



Status of Water Supply and Water Banking Programs

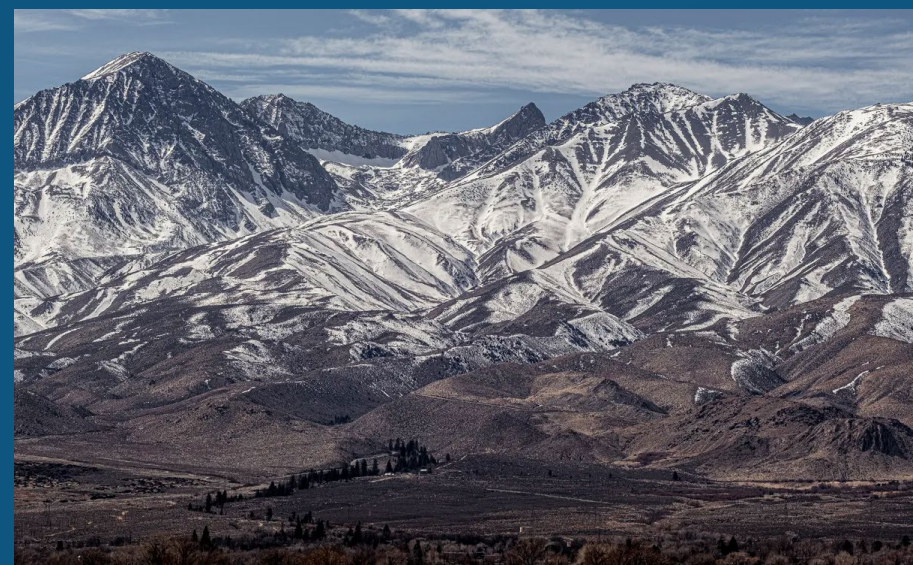
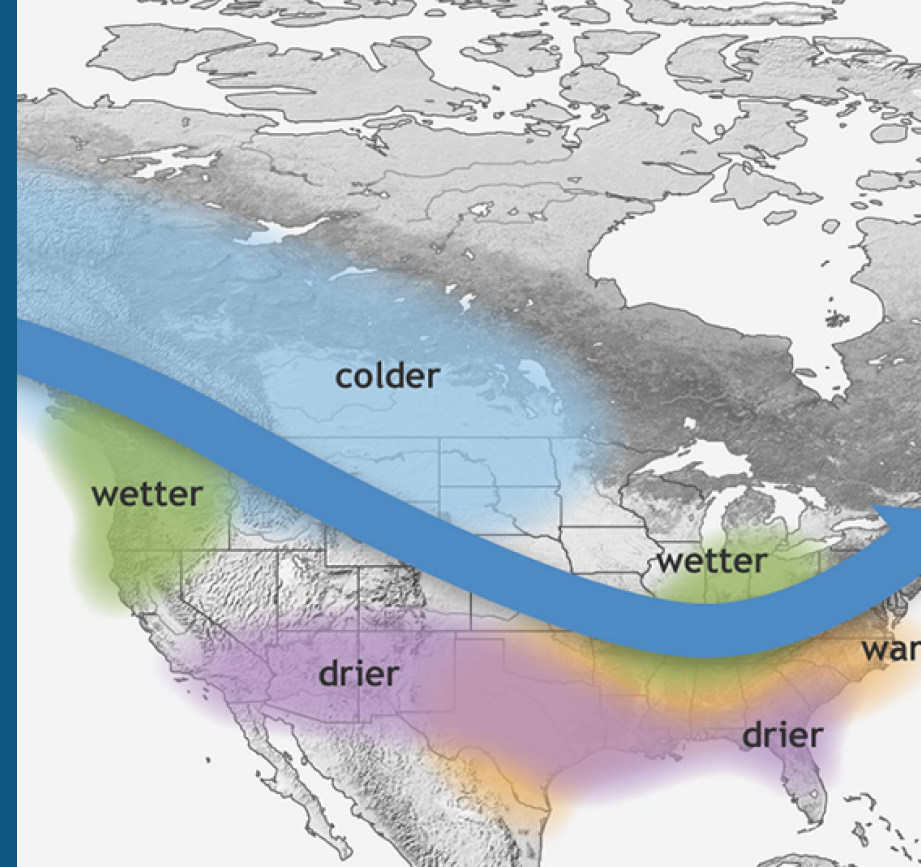
WATER RESOURCES AND WATERSHED COMMITTEE

MARCH 9, 2022

ITEM 5.1

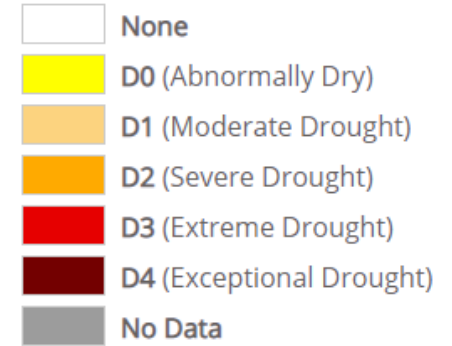
Water Supply Update Overview

- ▶ Drought Update
- ▶ Soil Moisture
- ▶ Snowpack
- ▶ Precipitation
- ▶ Weather
- ▶ Reservoir Levels
- ▶ 2022 Operations
- ▶ Dry Year Storage
- ▶ Banking & Exchange Programs



Drought Classification

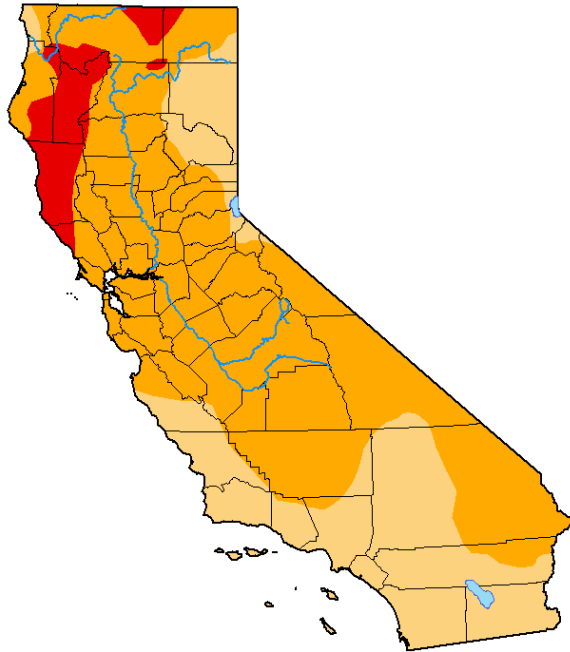
Intensity



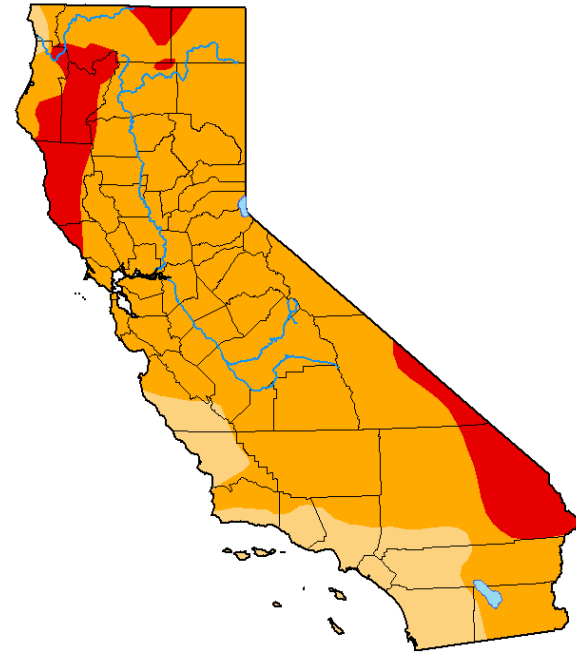
Feb 22nd

March 1st

February 22, 2022



March 1, 2022

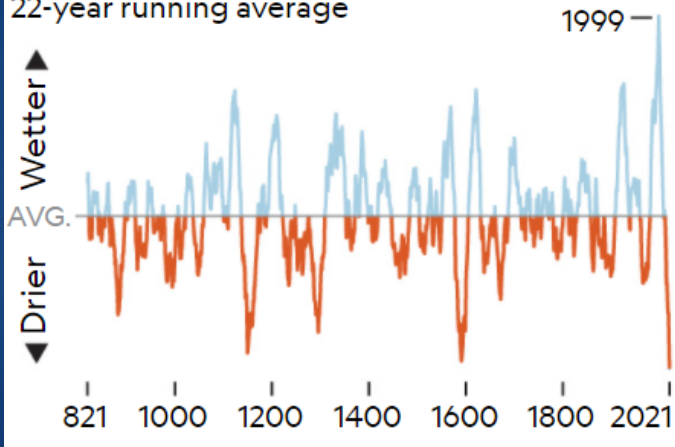


Parts of the western U.S. face the worst drought in 1,200 years

Scientists can determine historic soil moisture levels by measuring the rings of old trees. Based on these records, which stretch back to the year 821, the drought of 2000 to 2021 ranks as the worst in some areas, especially in the southwestern United States.

Soil moisture in southwestern study area

22-year running average

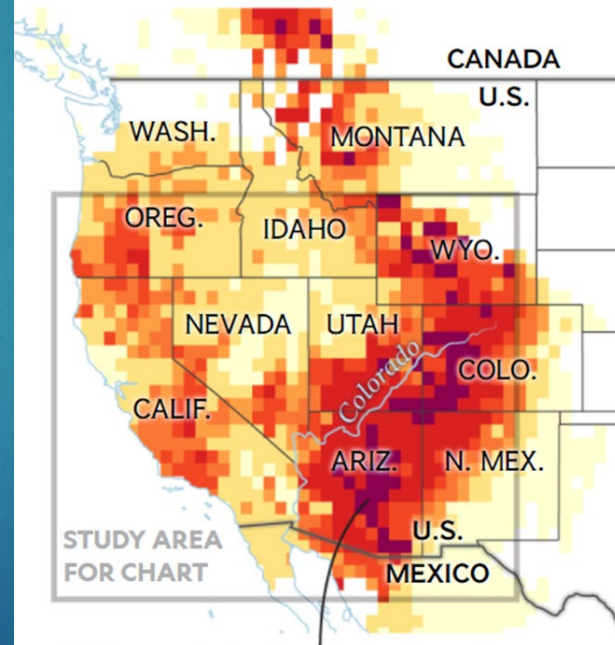


“The inertia of a drought of this magnitude is unlikely to be broken with a single year of good precipitation,” says Williams. “It’ll take a number of wet years to dig ourselves out.”

Ranking of the 2000-2021 drought

Based on records for years 821-2021

- First (worst)
- Second
- Third
- Fourth
- Fifth
- Sixth to tenth
- Below tenth
- No data

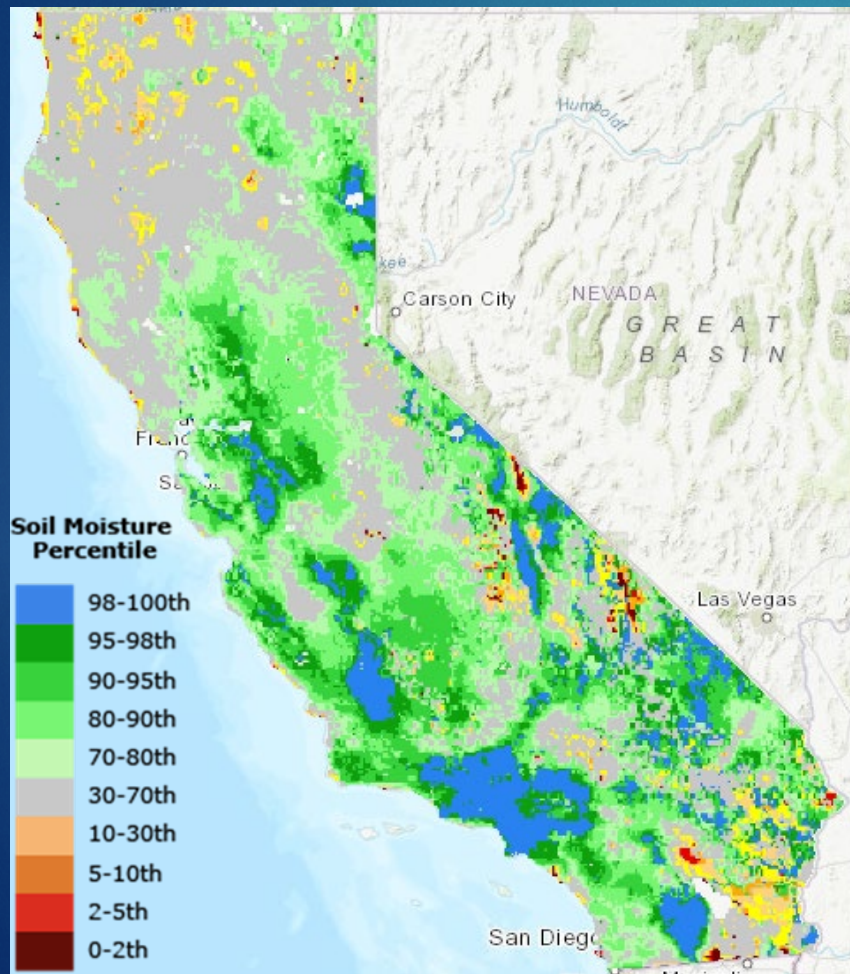


This area is in the **worst drought** of the last 1,200 years.

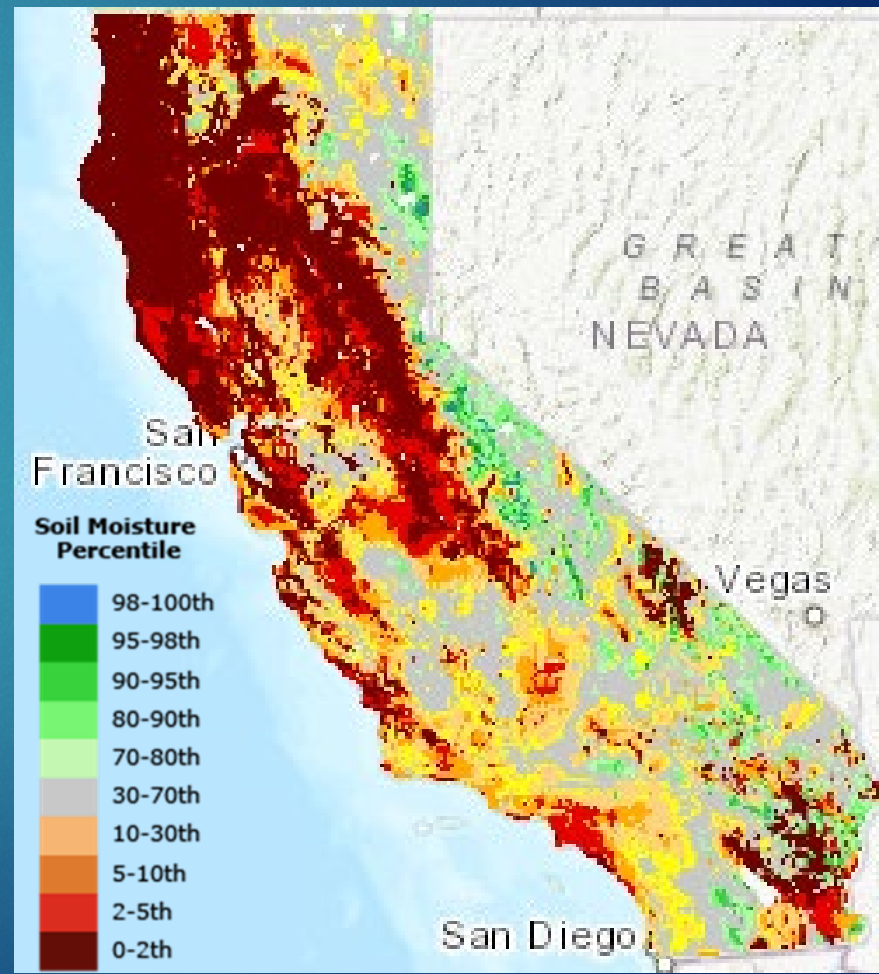
Riley D. Champine, NG Staff
Source: A. Park Williams and others,
Nature Climate Change, 2022

Soil Moisture Update

January 1, 2022



March 6, 2022

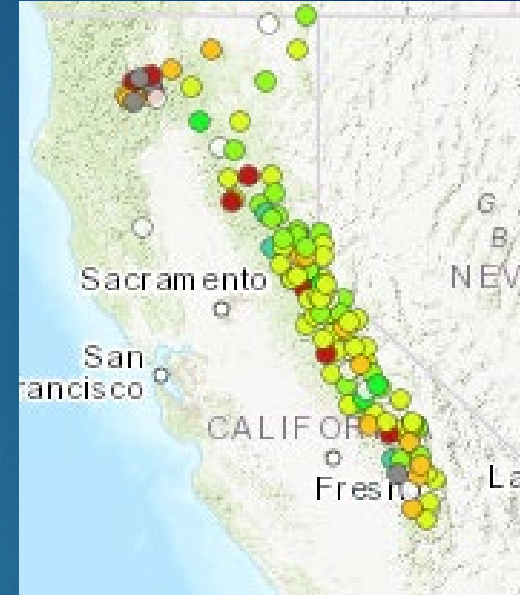
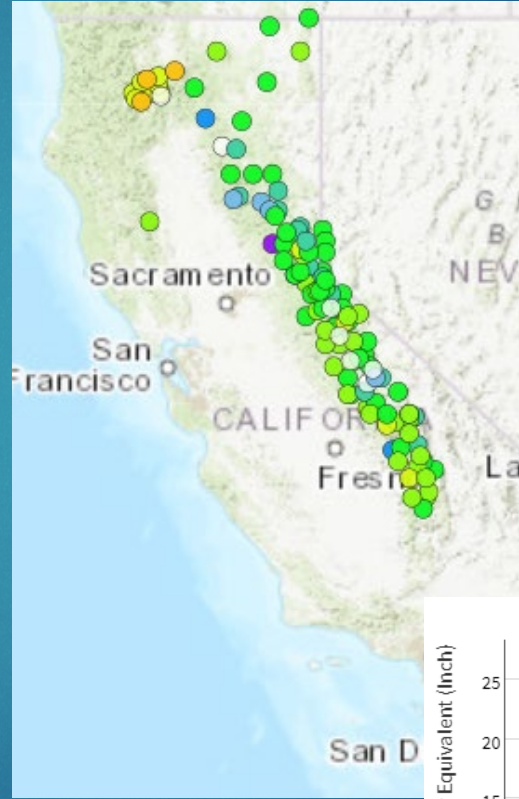
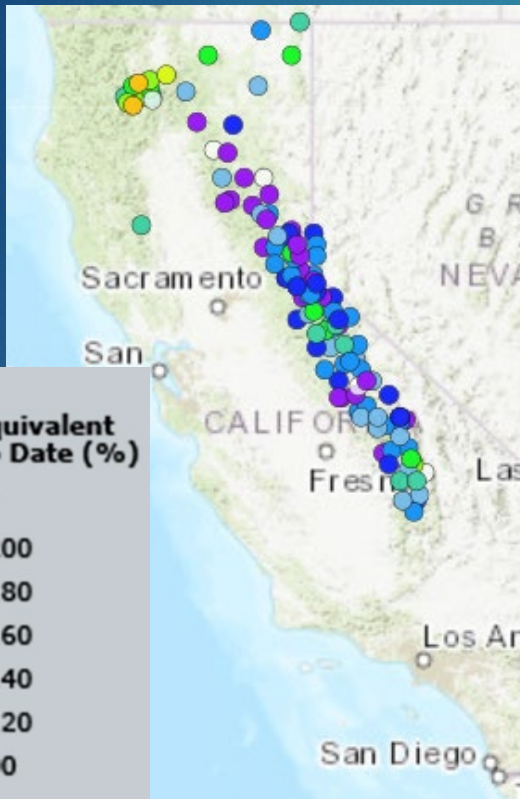


Snowpack Update

January 1, 2022

February 11, 2022

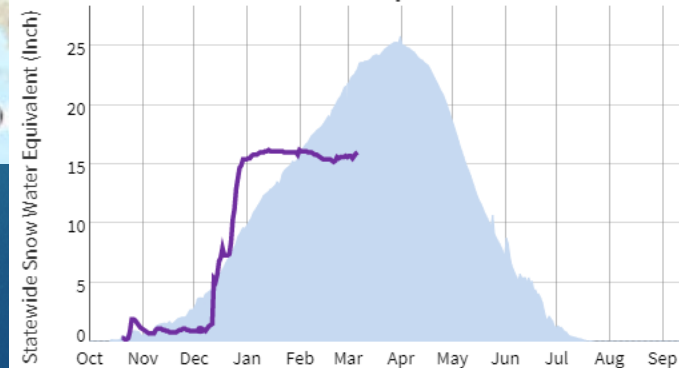
March 7, 2022



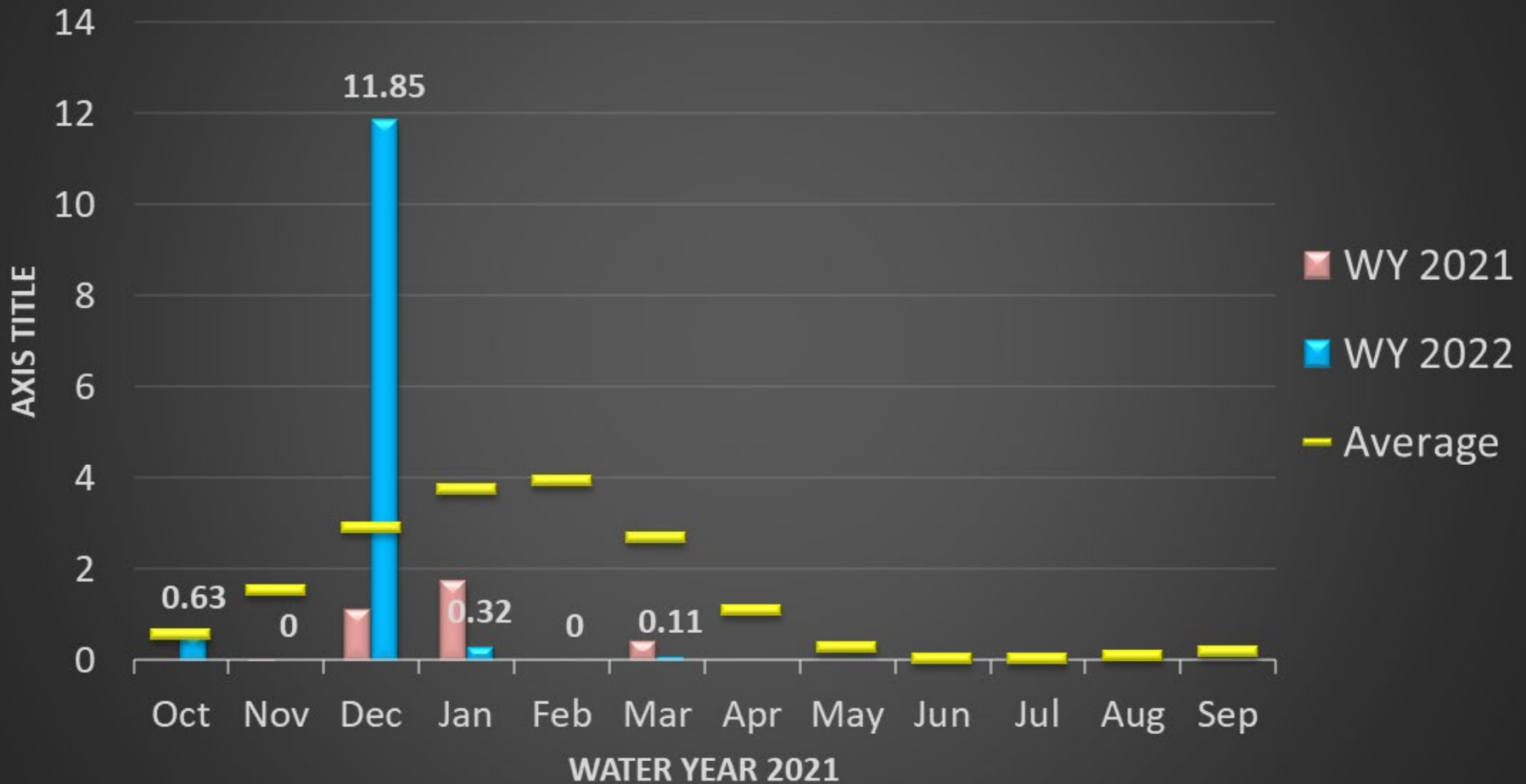
Snow Water Equivalent % of Average to Date (%)

- >200
- 180-200
- 160-180
- 140-160
- 120-140
- 100-120
- 80-100
- 60-80
- 40-60
- 20-40
- 0-20
- No data found

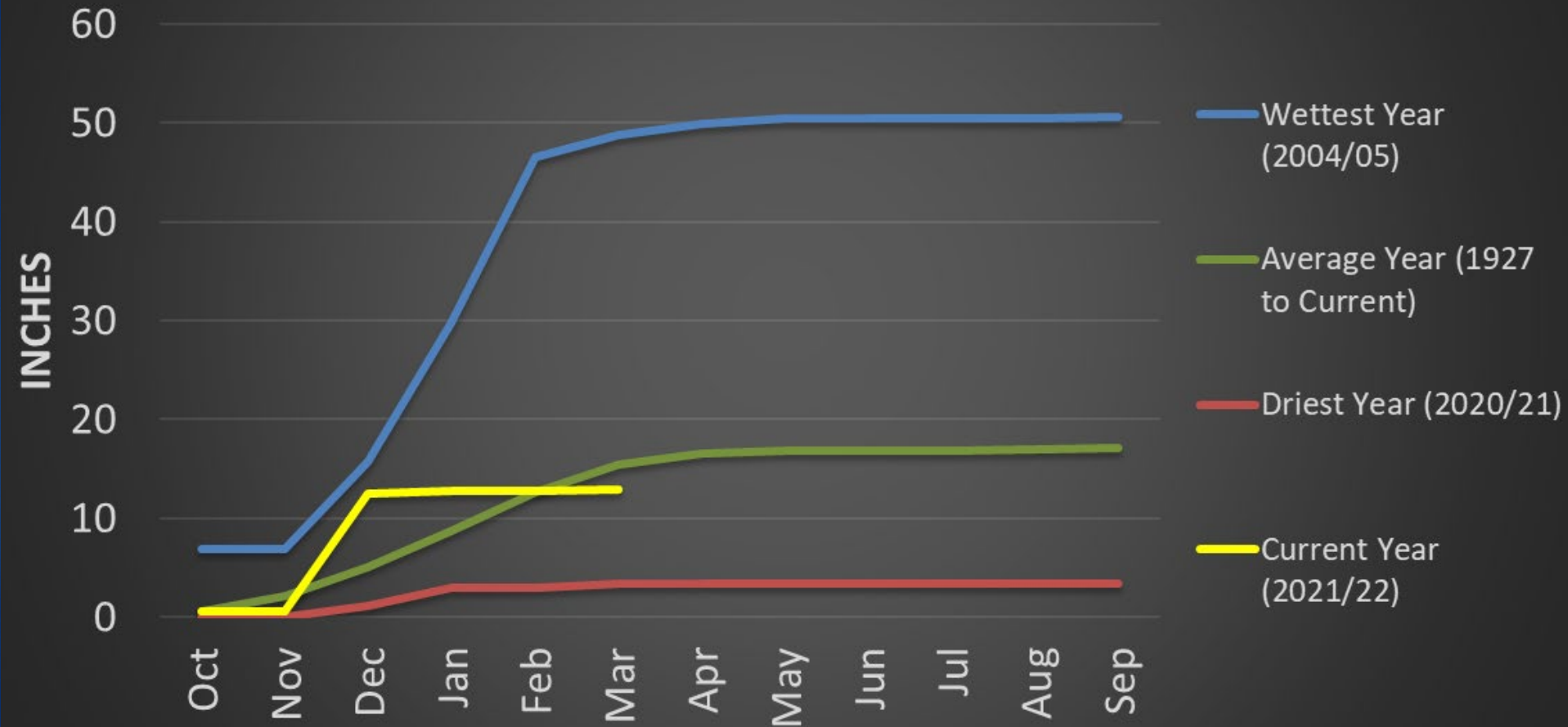
Statewide Snowpack Chart



SCV Precipitation Water Year 2022



SCV Historical Rainfall



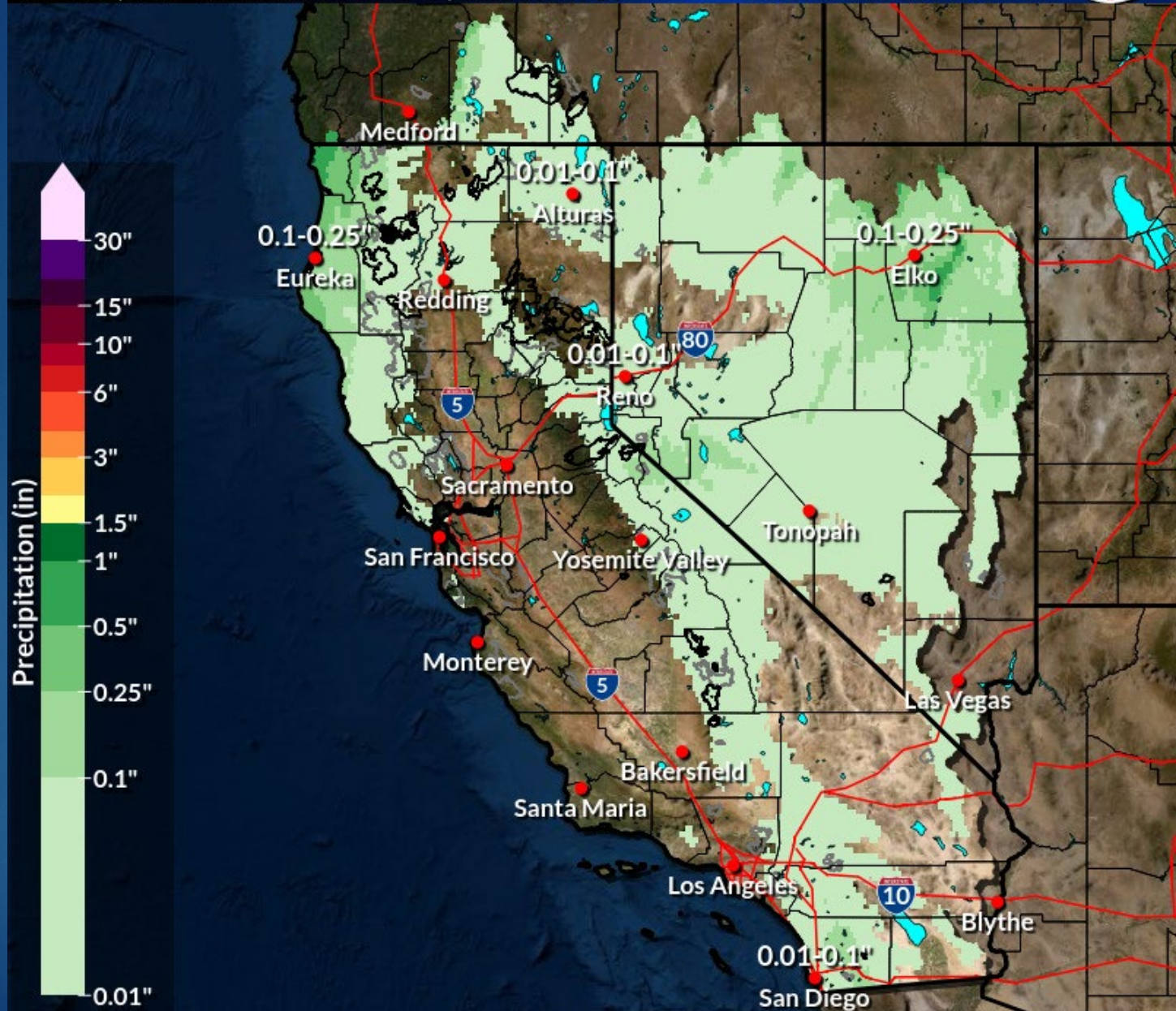
6-Day Forecast Precipitation

California Nevada
River Forecast Center



Tue Mar 8, 2022 4 AM PST to Mon Mar 14, 2022 5 AM PDT

Issued Mar 08, 2022 6:40 AM PST



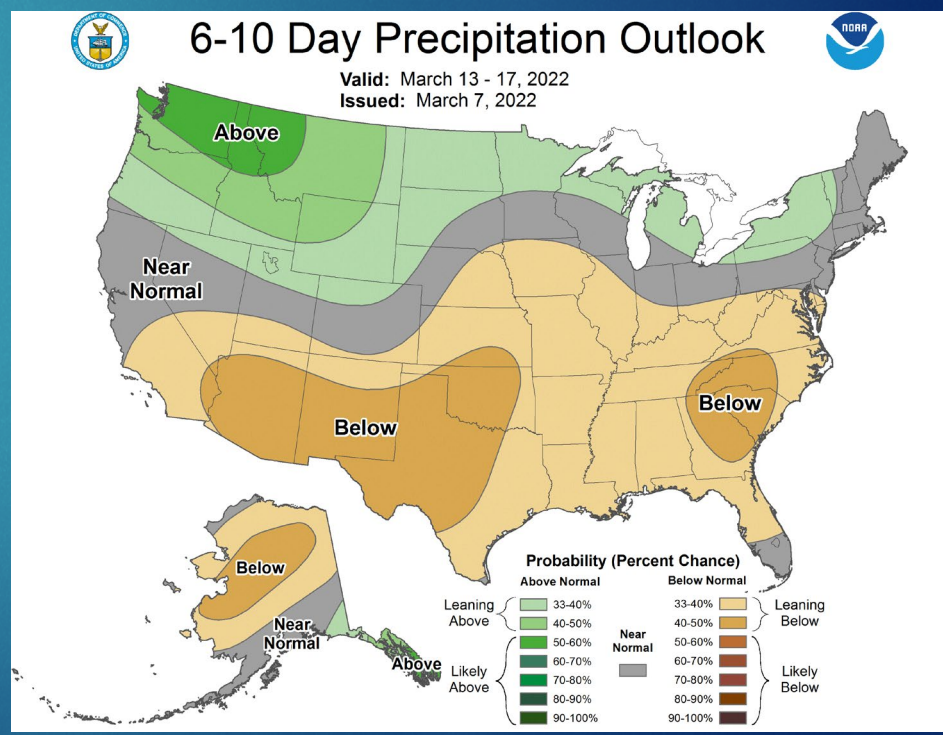
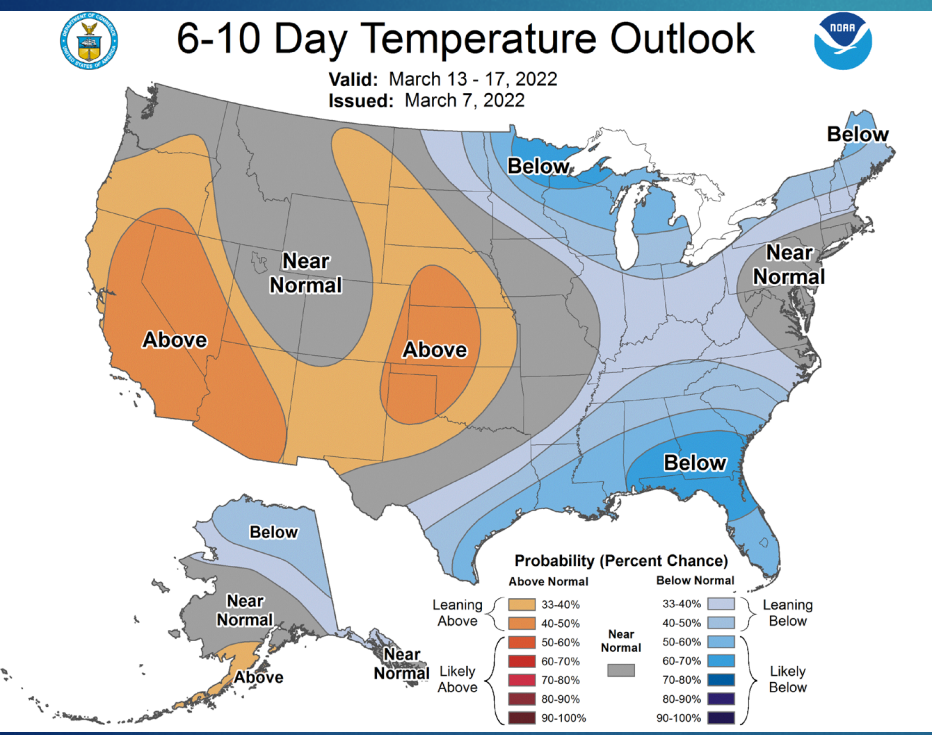
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

6-10 Day Outlook



Temperature

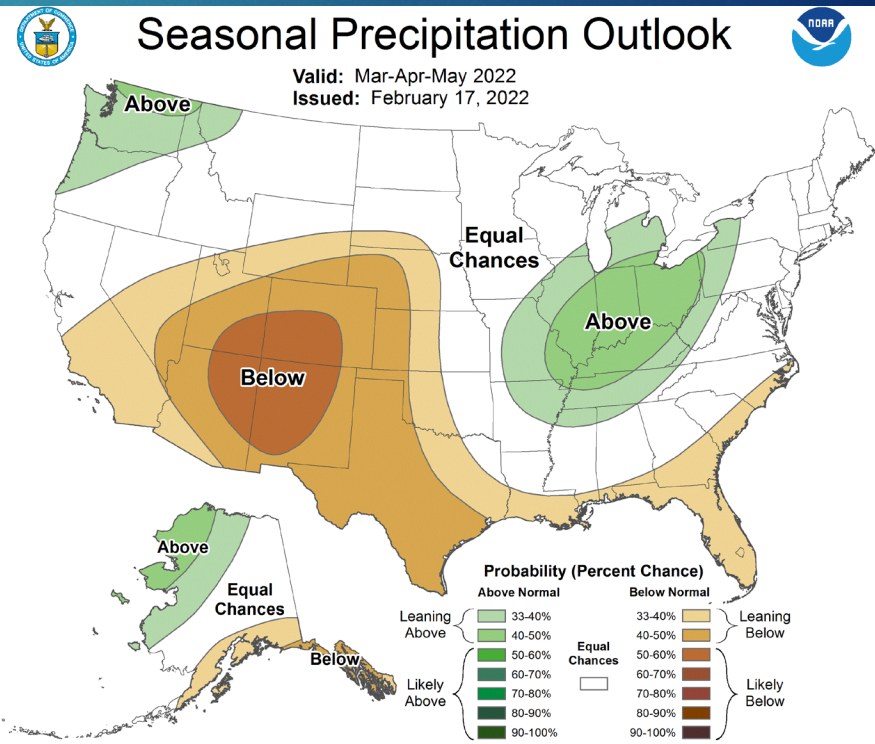
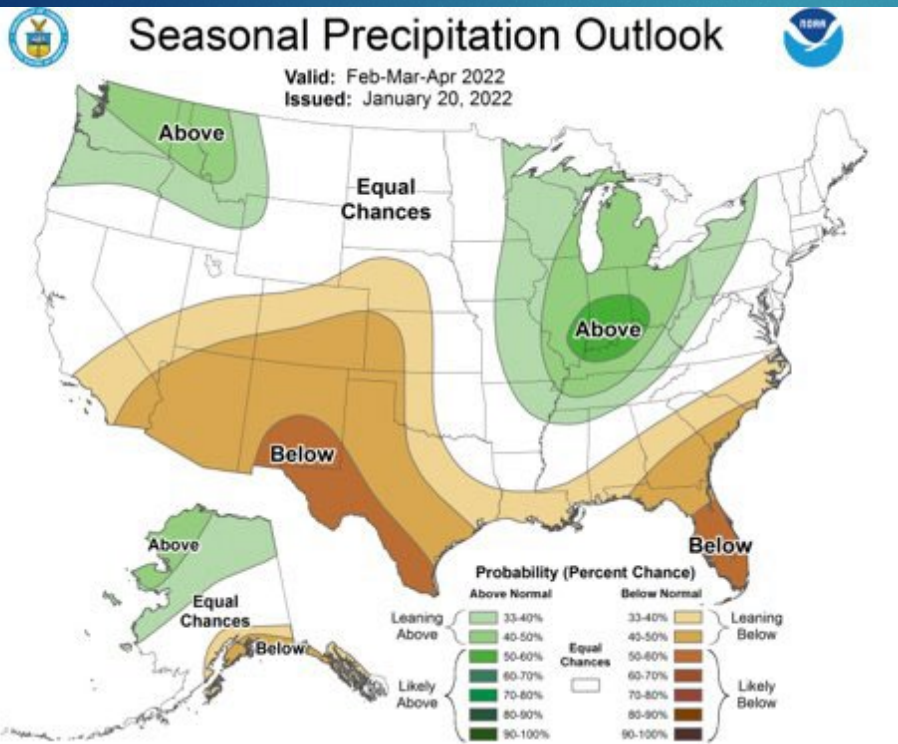
Precipitation



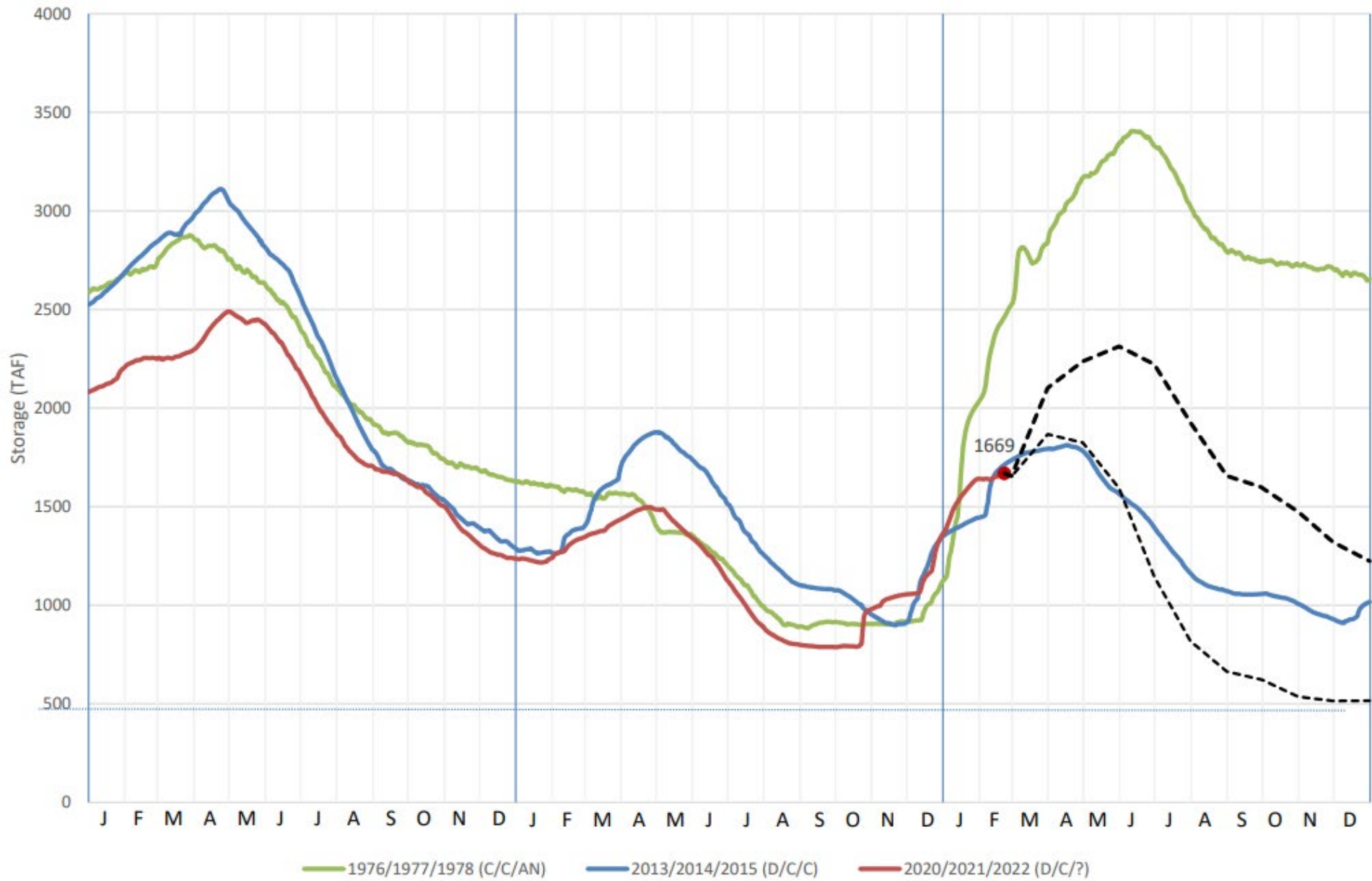
Three Month Precipitation Outlook

Feb-Mar-Apr

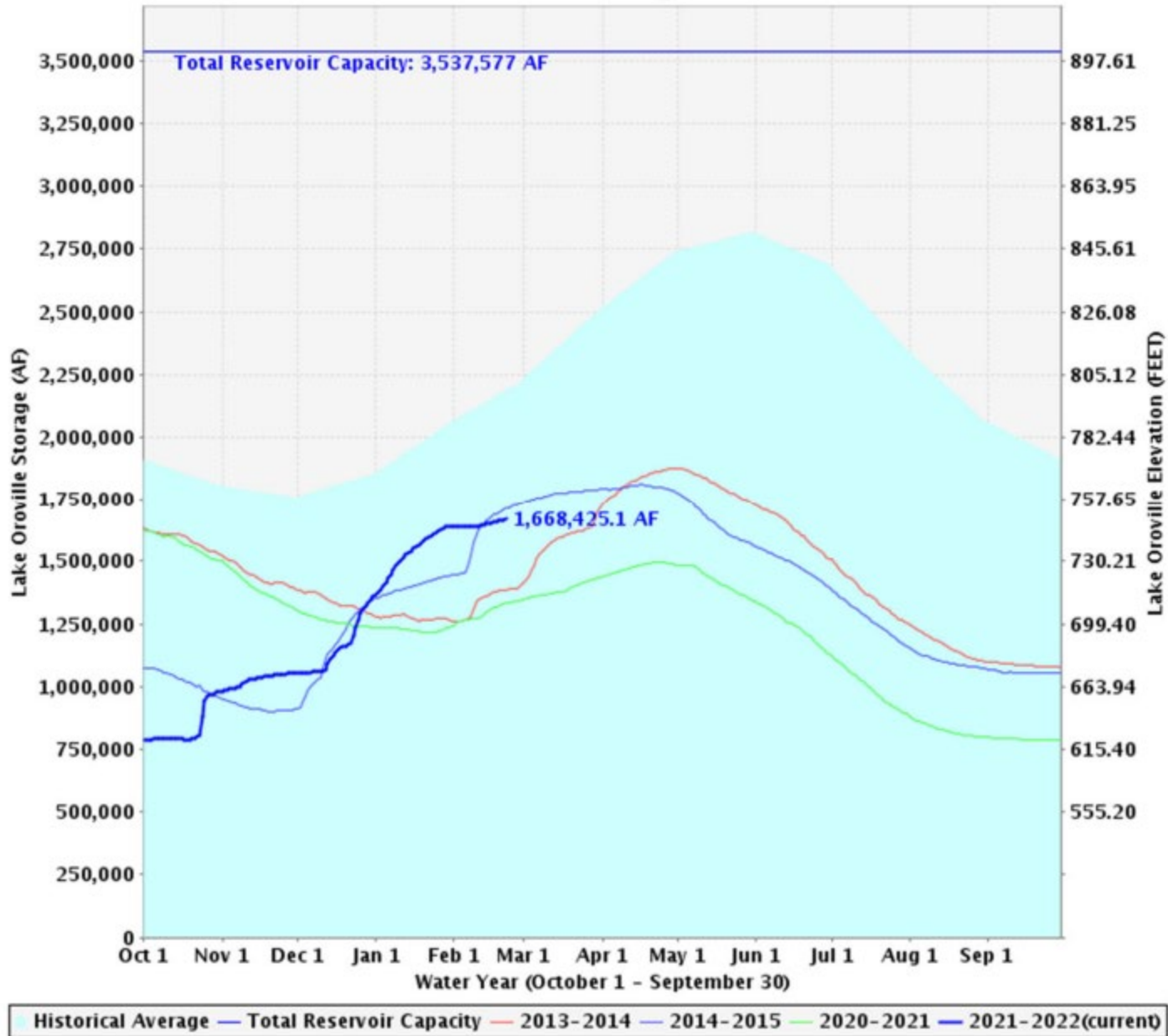
Mar-Apr-May



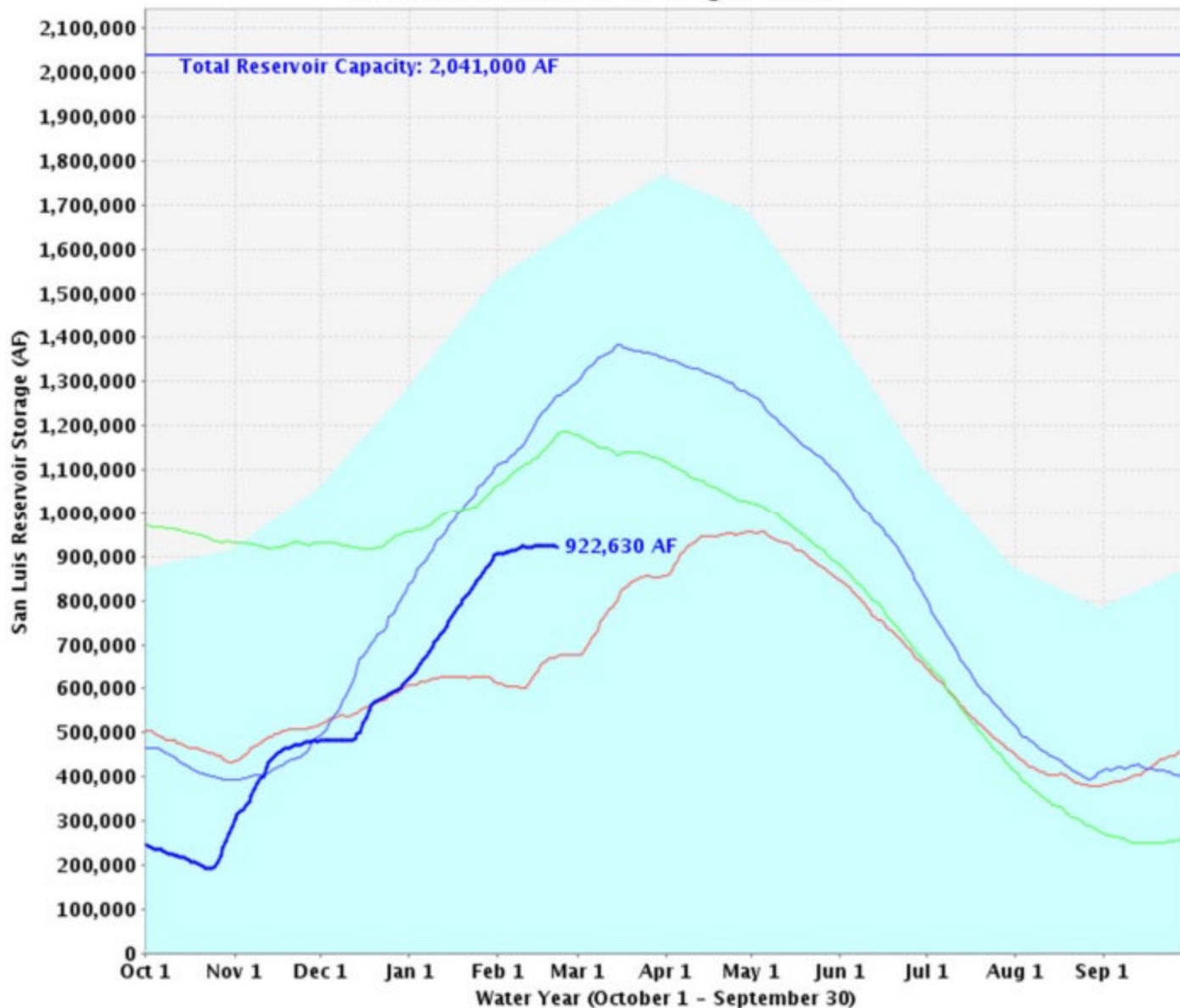
Lake Oroville



Lake Oroville Storage Levels

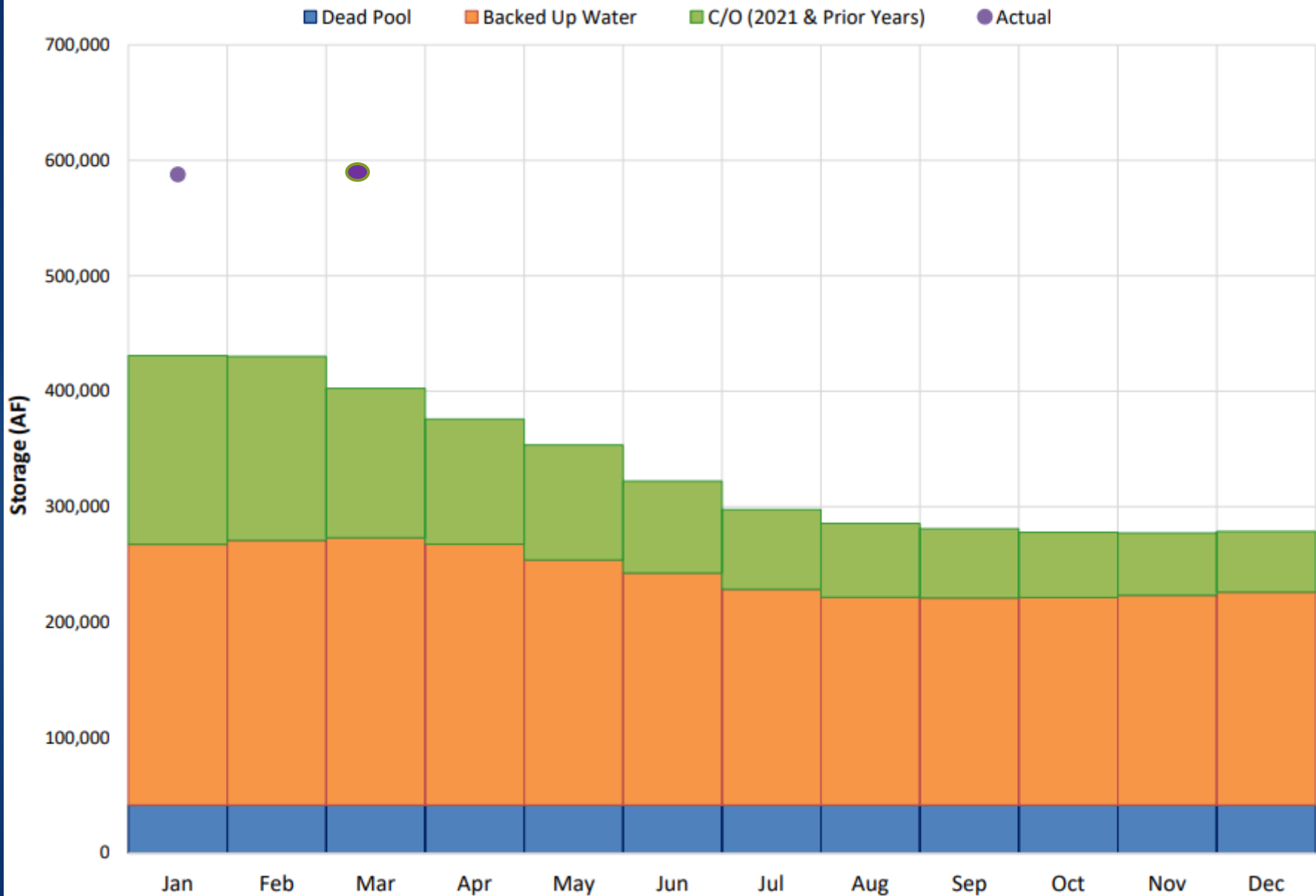


San Luis Reservoir Storage Levels



Historical Average — Total Reservoir Capacity — 2013-2014 — 2014-2015 — 2020-2021 — 2021-2022(current)

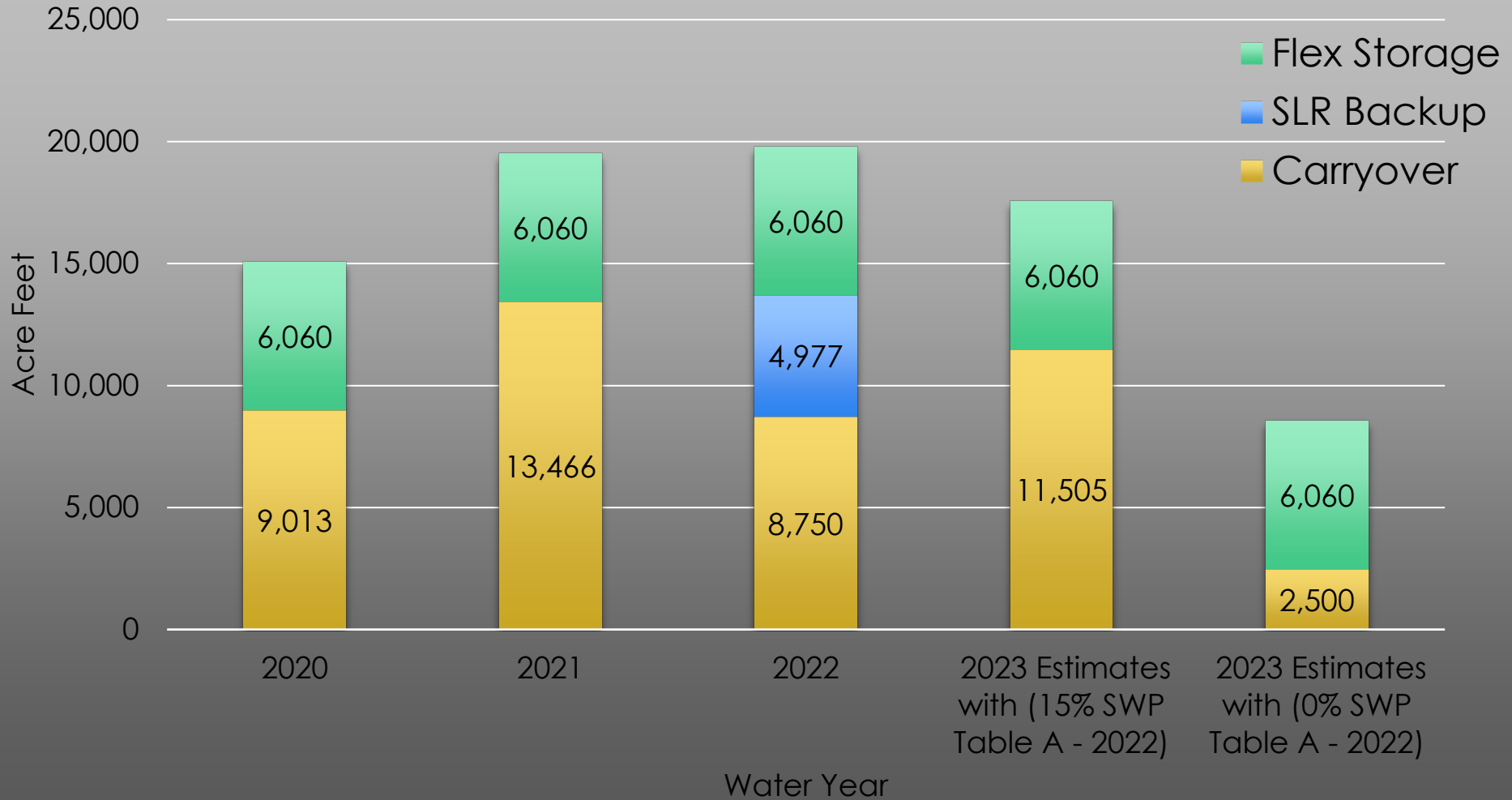
San Luis Reservoir (SWP Share)



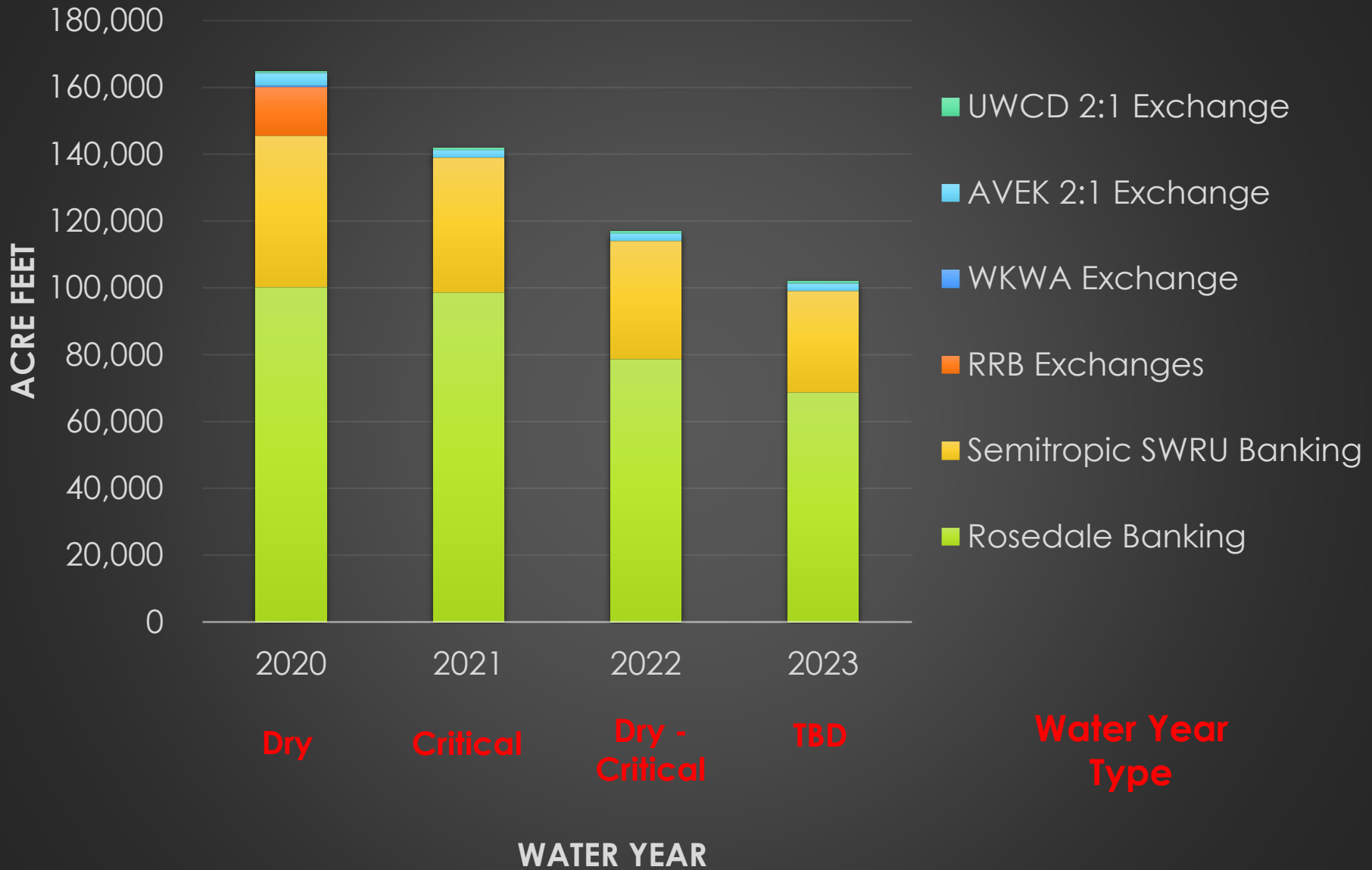
2022 Operating Plan

2022 Operating Plan (as of March 2022)	2022 0% SWP Allocation	2022 5% SWP Allocation	2022 10% SWP Allocation	2022 15% SWP Allocation2	2023 5% SWP Allocation
Demand	71,100	71,100	71,100	71,100	72,500
Groundwater	27,700	27,700	27,700	27,700	27,700
Alluvium	15,500	15,500	15,500	15,500	15,500
Saugus	12,200	12,200	12,200	12,200	12,200
Recycled Water	450	450	450	450	700
Imported Demand	42,950	42,950	42,950	42,950	44,100
Imported Supplies					
SWP Table A	0	4,760	9,520	14,280	4,760
BVRRB	11,000	11,000	11,000	11,000	11,000
Total Available Imported Supplies	11,000	15,760	20,520	25,280	15,760
<i>Excess Imported Supplies (neg = shortfall)</i>	<i>(31,950)</i>	<i>(27,190)</i>	<i>(22,430)</i>	<i>(17,670)</i>	<i>(28,340)</i>
Dry Year Water Supplies					
SWP Carryover Delivered (not always guaranteed)	13,500	13,500	13,500	13,500	11,830
Rosedale Banking	15,000	15,000	15,000	10,000	10,000
Semitropic Enhanced Recovery Unit (Banking)	5,000	5,000	5,000	5,000	5,000
Yuba Accord	1,000	1,000	1,000	1,000	1,000
Dry Year Water Purchase					
Flexible Storage (up to 6,060 AF)					6,060
Total Imported & Dry Year Supplies	45,500	50,260	55,020	54,780	49,650
2022 SWP Carryover into 2023 (neg = shortage)	2,550	7,310	12,070	11,830	5,550

Dry Year Storage Jan 1st Balance



Banking & Exchange Balances Jan 1st





**THE BAD NEWS:
NOTHING IS PERMANENT.
THE GOOD NEWS:
NOTHING IS PERMANENT.**

- LOLLY DASKAL

QUOTESPEEDIA.ORG

QUESTIONS?