



Eastern Snake Plain Aquifer Water Management Discussion

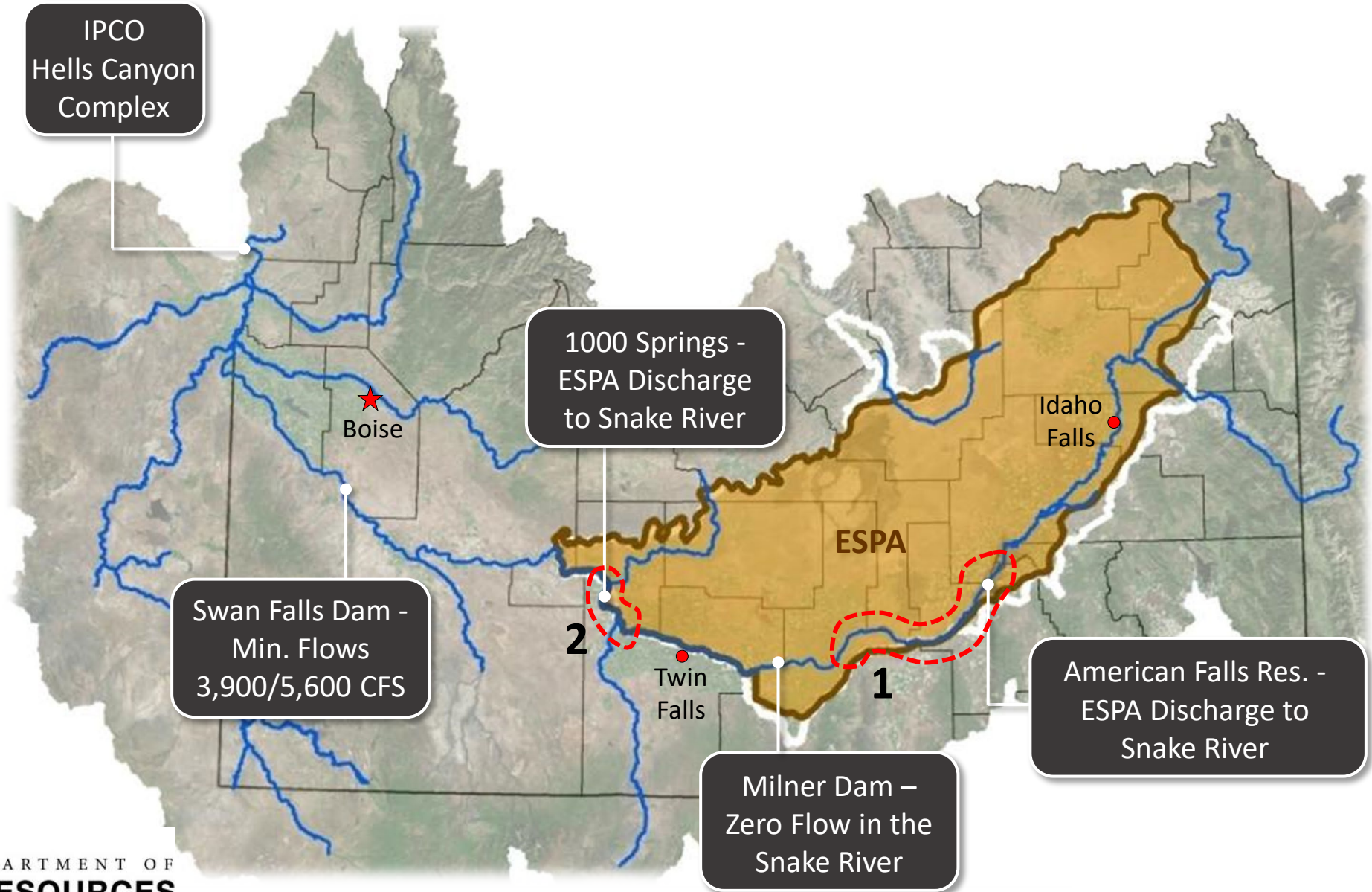
Presented to the Twin Falls County Farm Bureau

Mathew Weaver

IDWR Director

October 12, 2023

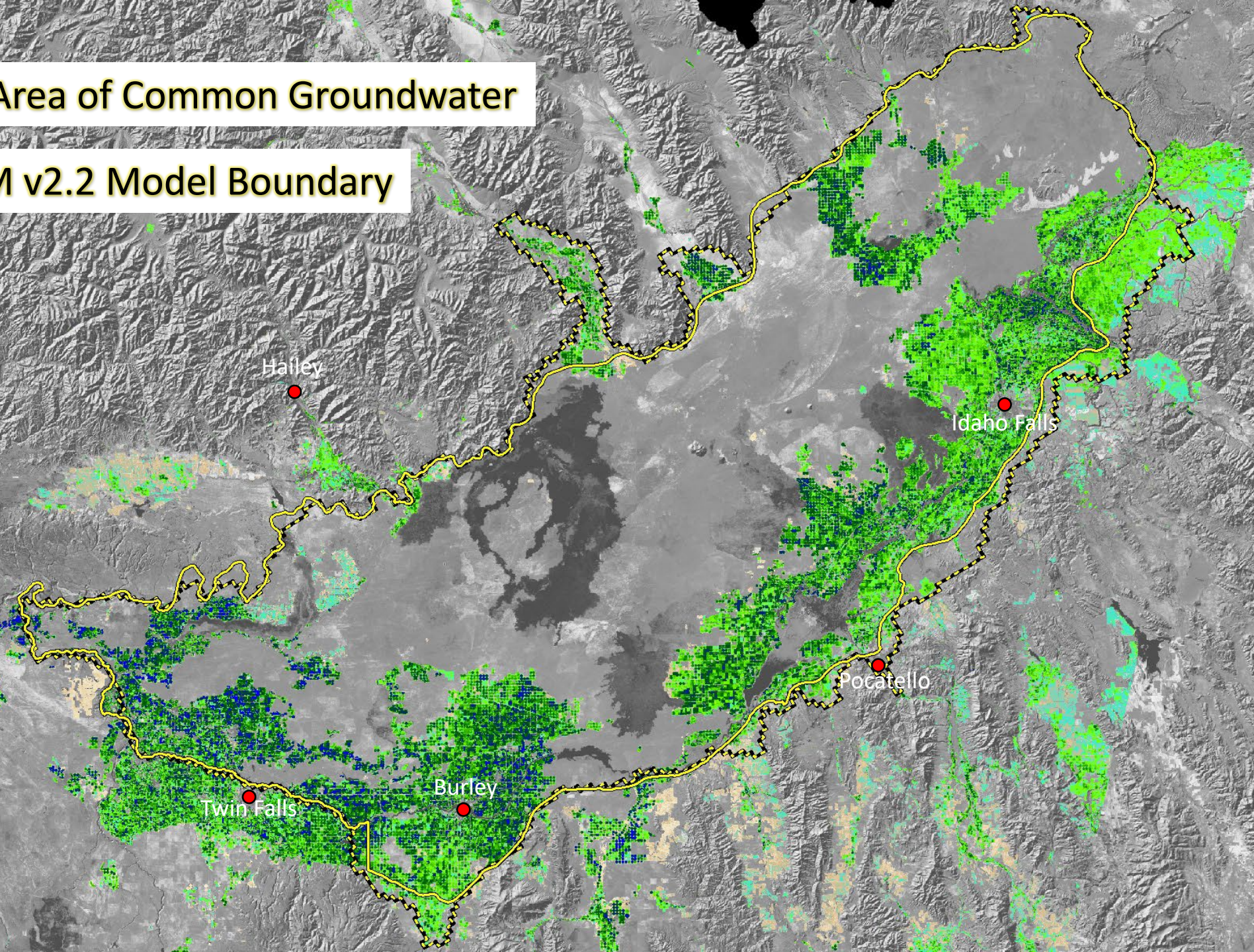
The Combined ESPA and Snake River Hydrologic System



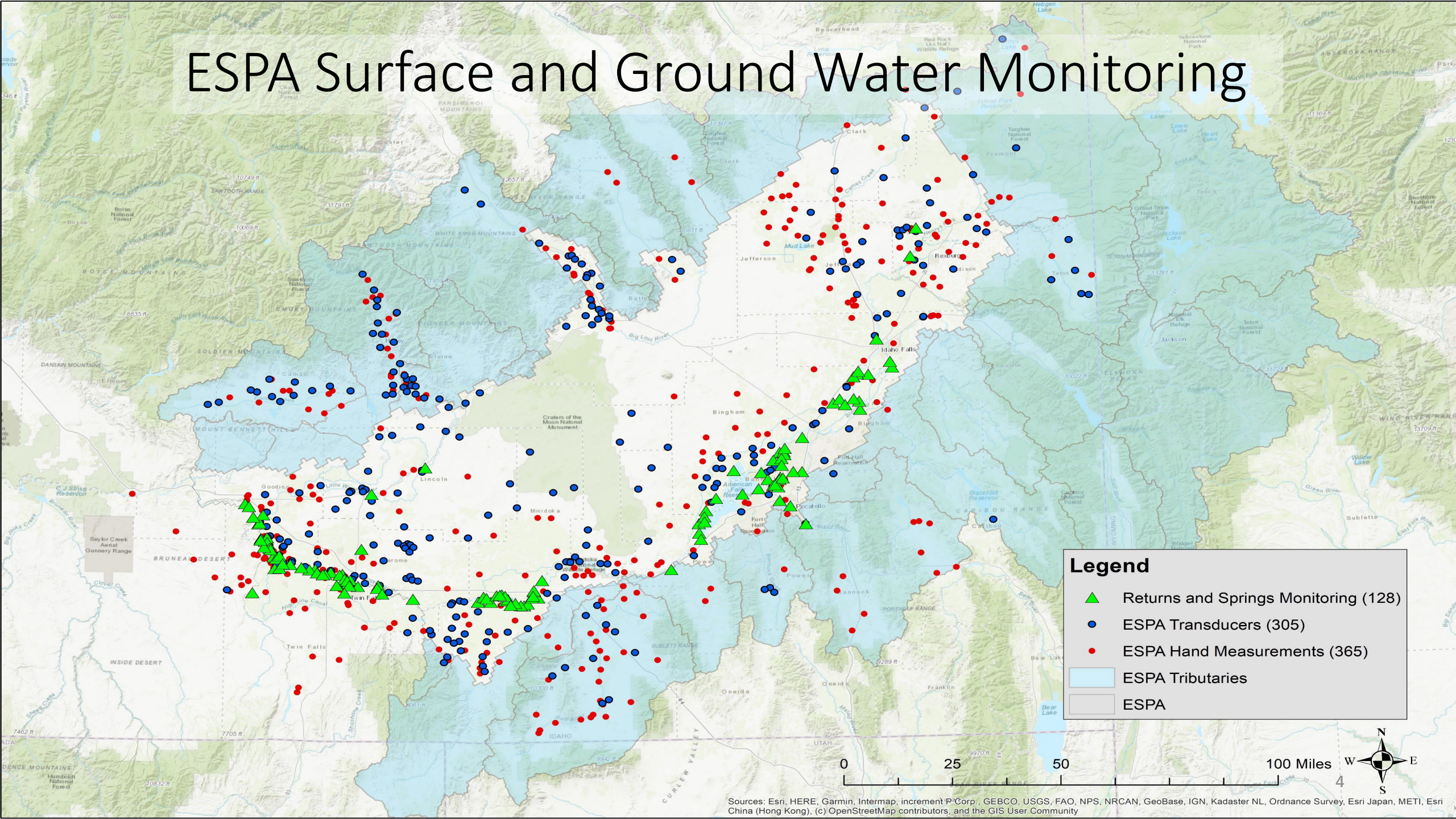


————— ESPA Area of Common Groundwater

- - - - - ESPAM v2.2 Model Boundary



ESPA Surface and Ground Water Monitoring



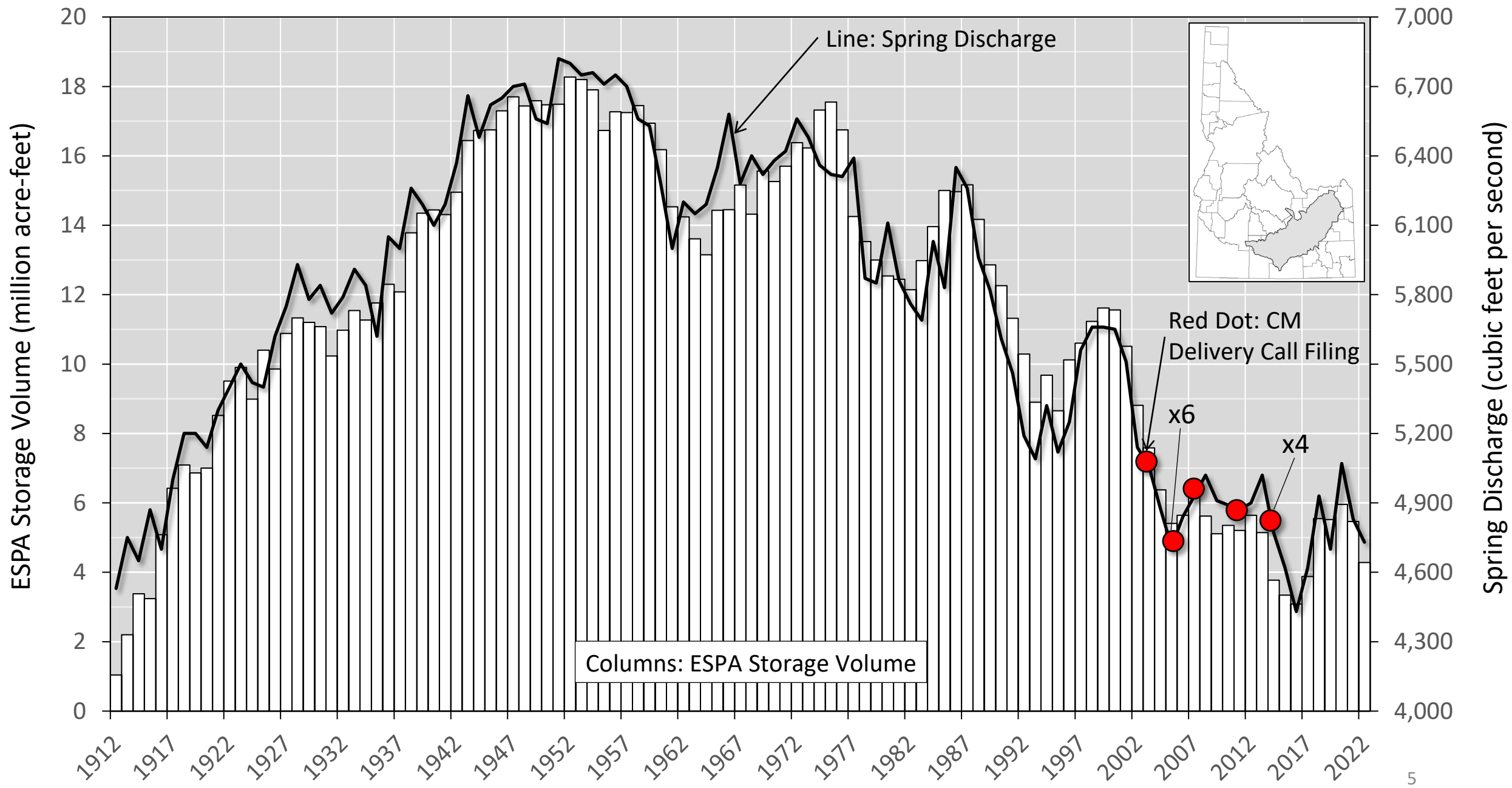
Legend

- ▲ Returns and Springs Monitoring (128)
- ESPA Transducers (305)
- ESPA Hand Measurements (365)
- ▭ ESPA Tributaries
- ▭ ESPA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

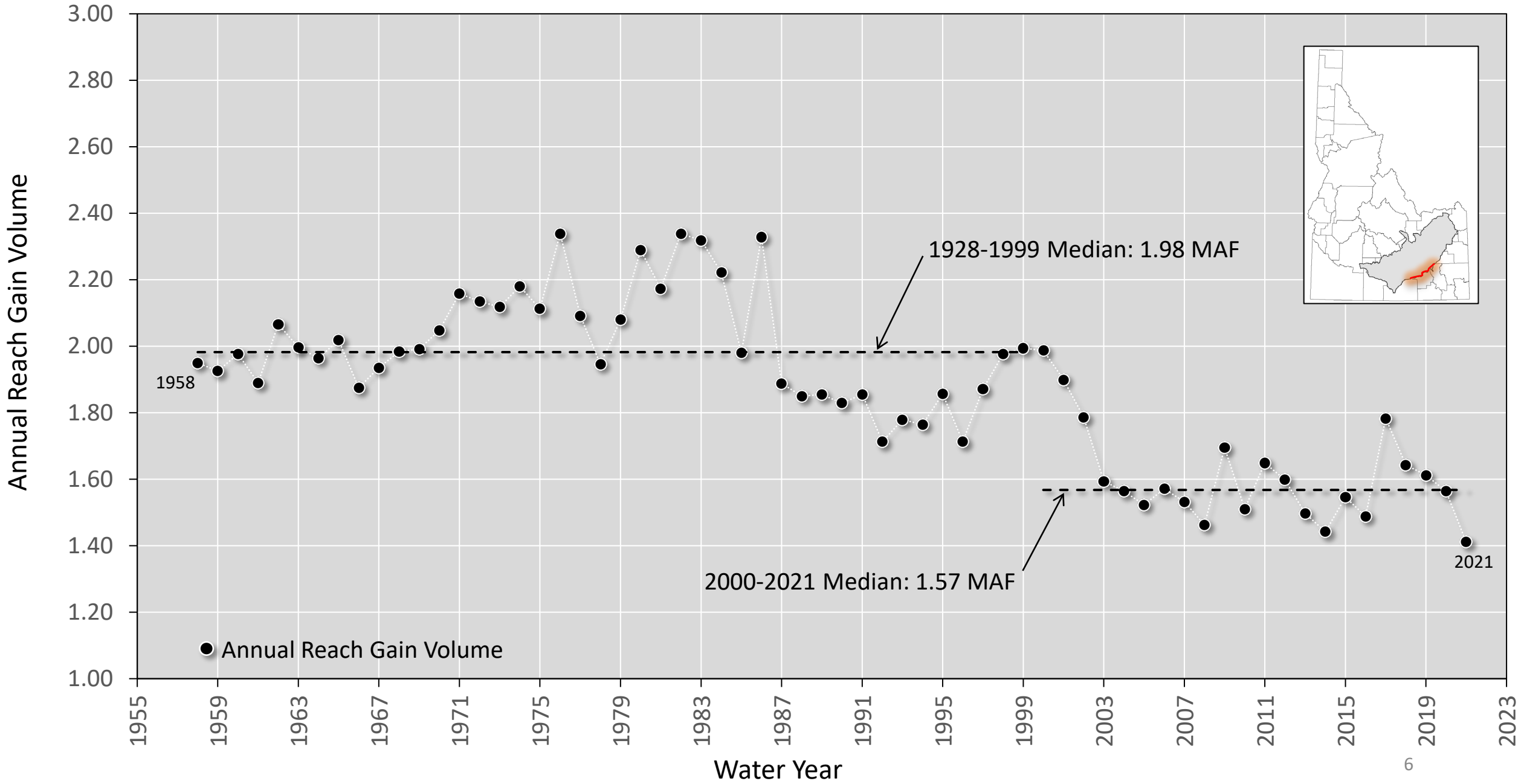


Annual ESPA Storage Volume Change and “Thousand Springs” Discharge



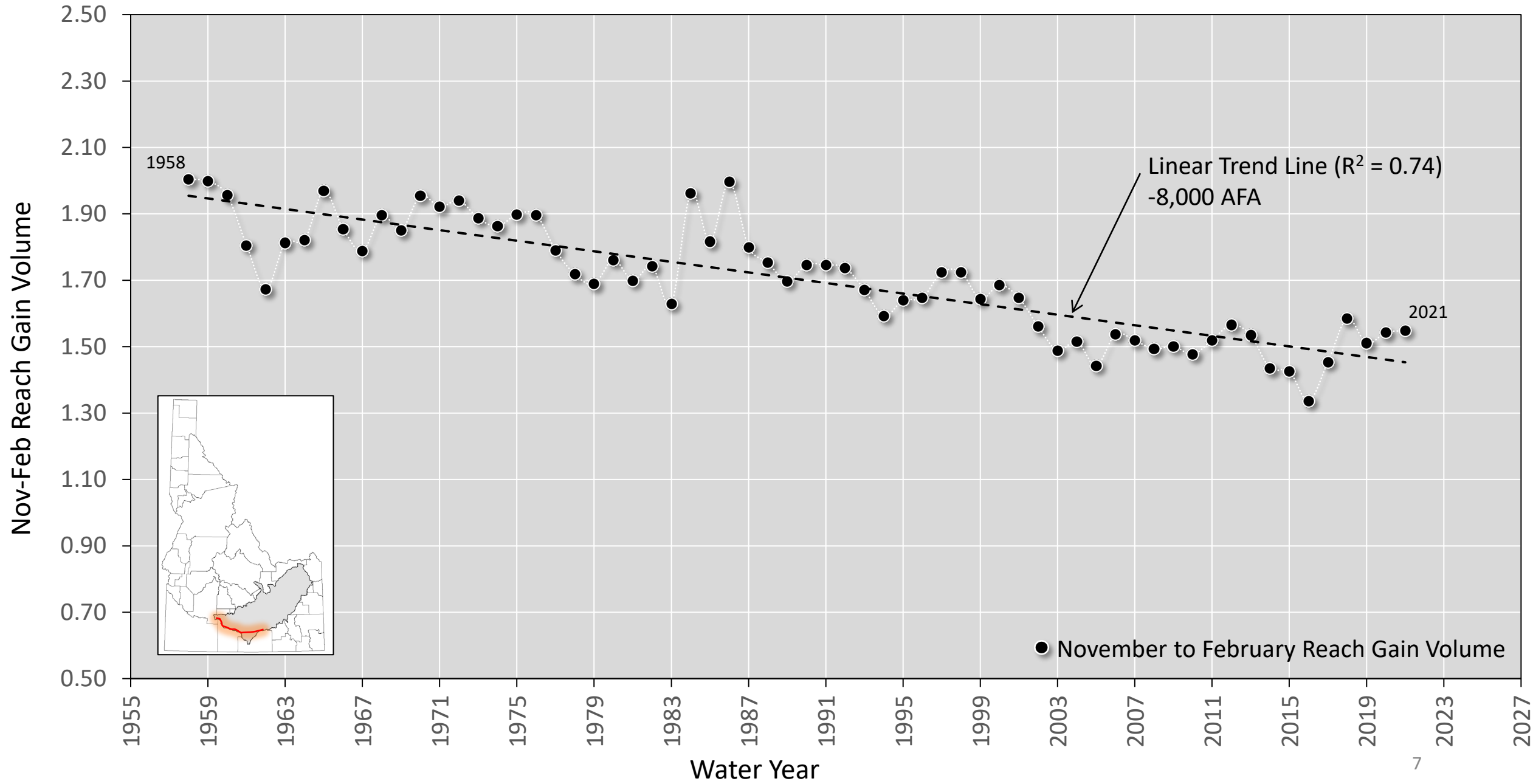


Snake River: Near Blackfoot - Minidoka Annual Reach Gain Volume (million acre-feet)



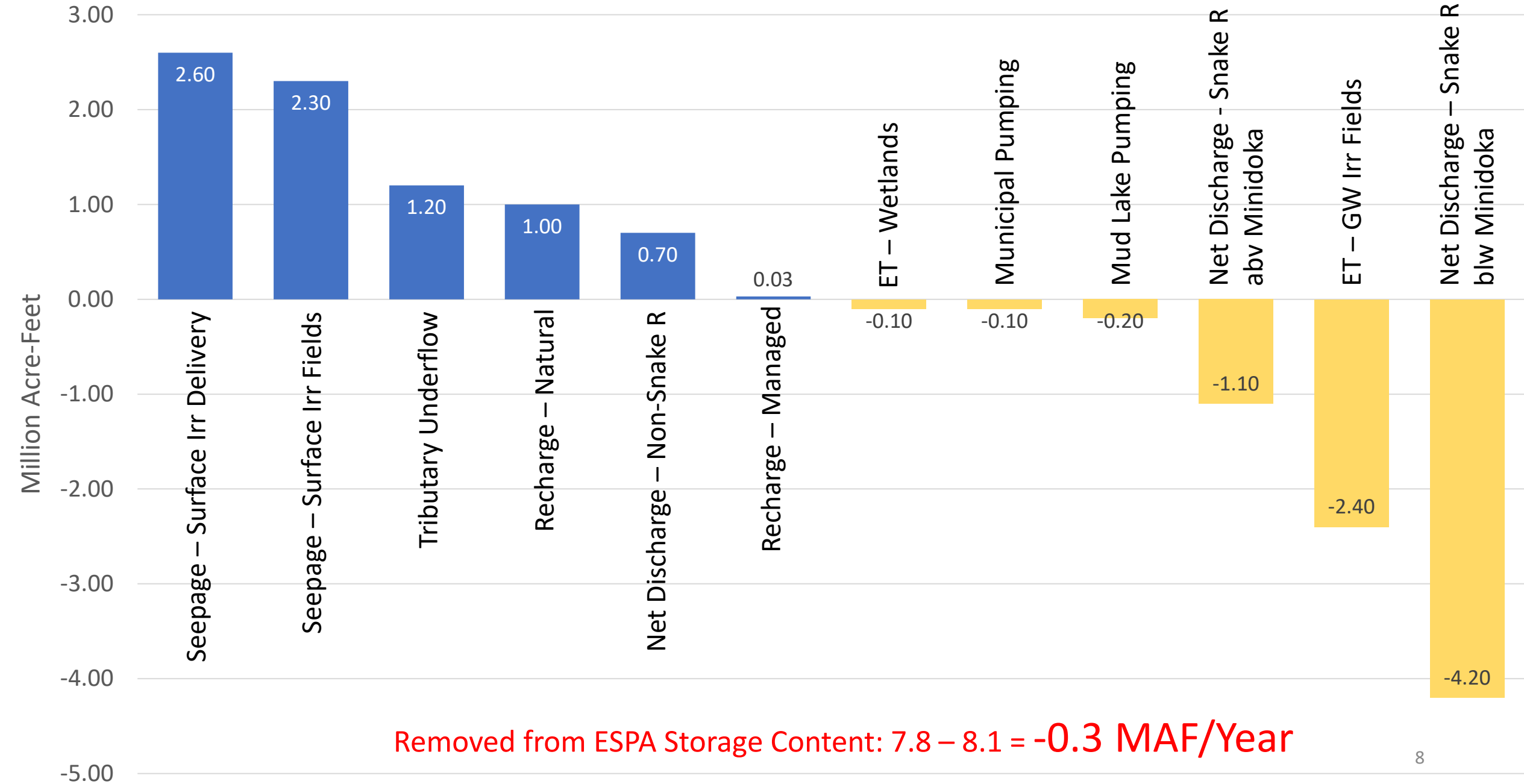


Snake River: Milner to King Hill Nov-Feb Reach Gain Volumes (million acre-feet)





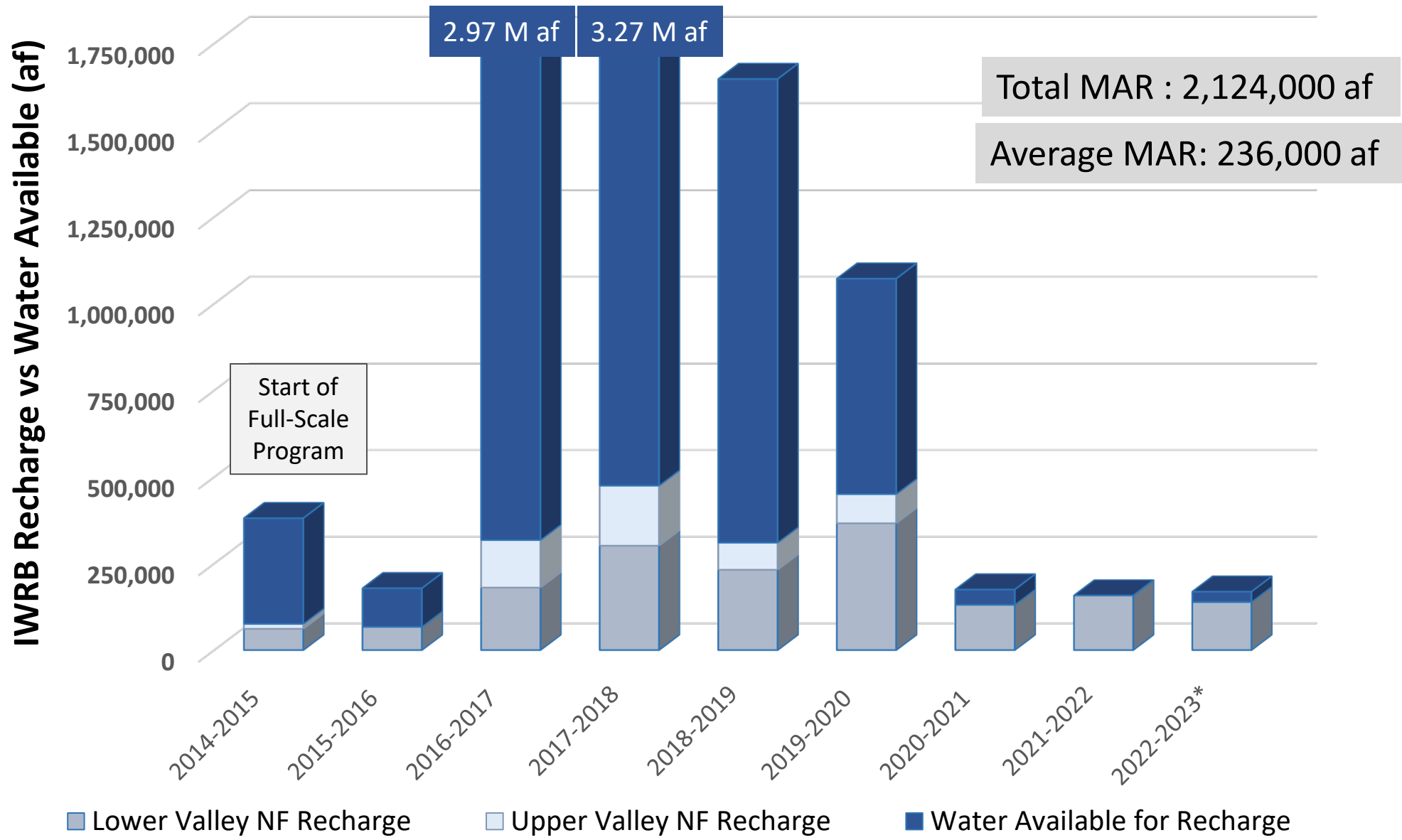
1980-2018: ESPA Avg. Annual Water Budget Components





IWRB Recharge

Snake River Water Available for Recharge vs. Water Recharged



Current & Potential ESPA Recharge Capacity



Lower Valley Recharge Capacity

Canals - 700 cfs
Sites - 2,000 cfs

IWRB Upper Valley Capacity

Sites - 150 cfs
Canals - 600 cfs

Upper Valley Recharge Capacity

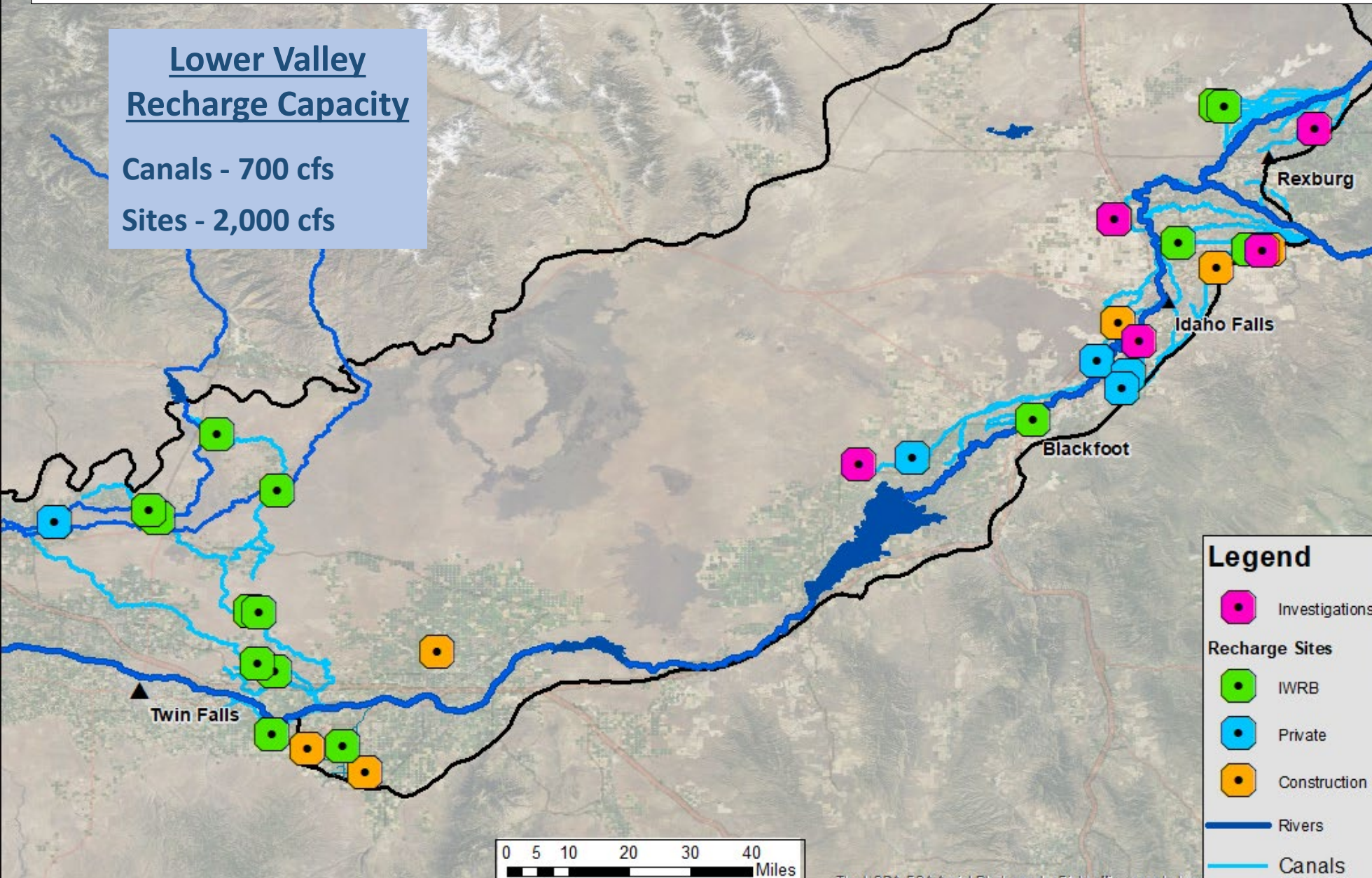
Canals - 1,500 cfs
Sites - 450 cfs

Potential New Capacity (Under Construction)

Lower Valley - 110 cfs
Upper Valley - 135 cfs

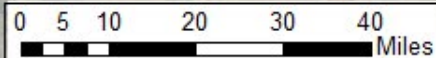
Potential New Capacity (Investigating)

Sites - 350 cfs 10



Legend

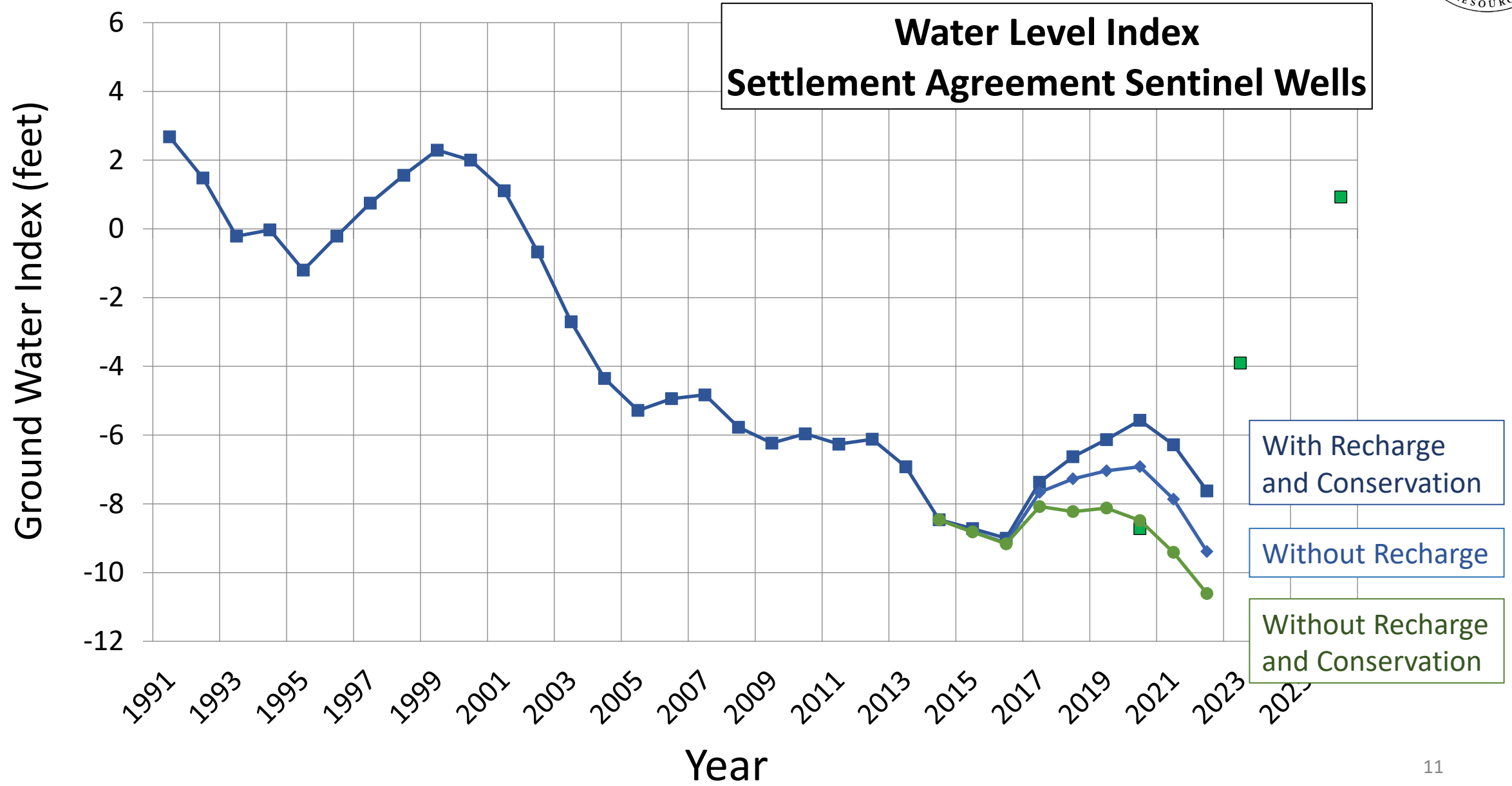
- Investigations
- Recharge Sites**
- IWRB
- Private
- Construction
- Rivers
- Canals



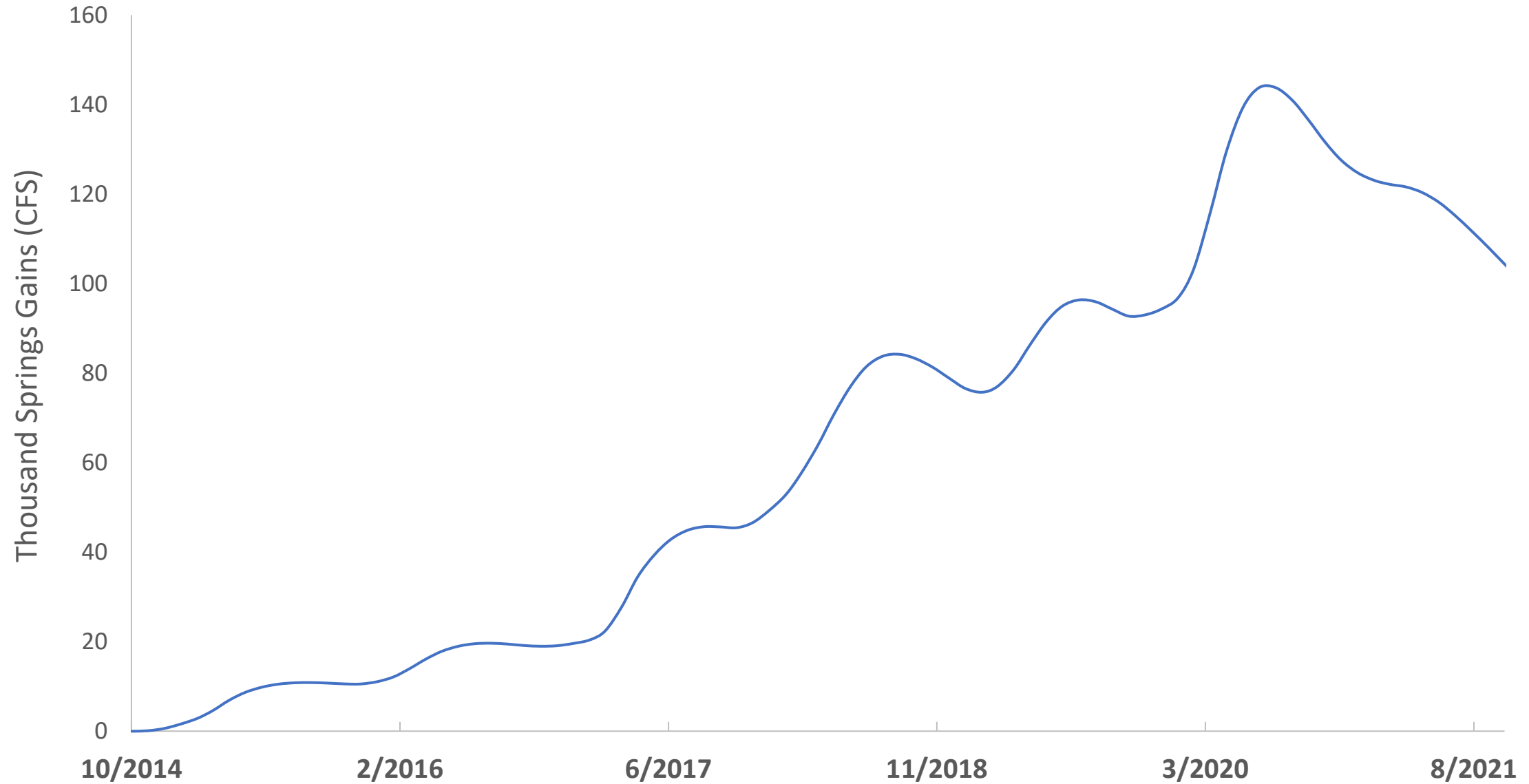
The USDA-ESA Aerial Photography Field office asks to be



Impact to the Aquifer



“Thousand Springs” Gains Due to IWRB Recharge





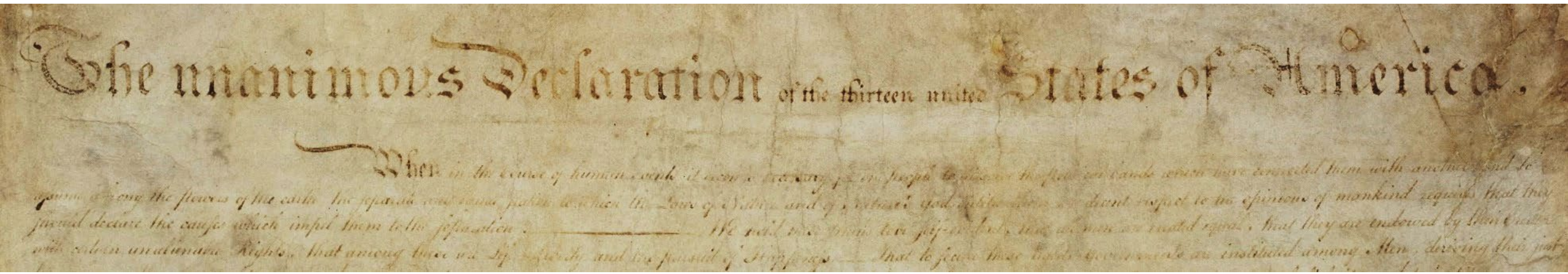
Summary of Feedback:

- Systems approach to Managed Recharge.
 - Not as focused on High Aquifer Retention.
 - Impacts more Important than Volume.
- Analysis of Impacts due to Recharge to optimize Program activities.
- Impacting the reaches on the Snake River below Blackfoot are a key interest.
- Recharge as much as possible when water available.



Priority of appropriation shall give the better right as between those using the water...”

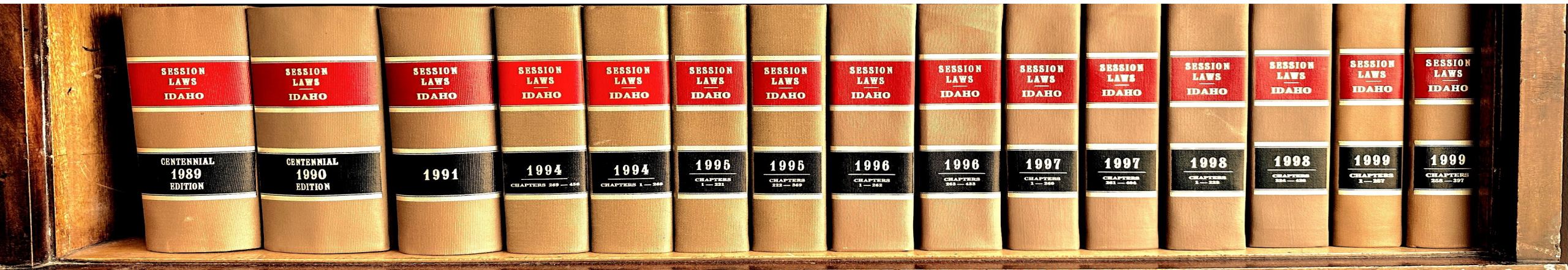
Article XV, Section 3, of the Idaho Constitution.





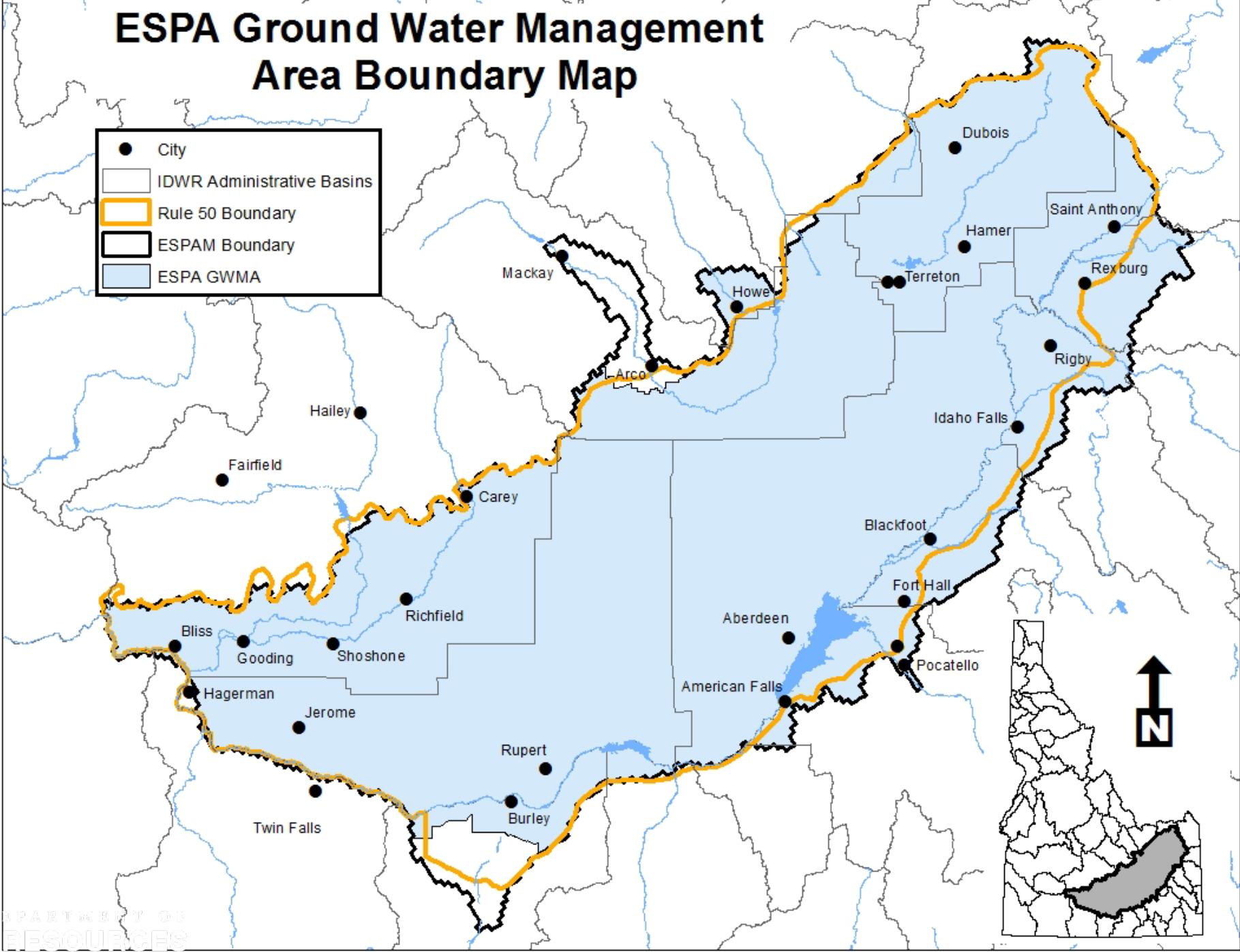
“The director of the department of water resources is authorized to adopt rules and regulations for the distribution of water from the streams, rivers, lakes, *ground water* and other natural water sources as shall be necessary to carry out the laws in accordance with the priorities of the rights of the users thereof.”

Idaho Code, § 42-603 Supervision of Water Distribution Rules & Regulations



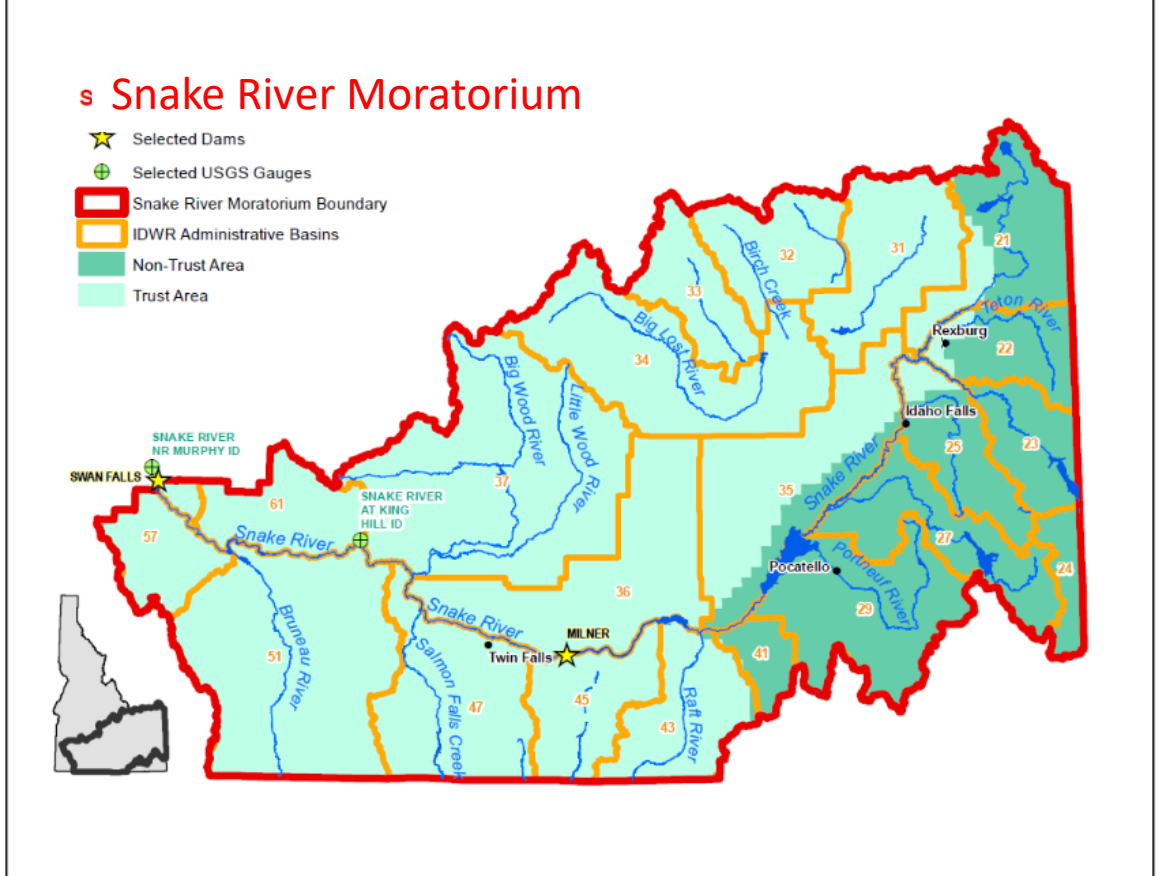
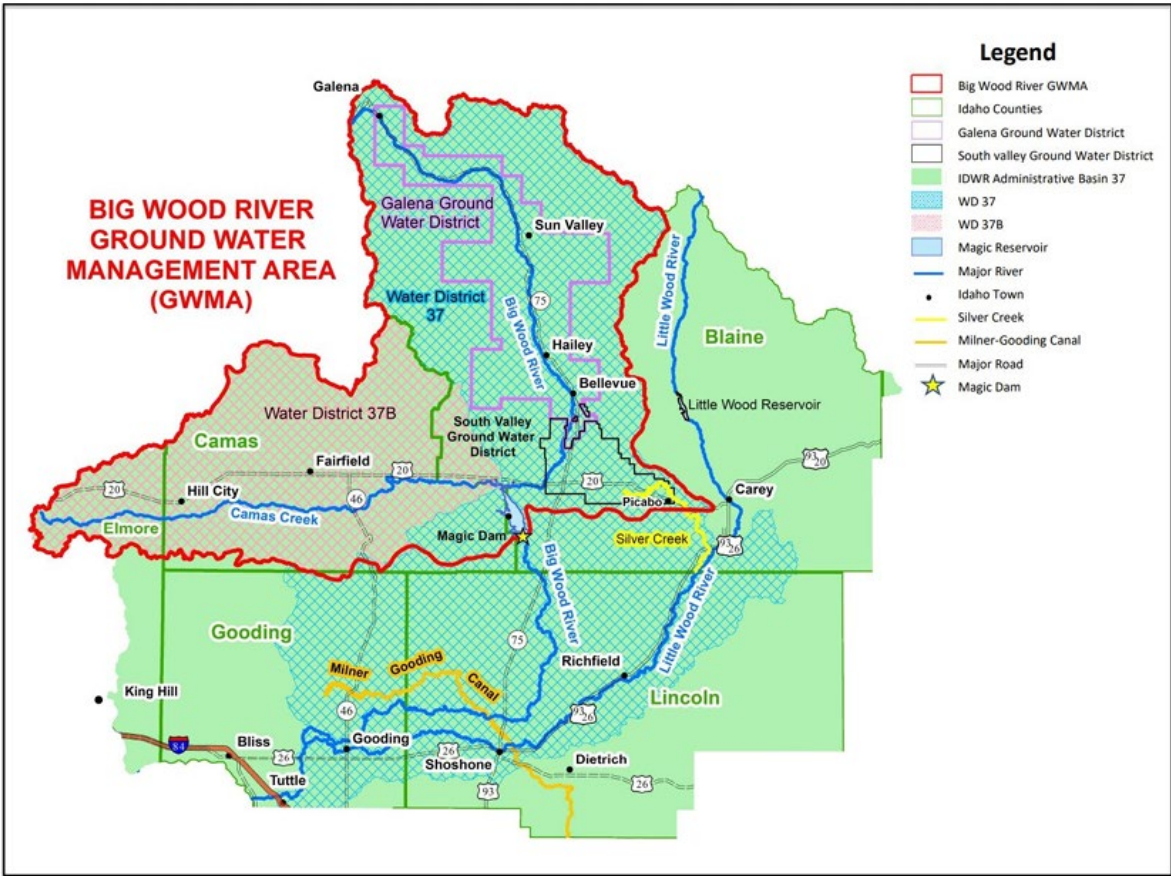
ESPA Ground Water Management Area Boundary Map

- City
- IDWR Administrative Basins
- ▭ Rule 50 Boundary
- ▭ ESPAM Boundary
- ESPA GWMA



Moratorium Orders - Status

- IDWR Issues Big Wood GWMA Moratorium Order – May 17, 2022
- IDWR Issues Snake River Basin Moratorium Order – October 21, 2022
- Consolidated Contested Case Hearing Set for October 2023



Questions

