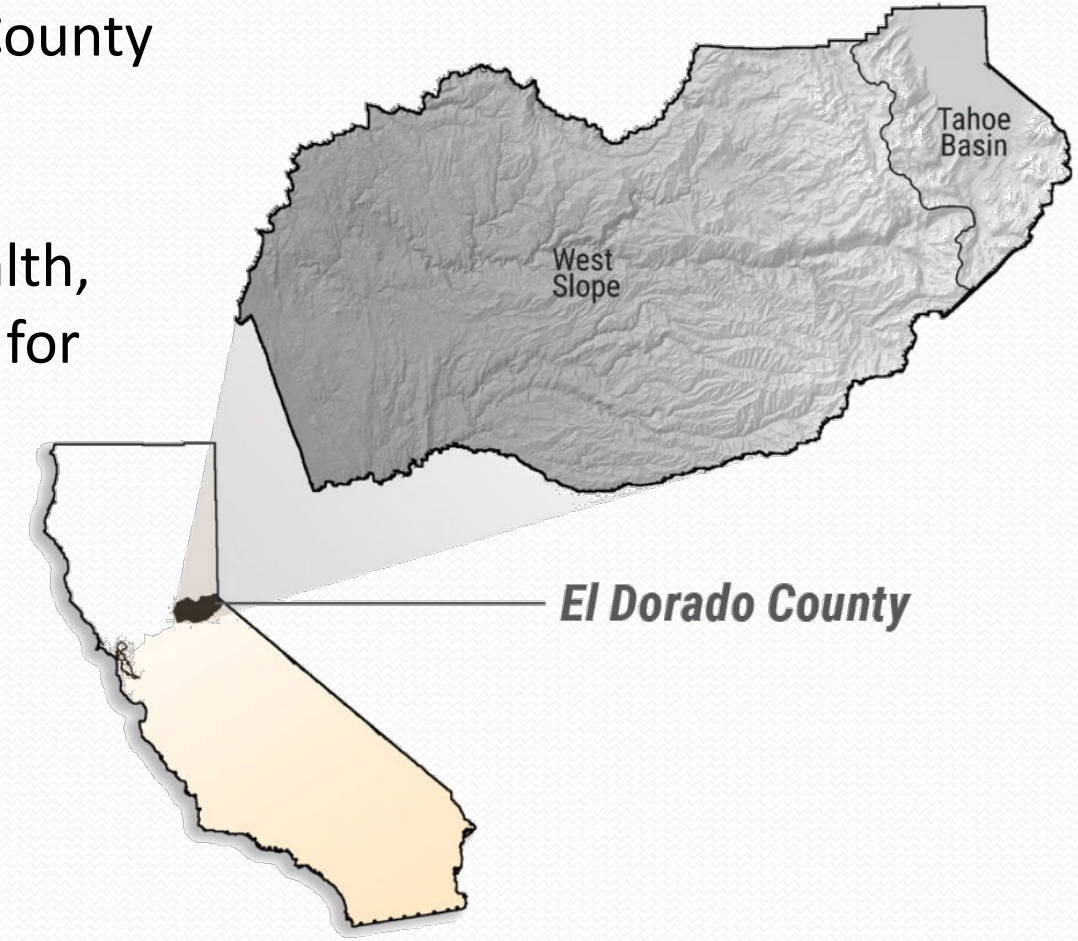
El Dorado Water Reliability Project

Coloma Lotus Advisory Committee
April 3, 2026

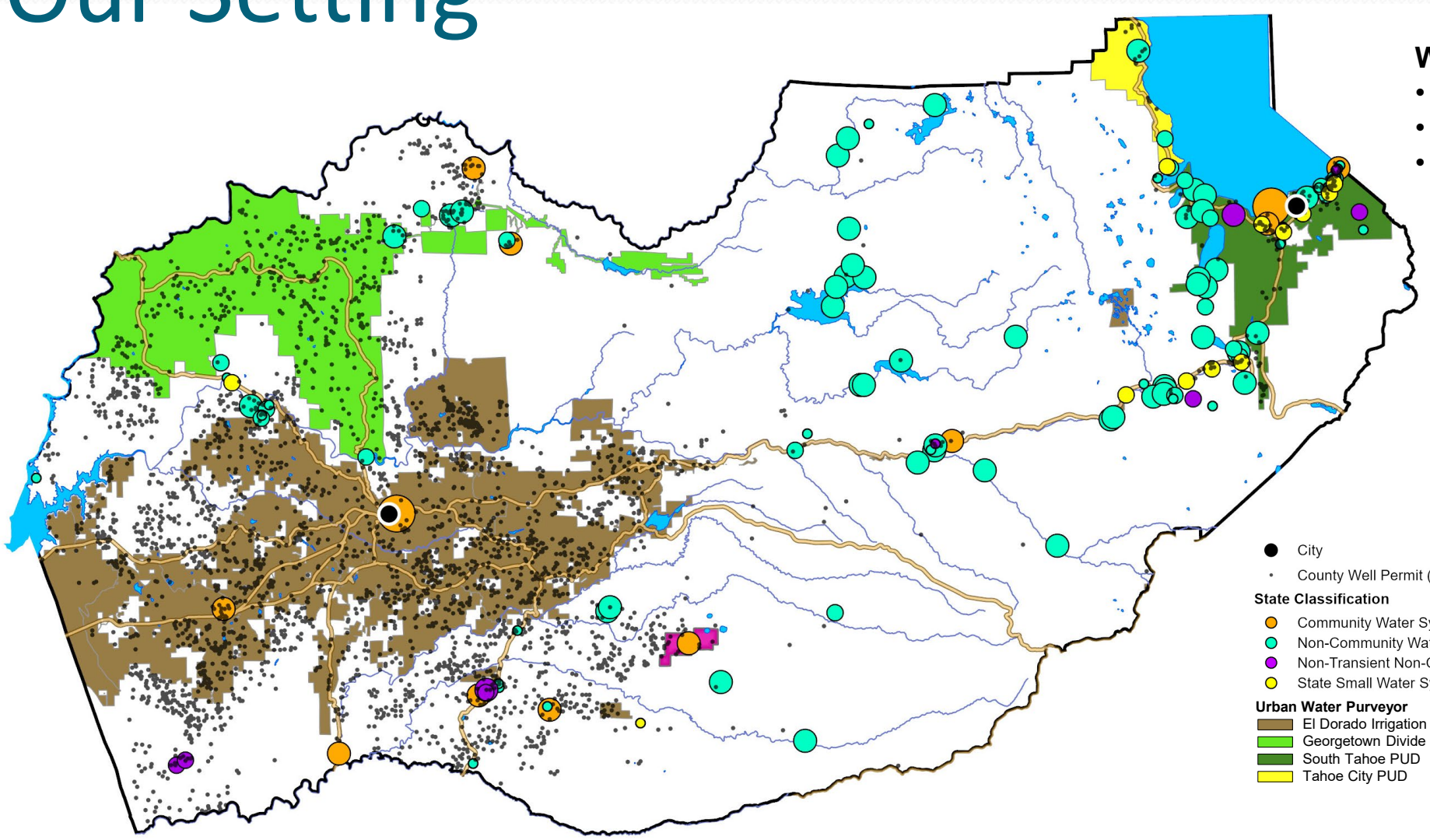
El Dorado County Water Agency

Our mission is to ensure El Dorado County has adequate and affordable water, through collaboration, to support economic prosperity, watershed health, and the rural-agricultural way of life for today and in the future.



West Slope
Water Supply Setting

Our Setting



West Slope Stats:

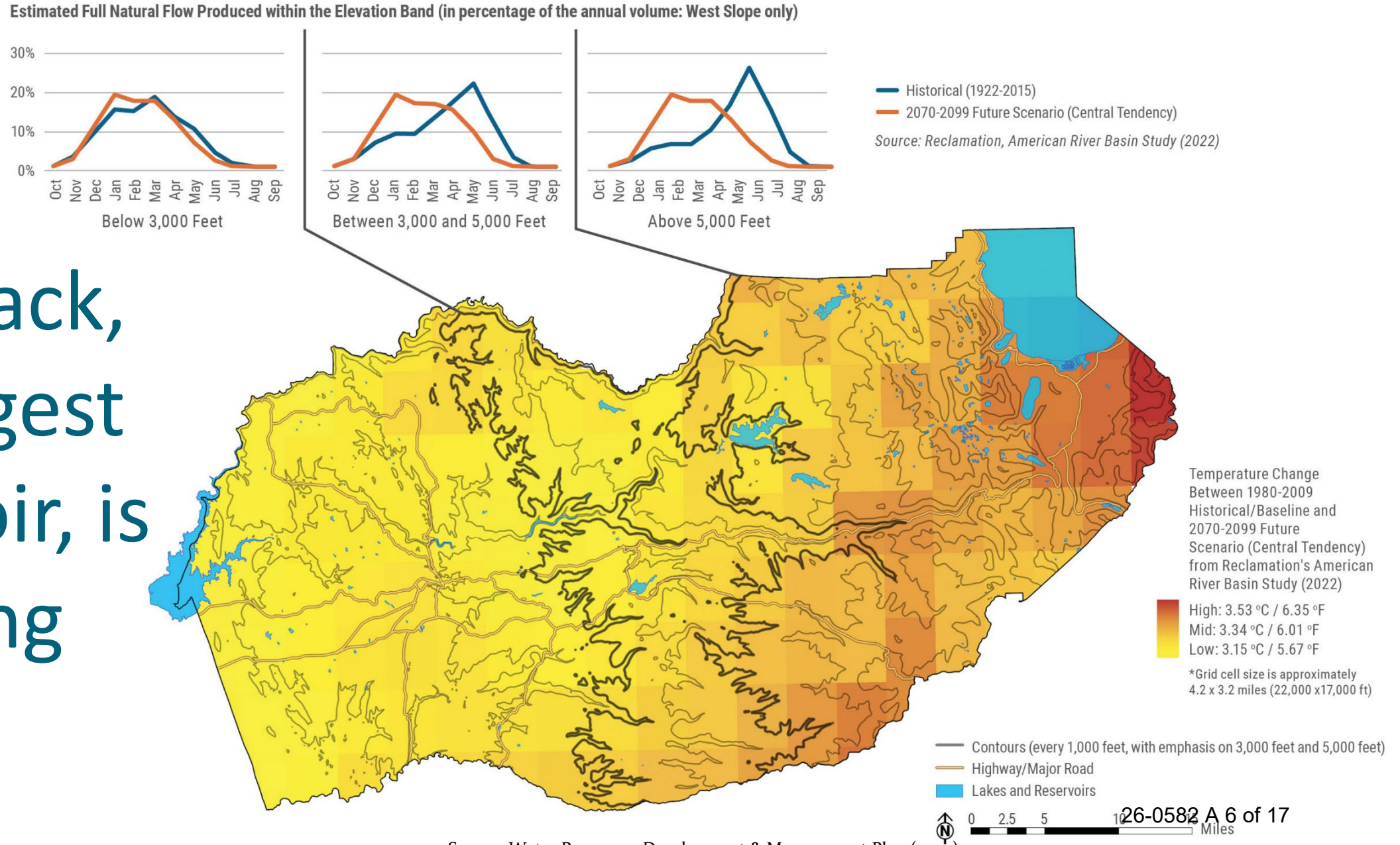
- 2 urban water purveyors
- 80 small water systems
- 3,300+ domestic wells

West Slope Water Sources

- Surface Water
  - Used by urban purveyors, a few small water systems
- Groundwater
  - Rely on low-yield fractured rock aquifers
  - How much water a well produces depends on size and depth of fracture opening, fracture spacing, interconnection of fractures, source of recharge

Both rely on snowpack

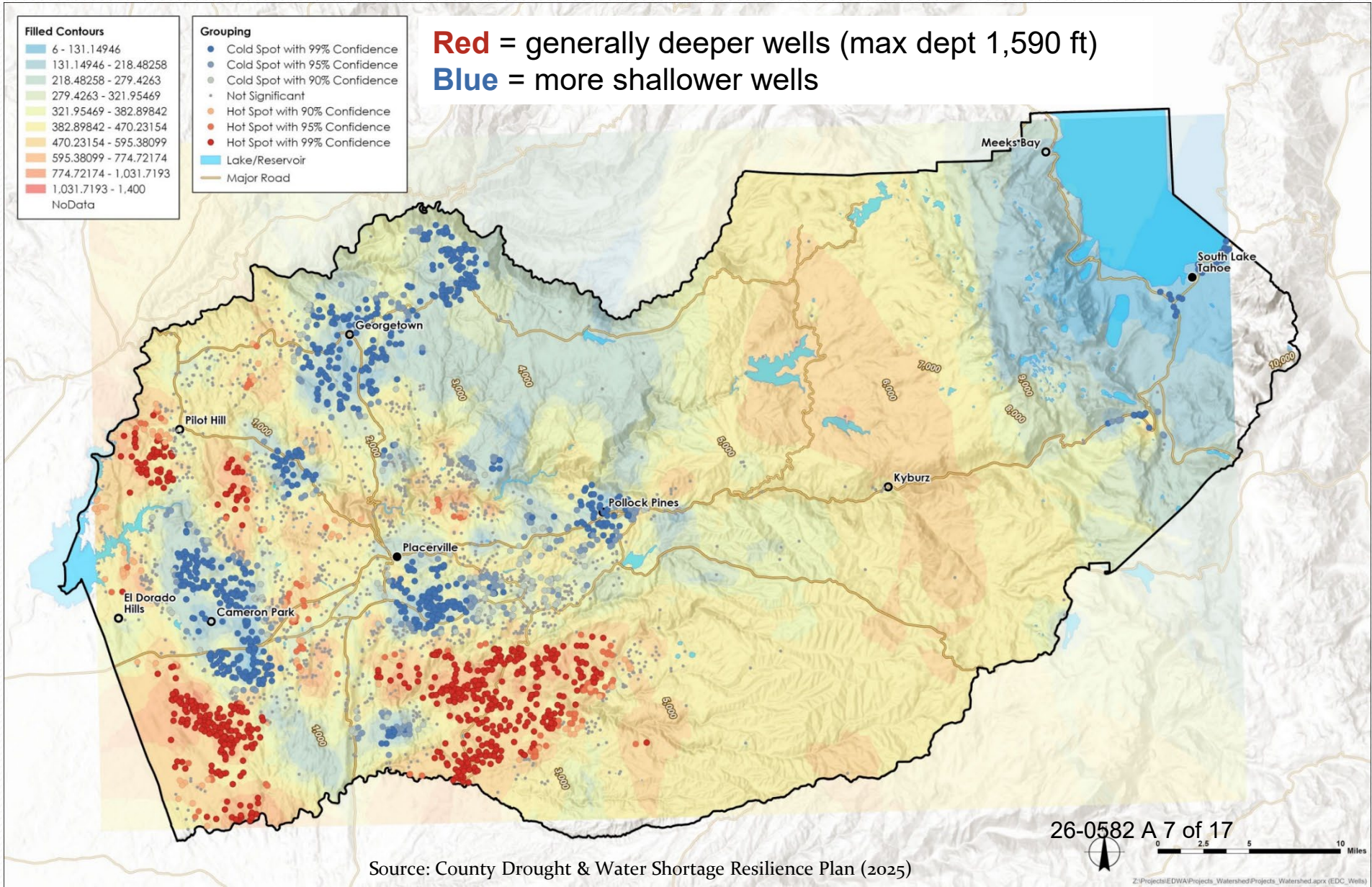
Snowpack, our largest reservoir, is changing



Source: Water Resources Development & Management Plan (2024)

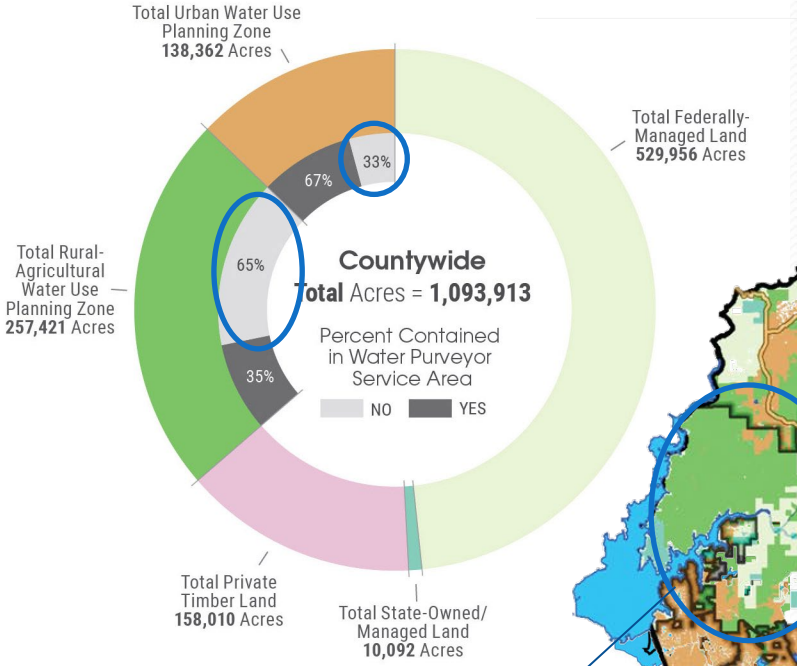
Groundwater

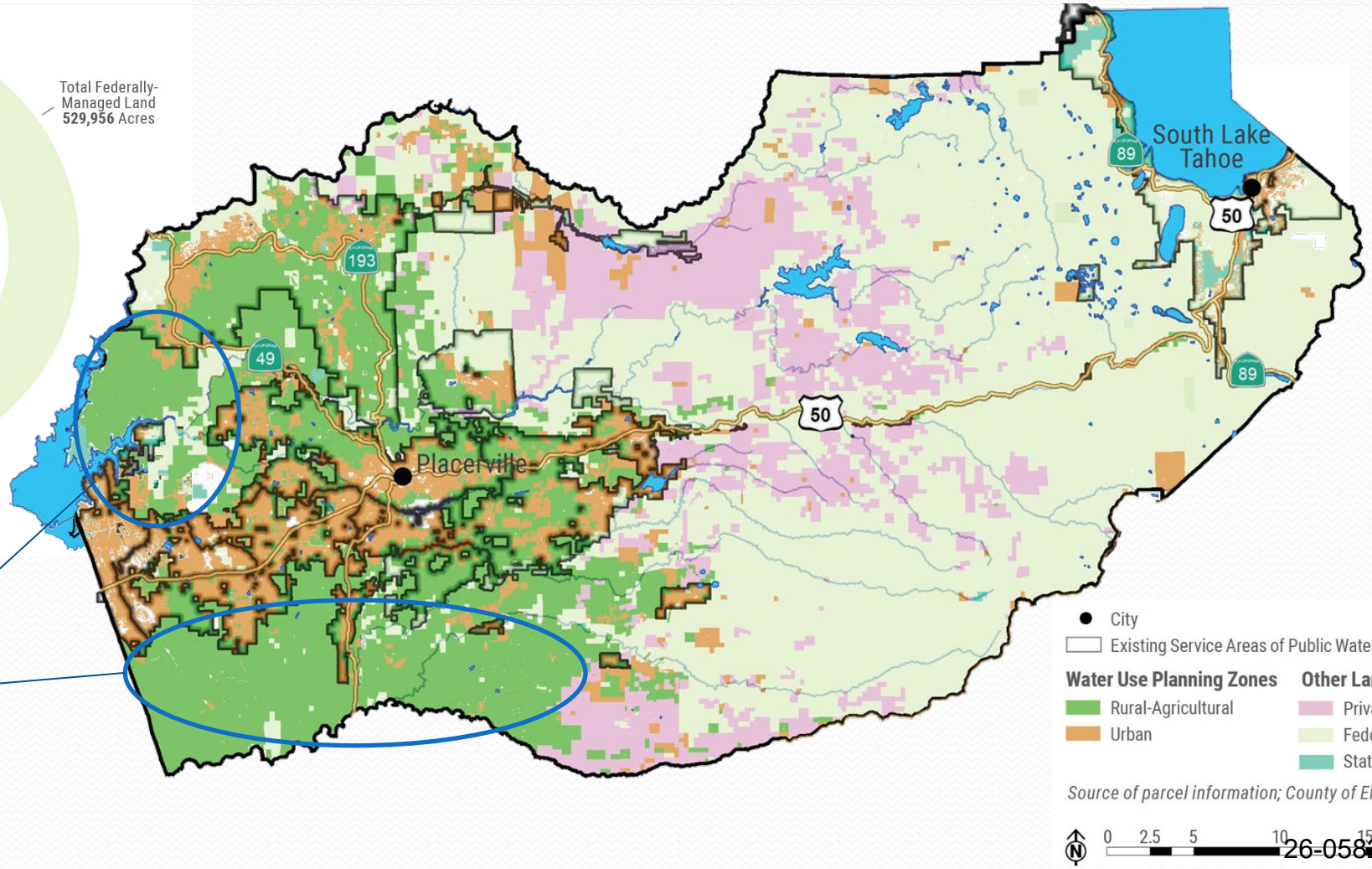
Well Depth Hot Spots



Source: County Drought & Water Shortage Resilience Plan (2025)

Supporting Other County Areas (OCA)



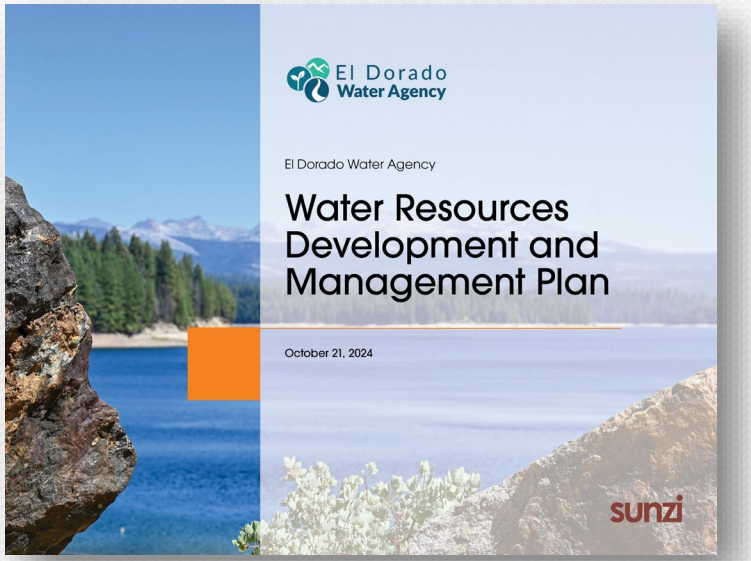


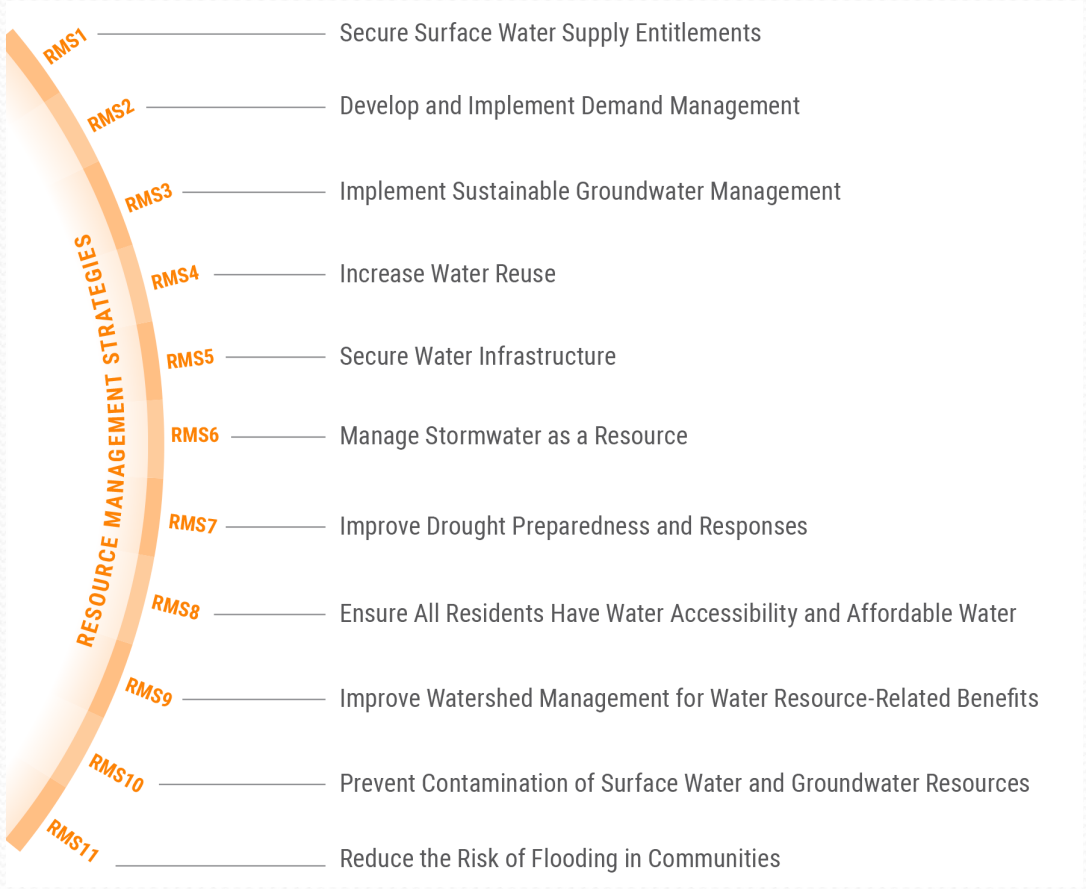
Other County Areas

Source: Water Resources Development & Management Plan (2024)

Preparing for Tomorrow

What are we doing to improve our county's water security?





Proposed Project

Proposed Project

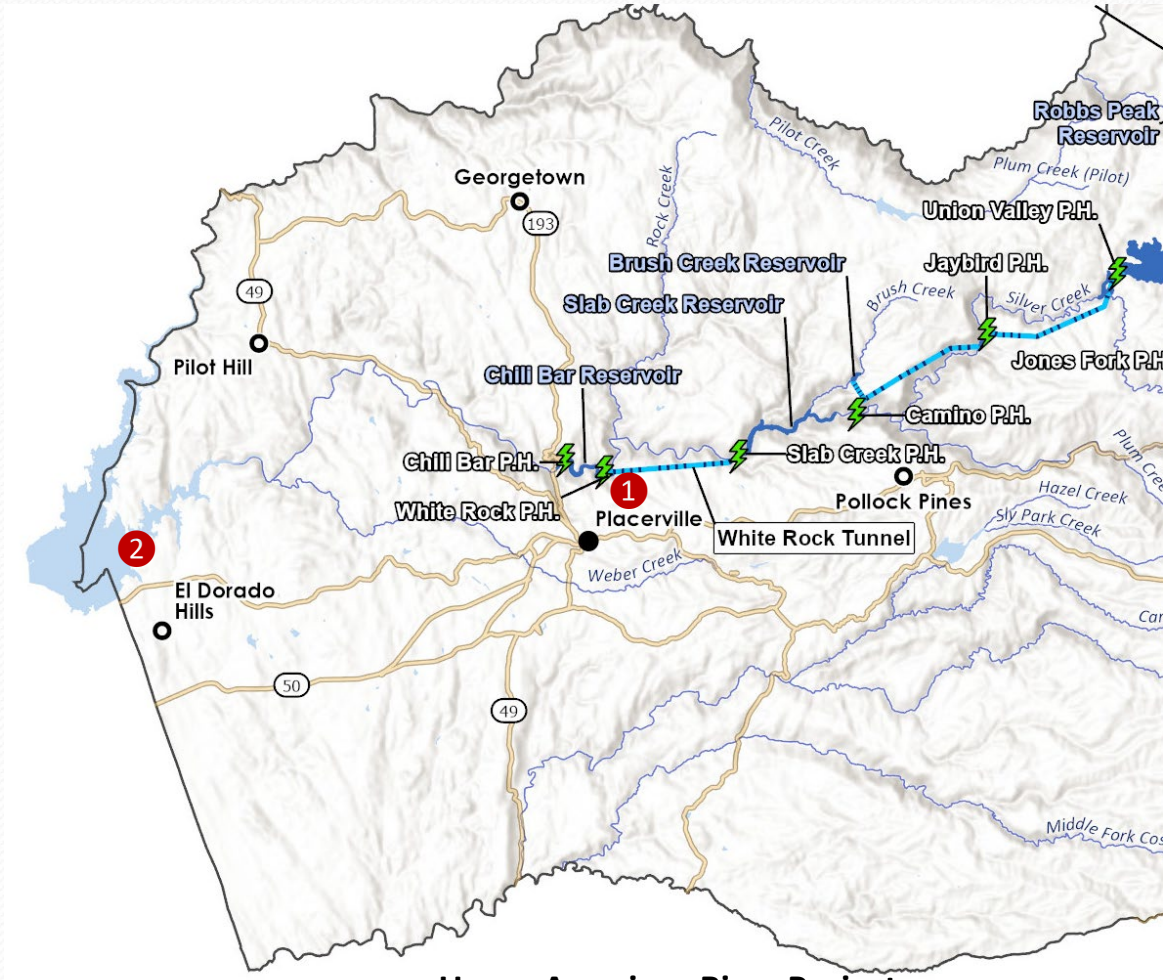
Secure assignment of State Filed Applications for surface water rights up to 40,000 acre-feet/year

Divert water through and storage in SMUD's existing Upper American River Project facilities

❶ SMUD's White Rock Powerhouse penstock (up to 100 cfs)

❷ EID's Folsom Lake Intake Facility (up to 100 cfs)

Max combined diversions for both diversion points (❶ and ❷) is 100 cfs



Proposed Project Operations at White Rock

Project operations during different hydrologic conditions are established per the 2005 El Dorado-SMUD Cooperation Agreement

Daily Net Storage (AF)	Annual Deliveries at White Rock (AF/yr)	From Seasonal Storage at from White Rock (AF/year)	From Carryover Storage at from White Rock (AF/year)	Total at White Rock (AF/year)
Normal Condition				
Above 150,000	≤ 40,000	≤ 40,000	- (1)	≤ 40,000
50,000 - 150,000	≤ 40,000	≤ 40,000	- (1)	≤ 40,000
Below 50,000	-	-	-	-
Critically Dry Condition (forecast of total water year unimpaired runoff below Folsom is ≤ 900,000 AF)				
Above 150,000	≤ 40,000	≤ 40,000	≤ 15,000	≤ 40,000
125,000 - 150,000	-	-	≤ 15,000	≤ 15,000
100,000 - 125,000	-	-	≤ 7,500	≤ 7,500
50,000 - 100,000	-	-	≤ 5,000	≤ 5,000
Below 50,000	-	-	-	-
SMUD Emergency Condition				
Any storage level	-	-	-	-

Key: AF = acre-feet UARP = Upper American River Project

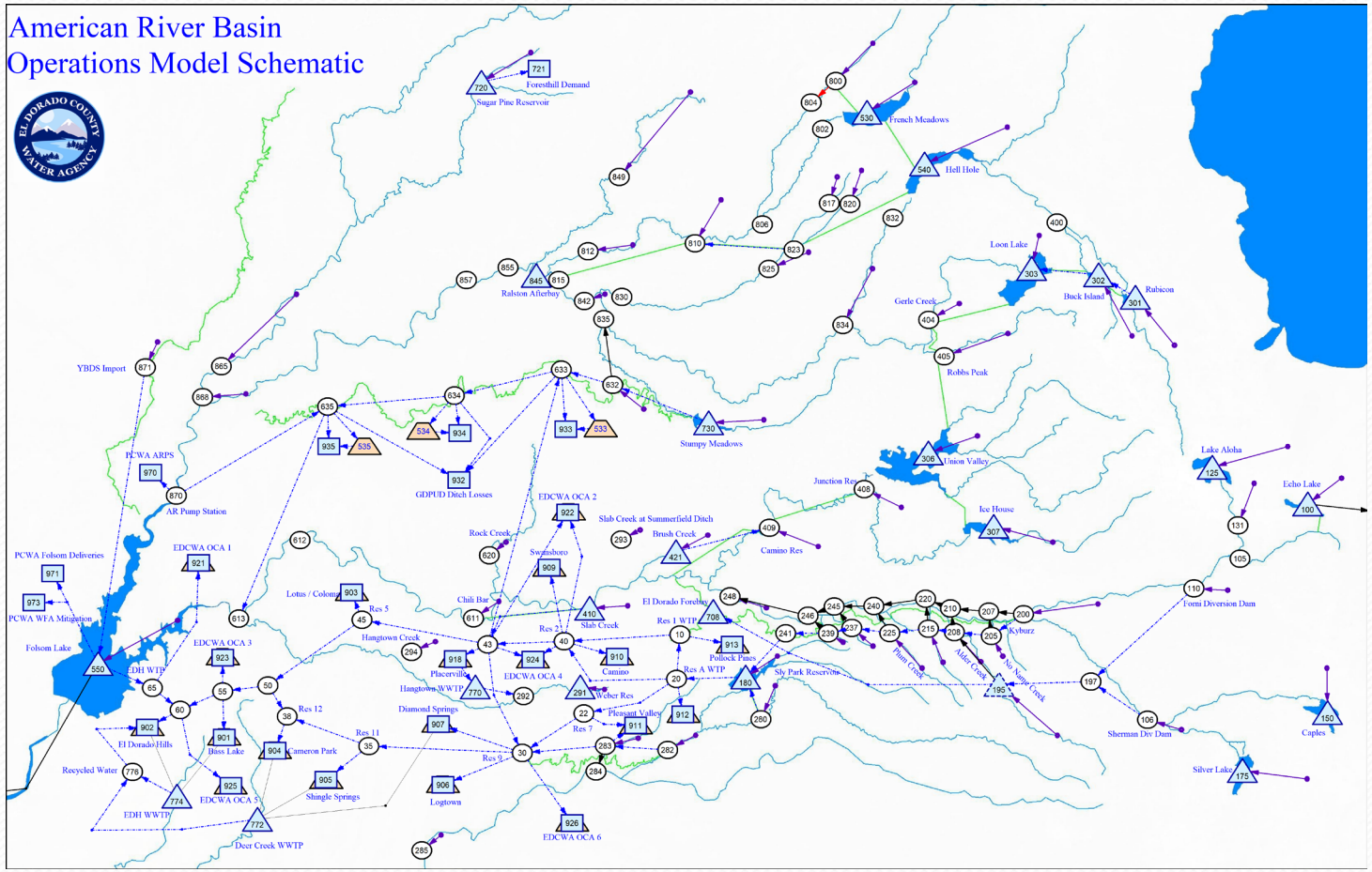
Notes:

(1) Carryover deliveries are allowed during an El Dorado Parties Emergency Condition (e.g., sudden flood or fire) that affects ability to make deliveries

- Seasonal Storage is storage used for the Proposed Project within a calendar year
- Daily Net Storage is the combined storage volume of Union Valley, Loon Lake, Ice House less any Proposed Project Carryover Storage, computed daily
- Annual Deliveries at the South Fork American River Delivery Point (Folsom) are limited by water availability and ability to take water

Modeling of Upper American River Operations

- American River Integrated Operations Model (ARIOps)
- Best up-to-date representation of operations on the South Fork American River.
- Daily timesteps allowing detailed simulation of water operations and power generation
- 94-year simulation period (water years 1922 to 2015)
- Historic and climate change hydrology; cumulative conditions



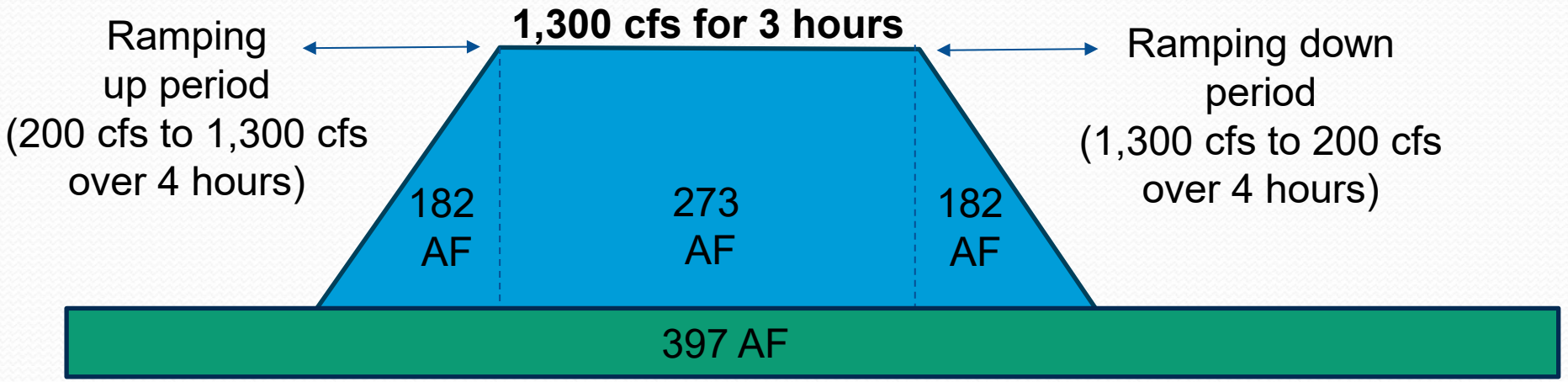
Considerations

Having free-flowing water in our rivers are valuable in many aspects

- Recreation
  - FERC-required days (1,300 cfs to 1,750 cfs)
  - Opportunistic (assuming 800 cfs to 1,300 cfs)
- Aesthetics, cultural
- Aquatic life
  - Minimum instream flows to protect aquatic life beneficial uses (150 cfs to 500 cfs)

Required Recreational Flows

An example of how we modeled this:



Aquatic Flow of 200 cfs for 24 hours

Total volume needed for this example is 1,034 acre-feet (AF), which equates to an average daily flow of 521 cfs in the daily model

Opportunistic Flows below Chili Bar

Looking at days without recreational streamflow requirements ( )

Assuming concerns surrounding opportunistic conditions are between 800 cfs to 1,300 cfs

Table 28 - Recreational Streamflow Requirements below Chili Bar, cfs

Water Year Type	Period	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
SD	April – Memorial Day	3 Hrs @ 1300					3 Hrs @ 1300	3 Hrs @ 1300
	Memorial Day – Labor Day	3 Hrs @ 1300			3 Hrs @ 1300	3 Hrs @ 1300	5 Hrs @ 1300	5 Hrs @ 1300
	Labor Day – September						3 Hrs @ 1300	3 Hrs @ 1300
	October - March						3 Hrs @ 1300	
CD	March – Memorial Day	3 Hrs @ 1300					3 Hrs @ 1300	3 Hrs @ 1300
	Memorial Day – Labor Day	3 Hrs @ 1300			3 Hrs @ 1300	3 Hrs @ 1300	5 Hrs @ 1500	5 Hrs @ 1500
	Labor Day – September					3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300
	October - February						3 Hrs @ 1300	
Dry	March – Memorial Day	3 Hrs @ 1300	3 Hrs @ 1300			3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	Memorial Day – Labor Day	3 Hrs @ 1300	3 Hrs @ 1300		3 Hrs @ 1300	3 Hrs @ 1300	5 Hrs @ 1500	5 Hrs @ 1500
	Labor Day – September					3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300
	October - February						3 Hrs @ 1300	3 Hrs @ 1300
BN	March – Memorial Day	3 Hrs @ 1300	3 Hrs @ 1300		3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	Memorial Day – Labor Day	3 Hrs @ 1300	3 Hrs @ 1300		3 Hrs @ 1300	3 Hrs @ 1300	6 Hrs @ 1500	6 Hrs @ 1500
	Labor Day – September				3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	October	3 Hrs @ 1300				3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1300	3 Hrs @ 1300
AN	March – Memorial Day	3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300	4 Hrs @ 1750	4 Hrs @ 1750
	Memorial Day – Labor Day	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750
	Labor Day – September				3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500
	October	3 Hrs @ 1300				3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1300	3 Hrs @ 1300
Wet	March – Memorial Day	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750
	Memorial Day – Labor Day	4 Hrs @ 1500	4 Hrs @ 1500	4 Hrs @ 1500	4 Hrs @ 1500	4 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750
	Labor Day – September				3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500
	October	3 Hrs @ 1300				3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1500	3 Hrs @ 1500

Thank you