



Engineering, Operations, & Technology Committee

Planning and Execution of Pipeline Shutdowns Within Metropolitan's Distribution System

Item 6c

August 18, 2025

Item 6c

Conveyance and Distribution Shutdown Planning and Execution

Subject

Conveyance and Distribution Shutdown Planning and Execution

Purpose

Overview of activities required to plan and execute a conveyance and distribution system shutdown

Shutdown Drivers

Corrective Maintenance



Urgent Repair



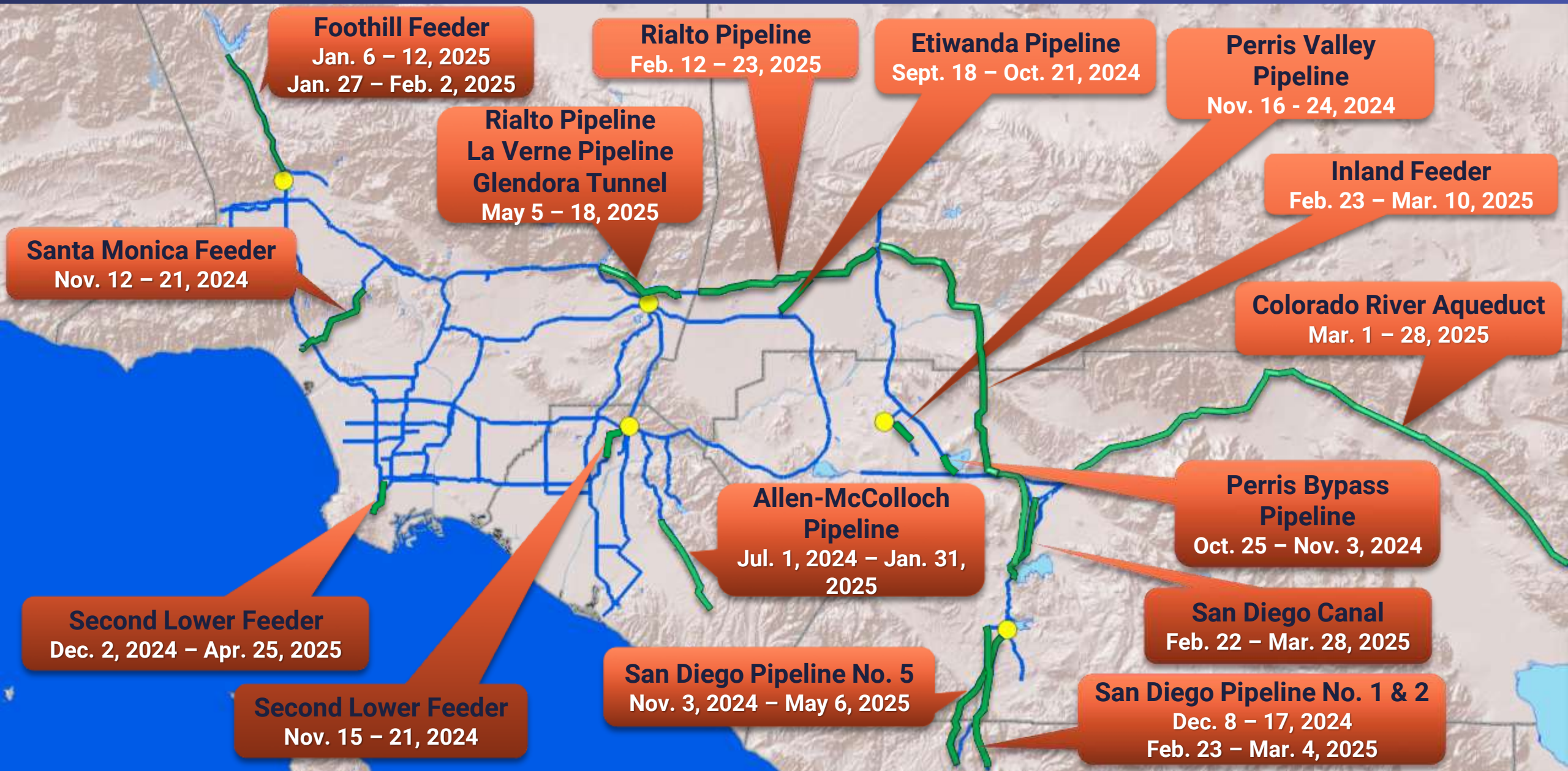
Inspection



Capital Improvement



FY 2024/25 Shutdown Schedule



Internal and External Coordination



Disinfection – Water Quality

Thank you for your support and patience as we work to rehabilitate this major pipeline and ensure water reliability throughout Southern California.

Gracias por su apoyo y paciencia mientras trabajamos para rehabilitar esta importante tubería y garantizar la confiabilidad del agua en todo el sur de California.

Second Lower Feeder - Etapa 3B Fase 2

Una de las tuberías principales en el sistema de agua regional, el Second Lower Feeder, distribuye agua en una extensión de 36 millas desde la Planta de Tratamiento de Agua Robert B. Diemer en Van Nuys hasta el Reservorio de Platos Verdes en Rolling Hills Estates. Construida en 1967, la antigua tubería cilíndrica de concreto pretensado necesita ser revestida con acero para asegurar su integridad futura. El revestimiento de la tubería en el Second Lower Feeder comenzó en octubre de 2017 y se espera que se lleve a cabo en fases durante los próximos 8-10 años.

El Proyecto de Revestimiento del Second Lower Feeder 3B rehabilitará aproximadamente 4 millas de tubería en las ciudades de Los Angeles y Torrance. La construcción comenzó en octubre de 2024 y se espera que continúe hasta junio de 2025.

Qué esperar durante la construcción:

- Ruido de la actividad de construcción
- Retrasos temporarios en el tránsito, restricciones de carriles y estacionamiento
- Puede ser necesario trabajar las 24 horas

Preguntas frecuentes

¿Por qué necesitan trabajar las 24 horas del día, los 7 días de la semana?
Es necesario trabajar las 24 horas para completar el proyecto de manera eficiente y oportuna. Nuestro objetivo es restaurar las condiciones normales de operación para que podamos garantizar un suministro confiable de agua a nuestros agencias clientes.

¿Necesita este proyecto un servicio de agua?
No. El agua seguirá siendo entregada por su proveedor local de manera de agua sin interrupción en el servicio.

¿Hay o estará el ruido de la construcción toda la noche?
La mayoría, si no todo, del trabajo realizado por la noche ocurrirá bajo tierra dentro de la tubería, minimizando el ruido. Es posible que escuches el ruido de los generadores necesarios para operar el sistema de ventilación en la tubería.

¿Preguntas?
Contacto: CommunityRelations@metrolia.com
Sitio Web: www.metrolia.com

Contacto:
Lizeth Martinez | Soome Carillo
(323) 621-0814 | (213) 217-4020

Equipo de Trabajo:
La Unión de Interoceanic Water District of Southern California

Map showing the project area, including the Second Lower Feeder pipeline route, and the locations of the City of Los Angeles and the City of Torrance.

Public Notice – External Affairs



Safety Plan – SRT



Site Visit – Member Agencies

Dewatering Location Information and Coordination



Metropolitan Water District of Southern California

Raw Water Discharge Plan

Raw water discharge from

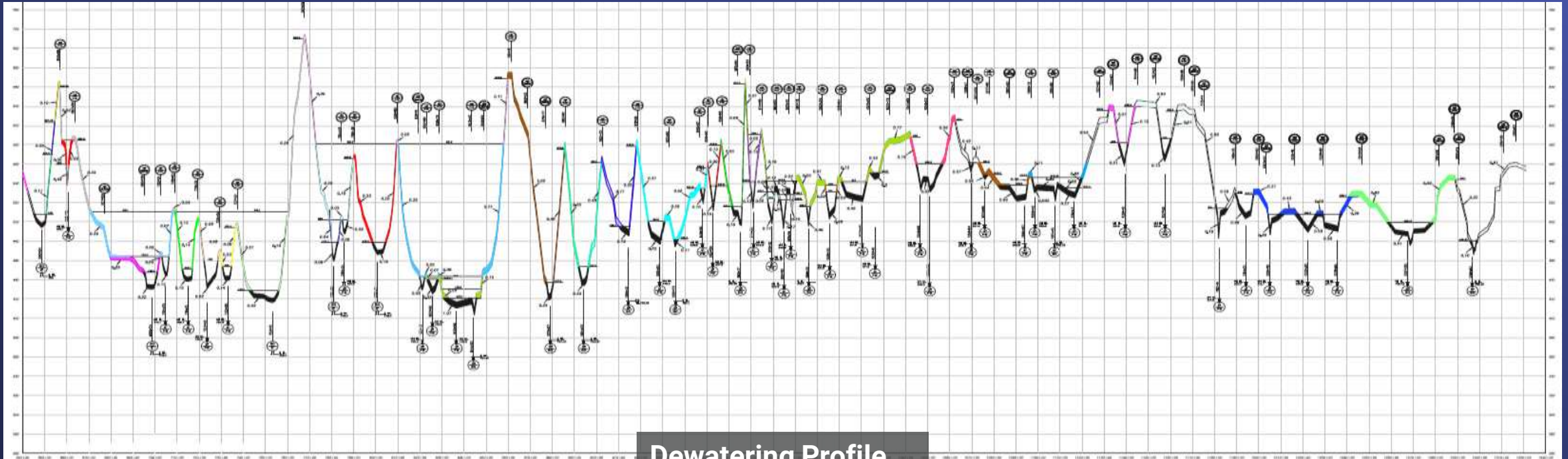
SAN DIEGO PIPELINE 5

Into Santa Margarita River Watershed Area

And San Luis Rey River Watershed Area

- Dewatering locations tracked and monitored
- Additional control measures due to invasive mussels (Quagga/Golden)

Operational Planning



Operational Planning

SLF 73+01 BO

Dewatering Location

Dewatering Information-Diemer Plant below Guard Shack



Gravity Discharge @ 5CFS
Volume -1.65AF Time- 4 Hours
Confirm 58+32 And 79+10 Open
Begin Flood and Pump
Remove Flange Cont. Pumping
Volume- .15A Time- 2 Hrs.
Equip. - 125kw Generator
Pumps- 3" Submersible
Hose-3" rigid 30' 3" Lay flat 30'

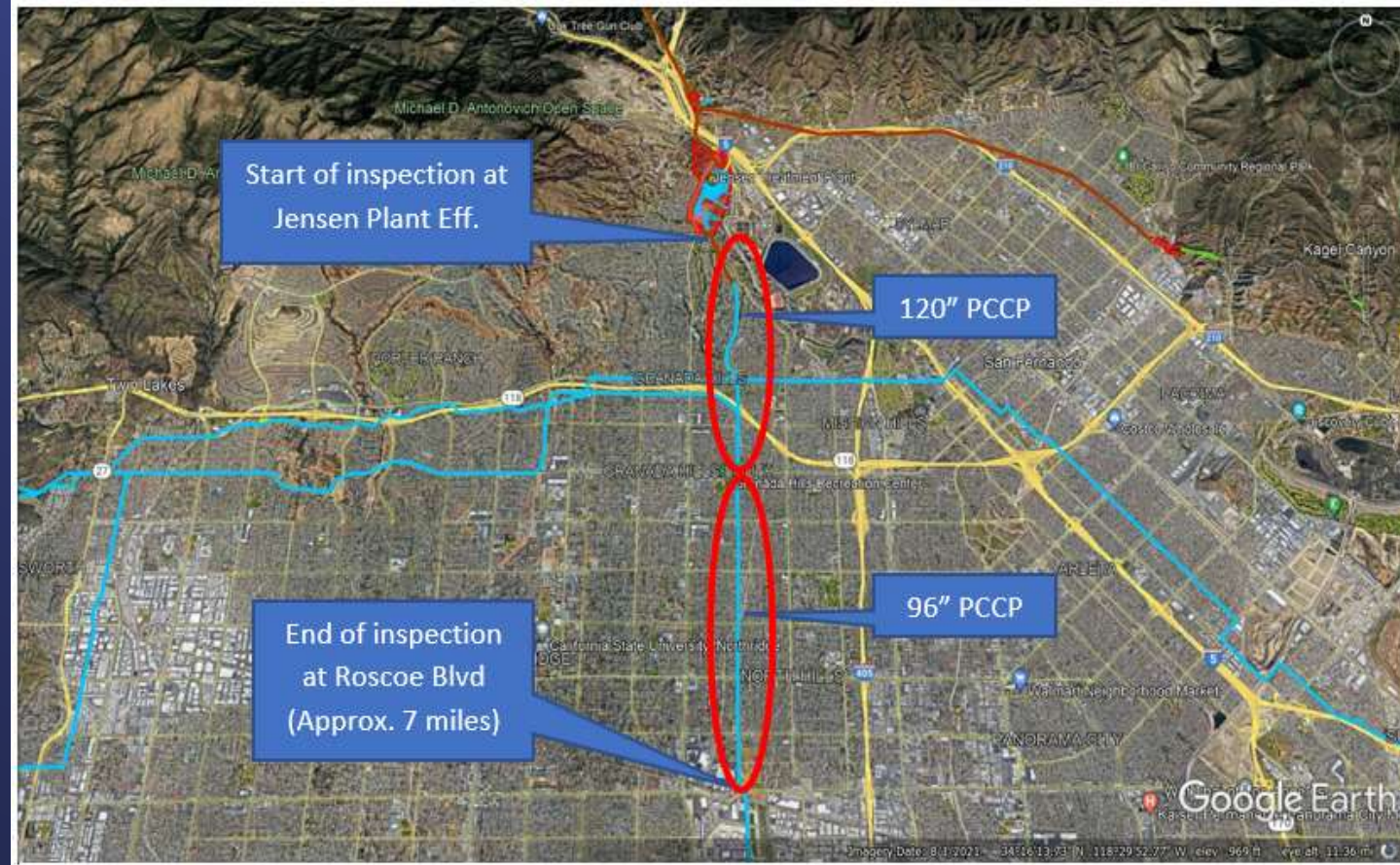
SLF 81+44 PW

Dewater Location

Dewatering Information -Valley View Ave/Golf Course

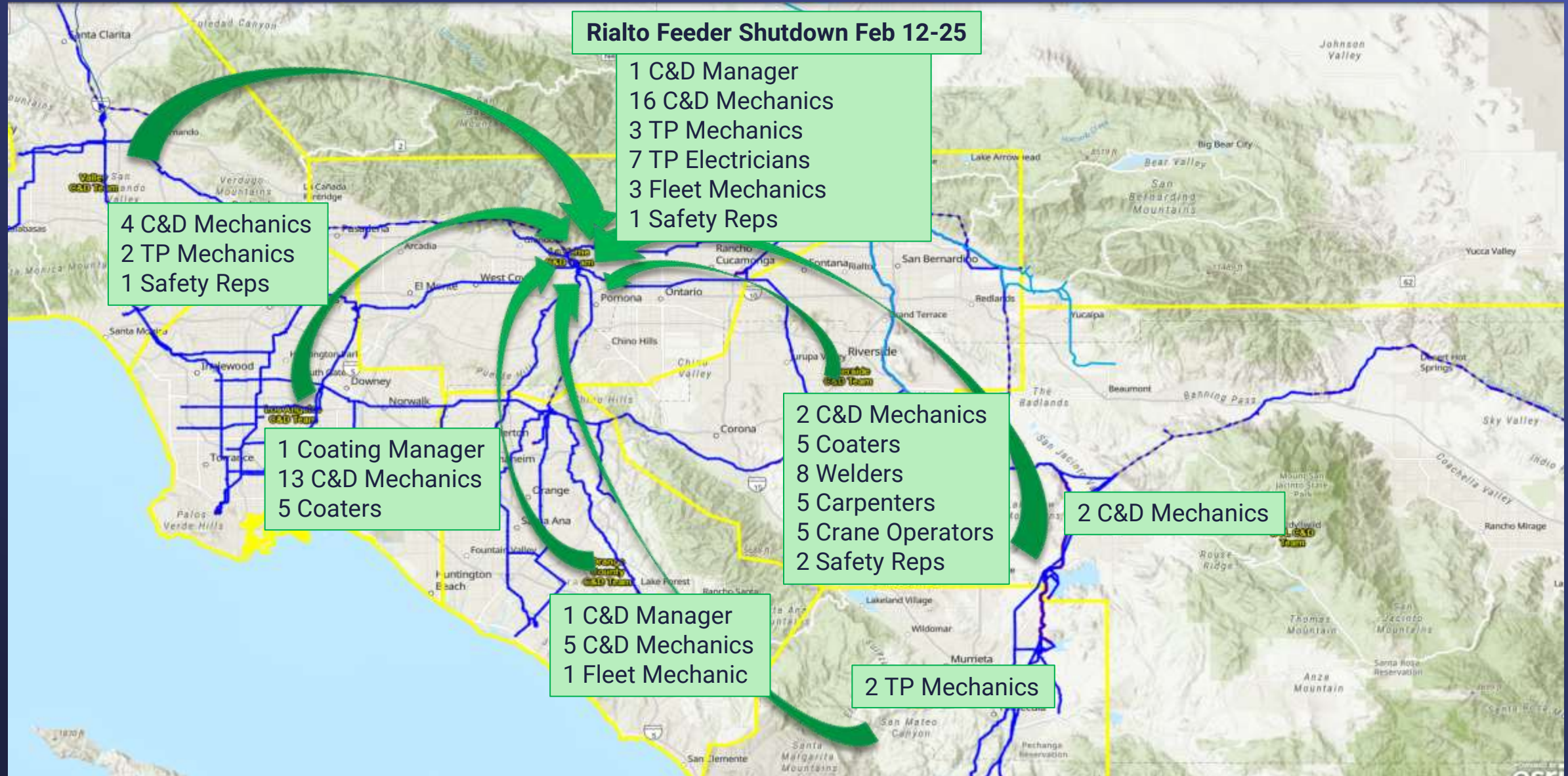


Flood and pump @ 800GPM
Volume -.25 AF Time- 2 hours
Confirm 79+10 and 84+26 open
Remove Flange Cont. Pumping
Equip.-70kw generator
Hose - 6" rigid 30', 6" lay flat 40'
Pump - 6" & 3" submersible
NOTE: Approx. 15' push

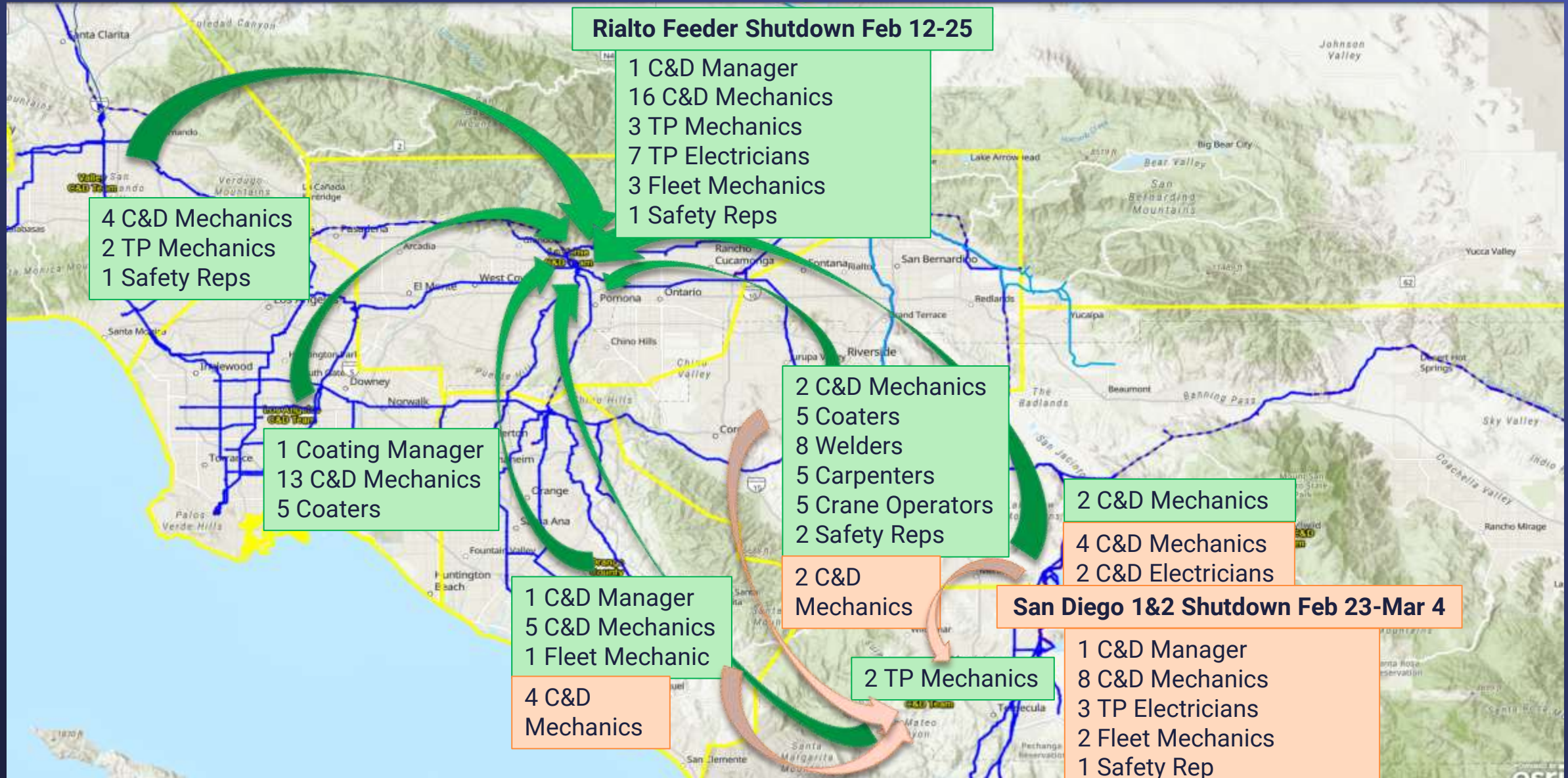


- Shutdown overview for staff briefings
- Location-specific information

Personnel Movement for Shutdown Support



Personnel Movement for Shutdown Support



Equipment Staging



OC-88 Staging for AMP Shutdown



Etiwanda Staging for Rialto Shutdown

- Remote locations near shutdown often used as base of operations
- Fleet logistics are of great importance

Clearance Procedures

Switching / Valving Instructions: -- Protected -- Between -- End Row -- Delete Row					Clearance Number
ASS / VI Number		Instruction Number	WA-001-24	Clearance To Be Issued?	Yes
Location	V-08 to SDC V-06	Rev.	0	Unavailable From	3/23/2024
Equipment or Line	San Diego Canal			Start Time	400
Reason	SDC concrete lining repairs			Unavailable To	3/27/2024
Location	Operation Instructions / Equipment to be Operated	Outage Request #	4417		
STEP	TIME	LOCATION	OPERATION	INSTRUCTIONS / EQUIPMENT TO BE OPERATED	INITIALS
				Remove From Service	
			Note:	SDC request #4420. LVPL flow limited to 45CFS, V-09, V-10 and V-11 open 100%, Weir bords installed on SDC/LVPL delivery weir/ weir bords removed on CLC/LVPL delivery weir during duration of clearance.	
1		DVL	Check	San Diego Canal drawdown complete.	
2		West Portal	Install	Blocker gate at San Jacinto pipeline V-04 structure, install L/D, D/L _____ and tag# _____	
3		SDC Turnout	Install	Blocker gate U/5 of V-08 radial gate, install L/D, D/L _____ and tag# _____	
4		DVL	Close	DVL connection canal wheel Gate, install L/D, D/L _____ and Tag# _____	
5		DVL	Open	DVL connection canal wheel Gate Disc. Sw. install, D/L _____ and Tag# _____	
6		SD Canal Skinner	Close	Lake Skinner Inlet Radial Gate V-06, use LQ/BO	
7		SD Canal Skinner	Close	E Lake Skinner Bypass slide gate #1 (West), install L/D, D/L _____ and Tag# _____	
8		SD Canal Skinner	Close	E Lake Skinner Bypass slide gate #2 (Center), install L/D, D/L _____ and Tag# _____	
9		SD Canal Skinner	Close	E Lake Skinner Bypass slide gate #3 (East), install L/D, D/L _____ and Tag# _____	
10		SD Canal Skinner	Open	E Lake Skinner Bypass slide gate #1 (West) Disc. Sw., install D/L _____ and Tag# _____	
11		SD Canal Skinner	Open	E Lake Skinner Bypass slide gate #2 (Center) Disc Sw. install, D/L _____ and Tag# _____	
12		SD Canal Skinner	Open	E Lake Skinner Bypass slide gate #3 (East) Disc Sw., install D/L _____ and Tag# _____	
13		SD Canal Skinner	Close	LSBP-1 BFPV 72", install L/D, D/L _____ and Tag# _____	
14		SD Canal Skinner	Close	LSBP-1 BFPV 72" Bypass Plug Valve install L/D, D/L _____ and Tag# _____	
15		SD Canal Skinner	Open	LSBP-1 BFPV 72" Disc. Sw., install D/L _____ and Tag# _____	
16		SD Canal Skinner	Close	LSBP-2 BFPV 96", install L/D, D/L _____ and Tag# _____	
17		SD Canal Skinner	Close	LSBP-2 BFPV 96" Bypass Plug Valve install L/D, D/L _____ and Tag# _____	
18		SD Canal Skinner	Open	LSBP-2 BFPV 96" Disc. Sw., install D/L _____ and Tag# _____	
19		SD Canal Skinner	Close	LSBP-3 BFPV 48", install L/D, D/L _____ and Tag# _____	
20		SD Canal Skinner	Close	LSBP-3 BFPV 48" Bypass Plug Valve install L/D, D/L _____ and Tag# _____	
21		SD Canal Skinner	Open	LSBP-3 BFPV 48" Disc. Sw., install D/L _____ and Tag# _____	
22		SD Canal Skinner	Open	LSBP-3 BFPV 48" Disc. Sw., install D/L _____ and Tag# _____	

Example of Clearance Checklist



Tag used for CLEARANCE isolation points during switching or valving



Locked out Electrical Equipment



Locked out Mechanical Equipment

Shutdown Execution

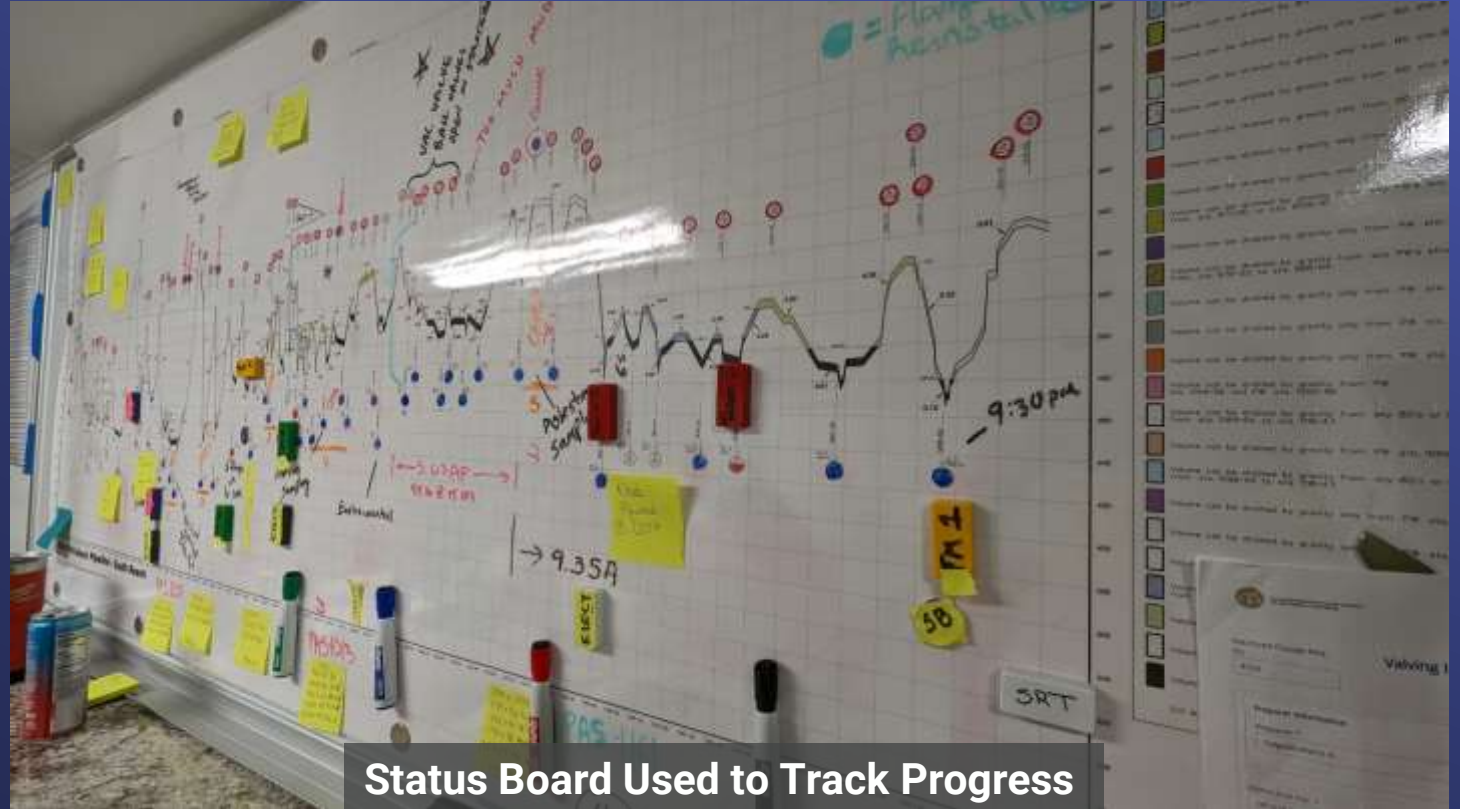


- 13-hour shift rotation to allow for overlap
- Safety Meeting and update from Shutdown Managers before each shift
- New shift relieves current shift at various locations

Shutdown Execution



Coordination at Central Location



Status Board Used to Track Progress

- Shutdown Managers coordinate daily activities
- Adjust from previous shift progress or setbacks
- Monitor and track crews over long distances

Shutdown Execution



Preventative Work Completed During Shutdowns

- Technology used to locate broken wires in Prestressed Concrete Cylinder Pipelines



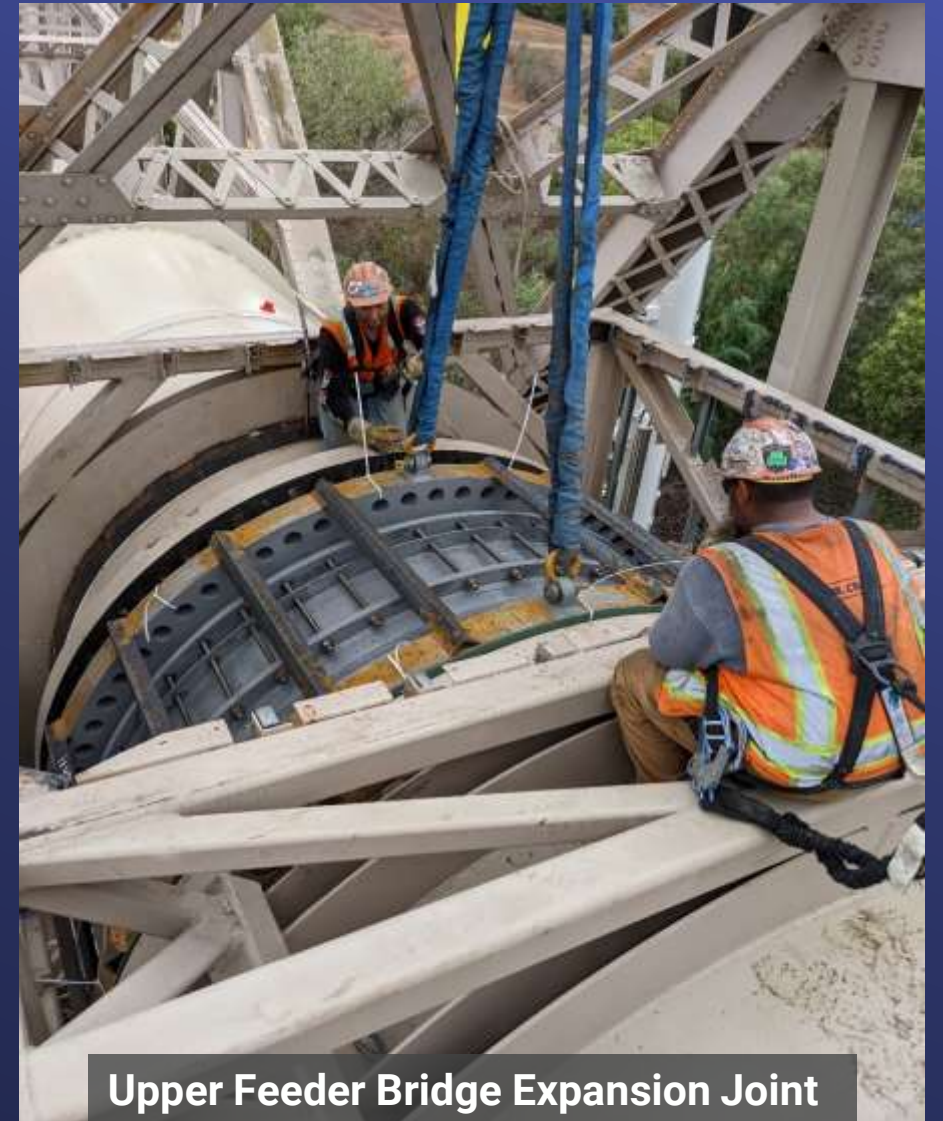
Inspection Team Preparing for Entry

- Engineering inspections
- Structural and corrosion, typically



PCCP Pipeline Inspection

Corrective Work Completed During Shutdowns



Capital Improvement Work Completed During Shutdowns

Valve Installation at Wadsworth Bypass



Tie-in at Rialto Pipeline



Tee Installation at Badlands Surge Tower



Making it Happen, Together



San Diego Canal Inspection

