# Water Year 2023 SWP Planning and Operations





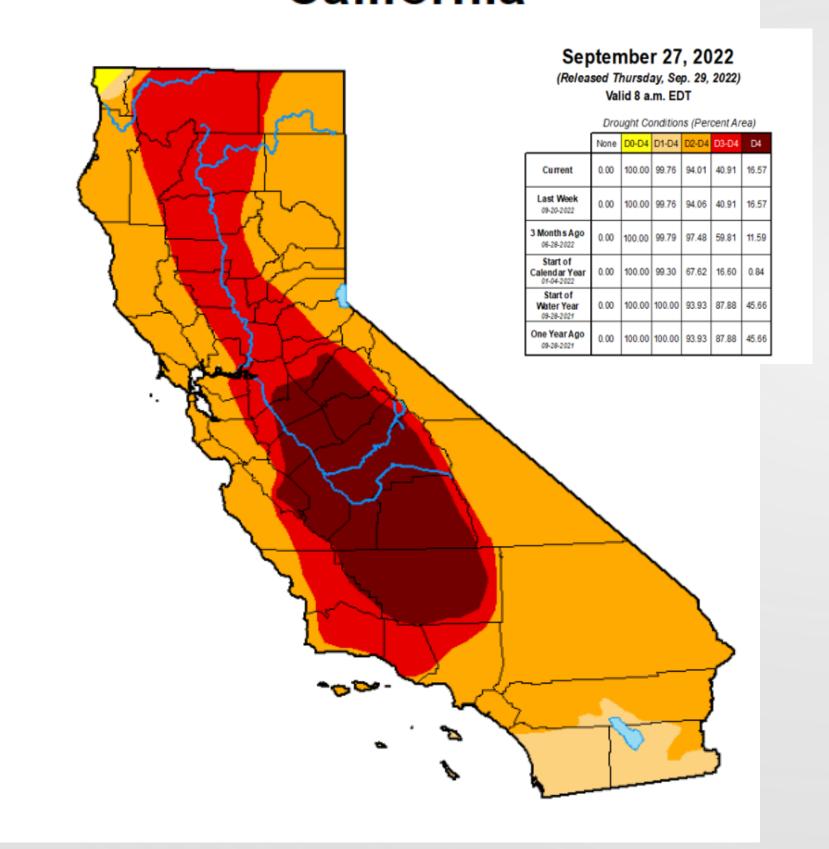


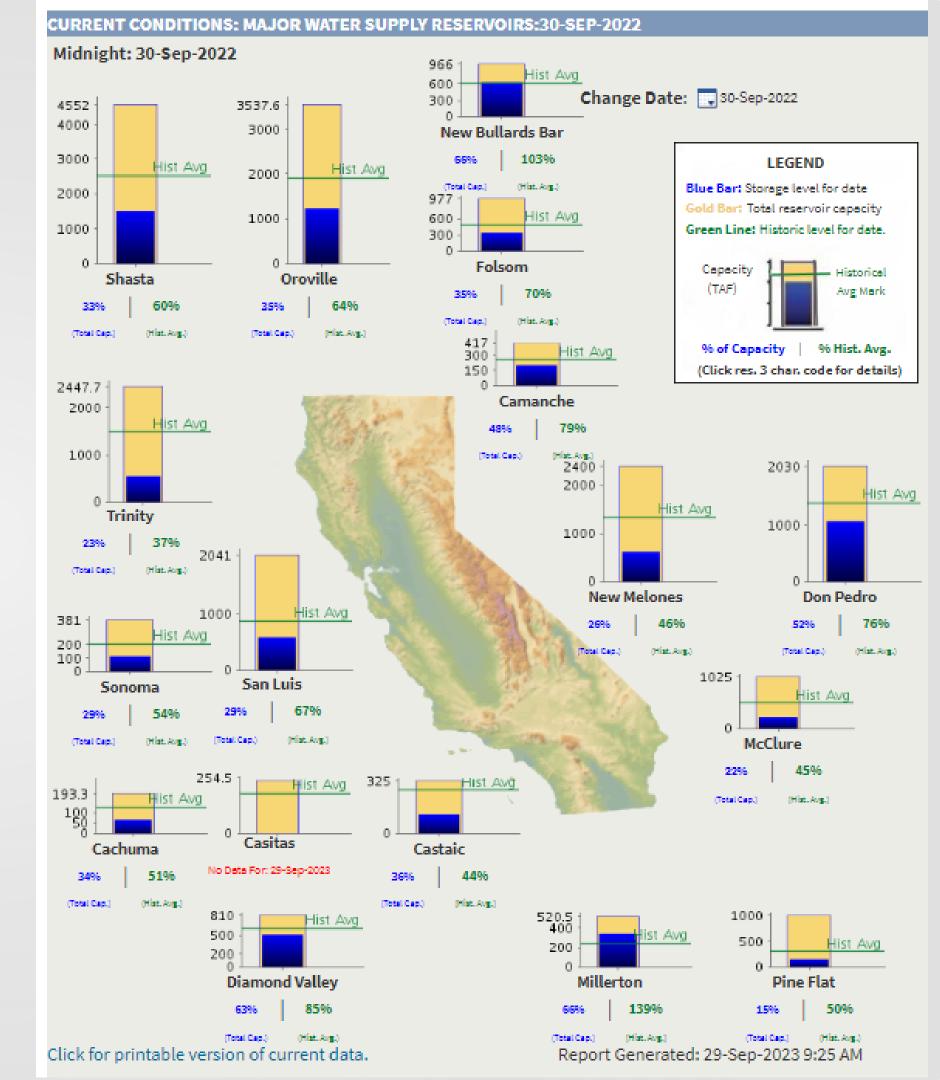
California Water Commission October 18, 2023

Molly White Water Operations Manager State Water Project

### **Beginning of WY 2023 Conditions**

### U.S. Drought Monitor California



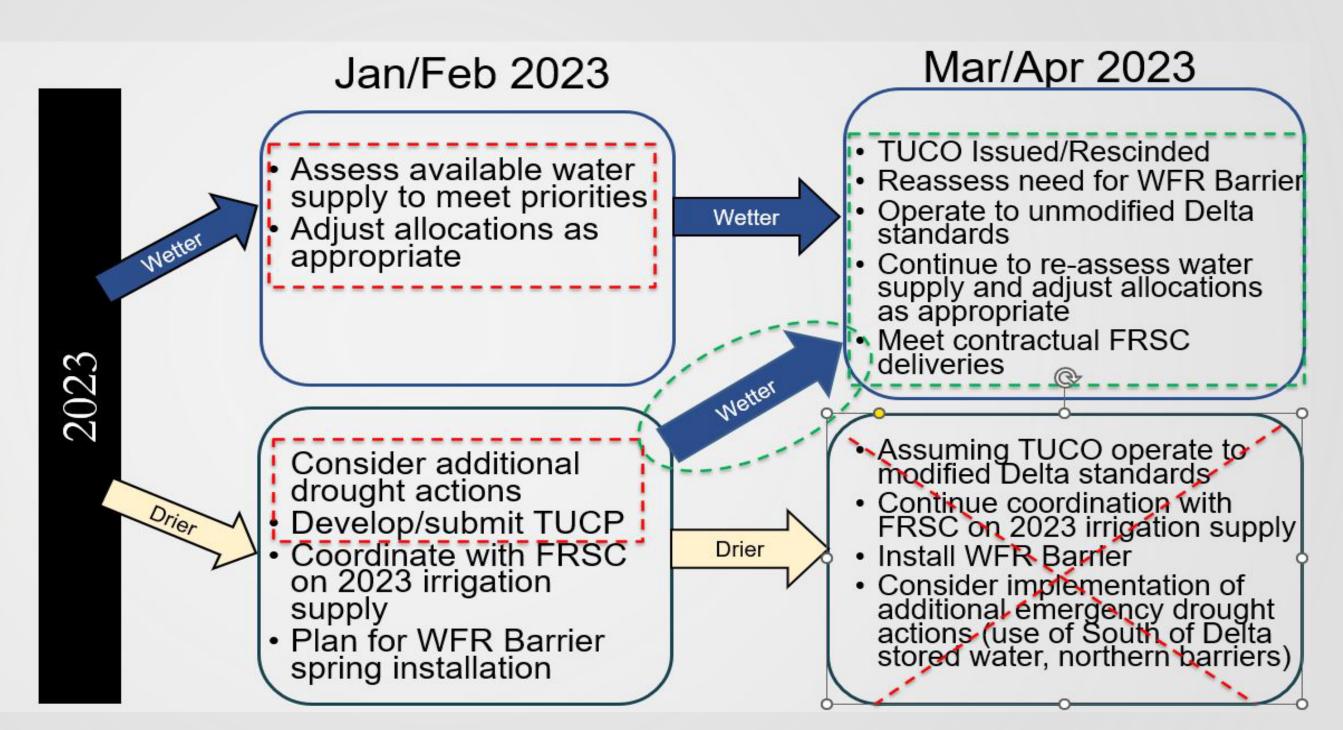


## SWP ALLOCATION AND DROUGHT ACTION DECISION PROCESS

Nov/Dec 2022

### Early Drought Actions

- Low SWP allocation
- Coordination with Feather River
   Settlement contractors on reduction of winter deliveries





### **SWP Contractors and Water Supply Allocation**

- 29 State Water Contractors have long-term water supply contracts
- Total Table A: ~4.17 million acre-ft (MAF)
- Allocation—percentage of Table A the SWCs receive each year (monthly updates) – initial issued Dec 1, final issued May/June
  - Key Assumptions/Inputs:
    - Conservative dry hydrology (90% exceedance—90% chance it will get wetter)
    - Storage conditions
    - SWC Demands
    - Delta water quality and flow criteria
    - ESA and CESA requirements



## SWP Water Supply Objectives

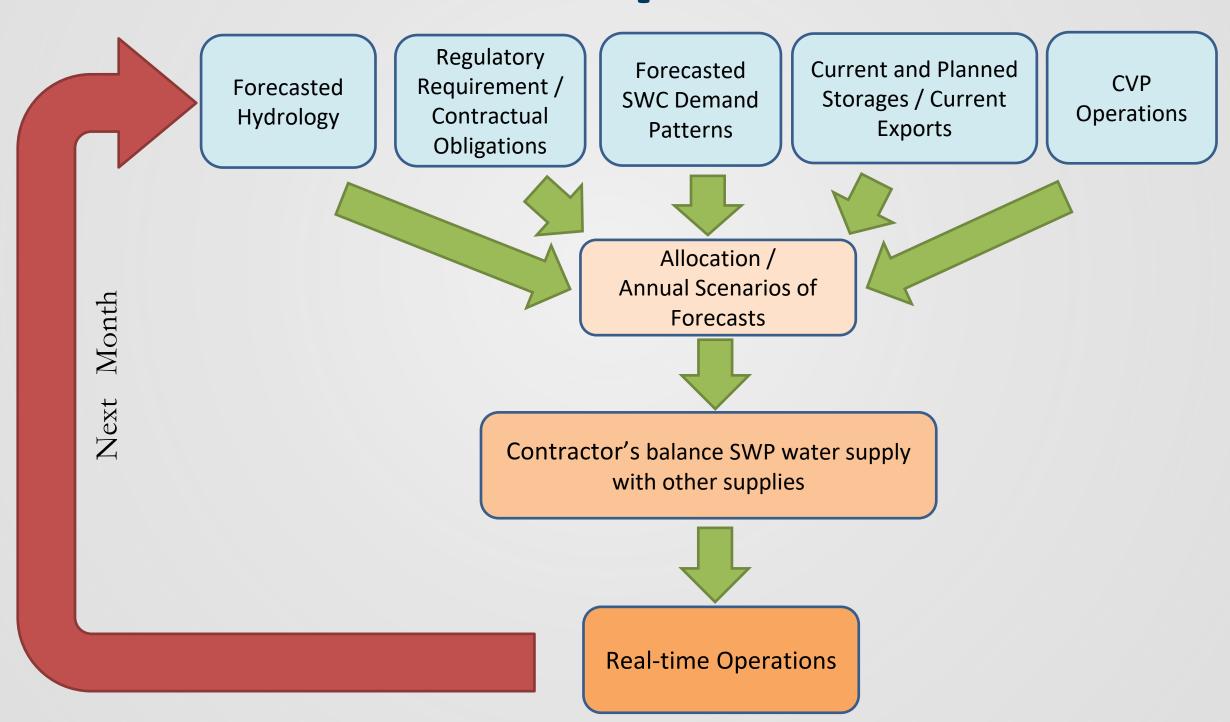
- Provide minimum health and safety needs
- Maintain Delta water quality
- Meet environmental needs to protect endangered species
- Conserve water storage to meet future critical needs
- Deliver water based on priority



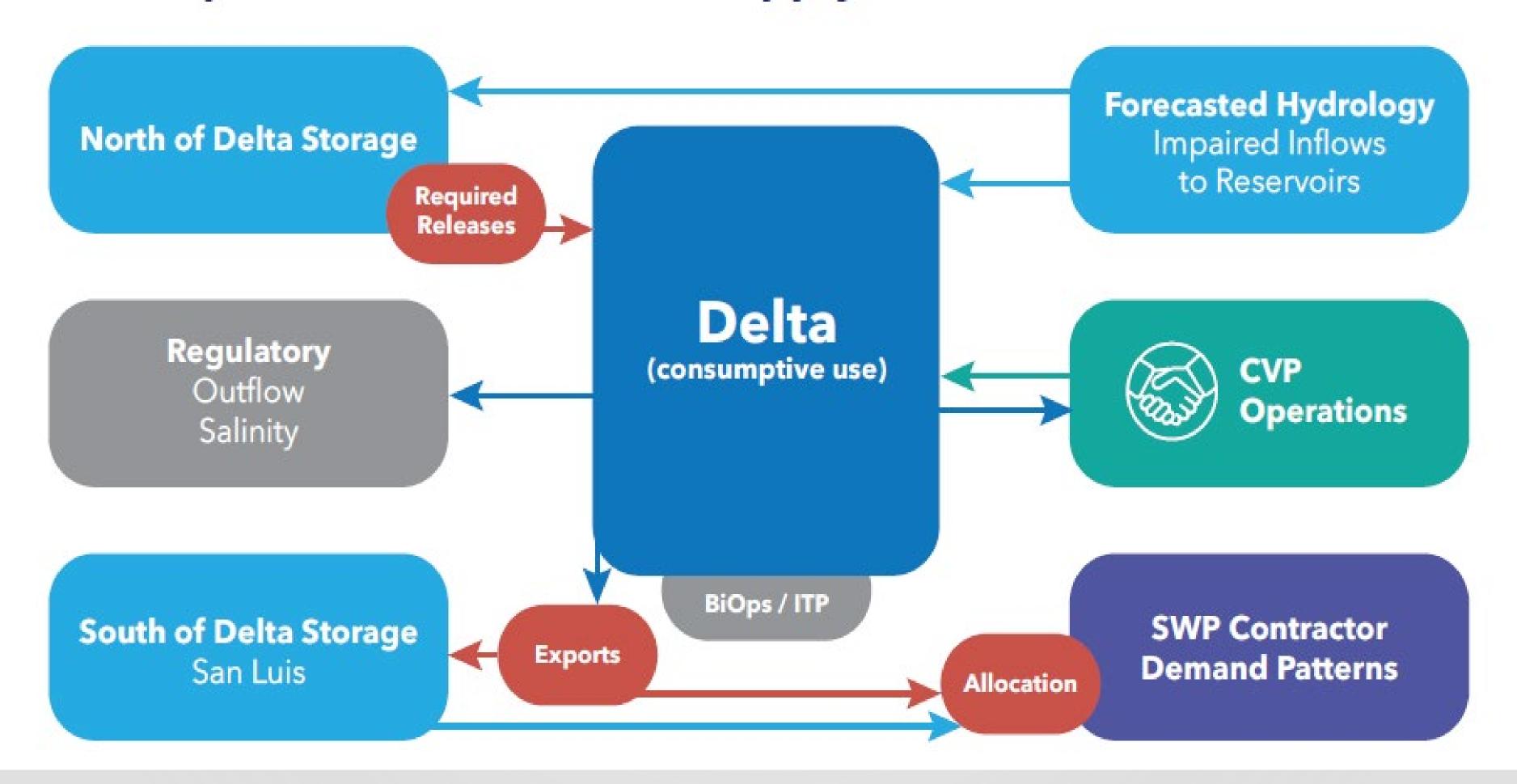




## **SWP Allocation Process and Forecasted Operations Plan**



### **SWP Operations and Water Supply Allocation Forecasts**

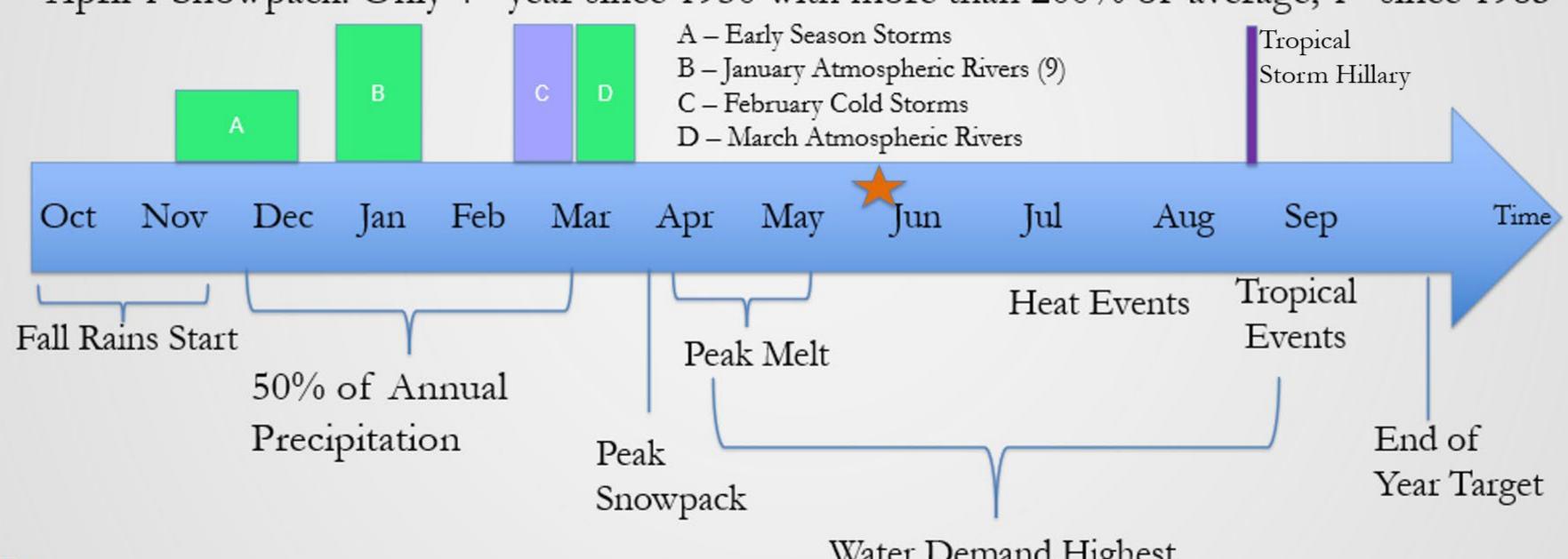


### Building a Water Year 2023

Oct-Mar: 153% of Average Statewide – 6th wettest

Oct-Mar: 199% of Average San Joaquin Climate Division – wettest

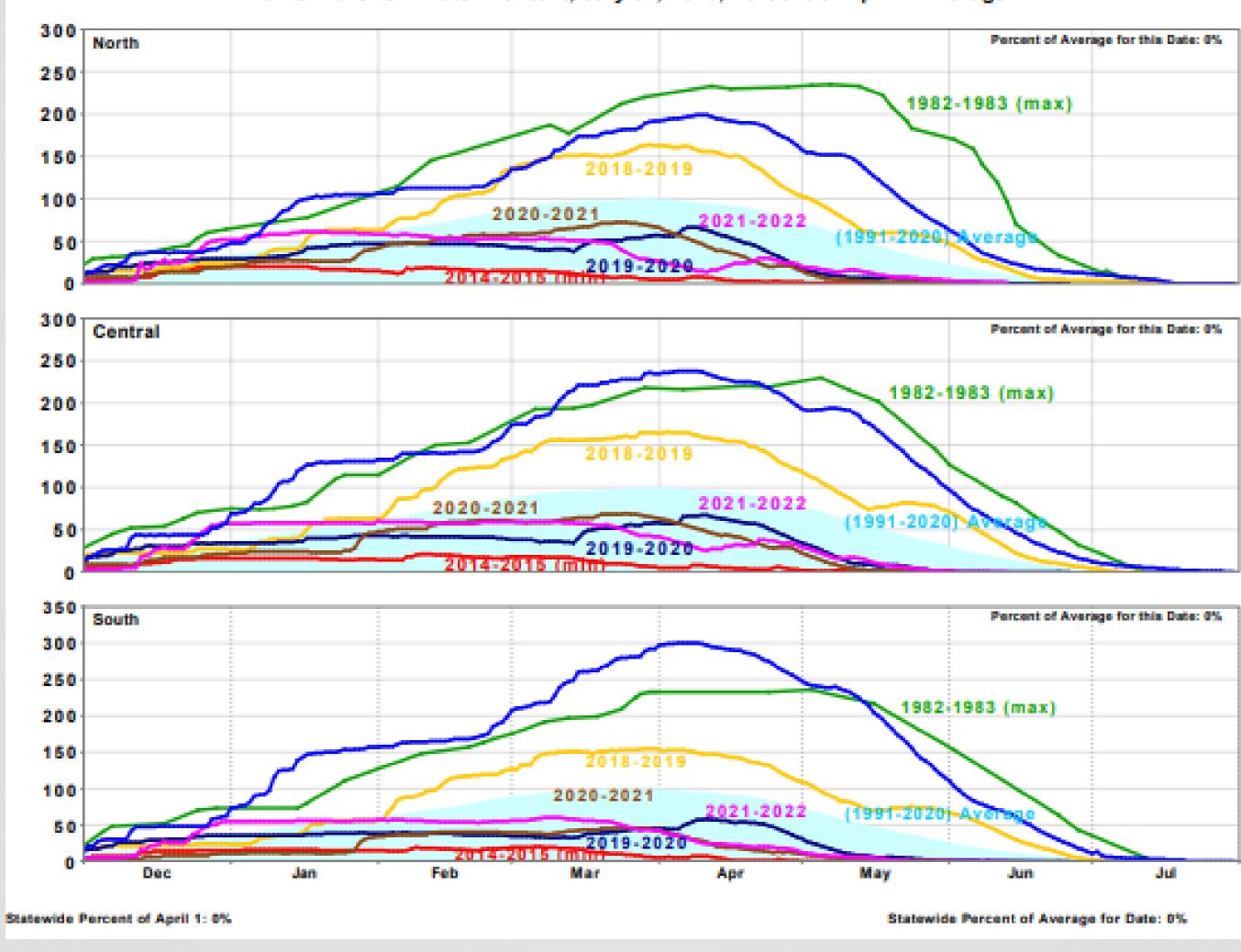
April 1 Snowpack: Only 4th year since 1950 with more than 200% of average; 1st since 1983





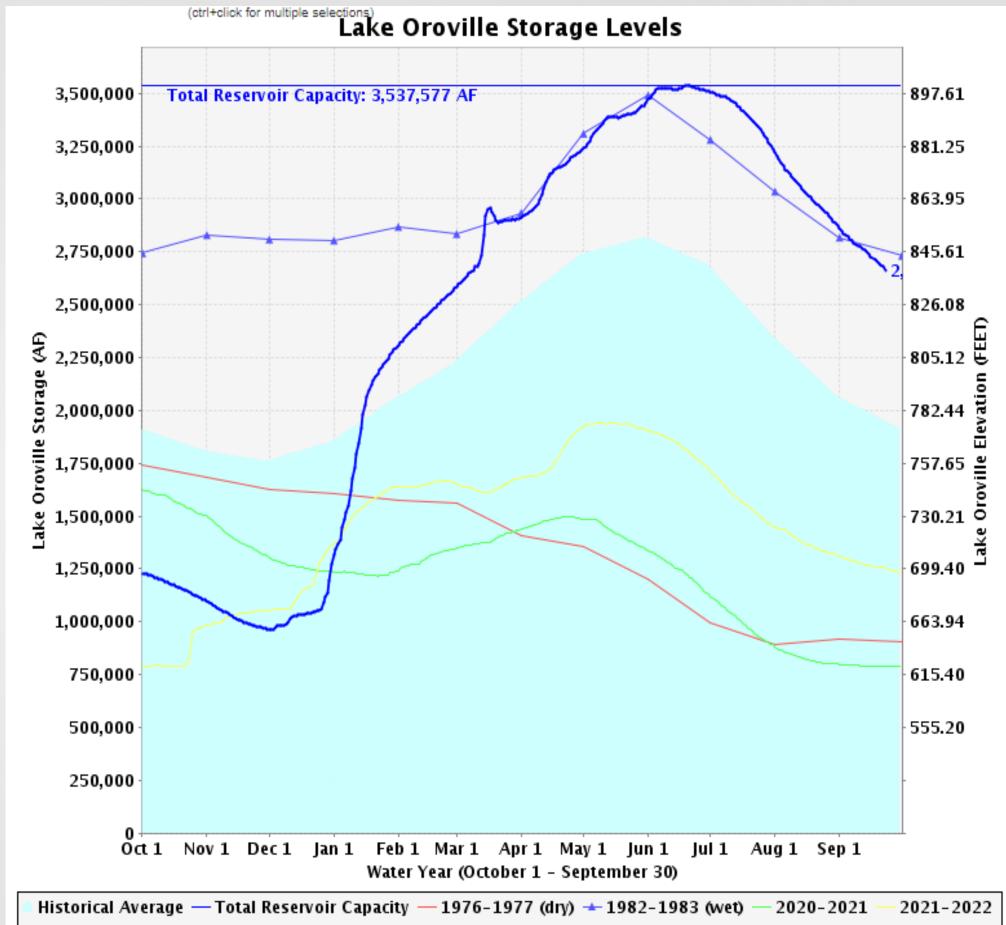


#### California Snow Water Content, July 31, 2023, Percent of April 1 Average



### Lake Oroville WY '23

- Total WY inflow: ~6.3 MAF
- Flood control initiated on 3/10/23
- About 2.4 MAF spilled (3/10-9/1)
- Lake filled early June, ~3.5 MAF
- Projected to have required flood control space available at the beginning of the flood control season (mid-October, per **USACE** Water Control Manual)

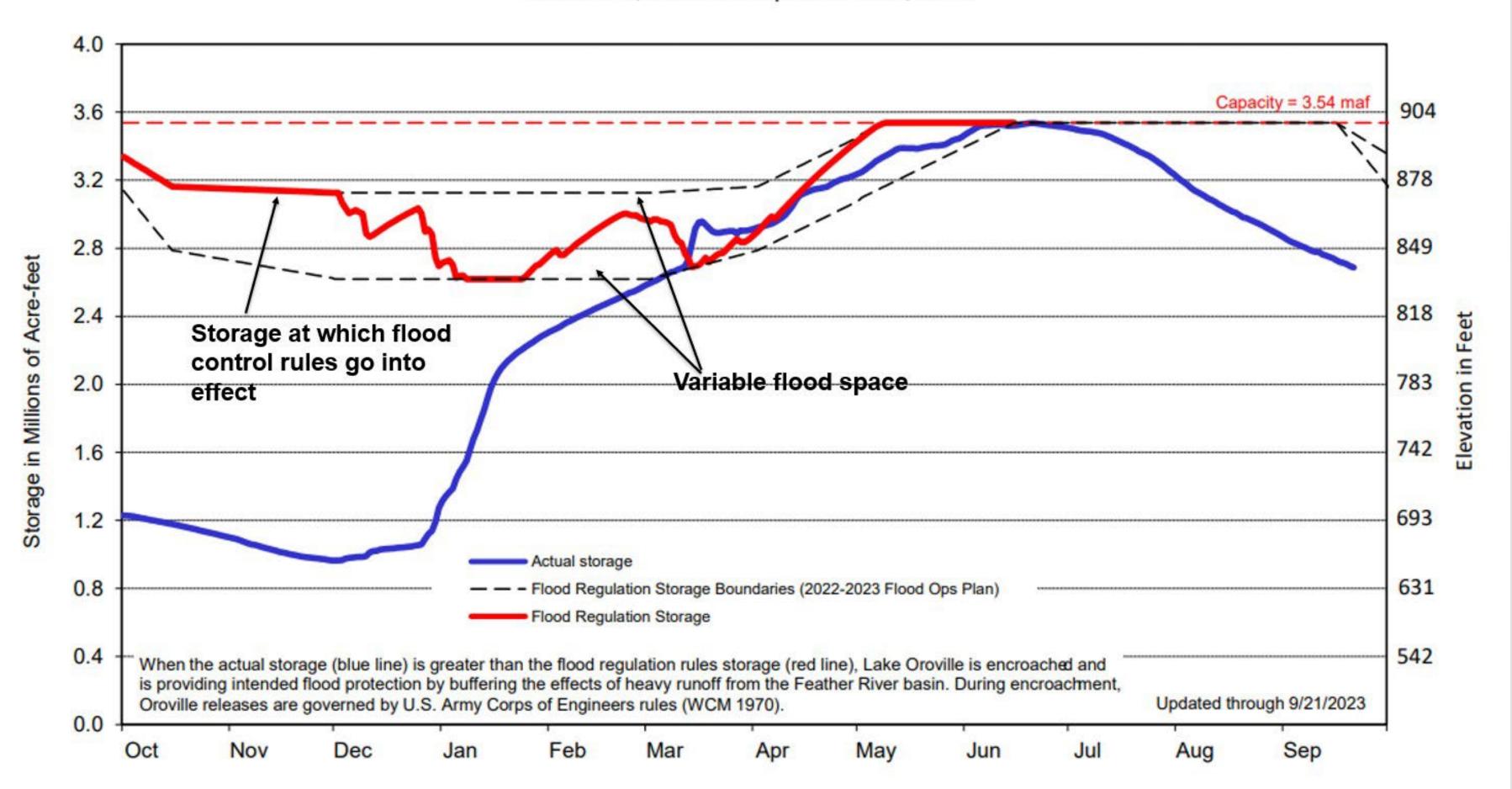


2022–2023(current)



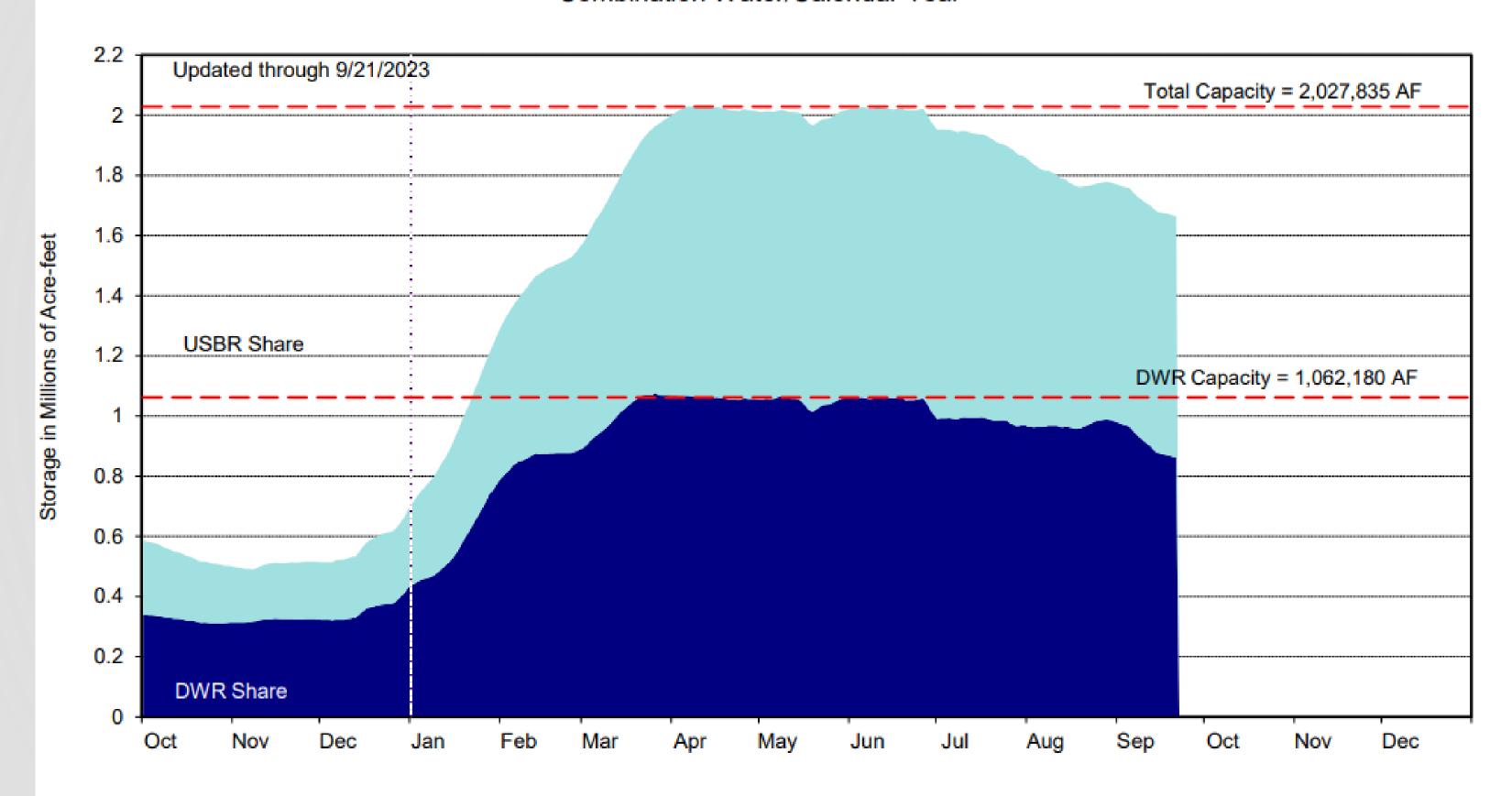
### **Lake Oroville Storage**

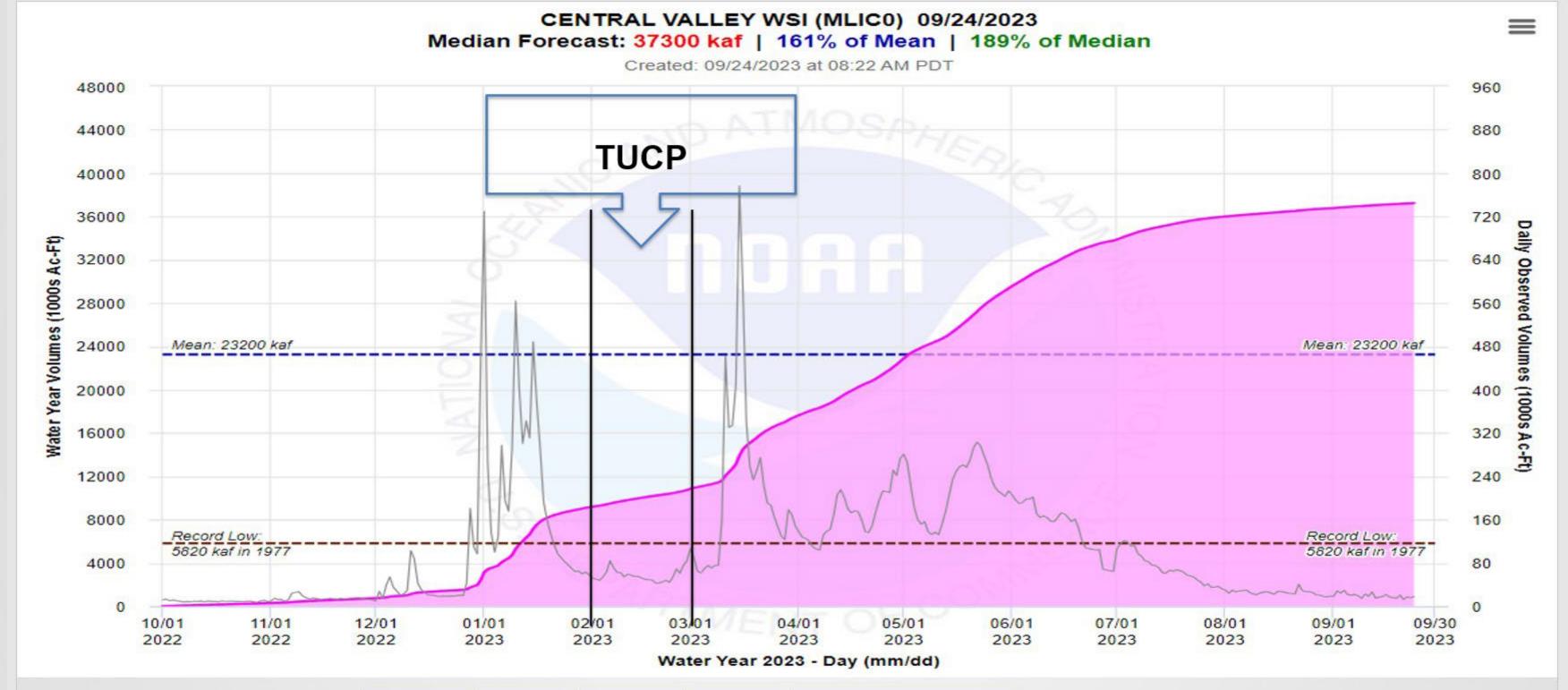
October 1, 2022 to September 30, 2023



### San Luis Reservoir Storage

Combination Water/Calendar Year





2023 SWP	
<b>Allocation</b>	
<b>Progression</b>	1

DEC (Initial)	JAN	FEB	MAR	APR (FINAL)
5%	30%	35%	75%	100%

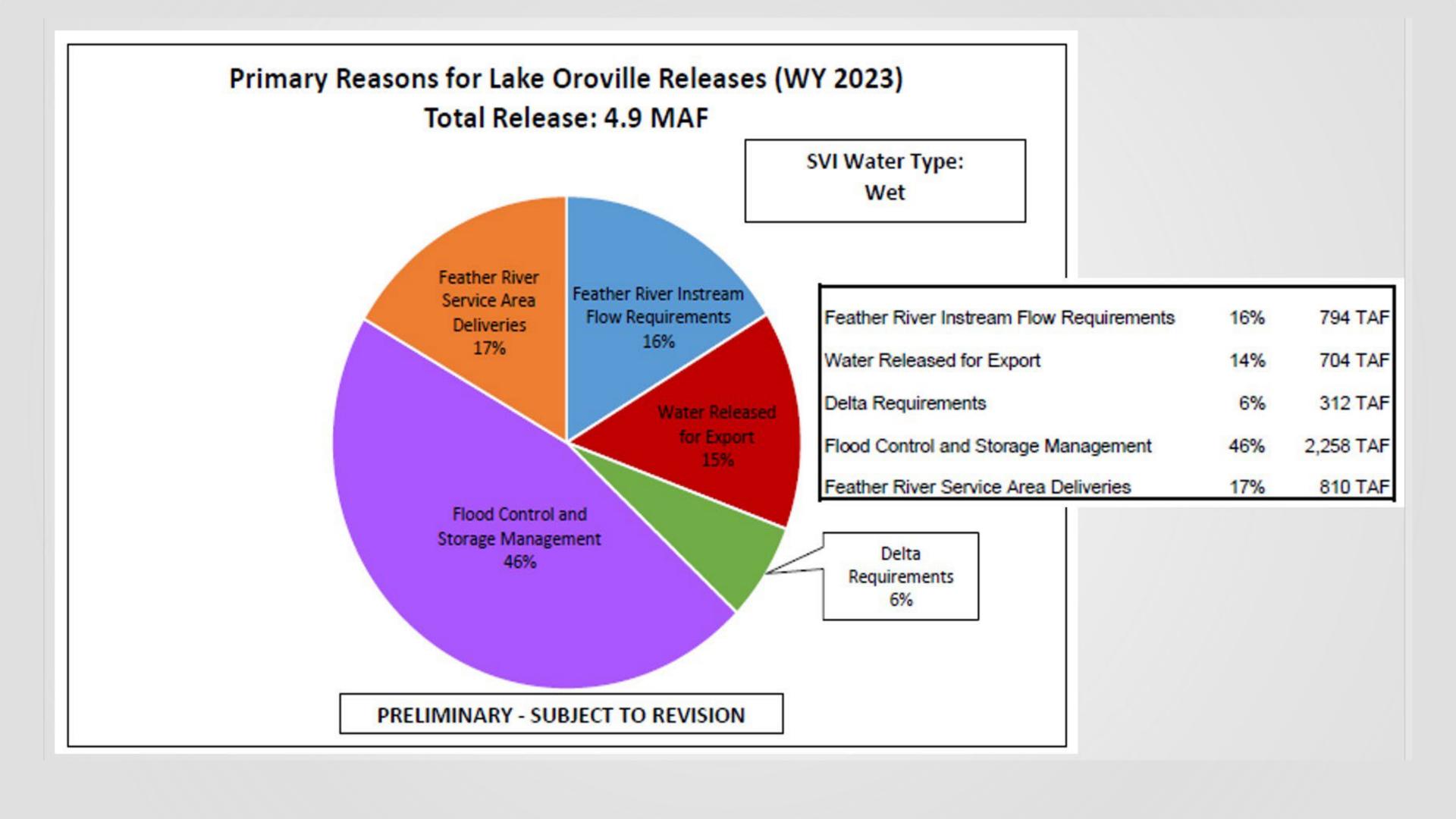
### **Annual SWP Operations Strategy**

- During periods of excess natural flows:
  - Maximize Delta exports while providing flows for fisheries
  - Minimize Oroville releases to build storage for future dry conditions (within flood control constraints)
- Fill San Luis Reservoir and southern reservoirs
- During summer months:
  - Maximize release of storage water for water supply purposes when Delta constraints are at a minimum
  - End of water year carryover storage target (currently 1.6 MAF) may control the amount of water moved during the summer



### Real-Time Decision-Making

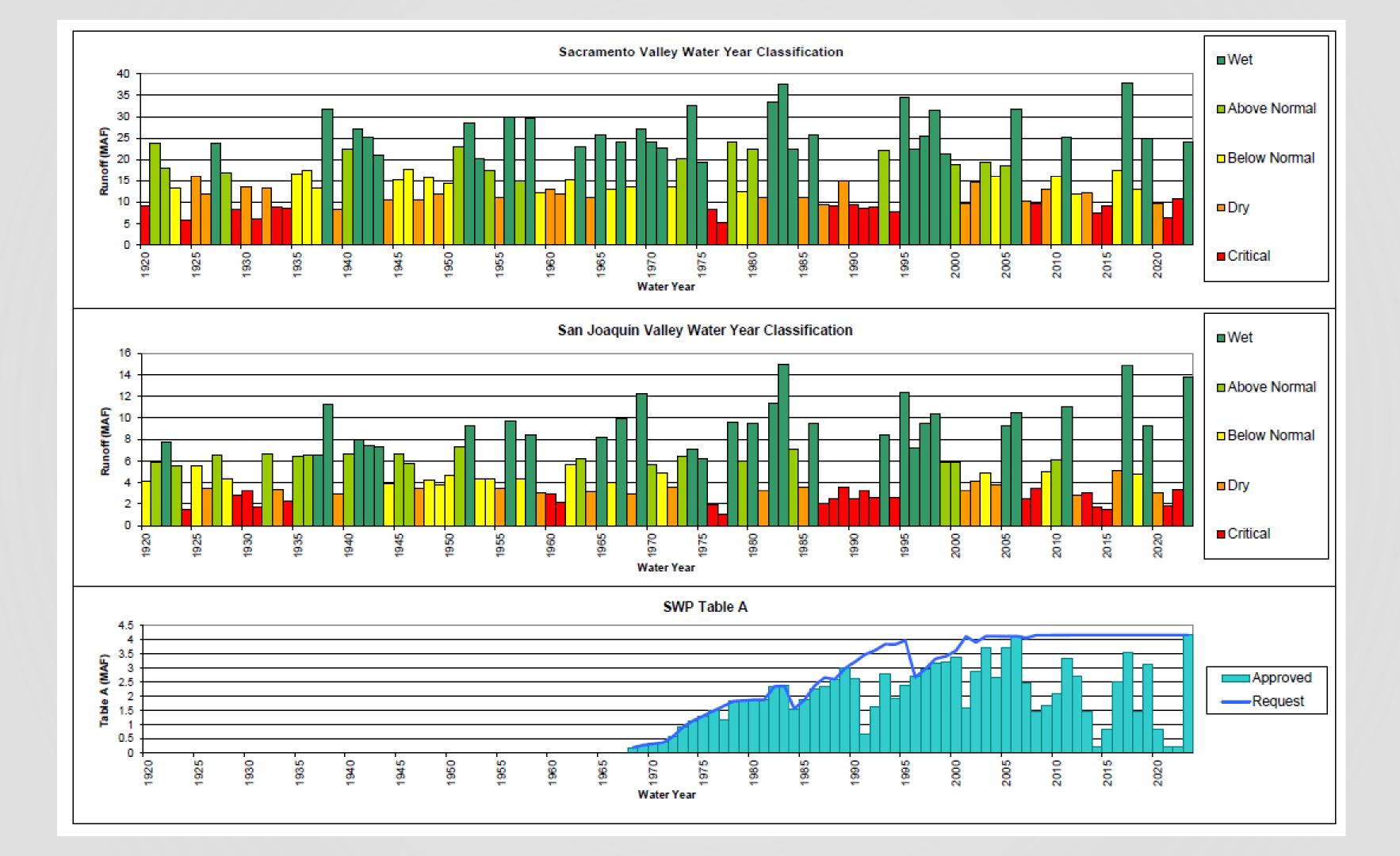
Flows	Water Quality	Fishery
Hydrology	Current and projected conditions	Salvage
Valley depletions	Tides	Real-time monitoring
Delta consumptive use	Wind	Smelt monitoring team
Reservoir operations	Delta Consumptive use	Salmon monitoring team
Exports		Water operations management team



### WY 2023 Highlights

- Re-directed flood flows through the Kern River Intertie into the CA Aqueduct
  - 5/21 to 6/12 about 25 TAF
- Provided about 400 TAF of surplus flows to SWP contractors to replenish local storage (surface and groundwater)
- Lake Oroville and San Luis Reservoir filled to capacity
- Achieved water supply objectives
  - 100% SWP allocation, first since 2006
- Excess flows in the Delta much of the spring and summer
  - Provided beneficial flows for listed and endangered species



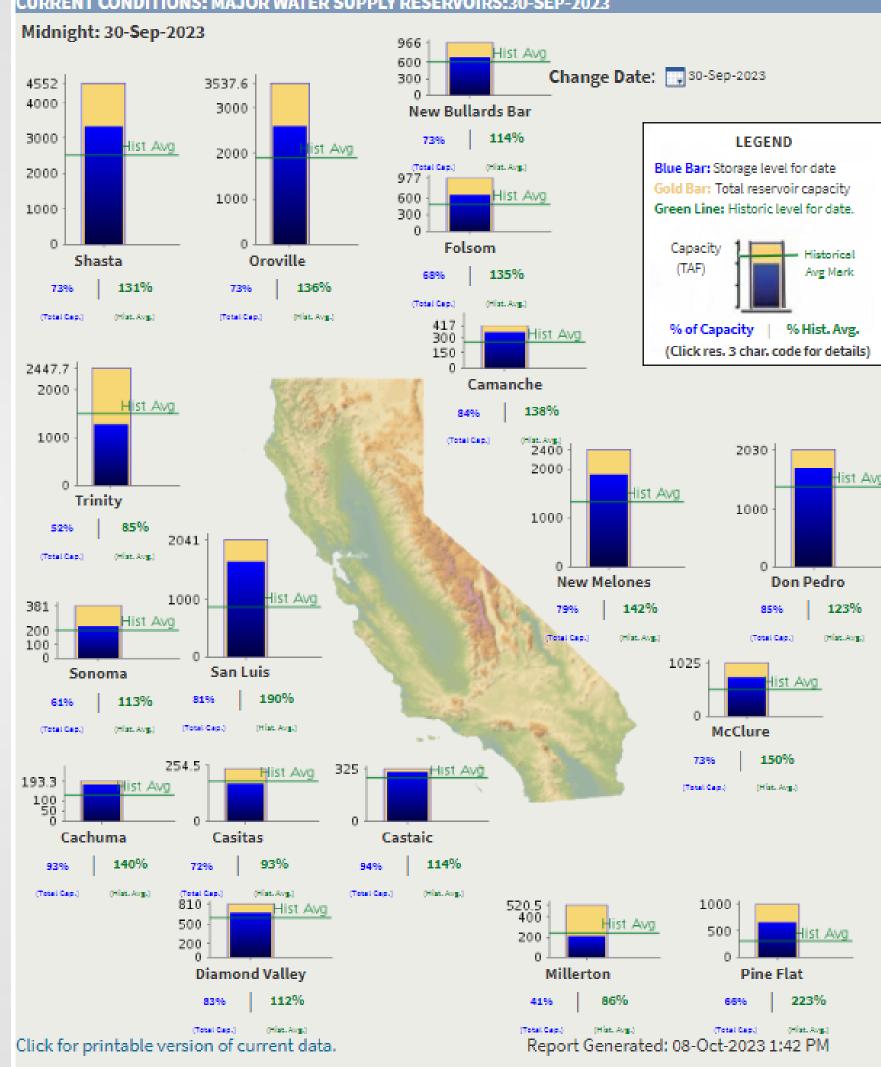


### Planning for 2024

- Much improved surface storage going into WY 2024
- Continue to plan and prepare for extreme dry or wet conditions
- Planning cycle for 2024 SWP allocations begins in November
- Ongoing coordination with Local, State and Federal agencies



#### CURRENT CONDITIONS: MAJOR WATER SUPPLY RESERVOIRS:30-SEP-2023



### 2024 SWP Planning and Operations









### **December through June**

#### Allocation:

Initial 2024 Allocation (December) and reassess monthly, final issued May/June

#### Reservoir Operations:

Instream flow and Delta requirements, Flood control (wet), reduce for storage conservation (dry)

### **Export Operations:**

Increase to capture storm flows for storage for later in the year and adjust for Delta requirements and ESA/CESA fisheries protections

#### **July through September**

#### **Reservoir Operations:**

Release water for export and instream flow and Delta requirements, target end of year carryover storage

### **Export Operations:**

Adjust for Delta requirements, water supply, and 3<sup>rd</sup> party transfers, if applicable

#### **October and November**

#### **Reservoir Operations:**

Ramp down releases for fisheries and storage conservation

#### **Export Operations:**

Adjust for Delta requirements





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