



2021 - Idaho Water Resource Administration and Regulation

Natural Resources Interim Legislative Committee

September 27, 2021

Mat Weaver, IDWR



IDAHO DEPARTMENT OF
WATER RESOURCES

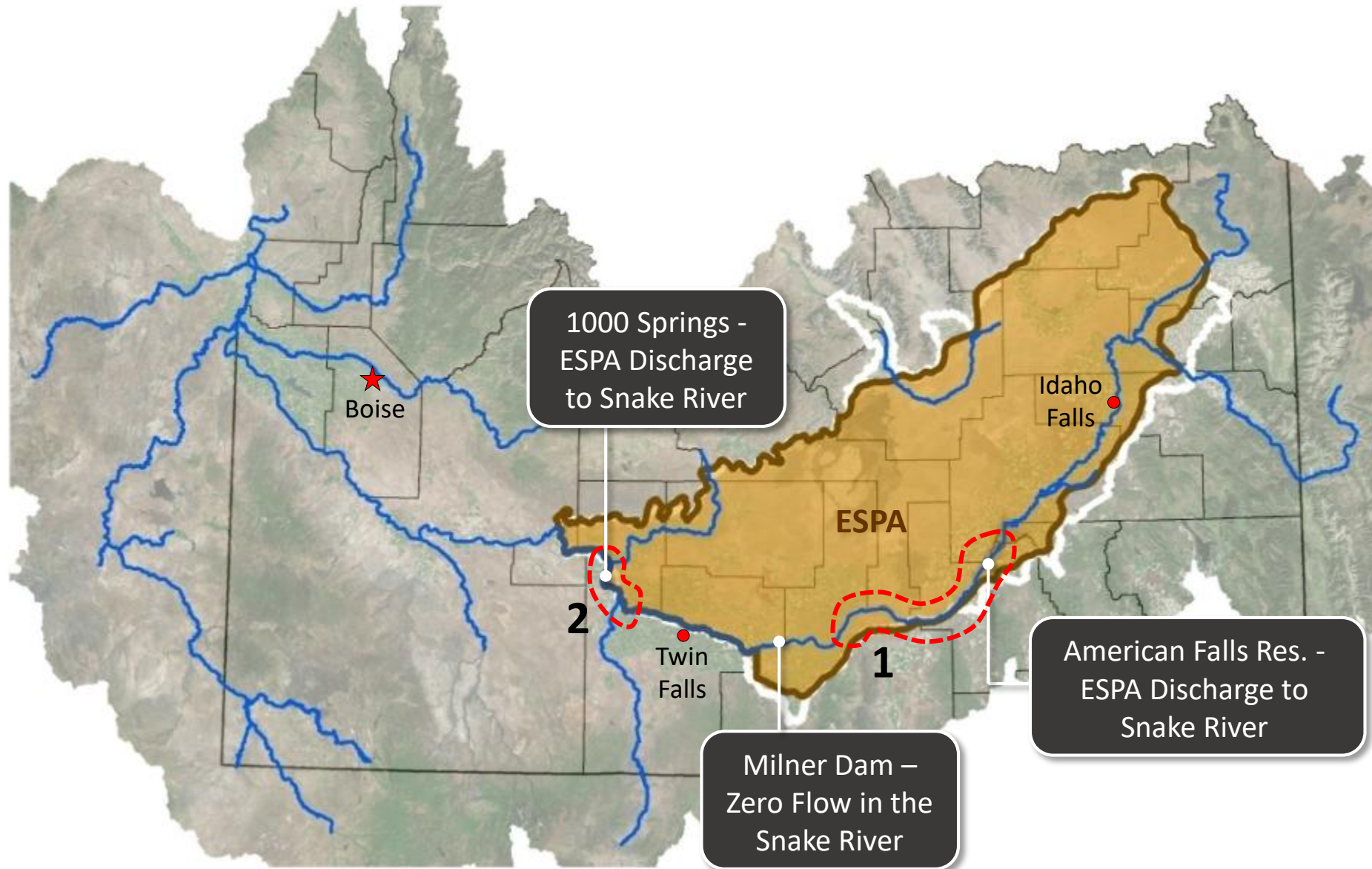
Presentation Topics

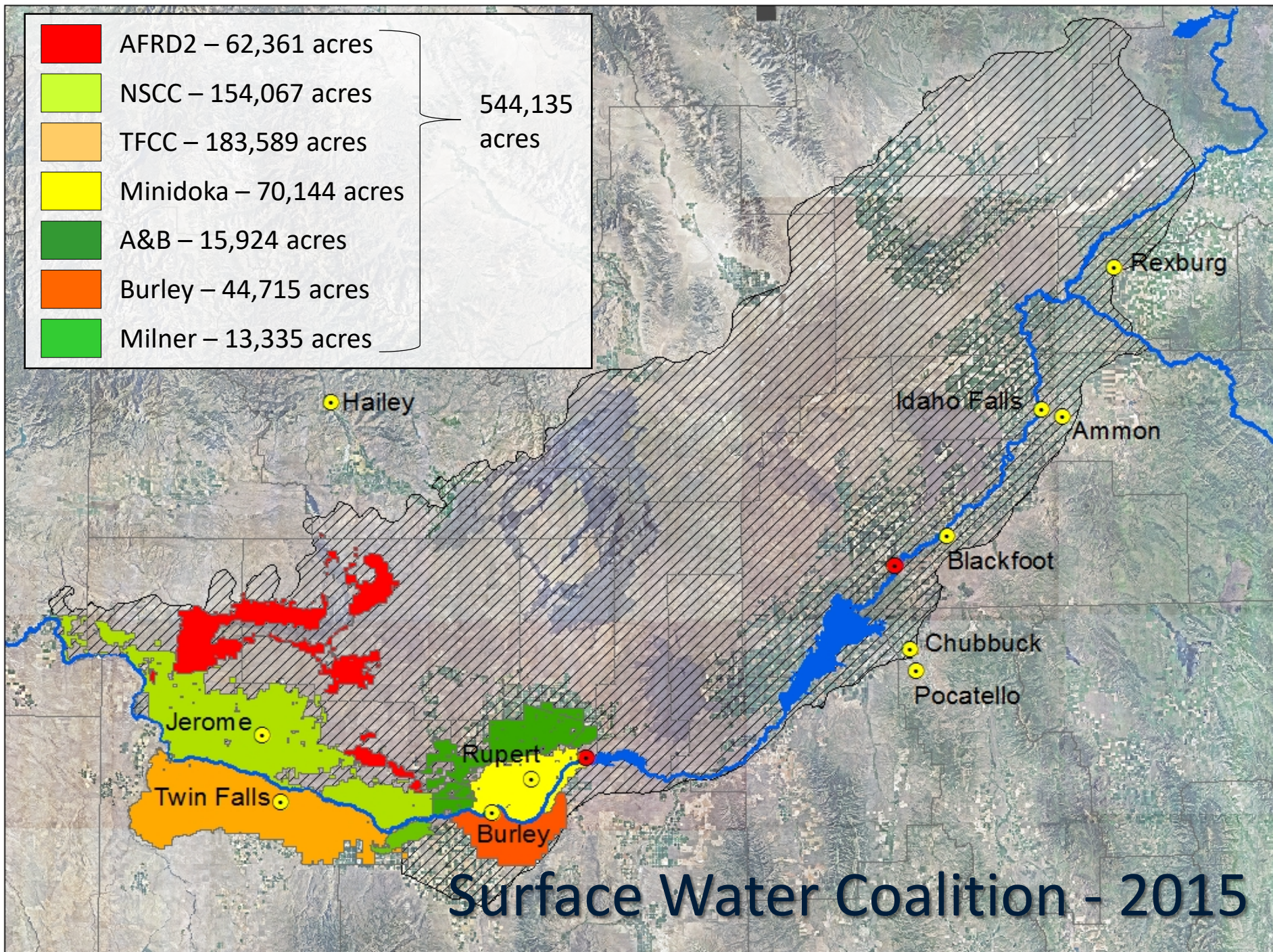
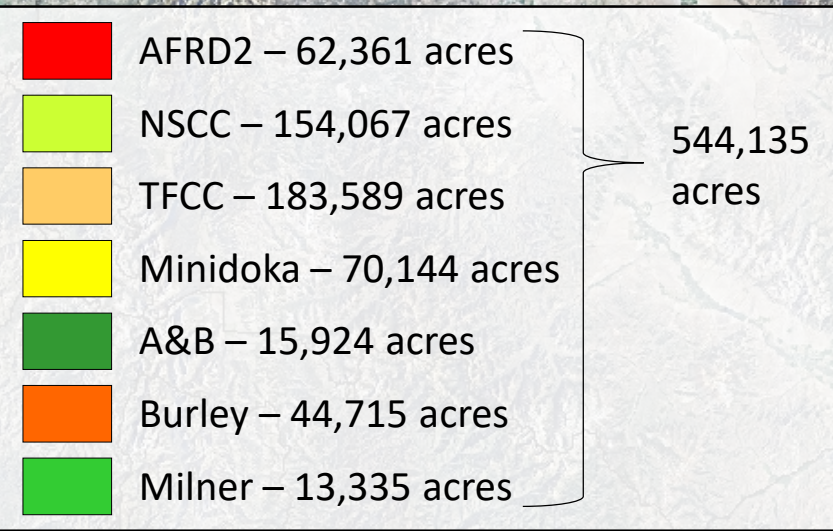
1. Eastern Snake Plain
2. Basin 29 – Portneuf River Basin
3. Basin 37 – Wood River Basin
4. Basin 74 – Lemhi River Basin Settlement Update



Eastern Snake Plain Delivery Calls

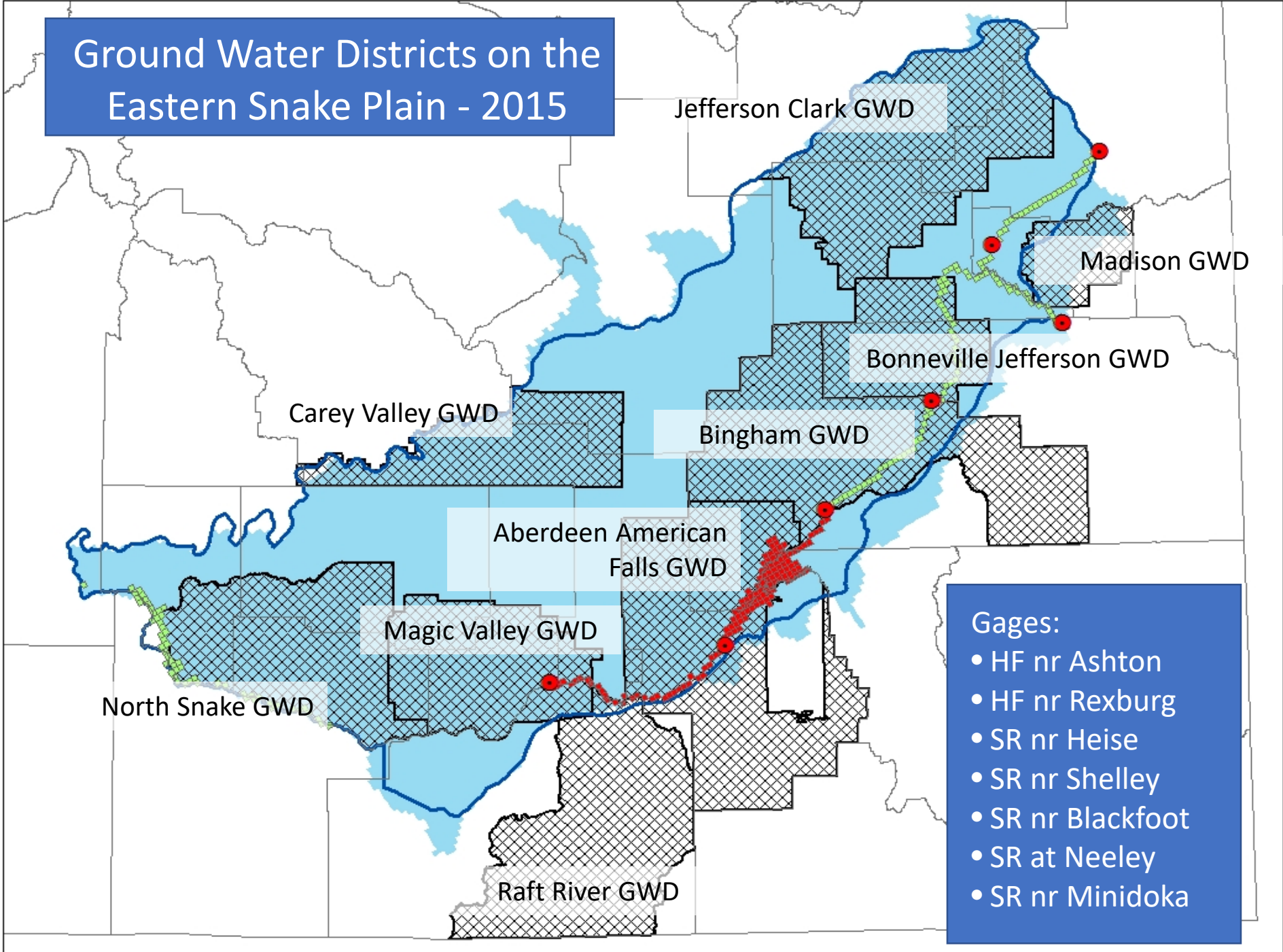
1. Surface Water Coalition Delivery Call
2. Spring User Delivery Calls (x11)





Surface Water Coalition - 2015

Ground Water Districts on the Eastern Snake Plain - 2015



SWC Delivery Call – History

- 💧 2005: Delivery Call Filed
- 💧 2015: Implementation of current Department-established, court-approved “Methodology” for determining:
 - In-season injury, and
 - End-of-season injury to storage carryover
- 💧 2016 – 2018: Approved mitigation plans for Idaho Ground Water Association (coalition of GWDs representing mostly irrigators) and cities
- 💧 Mitigation plans include:
 - reductions in pumping,
 - delivery of storage water, and
 - recharge



SWC Delivery Call – 2021

- 💧 April: Issue Initial Forecast Supply (FS), Forecast “Reasonable In-Season Demand” (RISD), and Shortfall (injury volume)
- 💧 May – July: Curtail affected ground water rights
- 💧 July: Issue “mid-season adjustment” recalculate FS, RISD, and Shortfall
- 💧 July – Aug. 15: Curtail affected ground water rights
- 💧 Aug 15: Time of Need recalculate FS, RISD, and Shortfall
- 💧 Nov 1: Determine injury to reasonable carryover storage water

	FS (MAF)	RISD (MAF)	Shortfall (KAF)	Curtailed Priority	Affected Acres	Ag. Vol. (AF)	Muni. Vol. (AF)	Cur. WRs
2021								
April	3.65	3.20	41	5/30/1989	37,534	40,279	239	~50
July	3.68	3.61	170	6/14/1977	164,210	168,228	1,952	~550
August	3.73	4.21	143	1/21/1979	135,102	141,186	1,902	~534

SWC Delivery Call – 2021

💧 IDWR Must Coordinate:

○ Internally:

- Legal Section (2 FTEs)
- Hydrology Section (2 FTEs)
- Water Distribution Section (2-4 FTEs)
- Regional Offices (4-6 FTEs)

○ Externally:

- Water Districts: six water districts
- Senior surface water users: seven entities (~550,000 acres)
- Ground Water Districts: ten entities (>1,000,000 acres)
- Cities: more than 25 participating cities
- Curtailed water rights: more than 550



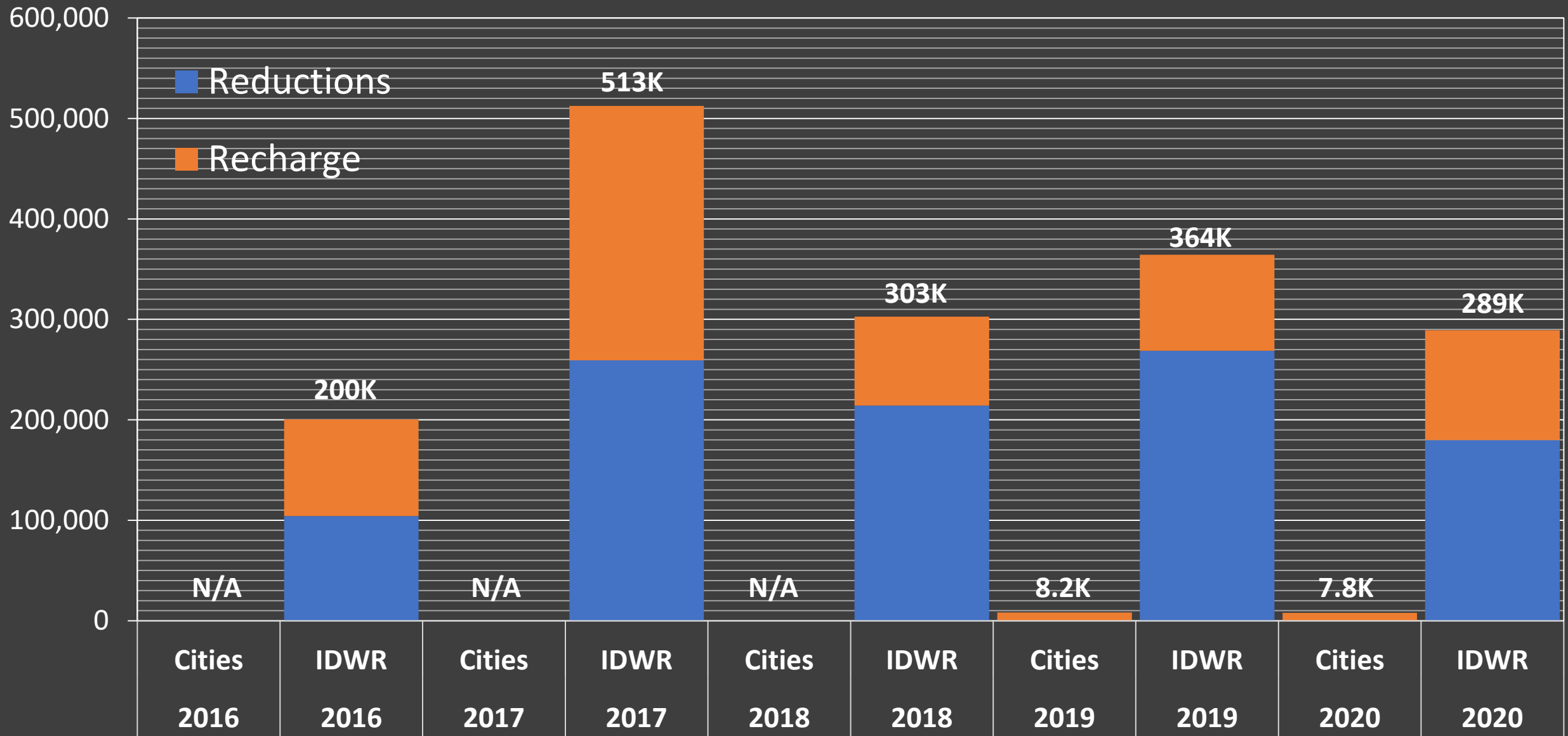
Big Lost River, Summer 2017

SWC Settlements (and Mitigation Plans)

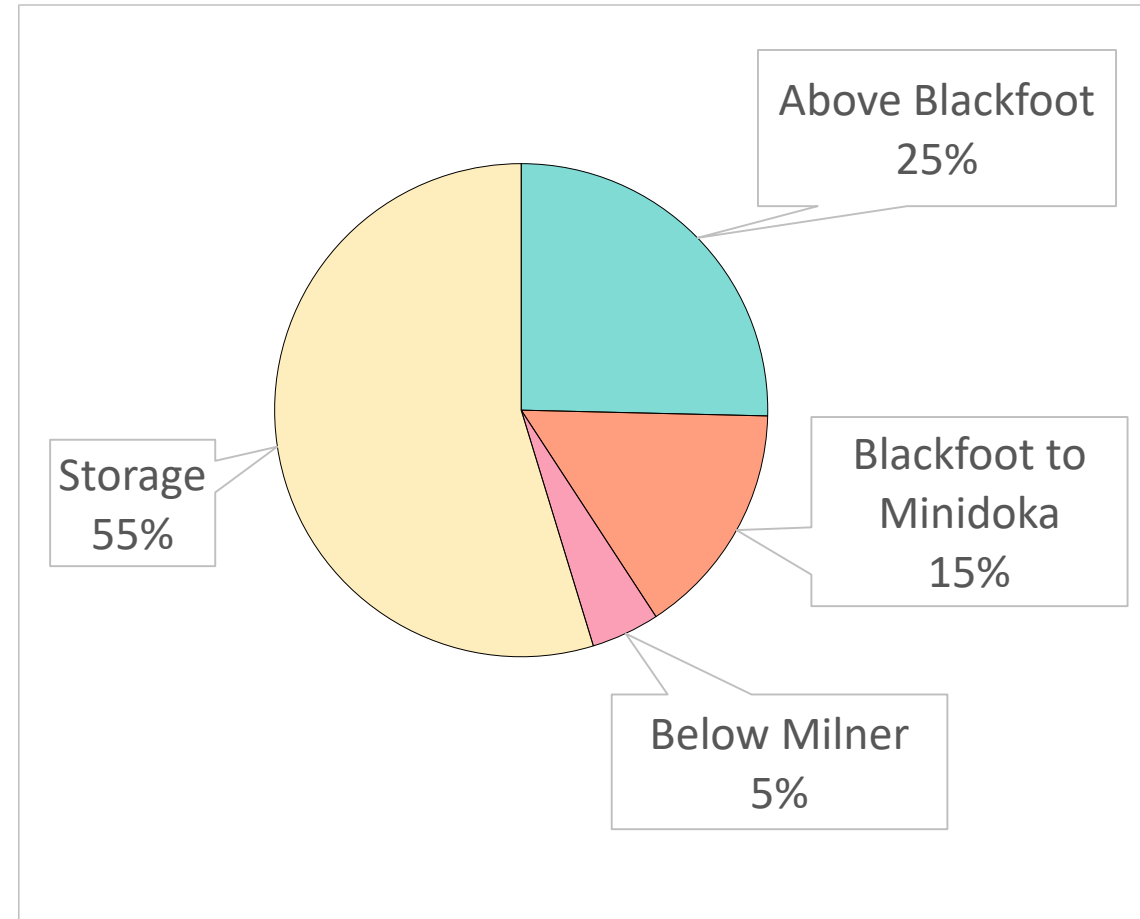
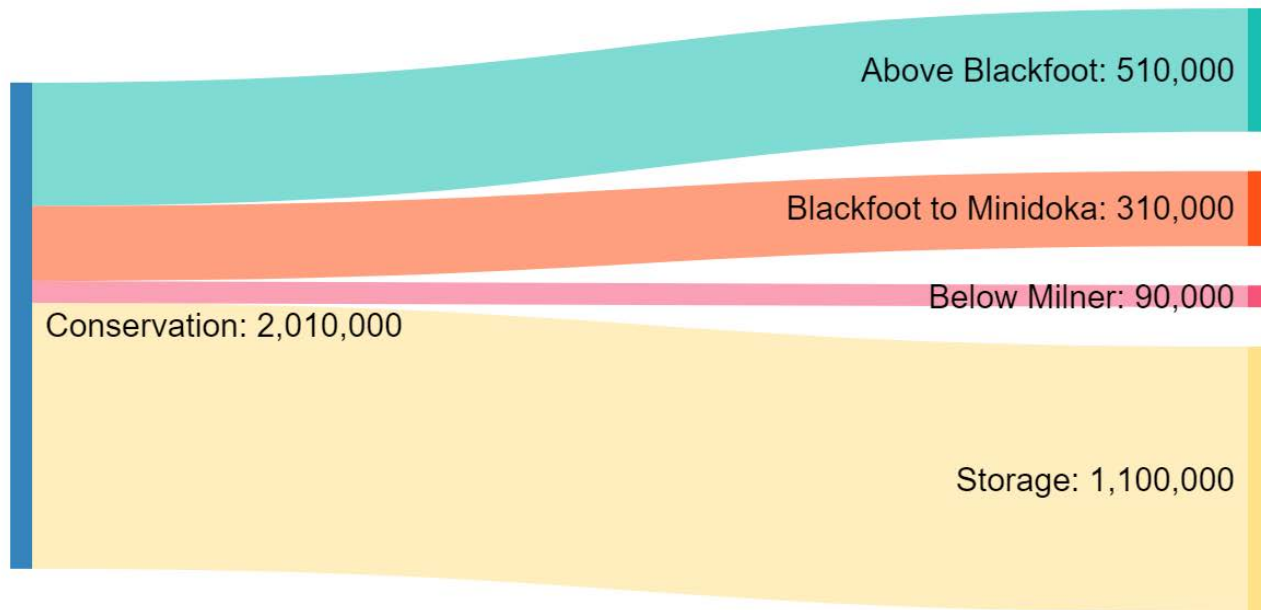
- ◆ 2015 SWC – IGWA Settlement Agreement
 - 240,000 acre-feet of reductions
 - 50,000 acre-feet of storage water
- ◆ 2018 SWC – Cities Settlement Agreement
 - 7,650 acre-feet of recharge
- ◆ Each year IGWA and the Cities submit Annual Reports documenting mitigation activities to IDWR for review.



Accomplished Mitigation Activities (acre-feet) by IGWA and the Cities

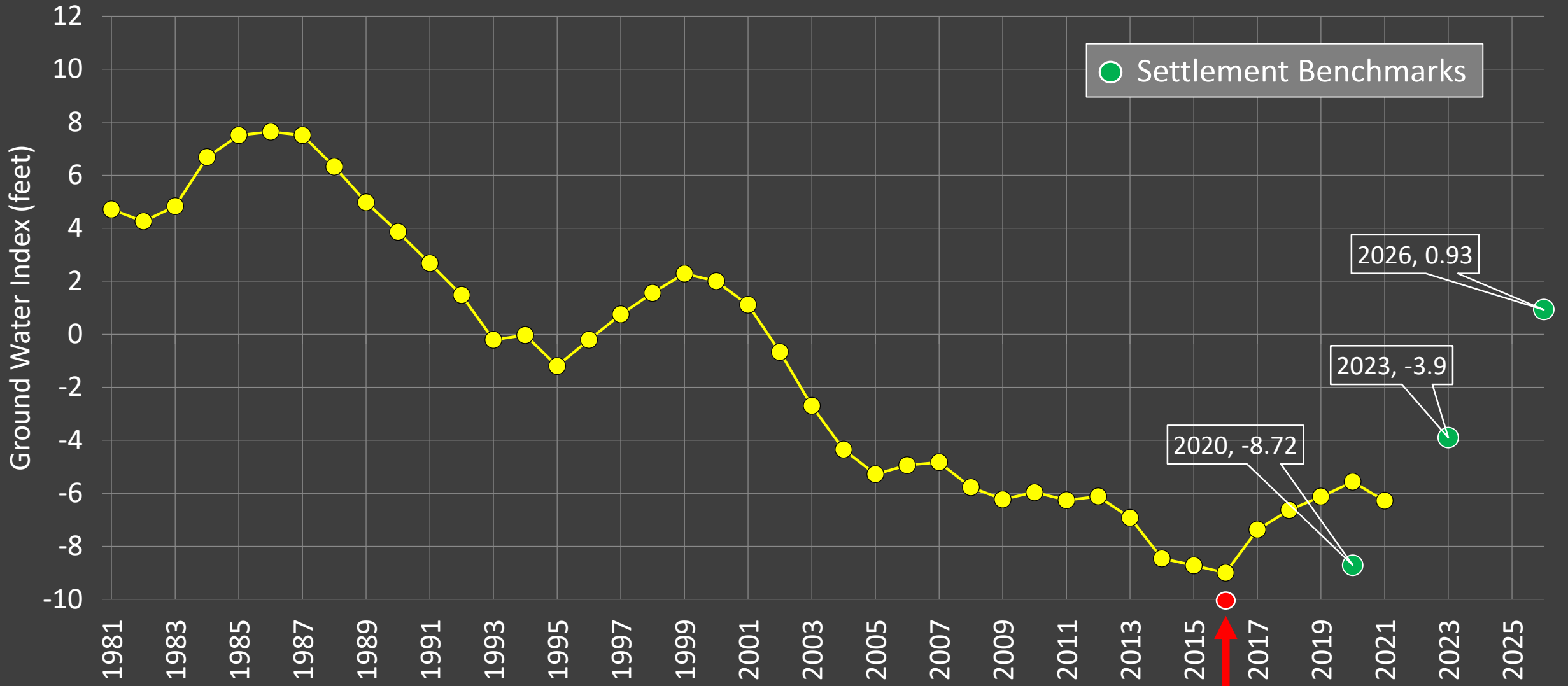


Achievements of Mitigation & Settlement (2016 – 2021)



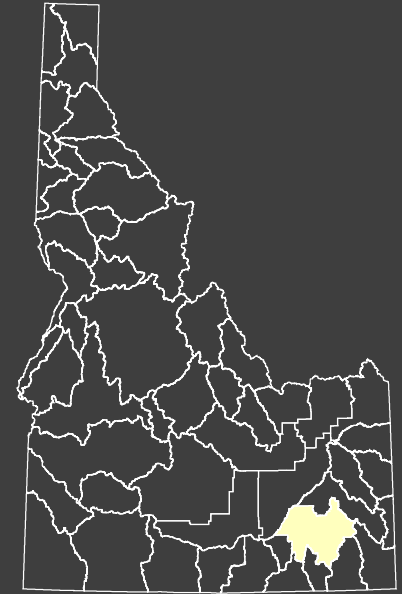
Settlement Agreement/Mitigation Plan

Annual Sentinel Wells Ground Water Level Index

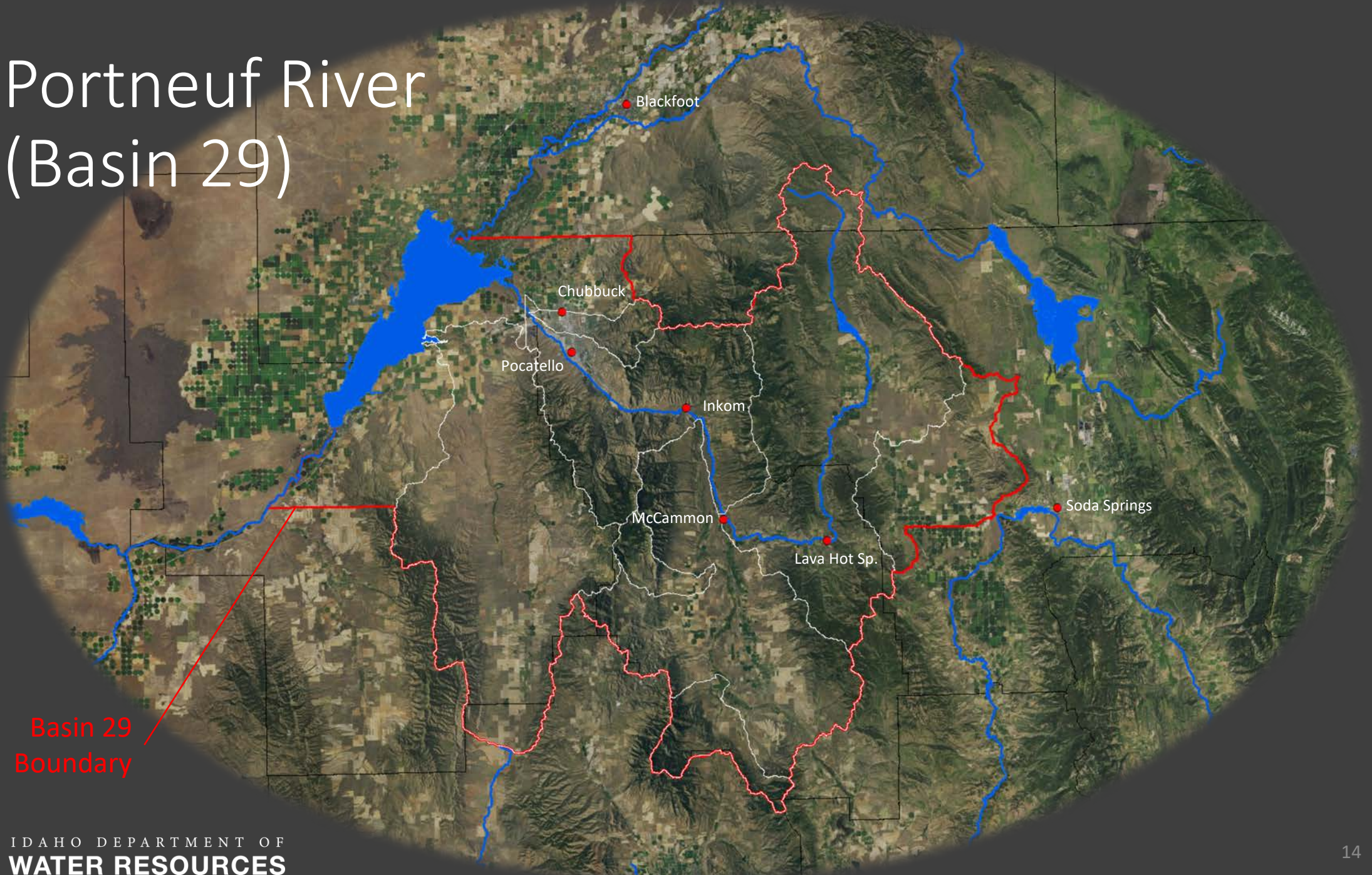


2016: 1st year Settlement Implemented

Basin 29 – Portneuf River Basin



Portneuf River (Basin 29)



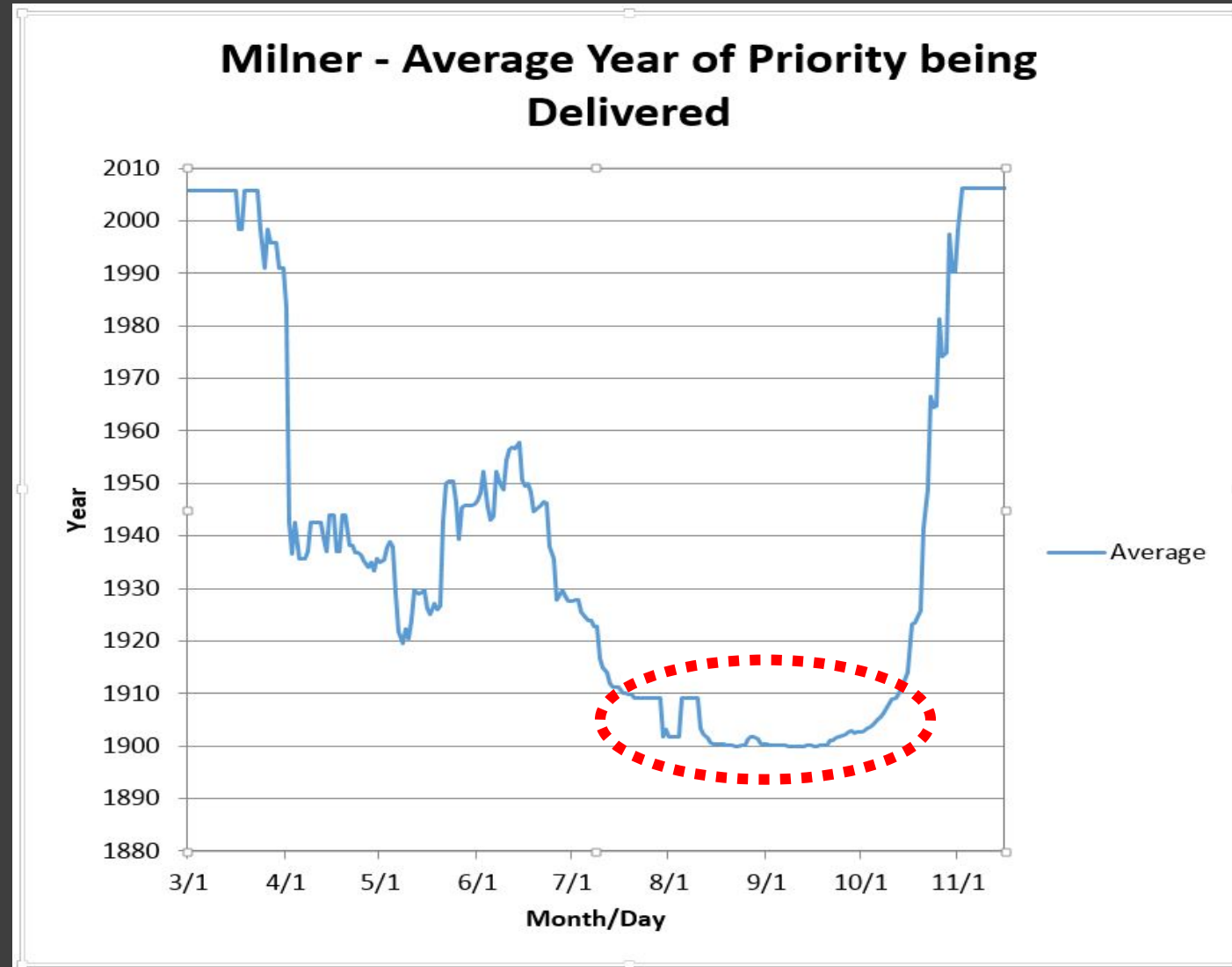
Basin 29
Boundary



Relevant History of Water Management in Basin 29

- 💧 Pre-2017: Creation of sub-basin WDs with varying degrees of functionality
- 💧 2014: SRBA Issues Final Unified Decree
 - No “Separate Stream” Provisions for Basin 29
 - Invoked statutory requirement to regulate WRs (measurement, reporting, curtailment)
- 💧 2017: IDWR Initiates Preparations in Basin 29 for comprehensive regulation
 - Water Users raise fairness concerns (i.e., regulation of ground water rights)
 - Department agrees to implement regulation over a 4-6 year timeline (measurement orders, consolidation of WDs, inclusion of ground water rights in WDs)
- 💧 2018: IDWR issues Water Measurement Orders
 - In June, IDWR Issues Order in 29D (~3 years to install)
 - In July, IDWR Issues Order in 29H (~3 years to install)
- 💧 2021: SWC Requests that Basin 29 be Regulated in Priority with the Snake River

The Snake River vs. the Portneuf River



The Snake River vs. the Portneuf River

Portneuf River & Trib. Water Districts	No. of Rights Senior to 1900	Total Water Right Diversion Rate (cfs)	No. of Rights Junior to 1900	Total Water Right Diversion Rate (cfs)
WD29 Upper Portneuf	184	319	247	616
WD29A Pocatello Ck	30	1.03	26	1.6
WD29B Garden Ck	34	20.9	34	24.8
WD29D Lower Portneuf	62	15.9	313	71
WD29G Birch Ck	24	48	16	32.3
WD29H Marsh Ck	65	107	192	139
Totals	399	511.83	828	884.7

Tributary Basin	Blackfoot River (Basin 27)	Portneuf River (Basin 29)	Bannock Creek (Basin 29)	Rock Creek (Basin 41)	Raft River (Basin 43)	Goose/Marsh Creeks (Basin 45)	Basin 35 Trib. Sources
No. of Surface Water Rights Junior to 1900	79	828	27	50	201	145	73
Div. Rates CFS) associated with Surface Water Rights Junior to 1900	93	885	9.7	73	495	388	90

Basin 29

WD Boundary Map

- 💧 3 WDs Partially Regulate GW
 - WD 120 (American Falls)
 - WD 290 (Bannock Creek)
 - WD 13T (Bancroft Lund)
- 💧 6 WDs Regulate SW
 - WD 29 (Portneuf River)
 - WD 29 A (Pocatello Creek)
 - WD 29B (Garden Creek)
 - WD 29D (Lower Portneuf R.)
 - WD 29G (Birch Creek)
 - WD 29H (Marsh Creek)
- 💧 3 Unregulated Areas in the Basin

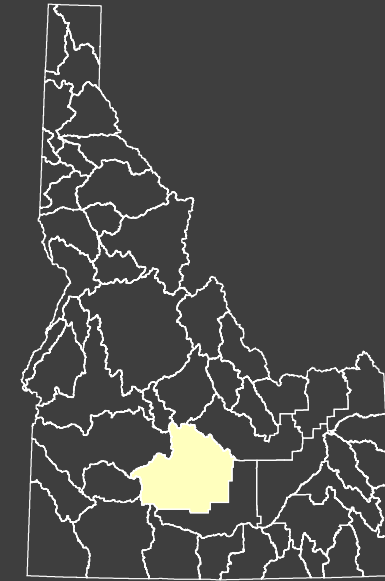


Basin 29 – Next Steps

- 💧 2022 IDWR will regulated Portneuf River in priority w/ Snake River
- 💧 Consolidate Water Districts
- 💧 Bring Ground Water Rights into Water District Regulation
- 💧 Issue Ground Water Right Measurement Orders
- 💧 Work with Water Users to Identify Mitigation Strategies



Basin 37 – Wood River Basin



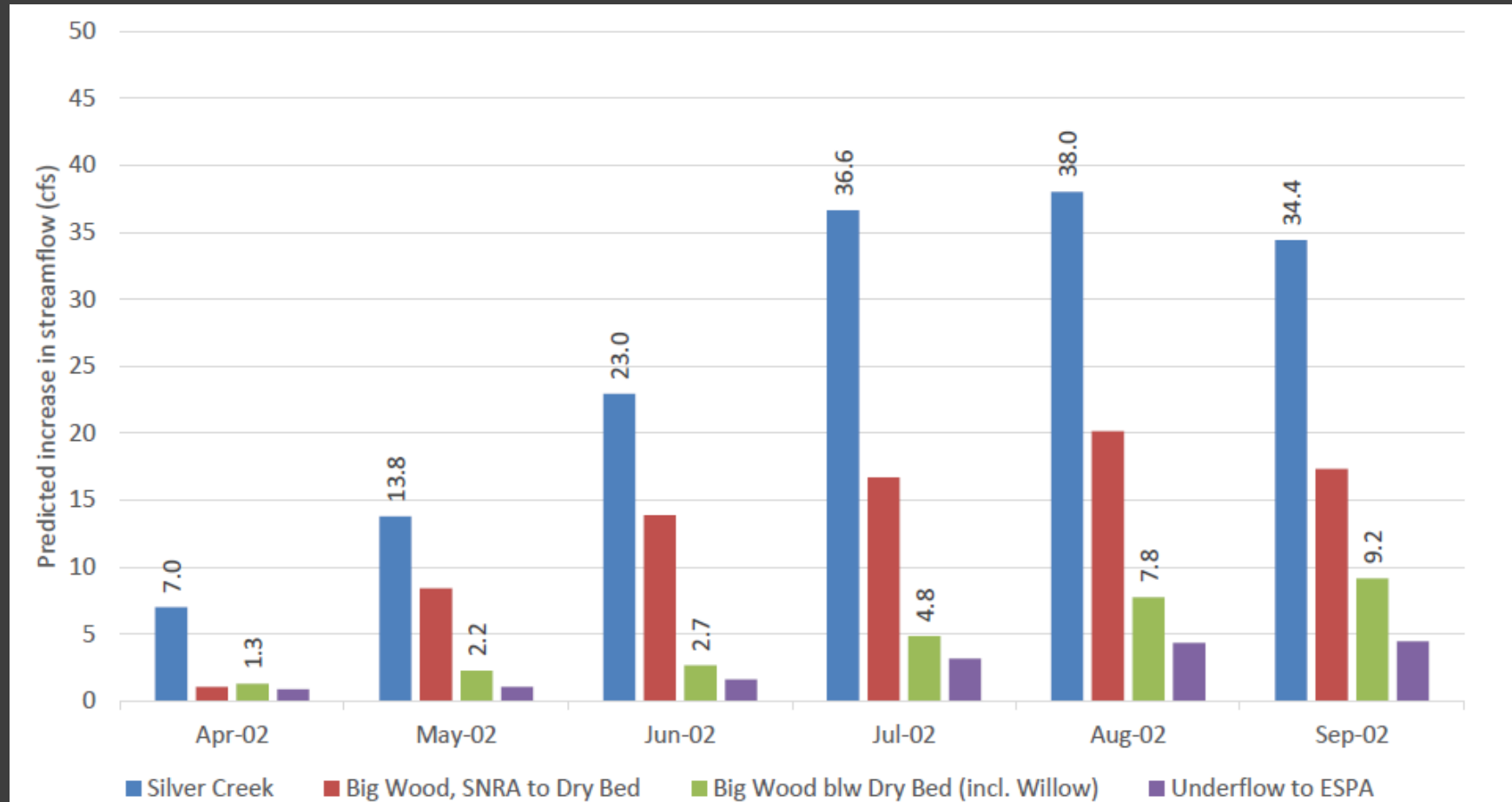
Wood River Basin (Basin 37)



History of Ground Water Management in Basin 37

- 💧 1991: IDWR designates Big Wood GWMA.
- 💧 2011: IDWR issues ground water measurement order.
- 💧 2013 -2016: IDWR & USGS develop ground water model.
- 💧 2014: IDWR consolidates Basin 37 water districts and adds ground water rights.
- 💧 2015: Big and Little Wood Water Users 1st Delivery Call.
- 💧 2015: Formation of South Valley GWD and Galena GWD.
- 💧 2017: Big and Little Wood Water Users 2nd Delivery Call.
- 💧 2018 – 2020: Ground water and surface water user settlement discussions.
- 💧 2020: IDWR revives GWMA and appoints GWMA Advisory Committee.
- 💧 2021: March – June Basin 37 experiences record drought conditions.

Modeled Response to Ground Water Curtailment – 2002 Analog Year



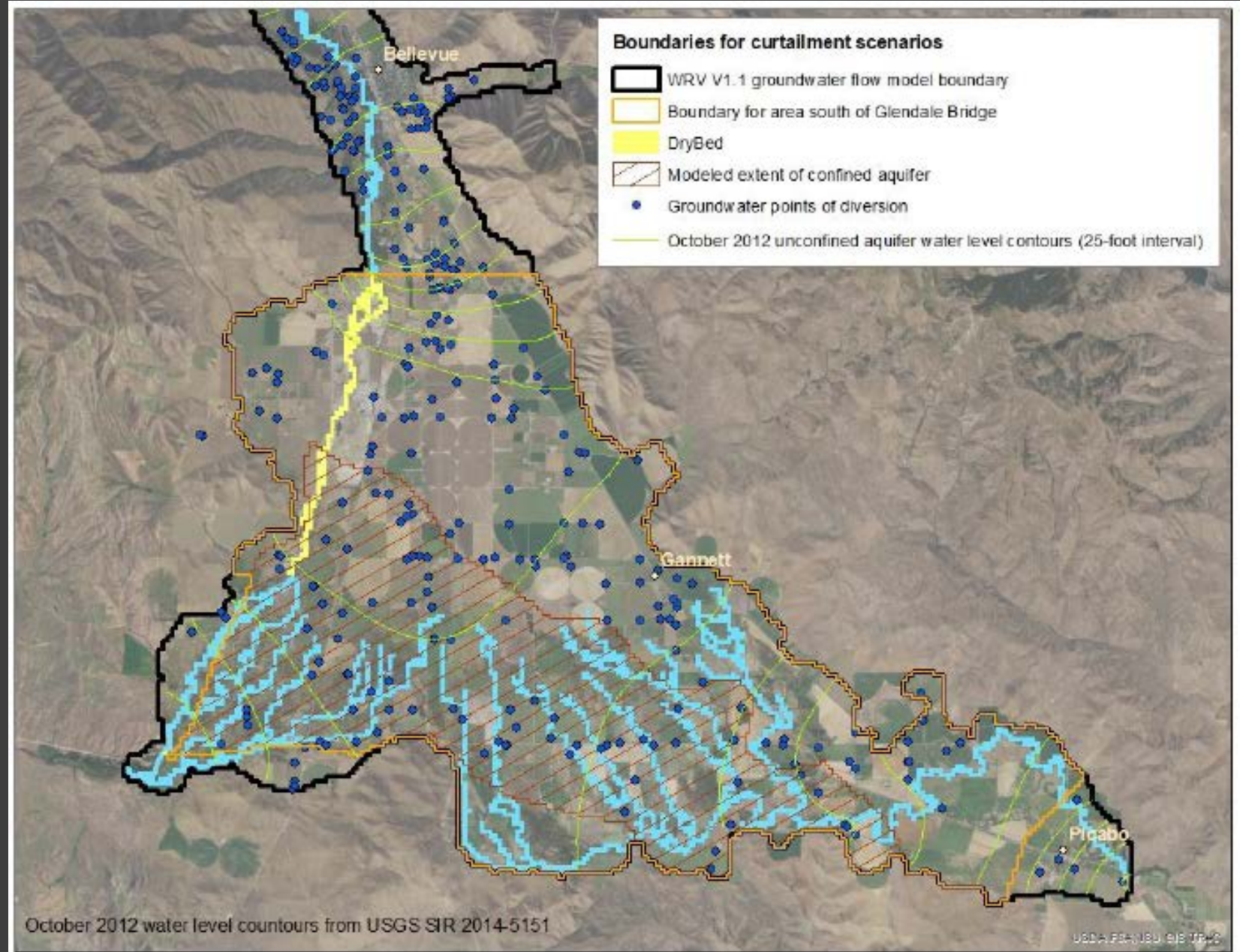
I.C. § 42-237a – Powers of the Director of the Department of Water Resources

- Administering ground water rights in priority with surface water rights pursuant to Idaho Code § 43-237 a.g.
 - *“To supervise and control the exercise and administration of all rights to the use of ground waters and in the exercise of this discretionary power [the Director] may initiate administrative proceedings to prohibit or limit the withdrawal of water from any well during any period that he determines that water to fill any water right in said well is not there available.”*
 - *“Water in a well shall not be deemed available to fill a water right therein if withdrawal therefrom of the amount called for by such right would affect, contrary to the declared policy of this act, the present or future use of any prior surface or ground water right or result in the withdrawing of the ground water supply at a rate beyond the reasonably anticipated average rate of future natural recharge.”*

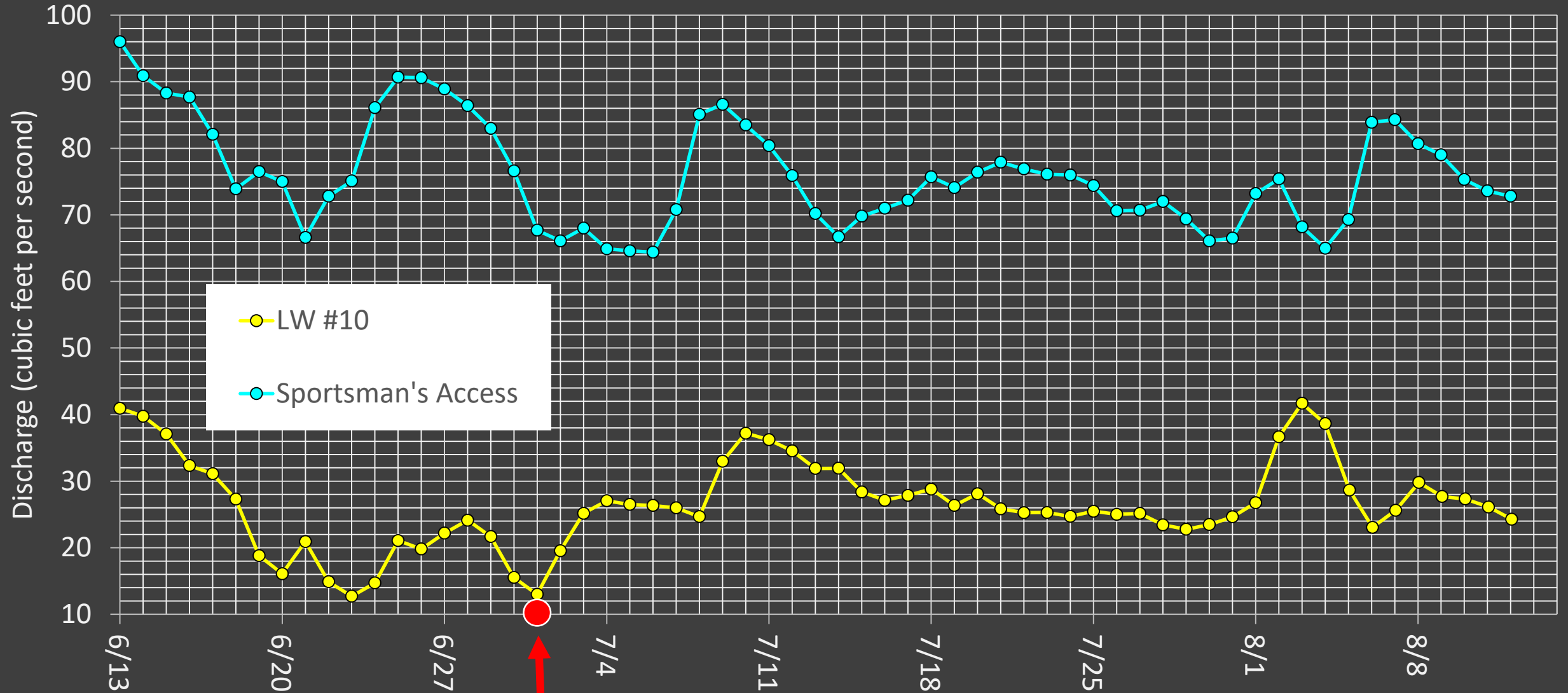
Basin 37 – 2021 Administrative Proceedings

- 💧 Administrative Hearing, June 6 – 12
- 💧 Director Issued Final Order, June 28
 - Curtailment of ground water rights in the Bellevue Triangle Effective July 1
- 💧 Ground Water Users Submitted Mitigation Plan, June 23
- 💧 Mitigation Plan Hearing, July 6 – 8
 - At hearing, parties agreed to a settlement for remainder of 2021
- 💧 Director Issued Final Order Approving Mitigation Plan and Staying Curtailment: July 8
 - Result of negotiations between ground water & surface water users
 - 2021 Term Sheet Agreement

Director Curtails GW Users on July 1



Little Wood River - Station 10 and Silver Creek at Sportsman's Access Hydrograph Jun 13 – Aug 12, 2021

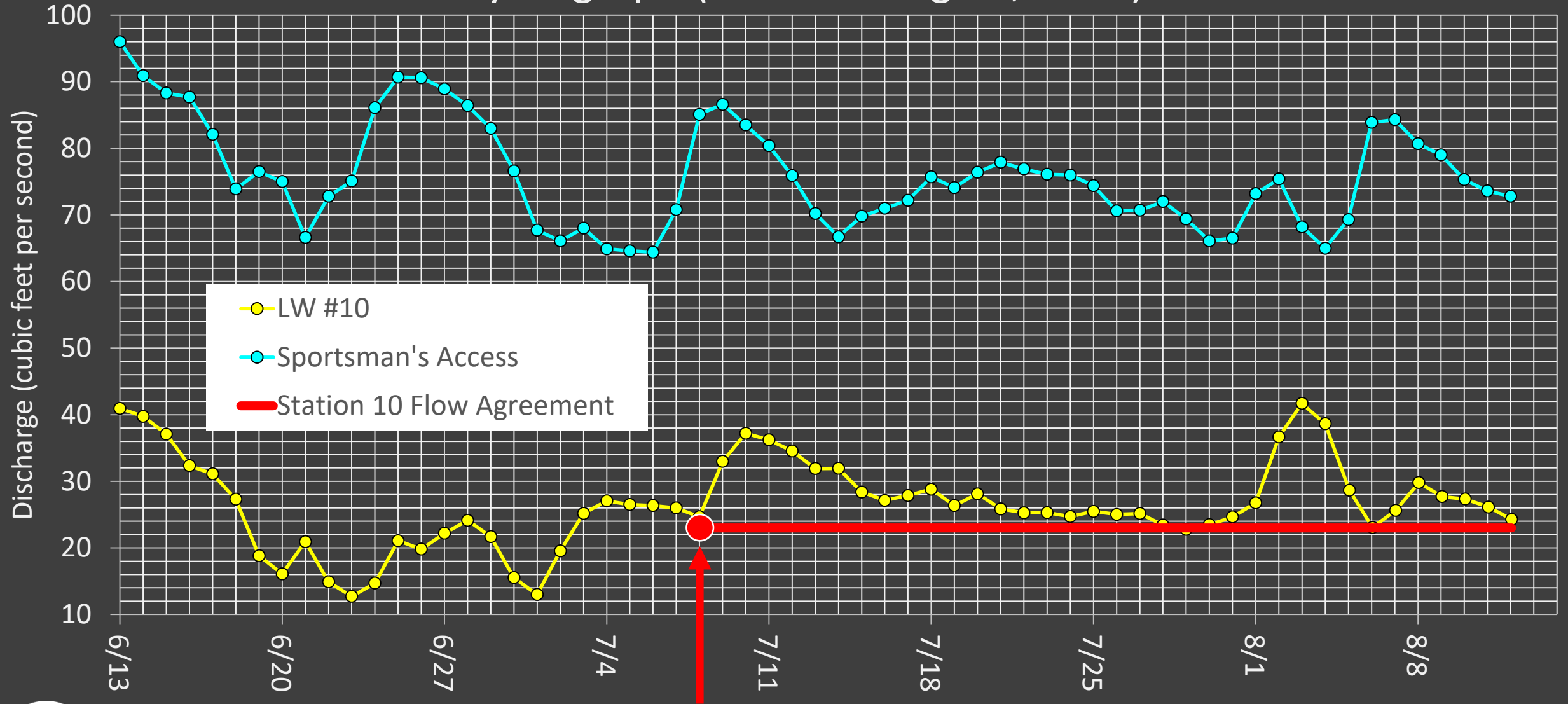


7/1 Curtailment (~20 cfs/33% increase in 6 days)

Basin 37 – 2021 Settlement Agreement

- 💧 Maintain delivery of 23 cfs to Station 10 on L. Wood River
- 💧 Acquisition of 2,500 AF of storage water for delivery to senior right holders on L Wood River through Milner-Gooding Canal
- 💧 Reduction in irrigation season (August 15 shut off)
- 💧 Groundwater Management Plan
 - Ground and surface water users agree to work through GWMA advisory committee to develop long-term management plan by December 1, 2021

Little Wood River - Station 10 and Silver Creek at Sportsman's Access Hydrograph (Jun 13 – Aug 12, 2021)



7/8 GWDs Implement Settlement



Basin 37 – Next Steps

- 💧 GWMA Advisory Committee renewed first meeting on 8/9
 - Key plan ideas and components listed by members
 - Technical Work Group (TWG) formed
 - Questions/items for TWG being proposed & ranked
- 💧 Initiate draft plan framework by early September
- 💧 Re-frame – work towards strawman proposal
- 💧 Draft Plan by December 1

Basin 37 – Next Steps

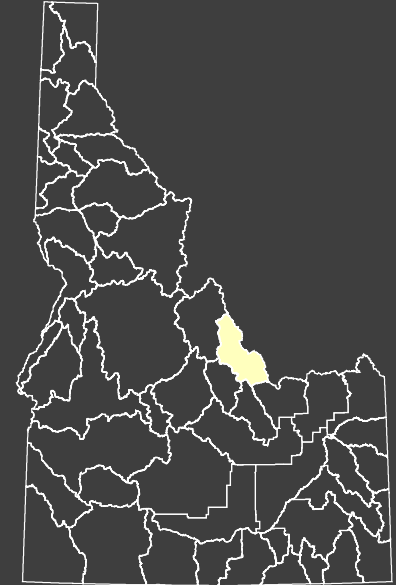
- 💧 GWMA Plan Components Under Consideration
 - Develop tools to predict annual water supply
 - Fallowing irrigated land
 - End gun removal
 - Grow less consumptive use crops; reduce through shorter season
 - Water use efficiency improvements/conservation
 - Delivery of Snake River Storage Water
 - Groundwater to surface water conversions
 - Water Supply Augmentation (recharge, cloud seeding)

42-237 a.g. vs. CGWA/GWMAs vs. Delivery Calls

- 💧 2021 Basin 37 first use of I.C. §42-237 a.g. in Idaho's water administration history
- 💧 Reserved power of the Director to be used when undeniable set of facts are present
- 💧 Stop-gap administrative tool that can be used in the absence of a delivery call and designated CGWA/GWMA and adopted GWMP



Basin 74 – Lemhi River Basin



Lemhi Basin Settlement Discussions

- ◆ Senate Concurrent Resolution 137, 2020
 - *“NOW, THEREFORE, BE IT RESOLVED...the Senate and the House of Representatives concurring therein, that we direct the Idaho Water Resources Board, with Technical Support form the Idaho Department of Water Resources, to work expeditiously with local water users to develop a comprehensive settlement that resolves current tensions and conflict... .”*
- ◆ House Concurrent Resolution 021, 2021
 - *“NOW, THEREFORE, BE IT RESOLVED...the Senate and the House of Representatives concurring therein, that we direct the Idaho Water Resources Board, with Technical Support form the Idaho Department of Water Resources, to continue to work expeditiously with local water users to develop a comprehensive settlement that resolves current tensions and conflict... .”*
- ◆ Discussions started in June of 2020 and since that time the mediators have hosted more than 15 formal meetings with all parties and countless meetings with individual parties.
- ◆ State agencies have completed significant analysis of high flow water supply conditions, current high flow water use needs, and historical high flow water use practices.

Lemhi Basin Settlement Discussions

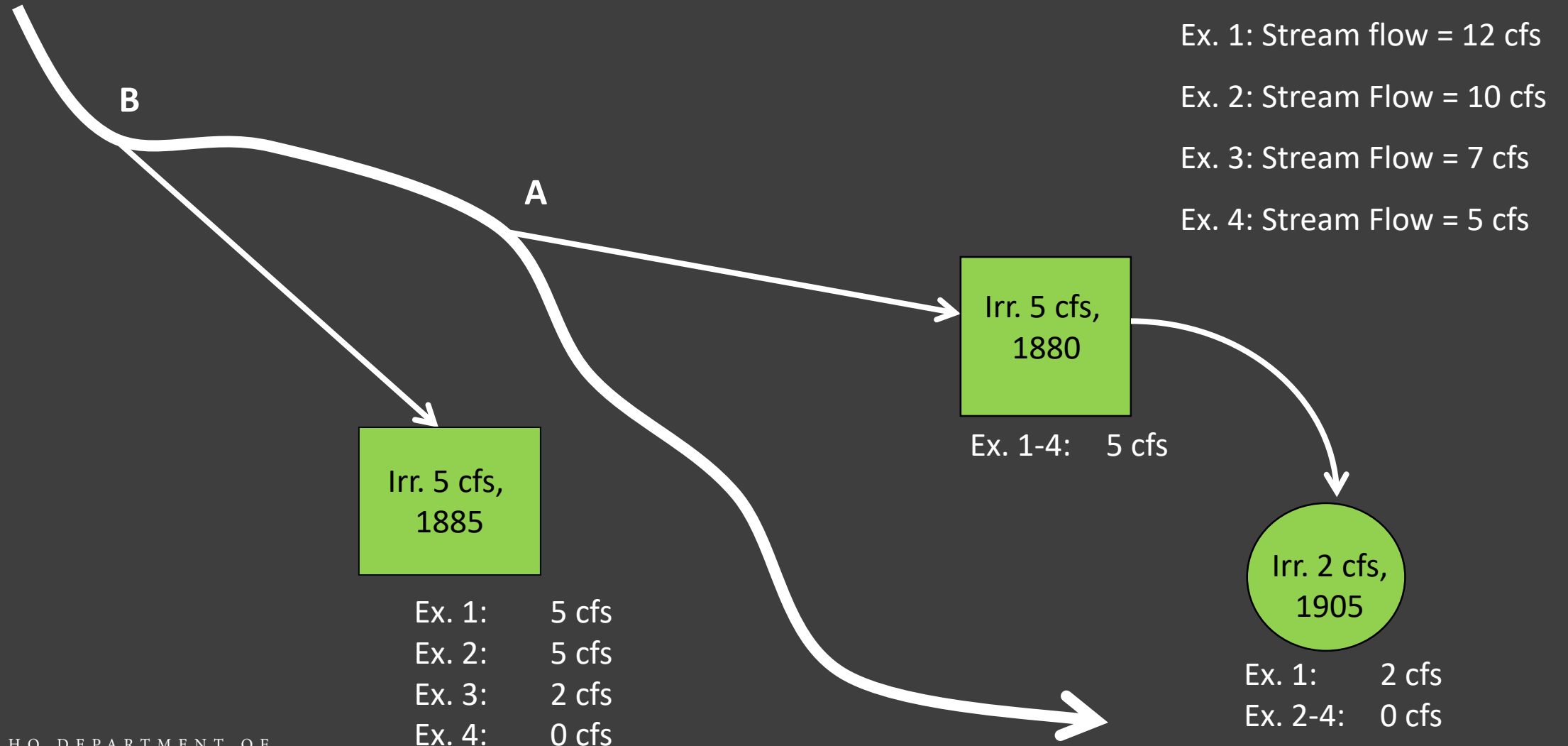
- 1) Significant progress has been made, but several issues remain unresolved;
- 2) We expect to complete the mediation process this year; and
- 3) Final resolution will likely require some legislative action, but uncertain of the scope at this time.



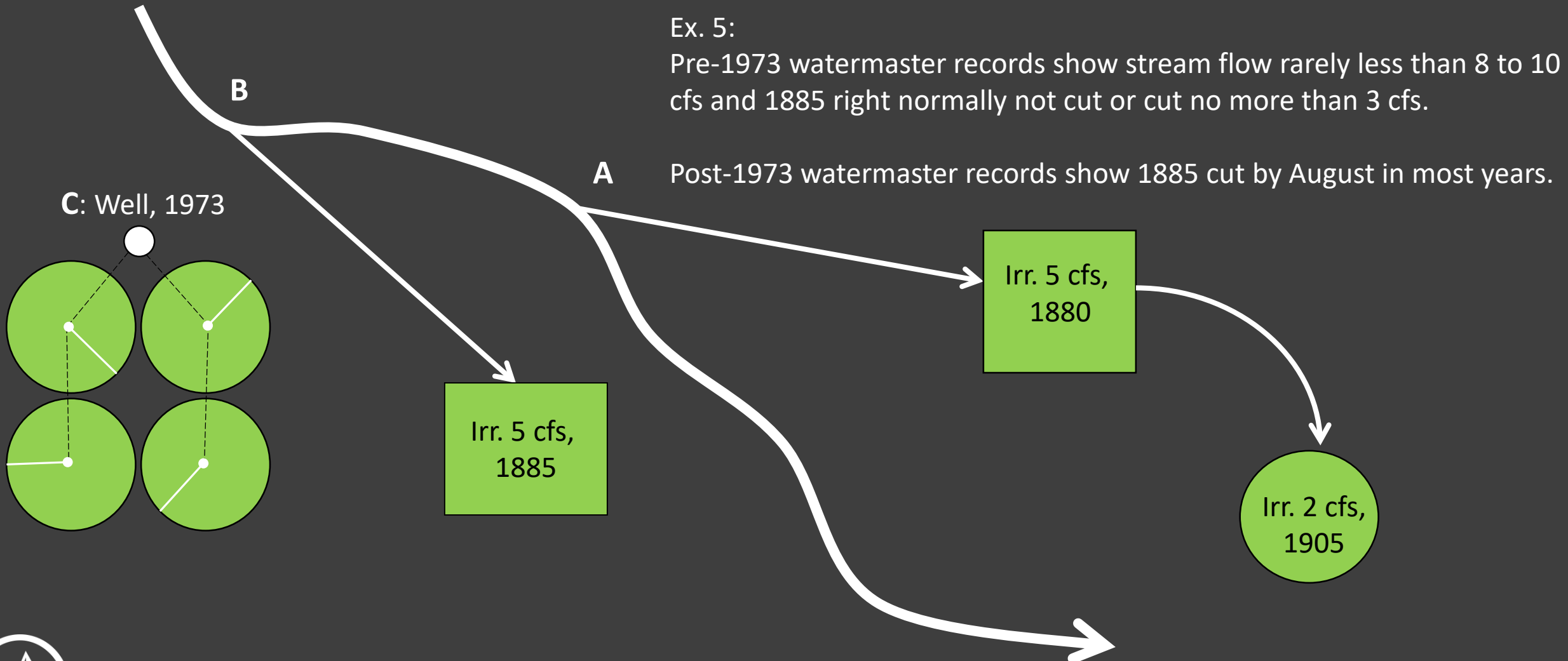
Questions or Discussion?



Regulation of Rights by Priority Date



Regulation of Rights by Priority Date

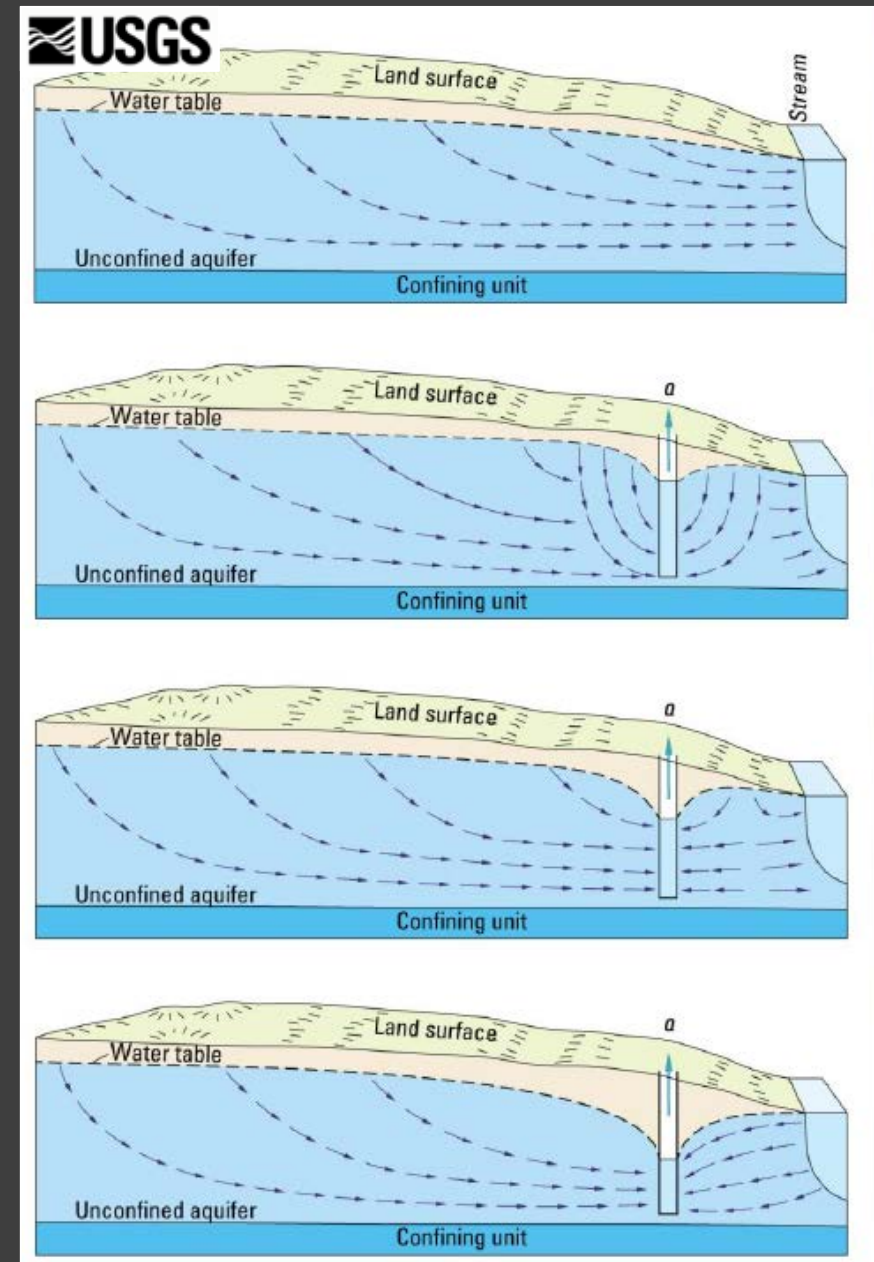


Can User B call for delivery of water against User C (owner of ground water right)?

Does groundwater pumping cause injury to WRs Diverted from streams?

- A. Pre-pumping condition
- B. Reduction in aquifer storage predominate
- C. Captured ground water discharge
- D. Captured ground water discharge and induced infiltration

Idaho has processes to address this question!



Idaho Water Districts

- 💧 Director of IDWR has the authority to divide the state into water districts. (Chapter 6, Title 42, Idaho Code).
- 💧 Water districts are organizations created for the purpose of water right administration.
- 💧 Watermasters are elected by local water users.
- 💧 Water users elect advisory board members. The board advises the watermaster and proposes budgets and resolutions for the district.
- 💧 Water users adopt an annual budget and pay watermaster through assessments calculated based on proportionate share of the total amount of water diverted.

Idaho Water Districts

- 💧 Watermasters shall perform the following duties in accordance with guidance, direction, and supervision from the Director:
 - Measure, collect, and record diversions under water rights;
 - Administer and enforce the water rights in priority, according to the conditions of the water rights;
 - Curtail unauthorized or excessive diversions;
 - Coordinate and direct the work activities of deputy watermasters;
 - Enforce delivery call curtailments; and
 - Enforce GWMP curtailments.



Rangen Delivery Call Pipeline, 2015.