



2024 STIPULATED MITIGATION PLAN

This 2024 Stipulated Mitigation Plan (“Plan”) is entered into between the parties defined in section 1. The parties agree as follows:

1. Parties. The parties to this Plan are (a) the members of the SWC, (b) ground water districts that sign this Plan by November 14, 2024, pursuant to section 2, and (c) ground water districts and other entities representing groundwater users that subsequently participate in this Plan pursuant to section 10. Parties may be referred to individually in this Plan as a “party.”

T.J. Budge, General Counsel

IDAHO GROUND WATER APPROPRIATORS, INC. (IGWA)

Mission

To represent the interests of Idaho’s groundwater users and promote the efficient use and economic development of water resources

- Purpose
 - Explain
 - Official
- Entered into
 - News
 - In April
 - On March
 - Massive
- Curtailment
 - Litigation
 - 2024 S

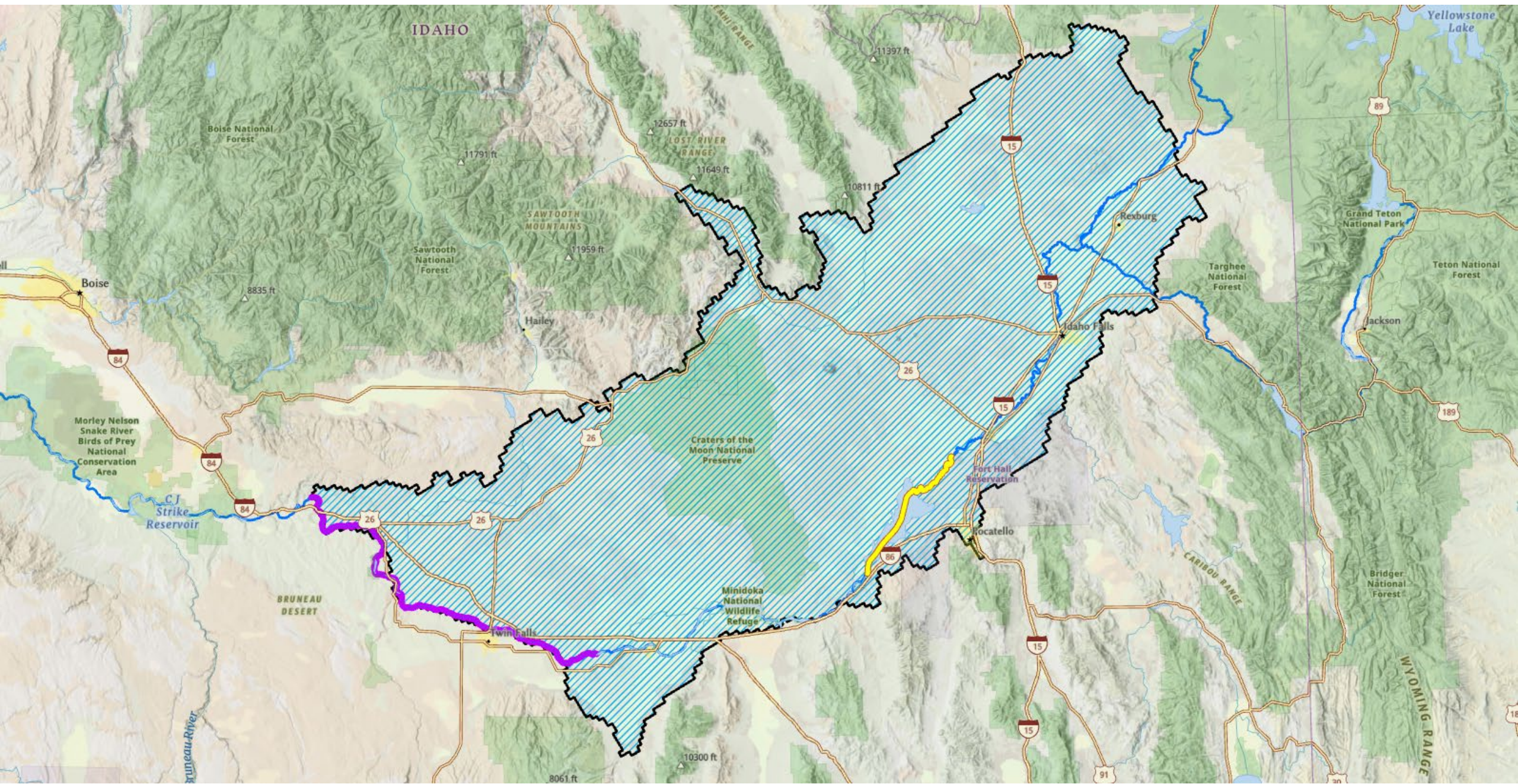
- Purpose
 - Explain terms of new settlement agreement b/w GWD and SWC entered in 2024
 - Official name of the agreement is “2024 Stipulated Mitigation Plan”
- Entered into in response to curtailment
 - News
 - In April, IDWR threatened to shut off irrigation water to almost ~700,000 acres (more than 1,000 square miles; 1 out of 3 irrigated acres)
 - On May 30, IDWR ordered GW be shut off to ~330,000 acres (more than 500 square miles; 1 out of 6 irrigated acres)
 - Massive economic loss to farmers, communities of SE Idaho, and state as a whole
- Curtailment was stopped due to a 1-year settlement agreement between SWC and GWDs
 - Litigation paused to focus on long-term agreement
 - 2024 Stipulated Mitigation Plan is the long-term agreement
- Before I get into the details of agreement, need to provide some technical and legal background



- Settlement agreement deals with conjunctive management of Snake River and ESPA
- Eastern Snake River Plain
 - ~2 million irrigated acres ($\frac{1}{2}$ SW, $\frac{1}{2}$ GW)
 - Key features (American Falls Reservoir, Great Rift, Milner Dam)
- SWC
 - Magic Valley
 - 7 canals
 - ~560,000 acres
 - Priority dates early 1900s

Water Supply

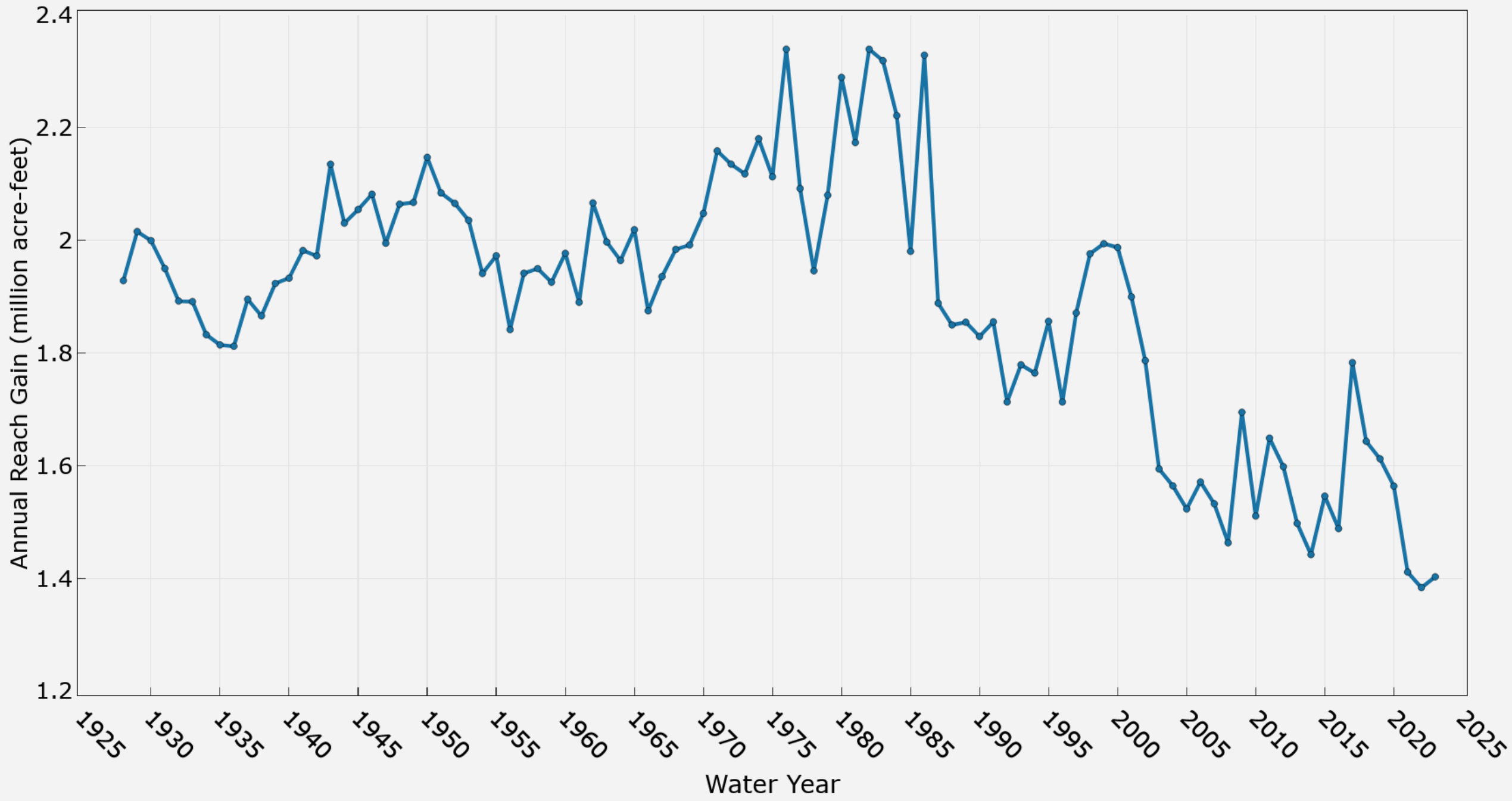
- Natural flow + storage
- Blackfoot break
 - Rely heavily on ESPA spring discharge



- ESPA
 - 10,800 square miles
 - Lots of water – Estimated to cover plain 140 feet deep
 - ~5.5 MAF leaves the ESPA annually
 - Enough water to fill Palisades Reservoir more than 4 times (1.4 MAF)
 - ~4 MAF leaves via Thousand Springs
 - ~1.5 MAF leaves via American Falls springs
- SWC water supply
 - Natural flow + storage
 - Blackfoot break
 - Rely heavily on ESPA spring discharge late in summer



Snake River: nr Blackfoot to Minidoka Reach Gains



- SWC not receiving as much water as they used to
- Historically ~ 2 MAF
- 2023 ~ 1.5 MAF
 - Less water during irrigation season
 - Less storage in reservoir system



| Year | Acre-Feet |
|------|-----------|
| 2001 | 243,565 |
| 2002 | 31,217 |
| 2003 | 0 |
| 2004 | 264,340 |
| 2005 | 0 |
| 2006 | 23,792 |
| 2007 | 289,065 |
| 2008 | 0 |
| 2009 | 0 |
| 2010 | 0 |
| 2011 | 0 |

| Year | Acre-Feet |
|------|-----------|
| 2012 | 139,524 |
| 2013 | 22,588 |
| 2014 | 0 |
| 2015 | 92,246 |
| 2016 | 7,853 |
| 2017 | 0 |
| 2018 | 10,996 |
| 2019 | 0 |
| 2020 | 0 |
| 2021 | 190,816 |
| 2022 | 276,551 |

- IDWR end-of-season water supply shortfall calculation for the SWC
- This is important because SWC water rights are senior in priority to ESPA groundwater rights



Prior Appropriation Doctrine

Priority Component: “Priority of appropriation shall give the better right as between those using the water”

(Idaho Constitution, Article 15, Section 3)

Public Interest Component: “The policy of the law of this State is to secure the maximum use and benefit, and least wasteful use, of its water resources.”

Poole v. Olaveson, 82 Idaho 496 (1960)

- Two components of the prior appropriation doctrine
 - “First in time is first in right”
 - Maximum beneficial use in the public interest
- SWC water rights are senior in priority to ESPA groundwater rights
- However, different statutory schemes for SW administration vs. GW administration
 - Surface water
 - Managed by shepherding water through rivers and canals.
 - When a junior is curtailed, essentially 100% of the water the junior could have diverted is available to the senior within a matter of hours or days
 - Groundwater [next slide]



Ground Water Act

Idaho Code 42-226

“...while the doctrine of ‘first in time is first in right’ is recognized, a reasonable exercise of this right shall not block full economic development of underground water resources. Prior appropriators of underground water shall be protected in the maintenance of reasonable ground water pumping levels as may be established by the director of the department of water resources ...”

- Groundwater is different
 - When you shut off a well, cannot shepherd that water to a specific senior user who is short
 - When water is pumped from a well, effect emanates in all directions
 - Water moves slowly through aquifer
- Ground Water Act provides for management based on groundwater levels
 - Maximum sustainable use
 - Without over-drafting the aquifer (“mining”)
- Idaho historically managed SW and GW separately under different statutory frameworks



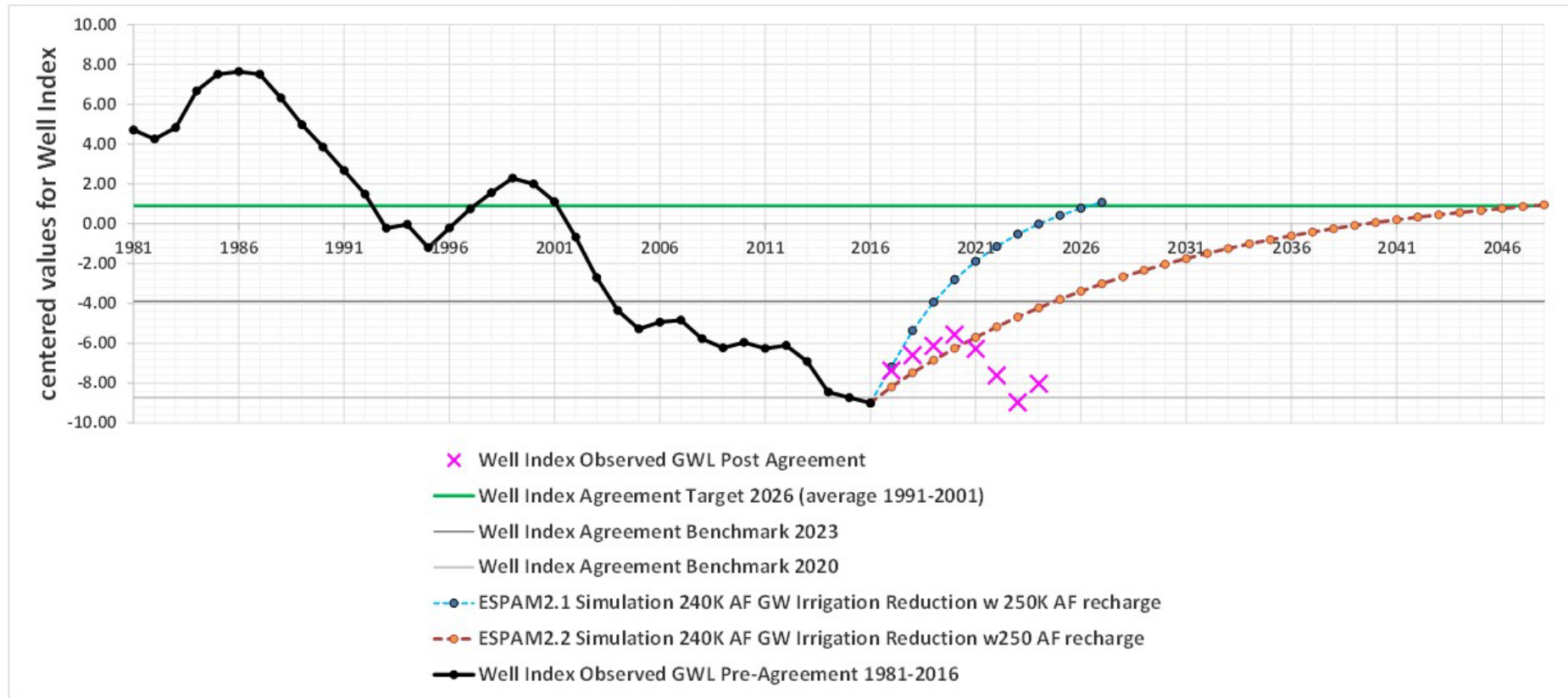
Conjunctive Management

Definition: “Legal and hydrologic integration of administration of the diversion and use of water under water rights from surface and ground water sources”

(Conjunctive Management Rule 10.03)

- Musser v. Higginson
- Conjunctive Management Rules
- Thousand Springs litigation
- SWC litigation
 - SW supplies re-set each water
 - Water supply shortages are short-term
 - Some years have adequate water, other years not
- GW curtailment
 - GW moves very slowly through aquifer
 - When a well is shut off, only a small fraction of the water that could be pumped from the well will reach a senior user that year
 - Must curtail exponentially more groundwater use than the senior needs

Figure 1 IGWA-SWC Sentinel Well Index Modeling ESPAM2.1 and ESPAM2.2



This Figure shows a time-series of the IGWA-SWC Well Index modeling using ESPAM2.1 and the proposed ESPAM2.2. The historic Well Index values cover 1981-2014 and represent an integration of water level data across a set of mutually agreed to Sentinel Wells. The time-series of the period 2015-2048 shows ESPAM2.1 and ESPAM2.2 simulated results showing the increase in projected Well Index from 240K AF/year of GW Irrigation reduction (evenly distributed across the GWDs) and 250K AF/year of recharge with about 43K AF/year simulated in the upper basin at Hilton Spill and 207K AF/year simulated in the lower basin at Mile Post 31. The green line across the chart marks the average value for the Well Index over the period 1991-2001 or the “Well Index Agreement Target”.

- 2015 Agreement
 - 240,000 AF GW conservation + 250,000 AF recharge
 - Aquifer levels would rise by about 9 feet
- Did not work as predicted
 - Model does not capture all factors
 - Continuing current conservation and recharge will stabilize
- Disagreements over interpretation
 - 2015 agreement was entered into in a compressed timeframe
 - Commitment defined, but how to achieve it not defined
 - GWDs conserved more than 300,000 AF on average, but dispute arose over averaging
 - Agreement fell apart in Fall of 2022



| County | Dried up Farmland (acres) | Groundwater Curtailed (acre-feet) | Surface Water Gained (acre-feet) | Surface Water Gained as a Percentage of Groundwater Curtailed |
|------------|---------------------------|-----------------------------------|----------------------------------|---|
| Elmore | 746 | 2,145 | 0.00 | 0.00% |
| Clark | 32,437 | 70,896 | 0.13 | 0.00% |
| Gooding | 45,998 | 126,774 | 0.00 | 0.00% |
| Jefferson | 104,904 | 231,935 | 372.61 | 0.16% |
| Butte | 6,853 | 15,380 | 6.08 | 0.04% |
| Blaine | 9,601 | 22,052 | 19.50 | 0.09% |
| Lincoln | 29,024 | 73,743 | 4.81 | 0.01% |
| Fremont | 19,355 | 36,850 | 0.01 | 0.00% |
| Twin Falls | 753 | 1,820 | 0.00 | 0.00% |
| Jerome | 40,368 | 105,964 | 0.17 | 0.00% |
| Madison | 2,753 | 6,040 | 0.00 | 0.00% |
| Bonneville | 52,976 | 117,198 | 787.91 | 0.67% |
| Bingham | 147,541 | 361,126 | 49,126.57 | 13.60% |
| Minidoka | 47,375 | 119,465 | 16.89 | 0.01% |
| Power | 75,905 | 179,445 | 16,806.60 | 9.37% |
| Cassia | 74,719 | 171,435 | 0.74 | 0.00% |
| Bannock | 4,300 | 9,766 | 6,087.08 | 62.33% |
| Total | 695,610 | 1,652,035 | 73,229 | 4.43% |

- 2024 curtailment
 - Red tags
- Cost-benefit – most wells located far away from river
- Not well received
- One-year agreement
 - Stay of litigation



2024 Stipulated Mitigation Plan

- **Term:** 2024-2027 with automatic renewal for successive 4-year terms unless terminated by any party.
- **Groundwater conservation:**
 - 205,000 acre-feet (fixed)
 - Averaging allowed (4-year compliance periods)
 - No obligation to raise aquifer
- **Storage water mitigation:**
 - Storage water delivered only when needed by the SWC
 - Storage water capped at 75,000 acre-feet in 2025 and 2026 and at 82,500 acre-feet in 2027
 - 2027 increase to 82,500 acre-feet only if SWC needed full 75,000 acre-feet in 2026
 - Ability to offset storage with alternative mitigation projects
- **State contribution:**
 - \$5 million state funding to improve reach gains
 - Increase IWRB recharge target from 250,000 to 350,000 AF
- **Litigation relief:**
 - Dismiss lawsuits involving 2015 Agreement and individual mitigation plans
 - Stay lawsuits involving Methodology Order

- Stabilize ESPA
- Better meet actual SWC water needs
- Clearly defines implementation
- Each GWD stands independent

APPENDIX A

Groundwater Conservation Allocations

| District | Baseline Diversion Volume | Annual Conservation Obligation | Annual Divertible Volume | Compliance Period Allocation |
|-------------------------|---------------------------------|--------------------------------------|--------------------------------|------------------------------------|
| American Falls-Aberdeen | 286,111 | 34,132 | 251,979 | 1,007,916 |
| Bingham | 274,578 | 32,756 | 241,822 | 967,287 |
| Bonneville-Jefferson | 161,987 | 16,500 | 145,487 | 581,948 |
| Carey | 5,545 | 661 | 4,883 | 19,533 |
| Jefferson-Clark | 445,393 | 53,134 | 392,259 | 1,569,037 |
| Henry's Fork | 76,241 | 9,095 | 67,146 | 268,583 |
| Madison | 78,095 | 3,000 | 75,095 | 300,380 |
| Magic Valley | 258,203 | 30,803 | 227,400 | 909,601 |
| North Snake | 208,881 | 24,919 | 183,962 | 735,849 |
| | 1,795,034 | 205,000 | 1,590,034 | 6,360,135 |

Clearly defined obligations by district

APPENDIX B

Storage Water Allocations Based on Initial 75,000AF Obligation

| District | Baseline Diversion Volume | NB-M SS Baseline Impact | % of total SS Impact | Share of 75k Storage |
|-------------------------|---------------------------------|-------------------------------|-------------------------|----------------------------|
| American Falls-Aberdeen | 286,111 | 210,298 | 28.6% | 21,420.0 |
| Bingham | 274,578 | 173,258 | 23.5% | 17,647.0 |
| Bonneville-Jefferson | 161,987 | 79,000 | 10.7% | 8,047.0 |
| Carey | 5,545 | 2,714 | 0.4% | 277.0 |
| Jefferson-Clark | 445,393 | 109,276 | 14.8% | 11,130.0 |
| Henry's Fork | 76,241 | 3,528 | 0.5% | 359.0 |
| Madison | 78,095 | 2,949 | 0.4% | 300.0 |
| Magic Valley | 258,203 | 123,758 | 16.8% | 12,605.0 |
| North Snake | 208,881 | 31,566 | 4.3% | 3,215.0 |
| | 1,795,034 | 736,347 | 100% | 75,000 |

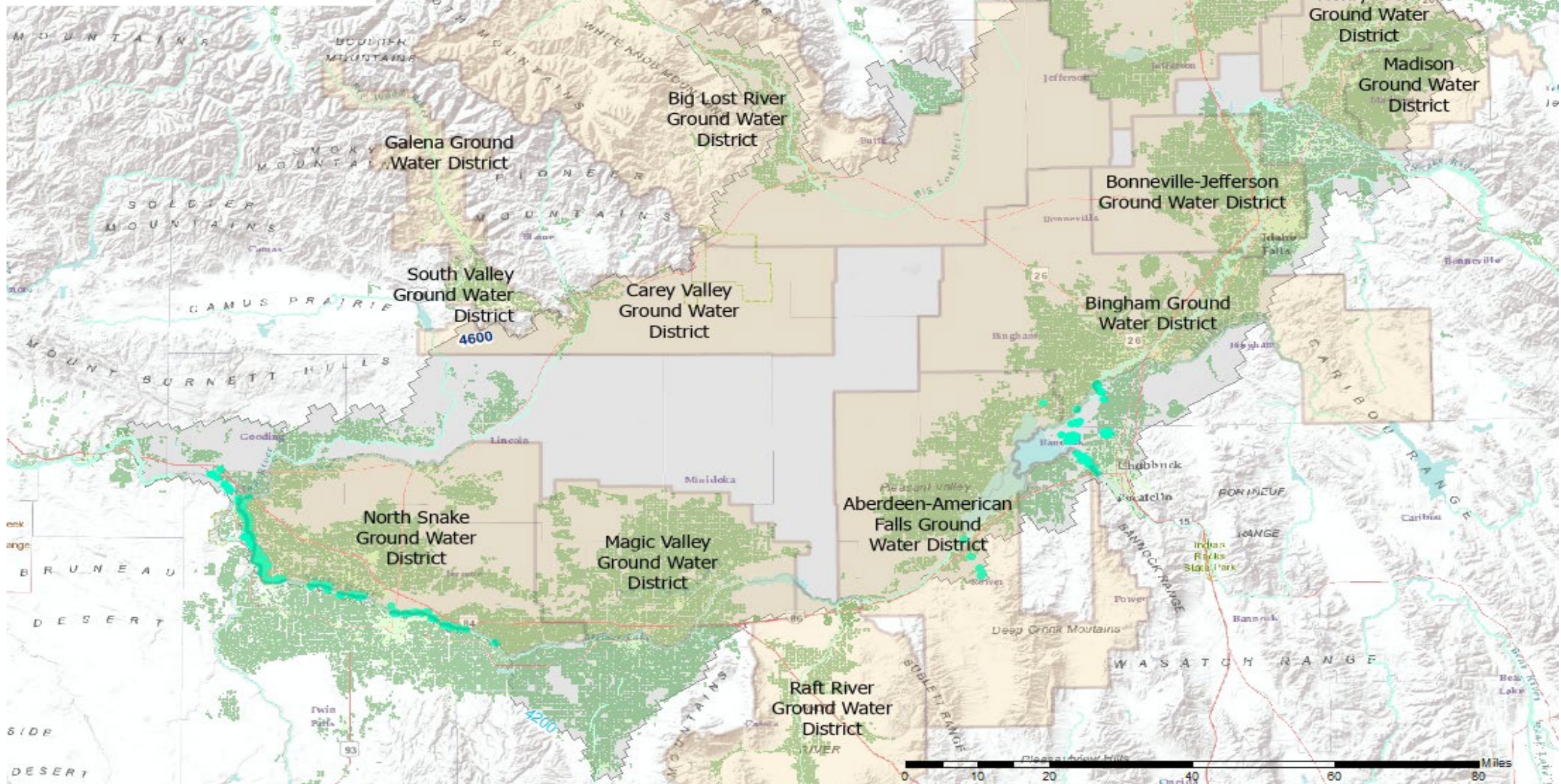
Clearly defined obligations by district



Questions



- NHD spring locations (USGS)
- ESPA Tributary Rivers
- Snake River
- Irrigated Lands**
- irrigated
- semi-irrigated (urban, homesteads, etc.)
- Groundwater Districts
- ESPAM Boundary



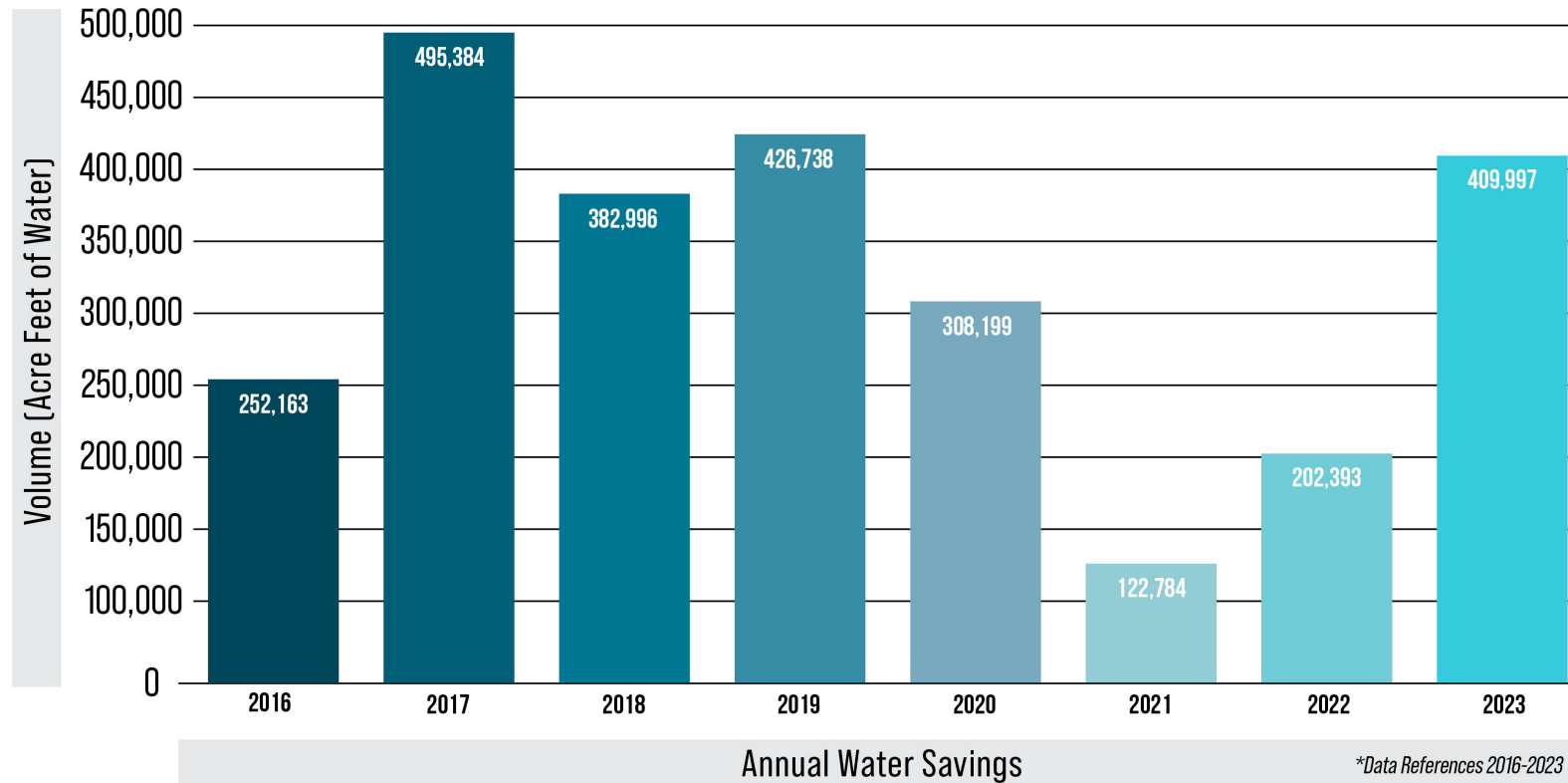
Service Layer Credits: USGS, IDWR, NOAA, ESRI, NPS

IGWA

- 10 GWDs + SWID
- Does not include Wood River GWDs or Raft River GWDs
- Members irrigate ~1 million acres (1/2 of all irrigated farmland)



EASTERN IDAHO FARMERS GROUNDWATER CONSERVATION



TOTAL WATER
SAVED 2,600,654 ACRE FEET
2016-2023

AVERAGE WATER
SAVED 325,082 ACRE FEET
ANNUALLY

Groundwater conservation

- 2015 Agreement: 240,000 AF conservation
- Savings every year (8 years straight)
- 2.6 million AF total savings
- 325,000 AF average (2016-2023)
- 2021 minimum: ~123,000 AF
- Farmers have been very successful in terms of reducing groundwater use
- Groundwater users are not the “bad guys” (“bad actors”)

PAST PREDICTED DEMAND SHORTFALL VOLUMES

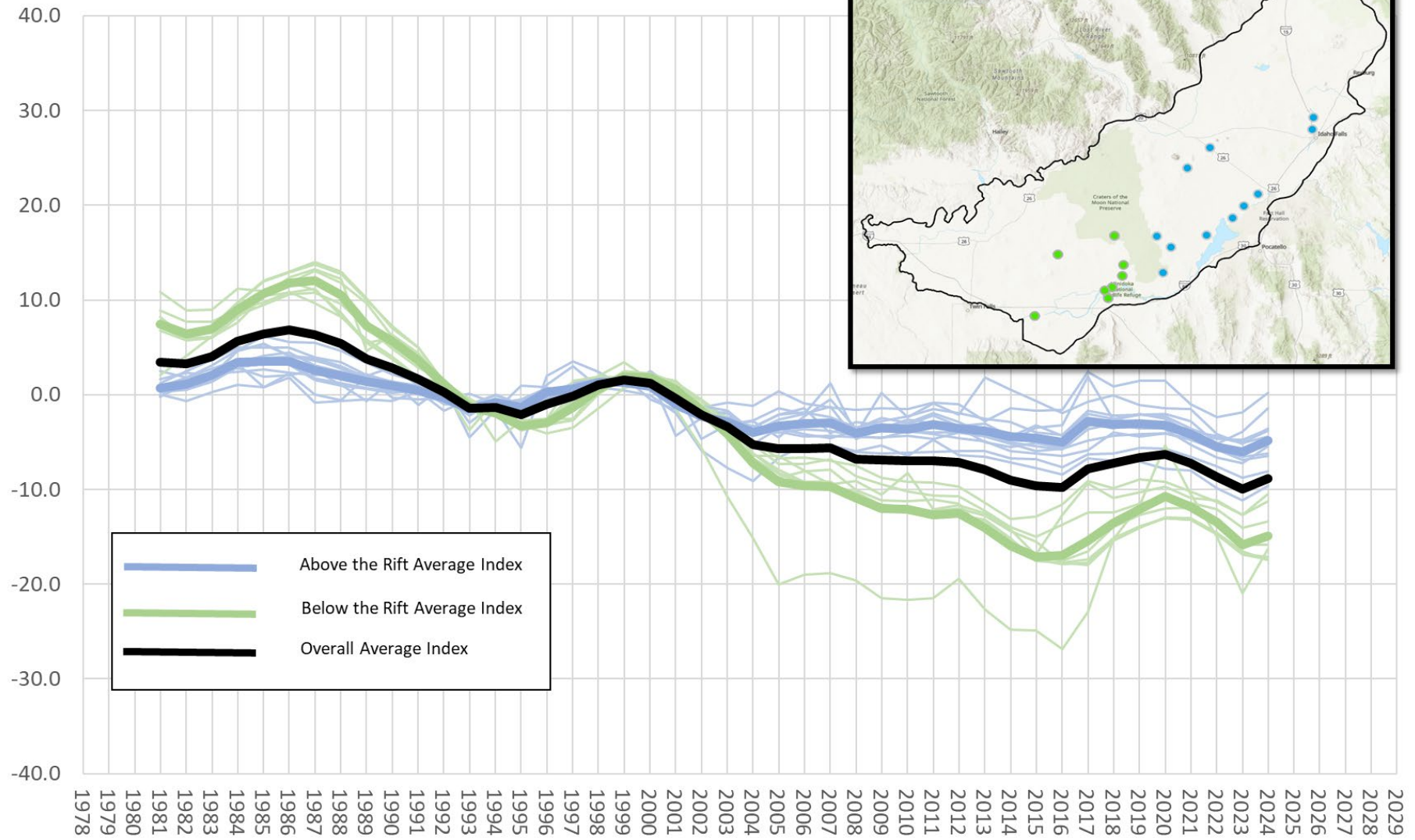
| MO Version | Year | Order | Shortfall (ac-ft) |
|------------|------|--|------------------------------------|
| 1st MO | | April As-Applied Order (Steps 3-4) | 84,300 |
| 2nd Mo | 2010 | Revised April As-Applied Order (Steps 3-4) | 57,000 |
| | | August As-Applied Order (Step 6) | 0 |
| | | September As-Applied Order (Step 7) | 0 |
| | | November As-Applied Order (Step 9) | 0 |
| | | April As-Applied Order (Steps 1-8) | 0 |
| | 2011 | November As-Applied Order (Step 9) | 0 |
| | | April As-Applied Order (Steps 1-8) | 0 |
| | 2012 | November As-Applied Order (Step 9) | 17,318 |
| | | April As-Applied Order (Steps 1-4) | 14,200 |
| | 2013 | August As-Applied Order (Steps 6-8) | 14,200 |
| | | November As-Applied Order (Step 9) | 45,995 |
| | | December As-Applied Order (Step 10) | 11,924 |
| | | April As-Applied Order (Steps 1-8) | 0 |
| | 2014 | November As-Applied Order (Step 9) | 0 |
| 3rd MO | | 2015 | April As-Applied Order (Steps 1-3) |
| 4th MO | 2016 | April As-Applied Order (Steps 1-3) | 44,200 |
| | | July As-Applied Order (Step 6) | 21,300 |
| | | November As-Applied Order (Step 9) | 39,500 |
| | 2017 | April As-Applied Order (Steps 1-3) | 0 |
| | | August As-Applied Order (Steps 5-6) | 0 |
| | | November As-Applied Order (Step 9) | 0 |

| MO Version | Year | Order | Shortfall (ac-ft) | |
|------------------------------------|------------|-------------------------------------|------------------------------------|---------------|
| 4th MO | 2018 | April As-Applied Order (Steps 1-3) | 0 | |
| | | July As-Applied Order (Steps 5- 6) | 0 | |
| | | November As-Applied Order (Step 9) | 0 | |
| | 2019 | April As-Applied Order (Steps 1-3) | 20,900 | |
| | | July As-Applied Order (Steps 5- 6) | 0 | |
| | | November As-Applied Order (Step 9) | 0 | |
| | 2020 | April As-Applied Order (Steps 1-3) | 0 | |
| | | July As-Applied Order (Steps 5- 6) | 0 | |
| | | November As-Applied Order (Step 9) | 0 | |
| | 2021 | April As-Applied Order (Steps 1-3) | 40,500 | |
| | | July As-Applied Order (Step 6) | 170,000 | |
| | | August As-Applied Order (Steps 7-8) | 142,700 | |
| | | November As-Applied Order (Step 9) | 64,647 | |
| | 2022 | April As-Applied Order (Steps 1-3) | 162,600 | |
| | | July As-Applied Order (Steps 5- 6) | 52,600 | |
| | | August As-Applied Order (Steps 7-8) | 132,100 | |
| | 5th/6th MO | 2023 | November As-Applied Order (Step 9) | 49,309 |
| | | | April As-Applied Order (Steps 1-3) | 75,200 |
| July As-Applied Order (Steps 5- 6) | | | 0 | |
| 2024 | | November As-Applied Order (Step 9) | 0 | |
| | | April As-Applied Order (Steps 1-3) | 74,100 | |
| | | July As-Applied Order (Steps 5- 6) | 6,800 | |

- Problems with Methodology Order
- Large DS predictions
- DS predictions bounce around
- Storage water costs very high
- Does not arrest decline in GW levels
 - Shortfall predictions becoming larger and more frequent
- Ground Water Management Plan
 - Will be imposed by IDWR
 - Mitigate injury under Methodology Order
 - Stabilize ESPA under GWMP

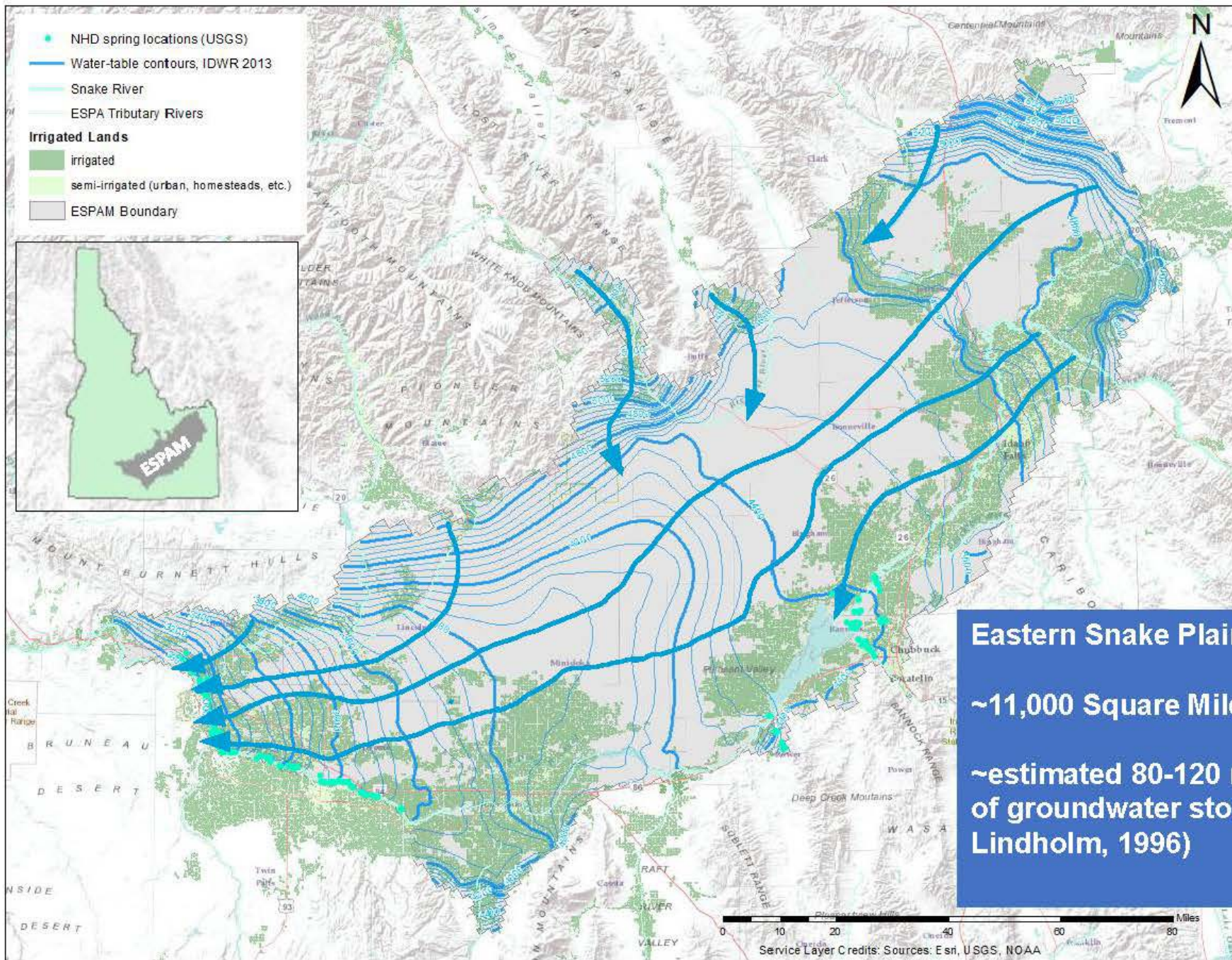


Sentinel Well Index



Sentinel well index

- East vs. west of great rift
- Less decline in American Falls area
- Reason for optimism



Eastern Snake Plain Aquifer
 ~11,000 Square Mile Area
 ~estimated 80-120 million acre-feet of groundwater stored (USGS; Lindholm, 1996)

ESPA

- 10,800 square miles
- Estimated to hold 200-300 million acre-feet
- 70 million acre-feet in top 10 feet
 - cf. Lucky Peak Reservoir 265,000 acre-feet
 - Top 10 feet holds 265 times more water than Lucky Peak
- Discharges at Thousand Springs and American Falls