



**Sierra Valley  
Groundwater  
Management District**

# Board of Directors Meeting

February 10, 2025

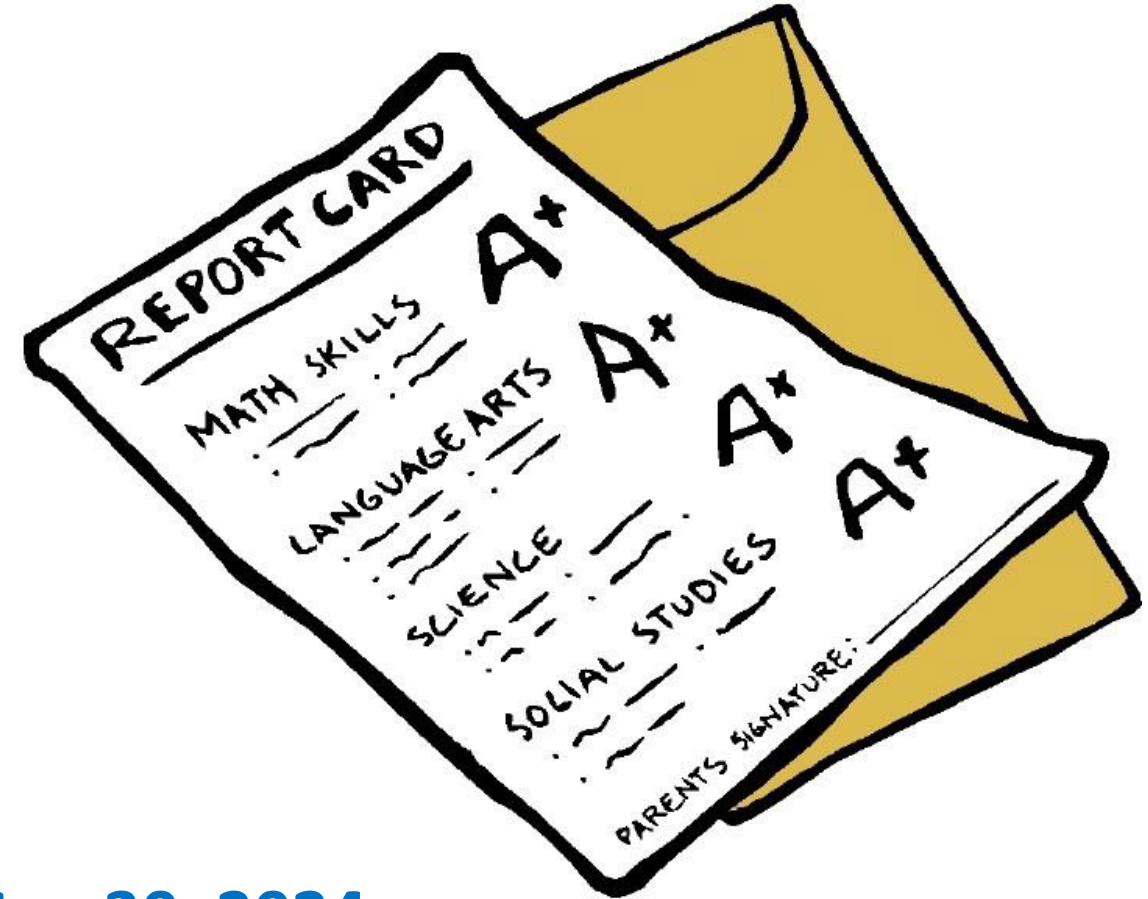


**LARRY WALKER  
ASSOCIATES**  
science | policy | solutions



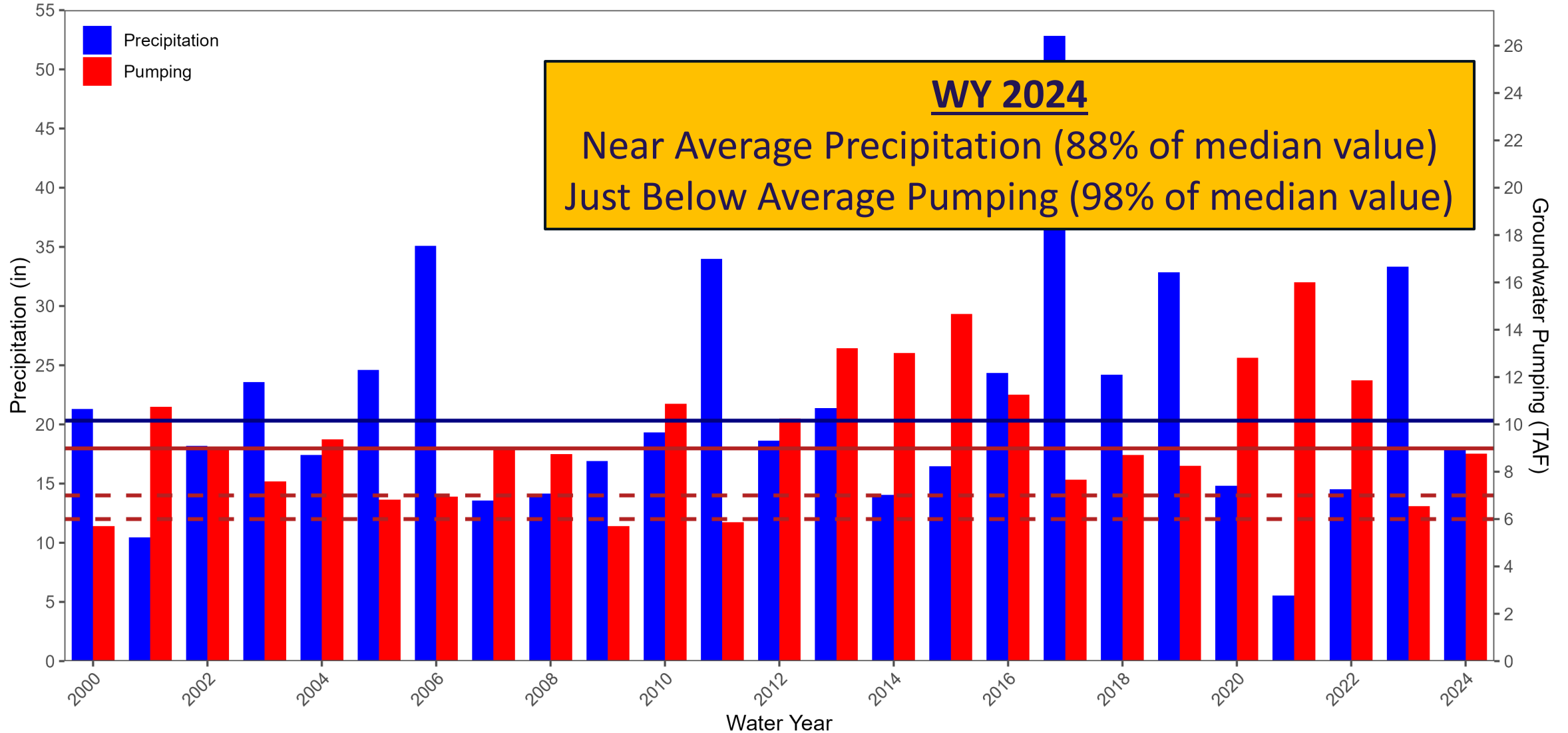
# GSP Annual Reports (23 CCR §356.2)

- Due to DWR April 1 every year
- Summarizes hydrologic conditions and storage changes over the preceding water year
- Describes progress towards plan implementation



**Annual Report WY 2024: Oct 1, 2023 - Sep 30, 2024**

## Sierra Valley Annual Precipitation and Pumping



# WY 2024 GSP Annual Report Conditions Summary

Median change in upper aquifer water levels (measured):  
**-0.56 ft**

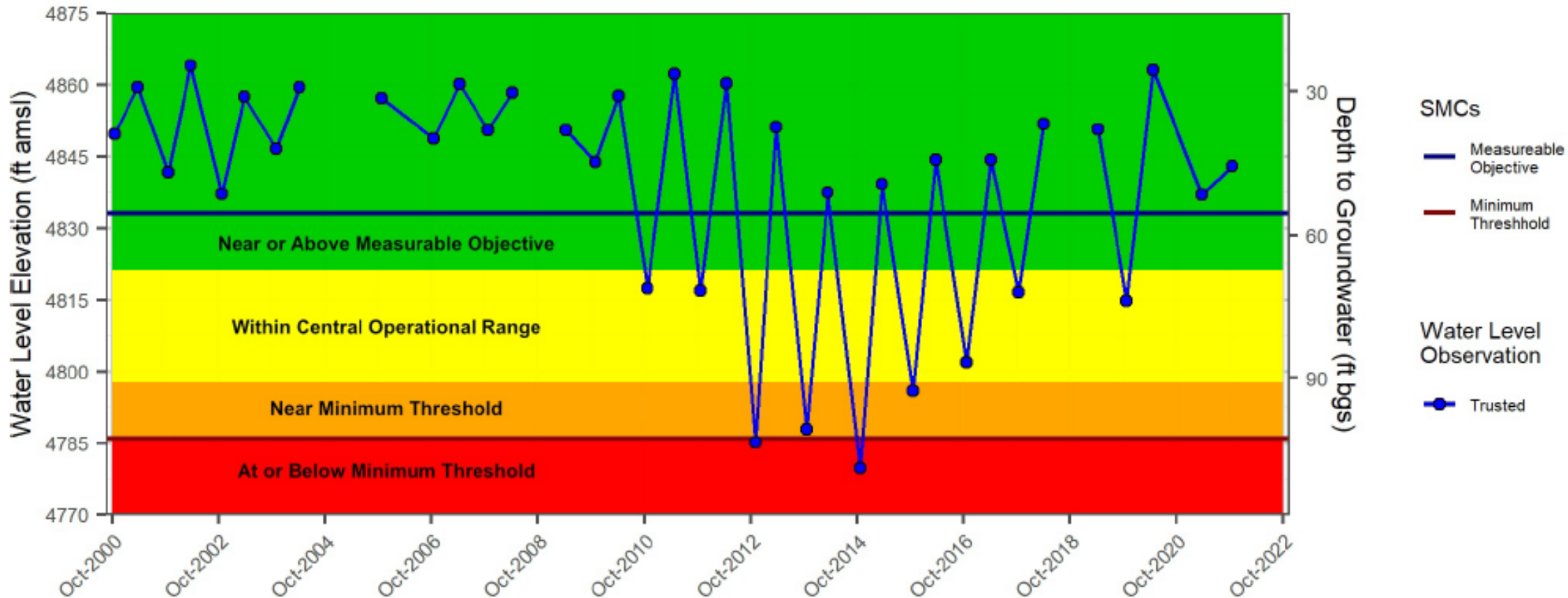
Median change in upper aquifer water levels (measured):  
**+ 0.65 ft**

Total groundwater extractions (measured + estimated):  
**8,766 AF**

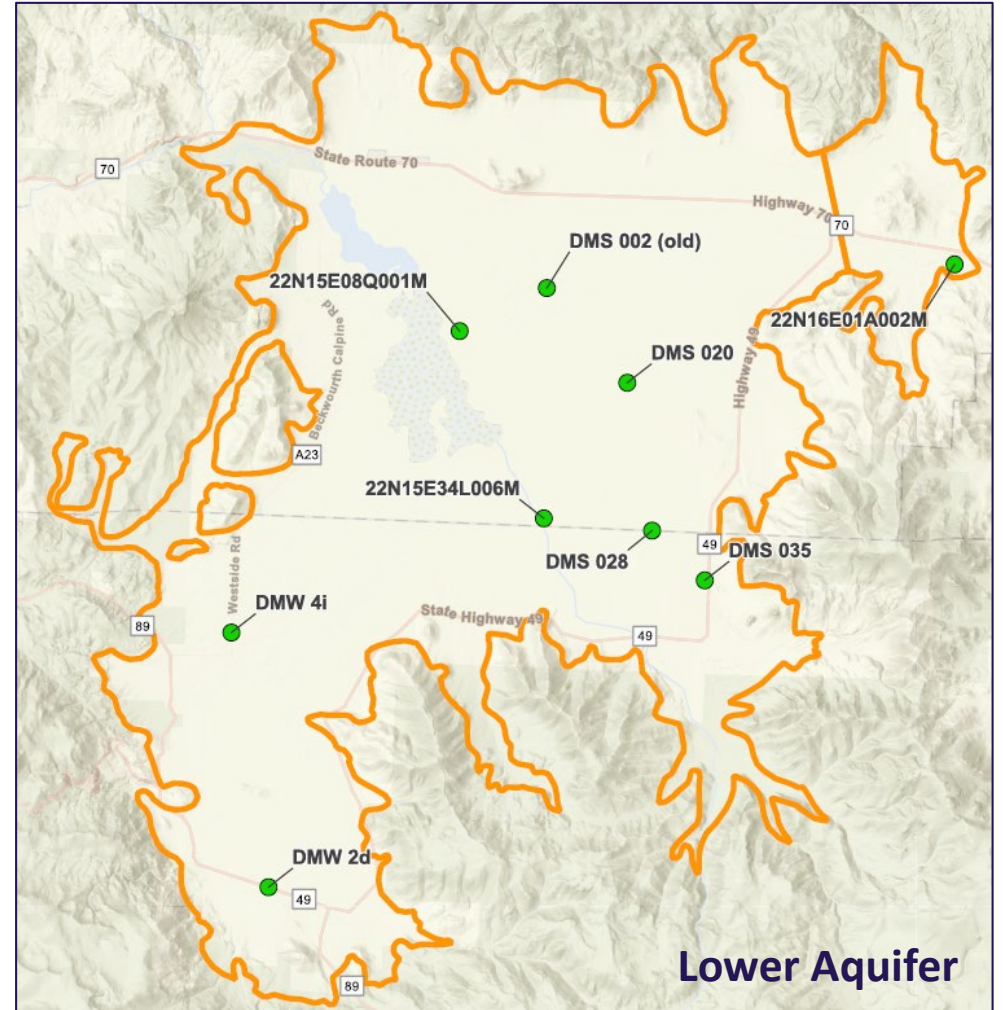
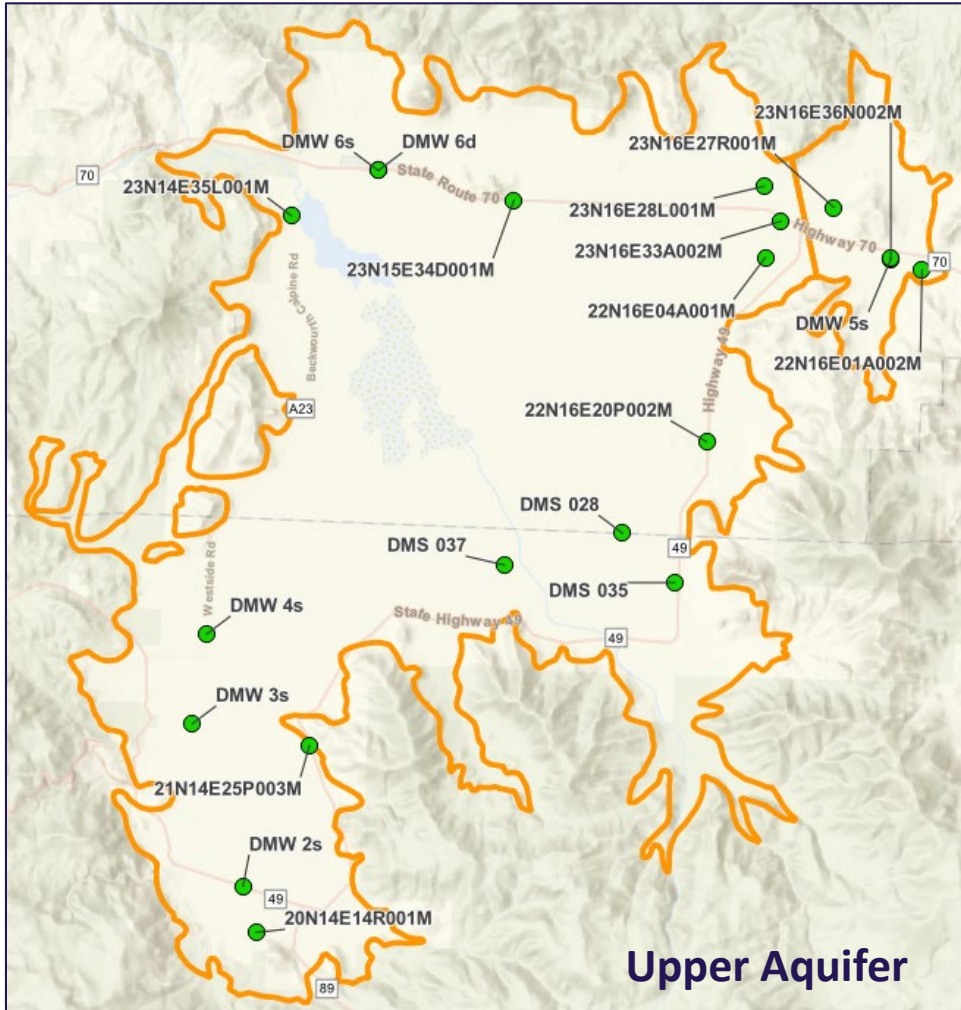
Change in Storage (estimated from SVHSM):  
**-7,054 AF**

# Sustainable Management Criteria (SMC) Status Example

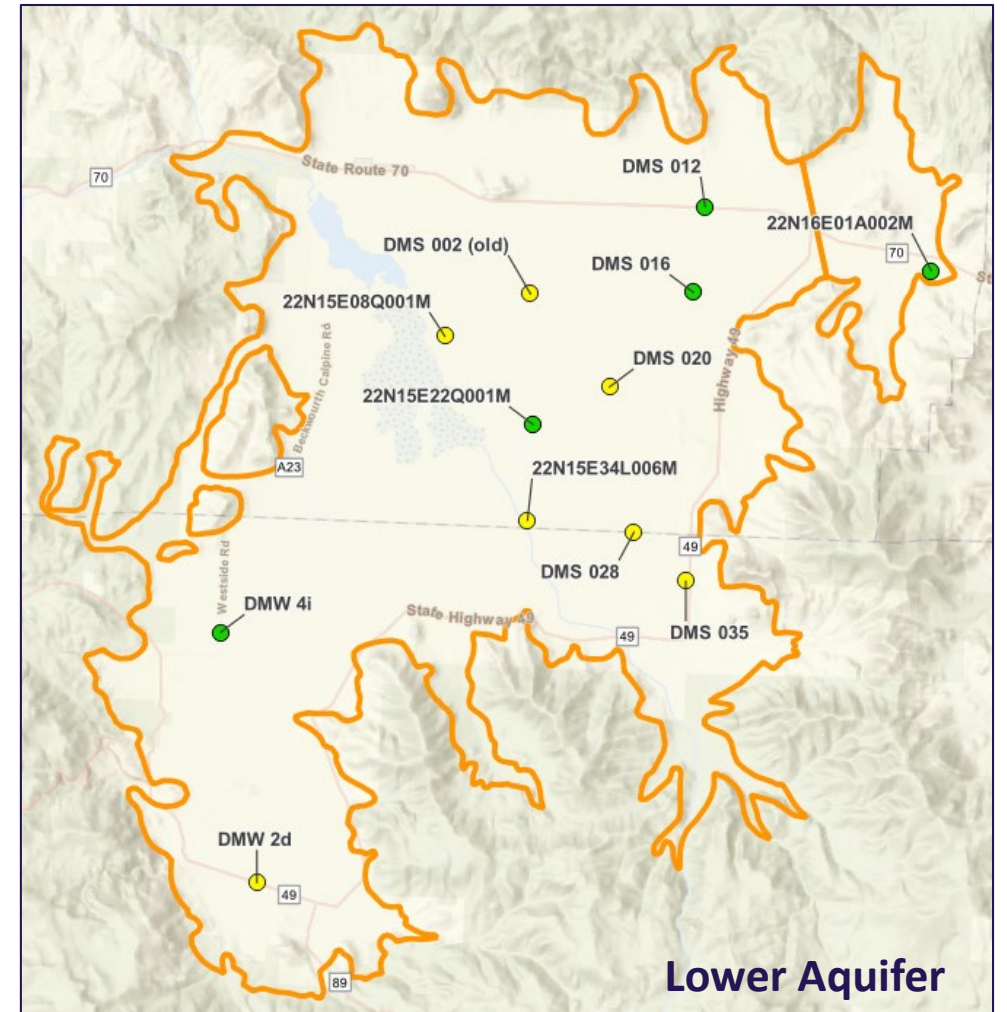
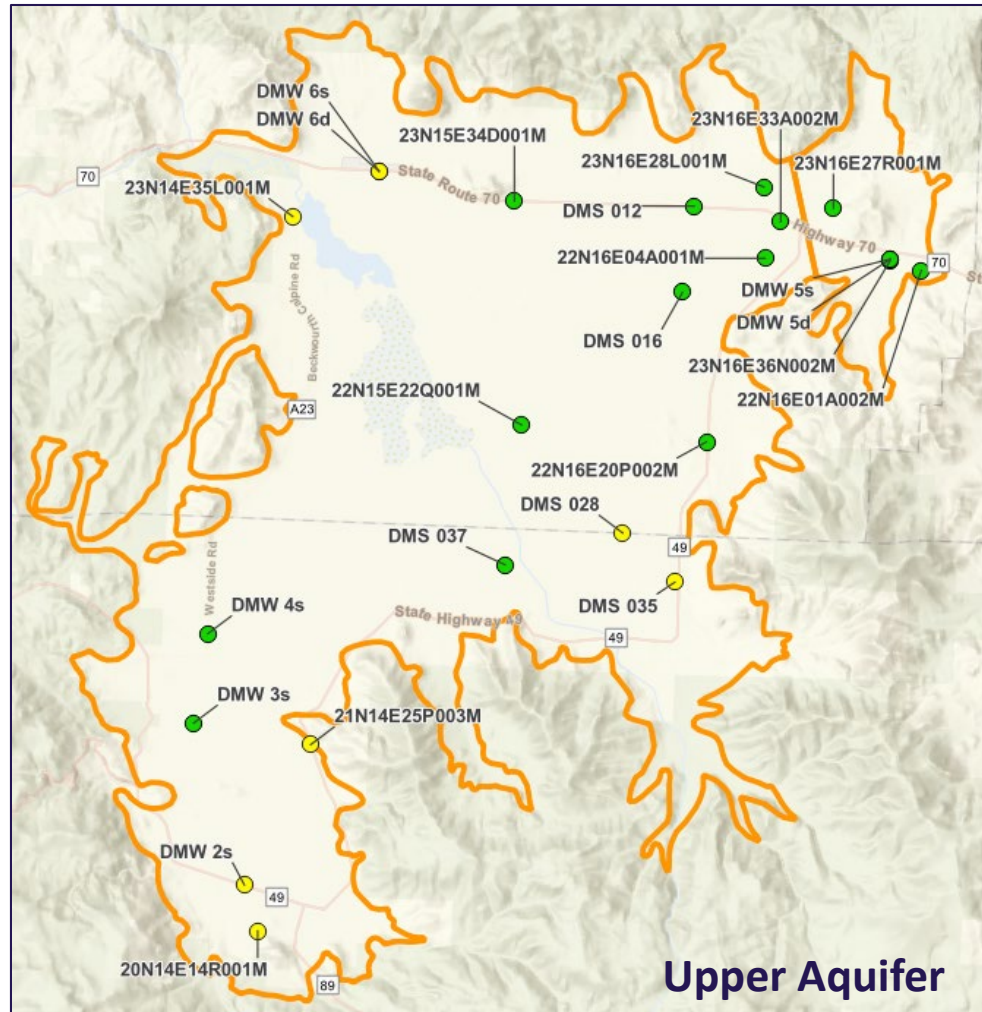
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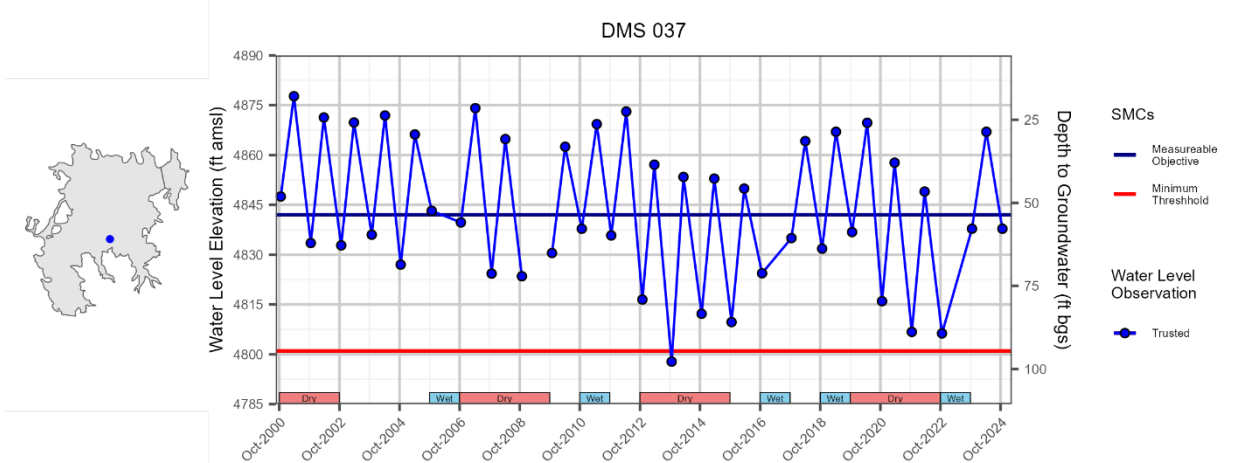
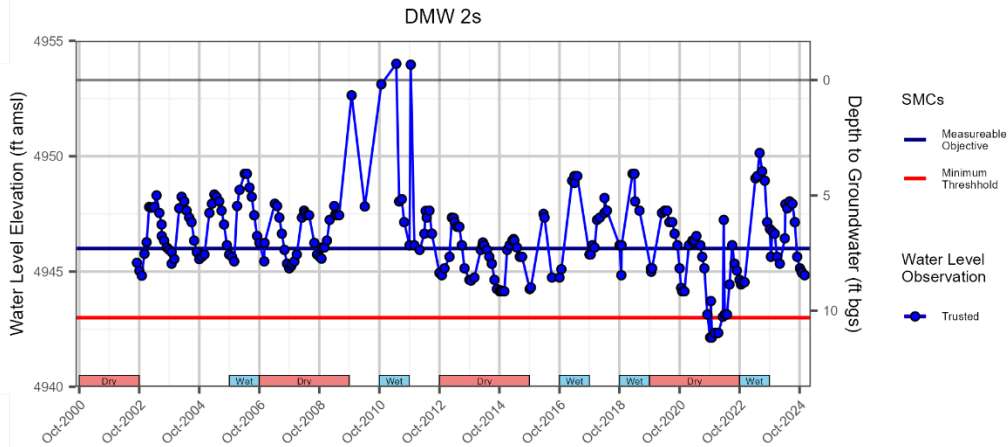
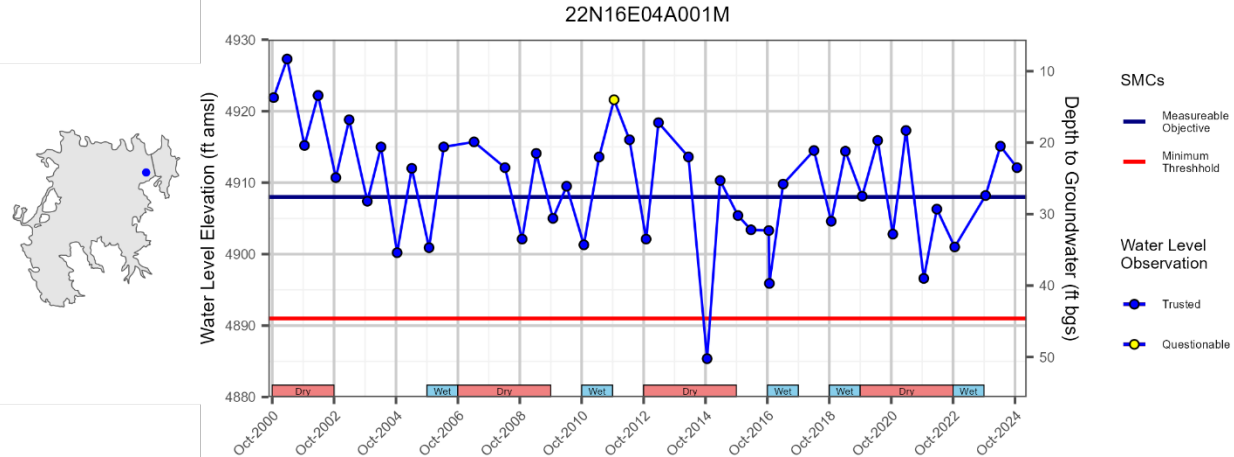
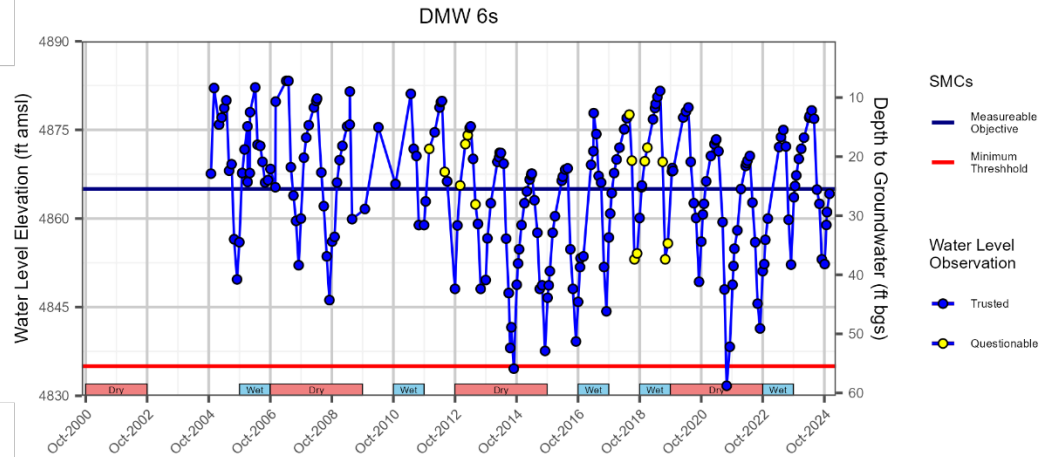
# Spring 2024 SMC Status



# Fall 2024 SMC Status

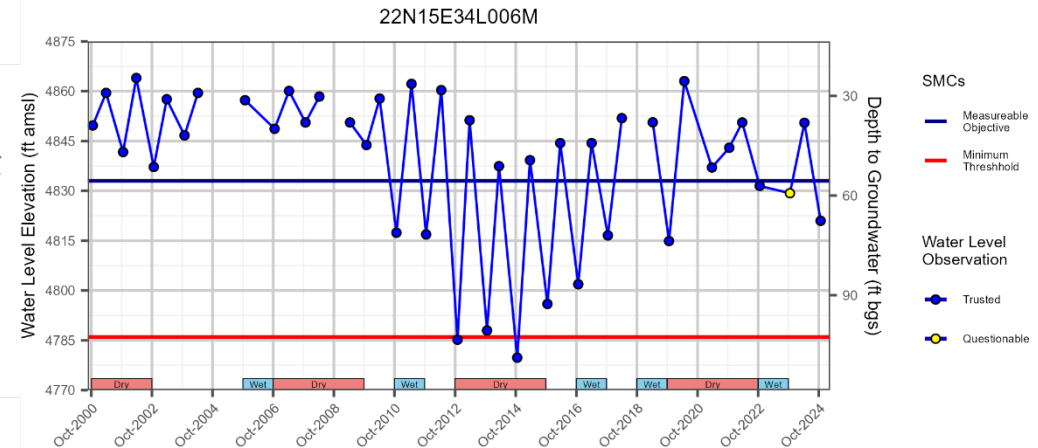
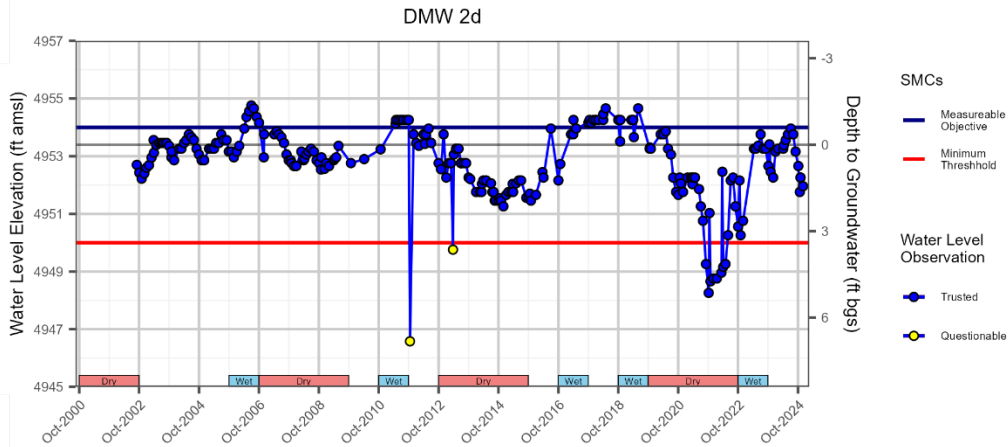
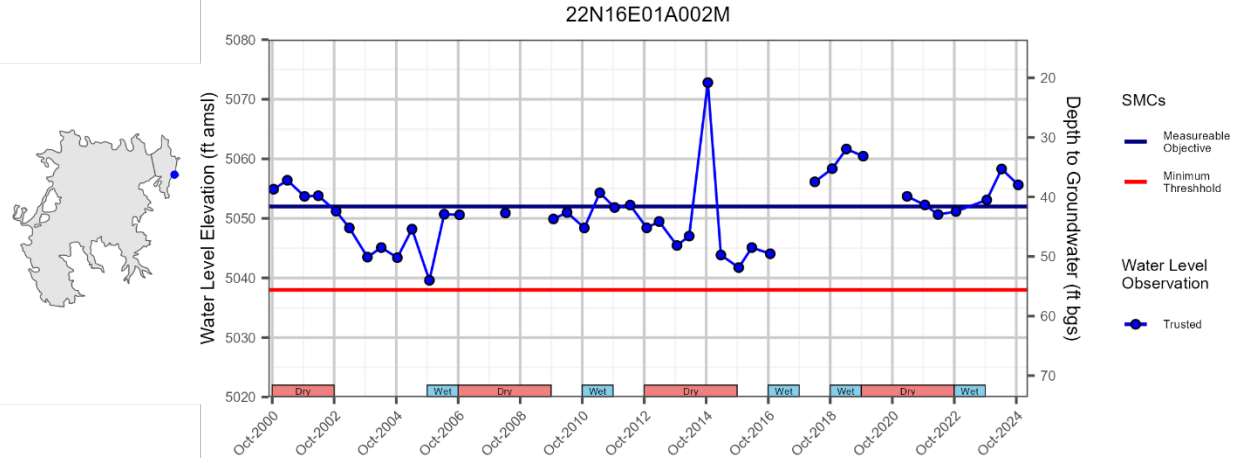
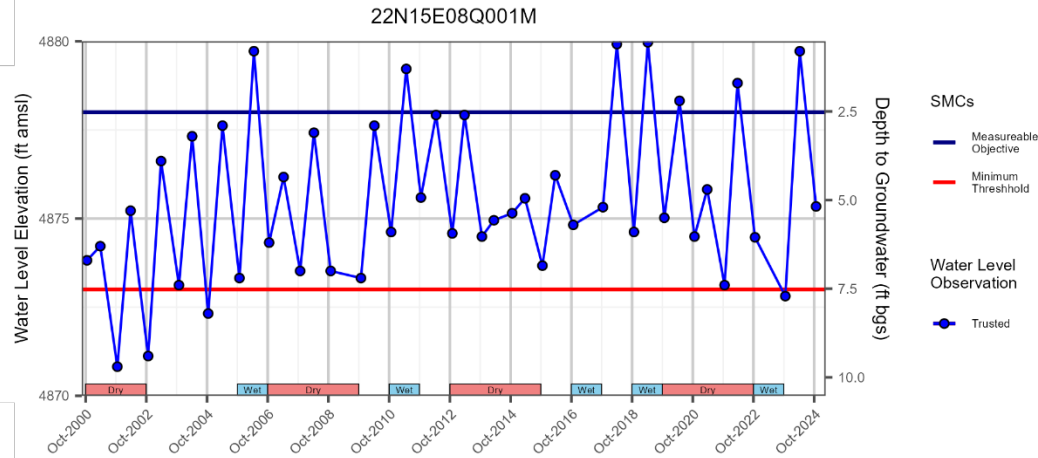


# Example Hydrographs - Upper Aquifer





# Example Hydrographs - Lower Aquifer



## Table 1. Groundwater extractions.

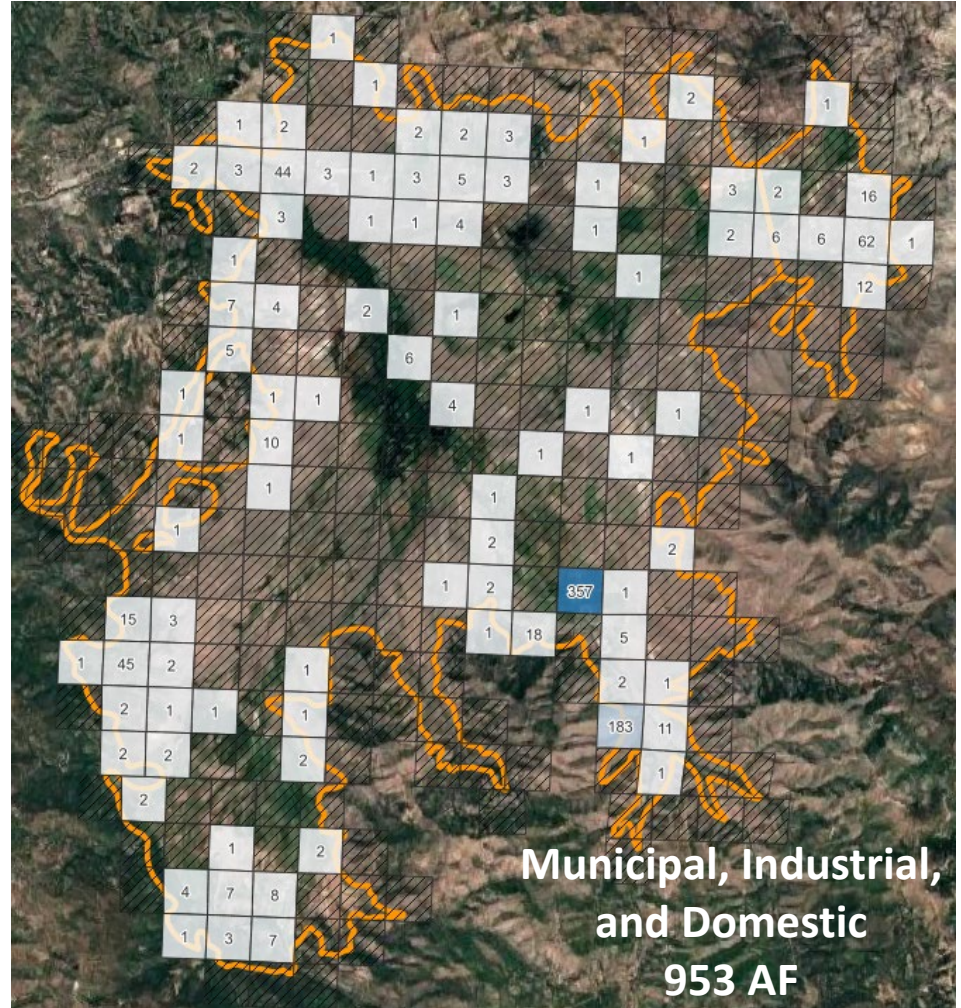
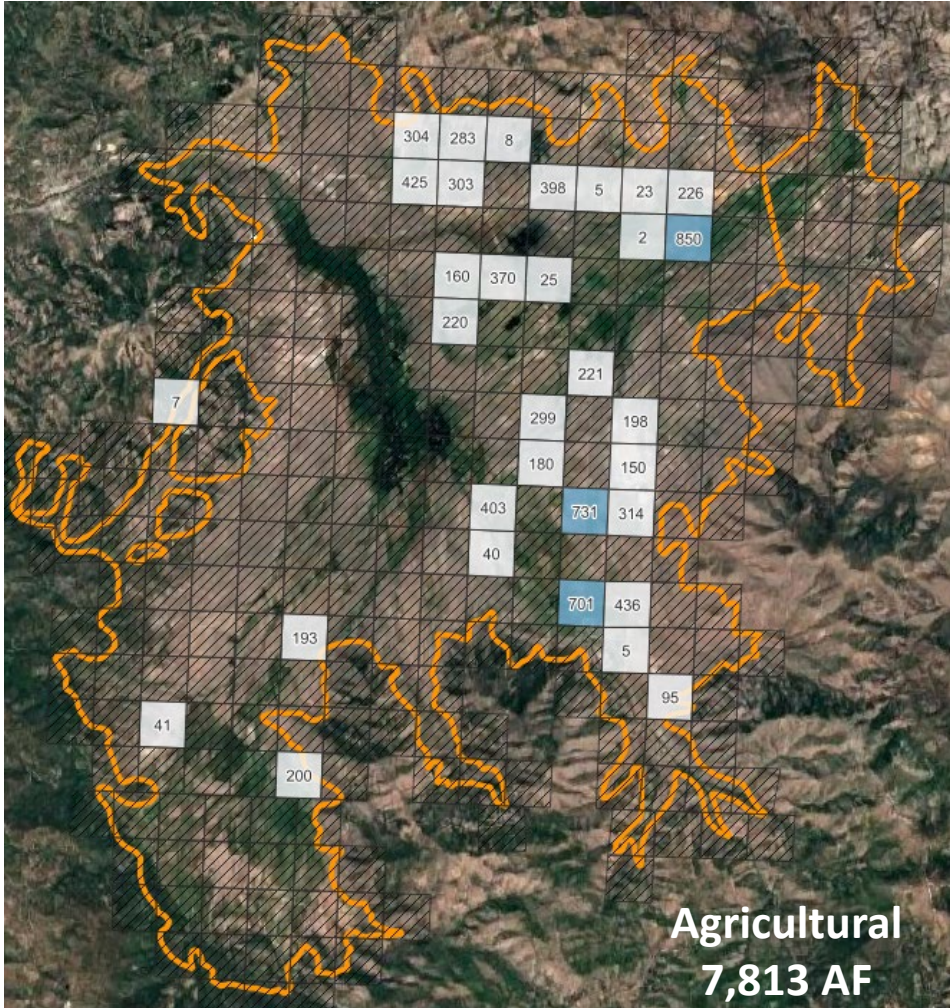
Sector	Method	GW Extraction Volume (AF)	Accuracy	Range (AF)
Agriculture	Totalizer	7,813	± 5 %	7,422 - 8,204
Municipal and Industrial	Domestic	379	± 20 %	303 - 455
Municipal and Industrial	Totalizer	574	± 5 %	546 - 603
<b>Total</b>	-	<b>8,766</b>	-	<b>8,271 - 9,262</b>

**WY 2024 Pumping Volume: 8,766 AF**

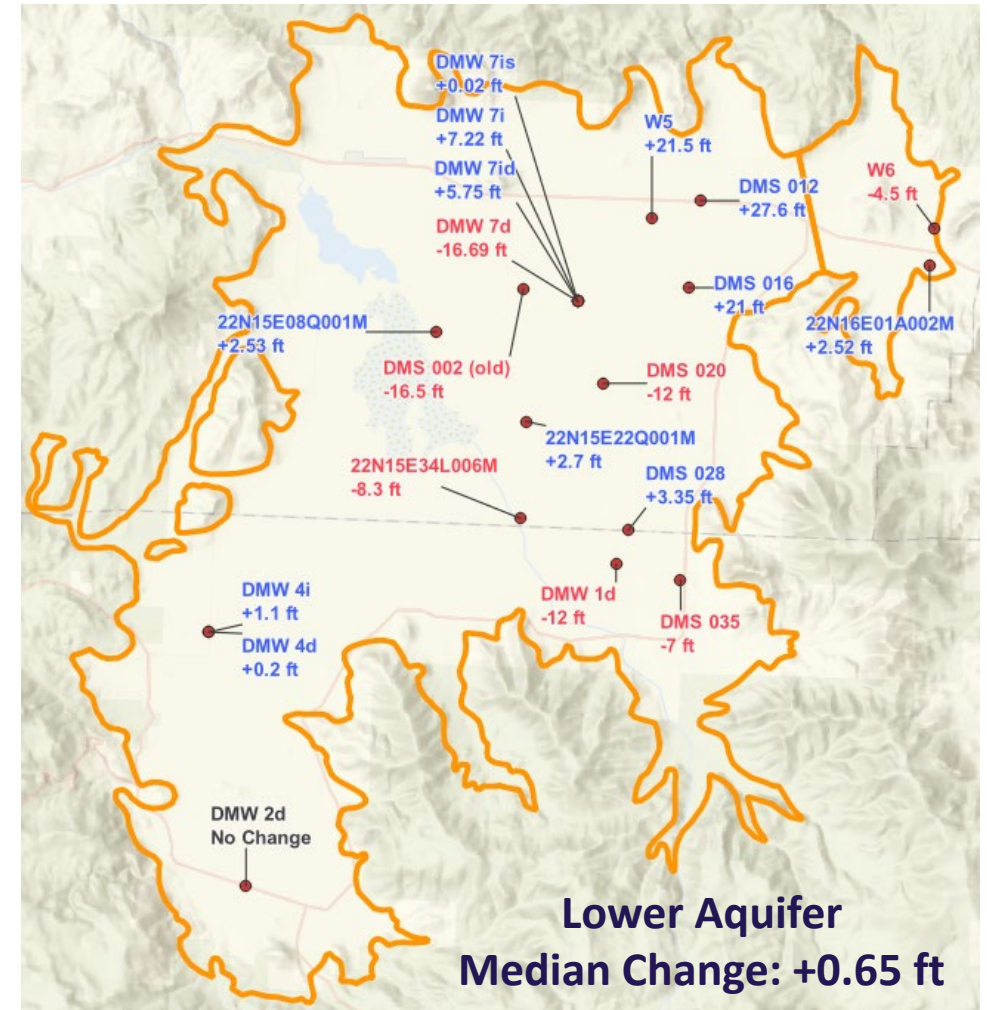
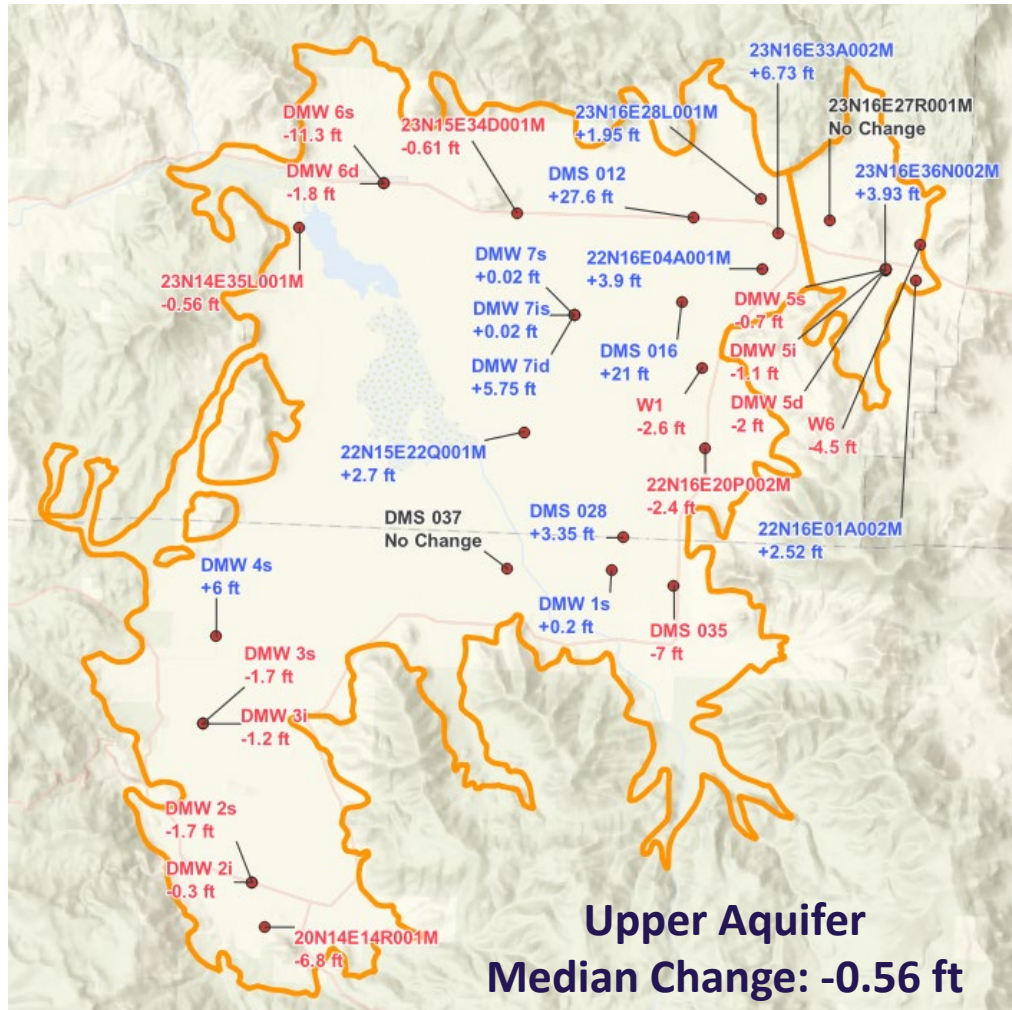
**WY 2023 Pumping Volume: 6,557 AF**

**Historical Range: 5,700 - 16,000 AF**

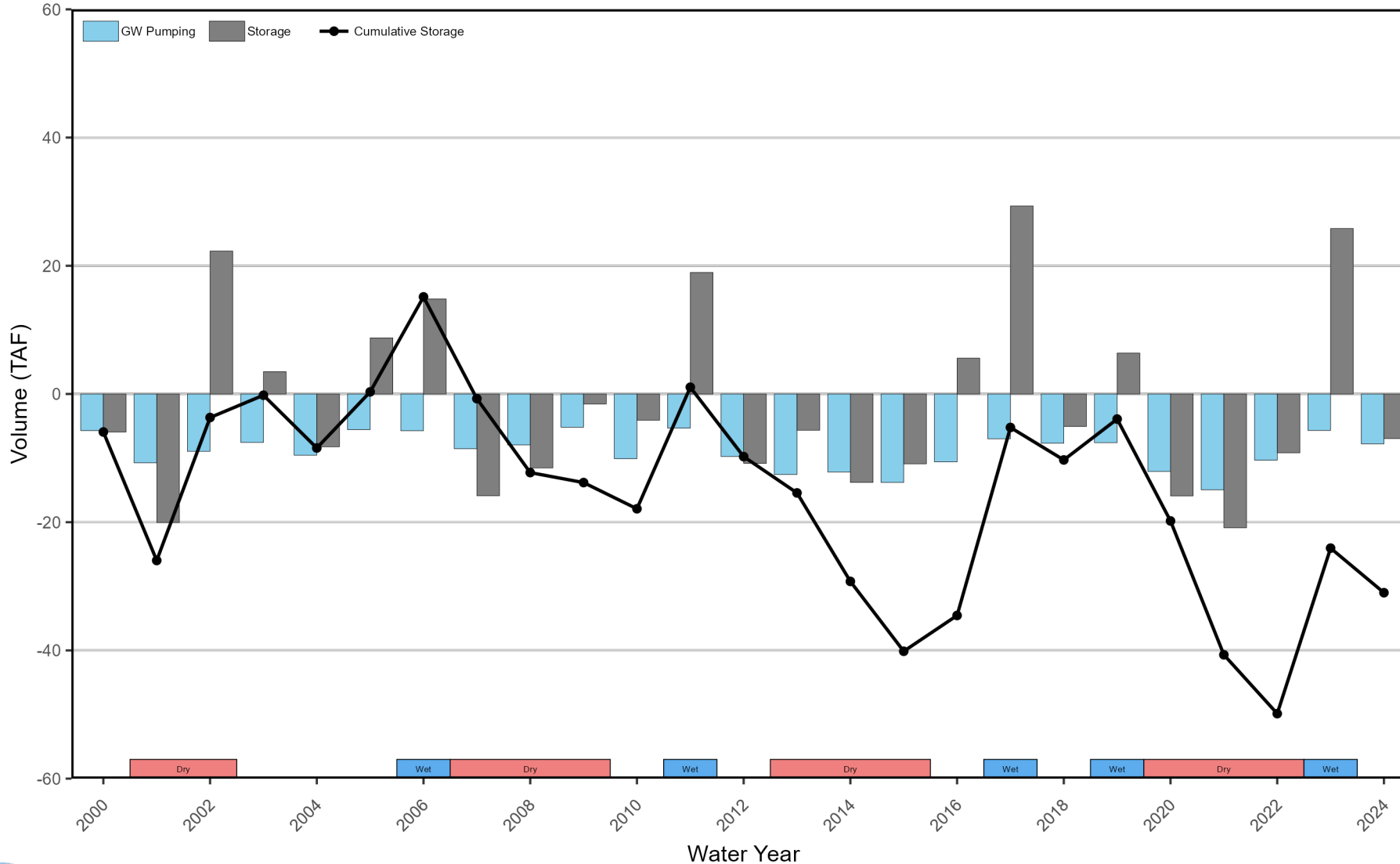
# WY 2024 Groundwater Extractions



# Fall 2023 to Fall 2024 Change in Water Levels



Annual Groundwater Pumping and Change in Storage



WY 2024 Estimated  
Change in Storage:  
**-7,054 AF**

Storage Relative to  
Oct 1, 2000:  
**-30,998 AF**

# PMA Project Status

- Well Inventory
  - State well completion database reviewed to build on GSP well inventory
  - Currently further evaluating location, well status and geologic conditions
- Irrigation Efficiency
  - Assessments completed at 7 farms/ranches; 4 more scheduled for Feb 2025
  - 2 additional ranches identified for LESA/LEPA conversion demonstration projects
- Groundwater Recharge
  - Initial recharge pilot conducted on Smithneck Creek in Spring 2024
  - Winter 2025 pilot projects - Staverville Creek and Little Last Chance Creek

## PMA Project Status (con't)

- Monitoring Network and Data Gaps
  - Stream gages and well data loggers added near Smithneck, Little Last Chance and Staverville Creeks
  - Test pits used to evaluate soil permeability
  - Subsidence measurements continued
- GSP Updates
  - Recent data and National Hydrologic Model values used to update and calibrate upper watershed rainfall-runoff (PRMS) model.
  - Additional model improvements and calibration planned for summer 2025



# Sierra Valley Groundwater Management District

