

# STATUS OF WATER SUPPLIES

Water Resources and Watershed Committee April 10, 2024





Weather

Reservoirs

**Operations** 

Questions

Drought

Rain

Snow

Forecast

Oroville

San Luis

Plan Updates



## www.cnrfc.noaa.gov Medf. rd Carson City an Francisco San Jose California Los Angeles **CPC Drought Outlook** San Diego Removal Development Persists or Remains but Seasonal Drought Outlook Created: 2024/03/21 Valid: 2024/03/21 - 2024/06/30

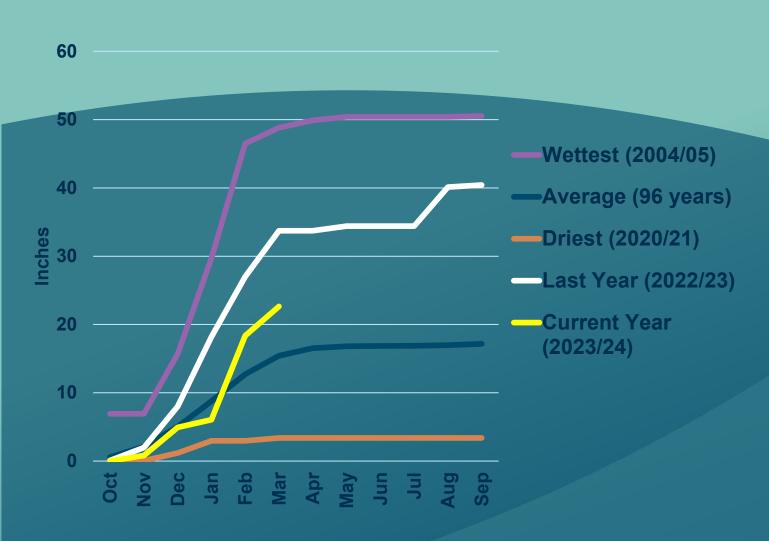
## SEASONAL DROUGHT FORECAST

March-June

- No change in drought status anticipated



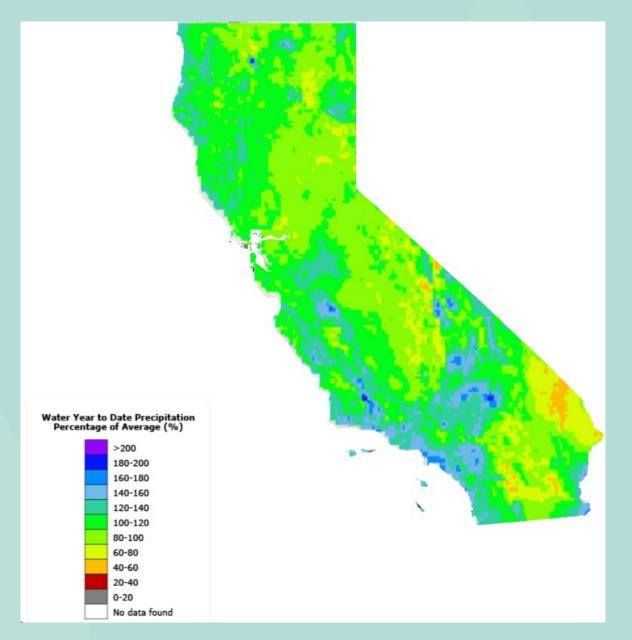
### **SCV Historical Rainfall**



## SCV PRECIPITATION

Historical Average = 17.4" 30 Year Average = 16.2"

- 22.64" so far in WY 2024
  - 146% of historical average through end of March



Source: California Water Watch - <a href="https://cww.water.ca.gov/">https://cww.water.ca.gov/</a>

# STATEWIDE PRECIPITATION

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

#### **Statewide as of 04/07/2024**

Water Year to Date: 21.67"

% of Average: 107%

Precipitation % of average for

full water year through

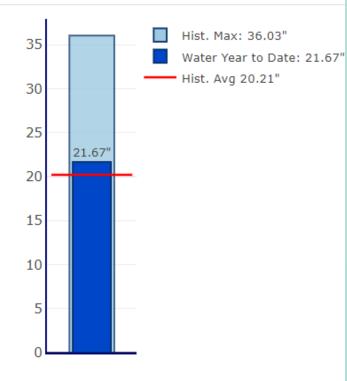
September 30th: 91%

#### **Historical Record to Date:**

Max: 36.03"

Mean: 20.21"

Min: 10.65"



Precipitation for water year to date is 107% of historical average

# Data For: 08-Apr-2024 % Apr 1 Avg. / % Normal for this Date 123.0% 127.0% - Northern Sierra / Trinity 112.0% \_\_ Central Sierra 109.0% 103.0% 107.0% Southern Sierra

#### NORTH

Data For: 08-Apr-2024

Number of Stations Reporting 25

Average snow water equivalent 35.5"

Percent of April 1 Average 123%

Percent of normal for this date 127%

#### **CENTRAL**

Data For: 08-Apr-2024

Number of Stations Reporting 48

Average snow water equivalent 29.9"

Percent of April 1 Average 109%

Percent of normal for this date 112%

#### SOUTH

Data For: 08-Apr-2024

Number of Stations Reporting 26

Average snow water equivalent 22.2"

Percent of April 1 Average 103%

Percent of normal for this date 107%

#### STATEWIDE SUMMARY

Data For: 08-Apr-2024

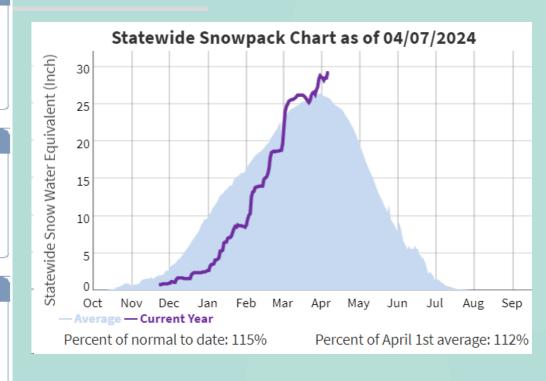
Number of Stations Reporting 99

Average snow water equivalent 29.3"

Percent of April 1 Average 112%

Percent of normal for this date 115%

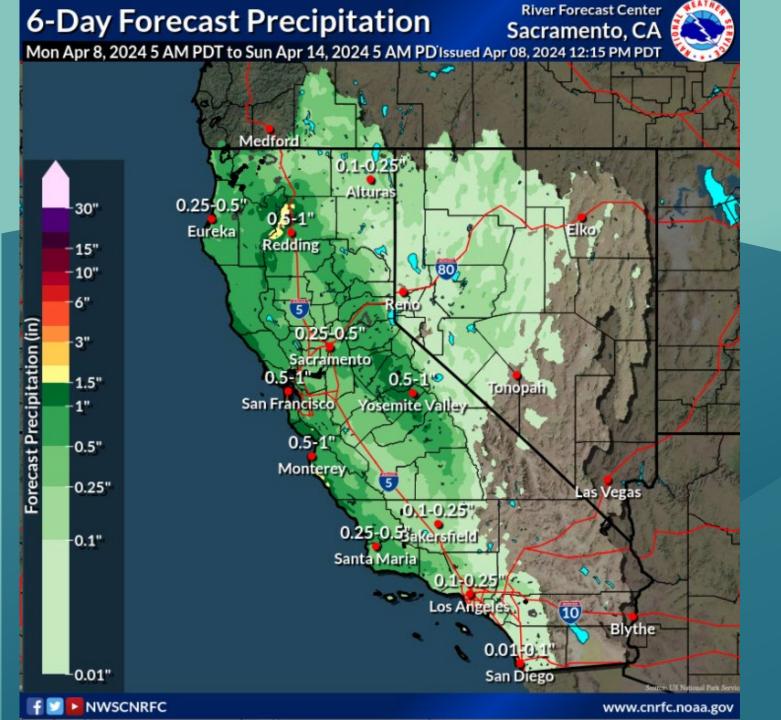
# **STATEWIDE SNOWPACK**



Source: California Water Watch - <a href="https://cdec.water.ca.gov/snowapp/sweq.action">https://cdec.water.ca.gov/snowapp/sweq.action</a>

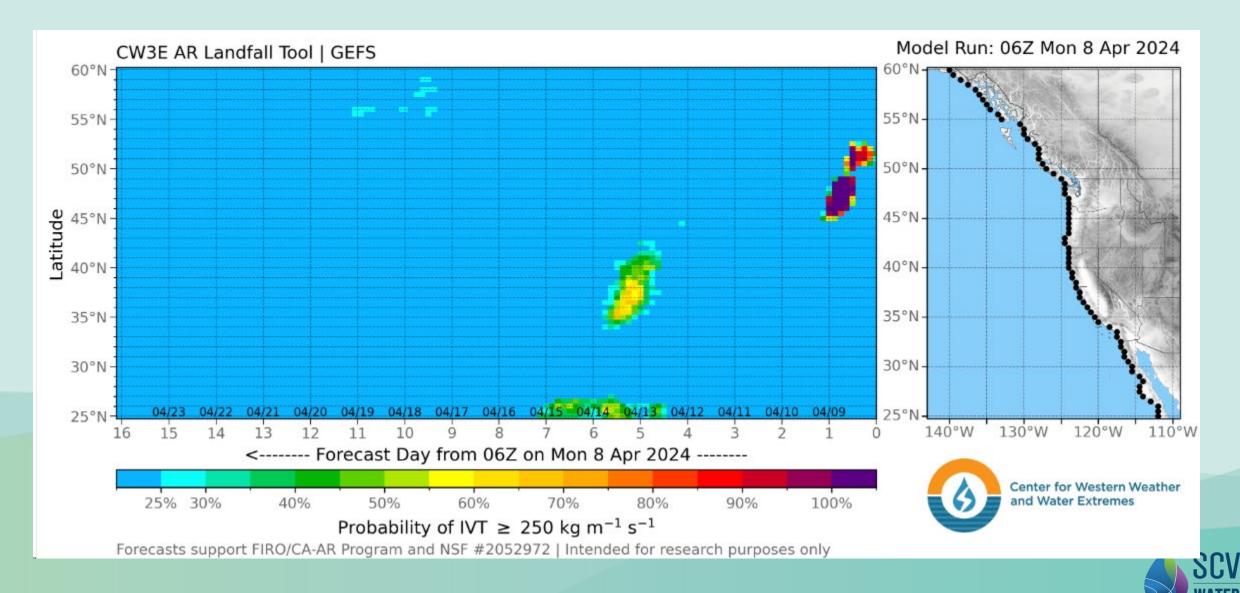






## 6-DAY FORECAST

# ATMOSPHERIC RIVER FORECAST

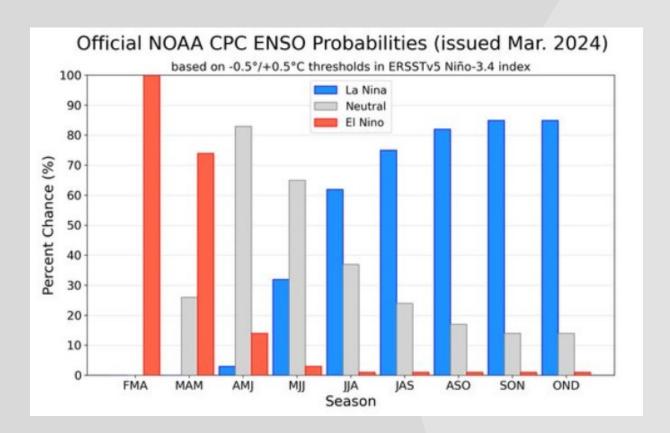


### **WEATHER SHIFT**

Transitioning from El Nino to La Nina again this summer

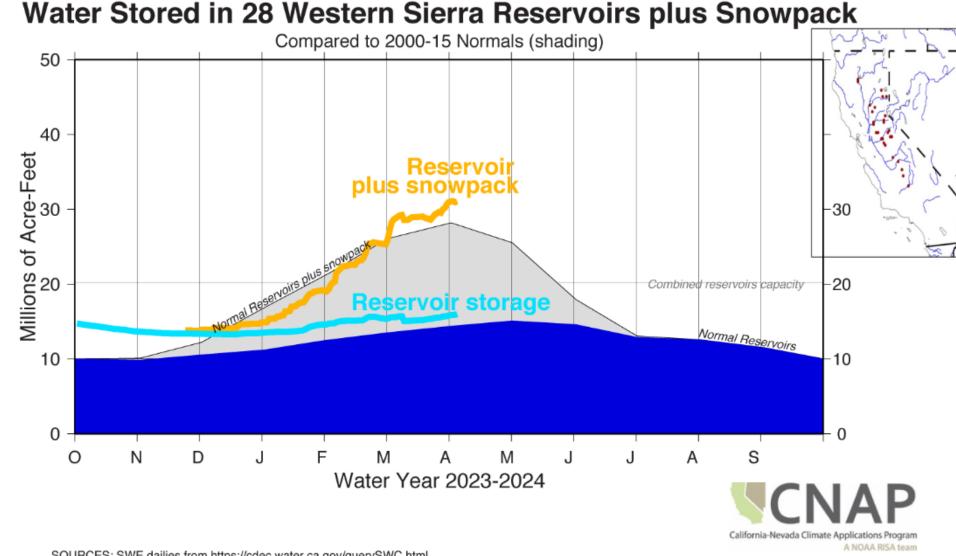
- No impacts for summer
- Next winter could be interesting

Source: https://www.climate.gov/news-features/blogs/enso/march-2024-enso-update-award-season



NOAA Climate Prediction Center forecast for each of the three possible ENSO categories for the next 8 overlapping 3-month seasons. Blue bars show the chances of La Niña, gray bars the chances for neutral, and red bars the chances for El Niño. Graph by Michelle L'Heureux.

### **RESERVOIR CONDITIONS**



Source: CNAP - <a href="https://cnap.ucsd.edu/">https://cnap.ucsd.edu/</a> /storage\_in\_sierra\_uc rb/

For info: mddettinger at gmail.com

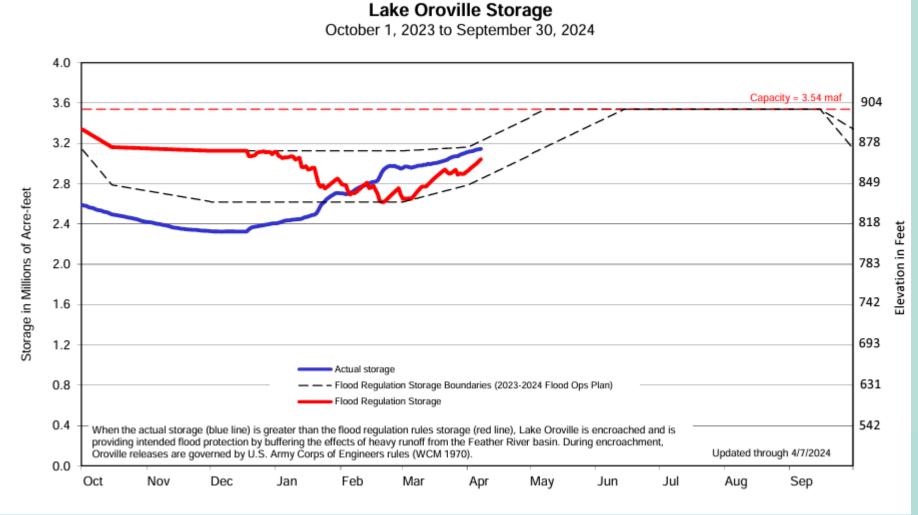
https://cnap.ucsd.edu/storage in sierra ucrb/

SOURCES: SWE dailies from https://cdec.water.ca.gov/querySWC.html
SWE volume conversion factor based on Margulis et al, JHM 2016, SWE reanalysis
Reservoir storage from https://cdec.water.ca.gov/queryDaily.html
Reservoirs: SHA, KES, ORO, ANT, FRD, DAV, BUL, ENG, FOL, UNV, LON, ICH, NAT, CMN, PAR, DON, BRD, TUL, NML, DNP, HTH, CHV, EXC, MIL, PNF, TRM, SCC, ISB



### **LAKE OROVILLE STORAGE**

 DWR has been able to keep the reservoir higher than flood regulation curve because storms have not been huge.

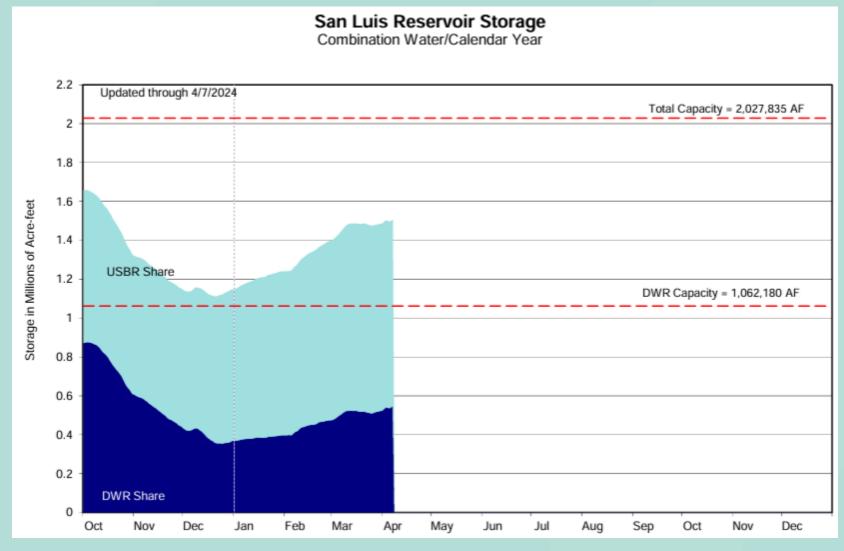




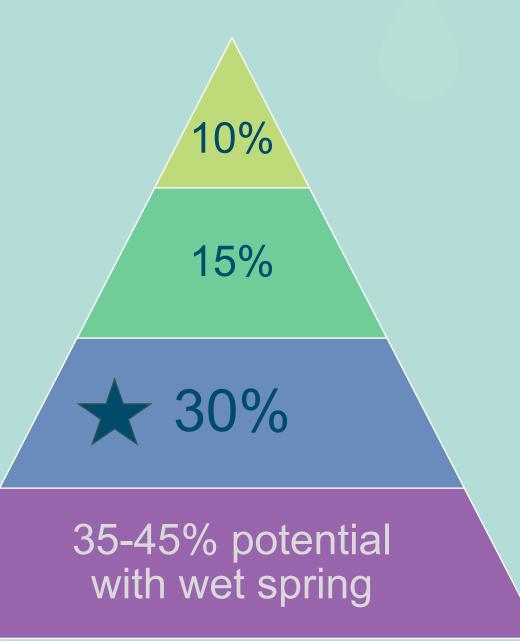
### SAN LUIS RESERVOIR STORAGE

- USBR share full
- DWR's share = 527 TAF
  - > March studies project
- Fishery constraints causing export reductions
  - Longfin smelt
  - Delta smelt
  - Winter-run salmon
  - Steelhead trout

TAF = thousand acre-feet







# SWP ALLOCATION INCREASED!

- March 22<sup>nd</sup> allocation increased to 30%
- Water year type is "Above Normal" currently



## 2024 OPERATING PLAN

- Updates highlighted in red
  - 30% SWP Allocation increase
  - 2019 AVEK 2:1 exchange return water confirmed!
  - Yuba Accord supply available
    - 500 AF @ \$128/AF
- Supplies used to date
  - 34% groundwater
  - 66% imported
    - Art 56 carryover
- Demands Jan.-Mar.
  - 17% less then forecasted

2024 Operating Plan 3-26-24	2024 30% SWP Allocation	2024 45% SWP Allocation	2025 5% SWP Allocation
Demand	57,500	57,500	60,500
Groundwater Supplies	18,050	18,050	22,840
Alluvium	10,900	10,900	11,840
Saugus	7,150	7,150	11,000
Recycled Water	500	500	500
Imported Demand	38,950	38,950	37,160
Imported Supplies			
SWP Table A	28,560	42,840	4,760
BVRRB	11,000	11,000	11,000
Total Available Imported Supplies	39,560	53,840	15,760
Excess Imported Supplies (neg = shortfall)	610	14,890	(21,400)
Dry Year Water Supplies			
SWP Carryover-Art 56 (not guaranteed)	18,000	18,000	21,454
Rosedale Banking		(15,000)	
Semitropic SWRU Banking			5,000
RRB 2023 Exchange			6,000
AVEK 2019 EXCHANGE	2,344		
YUBA WATER ACCORD	500		1,000
Conservation WSCP demand reduction			
Devils Den Sale	(500)	(500)	
Flexible Storage (up to 6,060 AF)			
Potential SWP Carryover at End of Year (neg = shortage	21,454	17,890	12,054



# QUESTIONS

