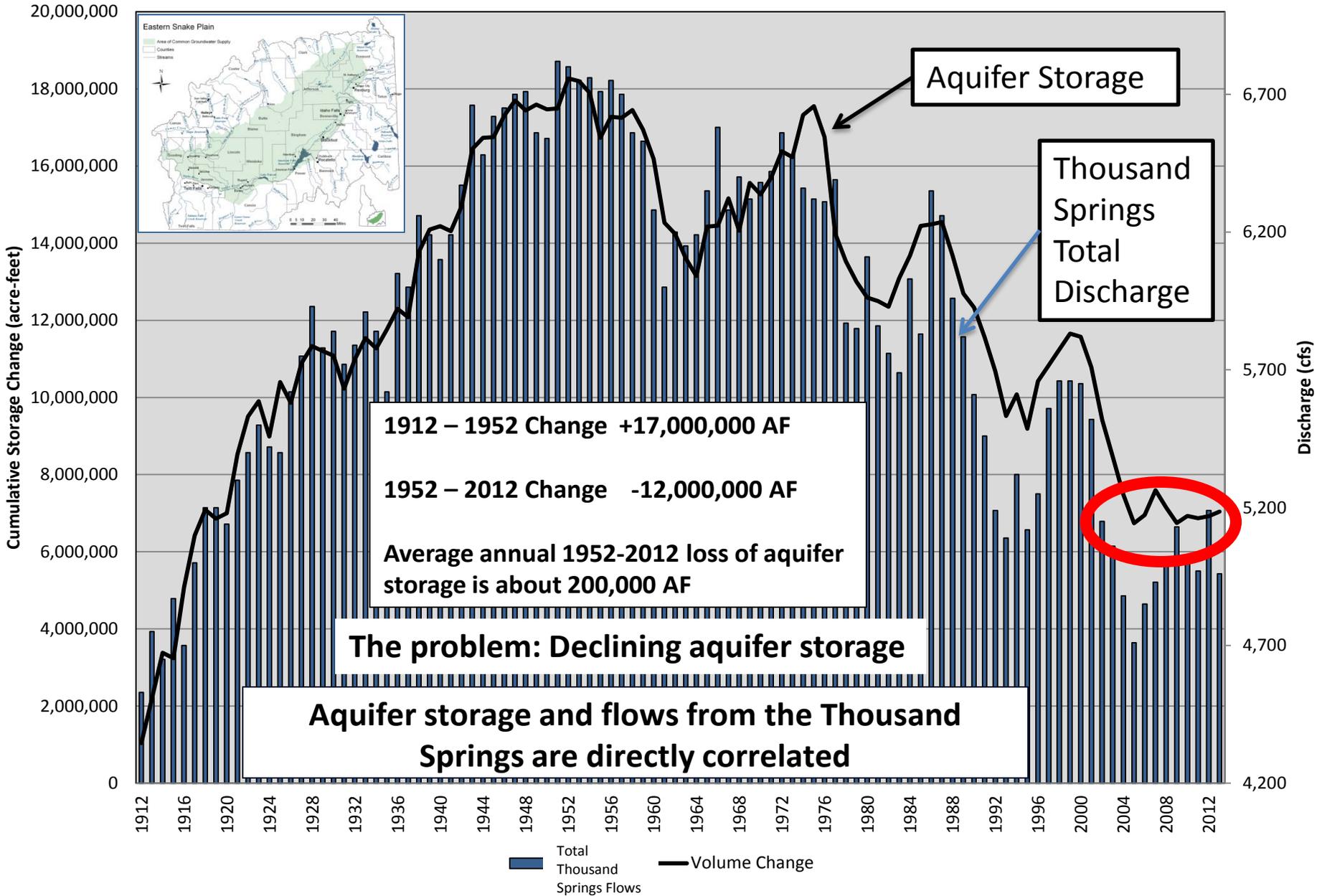
Swan Falls Technical Working Group Management Options to Maintain Minimum Flows

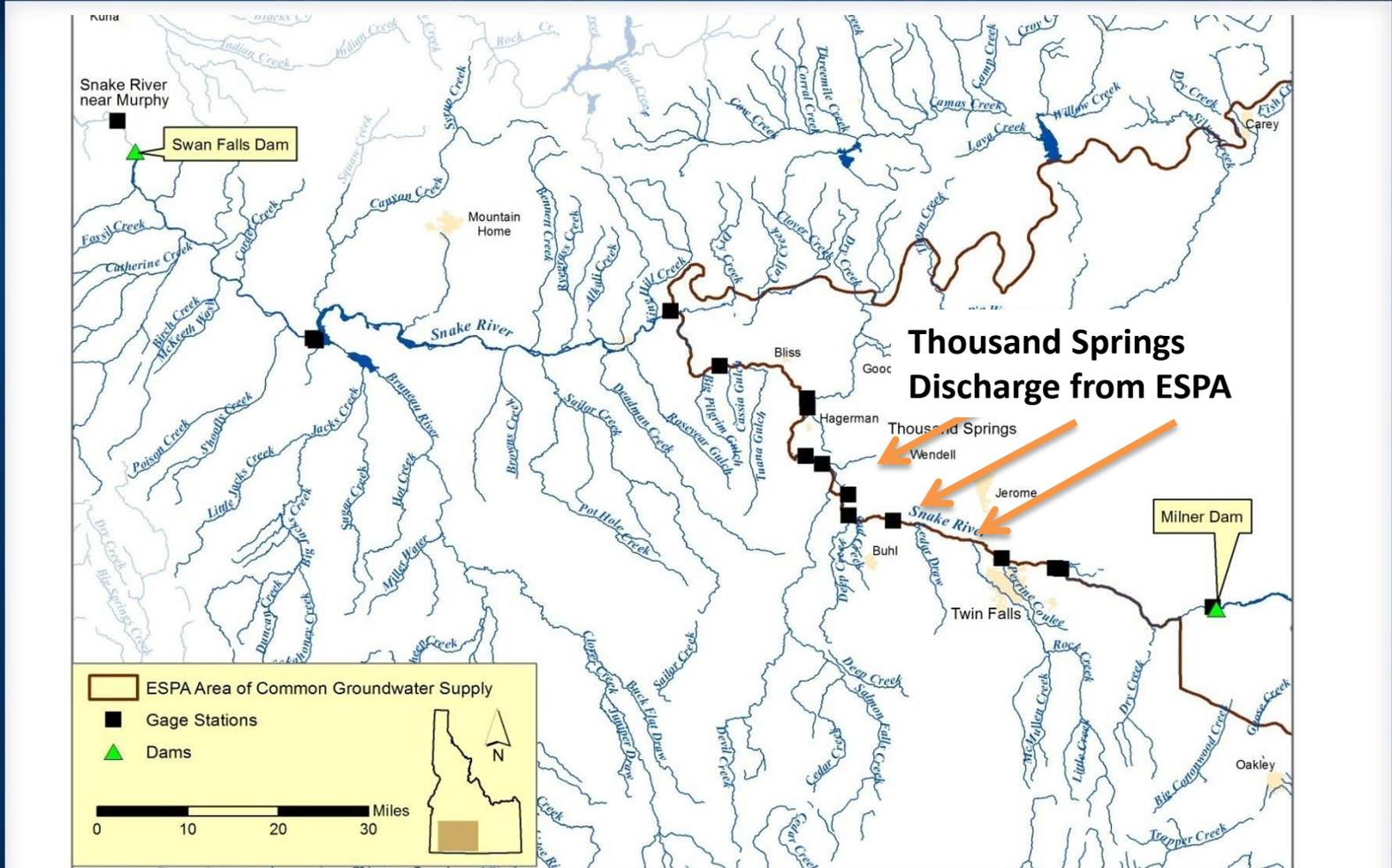
Brian Patton, Idaho Department of Water Resources

February 12, 2015

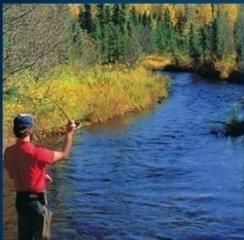


Cumulative Volume Change of Water Stored Within ESPA and Thousand Springs Discharge



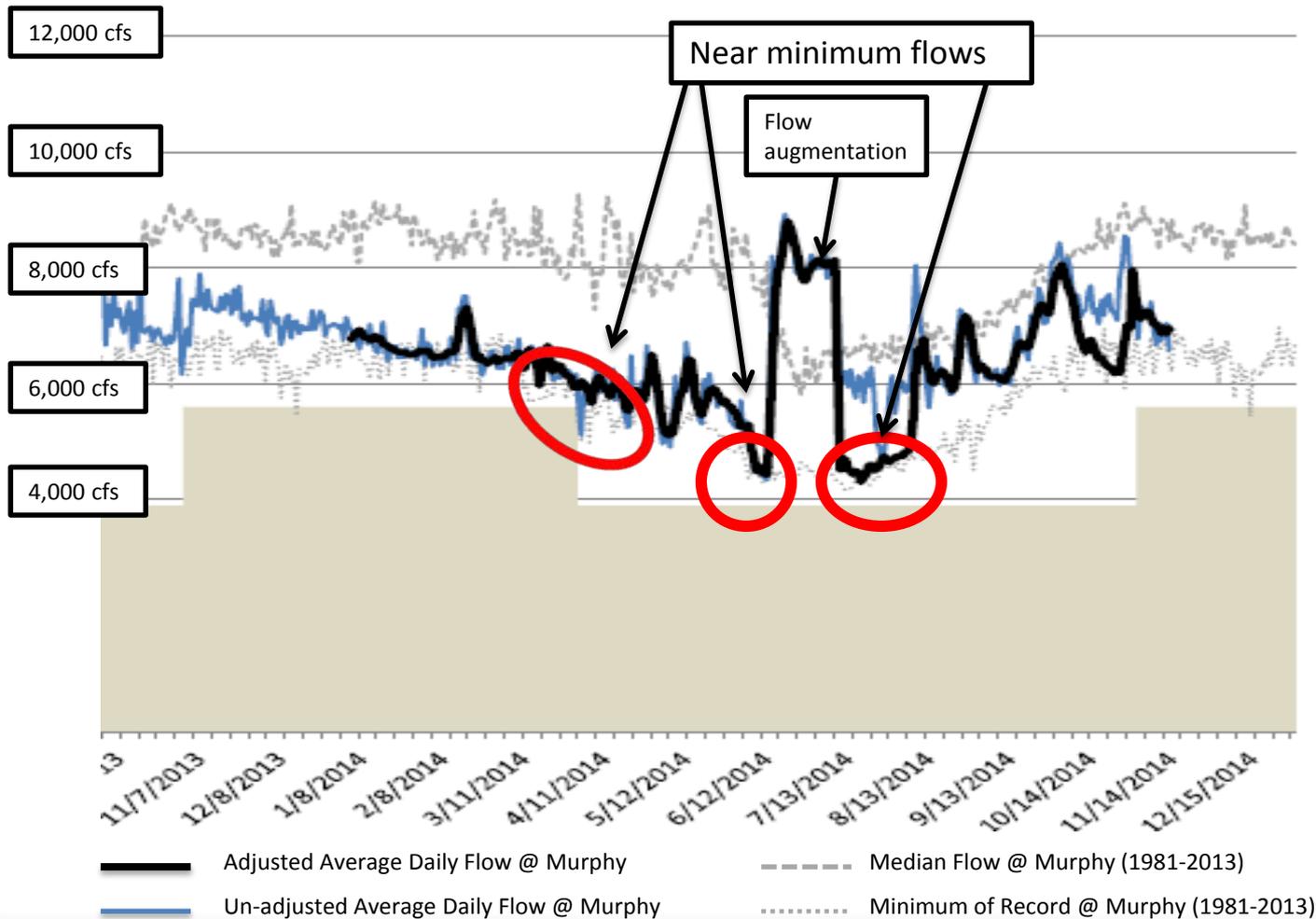


When flow is zero at Milner, flow at Swan Falls Dam is made up almost entirely of spring flows from the ESPA



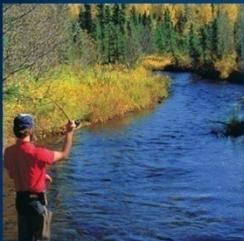
Snake River Near Murphy Gage

Swan Falls Dam - 2014



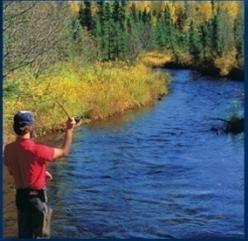
Trust Rights

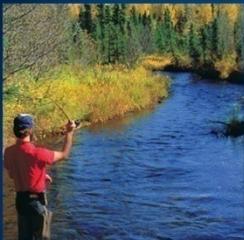
- ✓ Would be water rights curtailed by priority if flows drop below minimums
- ✓ Trust rights owners need to participate in solutions that provide alternatives to curtailment
- ✓ Trust right owners: create organization to negotiate and financially participate in solutions (similar to ground water district?)



Management Options

- ✓ Short term
- ✓ Mid-term
- ✓ Long-term





Short Term Option

Water Board Palisades Storage

- ✓ 5,000 AF of space
- ✓ Release to replace shortfall in minimum flows at Murphy
- ✓ Board expects Trust Right owners to assist in costs

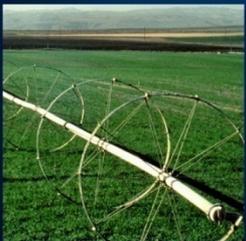
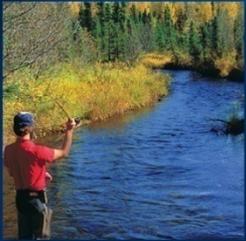
Palisades
Reservoir

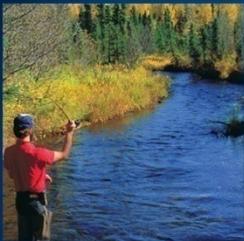


Mid Term Option

Interruptible delivery agreements in Basin 02

- ✓ Compensate irrigation users in B-02 to voluntarily curtail, when needed, to maintain minimum flows
- ✓ Similar agreements in place on Lemhi River
- ✓ Will require substantial negotiations with B-02 irrigators



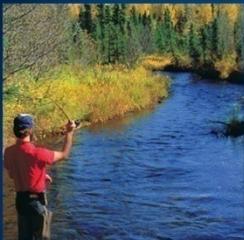


Long Term Option

Island Park Enlargement

- ✓ Water Board pursuing ~30,000 AF enlargement
- ✓ Could provide storage water, in addition to Palisades, to replace shortfall in minimum flow
- ✓ Trust users participate in project?





Long Term Option

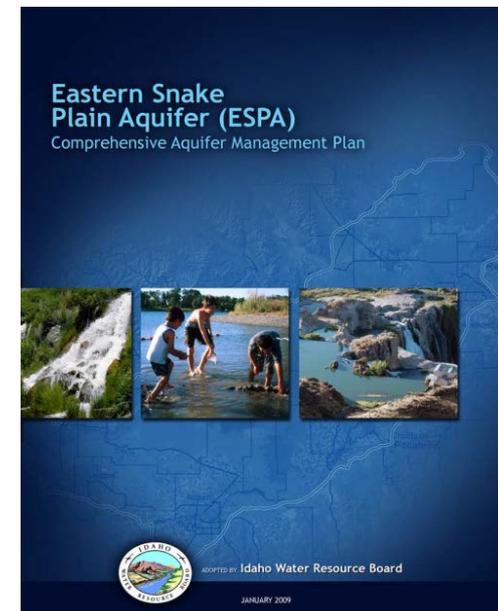
ESPA Management - CAMP

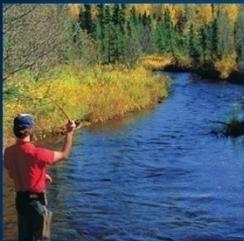
- ✓ Phase 1: 200 KAF – 300 KAF water budget change – stabilize aquifer
- ✓ Phase 2: recover aquifer

CAMP Measures

- ✓ Recharge
- ✓ GW-SW Conversions
- ✓ Demand Reduction
- ✓ Cloud Seeding

Trust Users Participate?





Long Term Option

ESPA Management - CAMP

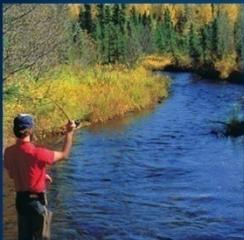
✓ Conversions:

- ~60,000 AF/yr delivered to offset GW pumping;
- A&B project under construction

✓ Demand Reduction: ~17,000 acres in CREP

✓ Cloud Seeding:

- IPCo-water user-state partnership in Upper Snake & Wood Basins
- 283KAF ave annual in Upper Snake → additional capacity increase of 115 KAF planned
- 100KAF planned in Wood



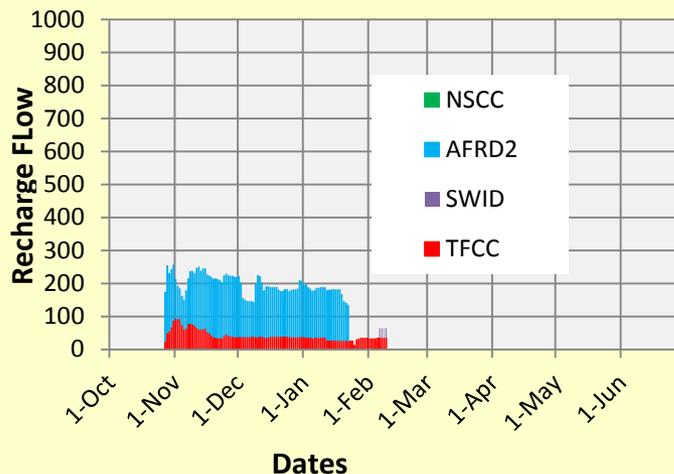
Long Term Option

ESPA Management – CAMP - Recharge

✓ Winter recharge efforts

- 35,000 AF since October, but also spilled 150,000 AF during same time
- Conveyance is limiting factor – working to address

Total Recharge Diversions During 2014 - 2015 Season



Recharge at MP31/Milner-Gooding Canal –
Jan 16, 2015