



**WATER
AGENCY**

2024 Annual Sustainability Report

April 17, 2024



Initiative 1

Establish a diversified water supply plan

Initiative 2

Evaluate and develop appropriate new water supply and reliability opportunities

Initiative 3

Continue to effectively implement infrastructure projects in the water system Capital Improvement Program (CIP)



Presentation Outline



WEATHER



STORAGE



WATER SUPPLY & DELIVERY PROJECTION

Water Supply Highlights



Cumulated local rainfall to date is just above normal following a wet year



Zone 7 expects to receive at least 30% allocation from the State Water Project and about 8,000 AF of local water



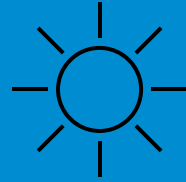
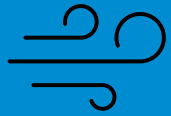
Zone 7 plans to supply less than average amount of groundwater this year – 4,200 AF



Zone 7 plans to recharge the main basin with about 5,000 AF of Table A water



Zone 7 is assessing the option to bank surplus water in the Kern County Storage and Recovery Programs



Weather

(Climate Conditions)



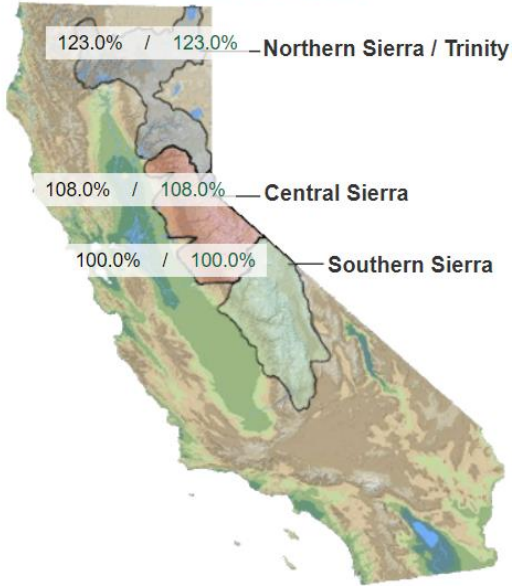
**WATER
AGENCY**

California Snow Water Content as of April 1, 2023

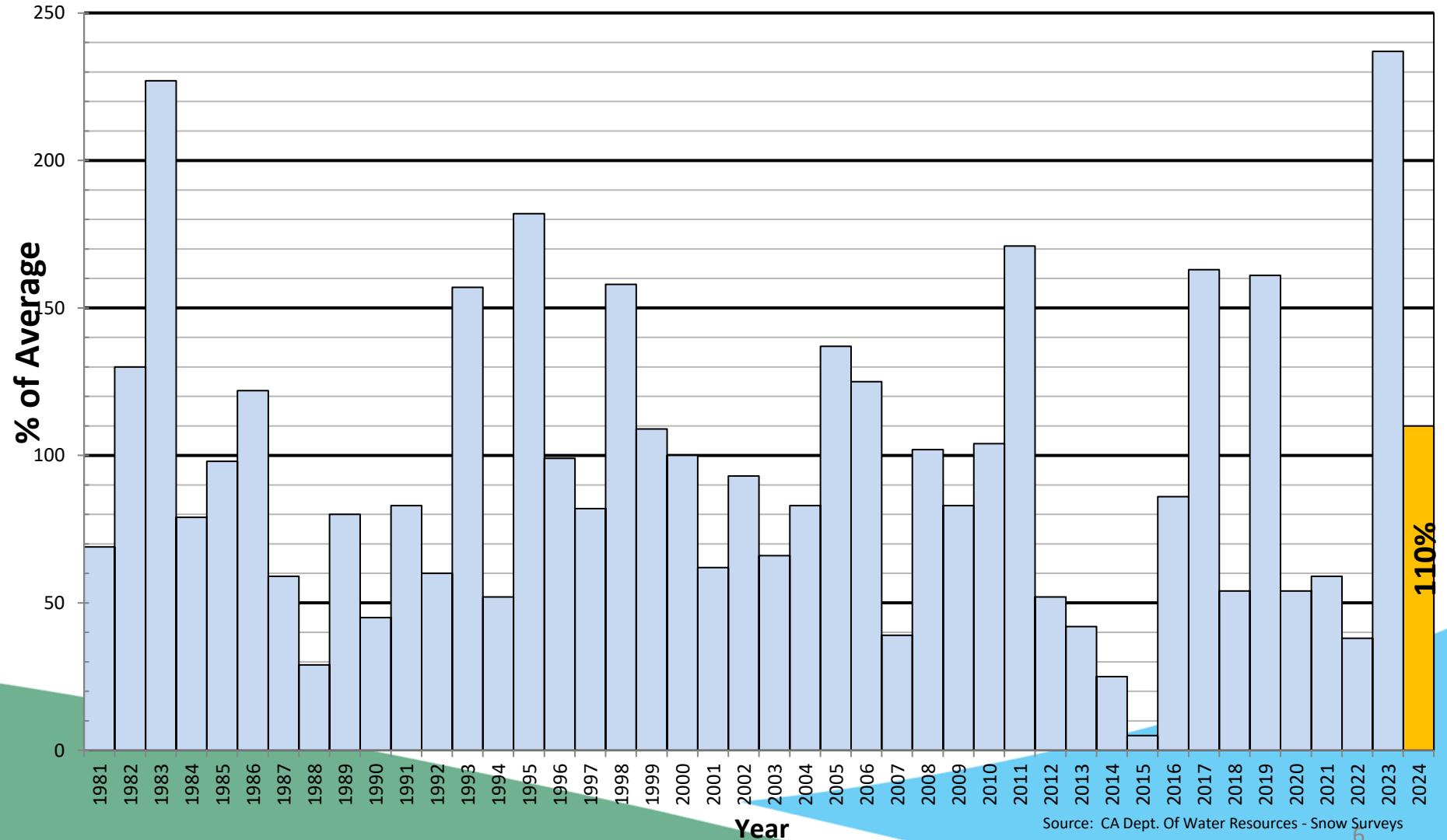
April 1 Statewide Snow Water Content (Percent of Average)

**Statewide 110%
of Average
(April 1, 2024)**

% Apr 1 Avg. / % Normal for this Date



Change Date :



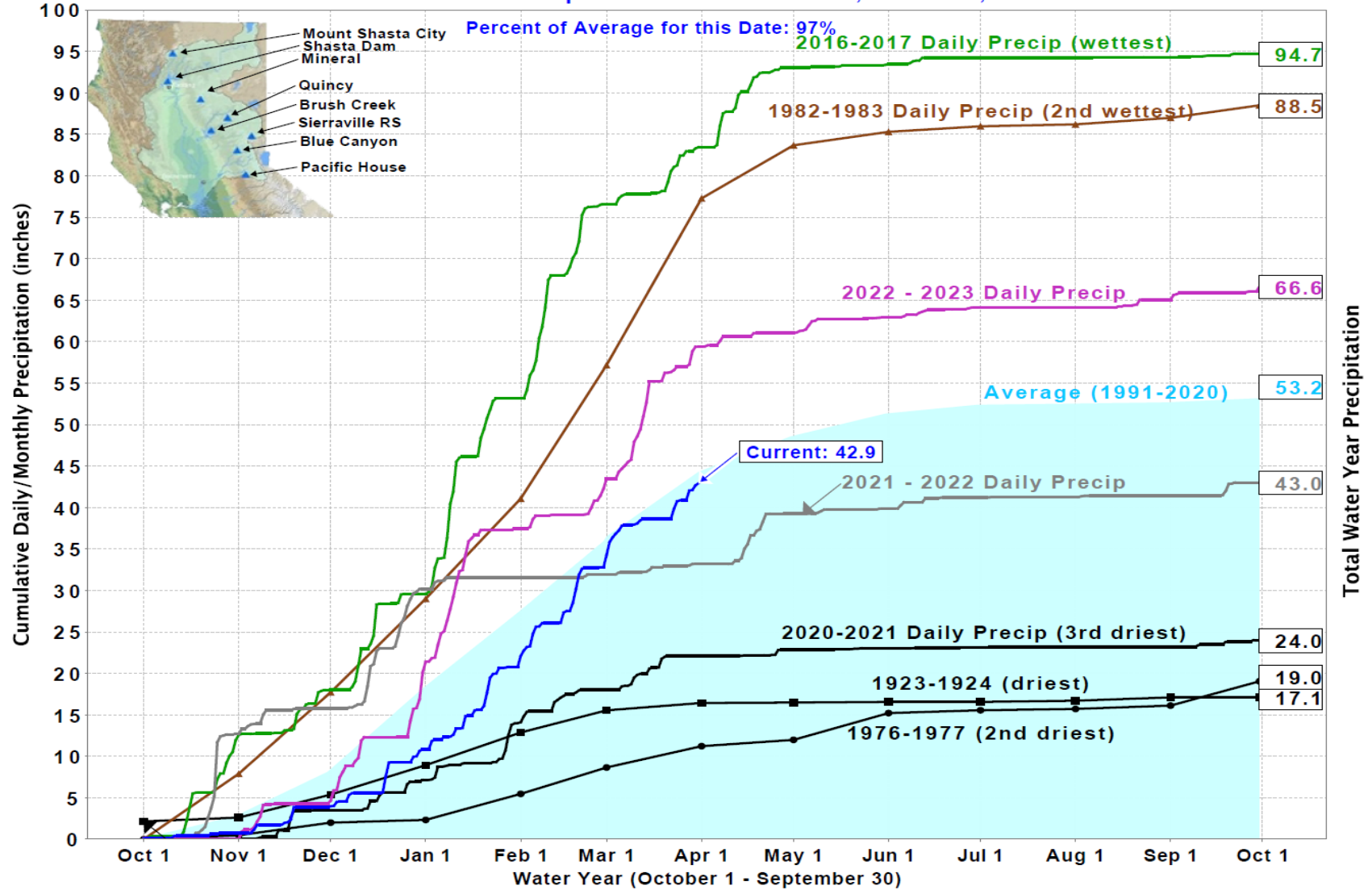
Source: CA Dept. Of Water Resources - Snow Surveys



Northern Sierra Precipitation Index

**Northern Sierra: 97%
of Average YTD**

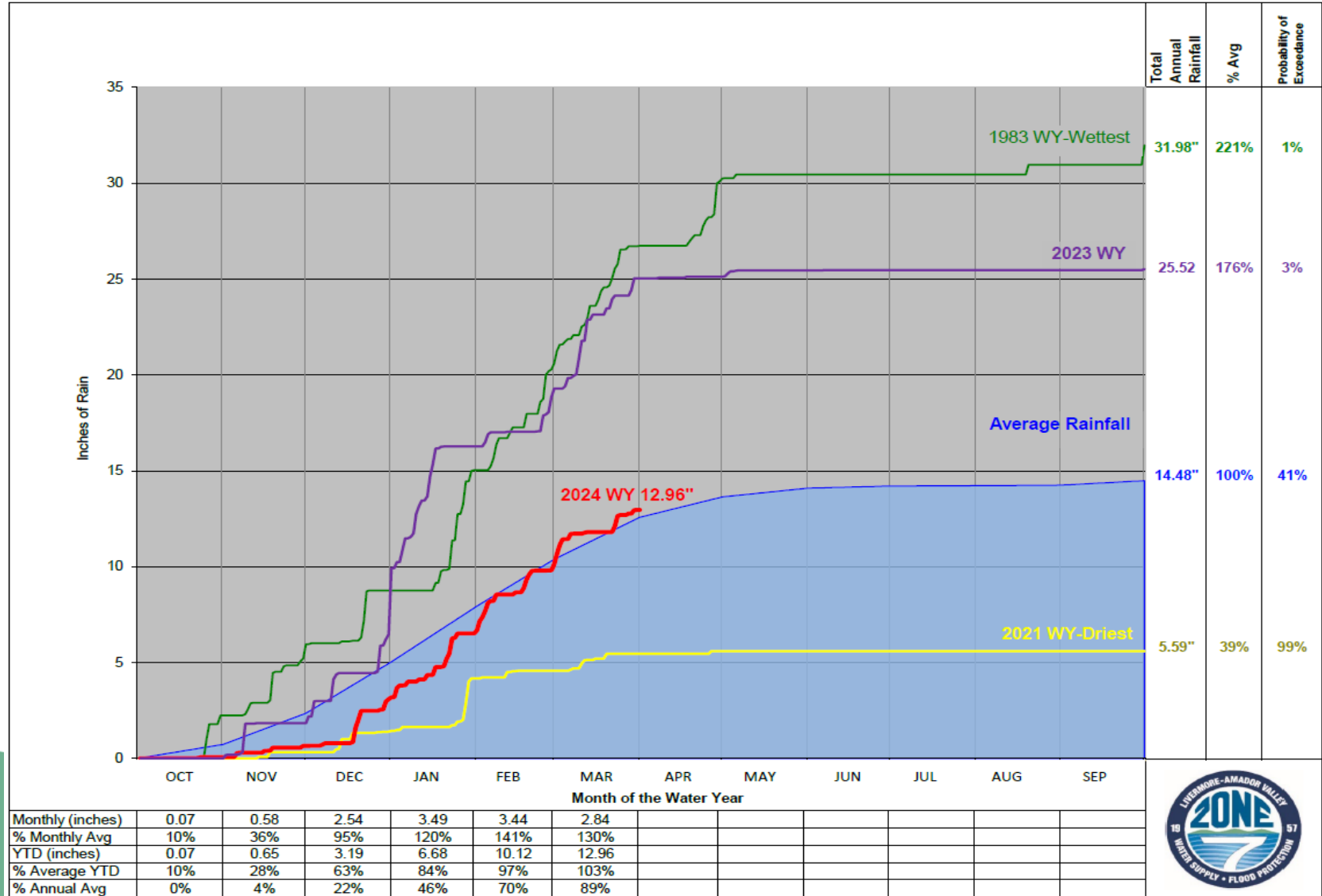
Northern Sierra Precipitation: 8-Station Index, March 31, 2024

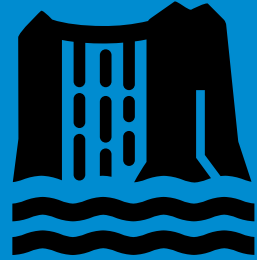
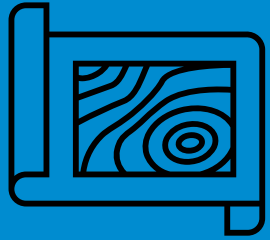


Livermore Valley Precipitation at Livermore Airport

FIGURE 2-2
ZONE 7 WATER AGENCY
GRAPH OF LIVERMORE RAINFALL INDEX

Local Rainfall: 103%
of Average Year To Date

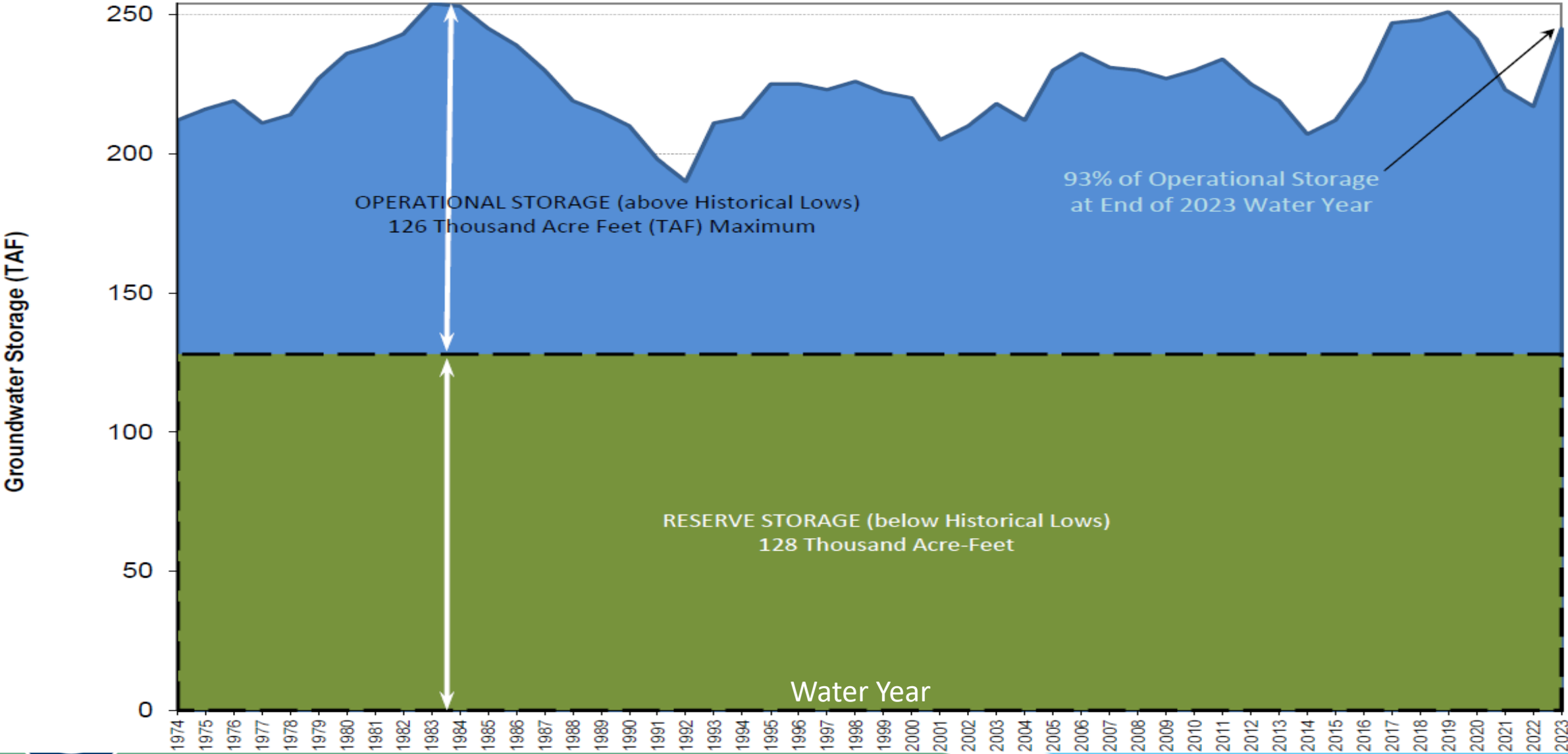




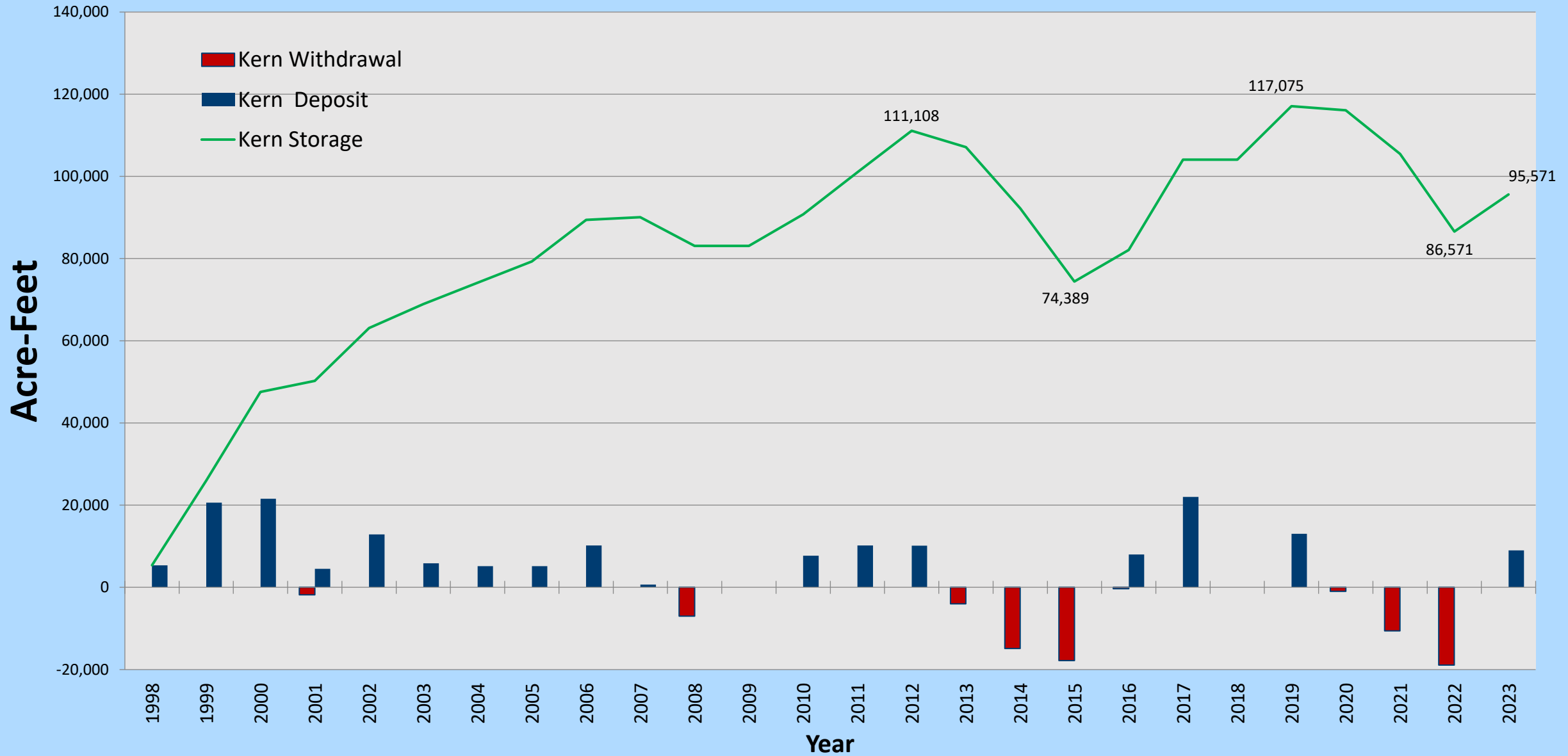
Water Storage



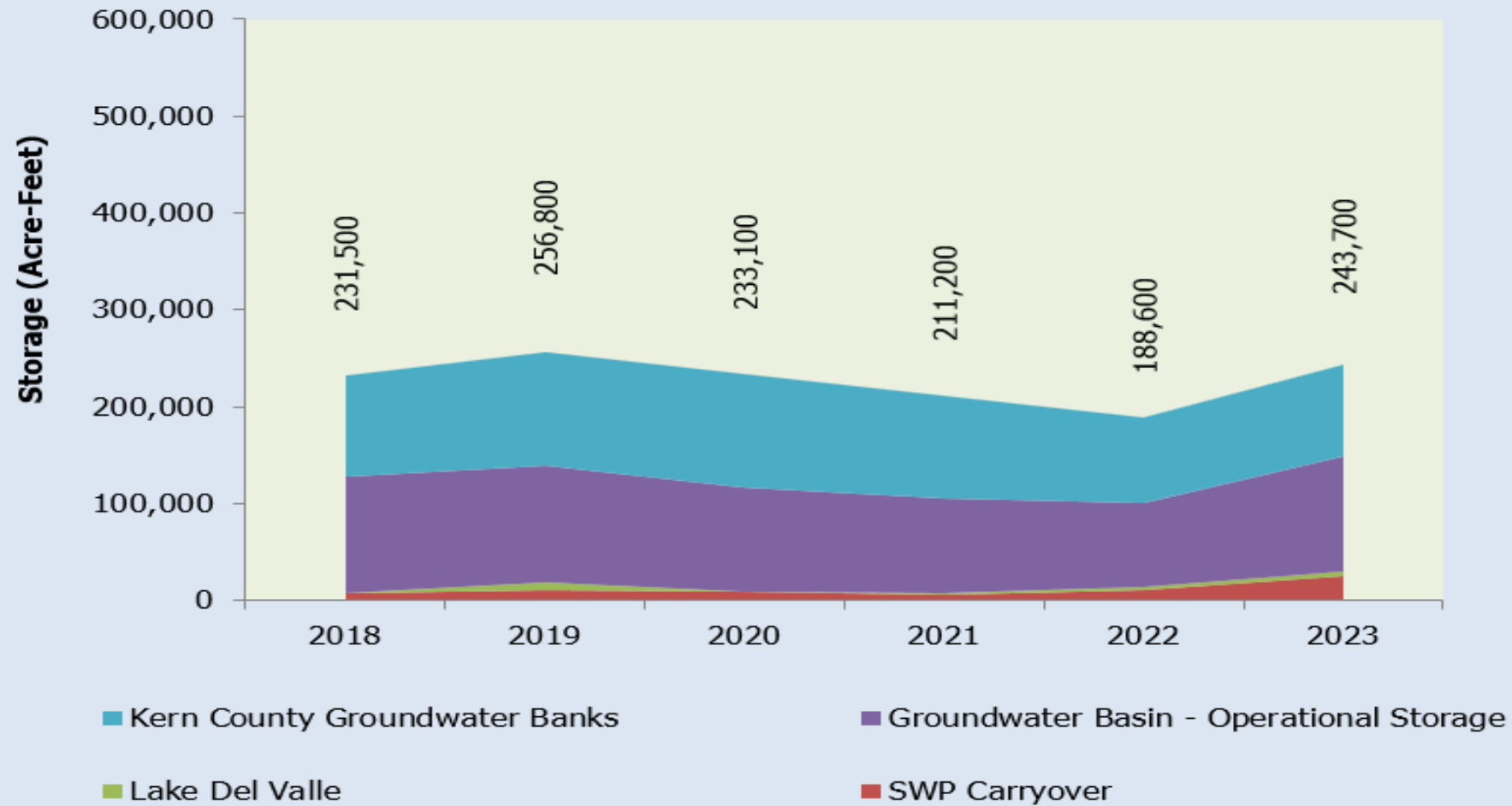
Available Groundwater Storage



Kern County Storage & Recovery Programs



End-of-Year Storage Balances



**WATER
AGENCY**

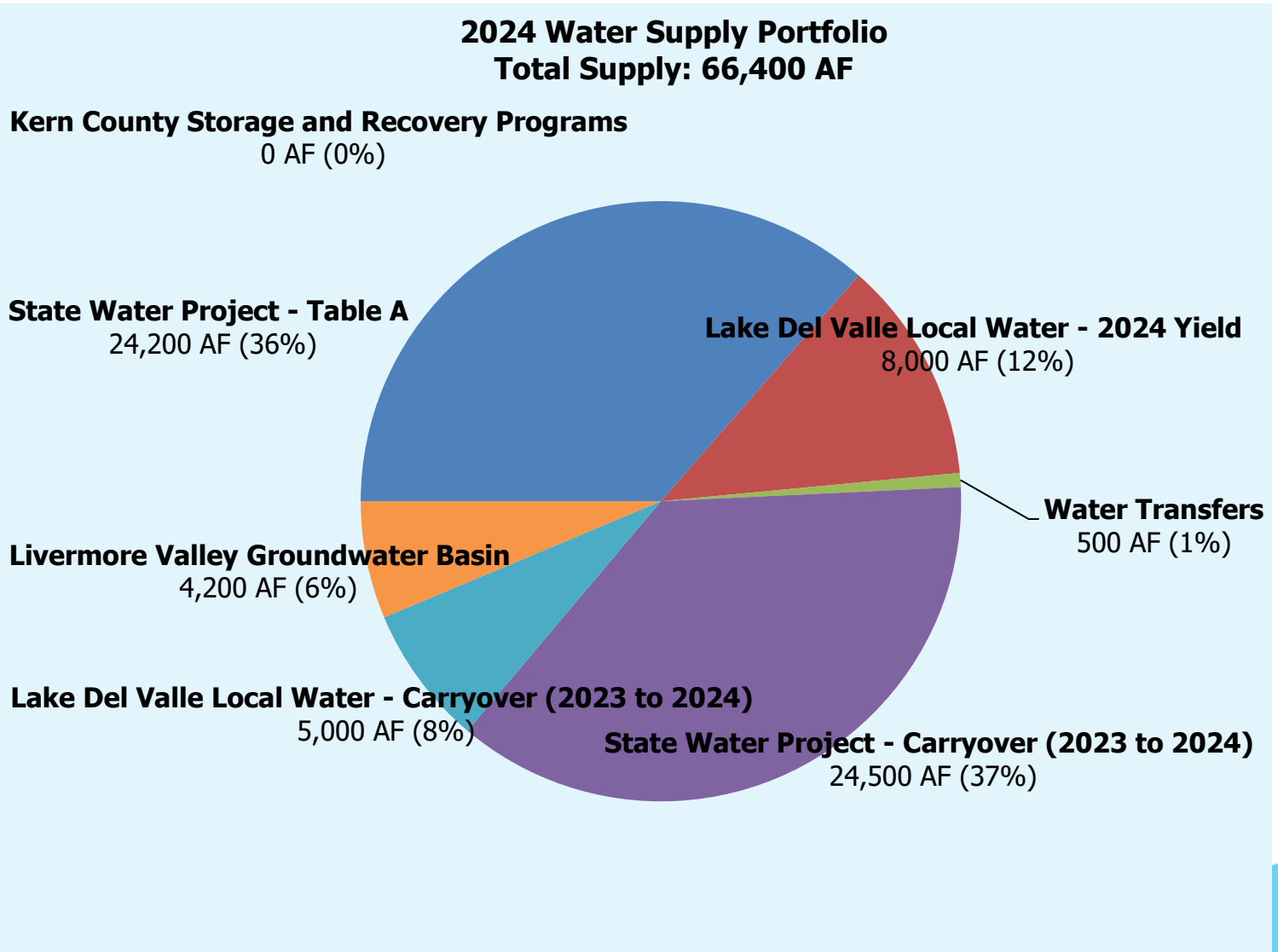


Water Supply and Delivery Plan



**WATER
AGENCY**

Current 2024 Water Supplies: 66,400 AF



2024 Water Supplies to Meet Delivery Requests

A similar analysis was done for 2025 assuming critically dry conditions:

Supply is 54,100 AF

vs.

43,000 AF
Projected Delivery

Transfers

•8,000 AF

Lake del Valle Yield

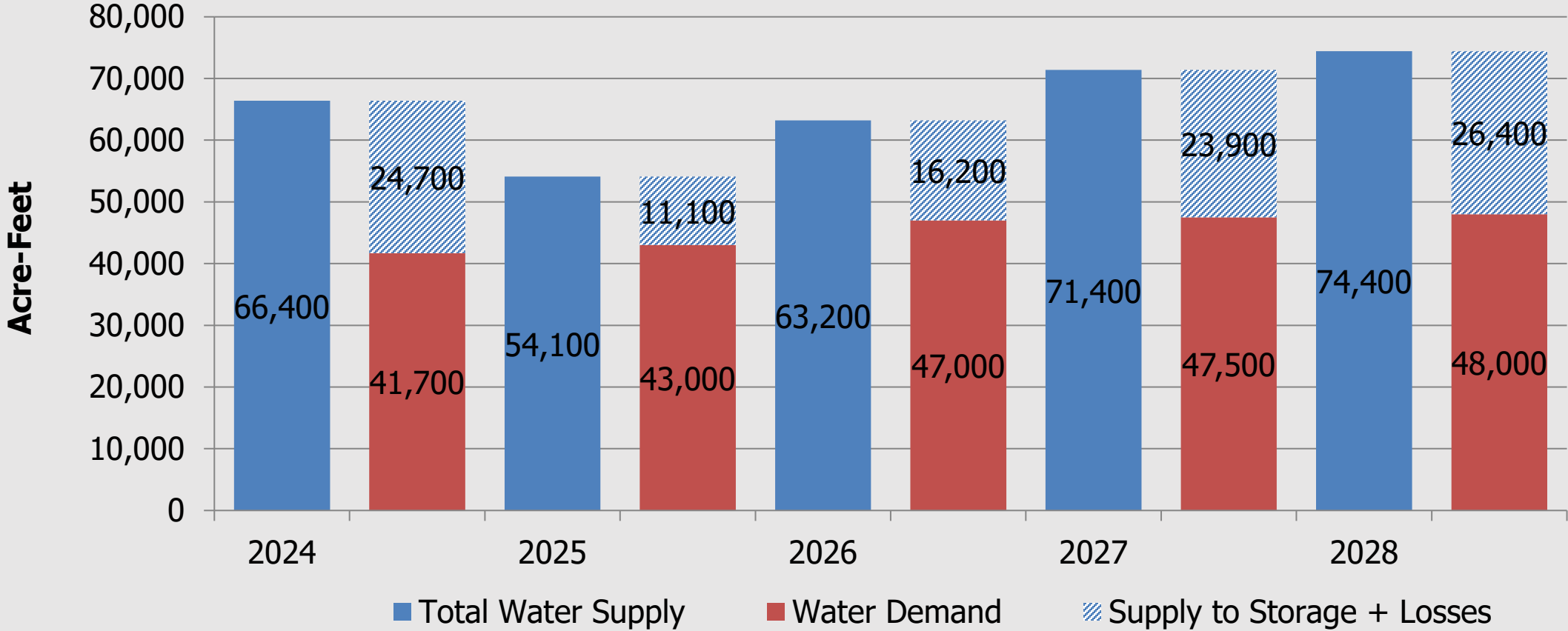
Remaining supply:
22,700 AF into storage for use in 2025 and 2,000 AF in losses.

Semitropic & Cawelo

•0 AF
•From Kern County Storage & Recovery Programs

Projected Water Availability & Use Based on Delivery Requests

Water Supplies versus Demands



Projected Deliveries and Water Planned for Storage

DEMANDS/PLANNED FOR STORAGE^a Acre-Feet	ACTUAL	PROJECTIONS				
	2023	2024	2025	2026	2027	2028
<i>Hydrologic Year Equivalent</i>	<i>2006</i>	<i>2018</i>	<i>1977</i>	<i>2018</i>	<i>Average</i>	<i>Average</i>
<i>Table A Allocation</i>	<i>100%</i>	<i>30%</i>	<i>10%</i>	<i>30%</i>	<i>55%</i>	<i>55%</i>
Customer Deliveries						
Treated Water Demand	34,000	36,200	37,000	41,500	42,000	42,500
Untreated Water Demand	4,900	5,500	6,000	5,500	5,500	5,500
To Storage						
State Water Project - Carryover (Current to Following Year)	24,500	10,000	10,000	10,000	10,000	10,000
Lake Del Valle Local Water - Carryover	5,000	8,000	0	5,000	8,000	8,000
Livermore Valley Groundwater Basin Groundwater Recharge	7,900	4,700	0	0	5,100	7,600
Semitropic Storage	10,000	0	0	0	0	0
Cawelo Storage	0	0	0	0	0	0
System Losses						
Groundwater Production (Disposal to brine)	100	200	400	400	100	100
Water Transfers or Delta Carriage Water	8,000	1,300	300	300	0	0
Treated Water System Losses	200	200	200	200	200	200
Lake Del Valle Evaporation Losses	400	300	200	300	500	500
State Water Project - Carryover Spill	10,000	0	0	0	0	0
Total	105,000	66,400	54,100	63,200	71,400	74,400

Five-Year Outlook Based on Projected Demands

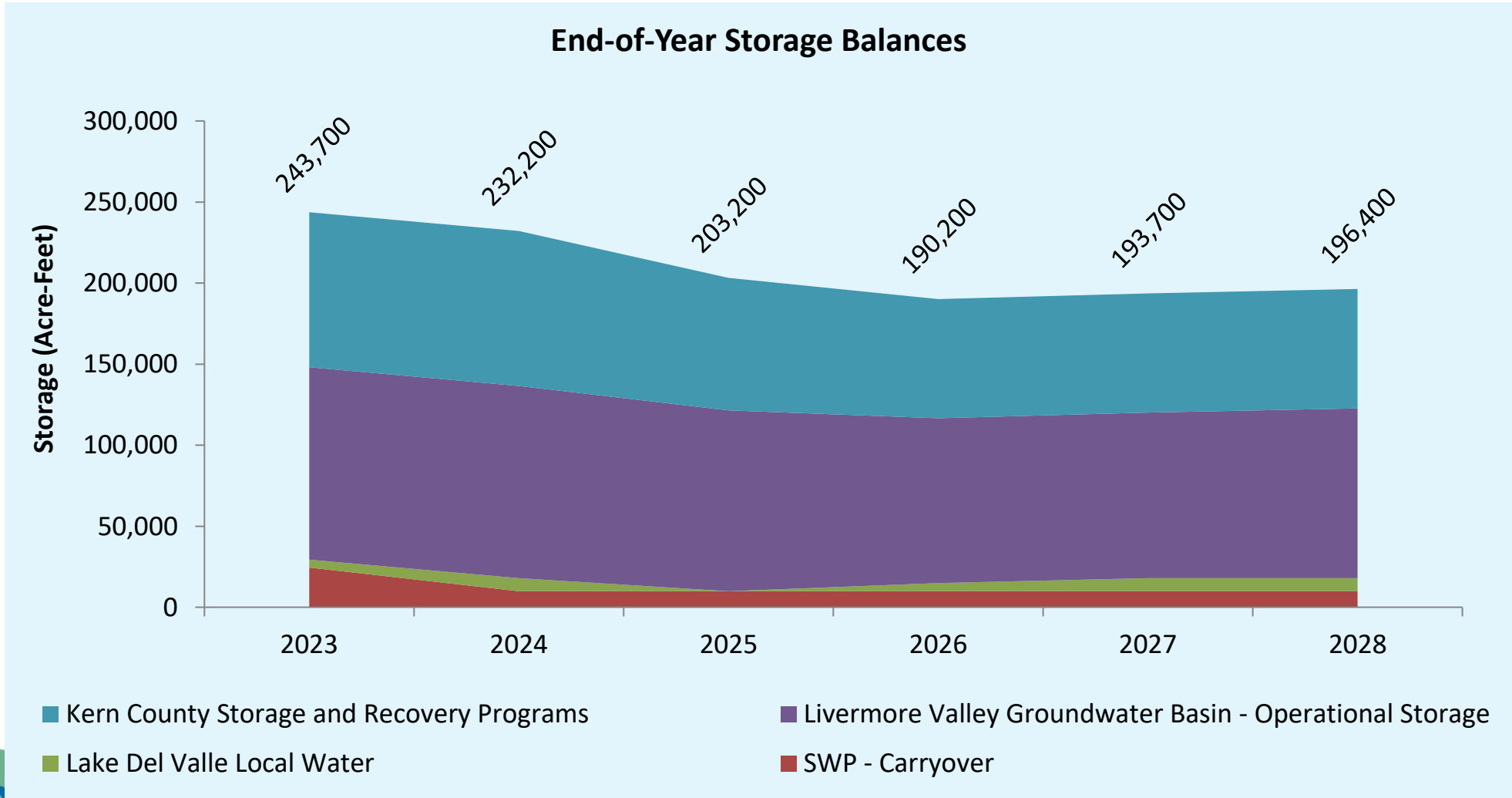
<i>SUPPLIES VS DEMANDS</i>	ACTUAL	PROJECTIONS				
Acre-Feet	2023	2024	2025	2026	2027	2028
<i>Hydrologic Year Equivalent</i>	<i>2006</i>	<i>2018</i>	<i>1977</i>	<i>2018</i>	<i>Average</i>	<i>Average</i>
<i>Table A Allocation</i>	<i>100%</i>	<i>30%</i>	<i>10%</i>	<i>30%</i>	<i>55%</i>	<i>55%</i>
Incoming Supplies ^(a)	87,300	32,700	15,100	35,200	52,300	52,300
Water Supply from Storage ^(b)	17,700	33,700	39,000	28,000	19,100	22,100
Total Water Supply	105,000	66,400	54,100	63,200	71,400	74,400
Customer Deliveries ^(c)	38,900	41,700	43,000	47,000	47,500	48,000
Supply to Storage ^(d)	57,400	22,700	10,000	15,000	23,100	25,600
System Losses ^(e)	8,700	2,000	1,100	1,200	800	800
% of Demand Delivered (Customer Deliveries)	100%	100%	100%	100%	100%	100%
TOTAL STORAGE	243,700	232,200	203,200	190,200	193,700	196,400

Actual and Projected End-of-Year Storage Balances

Storage projected to drop by 48,000 AF between 2023 to 2028.

Could mitigate declining storage through the additional purchase of transfer water.

- *Monitor conditions to determine adequate amounts of transfer water in future years.*





Questions?