

# NSV IRWM TAC

## 2023 Fall Hydrology and Groundwater Level Update

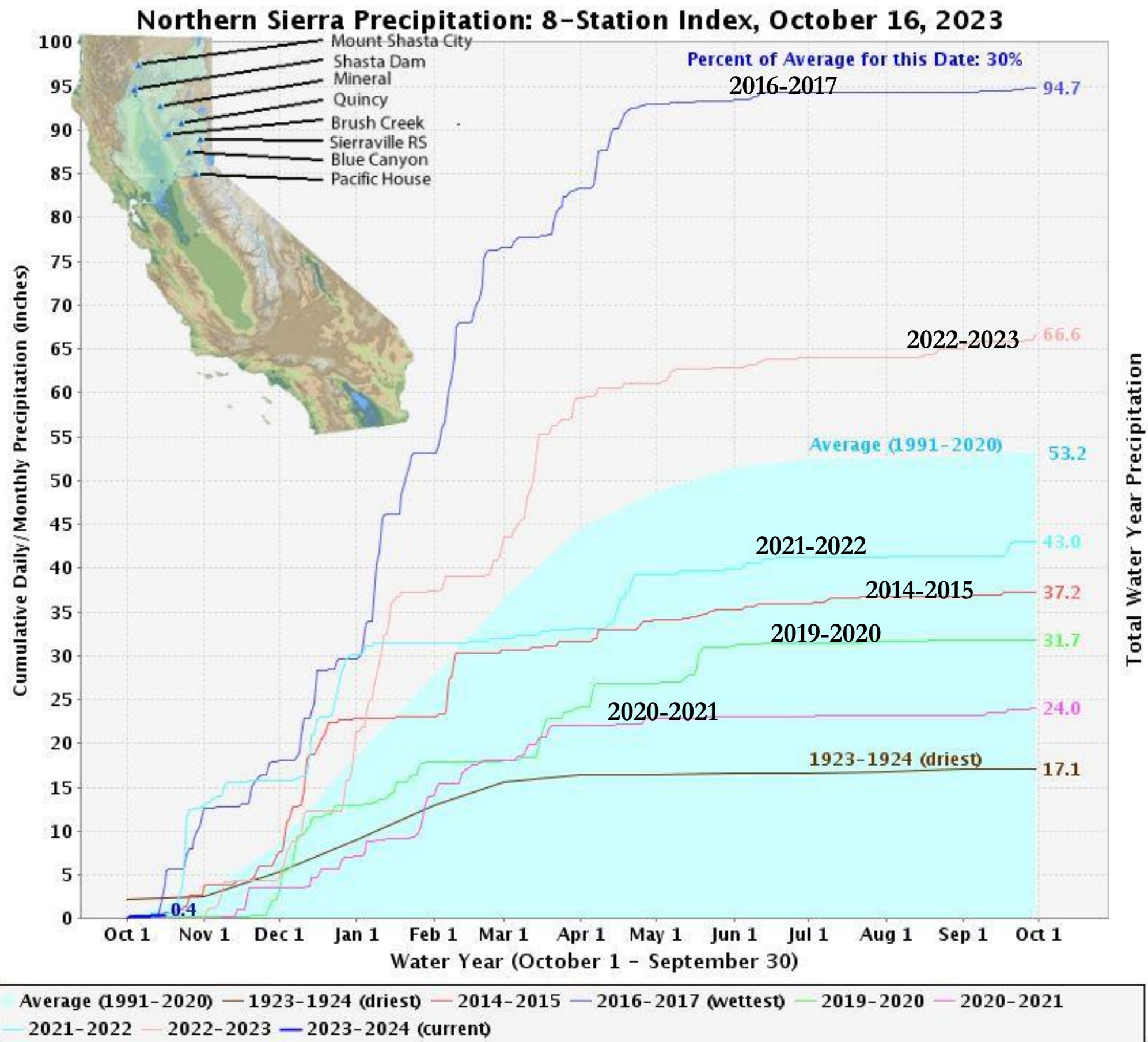
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530-945-0882



# Outline

- **Precipitation Index**
- **NOAA Climate Prediction**
- **California Water Watch**
- **California Groundwater Live**
- **Open Data Platform**





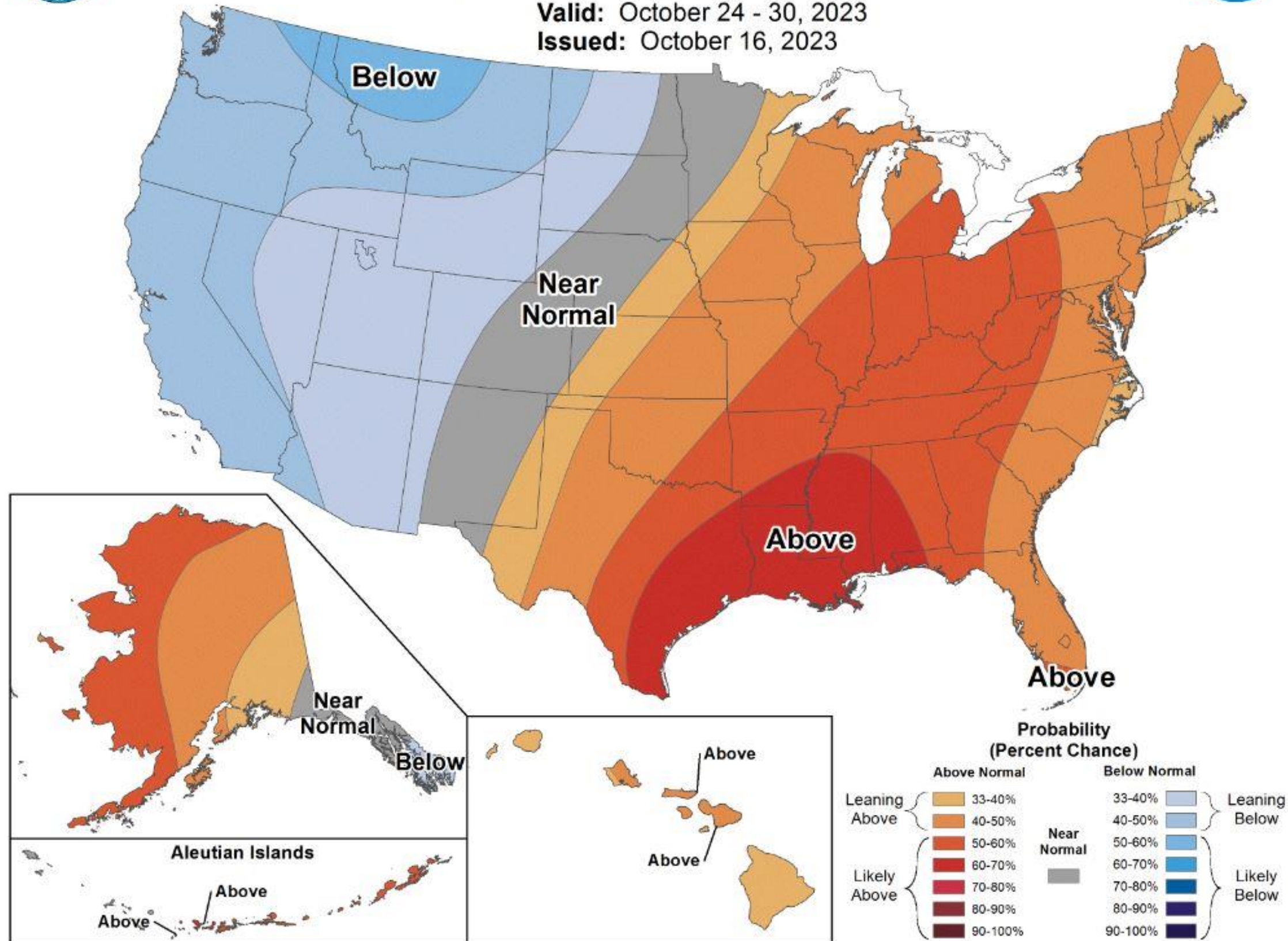


# 8-14 Day Temperature Outlook



Valid: October 24 - 30, 2023

Issued: October 16, 2023



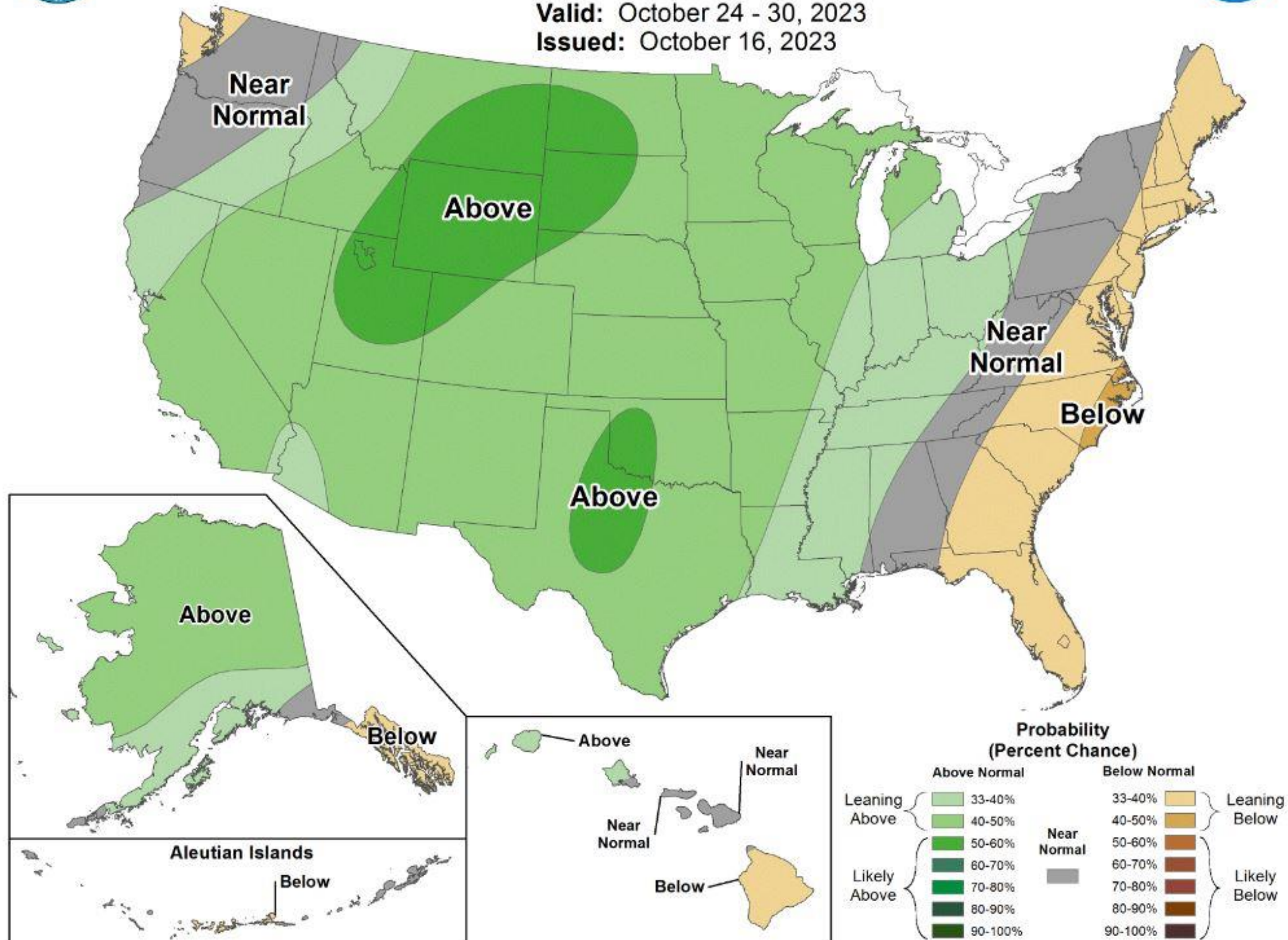




# 8-14 Day Precipitation Outlook

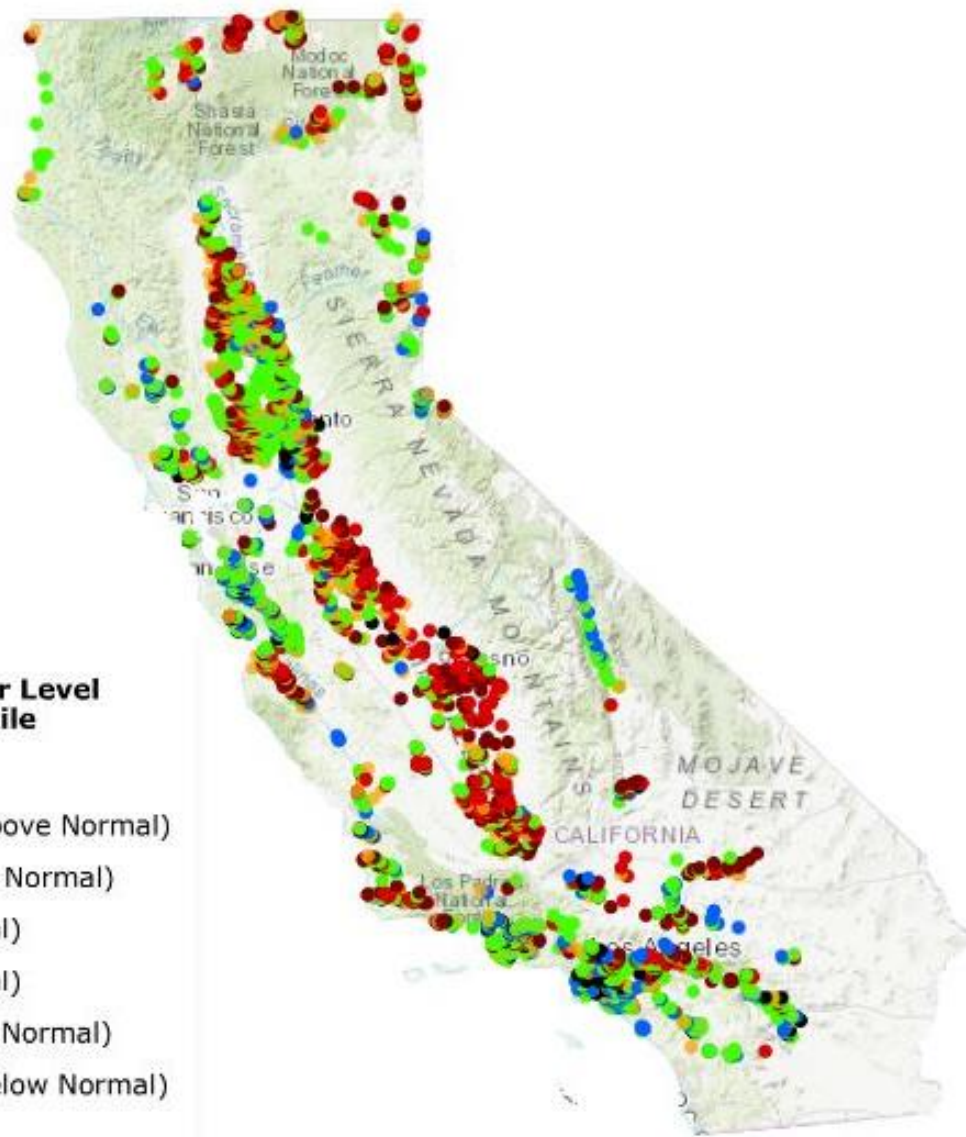


Valid: October 24 - 30, 2023  
Issued: October 16, 2023





# California Water Watch



## Groundwater as of 10/15/2023

The map of California shows groundwater level conditions across the state by comparing the most recent groundwater level measurement at individual monitoring wells to historical measurements during the same month. For a well to appear on this map, the most recent measurement must have occurred within the last 18 months, and measurements from at least 10 years must exist for that month.

Currently, most monitoring wells are only measured twice a year, in the spring and fall. Few wells have monthly data, however the State and local groundwater monitoring agencies are working to improve and expand groundwater level data collection.

We are collectively learning more than ever before about our groundwater basins from data being collected and reported by local groundwater agencies. These data are the foundation to support future decision-making related to land use and water resource planning.

The State and locals will continue monitoring and tracking groundwater conditions and collecting new data allowing locals to better manage water resources including implementing groundwater recharge during average and wet years to ensure groundwater will be available as a buffer for future dry and drought times when it is needed most.

[Get More Data >](#)

<https://cww.water.ca.gov/>

# California Water Watch

## Precipitation Statistics (period of record: 1981-current)

**Statewide as of 10/16/2023**

Water Year to Date: **0.29"**

% of Average: **72%**

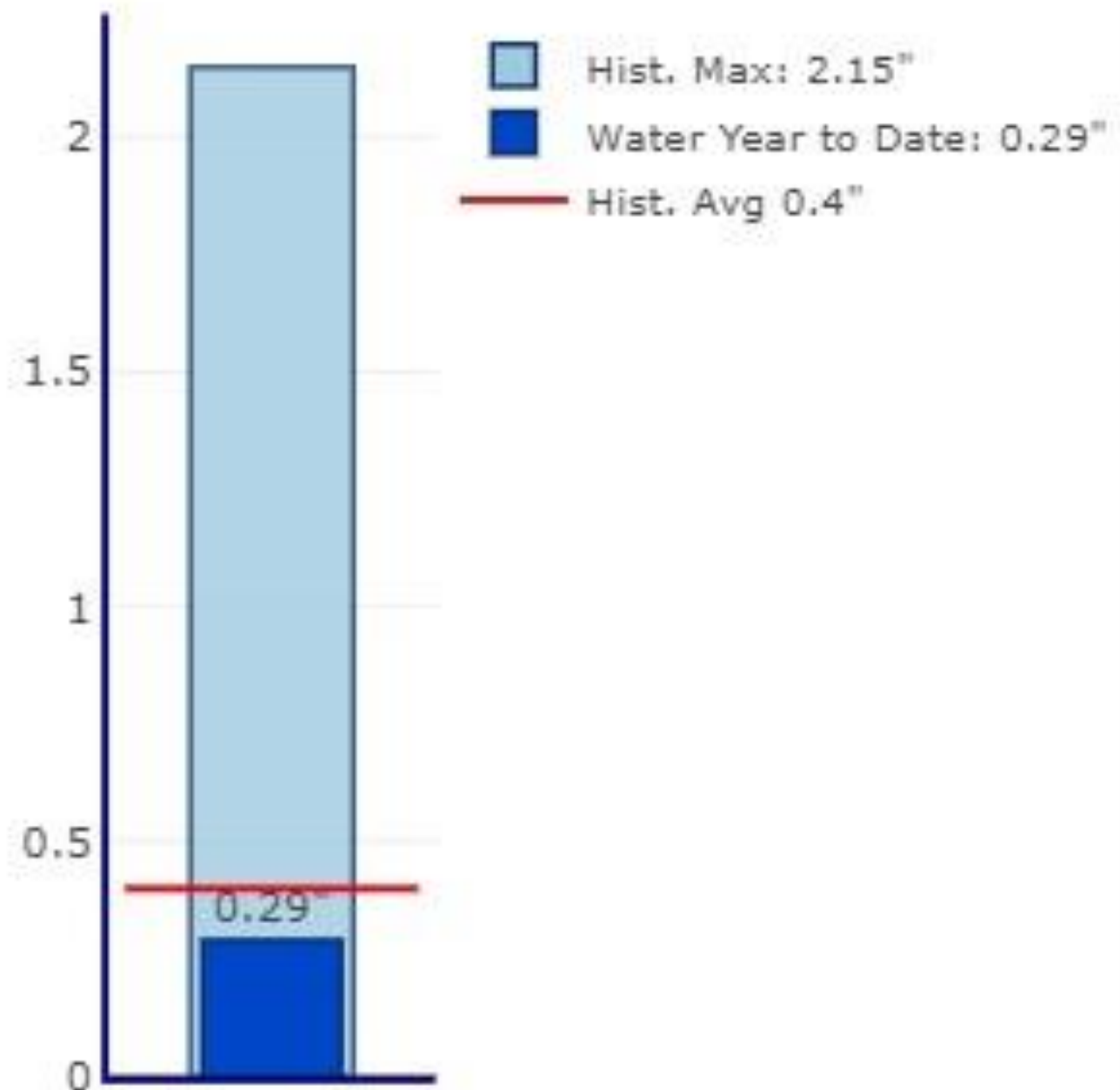
Precipitation % of average for  
full water year through  
September 30th: **1%**

**Historical Record to Date:**

Max: **2.15"**

Mean: **0.4"**

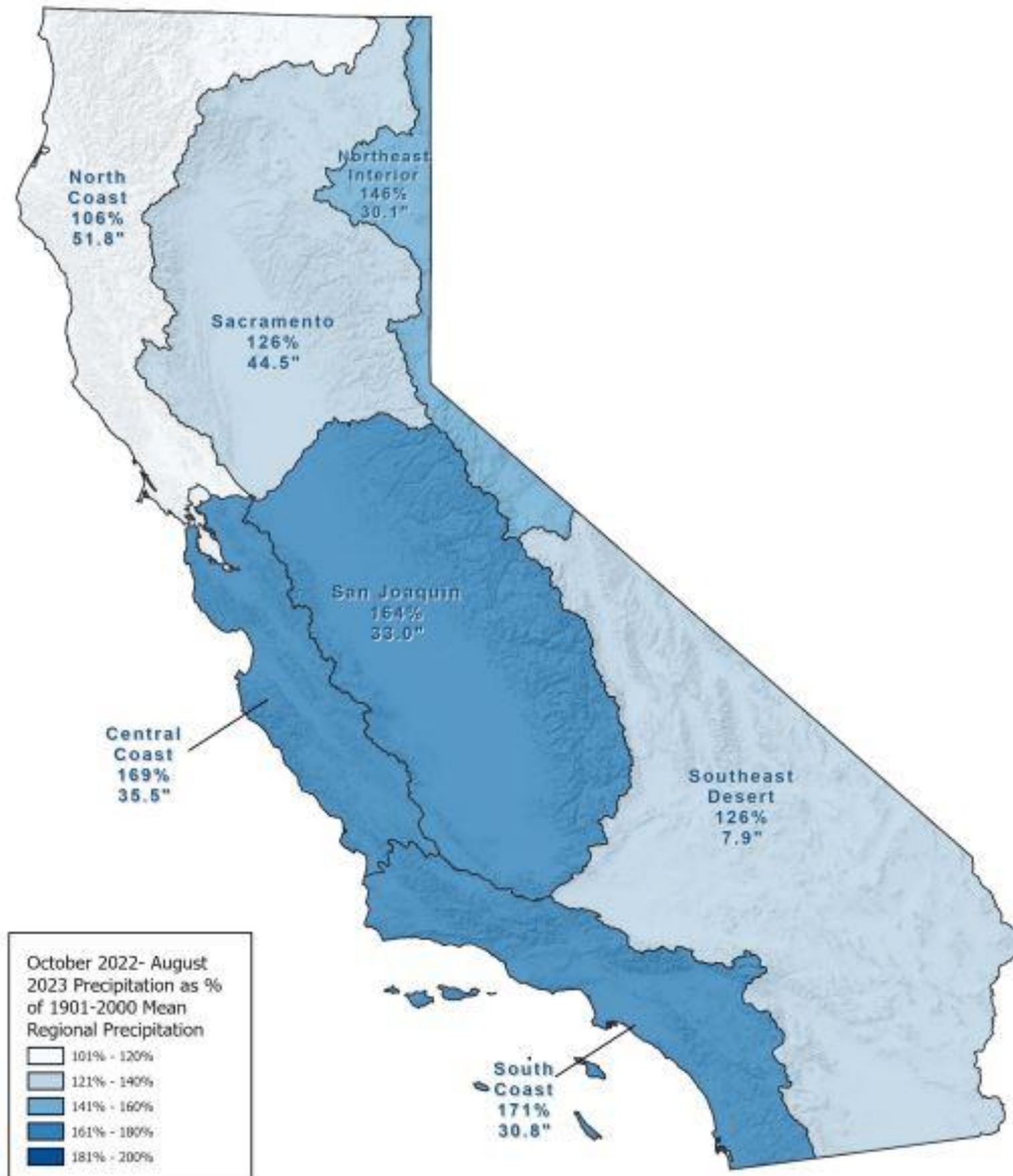
Min: **0.01"**



Precipitation for water year to date is  
72% of historical average



## 2023 Water Year Precipitation



Precipitation percentage based on California Divisional Precipitation for October 2022 - August 2023, compared to the 1901-2000 mean regional precipitation. Data from NOAA National Centers for Environmental Information website. Data accessed 09/12/2023. Map Updated: 09/19/2023.





# CalGWLIVE Website



California's Groundwater Live

[Current Conditions](#) [Groundwater Levels](#) [Well Infrastructure](#) [Land Subsidence](#)

## California's Groundwater Live

CALIFORNIA'S LATEST GROUNDWATER INFORMATION AND CONDITIONS



### SECTIONS

[CURRENT CONDITIONS](#)

[GROUNDWATER LEVELS](#)

[WELL INFRASTRUCTURE](#)

[LAND SUBSIDENCE](#)

[About](#)

[How to access data](#)

[Questions/Feedback: calgw@water.ca.gov](#)

# Statewide – Statistics from the last 10 years

## Current Groundwater Conditions

Groundwater is a vital resource in California. It sustains our ecosystems, supports our agriculture, fuels our economy, quenches our thirst, and reduces the impacts of drought and our changing climate. Groundwater accounts for 40 percent of the State's total annual water supply in normal years and almost 60 percent in drought years. This is why the California Department of Water Resources (DWR) is committed to protecting this precious resource and has developed California's Groundwater Live in conjunction with the public release of [California's Groundwater Update 2020](#). We welcome you to explore our newest groundwater tool which features the latest groundwater information, live statistics and a series of interactive dashboards that can be accessed by clicking the icons below.

### Monitoring Wells Below Normal Level

42%

### Monitoring Wells at Normal Level

33%

### Monitoring Wells Above Normal Level

25%

These numbers are calculated from combining All-Time High, Above Normal, Normal, Below Normal and All-Time Low categories in the Current Groundwater Level Conditions dashboard below. [Learn more about the calculations](#)

<https://sgma.water.ca.gov/CalGWLIVE/#stats>



# Current Well Infrastructure Information

This section includes the latest information on the well infrastructure in California. Information for domestic and irrigation wells are based on DWR's Online System for Well Completion Reports (OSWCR) and information for public supply wells is based on data from the State Water Resource Control's Division of Drinking Water. Click on the links below to explore the five interactive and user-friendly dashboards, that detail California's well infrastructure.

## Domestic Wells



279,011 Total  
**2,599 WCRs**  
Received Year to Date

## Irrigation Wells



61,601 Total  
**1,052 WCRs**  
Received Year to Date

## Public Supply Wells



13,858 Total  
Active  
Public Supply Wells

## Reported Dry Wells

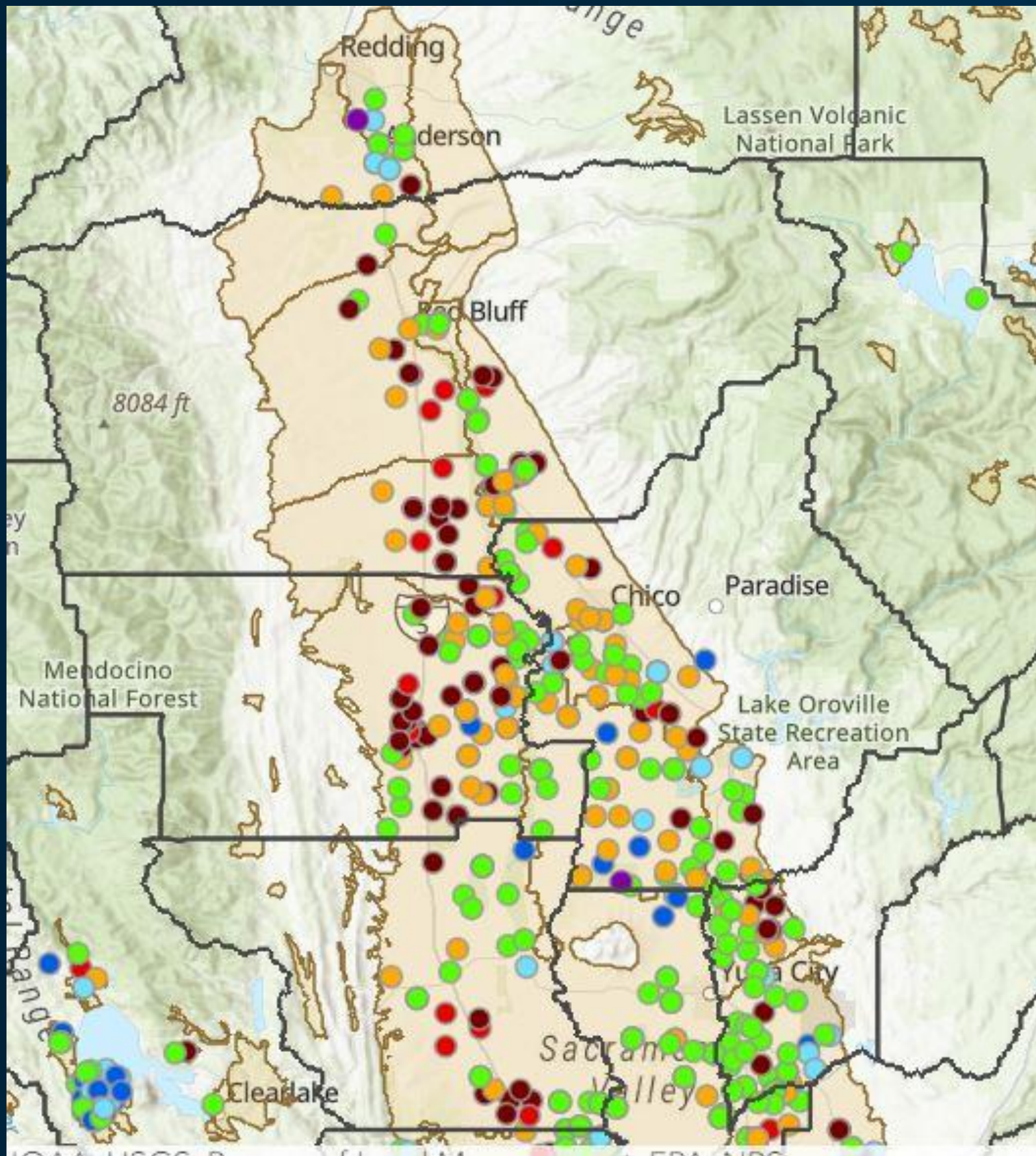


423 in 2023  
**18 Reported**  
In the last 30 Days

**New!** Explore [Dry Domestic Well Susceptibility](#) within Groundwater Basins



# Current GWL Conditions – Last 18 Months

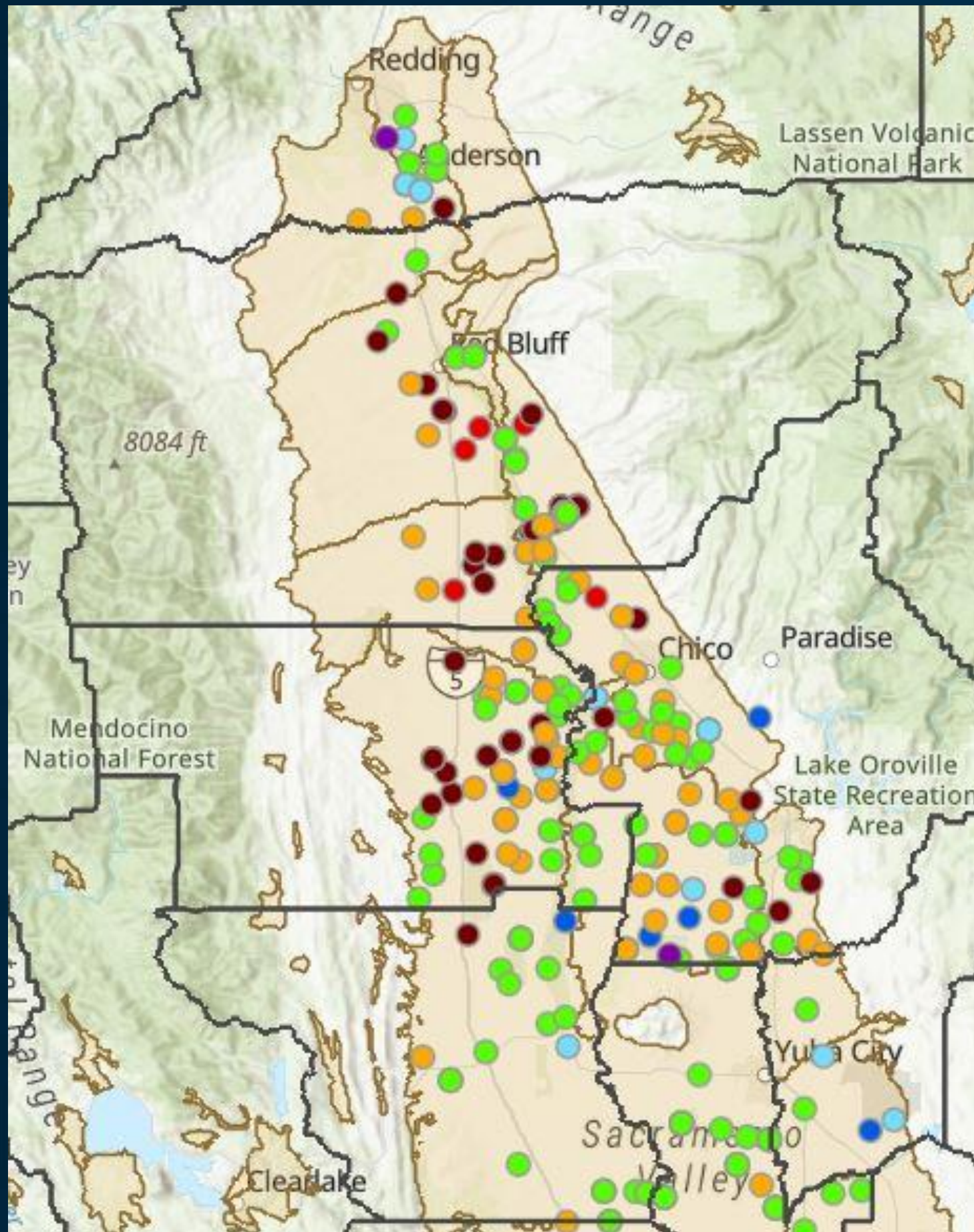


## Groundwater Level Percentile Class

- All-Time Low
- <10 (Much Below Normal)
- 10-25 (Below Normal)
- 25-50 (Normal)
- 50-75 (Normal)
- 76-90 (Above Normal)
- >90 (Much Above Normal)
- All-Time High



# Current GWL Conditions – Last 90 Days



## Groundwater Level Percentile Class

- All-Time Low
- <10 (Much Below Normal)
- 10-25 (Below Normal)
- 25-50 (Normal)
- 50-75 (Normal)
- 76-90 (Above Normal)
- >90 (Much Above Normal)
- All-Time High

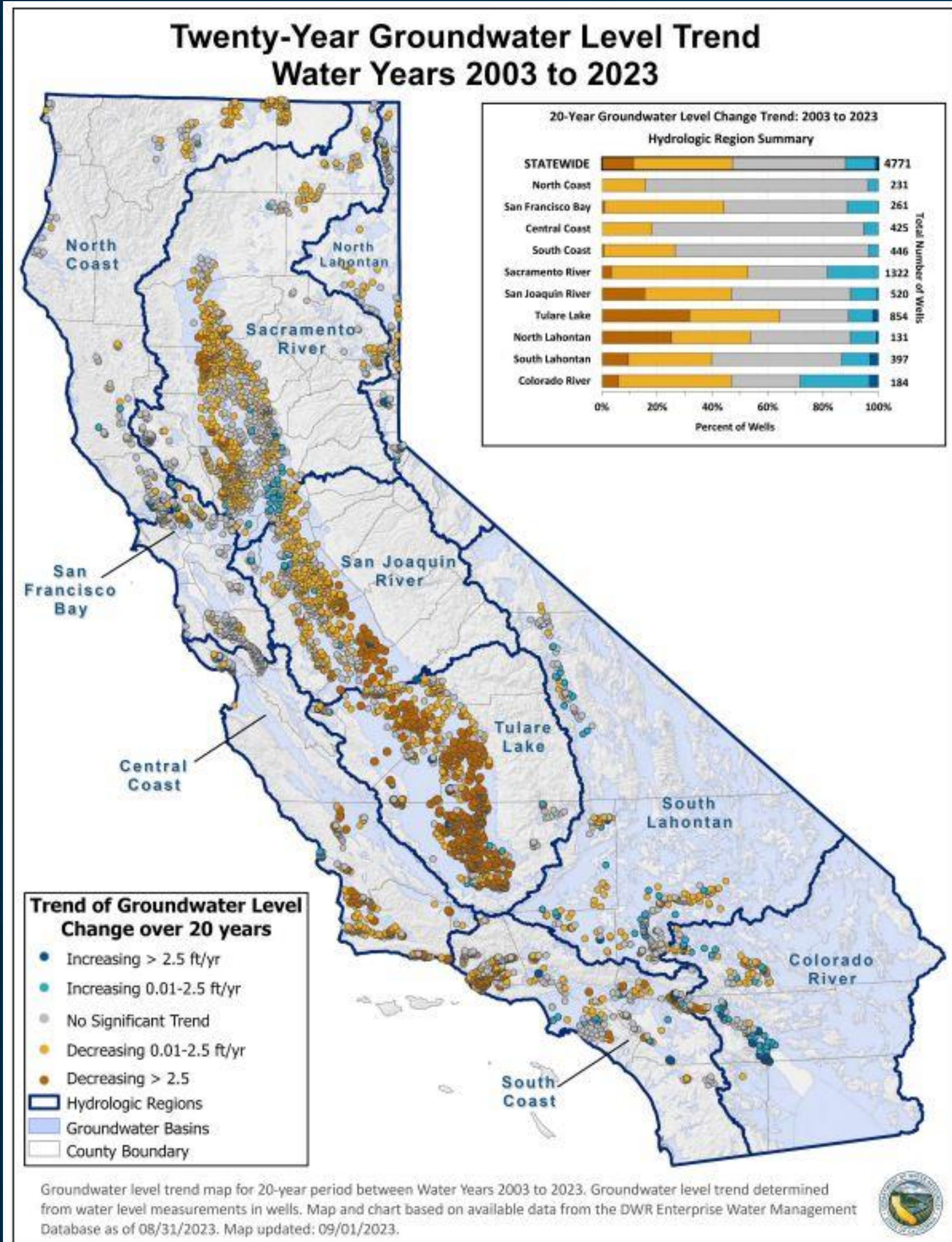
**NEW!**

**CALIFORNIA'S  
GROUNDWATER CONDITIONS  
SEMI-ANNUAL UPDATE:  
OCTOBER 2023**



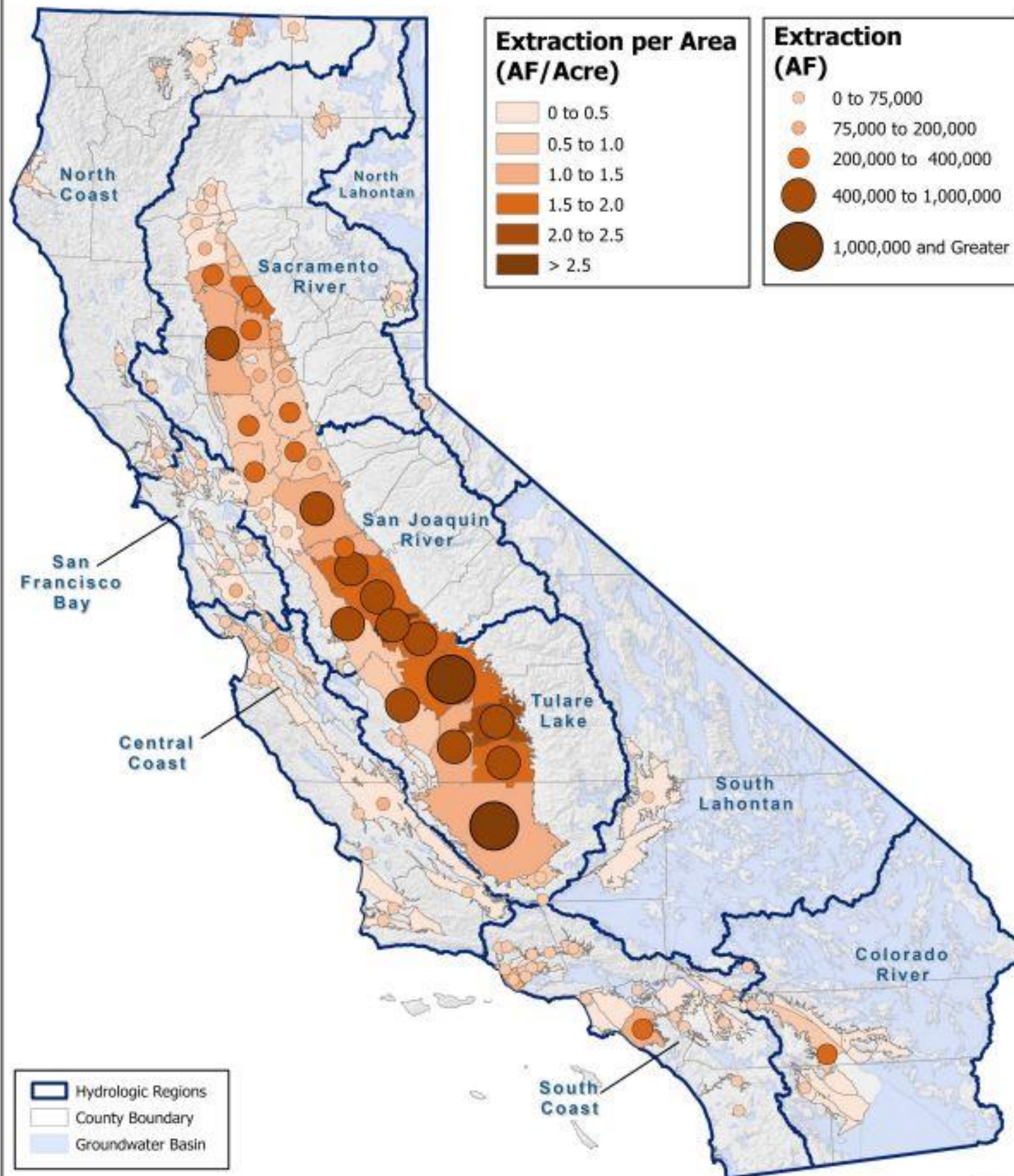
# California's Groundwater Conditions Semi-Annual Update: October 2023

[https://data.cnra.ca.gov/dataset/ae160cf2-51d8-450d-82cc-2708e63ccd95/resource/7a9f6a69-0f43-474c-b9a5-b8b6f3e5ed48/download/final\\_draft\\_oct\\_2023\\_semi\\_annual\\_groundwater\\_conditions\\_report.pdf](https://data.cnra.ca.gov/dataset/ae160cf2-51d8-450d-82cc-2708e63ccd95/resource/7a9f6a69-0f43-474c-b9a5-b8b6f3e5ed48/download/final_draft_oct_2023_semi_annual_groundwater_conditions_report.pdf)





# Groundwater Extraction Reported by Basin for Water Year 2022

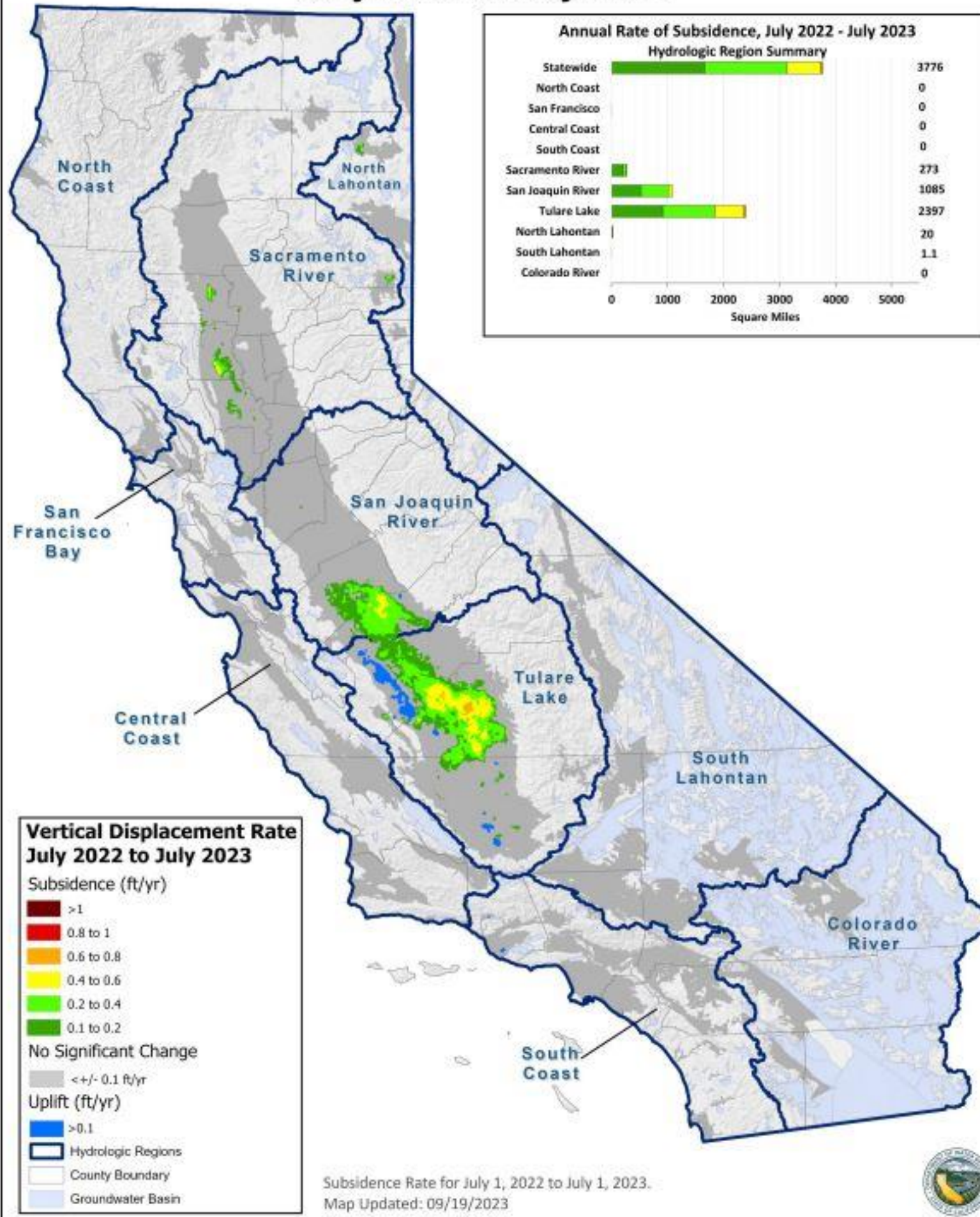


Groundwater Extraction for one-year period for Water Year 2022 (October 1, 2021 to September 30, 2022).  
 Map based on data submitted through 2022 GSP/Alternative Annual Reports.  
 Map Updated: 09/14/2023.





## Subsidence Rate July 2022 to July 2023

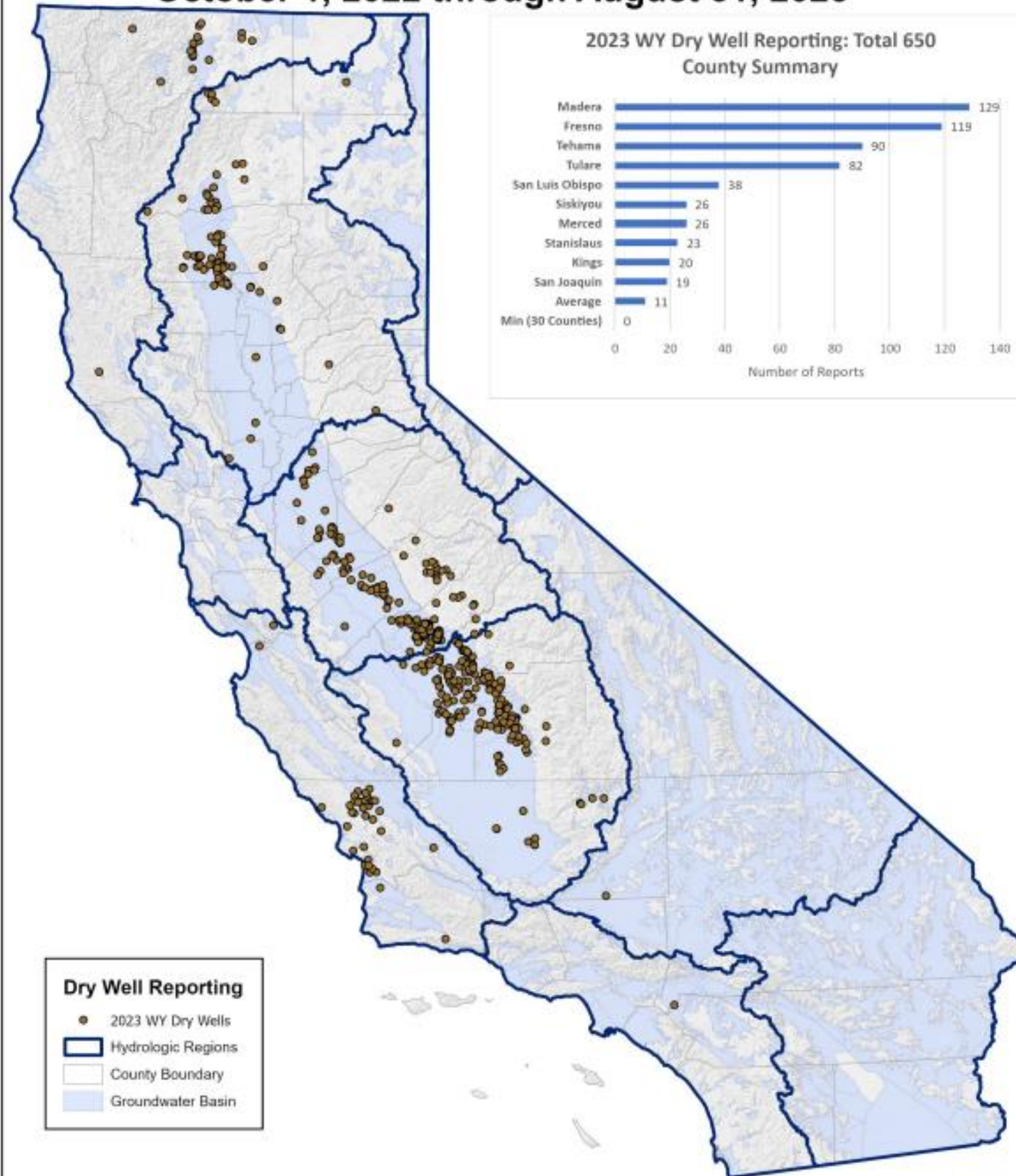


InSAR data  
processing for  
2022-2023 will  
be completed  
early 2024



# Dry Well Reporting

## October 1, 2022 through August 31, 2023



Dry well reporting map for one-year period between October 1, 2022 and August 31, 2023. Map and chart based on available data from the Household Water Supply Shortage Reporting System database as of 08/31/2023. Map Updated: 09/01/2023





***Groundwater is a renewable resource  
and CAN be managed sustainably***



<http://water.ca.gov/groundwater/>

<https://sgma.water.ca.gov/CalGWLIVE/>

<https://data.cnra.ca.gov/dataset/california-s-groundwater-semi-annual-conditions-updates>