NEWS RELEASE - FOR IMMEDIATE RELEASE
Idaho Water Resource Board contact: Brian Patton, Deputy Director, IDWR, 208-287-4800

Water levels in Eastern Snake Plain Aquifer rise by 800,000 acre-feet in the last year, 500,000 acre-feet over the last decade

BOISE – (Aug. 9, 2024) – Hydrologists with the Idaho Department of Water Resources provided an update on water volume changes in the Eastern Snake Plain Aquifer (ESPA) on Thursday, reporting that the aquifer had a net gain of 800,000 acre-feet of water from the spring of 2023 to the spring of 2024, and 500,000 acre-feet over the last 10 years.

Snake River "Reach Gains" from the ESPA between Blackfoot to Minidoka have dropped from about 1.6 million acre-feet of water to 1.4 million acre-feet from 2019 to 2023, officials said. Natural spring flows from the ESPA also are dropping slightly after going up after the big winter of 2017, based on the measurements from 17 springs that flow into the Snake River from Milner Dam to King Hill, officials said.

Over the last decade, the combined efforts of the Idaho Water Resource Board's Managed ESPA Recharge Program and reduced pumping and private recharge by groundwater users have combined to contribute a net gain of 2.62 million acre-feet of water stored in the aquifer, officials said.

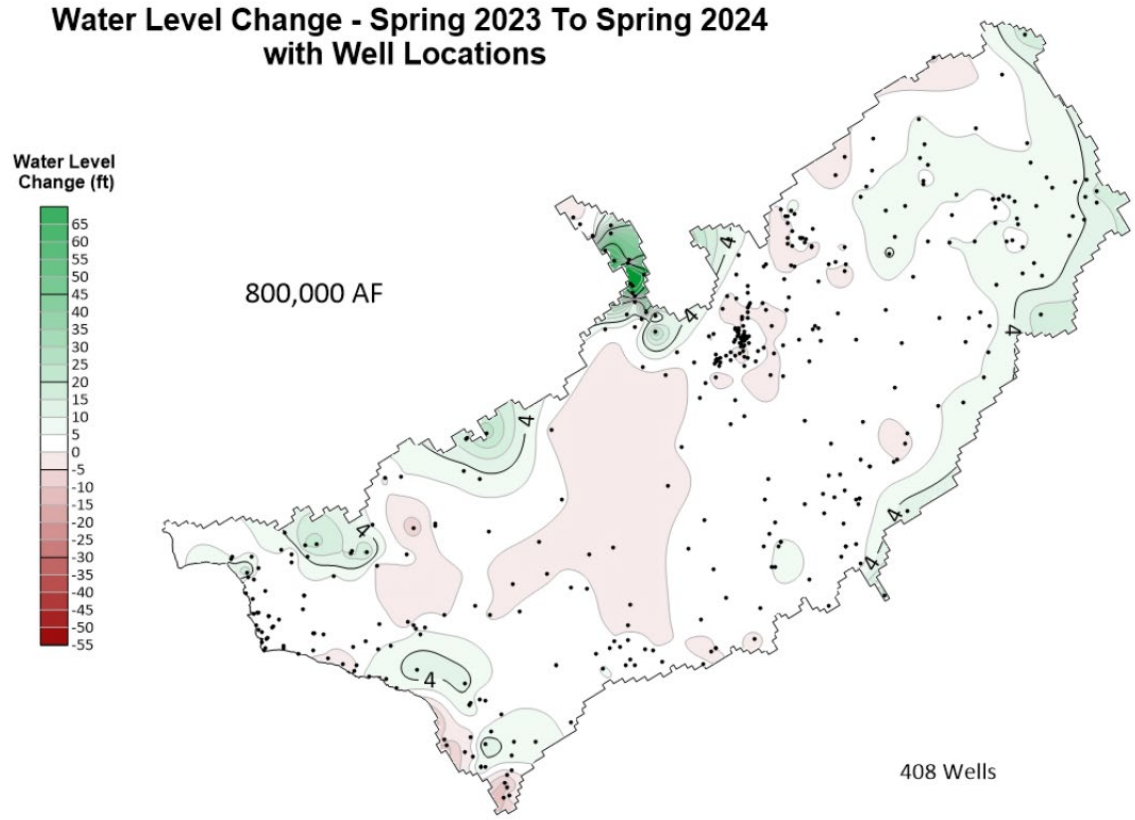
"The ESPA leaks and aquifer-storage gains can be fleeting," noted Mike McVay, IDWR hydrogeologist. "Changes in weather are to be expected. Perseverance through dry times and drought will be vital to our success."

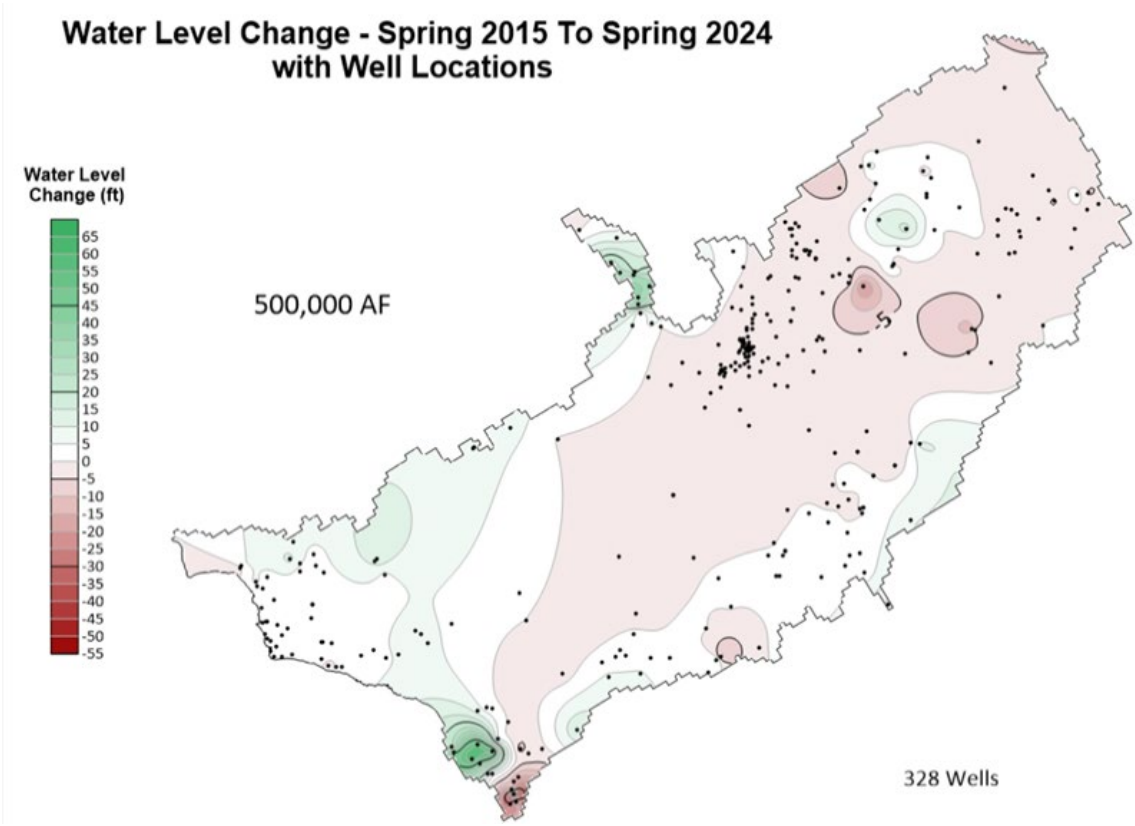
The Idaho Water Resource Board also received a presentation about aquifer trends in the Raft River Basin on Thursday, learning that groundwater withdrawals in the Raft have drawn down that tributary aquifer to the point where ESPA water flows are migrating into the basin, officials with the Idaho Geologic Survey said.

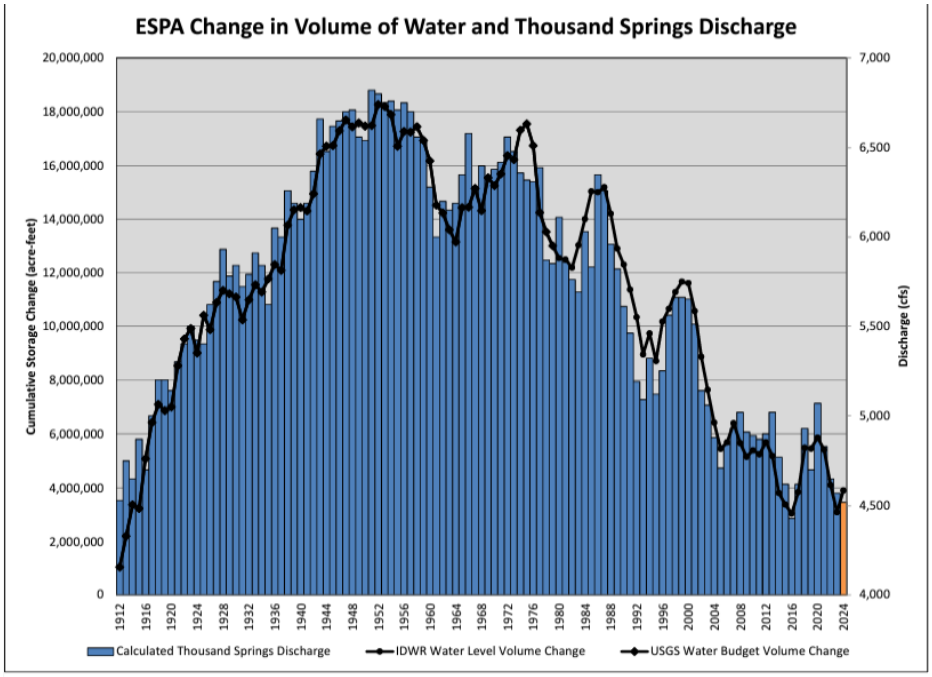
The Raft River Basin has been designated as a Critical Ground Water Management Area since 1963. Since 2000, the Raft River CGWA has seen groundwater declines of up to seven feet per year. The Board contracted with the Idaho Geologic Survey to do a hydrologic characterization study from 2019 to 2024 to learn more about surface water and groundwater trends in the Raft River Basin.

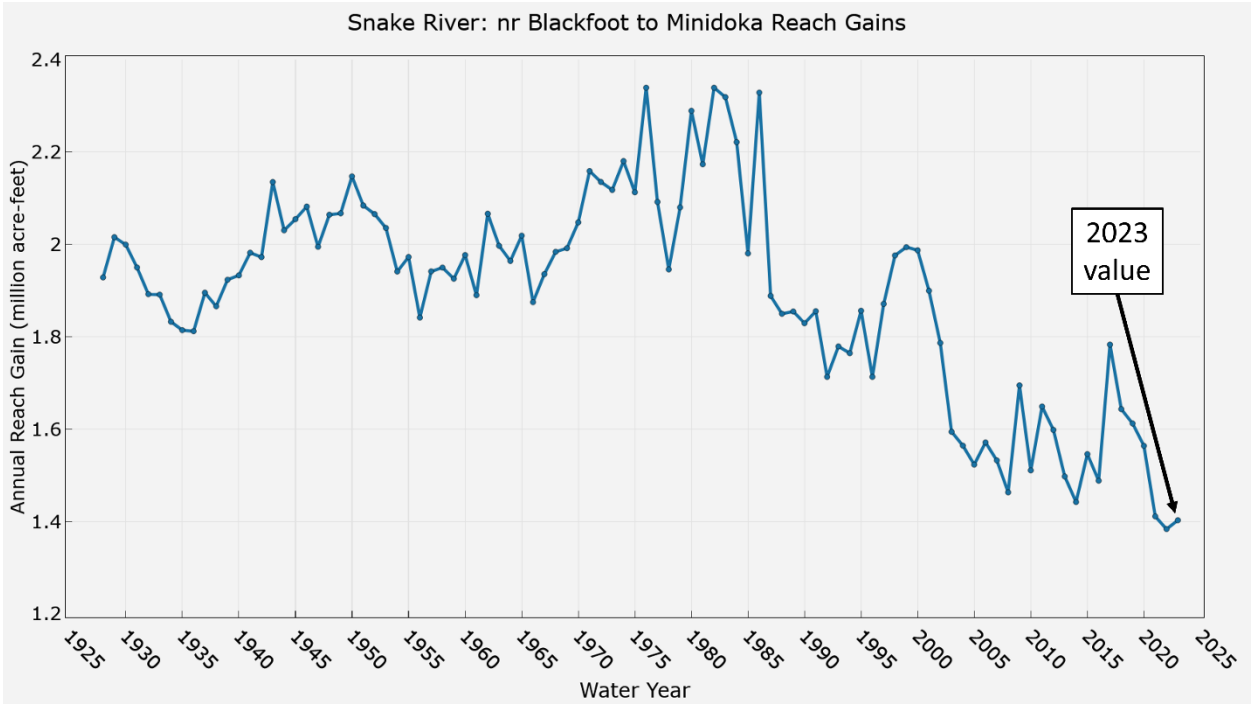
For more detailed information about the hydrologic reports presented to the Board on Thursday, go to: https://idwr.idaho.gov/wp-content/uploads/sites/2/iwrb/2024/AquiferStabilizationCommitteeMeeting2-24MATERIALS.pdf

Key illustrations shared by hydrologists on Thursday:






ESPA Change in Volume of Water and Thousand Springs Discharge
Cumulative Storage Change (acre-feet)
Discharge (cfs)
Calculated Thousand Springs Discharge
IDWR Water Level Volume Change
USGS Water Budget Volume Change


Snake River: nr Blackfoot to Minidoka Reach Gains
Annual Reach Gain (million acre-feet)
Water Year
2023 value

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