



Engineering, Operations, & Technology Committee

Management Announcements and Highlights

Item 7a

July 8, 2024

Engineering Services

Pure Water Southern California Panel at ACE(24)



Left to Right: Kim Wilson, Rupam Soni, Gloria Lai-Bluml, Heather Collins (AWWA Board President-Elect), Bruce Chalmers, and Derek Zondervan (LACSD)

Garvey Reservoir Rehabilitation Projects Outreach to City of Monterey Park



Site tours with city council members & city staff



Presentation by Sam Mouawad to
Monterey Park City Council

2024 Engineering Services Group – College Intern Program



- Opportunity for Junior/Senior engineering students to gain experience in design or construction management
 - Approx. 284 students since inception
- Majors of this year's interns include:
 - Chemical Engineering
 - Civil Engineering
 - Electrical Engineering
 - Environmental Engineering
 - Mechanical Engineering

Left to Right: Chris Garcia, Erick Estrada Perez, Amornwat Kitsiri, Matthew Sanchez, Jad Darwish, Giovanni Reynoso, Summer Minter, Avianah Butler, Alyssa Lee, and Theodore Nguyen

Water System Operations

Managing State Water Project Supplies

Current Operational Conditions



Deliveries to USG-03

- 2024 SWP Allocation at 40%
- CRA at 7-pump flow
- Deliveries to DWCV at ~740 cfs
- Deliveries to CUP and Cyclic ongoing
- SWP blend targets are 25% at Weymouth, Diemer, and Skinner
- June 2024 deliveries of 102 TAF were 3 TAF lower than June 2023

Managing State Water Project Supplies

July 2024
Operations

*Manage SWP supplies to
meet storage goals*

Maintain 25% SWP blends

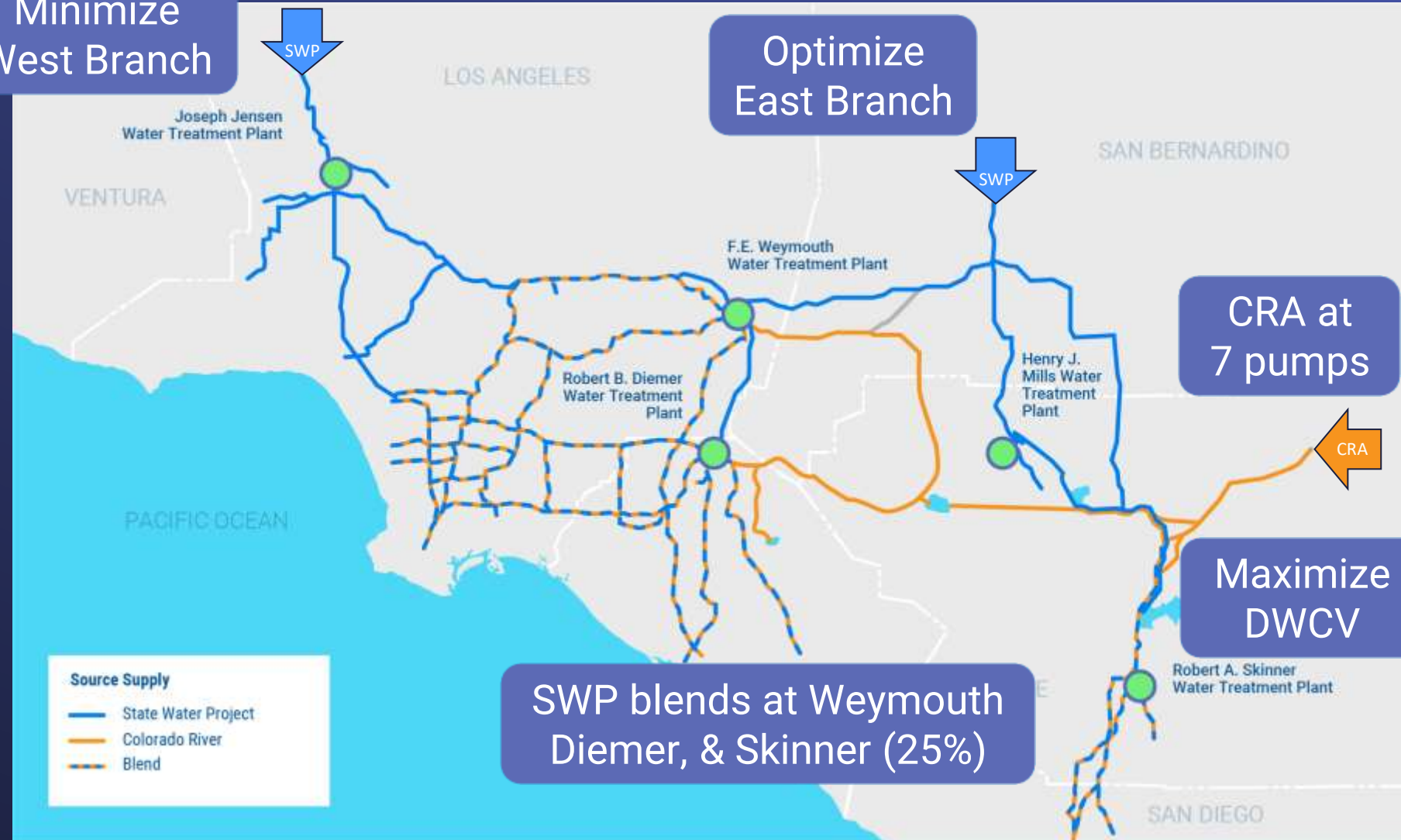
Minimize
West Branch

Optimize
East Branch

CRA at
7 pumps

Maximize
DWCV

SWP blends at Weymouth
Diemer, & Skinner (25%)



Member Agency Water Quality Managers Nitrification Workshop

June 27, 2024



- Information on causes, consequences, and control of nitrification in distribution systems
- Presentations by Water Quality staff and an industry expert, including response to 2023 nitrification event
- In-person at Metropolitan's Water Quality Laboratory and virtual
- ~120 participants from over 50 agencies



Recognition for Water Treatment Plants and Distribution System Optimization

Partnership Programs

*25-Year Directors Awards
for Diemer, Jensen, and
Skinner*

*10-Year Directors Award
for Distribution System*

AWWA ACE, June 2024



*Demonstrated commitment to optimized performance of
water system operations beyond regulatory requirements*



Annual Water Quality Report

Metropolitan's water
quality is equal to or better
than what is required to
safeguard public health

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Celebrating

5

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

**WATER
QUALITY
LAB**

**YEARS
1974 - 2024**

**WATER QUALITY EXCELLENCE
2024 ANNUAL DRINKING
WATER QUALITY REPORT**

Covering the reporting period January - December 2023

METROPOLITAN'S WATER QUALITY IS EQUAL TO OR BETTER
THAN WHAT IS REQUIRED TO SAFEGUARD PUBLIC HEALTH.

2023 Water Quality Table

	B	C	D	F	G	H	I			
Treatment Plant Effluents and Distribution Systems										
Parameter	Units	State MCS	PFC	Range Average	Demon Plant	Jensen Plant	WMA Plant	Skinner Plant	Westwood Plant	Major Sources to Drinking Water
Percent State Water Project	%	NA	NA	Range 0 - 100	100	100	0 - 67	0 - 100	Not Applicable	
PRIMARY STANDARDS - Mandatory Health-Related Standards										
CLARITY										
Combined Filter Effluent (CPE) Turbidity ¹	NTU	TT	NA	Highest % ± 0.3	0.08	0.07	0.07	0.07	0.04	Soil runoff
MICROBIOLOGICAL ²										
Total Coliform Bacteria ³	% Positive Monthly Samples	TT	MCLD = 0	Range Average	Distribution Systemwide: 0 - 0.3				Naturally present in the environment	
INORGANIC CHEMICALS										
Aluminum ⁴	ppb	1,000	660	Range Highest 8AA	ND - 73 105	ND - 83 ND	ND - 88 60	ND - 116 113	ND - 71 115	Residue from water treatment process; runoff and leaching from natural deposits
Barium	ppb	1,000	2,000	Range Average	ND ND	ND ND	ND 116	ND	ND	Oil and metal refineries; discharge; natural deposits erosion

Metropolitan's service area is expansive. It spans parts of six counties and 5,200 square miles. Our closest routine sample location is less than a mile from the La Verne Water Quality Laboratory, with the furthest 250 miles away. Sample collectors travel more than 150,000 miles each year by car and plane to bring samples in for analysis. Staff rely on nearly 500 different types of analytical equipment and use about 150 methods to evaluate samples. In a given year, about 250,000 water quality test results are generated.

Water Quality Co-Op Education



Safiya Hassan

Training Tomorrow's Workforce

- Cal Poly Foundation paid internship program started in early 1980s
 - Sophomore/junior/senior students in science and engineering from accredited universities
 - Bridging gap between theoretical study and professional world
- Over 300 students since inception
 - Over 30 became full-time employees, several as managers
- Opportunity for Metropolitan staff to develop leadership and management skills



*John Huang and
Pegah Tajvidi*



*Ryan Heumann and
Nathan Chen*

Safety and Security Awareness

Celebrating National Safety Month

*Safety awareness
events held at
multiple facilities
during June*



Gene



Weymouth



Soto St



Skinner



Jensen



July 8, 2024

Engineering, Operations, & Technology Committee

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June 27, 2024

Weymouth Plant Domestic Water Line Failure



Damaged PVC piping
July 8, 2024

Responding to Emergencies

- Domestic water line (6-inch PVC) piping failure at 9:30 PM
 - Root cause being investigated
- Flooded basement of Administration Building impacted electrical equipment, resulting in temporary loss of all site communications
- Excellent response by staff to quickly respond, restore SCADA, isolate damage, dewater, and repair facilities
 - Weymouth ICP activated
 - Station power, communication systems, and domestic water service restored over weekend
- No injuries; no impacts to water quality or treated water deliveries

Engineering, Operations, & Technology Committee



Domestic Water Line Failure
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Information Technology

2024 Information Technology Group – College Intern Program

Opportunity for college students and recent graduates to gain professional experience

Students from their respective universities represented in this year's intern cohort:

- Brenden Archer – Morehouse College, Atlanta, GA
- Christy Jose – University of California, Santa Cruz
- Jad Aljersh – CSU Northridge, Los Angeles, CA

Majors of this year's interns include:

- Software Engineering
- Network and Digital Technology
- Geographic Information Science

