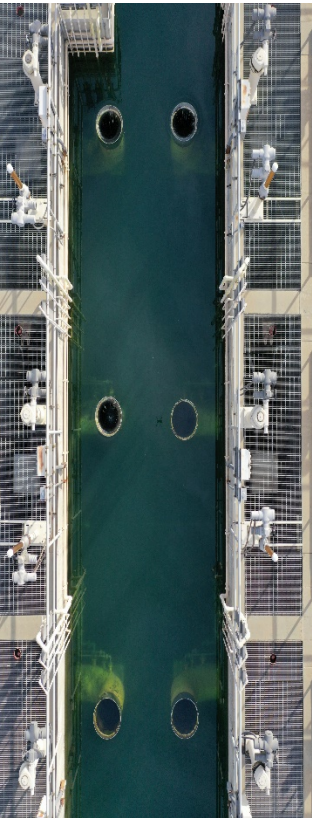




# WATER SUPPLY CONDITIONS UPDATE

Pomona City Council  
October 4, 2021



# MISSION STATEMENT

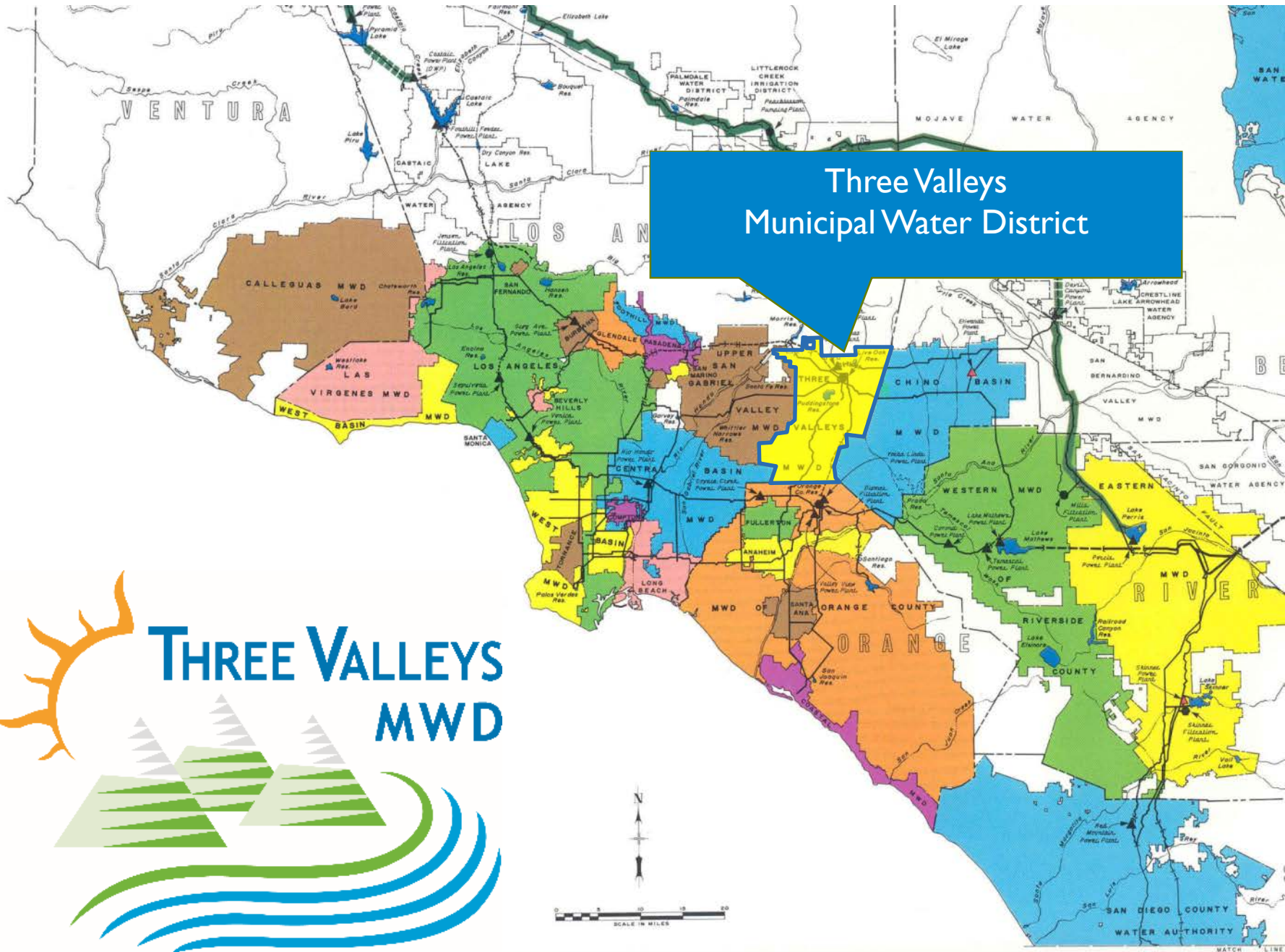
The mission of Three Valleys Municipal Water District is to supplement and enhance local water supplies to meet our region's needs in a reliable and cost-effective manner.







Three Valleys  
Municipal Water District



# MEMBER AGENCIES

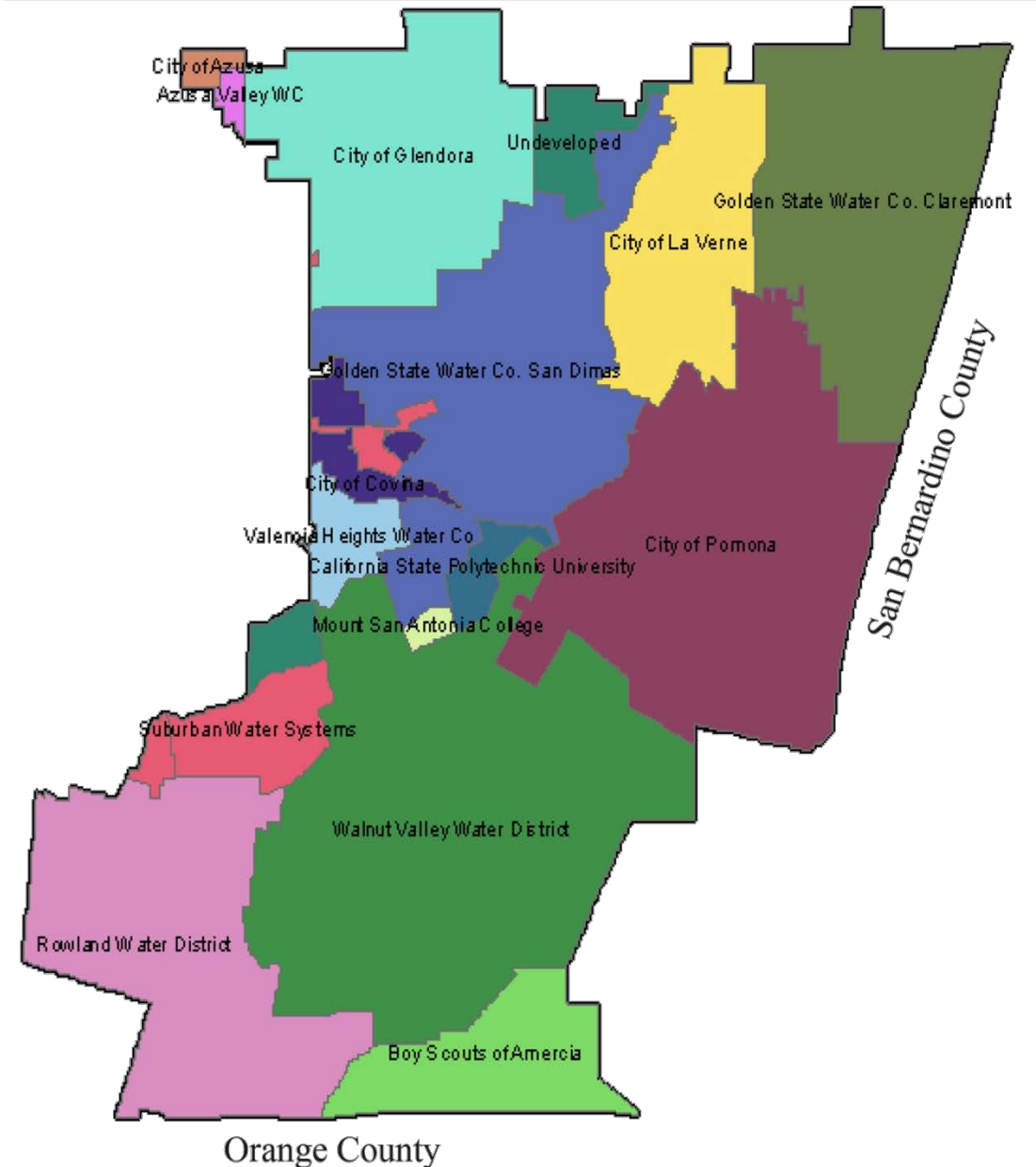
City of Covina  
City of Glendora  
City of La Verne  
City of Pomona  
Rowland Water District  
Walnut Valley Water District  
Golden State Water Co., Claremont / San Dimas  
Suburban Water Systems  
Valencia Heights Water Company  
Boy Scouts of America - Firestone Reservation  
California State Polytechnic University, Pomona  
Mt. San Antonio College

# MISSION

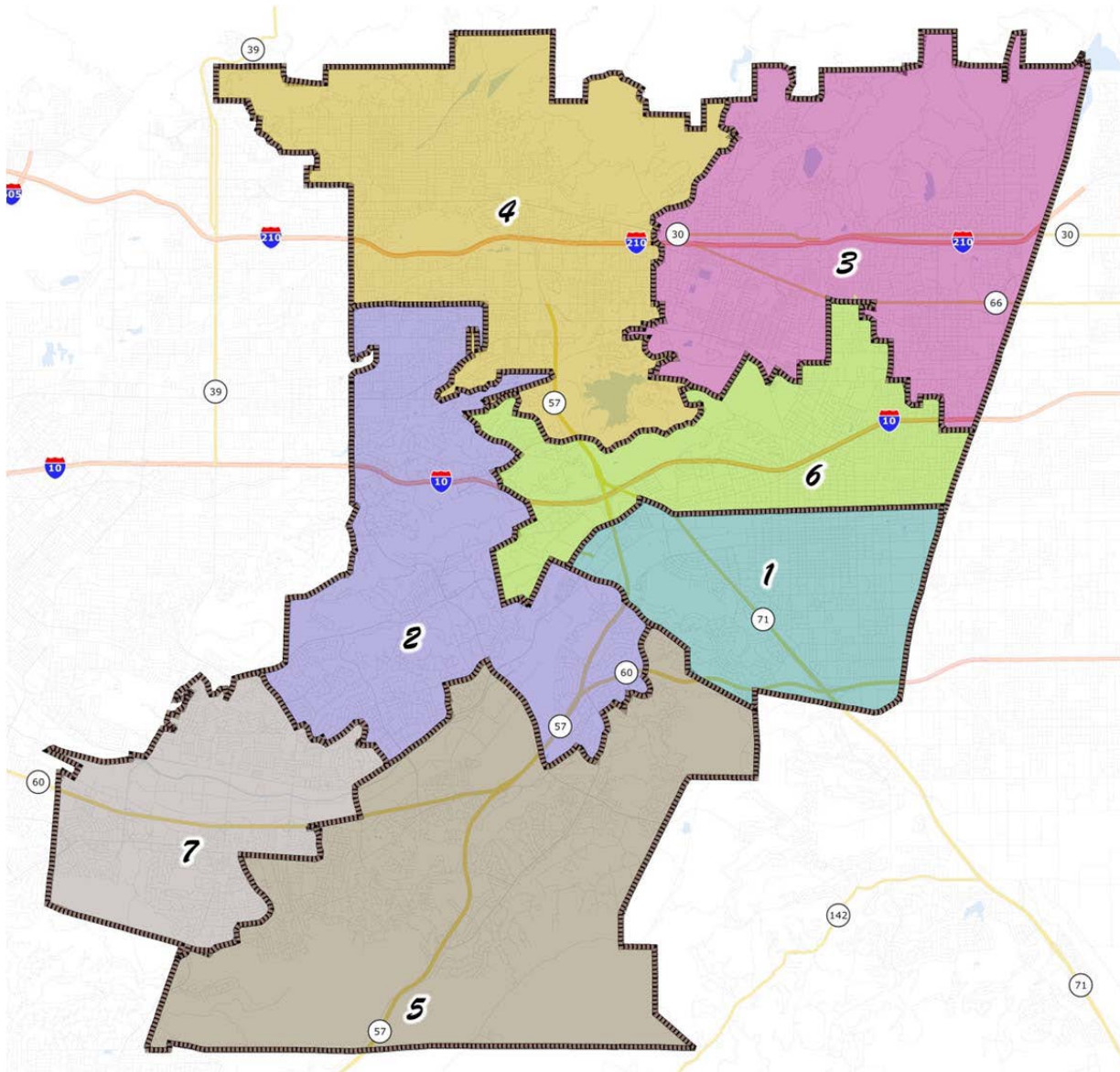
To supplement and enhance local water supplies to meet our region's needs in a reliable and cost-effective manner

- 133 square mile region
- Pomona, Walnut, East SGV region
- 525,000 population
- 7-member Elected Board

# TVMWD MEMBER AGENCIES





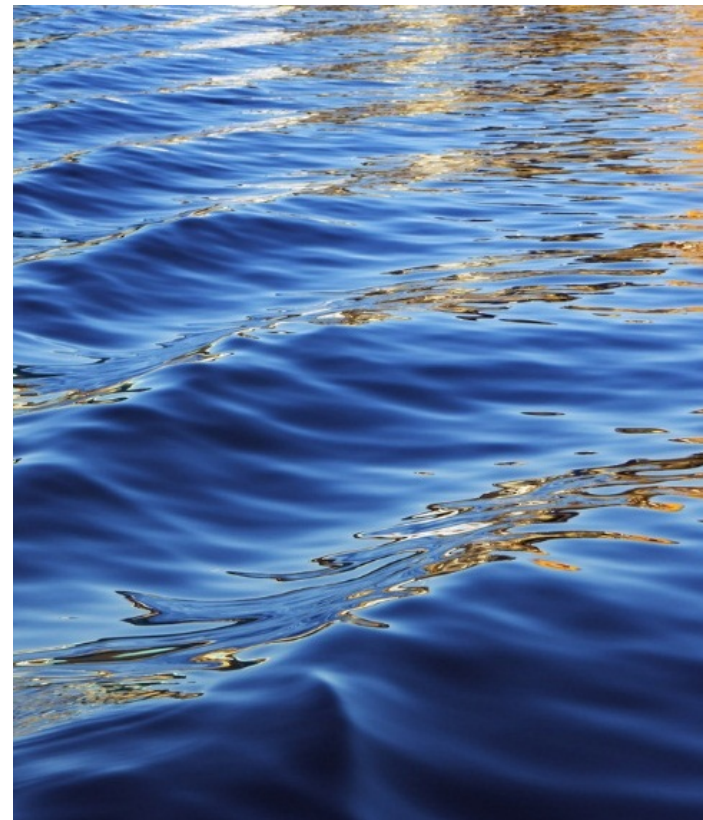


## ELECTED DIVISIONS

- Division 1 – Carlos Goytia
- Division 2 – David De Jesus
- Division 3 – Brian Bowcock
- Division 4 – Bob Kuhn
- Division 5 – Jody Roberto
- Division 6 – Danielle Soto
- Division 7 – Mike Ti



# TVMWD WATER SUPPLY





# CALIFORNIA AQUEDUCT (SWP)

Runs 444 miles

Delivery Capacity = 2,400,000 A.F./yr





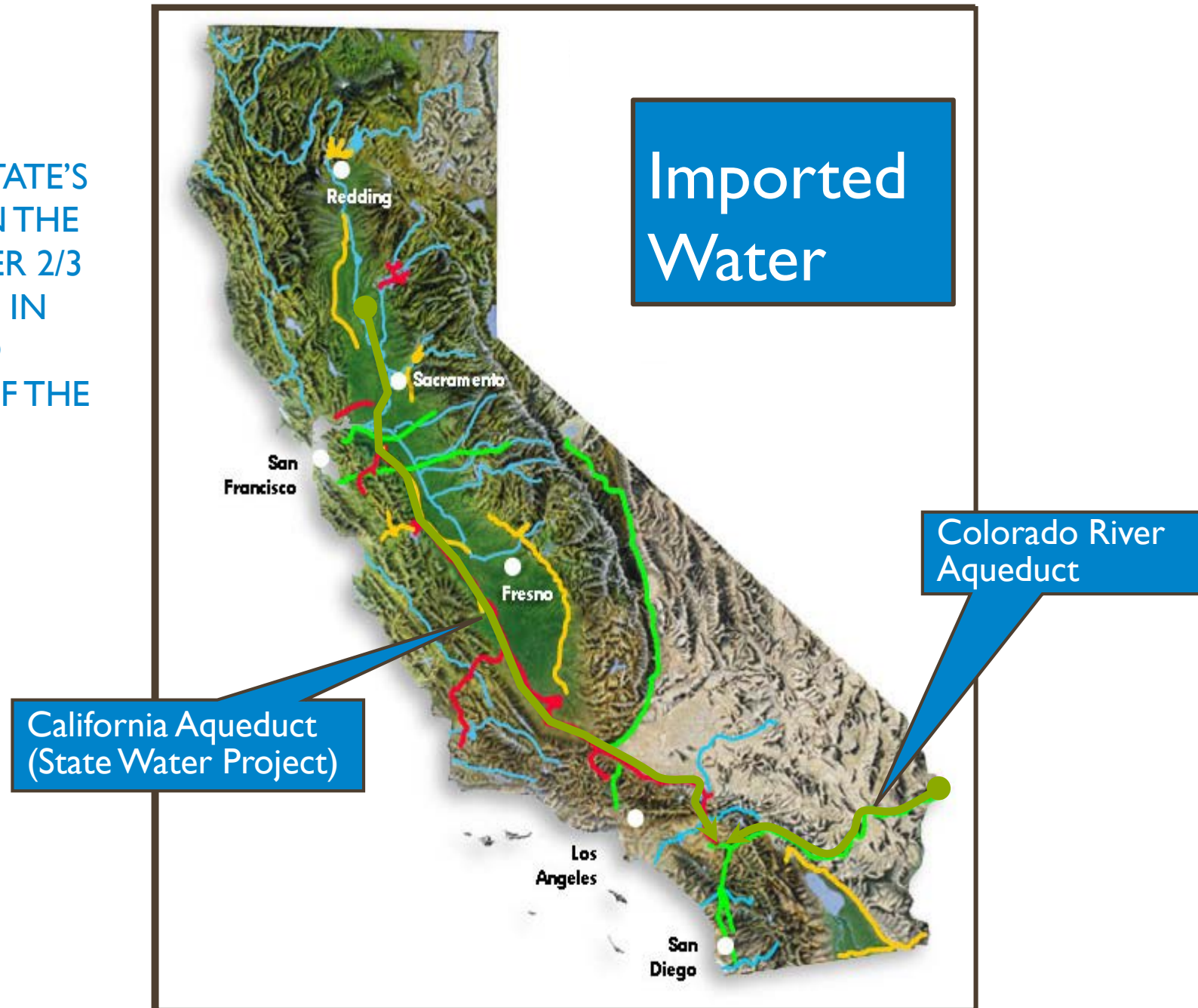
# COLORADO RIVER AQUEDUCT

Runs 242 miles

Delivery Capacity = 1,200,000 A.F./YR

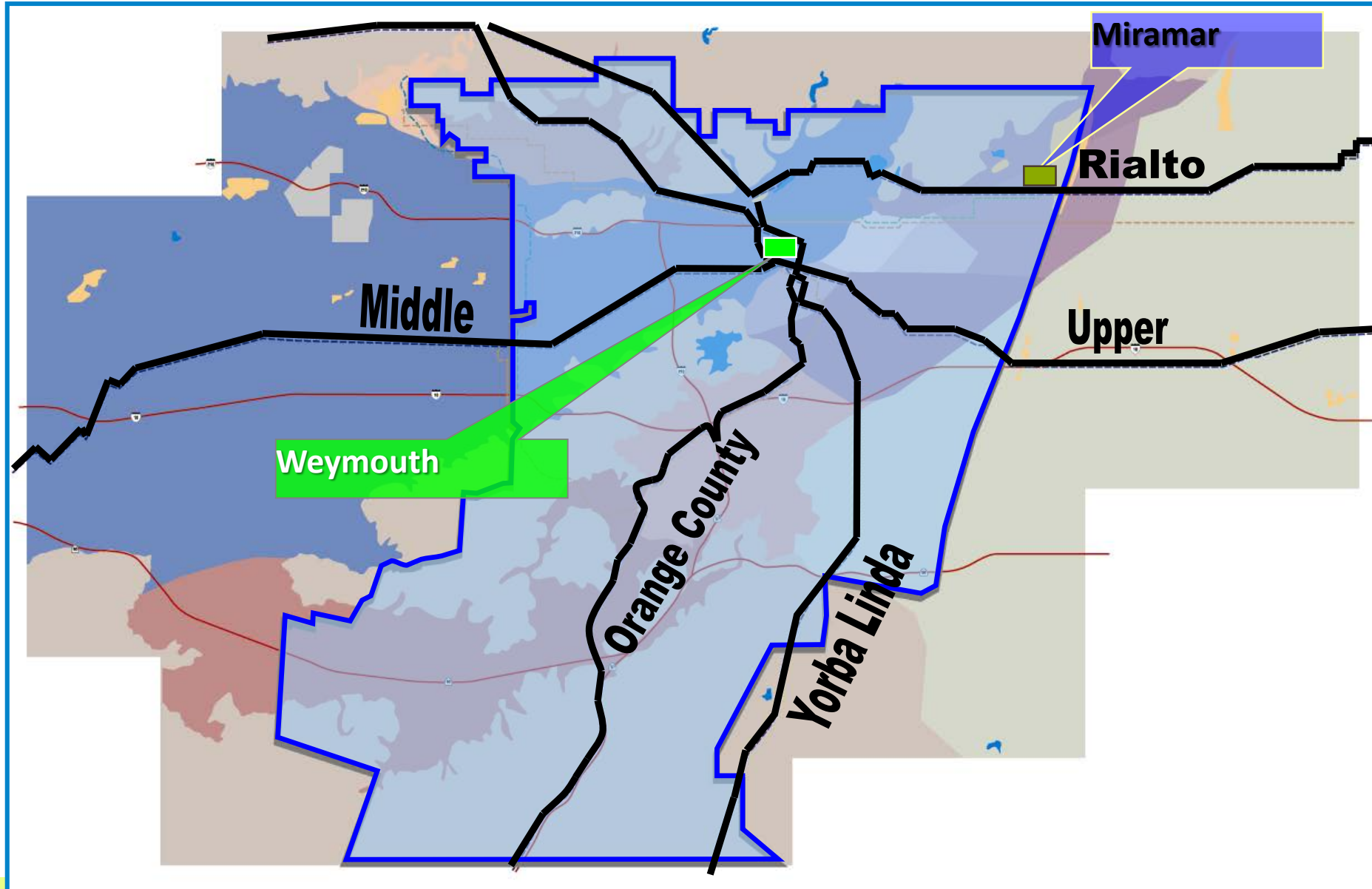


OVER 2/3 OF THE STATE'S WATER SUPPLY IS IN THE NORTH, WHILE OVER 2/3 OF THE DEMAND IS IN THE CENTRAL AND SOUTHERN PART OF THE STATE.





# FEEDERS / TREATMENT PLANTS





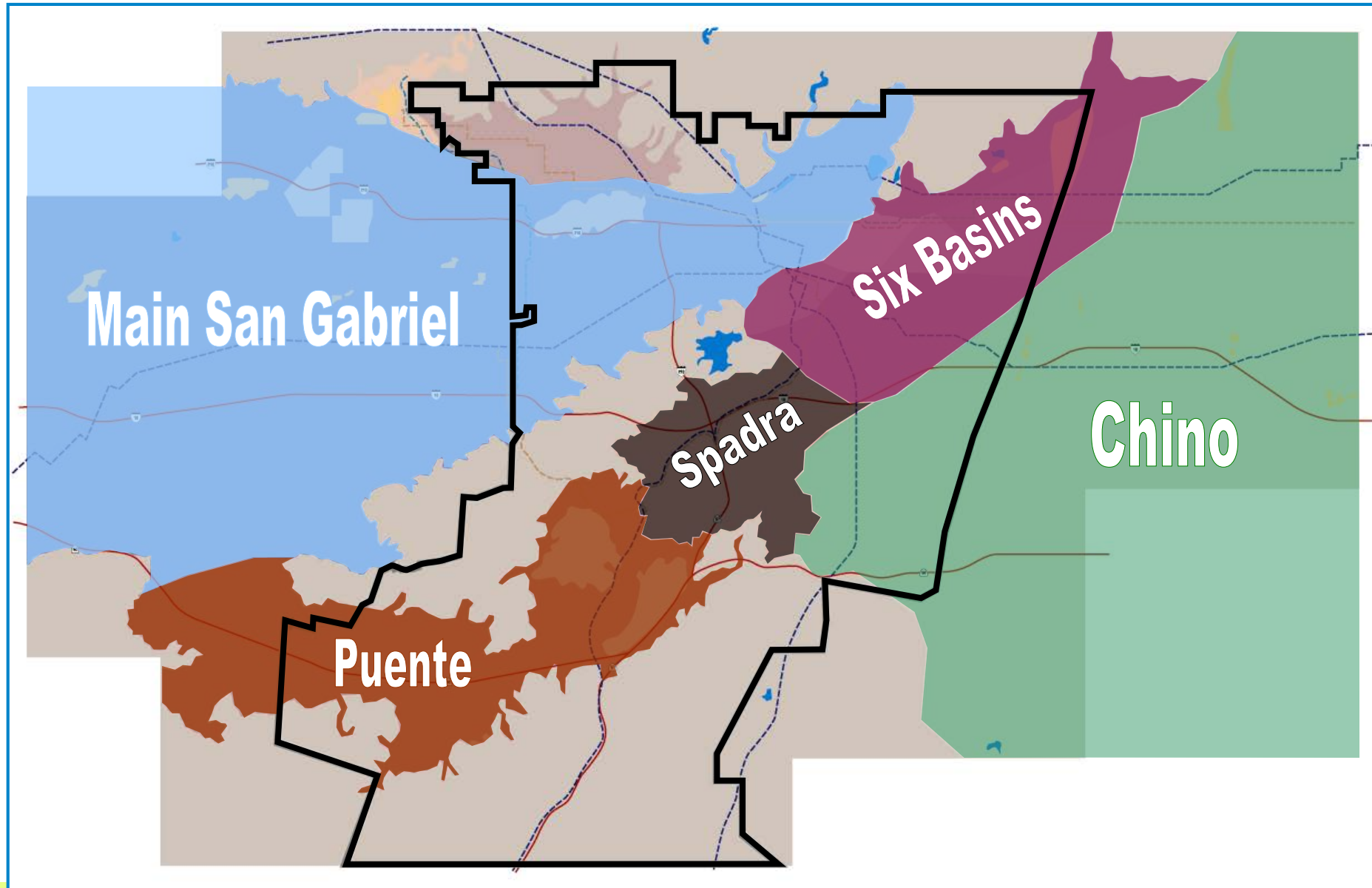
# MIRAMAR WATER TREATMENT PLANT

An aerial photograph of the Miramar Water Treatment Plant. The facility is characterized by several large, rectangular, light-brown sand storage tanks on the left side. To the right of these tanks are several green, rectangular treatment basins. A central area contains several small, red-roofed buildings and a parking lot. The entire plant is surrounded by a residential neighborhood with houses, trees, and swimming pools. The image is taken from a high angle, providing a clear view of the plant's layout and its integration with the surrounding environment.

Conventional Surface Water Treatment Plant



# GROUNDWATER BASINS



# WELL NO. 1





# WELL NO. 2



# GRAND AVE WELL







# **FUTURE MIRAGRAND WELL**

**(Under Construction)  
In Operation Spring/Summer 2022**





# 2021 SUPPLY/DEMAND BALANCE AND ACTIONS



# BLEAK OUTLOOK FOR IMPORTED WATER SUPPLY CONDITIONS



*Oroville*

- Anticipating a zero percent initial 2022 SWP Allocation
  - Oroville storage may end the year at record low levels
  - Roughly even chance of 20 percent SWP allocation in 2022



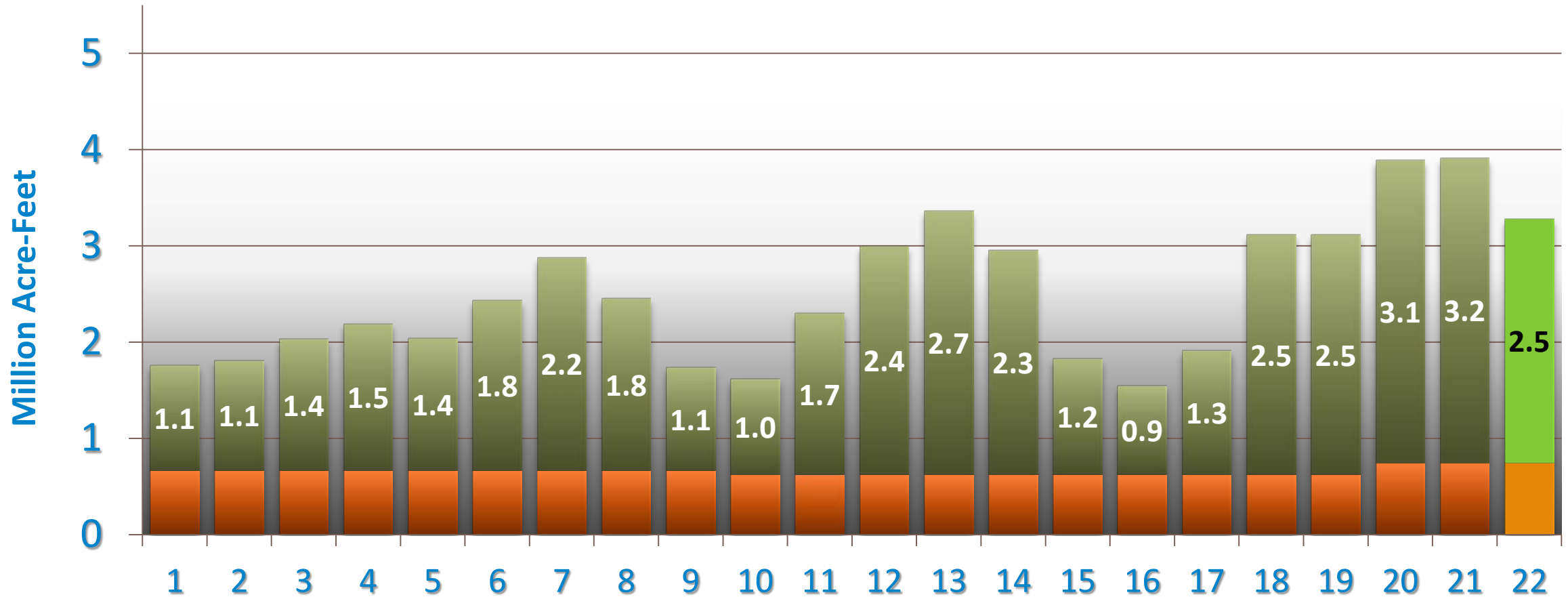
*Lake Mead*

- Shortage declared for Lower Colorado River Basin
  - Latest 24-month study showing continued decline in reservoir levels



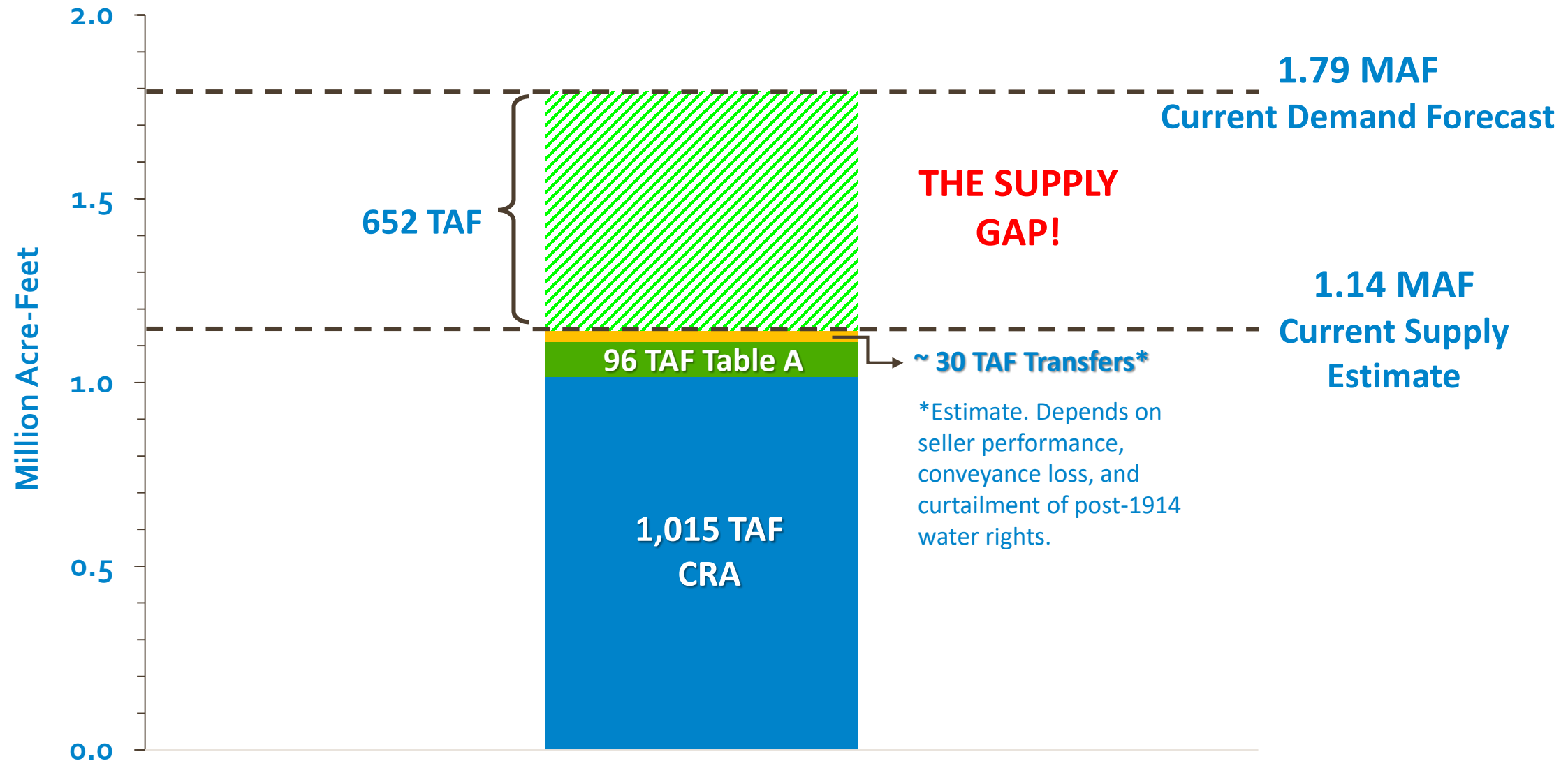
# PROJECTED METROPOLITAN STORAGE BALANCES

End of Year Balances



*Estimate – May change based on supply/demand conditions*

# IMPORTED WATER SUPPLY/DEMAND BALANCE FOR 2021







# WATER SURPLUS/DROUGHT MANAGEMENT (WSDM) PLAN



# CURRENT WSDM ACTIONS (2021)



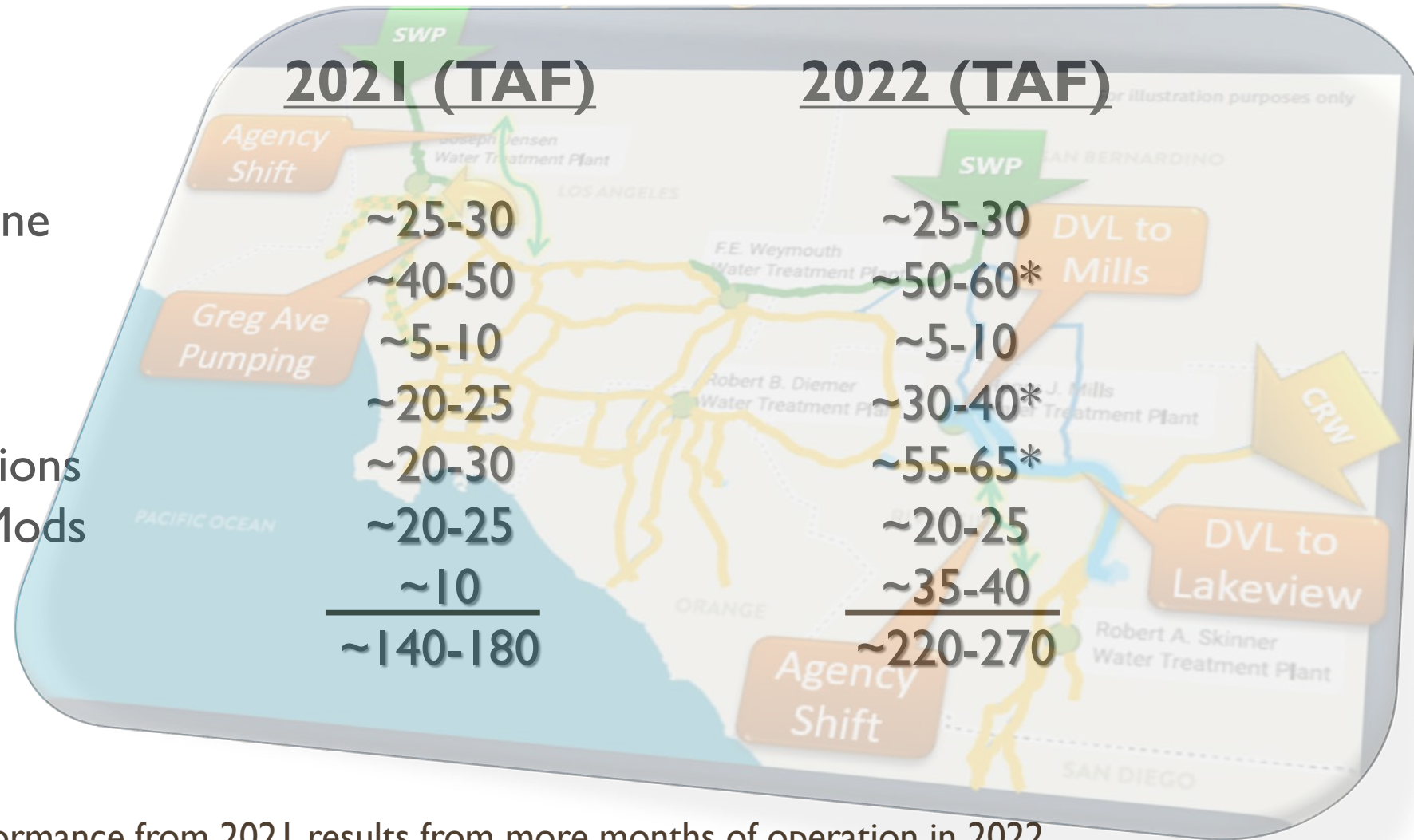
- Purchasing ~43 TAF of transfer supplies (~30 TAF after losses)
  - State Water Contractors Buyers Group
  - Yuba Accord supplies
- Withdrawing from dry-year storage
- Arvin-Edison Exchange/Recovery
  - Receiving high quality surface water (Friant supplies)



# EXTRAORDINARY DROUGHT ACTIONS CONSERVE SWP SUPPLIES – “SHIFTING” DEMANDS TO CO RIVER

## Drought Action

DVL to Lakeview Pipeline  
DVL to Mills  
Defer Deliveries  
Greg Avenue Pumping  
Greg Avenue Pumping  
Shift to CRW Connections  
Other MWD System Mods  
Defer Shutdowns

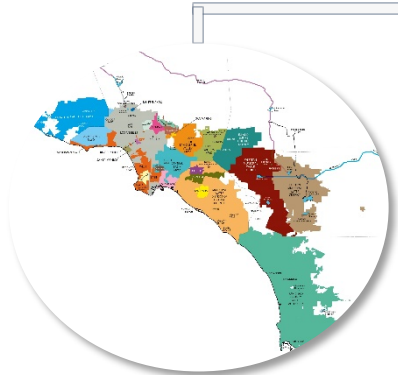


\*Increase in drought action performance from 2021 results from more months of operation in 2022

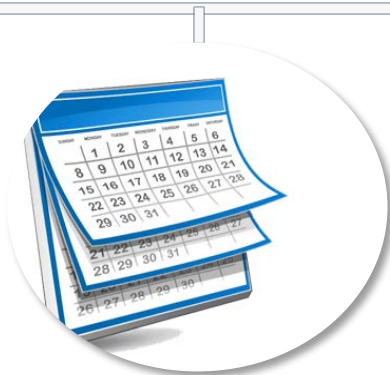
# METROPOLITAN EVALUATES NEW DROUGHT ACTIONS FOR THE NEAR AND LONG TERM

- Generated 132 creative ideas
  - 50 selected for further development

## Project Categories



***System  
and Operations***



***Shift Timing  
of Deliveries***



***Increase Local  
Supplies***



***Increase  
Conservation***



***Expand  
WSDM Programs***





# TVMWD DROUGHT ACTIONS



# “SHIFTING” SWP DEMAND TO COLORADO RIVER WATER

TVMWD executed agreement to “shift” 5 cfs away from Miramar Treatment Plant (100% SWP water) to MWD’s Weymouth Treatment Plant (100% Co River Water)

- Will save approximately 5,000 acre-feet of SWP for next year
- MWD reimburses TVMWD for increased cost

MWD made call on Conjunctive Use Program (CUP) agreement in 6 Basins GW Basin

- TVMWD produces more groundwater in lieu of imported water at Miramar Treatment Plant
- MWD pre-delivered 1,000 acre-feet into basin
- Will reduce up to 1,000 acre-feet off the Miramar Treatment Plant



# TVMWD BOARD APPROVES 15% VOLUNTARY REDUCTION

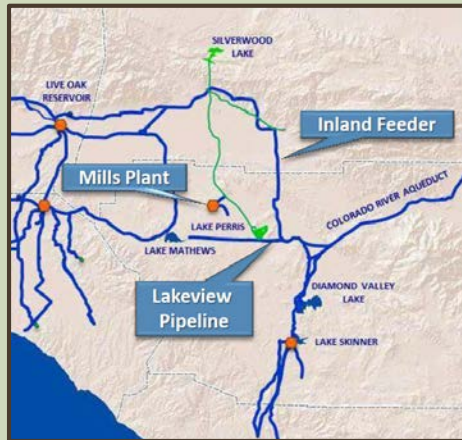
- In August 2021, MWD Board approved 15% voluntary conservation via resolution
- In September 2021, TVMWD Board of Directors approved a resolution supporting MWD 15% voluntary conservation via resolution.



# MANY TARGETED ACTIONS TO RESPOND TO POTENTIAL HISTORIC DRY CONDITIONS BEGAN IN JANUARY

**Jan 2021**

**Began releases from DVL to serve connections on the Lakeview Pipeline**



**Minimize operational flow of SWP to areas that can receive both SWP and CRW**

**Feb 2021**

**Metropolitan began pump-back operations at Lake Perris to withdraw flexible storage to meet Mills demands**



**Mar 2021**

**Returns from Semitropic Storage Program and Kern Delta Storage Program began**

**Apr 2021**

**Began operating CRA at full capacity for the first time since 2015**



**Board voted to explore purchasing transfers north of the Delta**

**Bulkheads installed to allow deliveries from DVL to Mills Plant**

**Eastern MWD began shifting deliveries, when possible**



# MANY TARGETED ACTIONS TO RESPOND TO POTENTIAL HISTORIC DRY CONDITIONS BEGAN IN JANUARY

**May 2021**

Board approved new Operational Shift Cost Offset Program (OSCOP)

Lakeview Pipeline improvements completed



DVL to Mills Plant in operation for the first time in Metropolitan's history

**Jun 2021**

Greg Avenue pumping station tests completed and began operation



Amended agreement with DWR to increase stated max flow rate for DVL to Mills Plant operation

**Jul 2021**

West Basin MWD began shifting demands

LADWP began shift through OSCOP

**Aug 2021**

Began receiving exchange of surface water supplies from the Arvin-Edison Storage Program

Continue to discuss OSCOP potential with other member agencies

Board declared a Water Supply Alert, calling for consumers and businesses to voluntarily reduce their water use

**Sep 2021**

**TVMWD** began shift through OSCOP

