

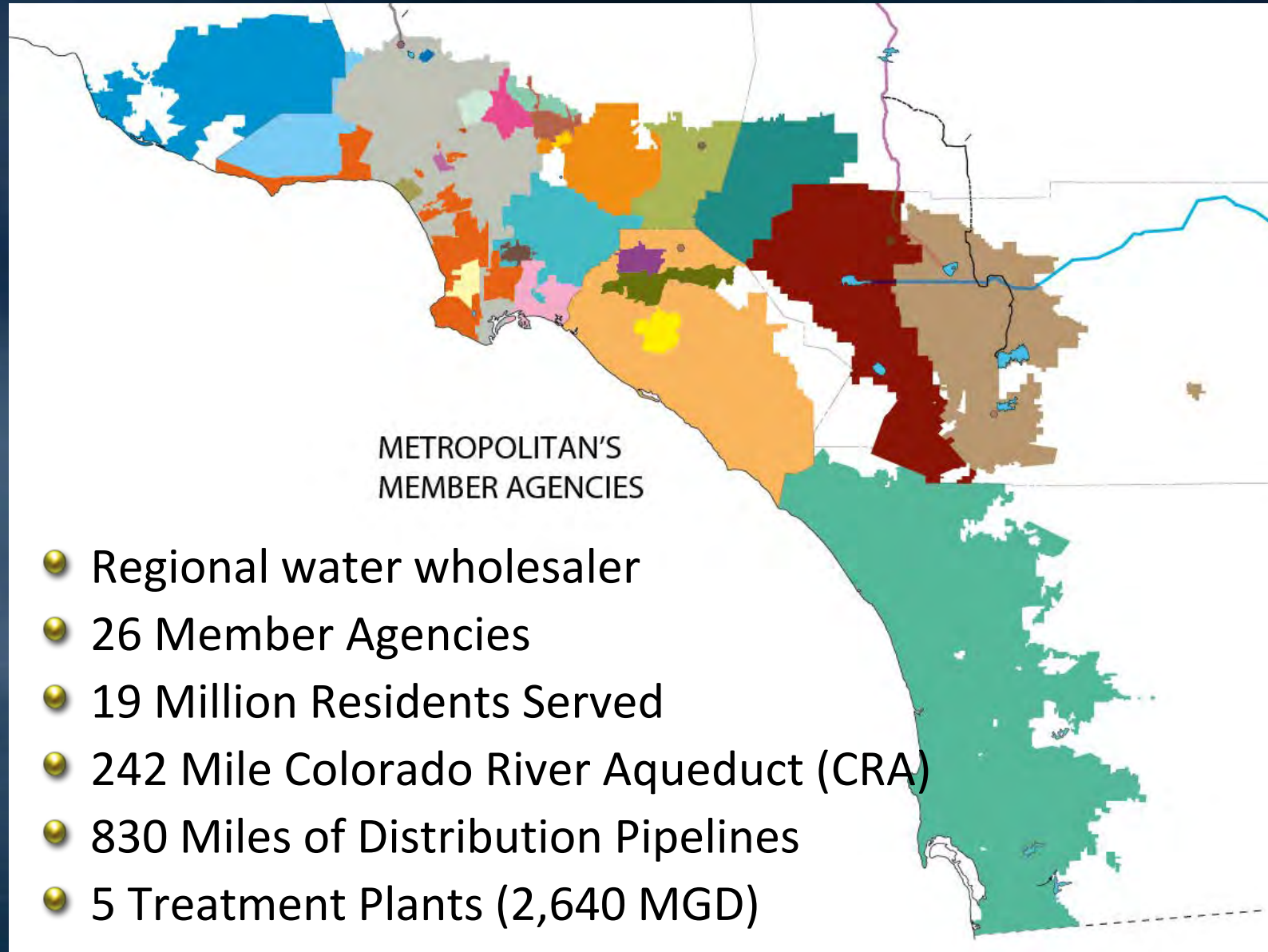


Metropolitan's Capital Investment Plan

ACEC Los Angeles County Chapter
September 22, 2021

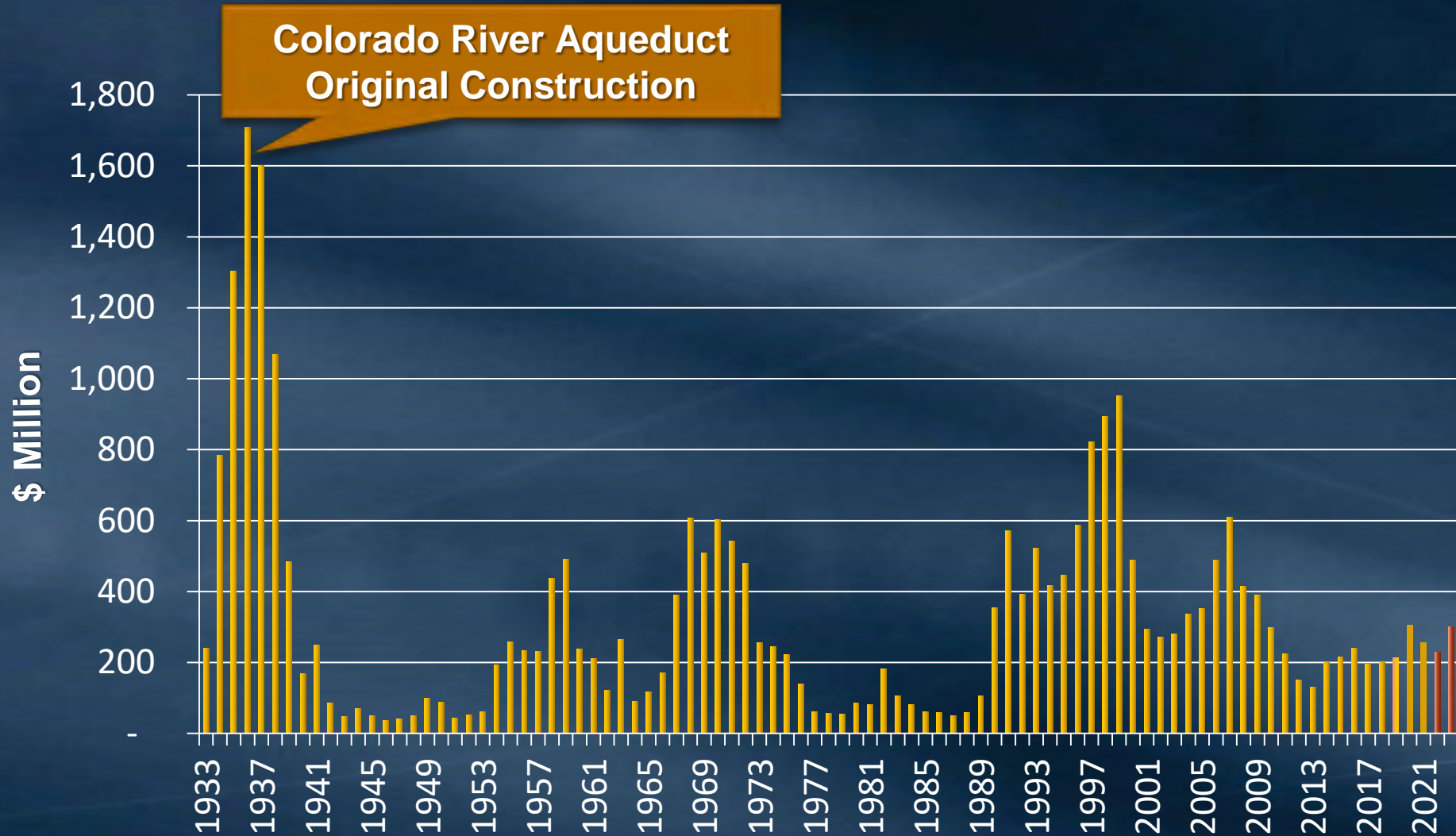


Metropolitan Water District



Annual Capital Expenditures

(Adjusted to Current \$)



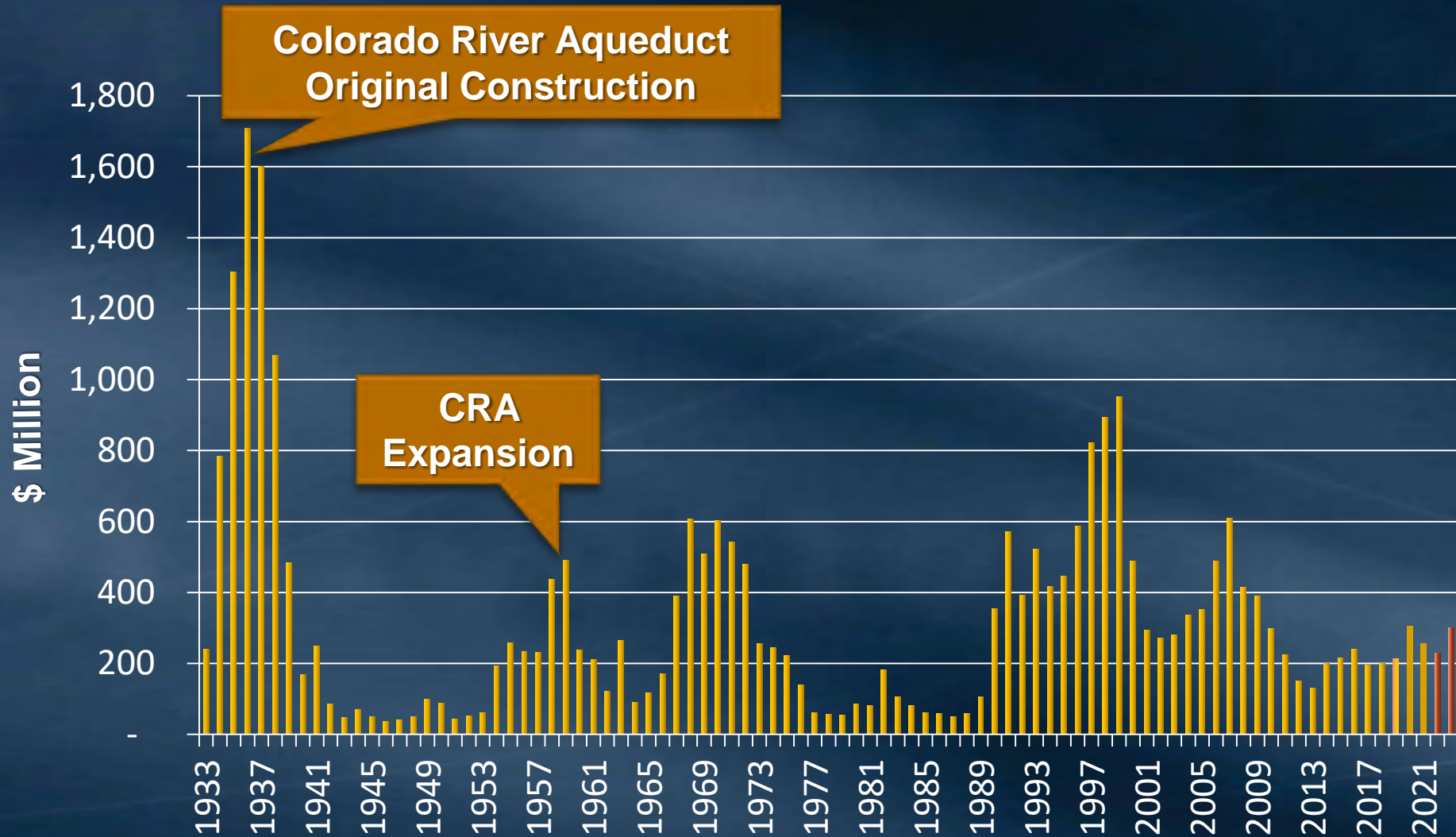
Backbone System – 1930's & 1940's



3-1-38

Annual Capital Expenditures

(Adjusted to Current \$)



CRA Expansion- 1950's



1-1P1-64

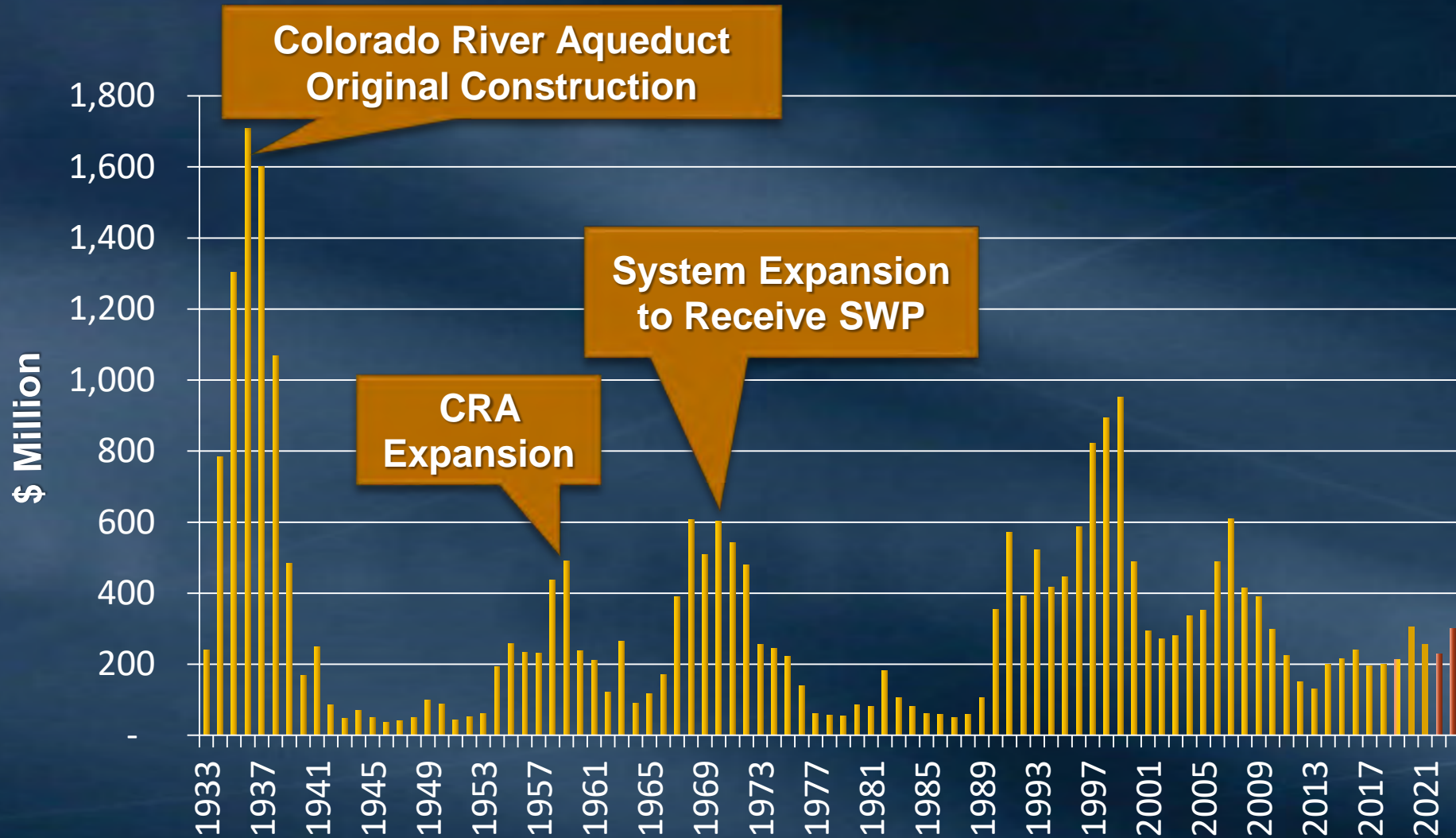
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MWD System - 1950's



Annual Capital Expenditures

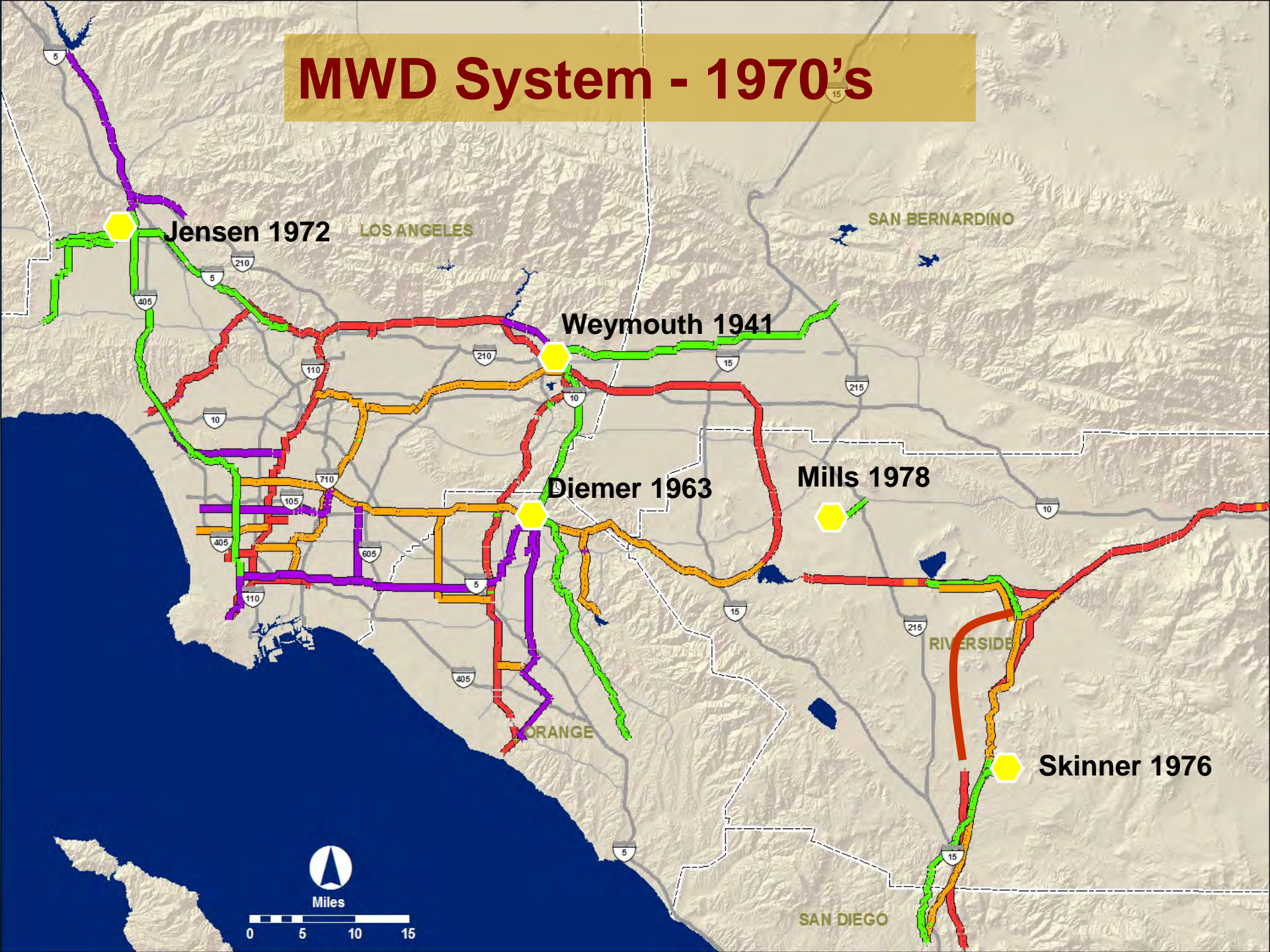
(Adjusted to Current \$)



System Expansion - 1960's

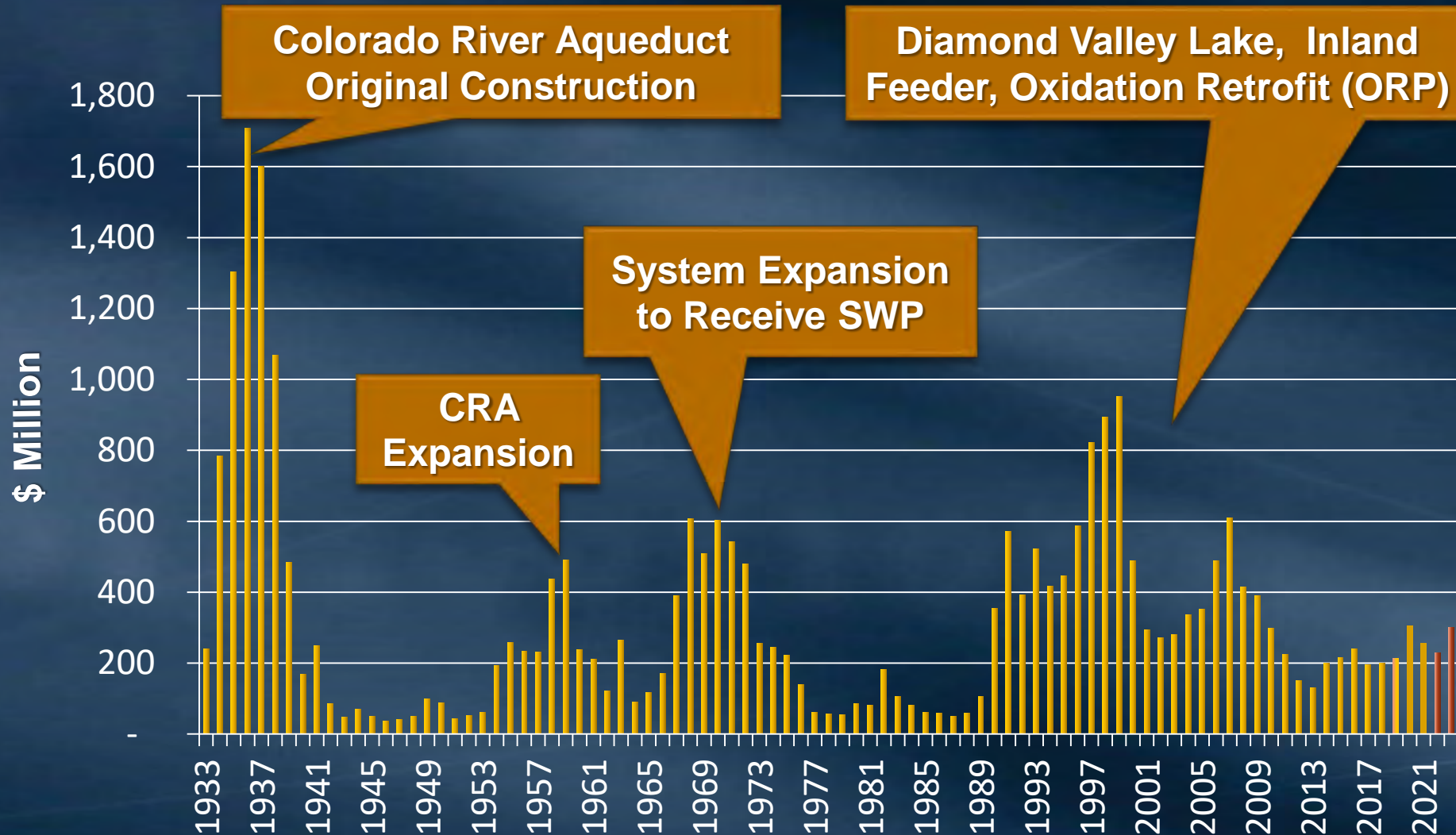
Diemer Plant
Completed 1963

MWD System - 1970's



Annual Capital Expenditures

(Adjusted to Current \$)

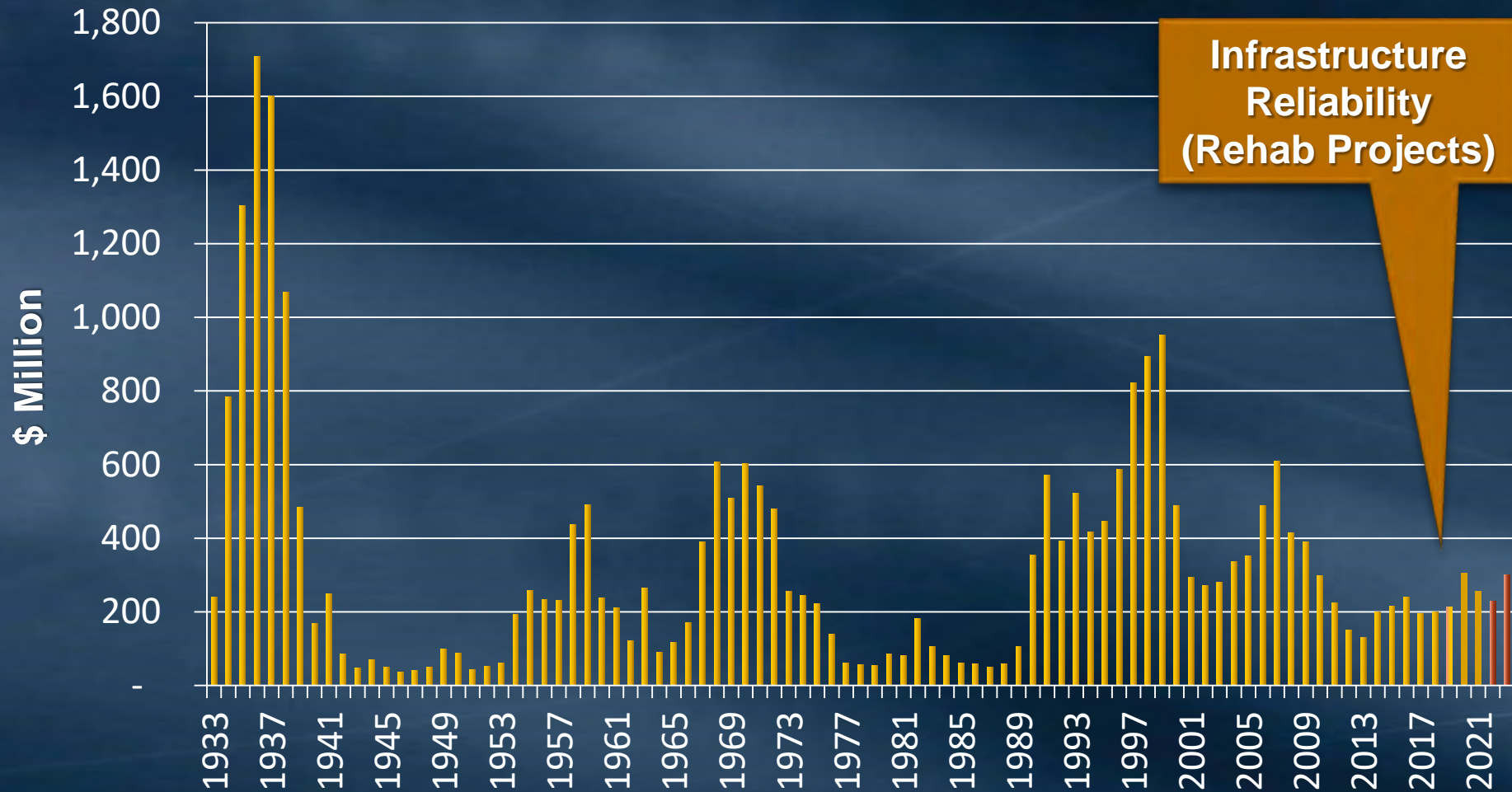


System Flexibility & Water Quality (1990's to 2000's)



Diamond Valley Lake

Annual Capital Expenditures (Adjusted to Current \$)



Planned CIP for FY 2020/21 - 2021/22

- 2-Year planned spending - \$500 million
- Over 80% proposed for infrastructure reliability work
 - Aging infrastructure - \$250 M
 - PCCP rehabilitation - \$54 M
 - Seismic upgrades - \$70 M
 - Information Technology – \$15 M
 - Other - \$35 M
- IT improvements/upgrades – \$32 M
- Other - \$44 M
- Prioritized to maintain reliability & comply with regulations

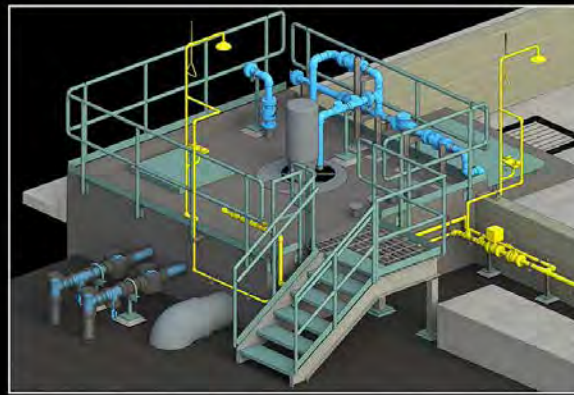
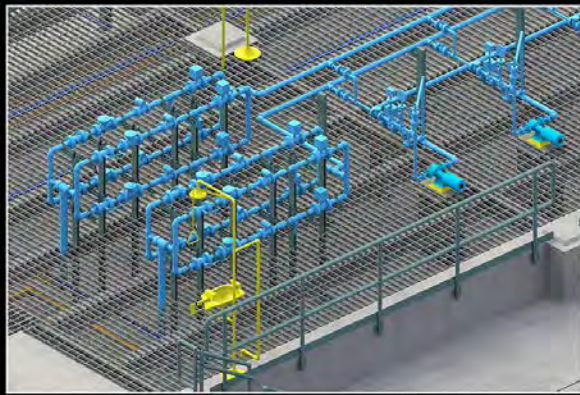
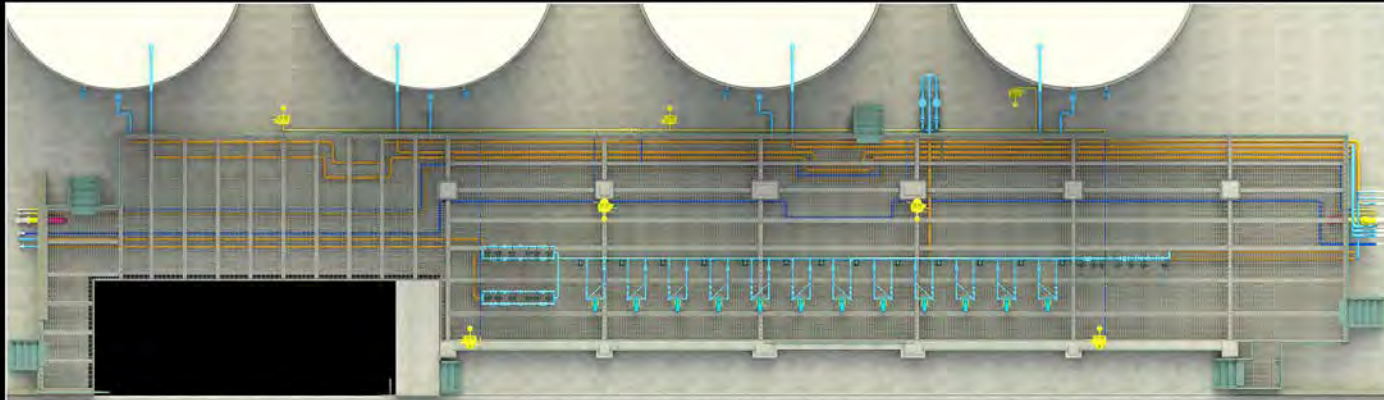
Today's Message

- Metropolitan has a lot of upcoming work, in all types
 - Pipelines
 - Electrical
 - Mechanical
 - Civil
 - Roads/Sewers/Domestic Water/Housing
 - Sustainability
- ... and all sizes
 - Largest: 2nd Lower Feeder PCCP (~\$70M): Perris Valley Pipe Tunnel (~\$60M)
 - Smallest: Lower Feeder Drain Line Replacement (~\$90k); Live Oak Reservoir Cathodic Protection (~\$100k)
- We partner with consultants to make this happen!

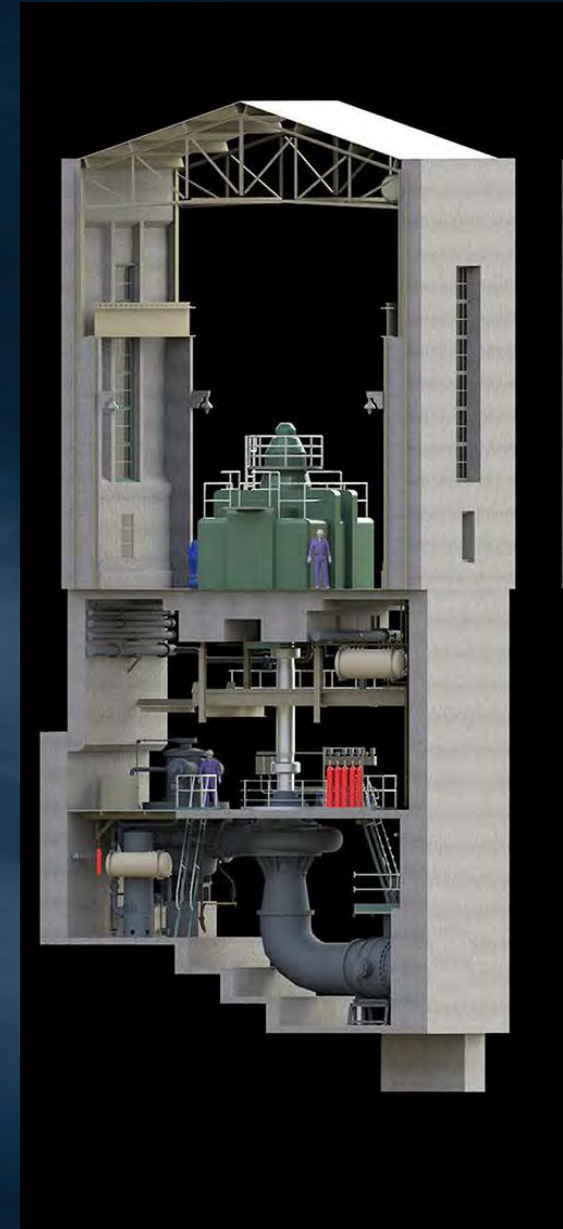
Metropolitan's Use of Engineering Consultants

- Metropolitan Staff
 - Full-service design capabilities
 - Focused on core work of water conveyance, treatment & delivery
- Engineering Consultants
 - Support project schedules
 - Specialized expertise
 - ~ \$23 M/ year

Design Practices – 3D today



103295 (Spec 1751) Jensen Caustic Soda Chem Contain Upgrades
Joseph Jensen Water Treatment Plant



Moving Towards BIM & Asset Management

Consultant Acquisition

- Respond to Master RFQs
 - Get on pre-qualified list (refreshed every three years)
 - Conveyance
 - Treatment
 - Rotating Equipment
- Respond to project-specific RFPs
- Types of agreements
 - On-call
 - Project specific

Upcoming RFQs & RFPs

- Now

- CRA Erosion Repair - RFP

- This Year

- Construction Management Tunneling Support
- Structural Engineering Services for Seismic & Pipeline Rehabilitation
- Facility Electrical Coordination Studies

- Next Year

- Conveyance, Treatment, Rotating & Electrical Equipment Design

Major Program – CRA Rehabilitation

- Colorado River Aqueduct (CRA) Main Pump Rehabilitation
 - Rehab 45 pumps, motors, support systems at five pump plants
 - Future contract amount: ~\$160M
 - Many contracts over 2025-2031
- CRA Electrical Upgrades
 - Main Transformers
 - Auxiliary Power Systems
 - Emergency Generators



Major Program – CRA Living Facilities

- District Housing, Support Facilities (Homes, Dormitories, Kitchens, Streets, Sewers, Roads)
 - \$100M+ in future contracts
 - Planned construction from 2023 through 2027
 - From Indio to Havasu



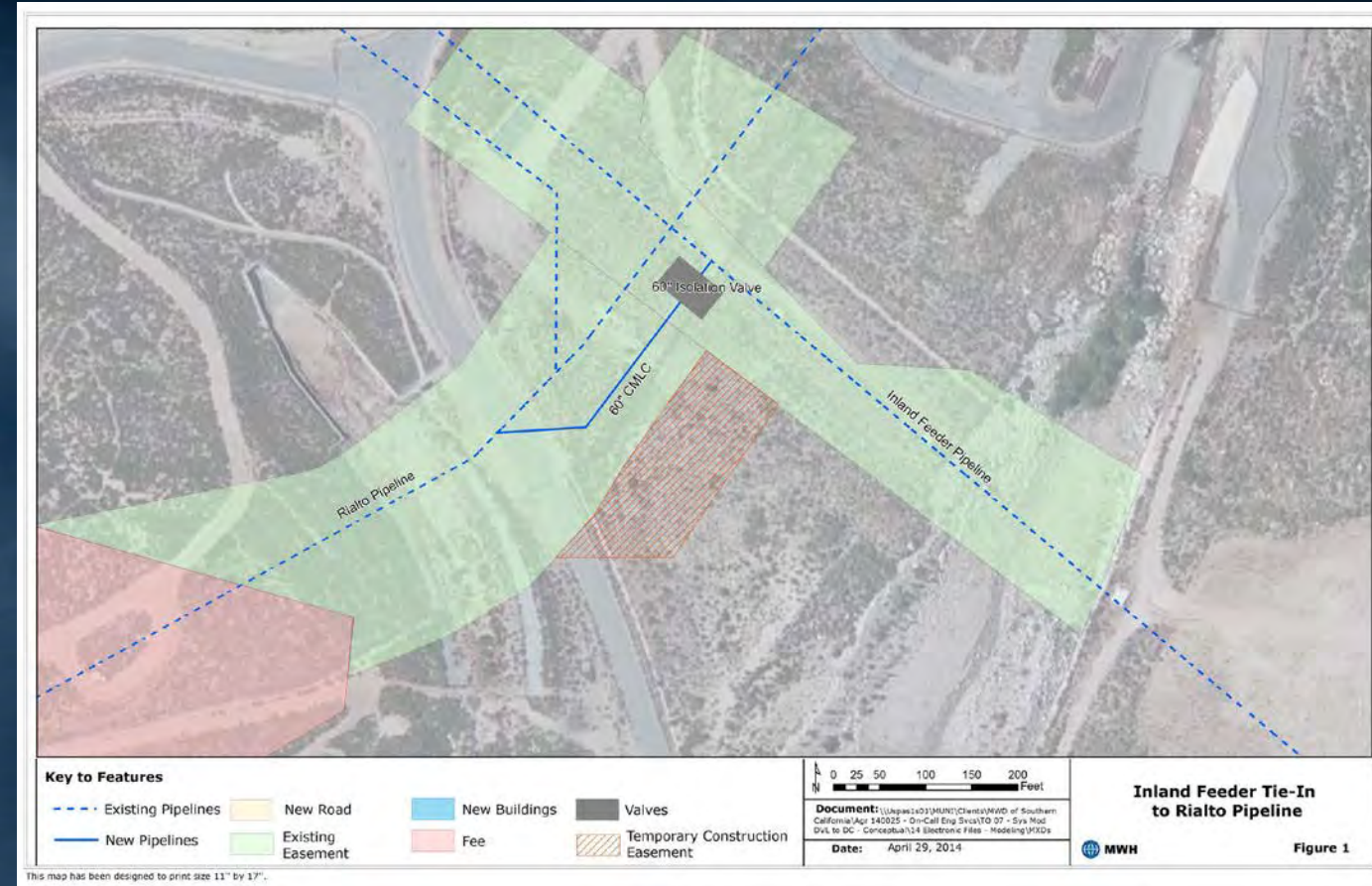
Major Program – PCCP Relining Program

- Total Program Includes Relining 100 miles of Pre-stressed Concrete Cylinder Pipe (PCCP)
 - ~\$2B over next 20 years
 - Expected 25-30 contracts
 - Currently using pre-qualified contractors



Major Program – System Resiliency, Drought Projects

- Interconnections to allow delivery from DVL to Rialto Feeder
- New pump stations on west side of Metropolitan's service areas



Major Program – Regional Recycled Water

- Constructing a 100 MGD recycled water plant at LACSD's Carson Plant, with distribution as far as Irwindale

- ~\$2.6B, construction from 2026-2032, 15-20 contracts

