



Water System Operations Manager's Report

Engineering and Operations Committee
Item 7a

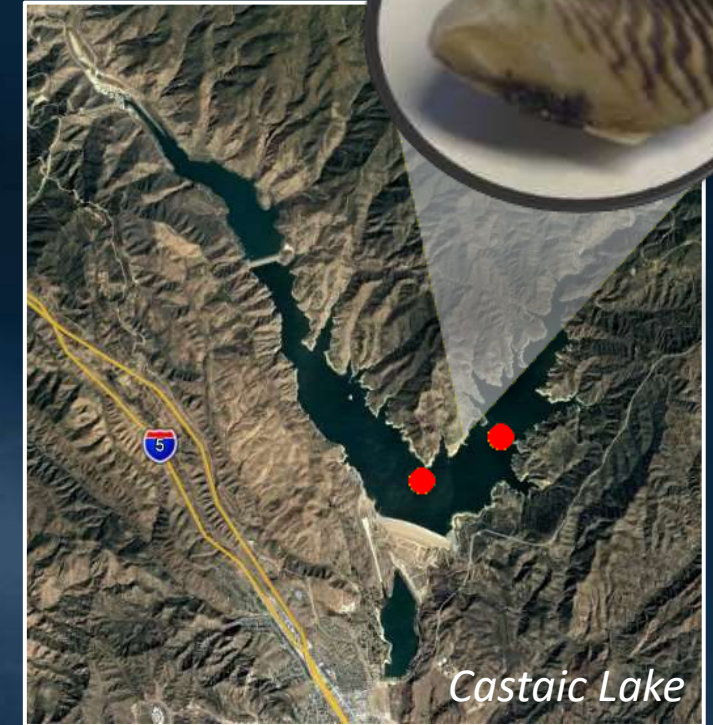
September 13, 2021

Current Operational Conditions

- 2021 SWP Allocation is 5%
- SWP blend targets are 0% at Weymouth, Diemer, and Skinner plants
- CRA is at 7-pump flow
- DVL to Mills drought operation continues to perform well
- Managing storage based on WSDM principles
- August 2021 deliveries of 164 TAF were 19 TAF higher than August 2020

Quagga Mussels Found in Castaic Lake

- In August, DWR found a few quagga mussels on shoreline of Castaic Lake
 - 1 confirmed adult mussel (live), 3 shells (dead)
- No evidence of reproducing mussel populations in Castaic Lake
 - No veligers (larval stages) detected in routine monitoring
 - No clumps of mussels
- Discovery triggers management actions to control mussels
 - Exit boat inspections implemented at Castaic Lake
 - Future management and control actions to be determined



Photos courtesy of DWR

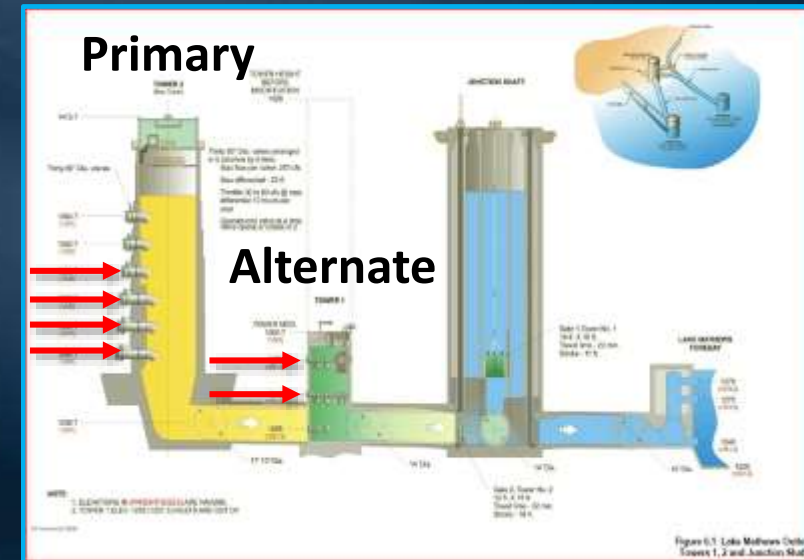
Upcoming Actions to Assess Impacts

- Coordinate with DWR on follow-up monitoring and potential control strategies
- Increase monitoring and infrastructure inspections at Metropolitan facilities receiving SPW
 - Routine (monthly) monitoring to date has not found quagga mussels or veligers, including samples at Jensen plant influent and DVL
- With much lower calcium levels in SPW, unlikely to see impacts as found in CRA system
 - Few quagga mussels found in Pyramid Lake in 2016 but no established populations
- No impacts to water deliveries at this time
 - Further investigation needed to fully assess operational impacts



Taste-and-Odor Event: August 2021

- In mid-August, some member agencies reported several consumer complaints of unpleasant odor in water
- Flavor Profile Analysis (FPA) for Weymouth and Diemer plants revealed sulfurous odor – *only aesthetic, no public health issue*
- Further investigation found low oxygen levels and sulfides deep in Lake Mathews
 - Natural lake phenomenon during warm weather
- Alternate outlet tower used during routine quagga mussel maintenance of primary tower
 - Pulling deeper water with no tier flexibility



Actions to Resolve Taste-and-Odor Event

- Turned ozone on at Weymouth and Diemer plants for effective control of aesthetic compounds
 - Chlorine was used during Lake Mathews outlet tower maintenance
- Transitioned back to primary outlet tower with tier flexibility
 - Able to withdraw better quality water
 - Rescheduled maintenance to later this year
- Conducted daily FPA for plant and distribution system samples until event resolved
- Member agencies updated throughout event



Flavor Profile Analysis

Lake Skinner Cyanobacterial Bloom: August 2021

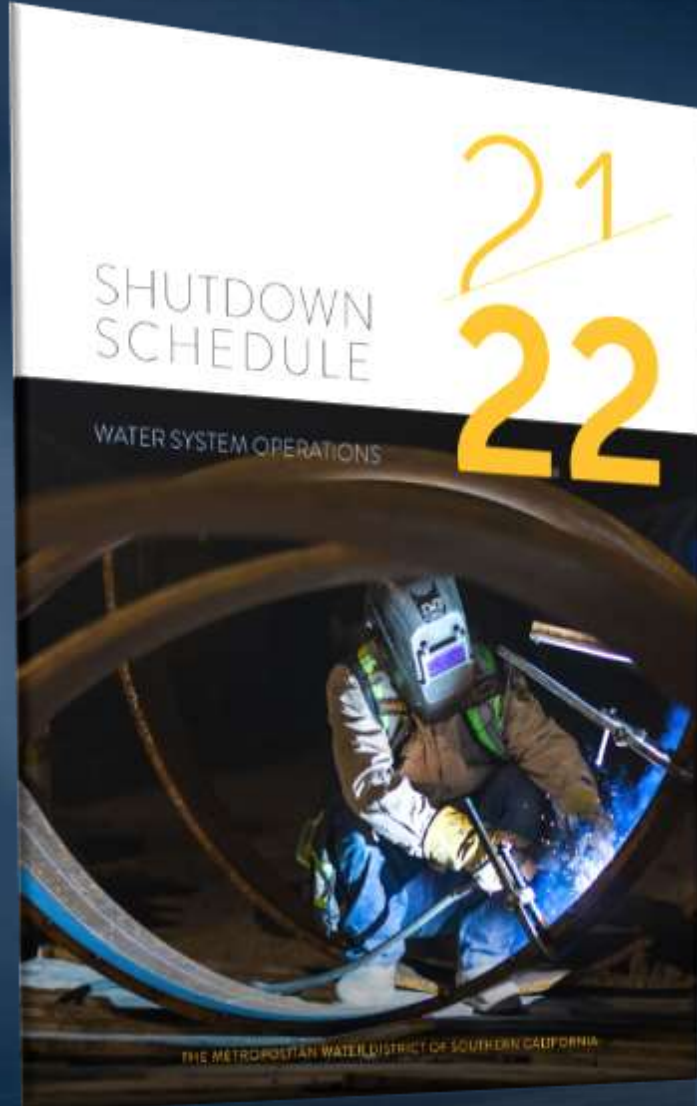
- Cyanobacteria producing T&O and cyanotoxin
 - Low concentrations but proactive control warranted to prevent rapid escalation
- Actions taken to respond to event
 - Ozone and peroxide at Skinner plant – no impact to treated water
 - Voluntary recreational “caution” signs posted at Lake Skinner park areas
 - Lake placed on bypass during event
 - Lake successfully treated with copper sulfate
 - Member agencies updated throughout event



Copper Sulfate Treatment

Ensuring Continued System Reliability

2021-22 Shutdown Schedule



- Publish and present to member agencies in September
- 17 major shutdowns planned
- Schedule also includes three-year look-ahead

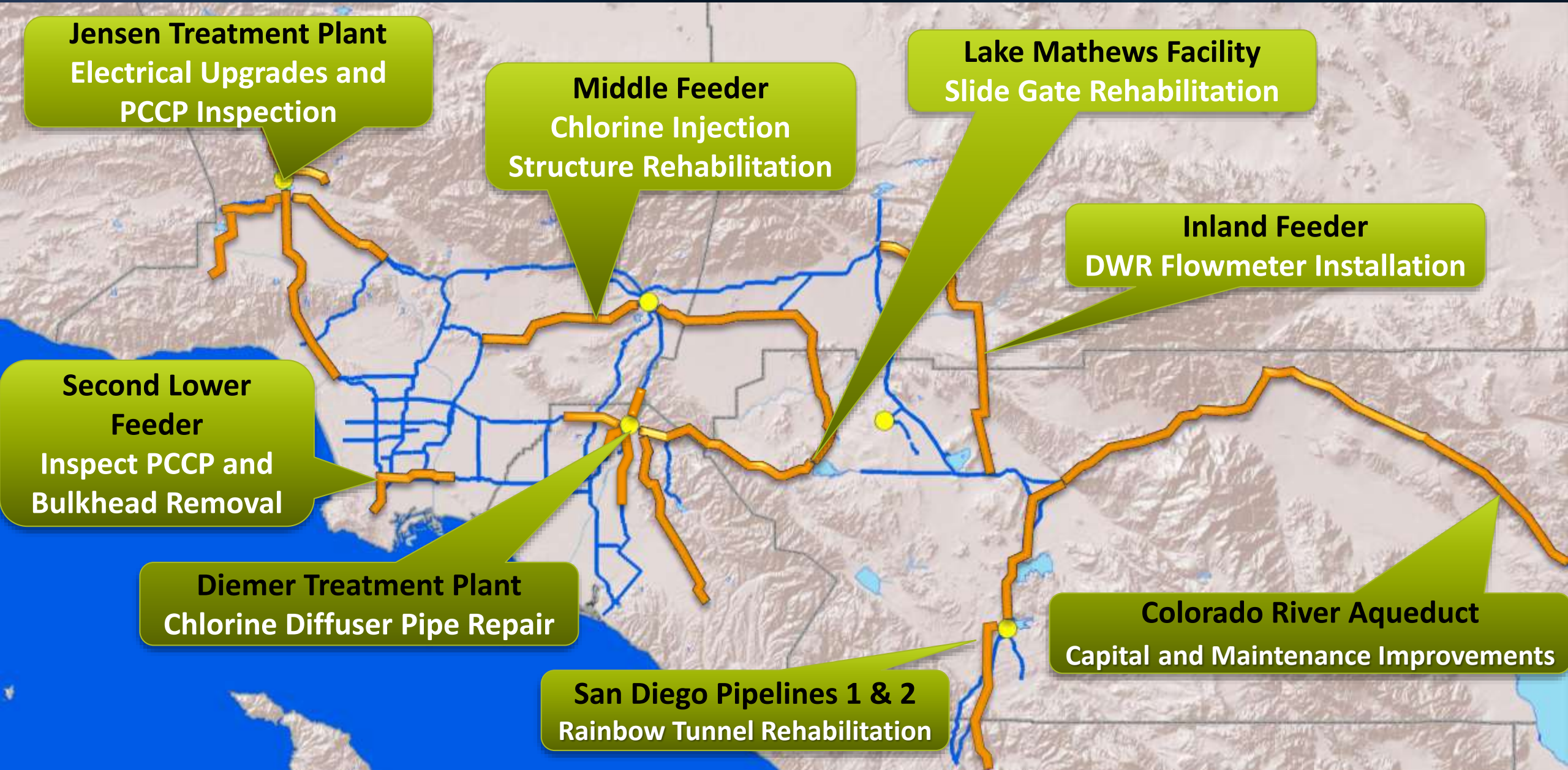
Ensuring Continued System Reliability

Planning for a Successful Shutdown Season



- Closely coordinate with stakeholders
- Ensure safety as top priority
- Manage finite resources and complex logistics
- Maintain reliability for member agencies

2021-22 Shutdown Schedule Highlights



2021-22 Shutdown Schedule Highlights



Lake Mathews Gate Repair



Jensen/Diemer Treatment Plant Shutdowns



CRA Flow Meter Installation



Sepulveda PCCP Inspection

