



Solutions for San Diego and the Southwest

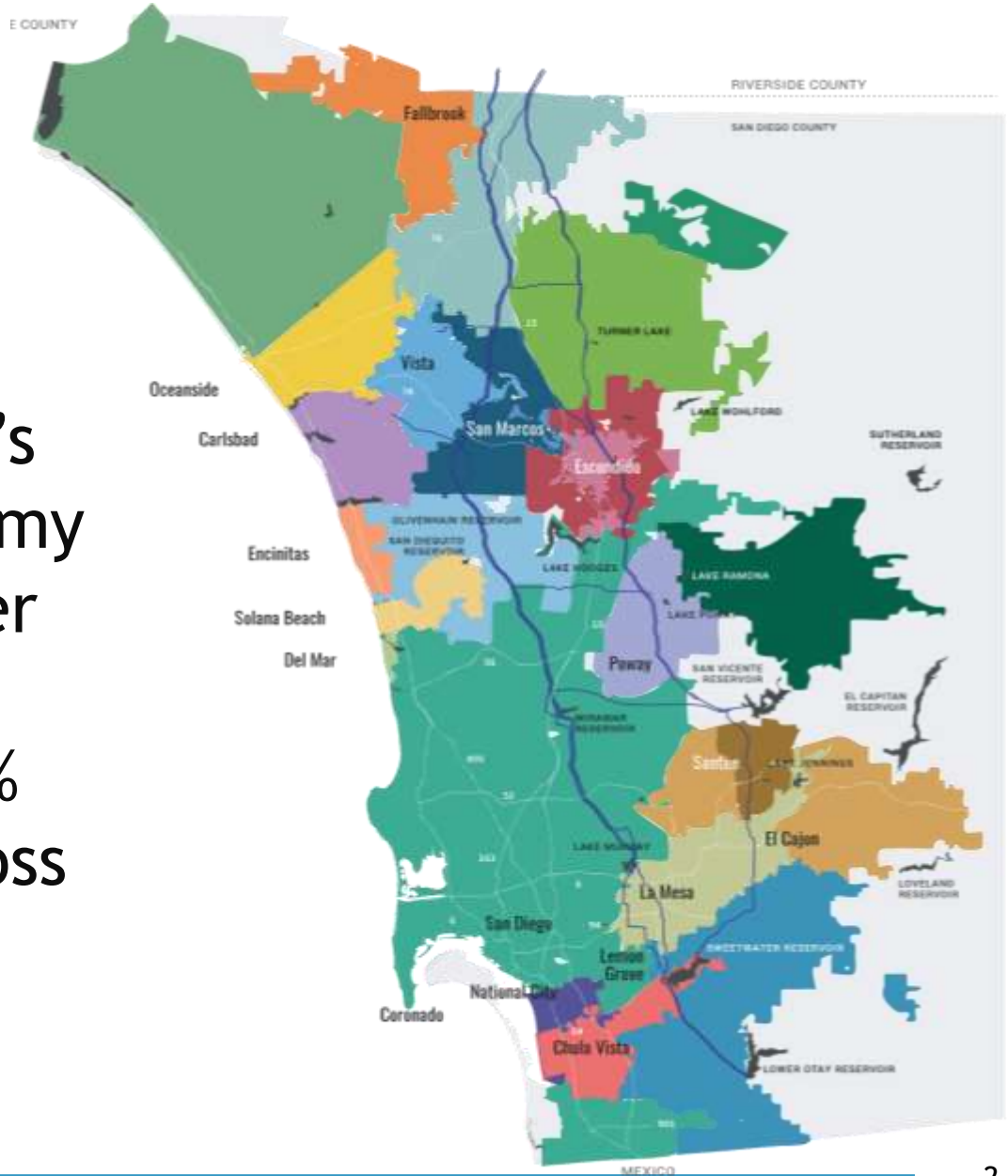
San Diego County Farm and Nursery Expo
Nov. 6, 2019

Sandy Kerl
Acting General Manager

Water Authority Transforms a Region ...

Wholesale agency
created by the state
Legislature in 1944

- Serves 3.3 million people and region's \$231 billion economy through 24 member agencies
- Provides about 75% of water used across the metropolitan area



... With Few Natural Water Assets

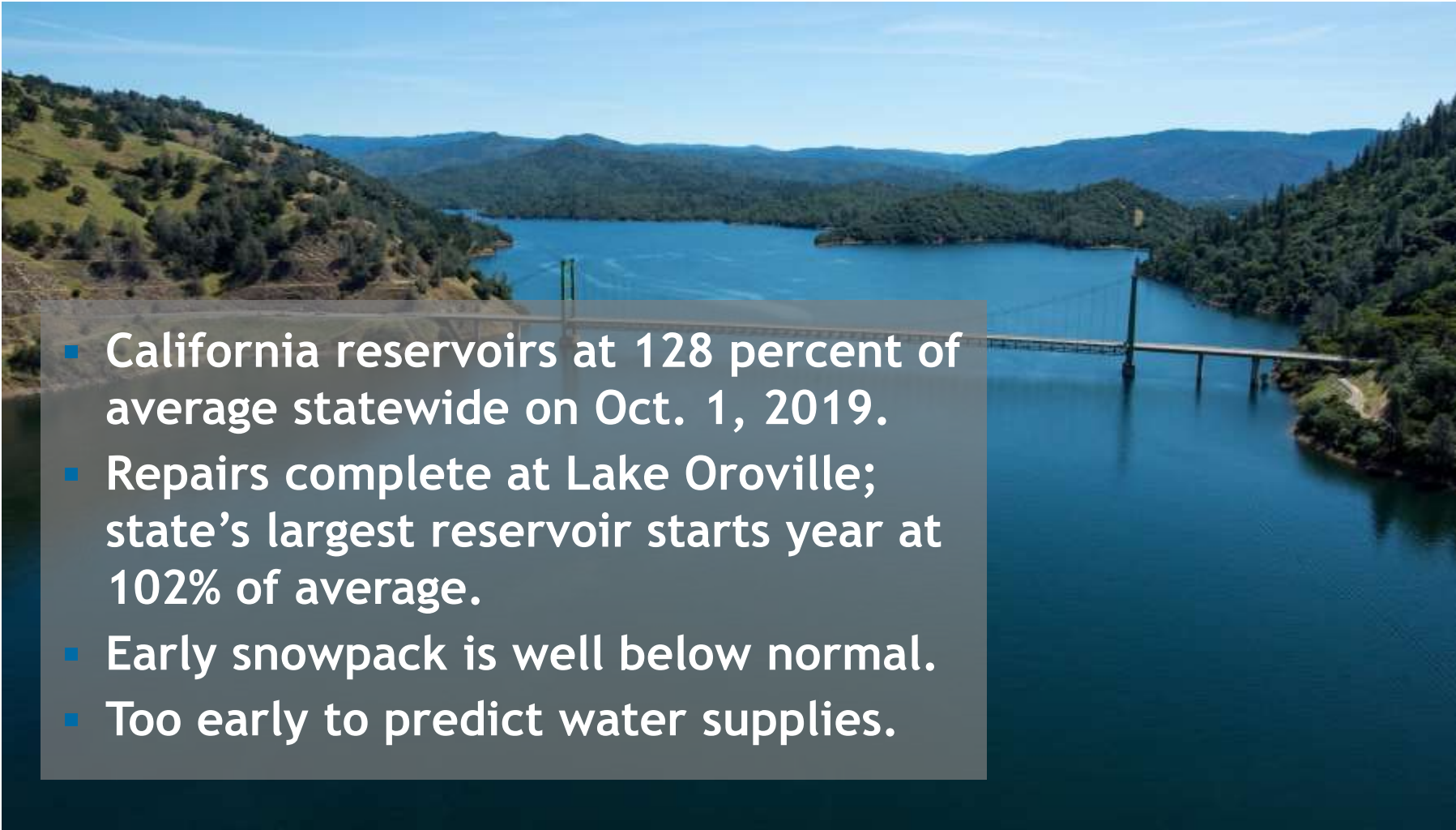


Sierra Nevada is an Important Source of Supply

- Water Year 2019 (Oct. 2018 -- Sept. 2019) was wet, continuing recovery from 2012-2016 drought.
- Statewide snowpack on April 1 was 175% of average.



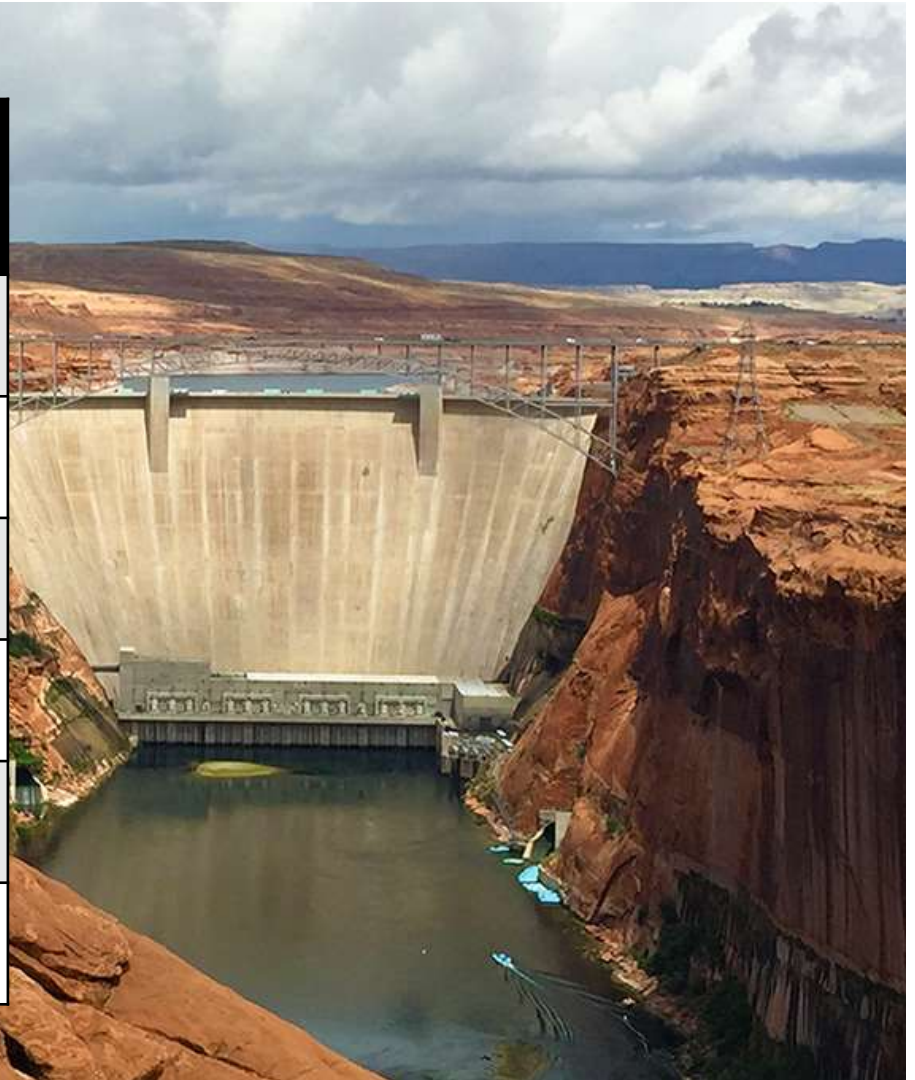
Water Year 2020 Starts with Strong Reserves

- 
- California reservoirs at 128 percent of average statewide on Oct. 1, 2019.
 - Repairs complete at Lake Oroville; state's largest reservoir starts year at 102% of average.
 - Early snowpack is well below normal.
 - Too early to predict water supplies.

Drought Persists in Colorado River Basin

Storage and Hydrology (October 2019)

	% Full	Million AF	Elev.
Lake Powell	54%	13.1	3,613'
Lake Mead	39%	10.3	1,083'
Total System	52%	31.3	-
2019 Peak Snowpack 133% of normal			
2019 Runoff to Powell 120% of normal			



Water is Critical for Region's Ag Economy



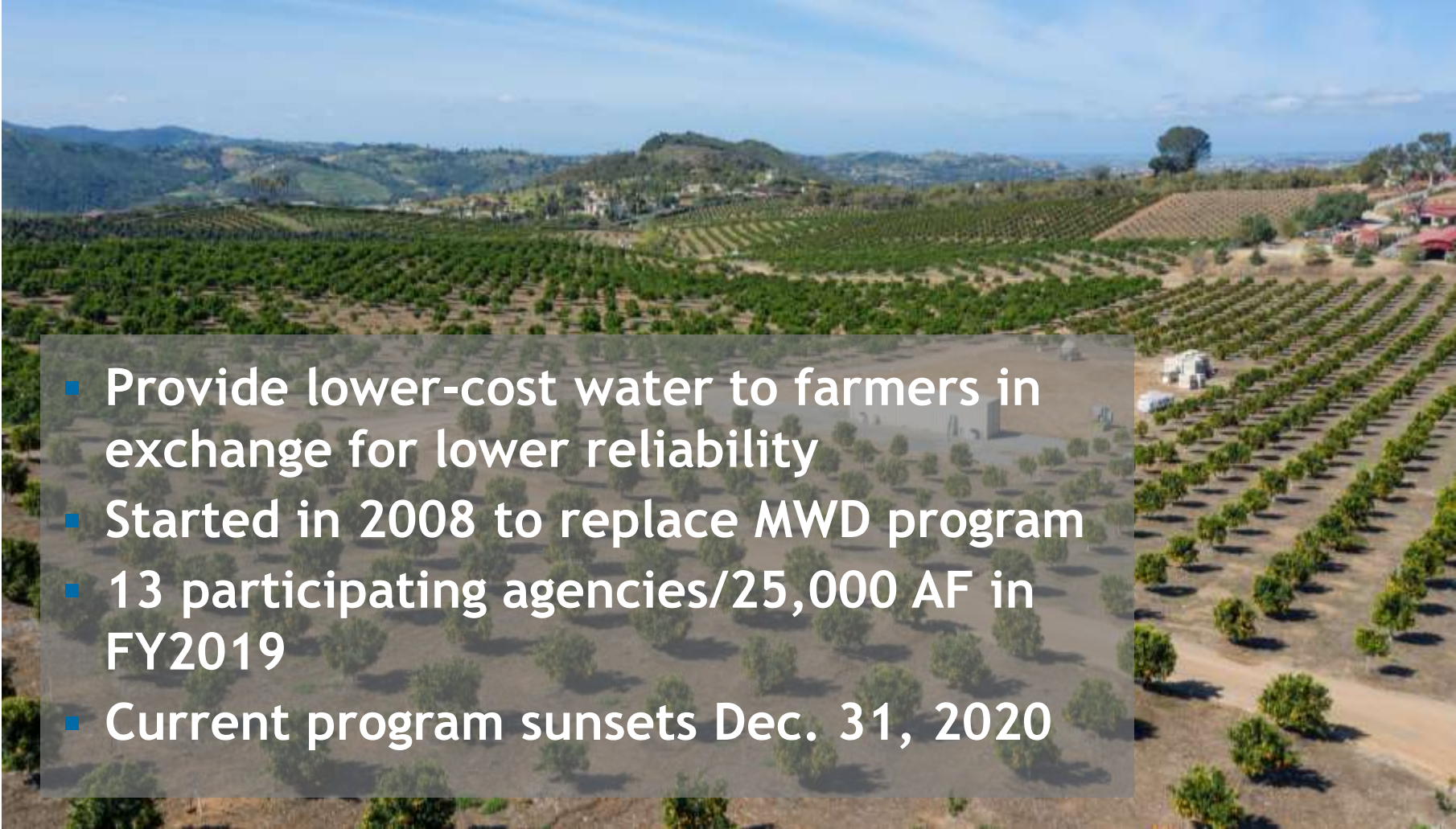
- 242,500 acres in production
- Nursery and cut flower products are 71% of total value (\$1.2B)
- Avocados are largest by acreage
- National leader certified organic farms

Water Authority Efforts Benefit Farmers

- Free ag water system assessments
 - More than 2,300 irrigation evaluations since 1991
 - Work performed by the Mission Resource Conservation District at www.missionrcd.org



Special Water Rates Support San Diego Ag

- 
- Provide lower-cost water to farmers in exchange for lower reliability
 - Started in 2008 to replace MWD program
 - 13 participating agencies/25,000 AF in FY2019
 - Current program sunsets Dec. 31, 2020

Price Break Helps Local Farmers


- M&I “All-In” Treated: \$1,686/AF
- TSAWR Treated: \$1,231/AF
- Difference: \$455/AF

All figures for 2020.

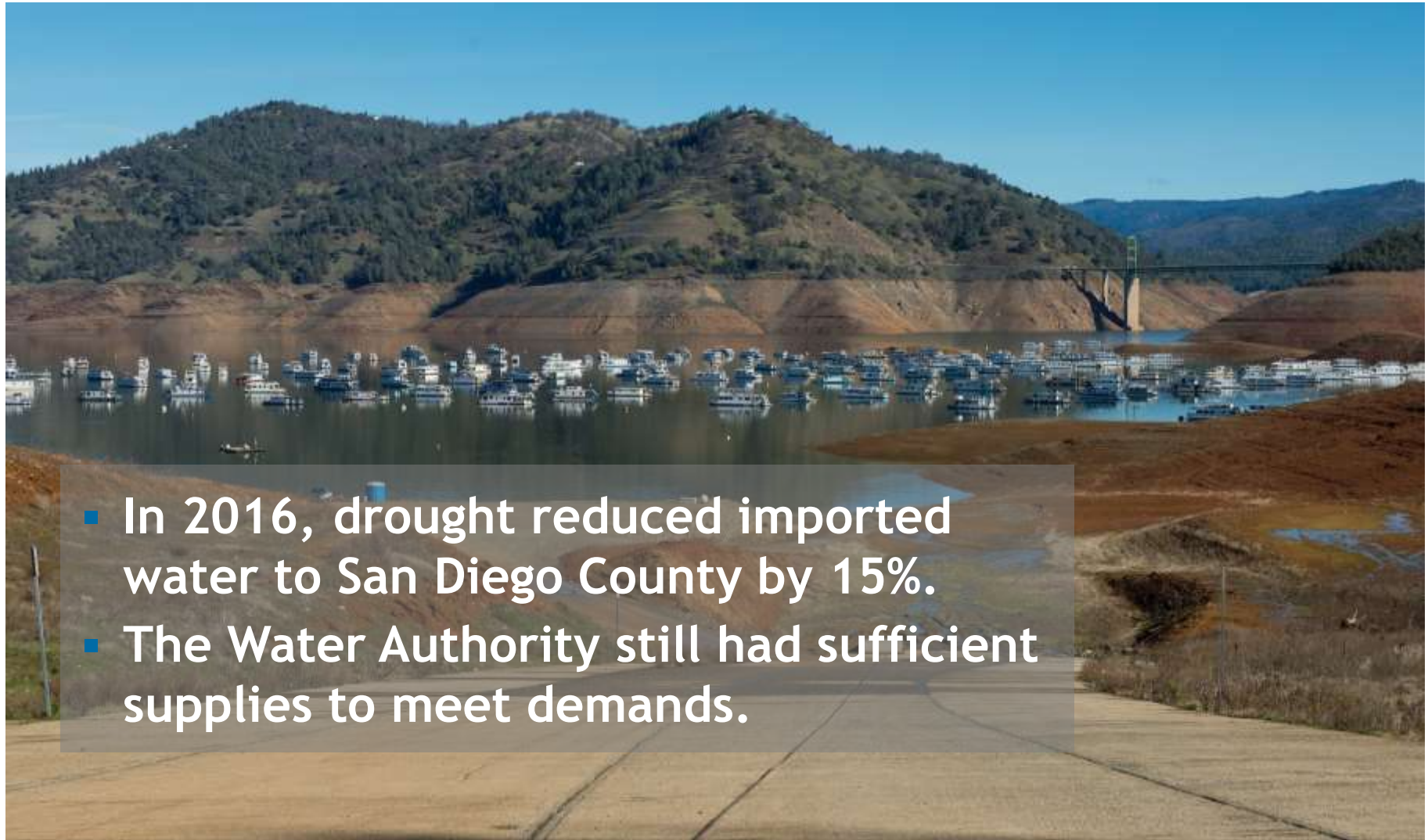
Key Issues for Future Ag Rates

- Define a reasonable, actionable level-of-service difference
 - Source of supply, supply reliability, severity of delivery cutbacks, storage
- Create criteria for expansion
 - Provide certainty to help farm investment decisions
 - Allow new users to join
 - Streamline annual validation process
 - Meet cost-of-service requirements

Four Ag Water Alternatives Under Review

- 
- Task force selected four alternatives for further review and analysis by staff and cost-of-service consultant.
 - All four options extend the program.
 - Farm Bureau proposal among the alternatives.

Why Supply Reliability is Critical



- In 2016, drought reduced imported water to San Diego County by 15%.
- The Water Authority still had sufficient supplies to meet demands.

Conservation and Transfers



- The nation's largest ag-to-urban conservation-and-transfer agreement benefits San Diego County and the entire Southwest.

Carlsbad Desalination Plant



- Opened in 2015, the nation's largest seawater desalination plant produces 50 MGD of drought-proof supplies.

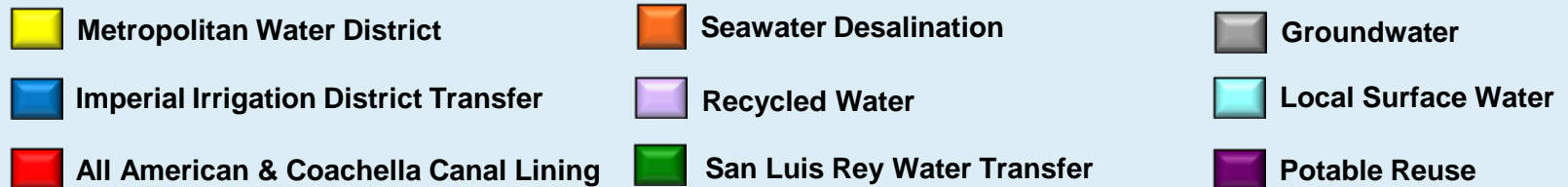
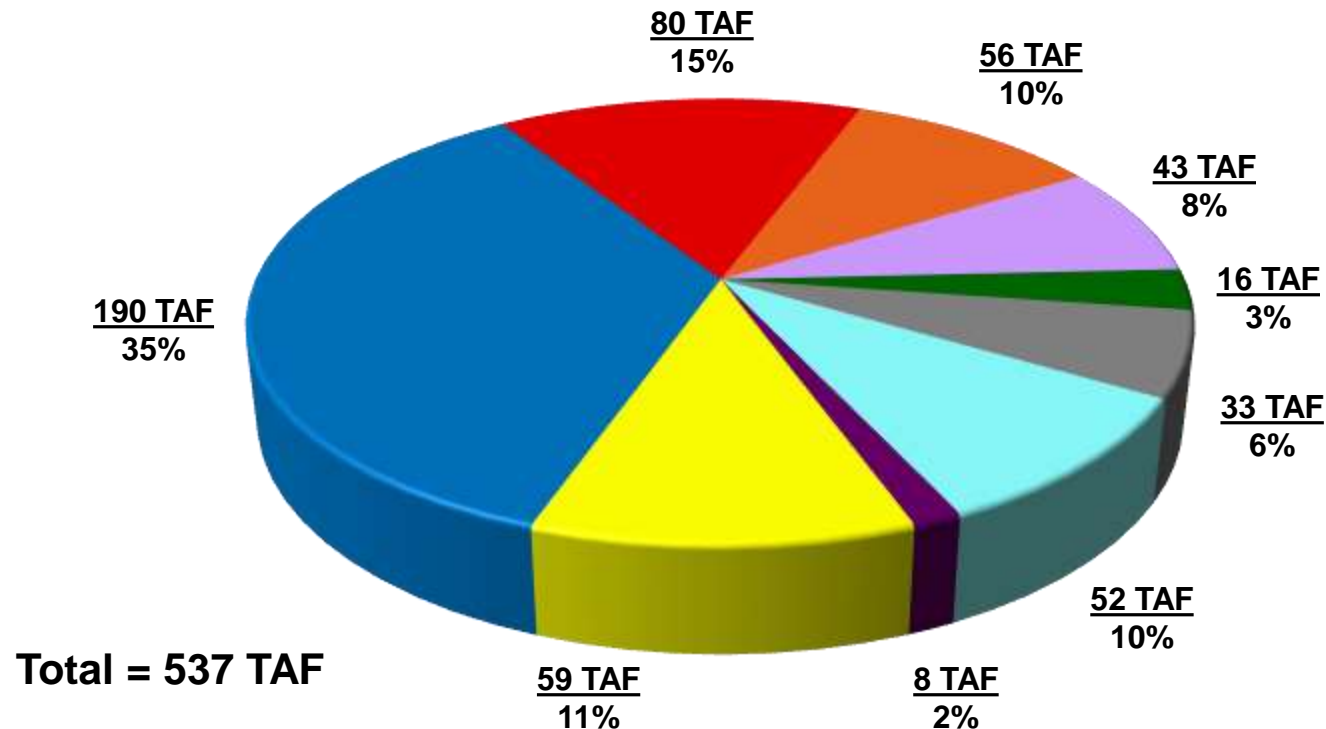
San Vicente Dam Raise

- The dam raise, completed in 2014, produced the largest increase in water storage in San Diego County history.

Conservation and Efficiency



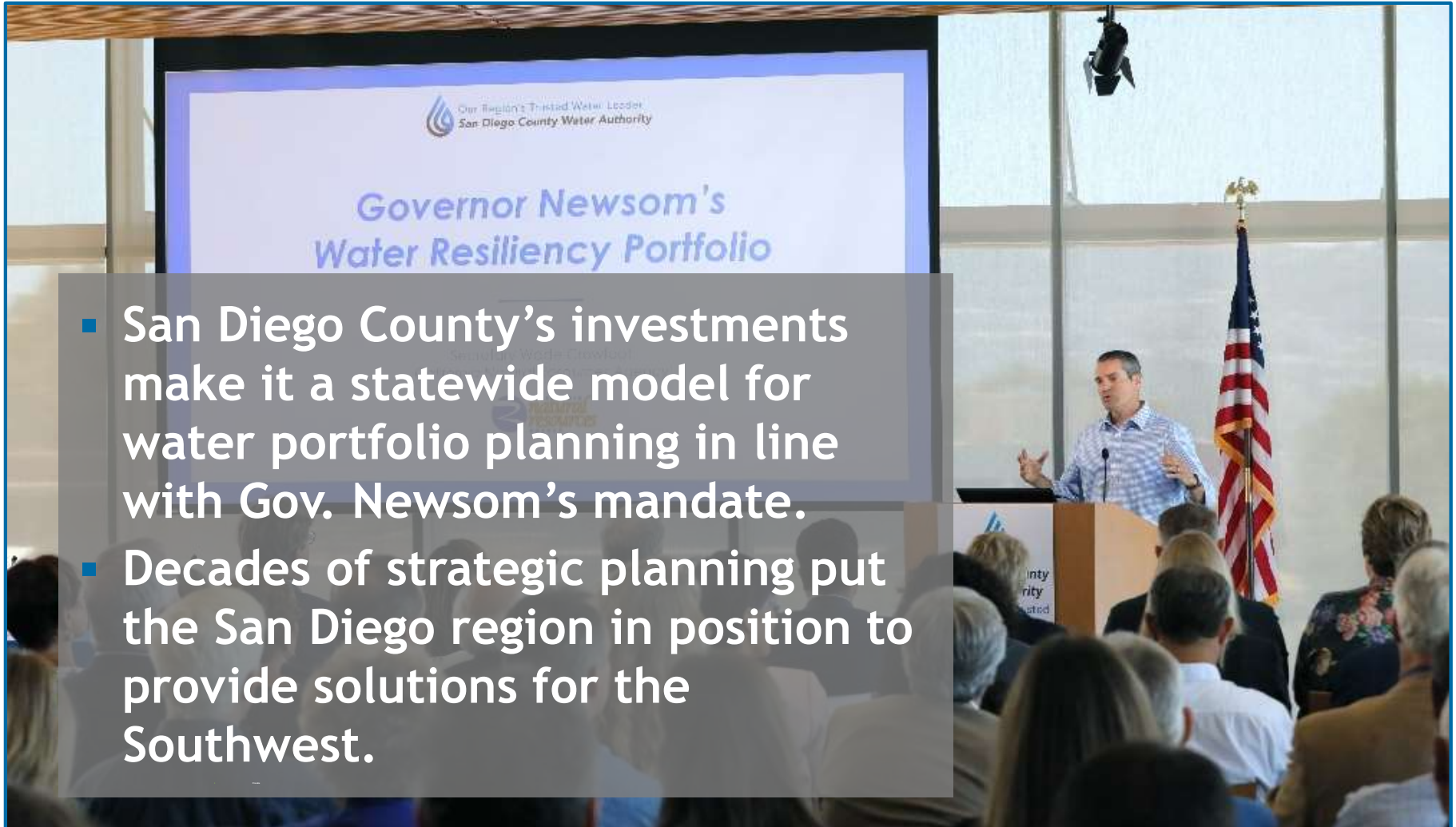
A Diversified Water Supply Portfolio (2020*)



TAF=Thousand Acre-Feet

*Based on Interim Demand Forecast Reset and includes verifiable and additional planned local supply projects from 2015 UWMP; to be updated in 2020 UWMP.

San Diego's Portfolio Takes Center Stage



- San Diego County's investments make it a statewide model for water portfolio planning in line with Gov. Newsom's mandate.
- Decades of strategic planning put the San Diego region in position to provide solutions for the Southwest.

Planning for Tomorrow

- Pumped Energy Storage Project at San Vicente Reservoir
- Potential regional water conveyance system
- Storing Water Authority supplies in Lake Mead




Boosting Clean Energy for California

- Pumped storage could help state meet clean-energy goals, provide on-demand power, and save ratepayers money.



Delivering QSA Supplies to San Diego

- 
- Water Authority pays MWD to transport all QSA water - 280,000 acre-feet in 2021.
 - Water Authority has rights to canal lining water for 110 years, and transfer water for up to 75 years.
 - Alternative conveyance could prove to be more cost-effective and a better deal for ratepayers.

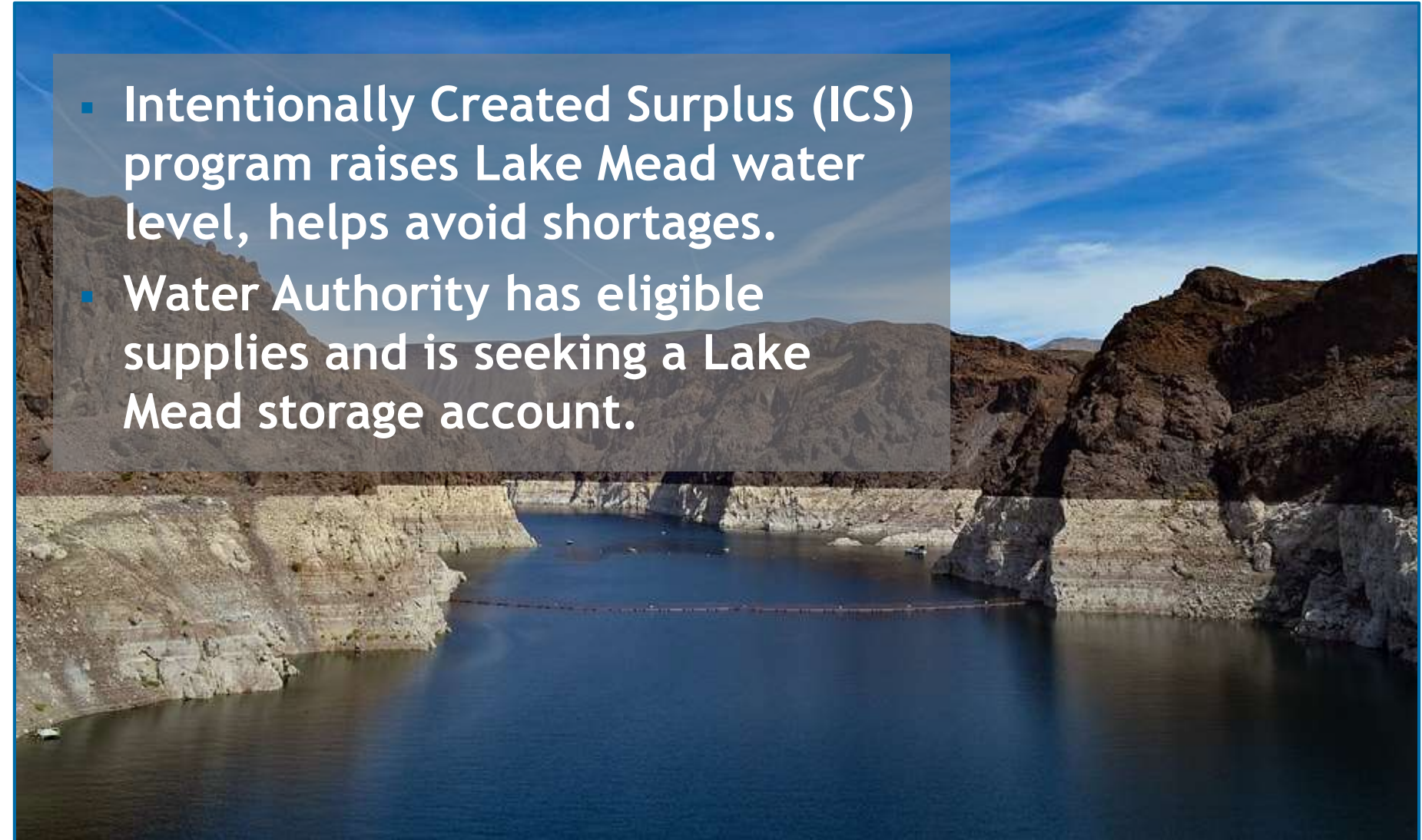
Regional Conveyance System Study

- Two-phase study looks at regional benefits:
 - Protecting ratepayers while adding reliability
 - Exploring partnerships
 - Assessing geotechnical, financial, operational and other aspects
 - Phase 1 ends summer 2020



Boosting Water Levels in Lake Mead

- Intentionally Created Surplus (ICS) program raises Lake Mead water level, helps avoid shortages.
- Water Authority has eligible supplies and is seeking a Lake Mead storage account.



Serving San Diego for 75 Years ... and Counting

