



moulton niguel water district

Water Reliability Policy Update

Board Meeting

January 23, 2020

Presentation Overview

- Define System Reliability vs. Supply Reliability
- Water Reliability Policy Future Updates
- Overview of State, Regional and Local Water System
- Demand Management Successes
- System Reliability Investments
- Average Days System Reliability
- Future Opportunities and Next Steps

Water Reliability

- **System Reliability** - Ability to meet customer demands during unplanned **emergency outages** (e.g., seismic events, facility failures, and other catastrophic events) of key facilities (e.g., **Diemer Water Treatment Plant**)
- **Supply Reliability** - Ability to meet demand based on **hydrologic variability** (e.g., drought and high temperatures) and long-term changes in available imported water supply (e.g., SWP and CRA)

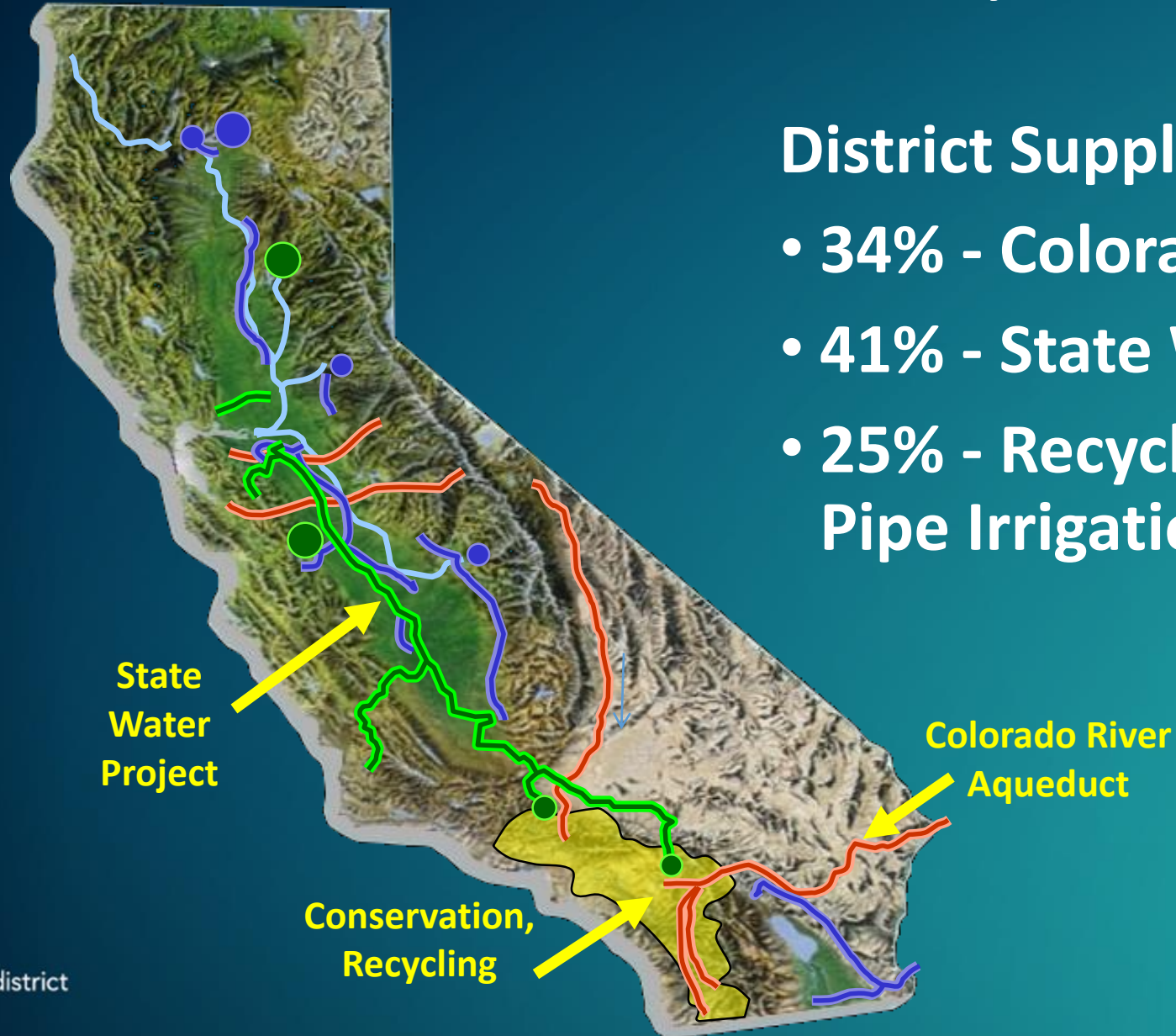


Water Reliability Policy

- Future updates to Resolution No. 08-38 (Adopted November 13, 2008) to reflect:
 - Reinforce engagement with MWD to enhance reliability
 - Investment in supply storage to reduce long-term drought impacts
 - Maximize Water Reuse
 - Review system reliability criteria (currently 31-day average and objectives)



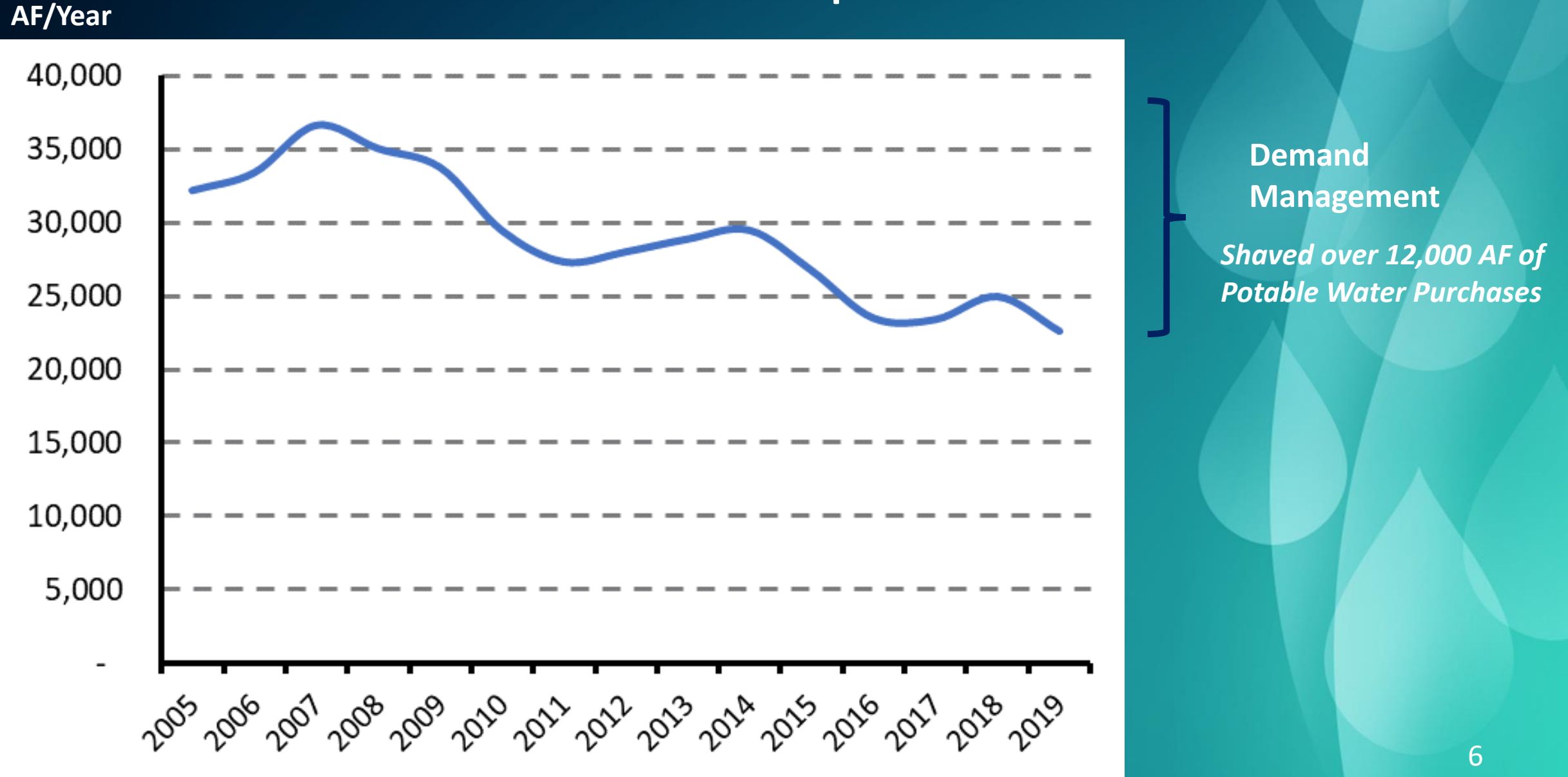
California Water System



District Supplies

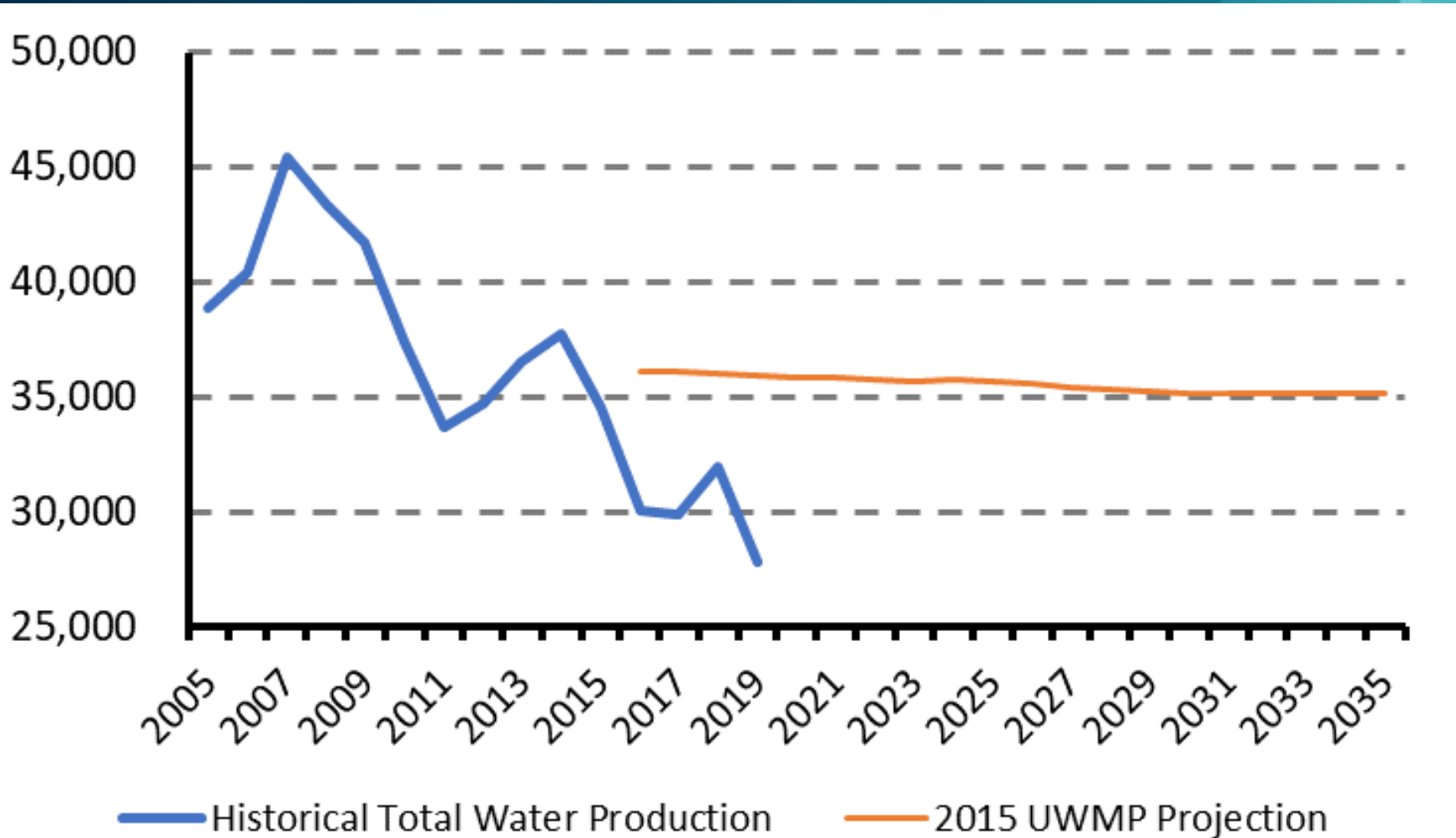
- 34% - Colorado River
- 41% - State Water Project (Delta)
- 25% - Recycled Water (Purple Pipe Irrigation)

Reductions in Imported Water



Impact of Demand Management

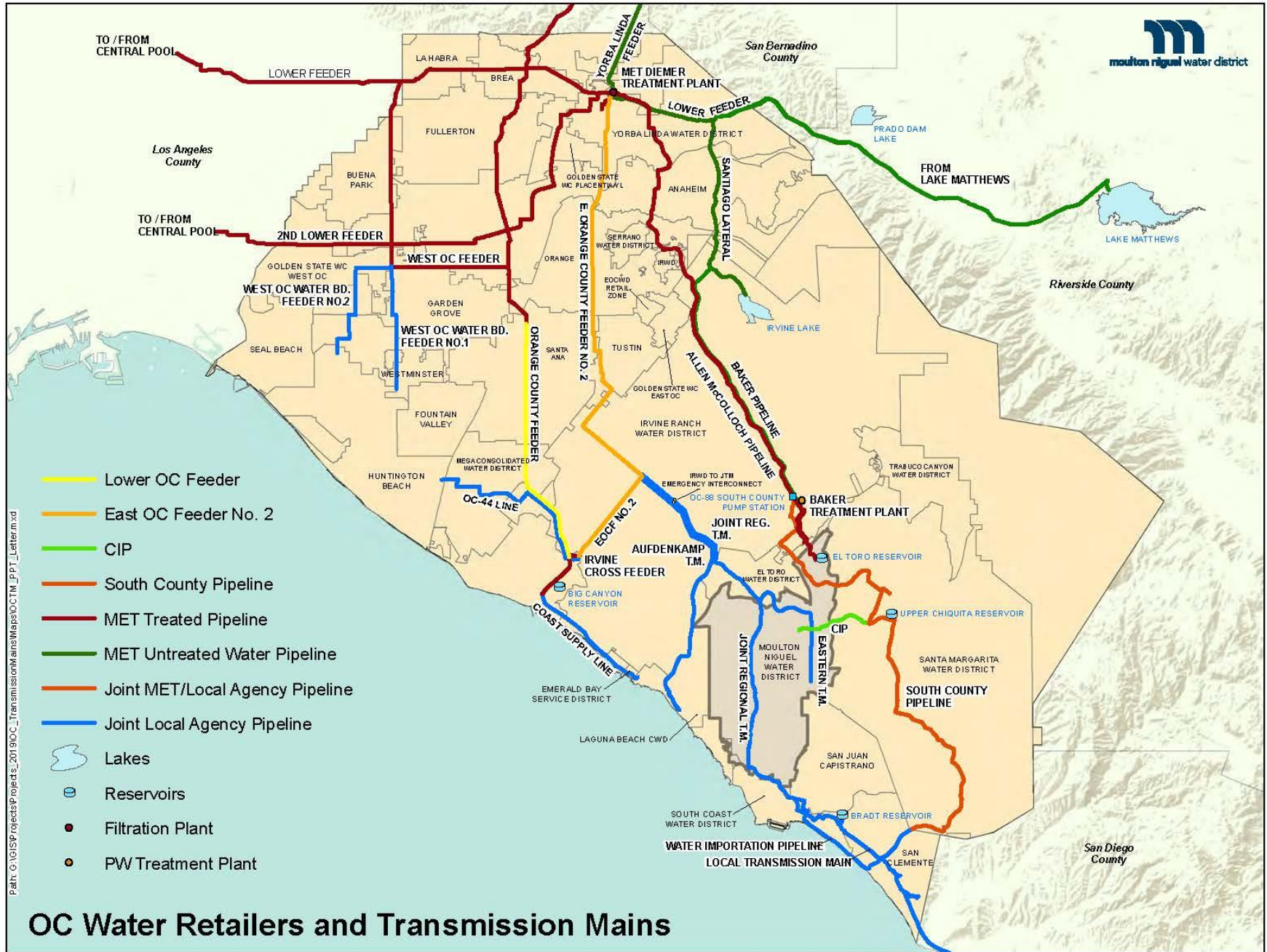
AF/Year



Demand Management Summary

- Cost effective progress from 2014 Reliability Plan:
 - Demand Management
 - Recycled Water Expansion
- System Reliability improved from average demand of 2 days in 2008 to 30 days in 2019
- Reduced average supply needed by over 5,000 AF/Year since 2014 Reliability Plan
 - Customer Benefits

OC Water Retailers and Transmission Lines



OC Water Retailers and Transmission Mains

System Reliability Investments

- Local Capacity Investments
 - Baker Water Treatment Plant
 - SMWD Upper Chiquita Reservoir
 - ETWD R-6 Reservoir
 - IRWD Interconnection (2030)
 - Expansion Study Underway

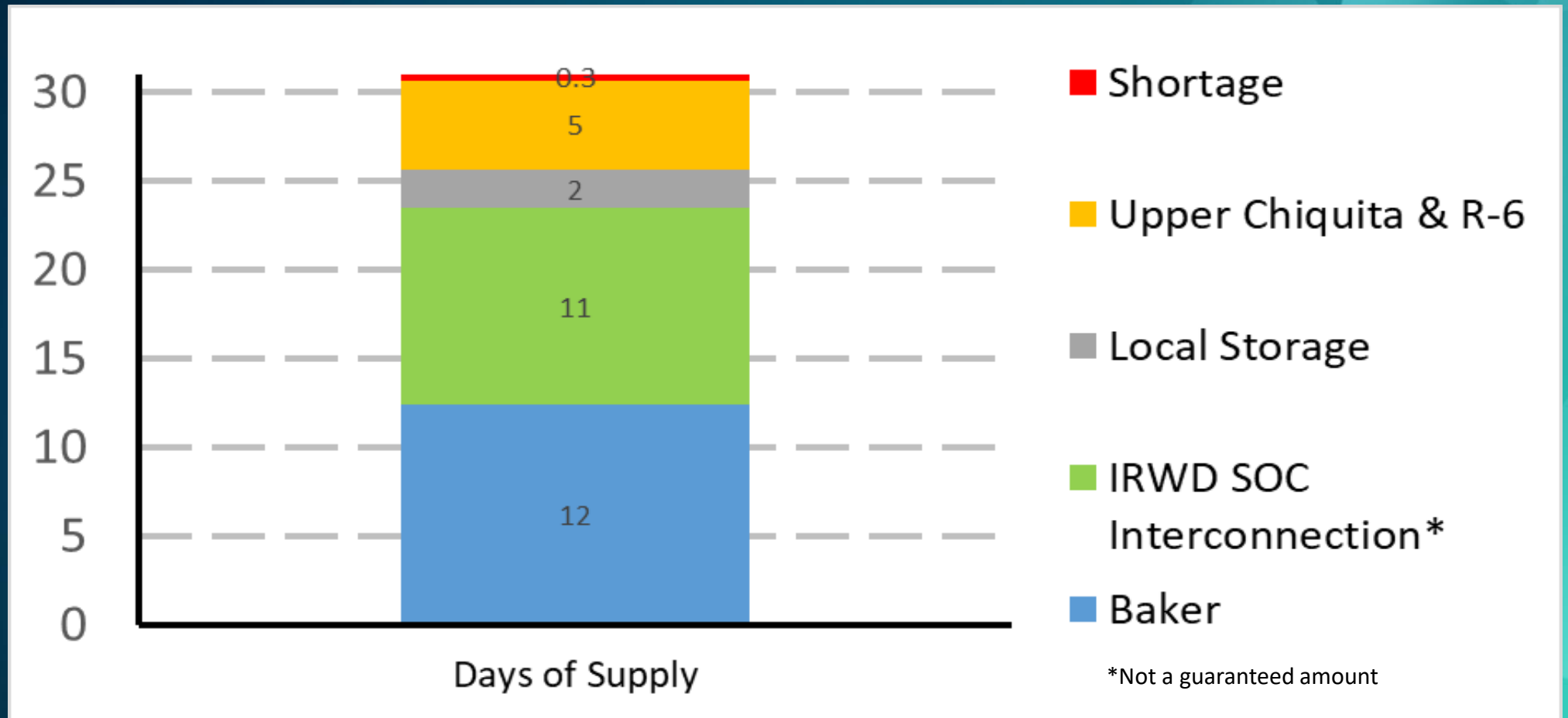


1967 construction of the uncovered 233-million-gallon R-6 Reservoir enabled the El Toro Water District to store imported water for later use.

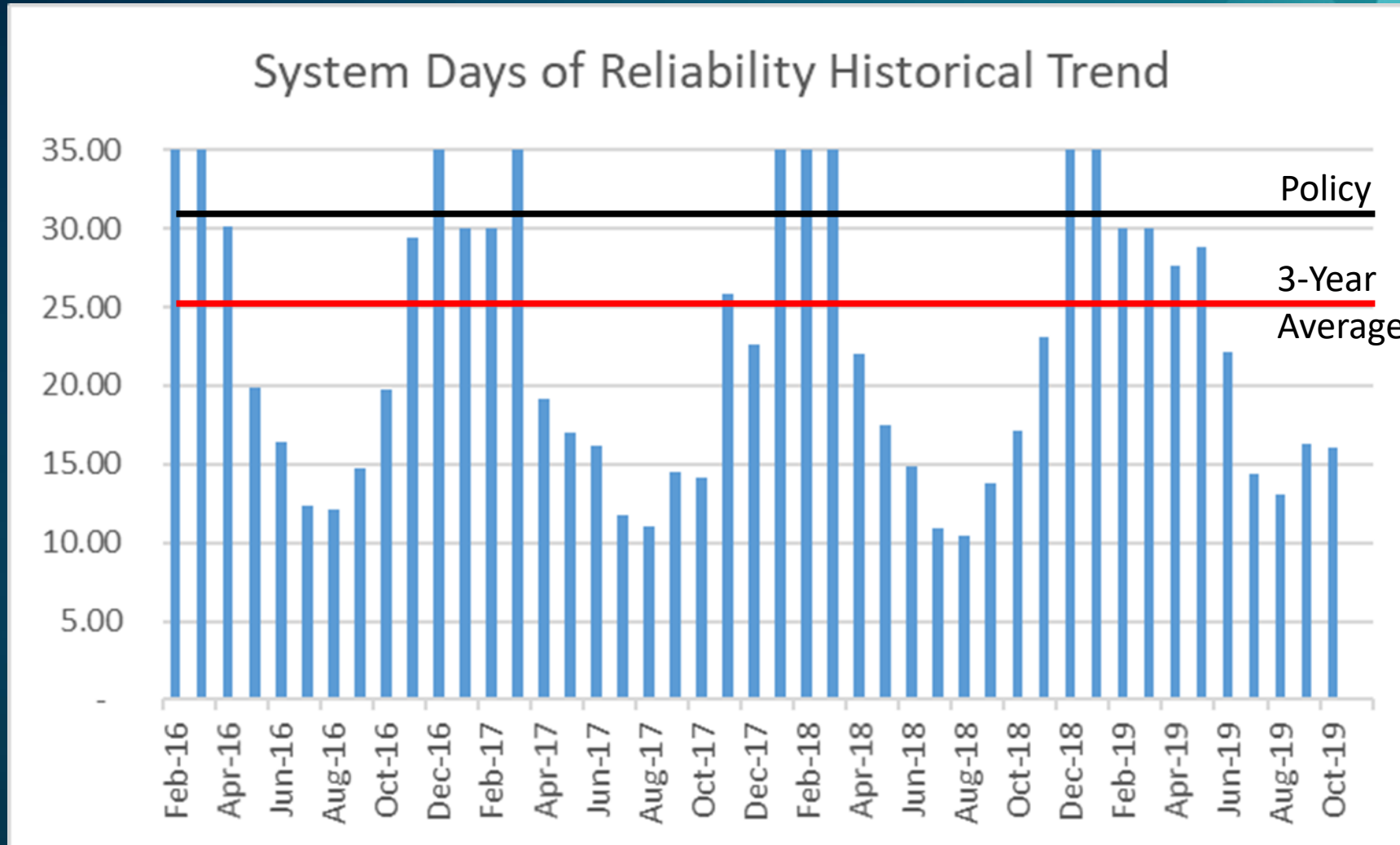


R-6 Reservoir expanded and covered in 2002.

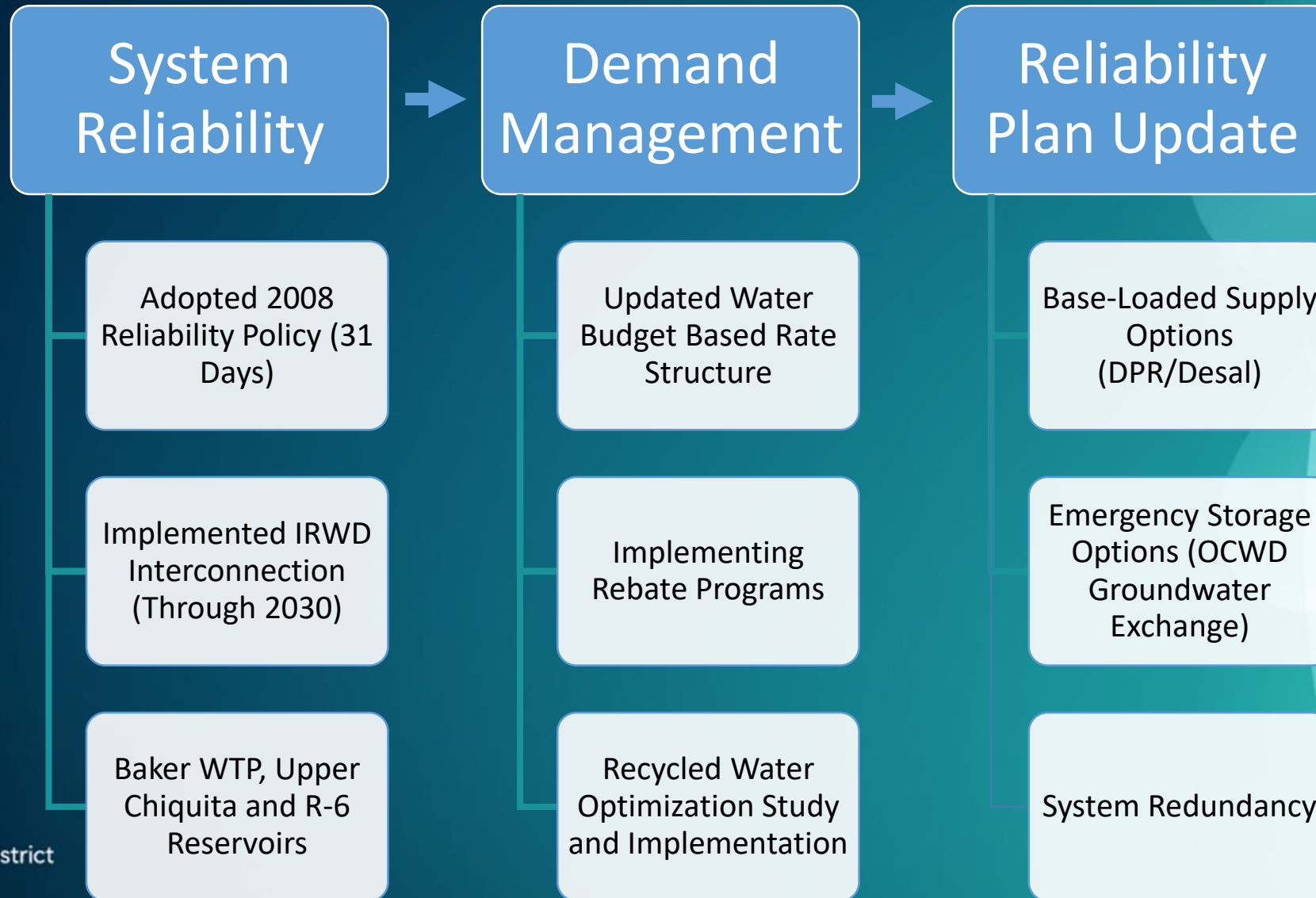
System Reliability Breakdown – 12 Month Average



2016-2019 Days System Reliability



Approach to Reliability



Reliability Next Steps

- Update Water Reliability Policy based on Board direction
- Update Long Range Water Reliability Plan
 - Feeds into 2020 UWMP
- Continue evaluation of water reliability projects/programs
 - OCWD, Sulphur Creek Lake, Desal



11-13-08

RESOLUTION NO. 08-32 38
(revised by Minute Order of the Board on 11-13-08)

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE MOULTON
NIGUEL WATER DISTRICT SETTING FORTH A GOAL FOR
POTABLE WATER RELIABILITY CAPACITY**

WHEREAS, the Moulton Niguel Water District's ("District") mission statement provides "Moulton Niguel Water District is a community-oriented agency dedicated to serving its customers and environment with reliable, economical, high-quality water and sewer service;"

WHEREAS, water agencies in south Orange County have a primary interest in developing water reliability projects to assist in providing potable water needs during times of planned or emergency imported water outages;

WHEREAS, 100% of the District's potable water supply is imported treated water supplied through the Metropolitan Water District of Southern California's (MWD) Diemer Water Treatment Plant in Yorba Linda and regional transmission facilities;

WHEREAS, MWD Administrative Code Section 4503 was recently revised to state, "Each member agency *shall* have *sufficient resources*, such as local reservoir storage, groundwater production capacity, system interconnections, or alternate supply source to sustain *at any time* a seven-day interruption in MWD's deliveries (emphasis added);"

WHEREAS, the Municipal Water District of Orange County (MWDOC) completed the "South Orange County Water Reliability Study – Phase 2 System Reliability Plan, June 2004" which identifies risks and calculated shortages, and develops a list of projects to bolster source-of-supply and regional distribution systems to reduce the potential economic losses of up to \$1.7 billion in the event of water outages, depending on the shortage scenarios;

WHEREAS, MWDOC identified supply shortages for 7-day, 10-day, and 31-day water supply outages ranging from 579 to 4,457 acre feet for the District during projected average demands in the year 2025;

WHEREAS, potable water reliability capacity policies will impact both future capital projects financing options, and water rate considerations; and

WHEREAS, the Board desires to set forth a potable water supply reliability capacity policy that reflects the District's current situation and considerations, such policy to be subject to further evaluation upon Staff's presentation to the Board of additional information regarding MWD and MWDOC water allocation plans, including supply curtailments and penalty provisions for excessive use.


NOW, THEREFORE, the Board of Directors of the Moulton Niguel Water District does hereby **RESOLVE, DETERMINE** and **ORDER** as follows:

The Board of Directors of Moulton Niguel Water District hereby adopts the following goal in furtherance of the District's stated mission and in response to MWD policy, subject to the Board's consideration from time to time to review the 31-day average time period set forth below:

"Moulton Niguel Water District intends to develop adequate capacity and supplies through local facilities and regional projects, including both storage and water supply development, to provide at least a 31-day average annual potable water supply to meet demands throughout the District in the event the MWD supply source to southern Orange County is interrupted on a short term basis as a result of emergency or planned water outages."

ADOPTED, SIGNED and **APPROVED** this 18th day of September 2008, as modified by Minute Order approved on November 13, 2008.

MOULTON NIGUEL WATER DISTRICT



President

MOULTON NIGUEL WATER DISTRICT
And the Board of Directors thereof



Secretary

MOULTON NIGUEL WATER DISTRICT
And the Board of Directors thereof

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

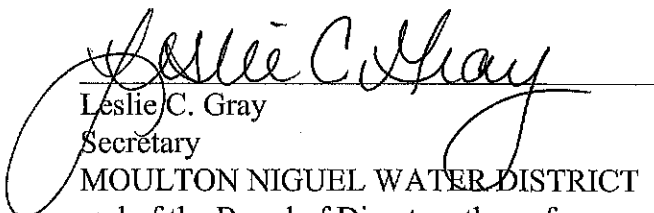
I, LESLIE C. GRAY, Secretary of the Board of Directors of the MOULTON
NIGUEL WATER DISTRICT, do hereby certify that the foregoing resolution was duly
adopted by the Board of Directors of said District at a regular meeting of said Board held
on the 13th day of November, 2008 that it was so adopted by the following vote:

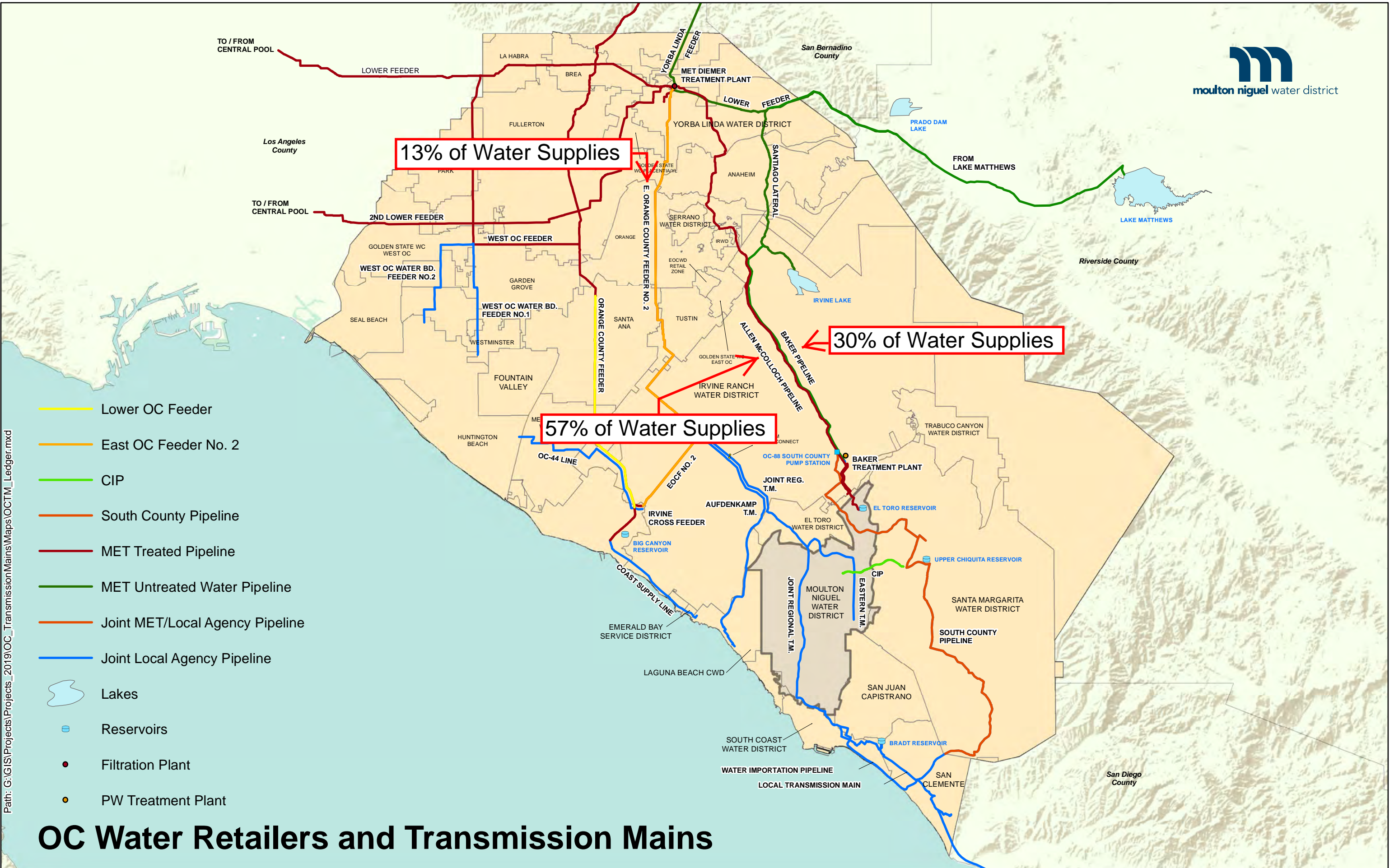
AYES: LIZOTTE, FIORE, BUCK, KURTZ, ENGLISH, PEQUET,
STEWARD

NOES:





ABSTAIN:

ABSENT:


Leslie C. Gray
Secretary
MOULTON NIGUEL WATER DISTRICT
and of the Board of Directors thereof



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- Lower OC Feeder
- East OC Feeder No. 2
- CIP
- South County Pipeline
- MET Treated Pipeline
- MET Untreated Water Pipeline
- Joint MET/Local Agency Pipeline
- Joint Local Agency Pipeline
-  Lakes
-  Reservoirs
-  Filtration Plant
-  PW Treatment Plant

OC Water Retailers and Transmission Mains