

NEVADA DIVISION OF
WATER RESOURCES



I don't need water! Water's for quitters! I don't need it! I don't need it!...

Smith Valley Annual Groundwater Update
March 24, 2026

Presented by:
**Lauren Bartels, Kip Allander, and
Carly Venghaus**
Nevada Division of Water Resources



Additional material: <https://www.youtube.com/watch?v=m5uayeTCYJQ>

OVERVIEW

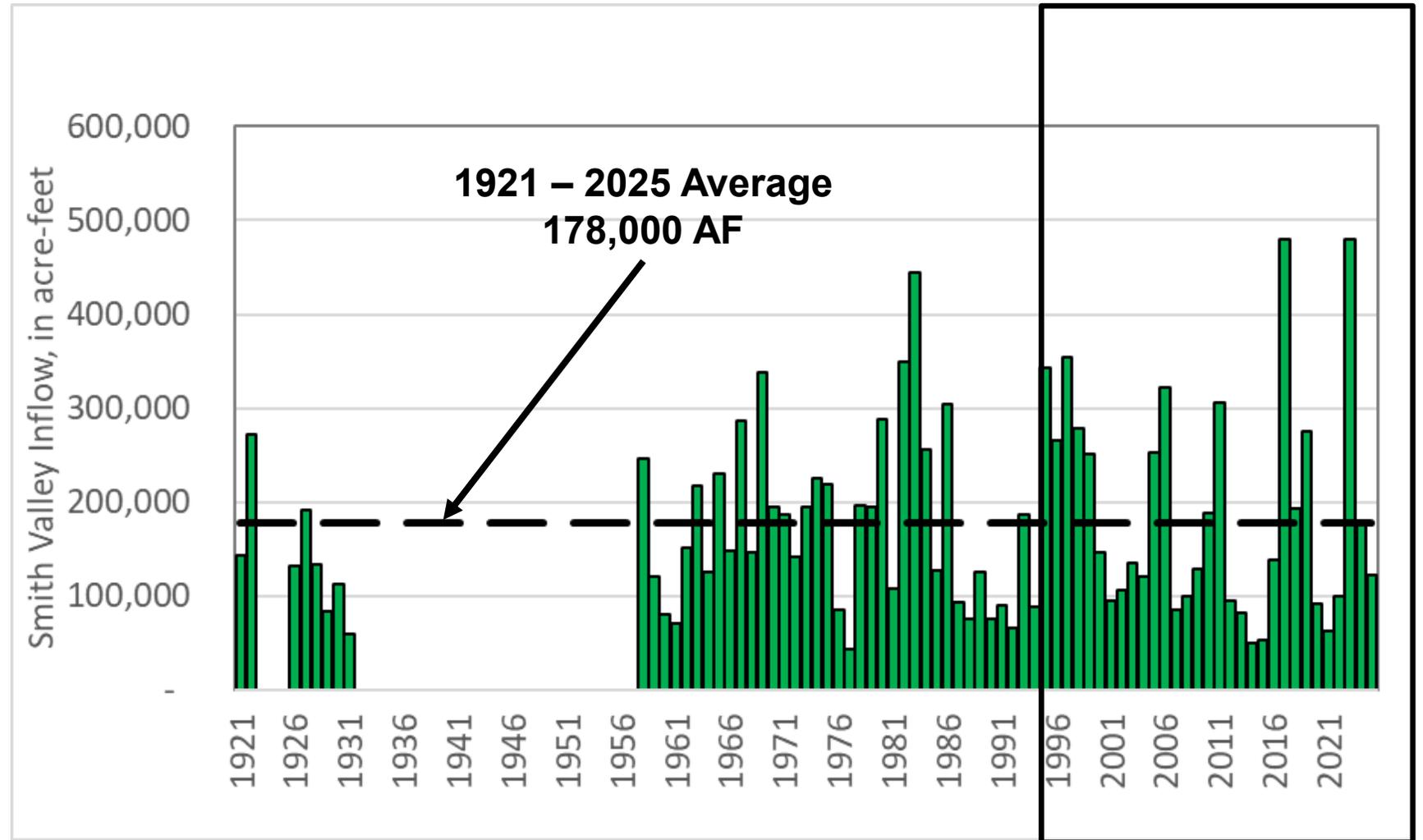
- Recap of 2025 runoff
- Pumping and water levels for 2025
- Current water supply conditions
- Pumping goals for 2026
- Summary and Outlook



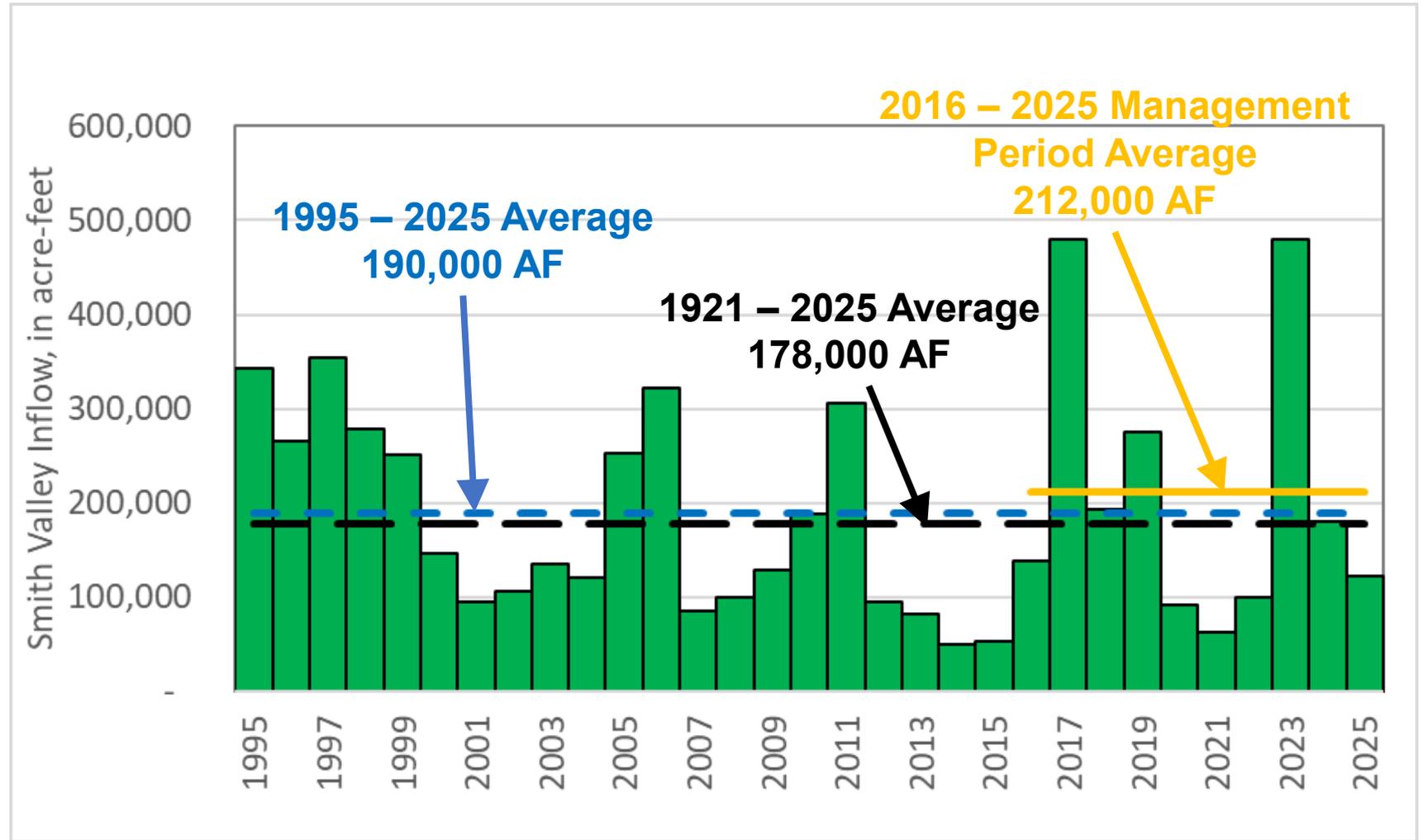
RECAP OF 2025 RUNOFF SEASON

WALKER RIVER INFLOW TO SMITH VALLEY – FULL PERIOD

2025 runoff was less than long-term average by about 56,000 AF.



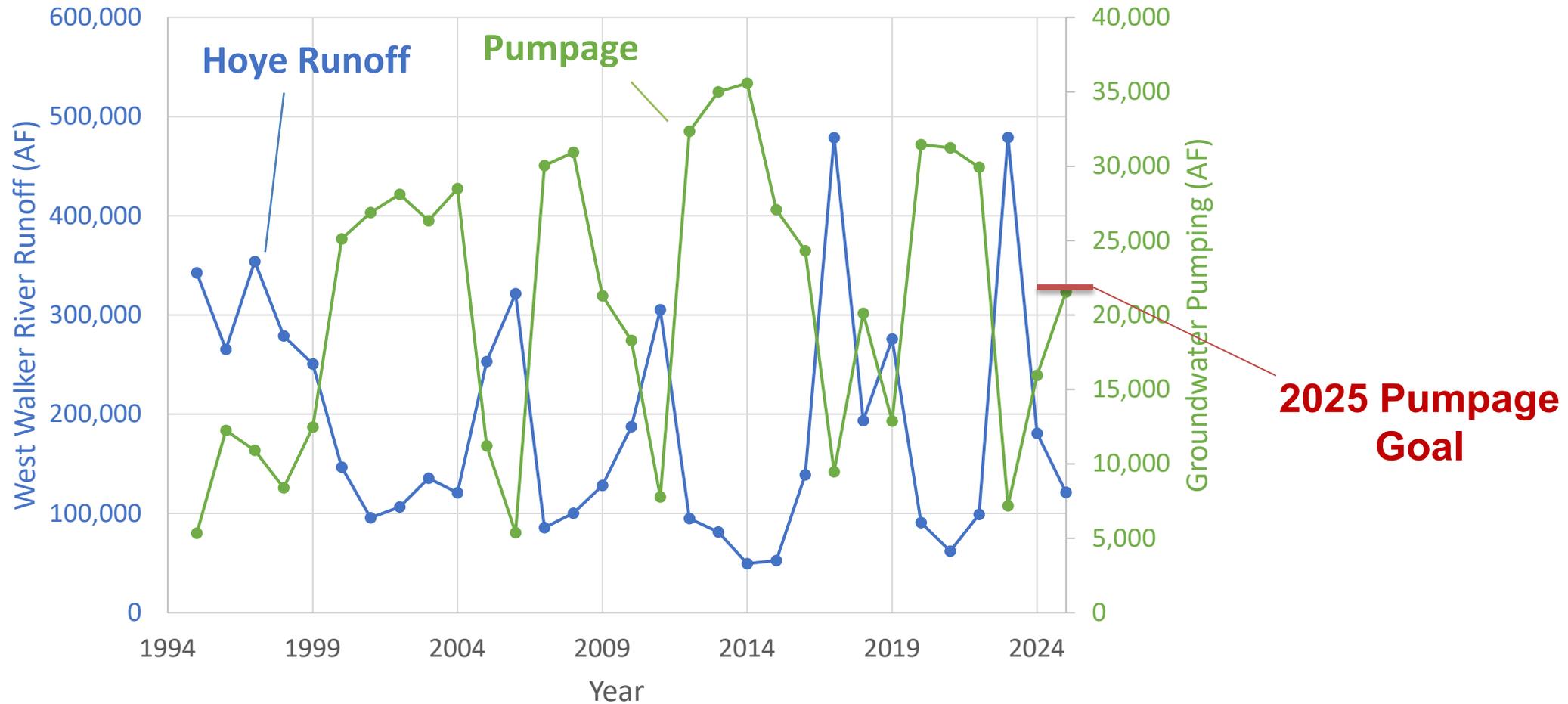
WALKER RIVER INFLOW TO SMITH VALLEY – 2016 – 2025 MANAGEMENT PERIOD



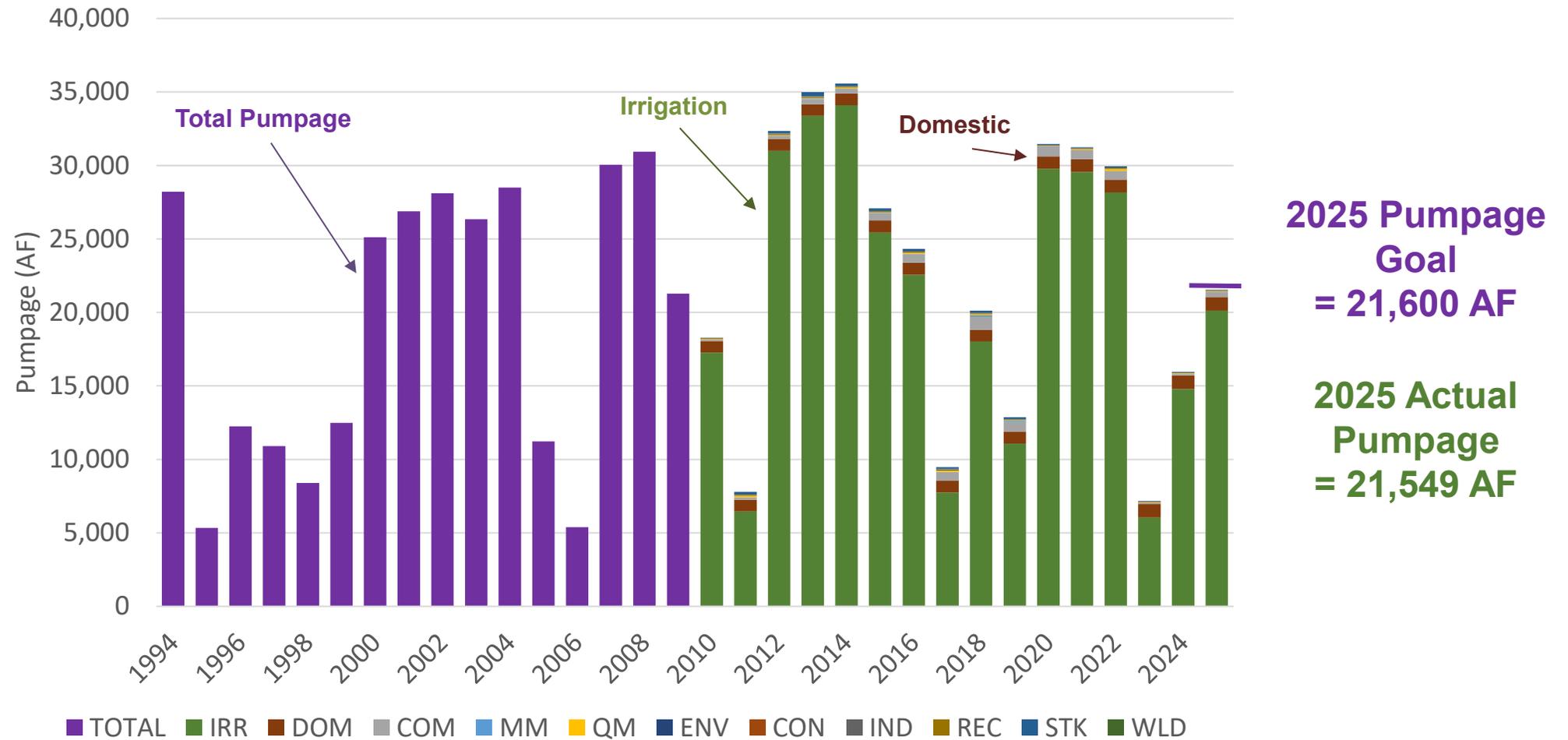
2016 – 2025
Management period
average runoff is 22,000
acre-feet wetter than
1995 – 2025 period.

2025 PUMPING AND WATER LEVEL REVIEW

WALKER RIVER STREAMFLOW VS. SMITH VALLEY PUMPING

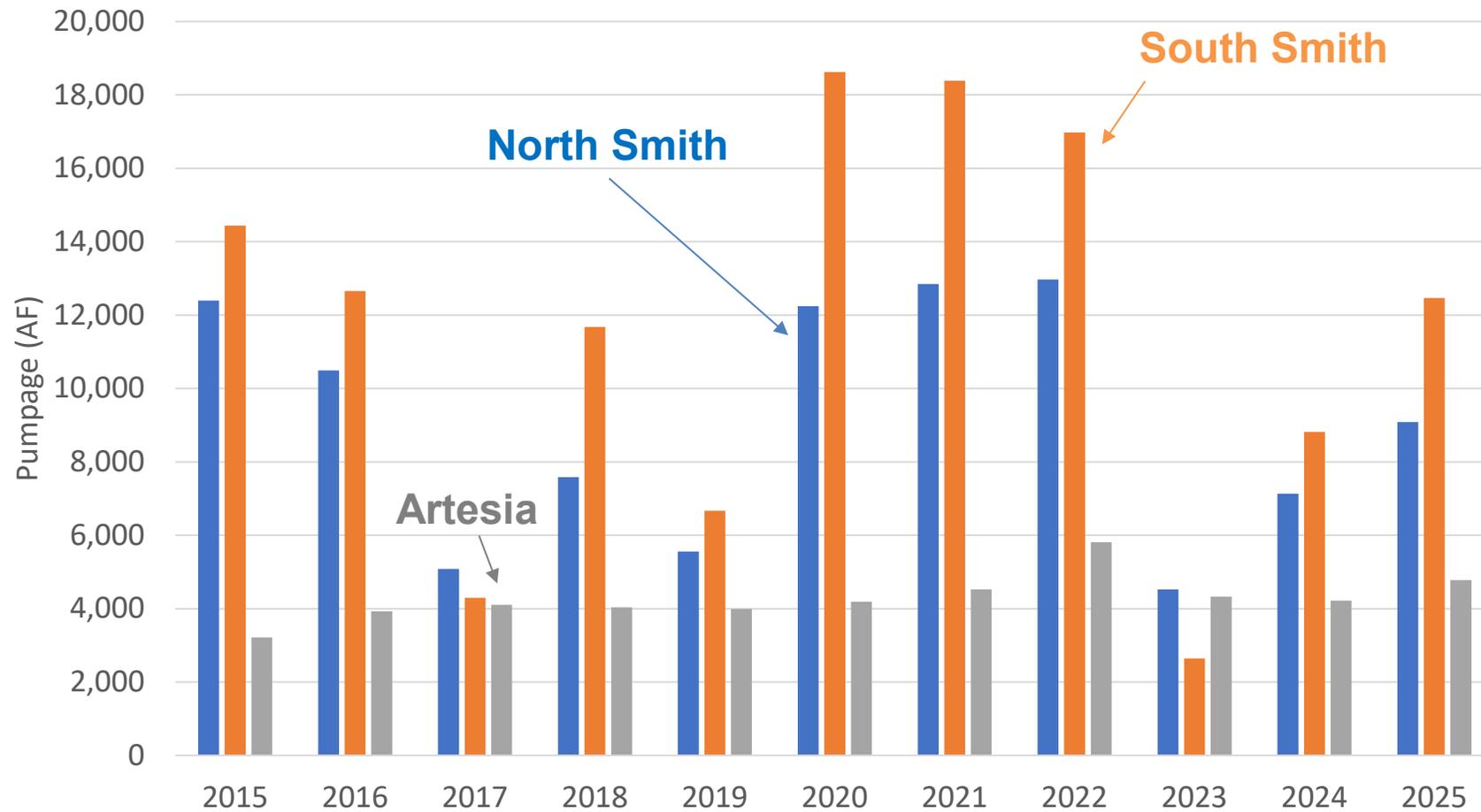


SMITH VALLEY TOTAL PUMPAGE BY MOU (MINUS ARTESIA)



*2025 pumpage data are provisional and subject to revision.

SMITH VALLEY PUMPAGE BY LOCATION



*2025 pumpage data are provisional and subject to revision.

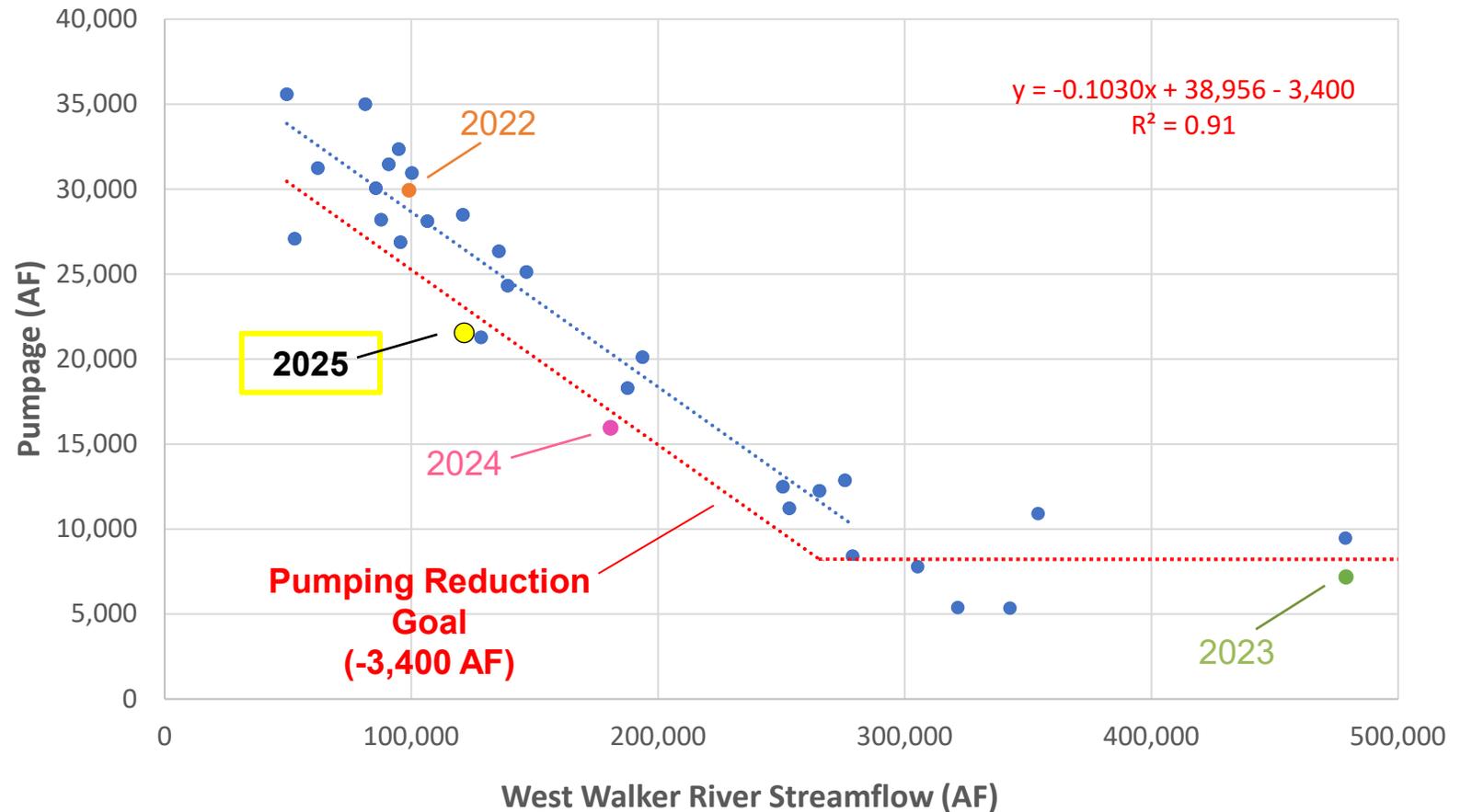
PUMPING PREDICTION 2025 REVIEW – SMITH VALLEY



For 2025, based on actual streamflow and pumping; pumpage came in under goal line.

In 2025, actual pumpage was almost exactly equal to the pumpage goal

Who ever said nobody's perfect? 😊

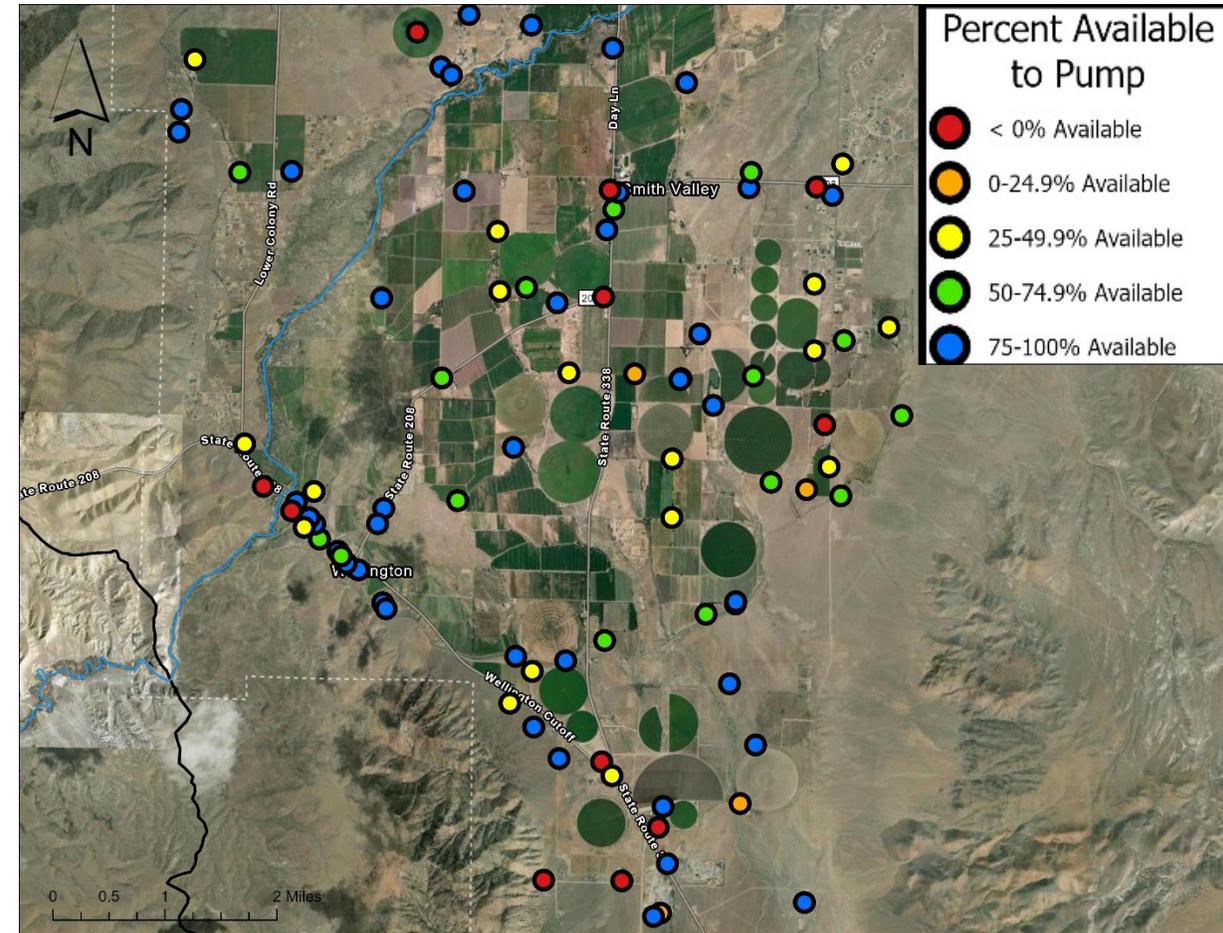
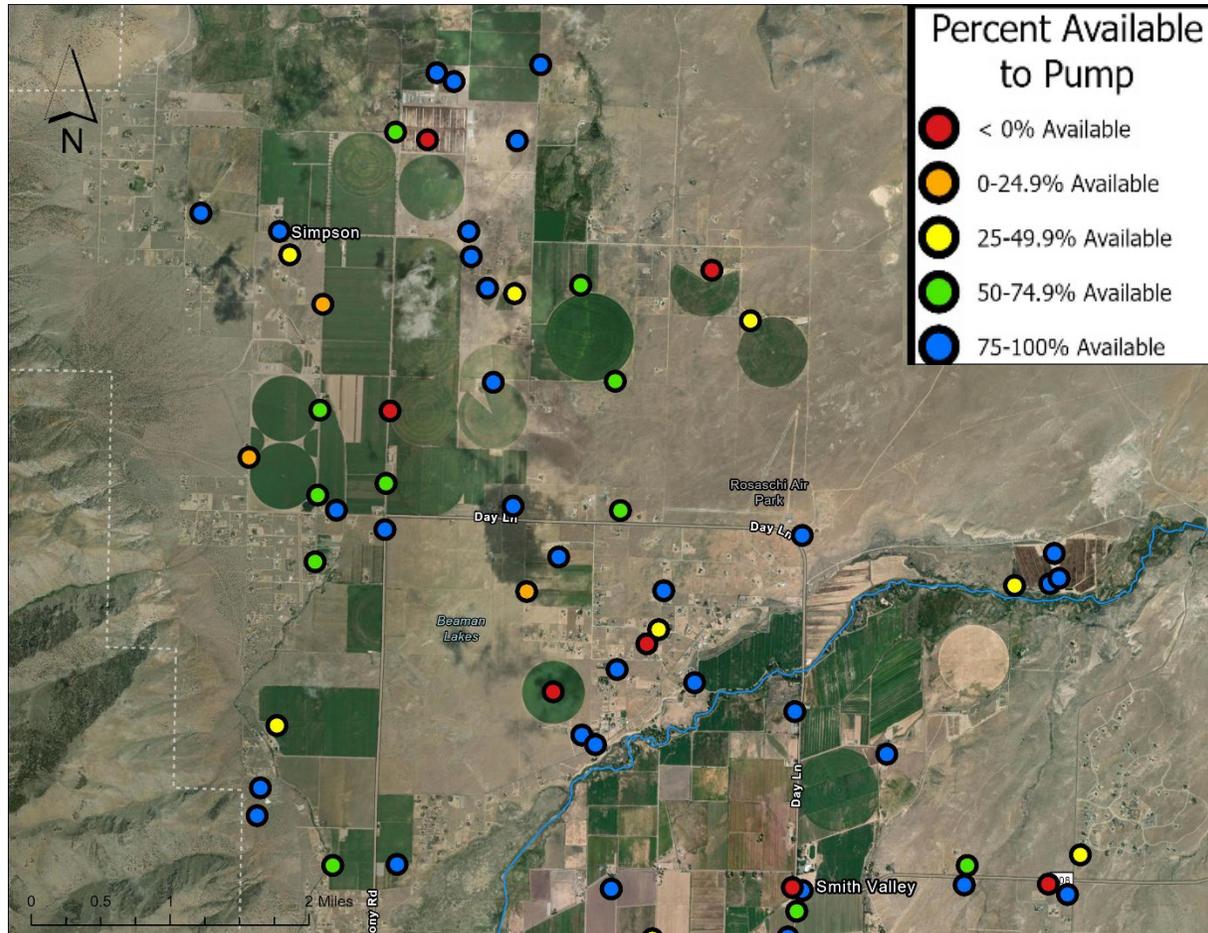


*Top 5 wettest years have been removed from regression; pumping doesn't include Artesia

SMITH PUMPAGE MAP: END OF 2025

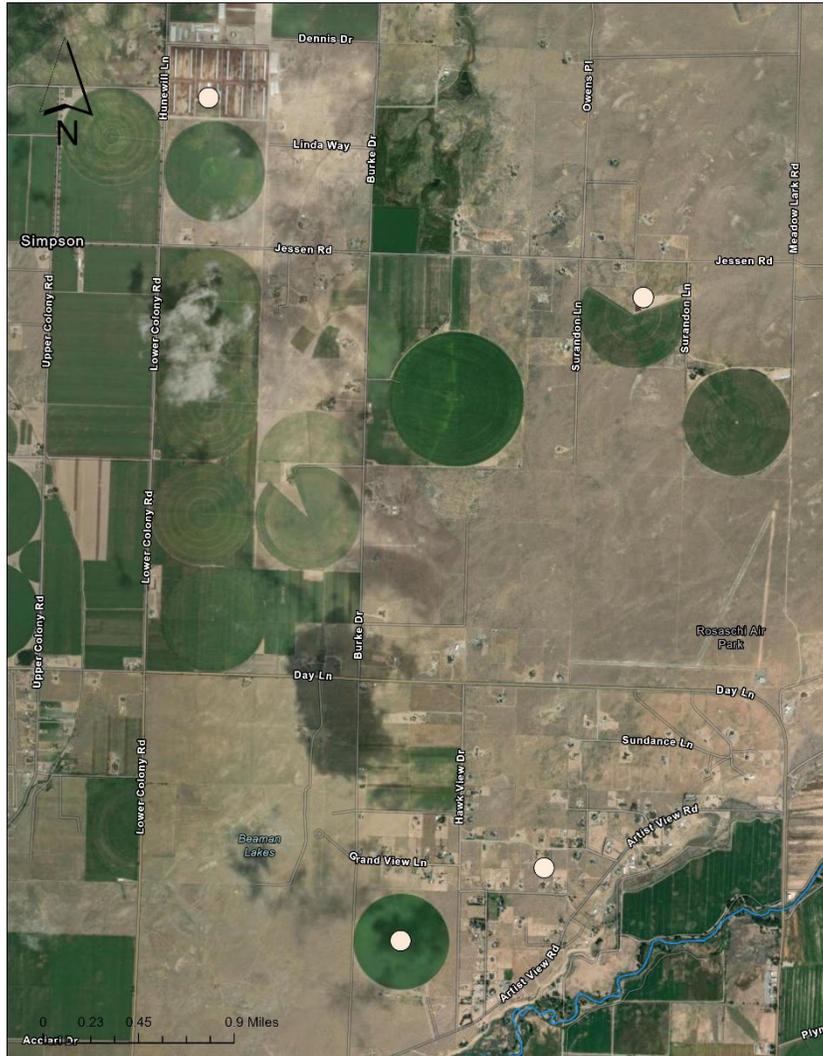
Northern Smith

Southern Smith



SMITH PUMPAGE MAP: OVERPUMPING IN 2025

Northern Smith

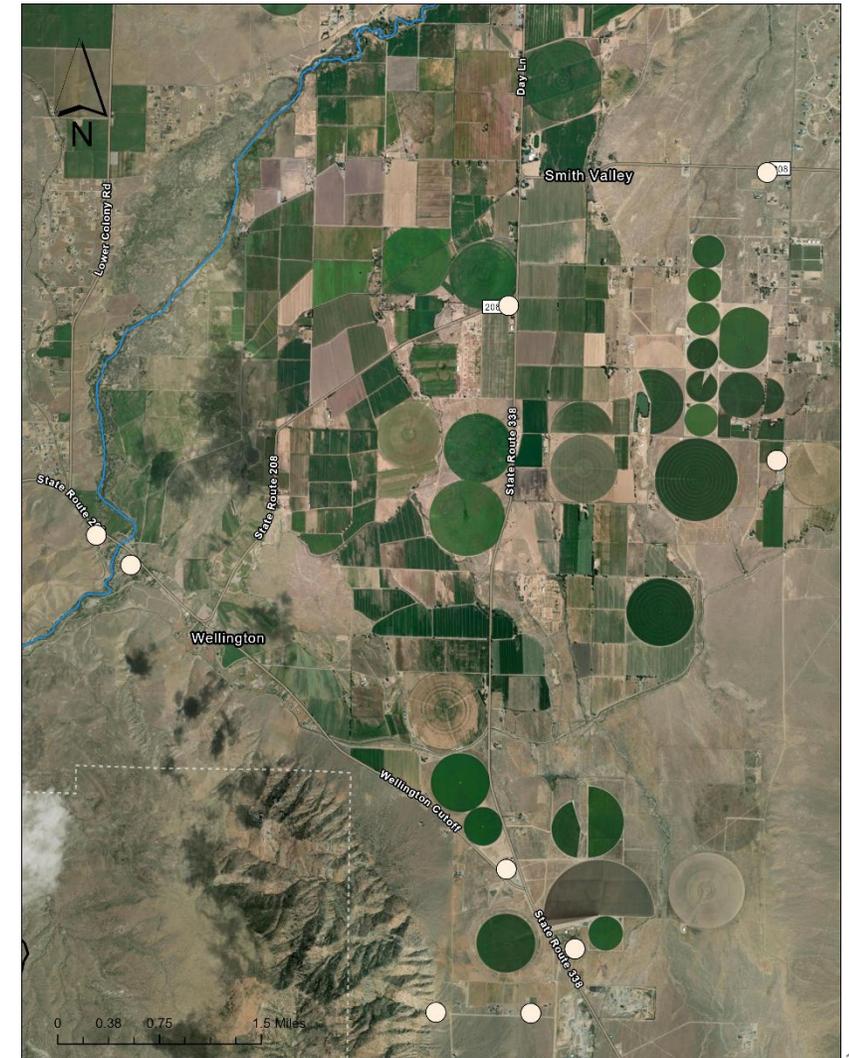


13 out of 139 metered wells over-pumped their duty (by < 50 AF each)

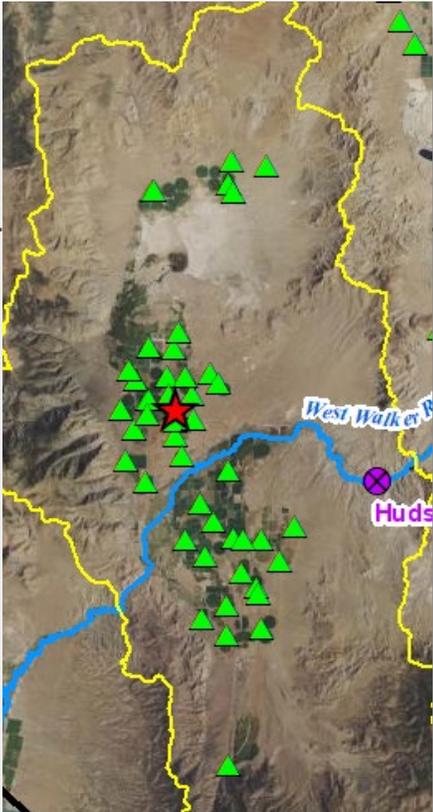
Total volume over-pumped was 70 AF

-  < 50 AF
-  50-100 AF
-  100 – 250 AF
-  250 – 500 AF
-  > 500 AF

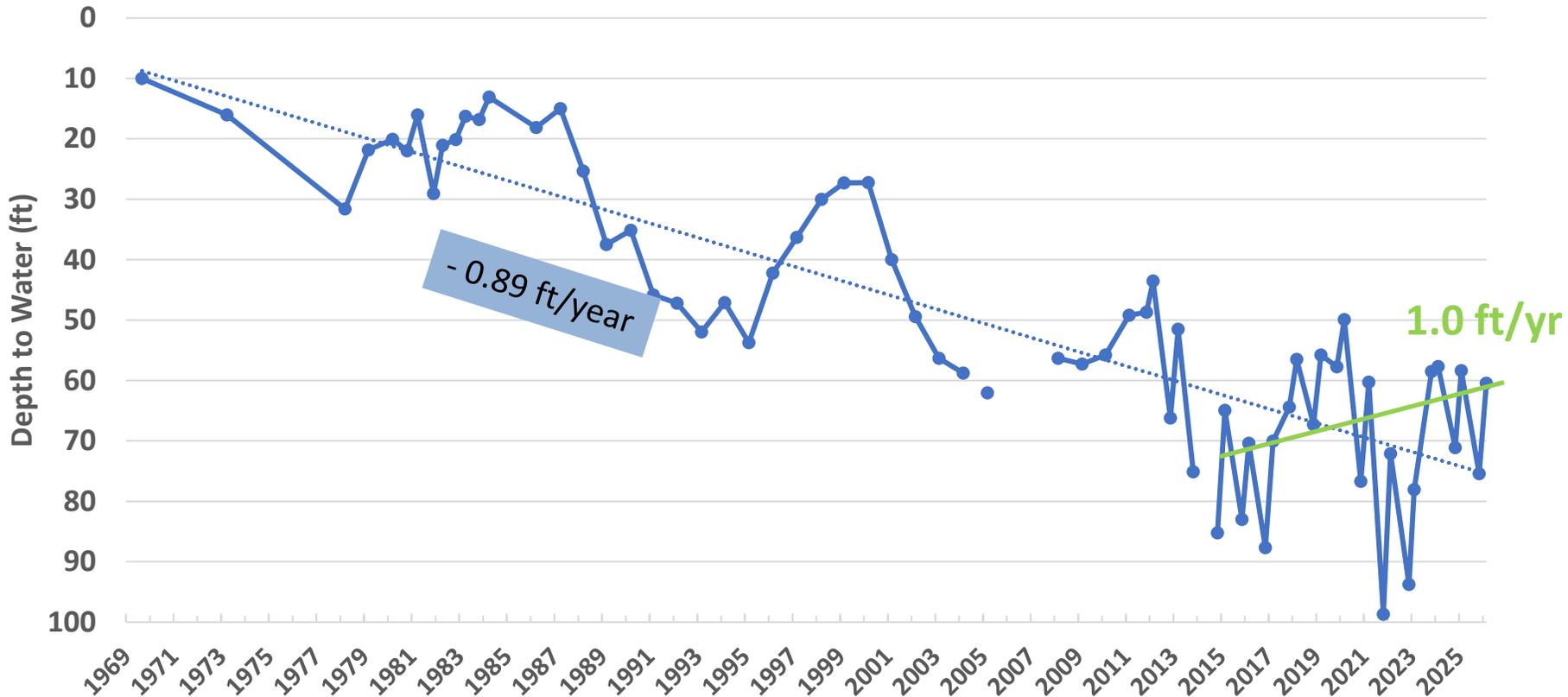
Southern Smith



SMITH VALLEY WATER LEVELS



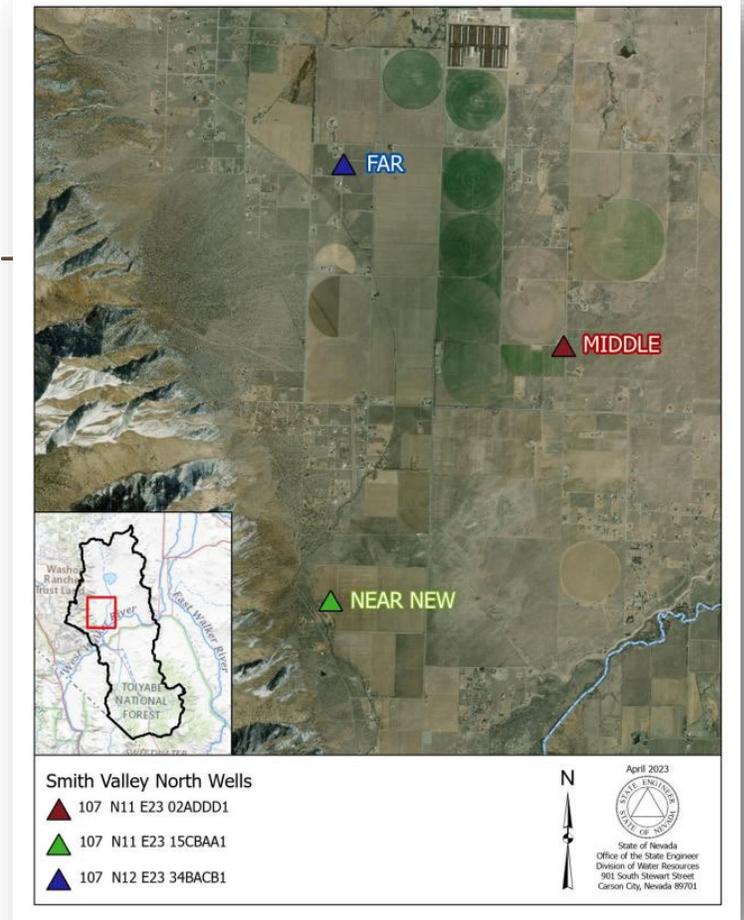
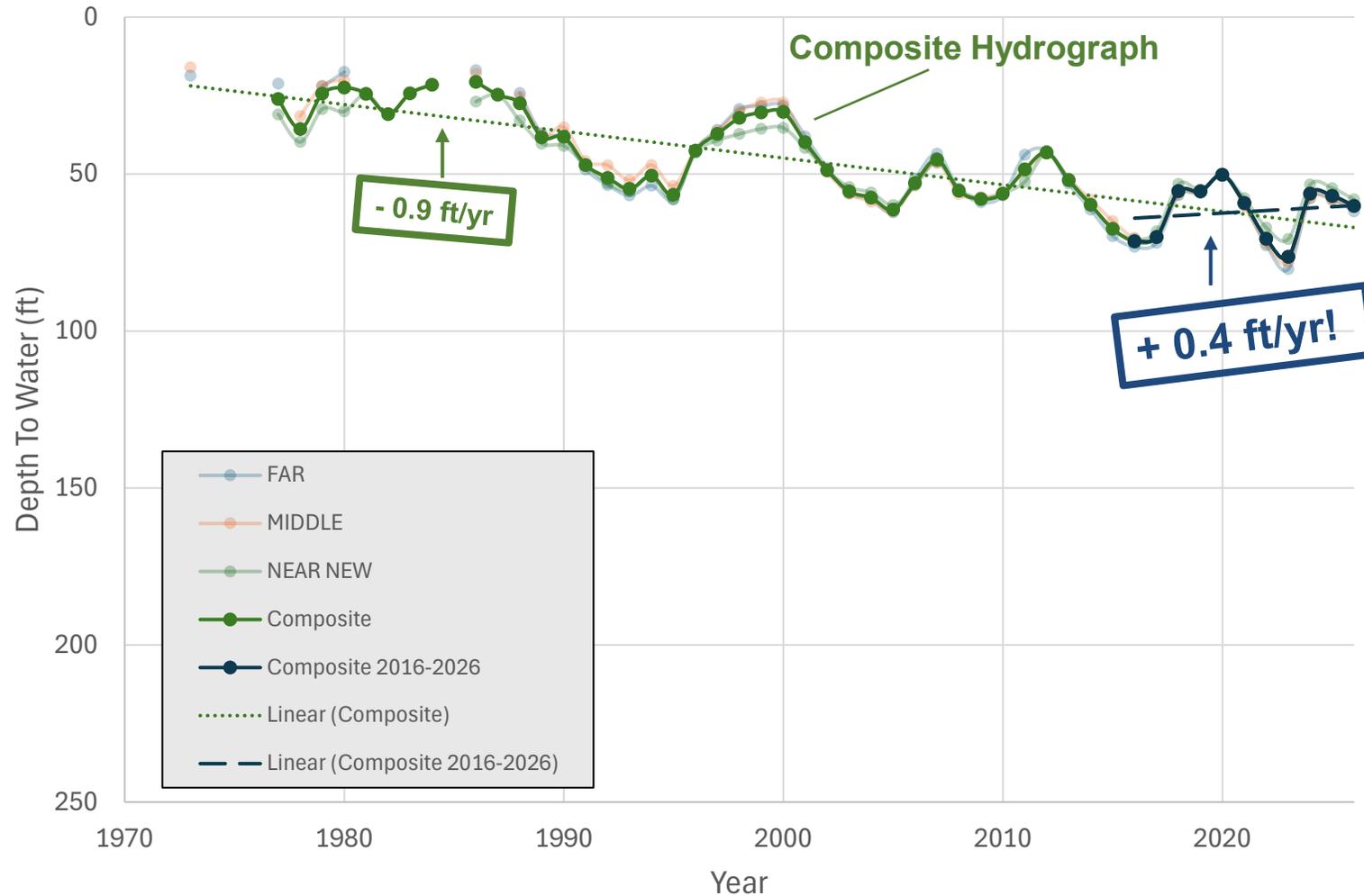
★ 107 N11 E23 02ADDD1



Average Smith Valley Water Level Changes (ft/yr)	
2025-2026	-2.1
2024-2025	-0.7
2016-2026	0.8
2016-2025	1.1

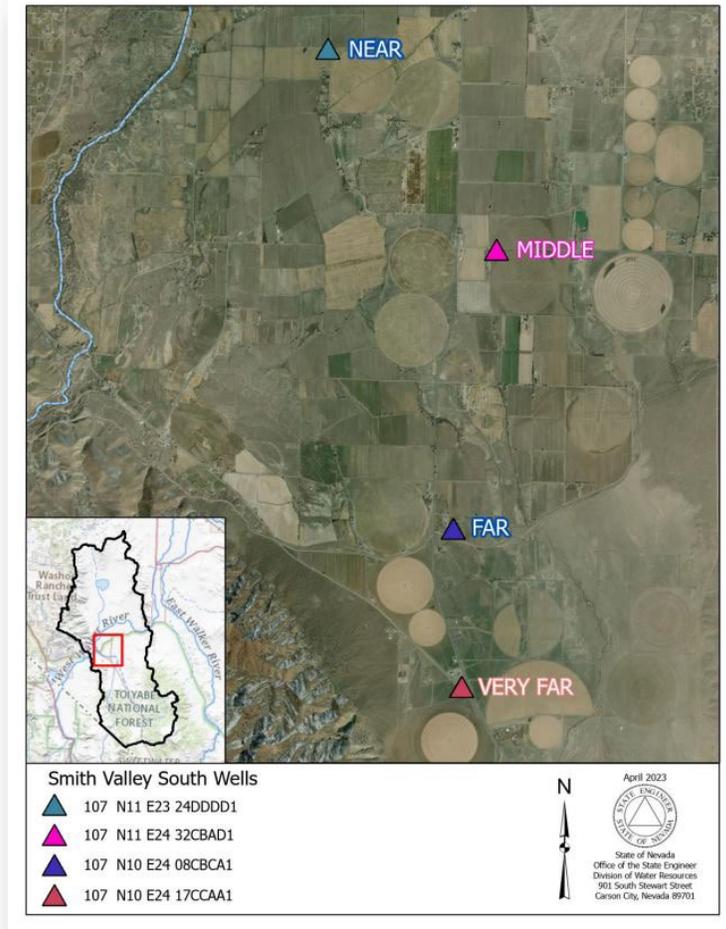
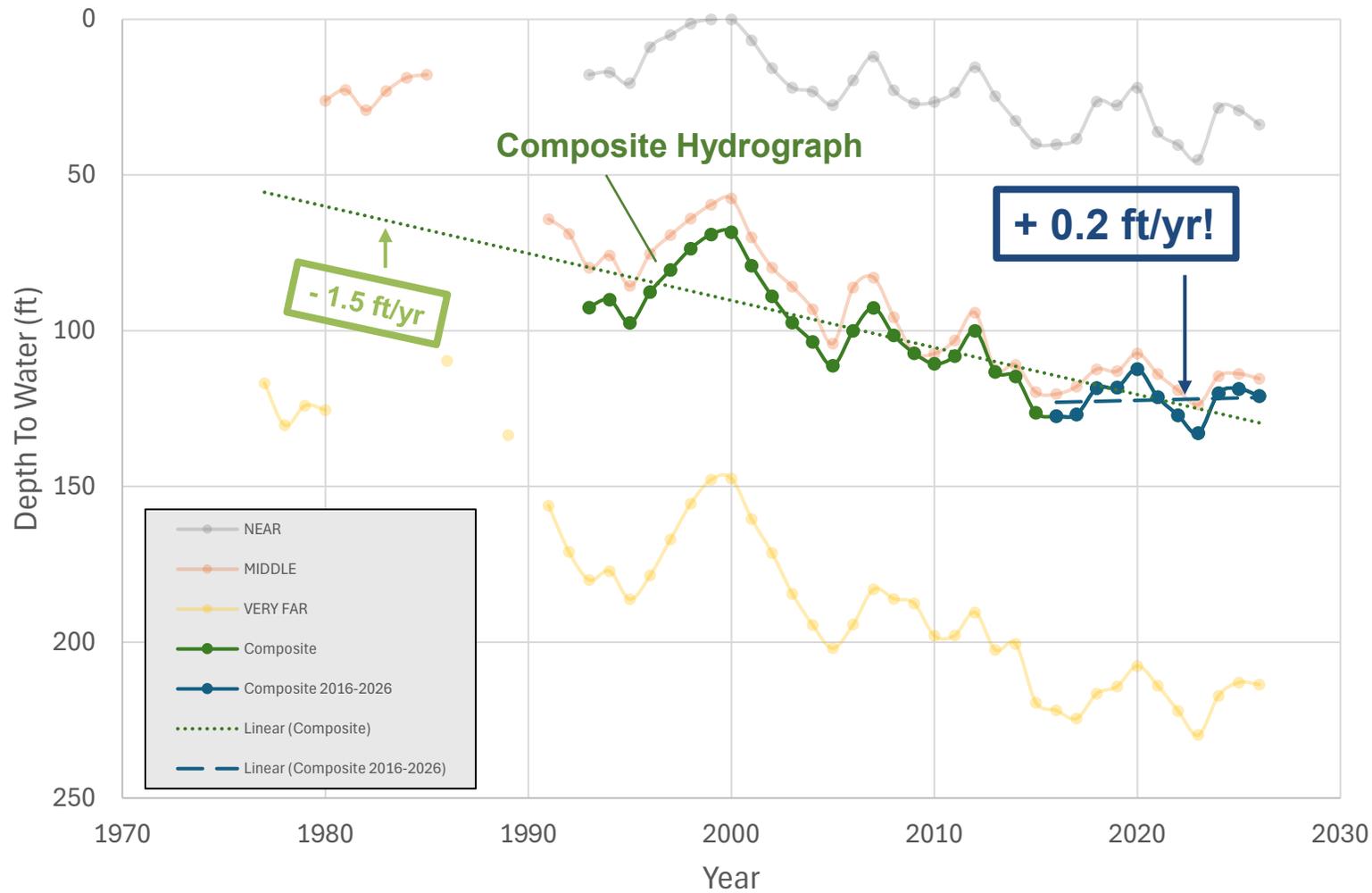
*Excludes Artesia

NORTHERN SMITH VALLEY SPRING 1973-2026



Average Northern Smith Valley Water Level Changes (ft/yr)	
2025-2026	-2.5
2024-2025	-0.8
2016-2026	0.9
2016-2025	1.3

SOUTHERN SMITH VALLEY SPRING 1977-2026

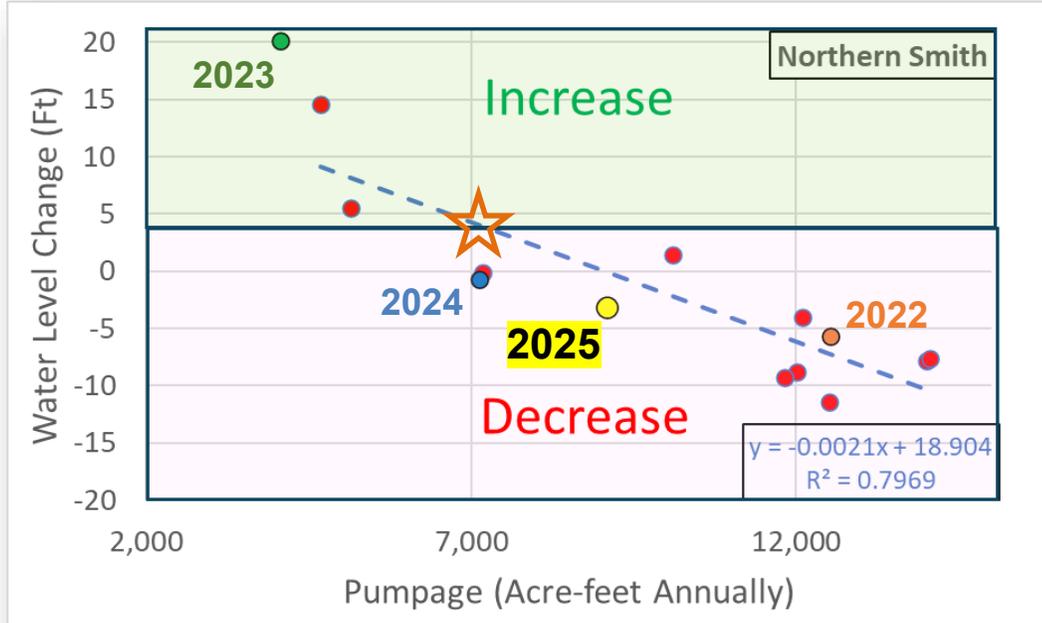


Average Southern Smith Valley Water Level Changes (ft/yr)	
2025-2026	-1.6
2024-2025	-0.5
2016-2026	0.5
2016-2025	0.7

SMITH VALLEY PUMPING VS. WATER LEVEL CHANGE

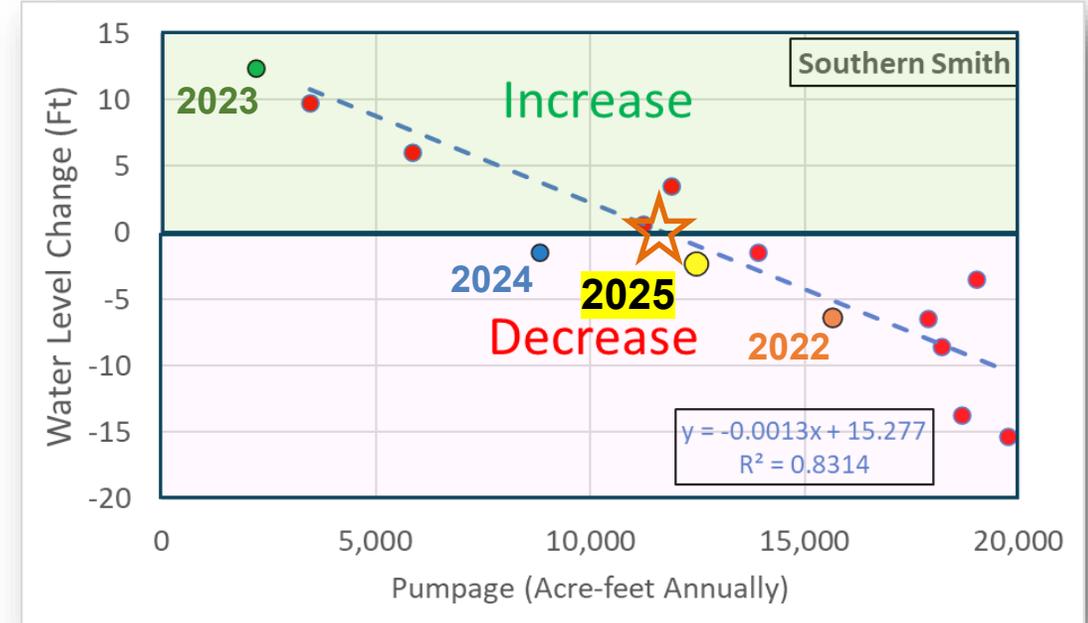
Northern Smith*

2012-21 Average Pumping: 10,360 AF
 Estimated Goal: <9,200 AF



Southern Smith

2012-21 Average Pumping: 13,980 AF
 Estimated Goal: <11,800 AF



*Excludes Artesia

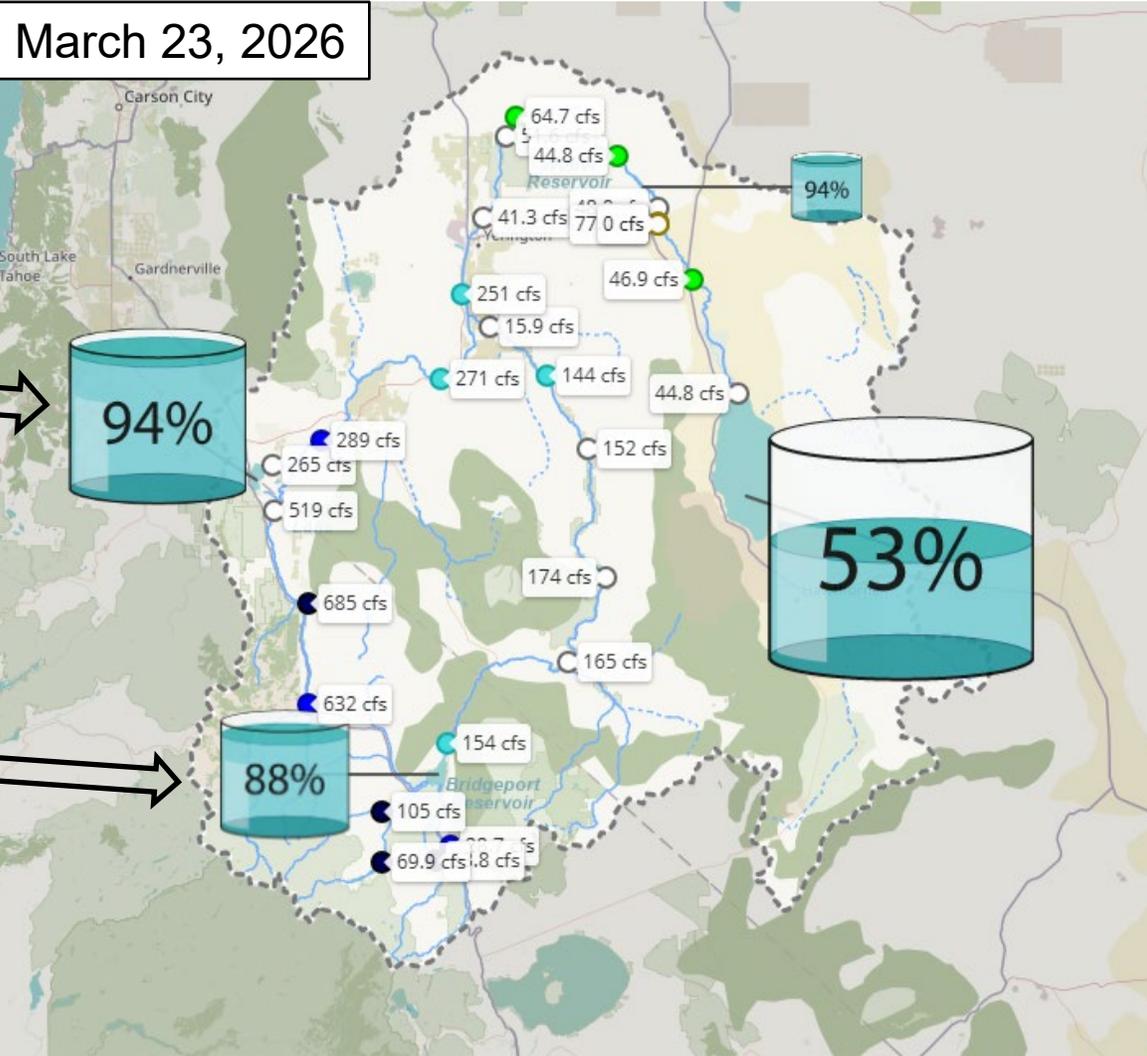
Total pumping reduction goal $\geq 3,400$ AF/yr (average of 21,000 AF)

No water level change @ streamflow of $\sim 169,000$ AF (07-21 median = 100,000 AF)

WATER SUPPLY OUTLOOK



RESERVOIR STORAGE



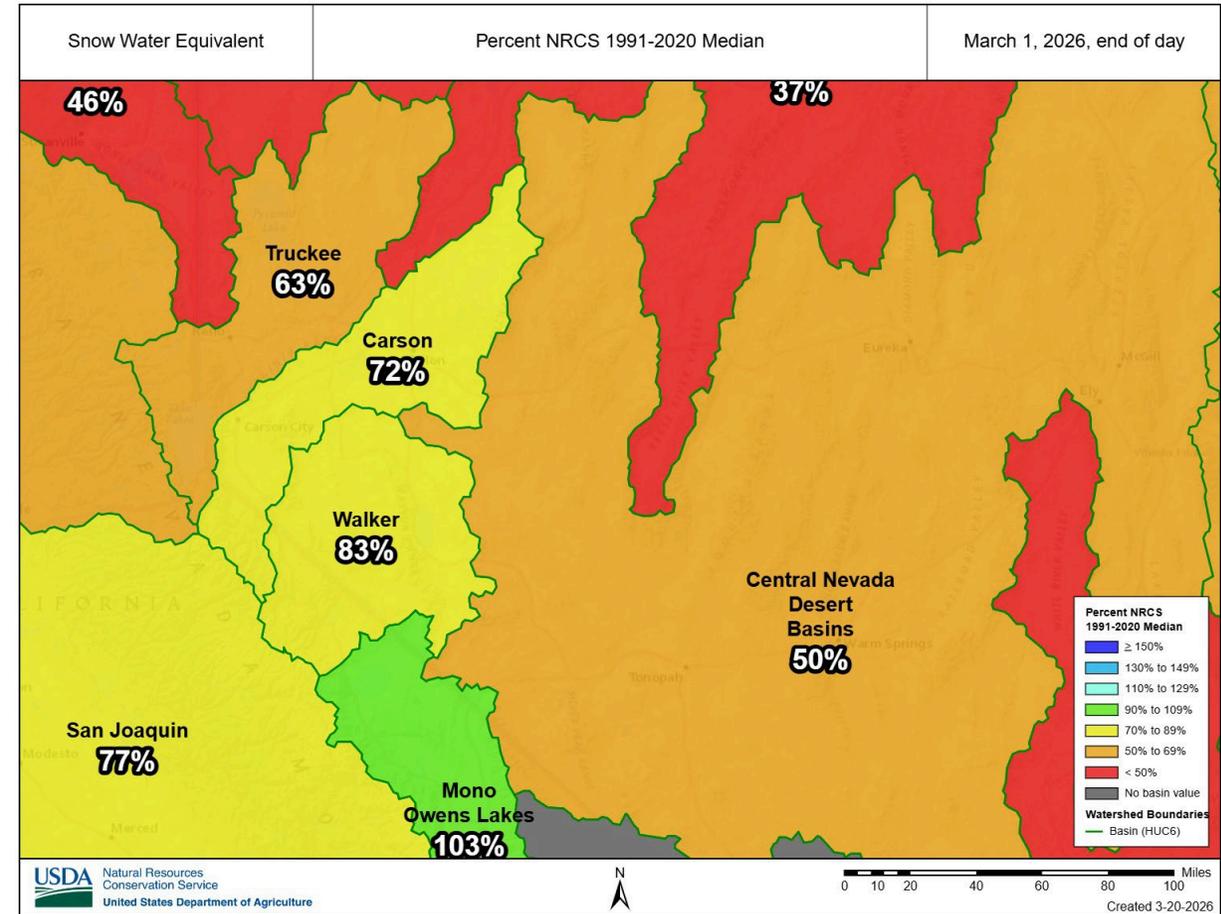
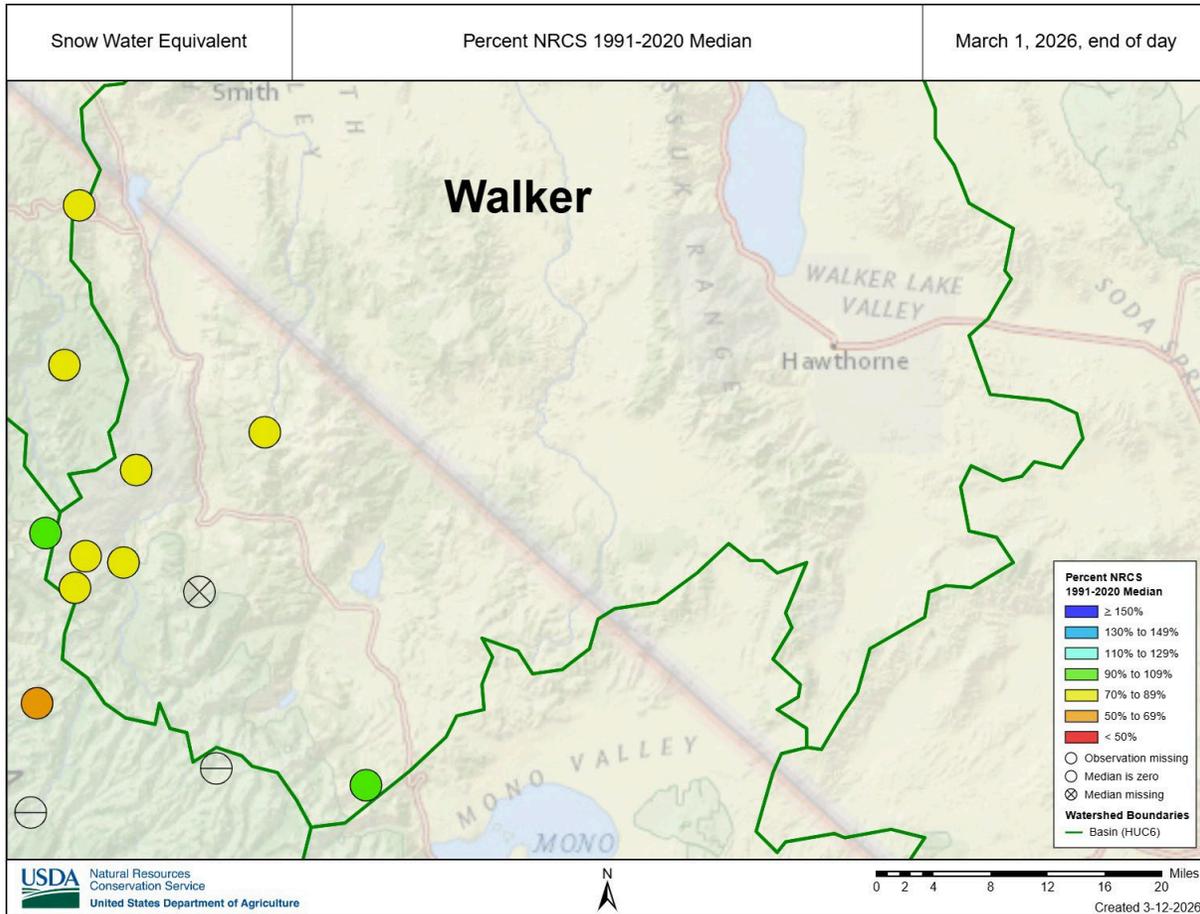
Up 39%



Up 25%



SNOW WATER EQUIVALENT (SWE), % OF MARCH 1 MEDIAN

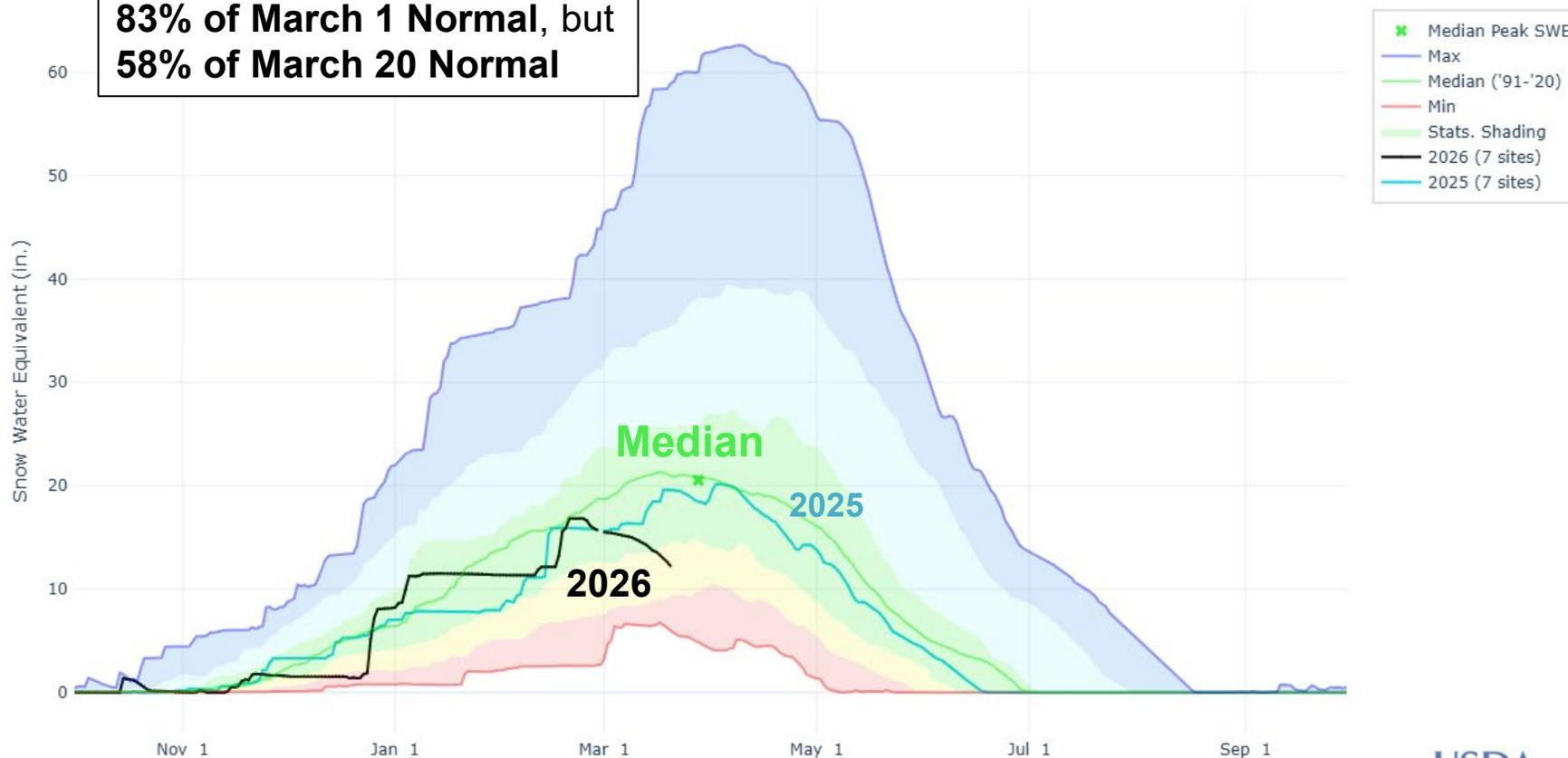


2026 WALKER SNOWPACK (SWE)

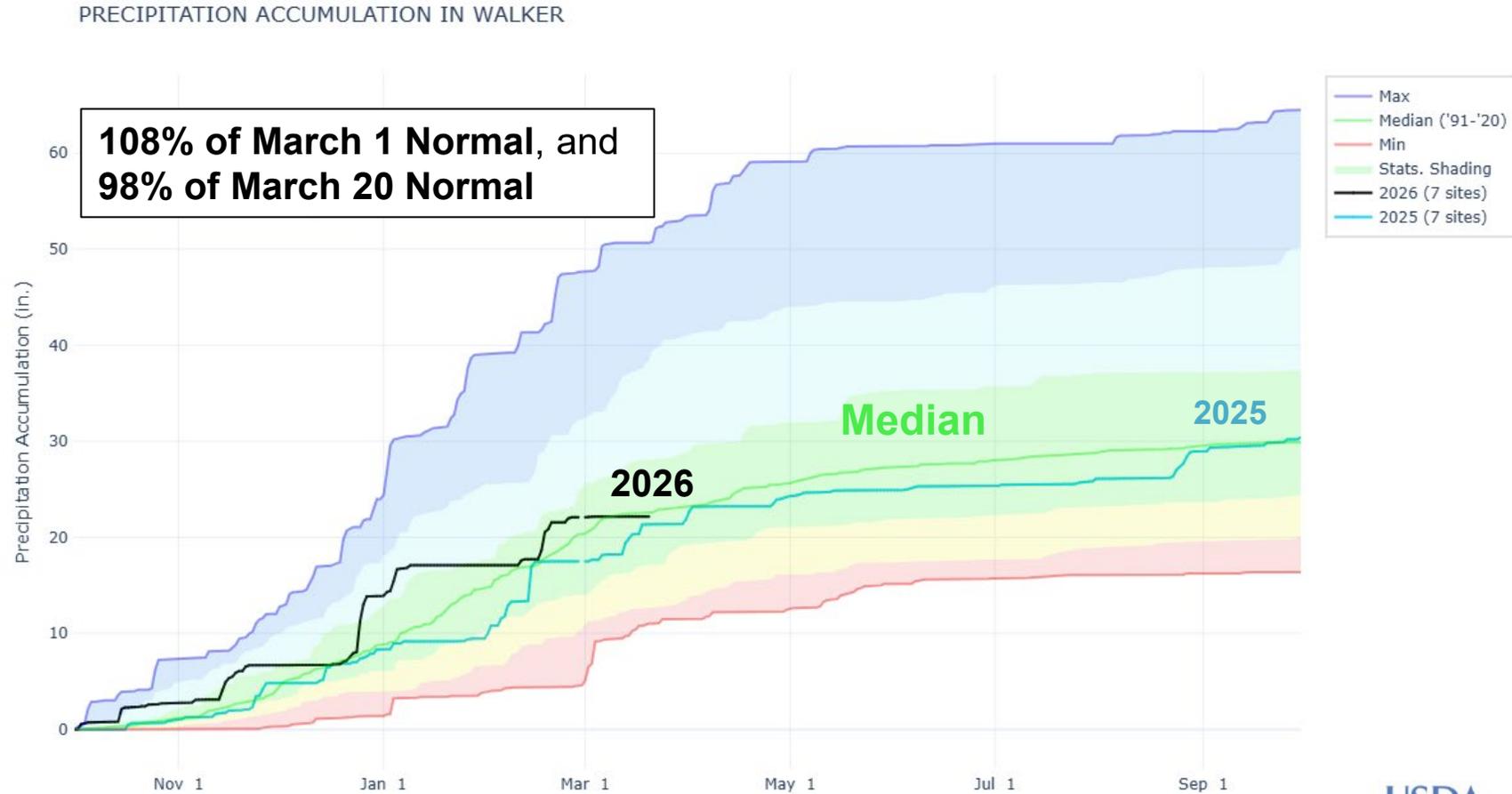


SNOW WATER EQUIVALENT IN WALKER

**83% of March 1 Normal, but
58% of March 20 Normal**

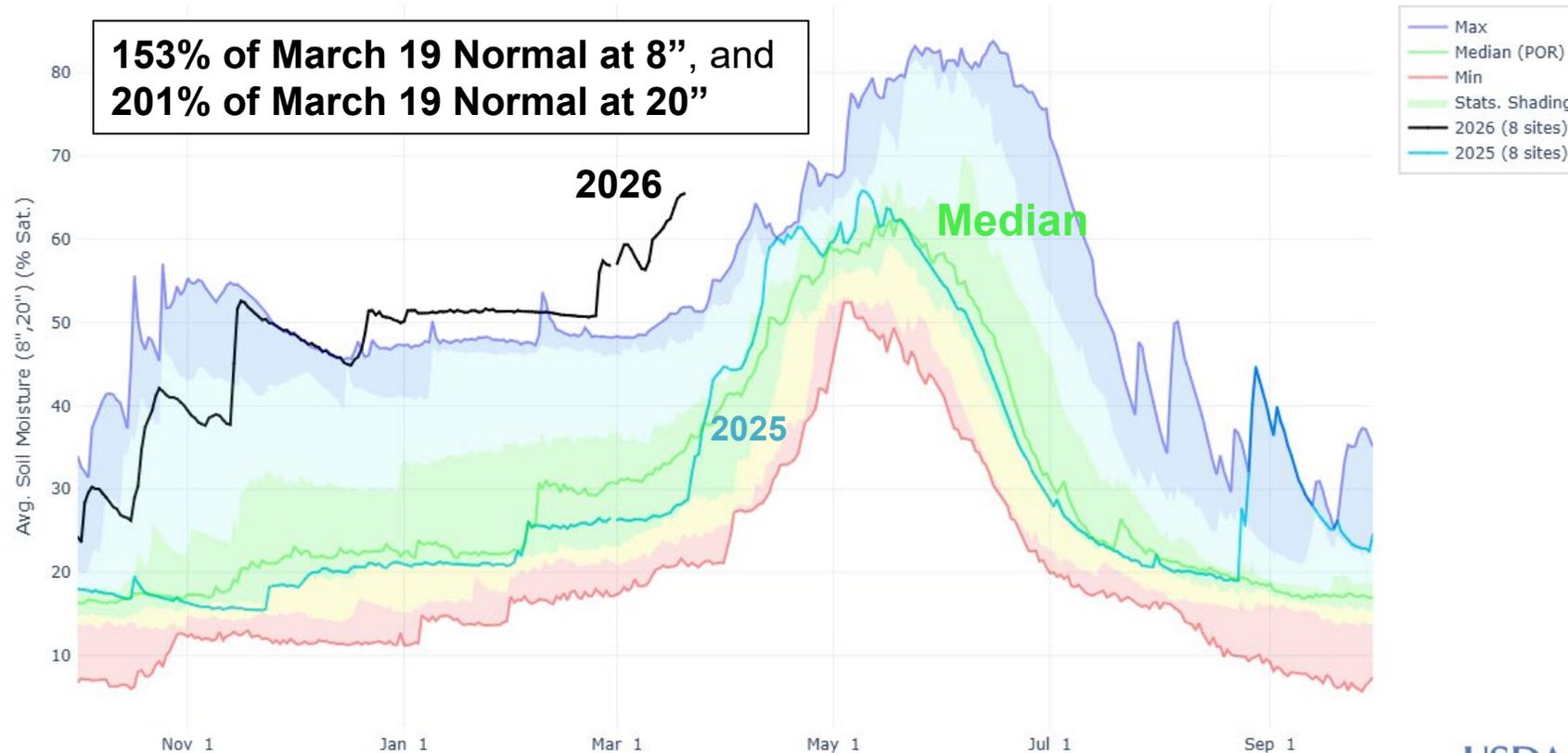


2026 WALKER PRECIPITATION



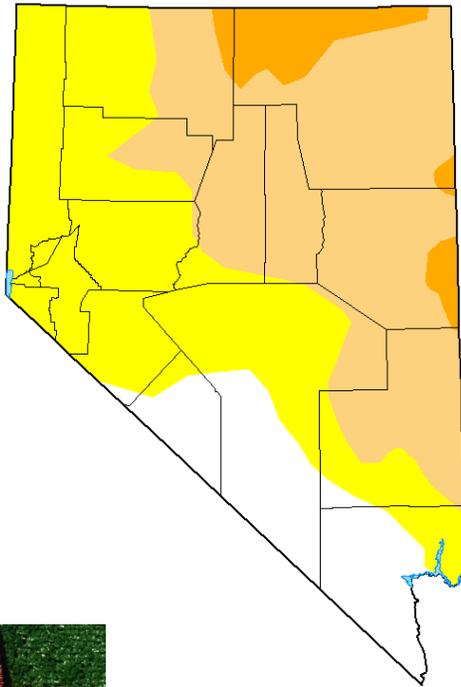
2026 WALKER SOIL MOISTURE

AVG. SOIL MOISTURE (8",20") IN WALKER

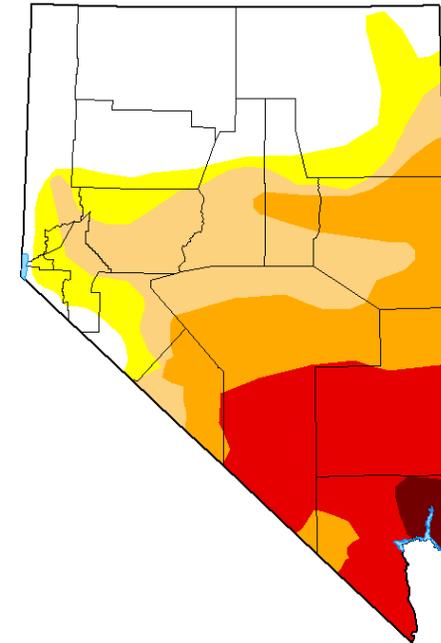


U.S. DROUGHT MONITOR

March 17, 2026



March 18, 2025



Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

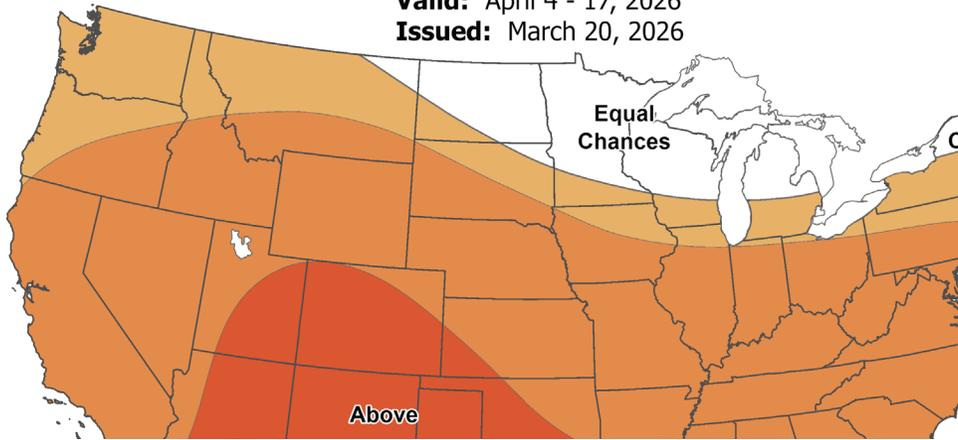


EARLY SEASON 2026 OUTLOOKS



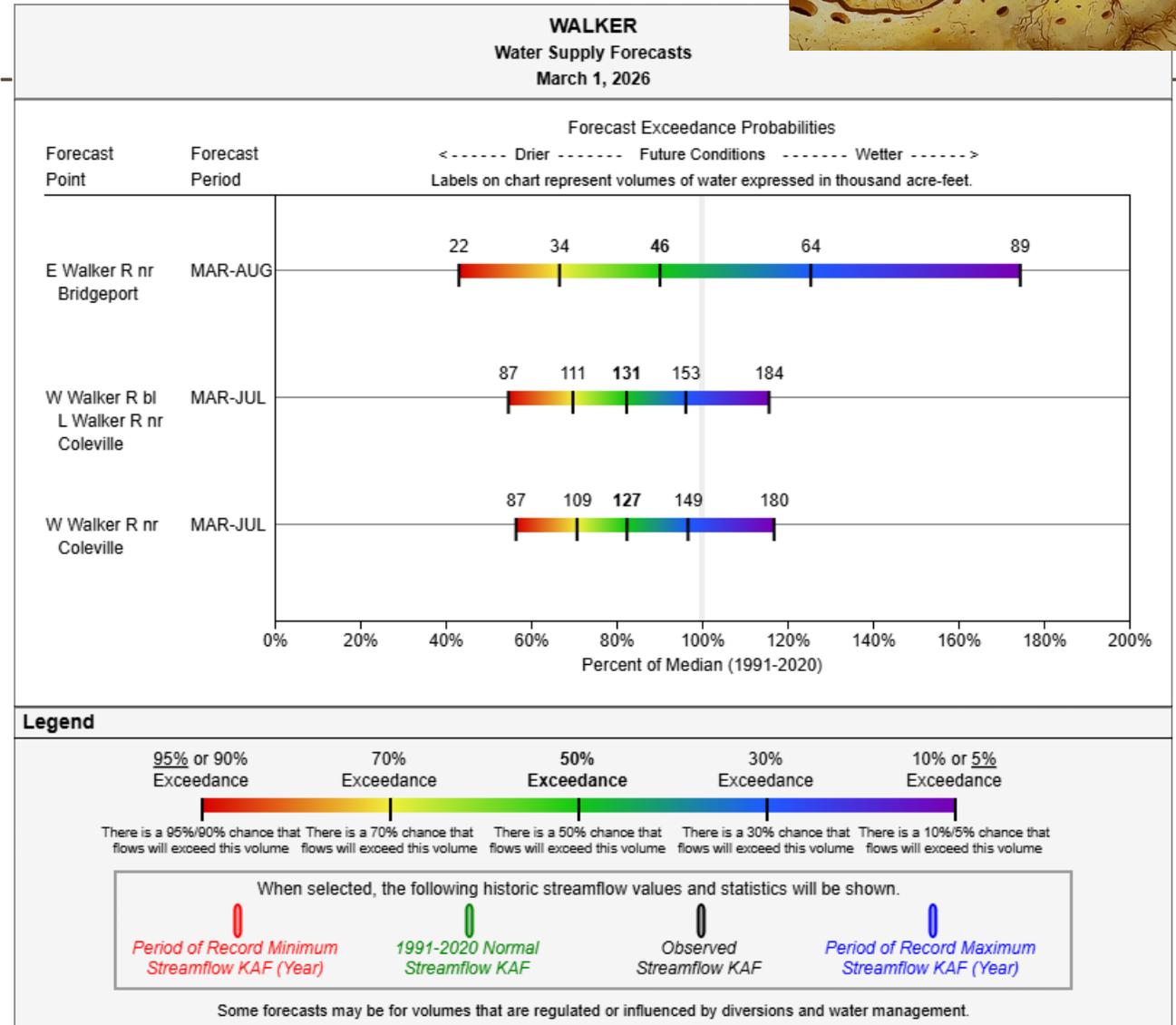
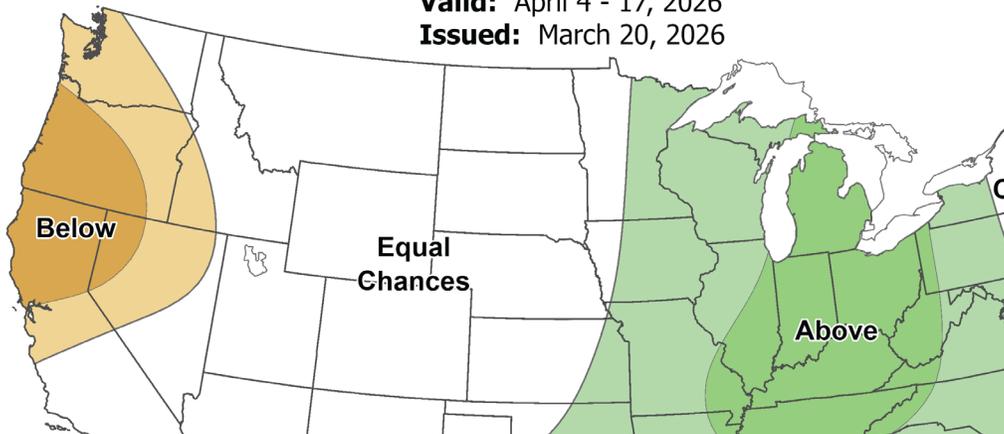
Week 3-4 Temperature Outlook

Valid: April 4 - 17, 2026
Issued: March 20, 2026



Week 3-4 Precipitation Outlook

Valid: April 4 - 17, 2026
Issued: March 20, 2026



2026 PUMPING GOALS - EXPERIMENTAL

PUMPING PREDICTION FOR 2026 (MARCH 1) – SMITH VALLEY

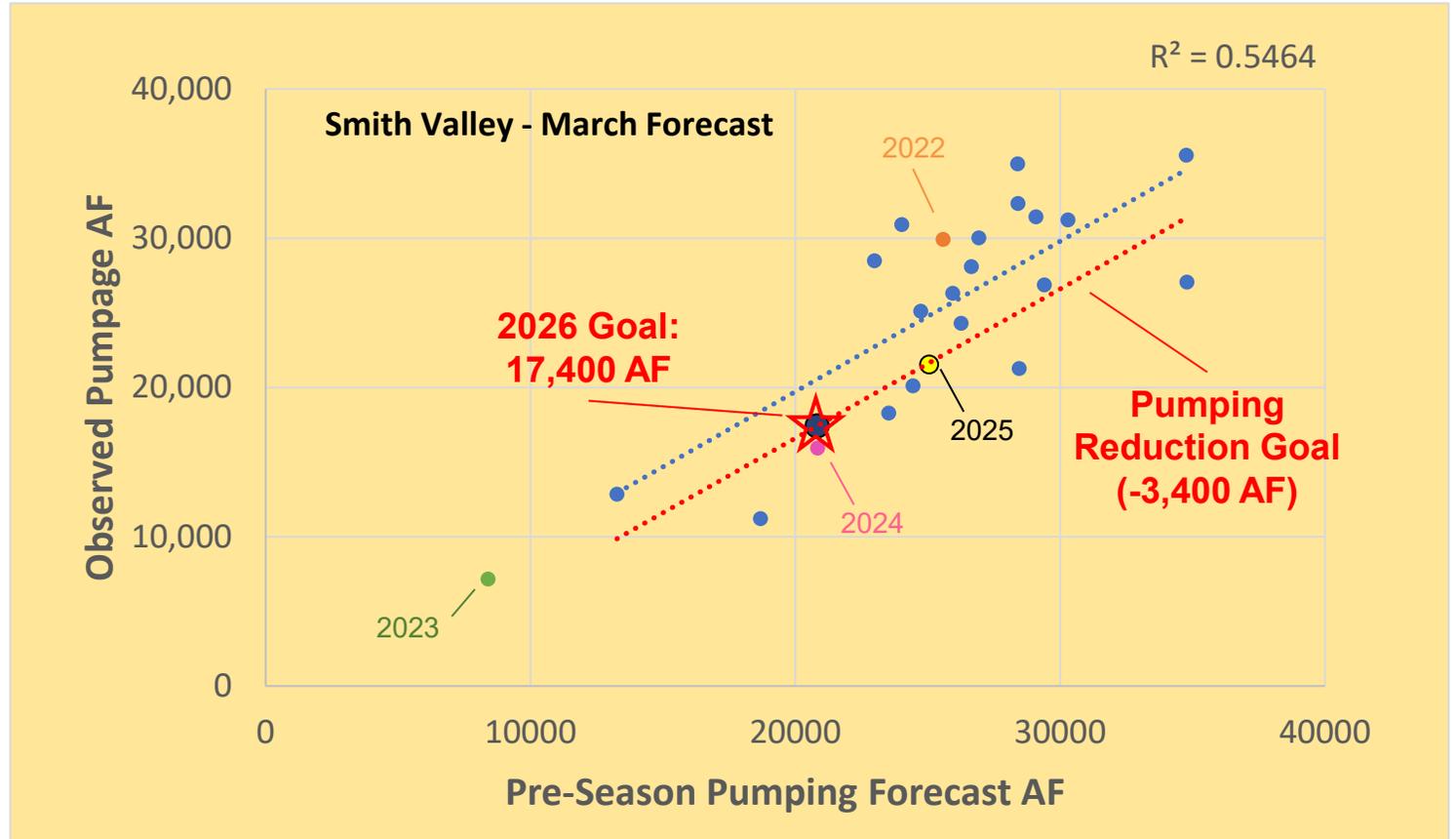
$$\text{March Pre-Season Pumping Forecast} = -0.215*(TP) - 11,870*(SWE) + 41,894 - 3,400$$

March 1 Observations of:

TP = Topaz Storage (53,730 AF)

SWE = West Walker Basin
Snow Water Equivalent (80%)

**2026 pumpage goal for
Smith Valley is < 17,400 AF.**



PUMPAGE GOAL VS. TOTAL COMMITMENTS

2026 Pumpage Goal for Smith Valley: 17,400 AF

- Groundwater commitments: ~58,475 AF
 - Irrigation groundwater commitments: ~55,430 AF

2026 pumpage goal is about 30% of the total groundwater commitments in the basin and about 83% of the average pumpage in the basin (based on 1994-2025)

SUMMARY AND OUTLOOK

SUMMARY FOR 2025 SEASON

- 2025 pumping greater than 2024 (as expected).
- Pumpage goals ~perfectly~ met in both Smith and Mason Valleys.
- Groundwater levels declined more than expected in each valley, so pumpage goals may need to be revised lower.
- Long-term hydrographs still show declining trends, but recent period (2016 – 2026) still has increasing trend.





OUTLOOK FOR 2026 SEASON

BLUF: It will be much harder to meet the 2026 pumpage goal

(Bottom Line Up Front)

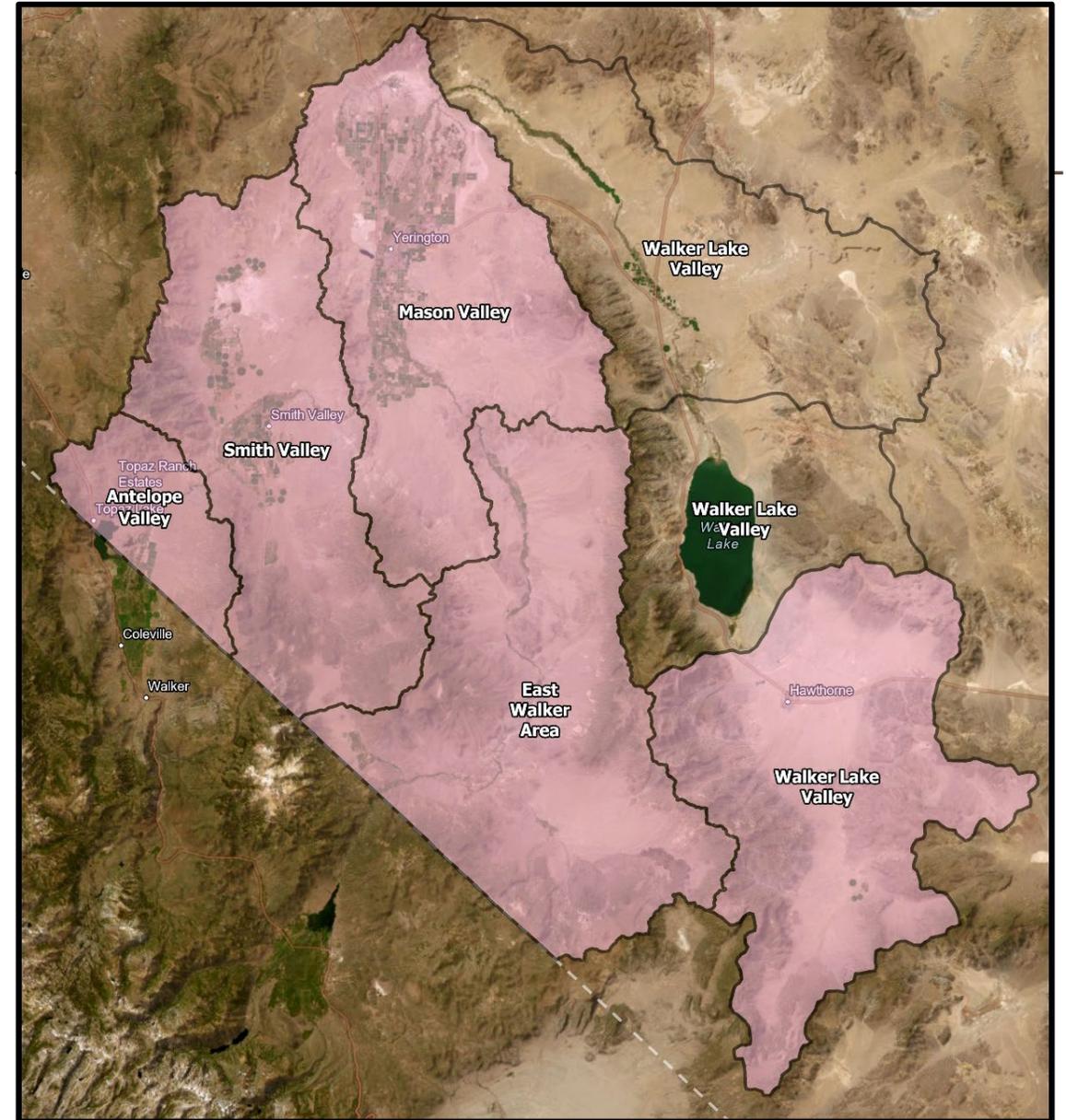
- WY26 has tracked similarly to WY25 through February, but the unseasonably warm and dry March is leading to early and rapid snowmelt.
- Aiming for less supplemental pumping this year due to higher reservoir levels, but this also depends on runoff patterns and valley soil moisture.
- Peak discharge likely to occur earlier, causing decree to fall off fast and wells to turn on sooner (which we are already seeing)
- Maximize opportunities to turn off your wells (e.g., do not irrigate on rainy days)

2026 pumpage goal for Smith Valley is < 17,400 AF.



EXTRA, EXTRA! READ ALL ABOUT IT!

- East Walker Designation and Meter & Reporting Order
 - East Walker Area (Basin 109) was designated on June 23, 2025
 - Enables enhanced management by the State Engineer
 - No new appropriations allowed in the basin (with minor exceptions)
 - Also issued a meter and reporting order on June 23, 2025
 - East Walker Area is now within the same management scheme as Smith and Mason Valleys
- New State Engineer – Joe Cacioppo



Questions?



Contact



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