



Engineering, Operations, and Technology Committee

12/8/2025 Committee Meeting

6a

Subject

Engineering, Operations, and Technology Committee Field Inspection Trip Report

Executive Summary

The 2025 Engineering, Operations, and Technology Committee (EOT) Field Inspection Trip to several Colorado River Aqueduct (CRA) facilities was conducted on October 29 and October 30. This annual event complies with the Standing Committee Inspection Trip section of Metropolitan's Administrative Code and seeks to provide additional context for future board deliberations.

This year, the following five directors attended the trip: EOT Chair Dennis Erdman (Municipal Water District of Orange County), EOT Vice Chair Stephen Faessel (City of Anaheim), Jacque McMillan (Calleguas Municipal Water District), Karl Seckel (Municipal Water District of Orange County), and Gretchen Shepherd Romey (City of San Marino). This trip to Eagle Mountain Pumping Plant, Gene Pumping Plant, and Copper Basin Reservoir focused on CRA operations and maintenance (O&M) activities, capital projects under design, and ongoing construction contracts. An agenda for the trip is shown in **Attachment 1**.

Applicable Policy

Metropolitan Water District Administrative Code Section 2315: Standing Committee Inspection Trips

Related Board Action(s)/Future Action(s)

Over the coming months, staff will return to the Board to request approval of the budget and Capital Investment Plan appropriation, as well as authorization to enter into agreements with consultants and award construction contracts. The EOT Inspection Trip helps provide a better understanding for directors as they deliberate on funding and other board decisions.

Details and Background

Background

Annually, the Chair and Vice Chair of the EOT Committee formally invite all members of the Board of Directors to a tour of Metropolitan facilities to "aid its members in the deliberations of matters before that committee." Recent trips included visits to the F.E. Weymouth Water Treatment Plant and La Verne shops, Diamond Valley Lake, the Department of Water Resources' Devil Canyon Power Plant, the Henry J. Mills Water Treatment Plant, the Joseph Jensen Water Treatment Plant, and the Sepulveda Pressure Control Facility. In-person site visits allow directors to see a level of detail that is not possible during concise presentations to the committee.

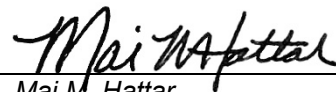
Approximately every five years, the trip visits the CRA facilities. Stretching 242 miles from the Colorado River on the California-Arizona border to Lake Mathews reservoir near Riverside, California, the CRA consists of more than 90 miles of tunnels, nearly 55 miles of cut-and-cover conduit, almost 30 miles of siphons, and five pumping stations and supplies approximately 1.2 million acre-feet of water a year. The American Society of Civil Engineers selected it as one of the Seven Modern Civil Engineering Wonders in 1955.

The trip offered an opportunity for directors to interact directly with staff responsible for operating, maintaining, rehabilitating, and improving the CRA. This trip focused on O&M activities, ongoing construction contracts, and upcoming contract awards in the following year.

Presentations for O&M activities included an overview of CRA operations, high voltage transmission system maintenance, microwave communication system maintenance, the aqueduct maintenance shop, and power operation and strategic planning. A tour of the Eagle Mountain Pumping Plant was also provided, which included visits to the control room, pump bay, and motor room. Staff detailed how they perform preventive and corrective maintenance activities to maximize equipment life and provide reliable CRA deliveries. Also discussed is how they are increasing productivity and maximizing efficiencies with limited resources, as well as the need to add staff to keep up with maintenance for the ageing water delivery systems.

Staff presented ongoing construction contracts, including the replacement of the domestic water treatment systems, the new storage building at Eagle Mountain Pumping Plant, and the replacement of the main transformers. Directors were also briefed on projects nearing design completion. They will be brought before the Board for contract award, including the replacement of utilities at Eagle and Hinds pumping plants, CRA housing improvements, auxiliary power system upgrades, and the Black Metal Communication site improvements. The discussion on these capital investment projects was preceded by a presentation on Metropolitan's asset management program and how staff manage physical assets through the entire lifecycle to maximize value, minimize costs, and mitigate risks. Staff also discussed the need to include funding capital investments at a level that reduces Metropolitan's risk exposure and maintains the reliability of its water infrastructure.

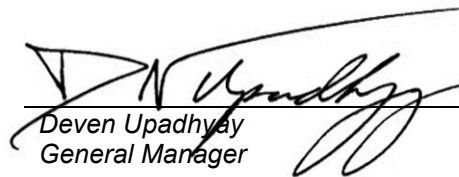
The group managers of Conveyance and Distribution; Integrated Operations, Planning and Support Services; Treatment and Water Quality; Information Technology; and Engineering Services would like to express gratitude to the directors for dedicating their time and attention to the EOT Inspection Trip. The directors who attended the inspection trip expressed their appreciation for the outstanding work of the teams who operate, maintain, and support the CRA every day. The directors' engagement and continued support are appreciated as staff addresses current challenges, plans for future needs, and ensures the CRA remains reliable for the region.



Mai M. Hattar
Chief Engineer
Engineering Services

11/25/2025

Date



Deven Upadhyay
General Manager

11/25/2025

Date

Attachment 1 – Engineering, Operations, & Technology Committee Field Trip Agenda

Ref# es12706930

Engineering, Operations, & Technology Committee Inspection Field Trip Agenda

DAY 1
Wednesday, October 29, 2025

Arrive	Facility/Activity	Presenter
Start from the F.E. Weymouth Water Treatment Plant in La Verne		
7:00 AM	Breakfast at the Water Quality Lab	
8:00 AM	Welcome Remarks	
8:15 AM	Big Picture Asset Management - Maturity & Criticality Assessment	Ricardo Hernandez, Operations Project & Asset Management Unit Manager
8:30 AM	Drive from Weymouth WTP to Brackett Field Airport	
8:45 AM	Flight from Brackett Field Airport to Eagle Mtn. Pumping Plant Airstrip	
9:45 AM	Drive from Airstrip to Eagle Mtn. Pumping Plant	
10:30 AM	Eagle Mtn. Pumping Plant Presentations – Recreation Hall	
	Welcome Remarks	JR Rhoads, Conveyance & Distribution Group Manager
	CRA Operation Overview	Justin Davis, Conveyance & Distribution Unit Manager
	Main Transmission System Maintenance	Craig Spitz, Powerline Maintenance Team Manager
	Power Operation and Strategic Planning	Keith Nobriga, Integrated Operations Planning & Support Services Group Manager
11:20 AM	Facilities Visited - Housing and Support Facilities	
	Overview: Eagle Mtn. Pumping Plant Lodge/ Housing	Victor Ramirez, Facility & Fleet Management Section Manager
	Walkthrough of Remodeled Home	
	Eagle Mtn. and Hinds Pumping Plants Utilities Replacement	Prudencio Alonso, Project Manager
	New Storage Building Project Overview	Adrian Almeida, Construction Inspector I
	Aqueduct Pump Maintenance Shop	Steve Solaiza, Team Manager IV
12:40 PM	Lunch at Rec Hall	
1:30 PM	Facilities Visited - Pump Plant and Electrical Facilities	
	CRAMPR – Overview & Details	Prudencio Alonso, Project Manager
	Tour: Eagle Mtn. Pumping Plant Overview (Starting from the Control Room)	John Carter, Eagle Mountain Pumping Plant Team Manager
	Domestic Water System Project	John Carter
	Unit No. 9 Pump Bay and Motor Room Floor	Steve Solaiza and John Carter
	CRA Main Pump Transformers	Patrizia Hall, Project Manager

DAY 1
Wednesday, October 29, 2025

Arrive	Facility/Activity	Presenter
	Overview of the Electrical System	Santiago Ocampo, Project Manager
	230kV Transmission System	Santiago Ocampo, Project Manager
	Low Voltage Improvements – Includes Switchyard, Generator, and Auxiliary Power Systems	Santiago Ocampo, Project Manager
	Black Metal Communications Site Improvement	Santiago Ocampo, Project Manager
3:35 PM	Drive to Airstrip	
3:45 PM	Flight to Gene Pumping Plant	
6:00 PM	Dinner at Gene Camp Kitchen	
7:00 PM	Entertainment at Gene Lodge: CRA History, Gene PP Museum	John Shamma, Engineering Services, Asst. Group Manager

DAY 2
Thursday, October 30, 2025

Arrive	Facility/Activity	Presenter
7:00 AM	Breakfast at Gene PP Kitchen	
7:30 AM	Gene Assembly Hall/ IT Projects Presentations	
	Desert Microwave	Brian Herzog, IT Communications Specialist
	Fiber Optics Improvements	Charles Eckstrom, IT Group Manager
8:00 AM	Drive to Copper Basin Reservoir	
8:15 AM	Copper Basin Discharge Valve Project	Ish Singh PM Team Manager
	New Sodium Hypochlorite Tanks Replacement/Upgrades	Randy Smith, Aqueduct Maintenance Team Manager
		Jason Pagenkopp, Corrosion Control Team Manager
10:15 AM	Lunch at Gene Assembly Hall	
11:30 AM	Flight to Brackett Field Airport	
12:45 PM	Drive to F.E. Weymouth Water Treatment Plant	