



Engineering & Operations Committee

# Water System Operations Manager's Report

Item 7a

Monday, June 13, 2022  
10:30 a.m.

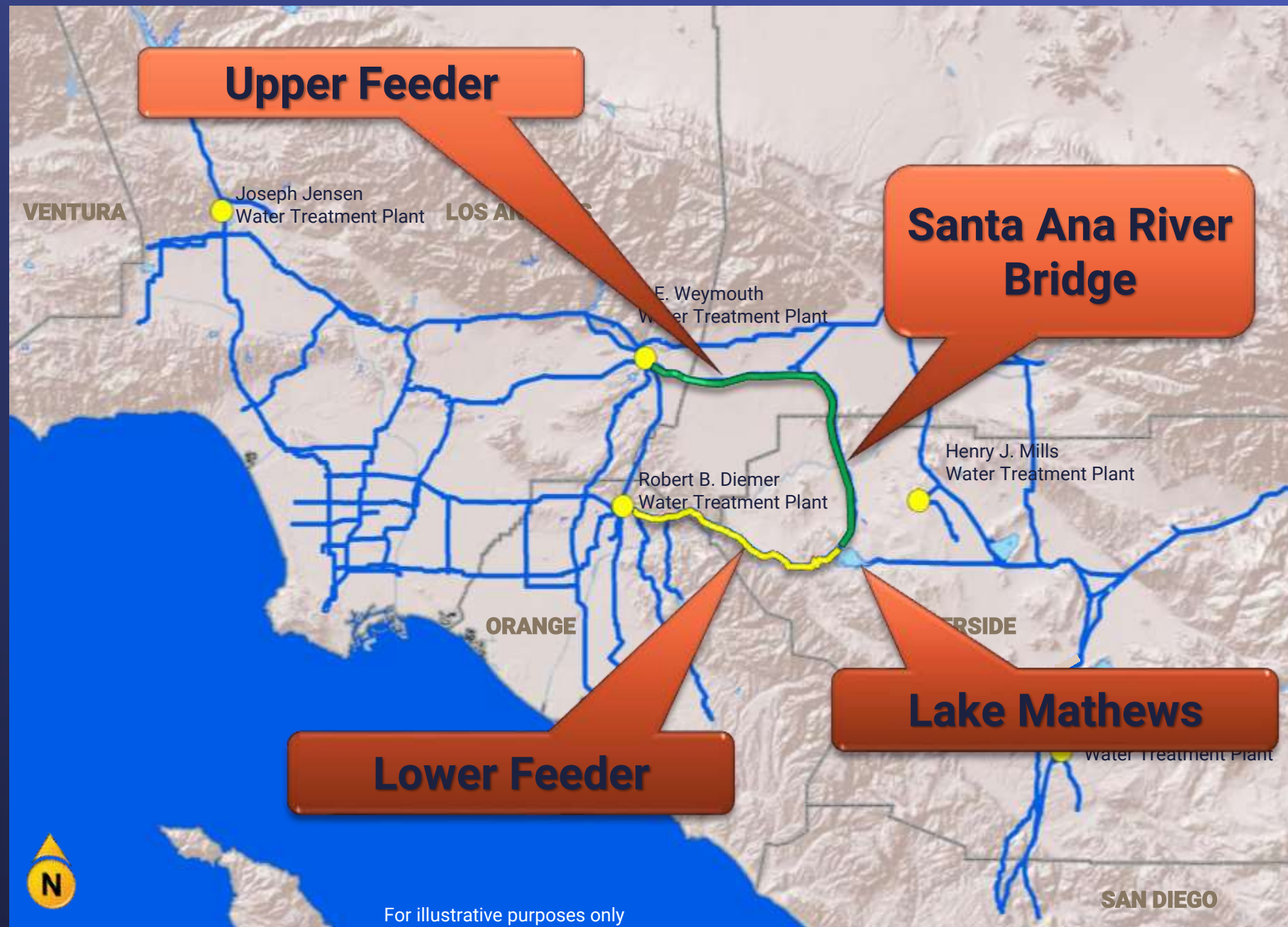
## Current Operational Conditions

# Continuing Drought Operations

- 2022 SWP Allocation is 5%
- SWP blend targets are 0% at Weymouth, Diemer, and Skinner plants
- DVL to Mills drought operation continues to perform well
- Managing storage based on WSDM principles
- May 2022 deliveries of 144 TAF were 2 TAF higher than May 2021

# Upper Feeder and Lower Feeder Constraints

The only two  
feeders bringing  
CRW into the  
Central Pool





# Lower Feeder and Diemer Plant

## High Flow Challenges

- Lower Feeder is a falling grade pipeline
- Prone to air entrainment at high flows (>425 cfs)
- Air entrainment causes operational challenges at Diemer, such as floating foam and excessive filter media loss
- Staff works diligently to overcome these challenges
- Lost filter media must be replaced before flows are increased; flow incrementally increased starting June 8



# Diemer Plant Backwash Valve Failure

- Backwash valve failure caused water hammer damage to 36" diameter filter backwash system piping
- Damage to piping temporarily took 12 of 48 filters out of service
- Staff quickly isolated the damage to return 10 of the 12 filters back into service
- Two filters remain out of service, limiting Diemer flow by 4% through summer months. Max flow 498 MGD





# Upper Feeder - Santa Ana River Bridge

- 1010' Long
- 116" Diameter
- 750 cfs max flow



Stainless steel bellows joint allows for pipeline expansion/contraction

# Upper Feeder Leak Repair Current Status



## Inspection

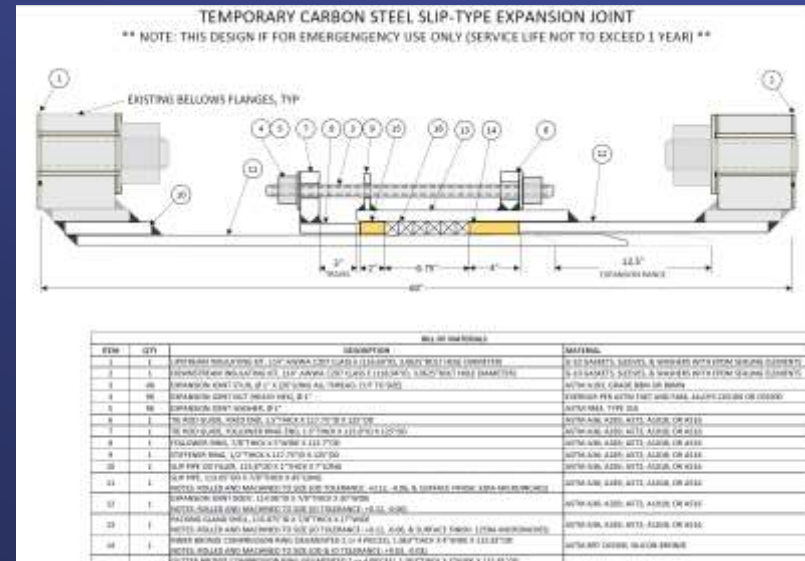
- Inspected on 6/1 with no crack growth
- No crack growth since 5/19 measurement
- Monitoring weekly

## Fabrication

- Completed carbon steel joint design
- Fabrication of replacement slip joint underway with flanges under procurement (estimated early August completion)
- Planning to install slip joint once fabricated to restore feeder capacity to 750 cfs



# Upper Feeder Slip Joint Ring Fabrication





# Shutdown Planning Current Status

- Coordinate access/permits/dewatering for shutdown
- 14-day shutdown planned for August or September (estimated)
- Estimated SWP use: ~20,000 AF



