



Engineering, Operations, & Technology Committee

Garvey Reservoir Update

Item 6c

April 7, 2025

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Garvey Reservoir Update

Subject

Update on Garvey Reservoir

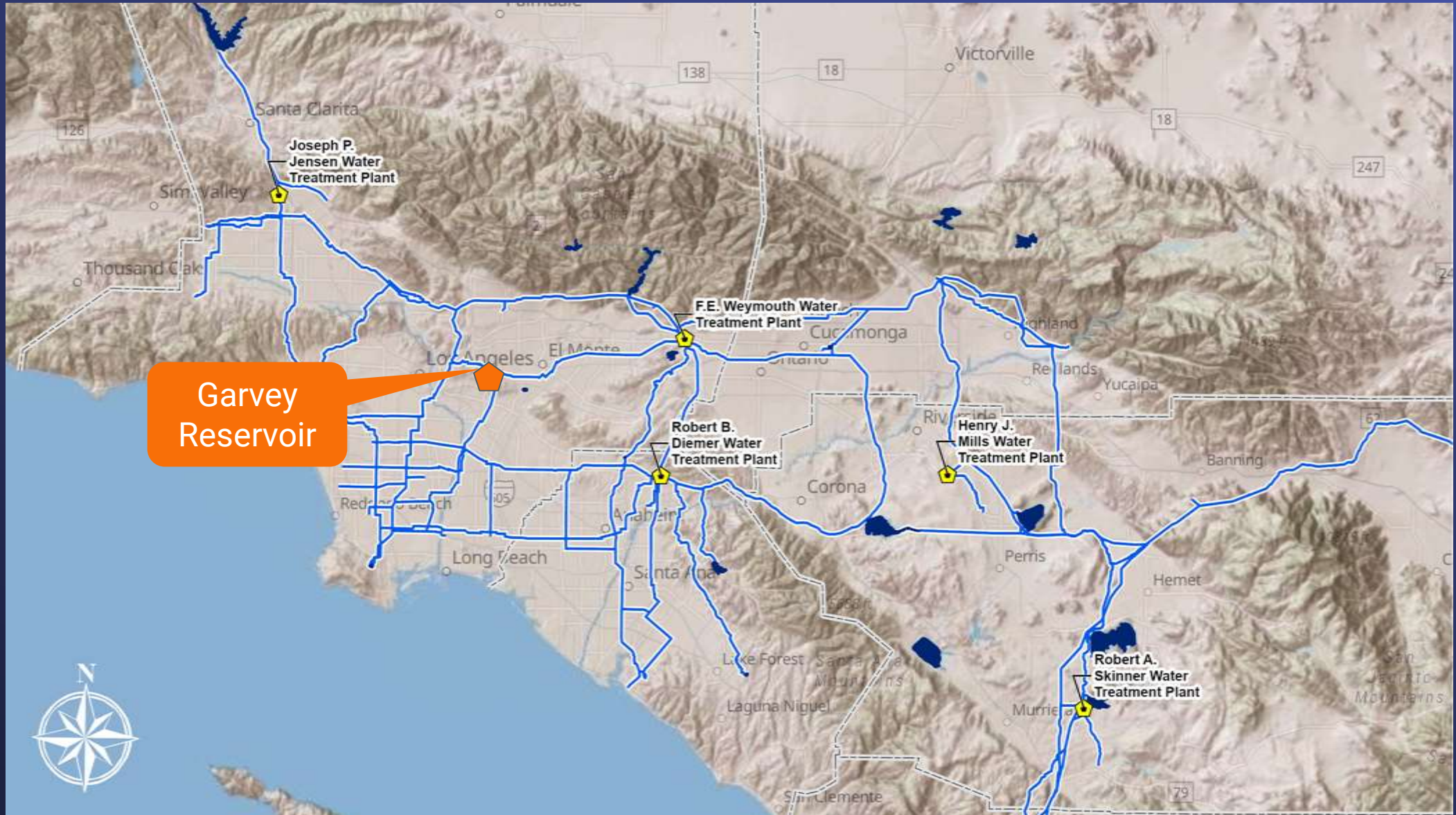
Purpose

Provide briefing on the status of Garvey Reservoir

Next Steps

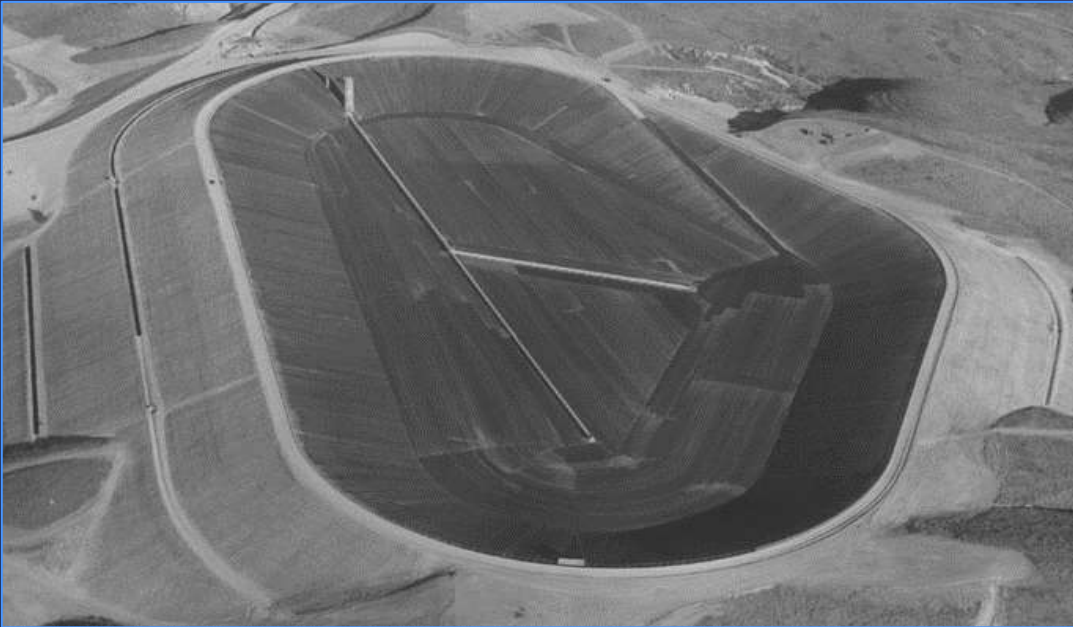
Continue to operate the reservoir in bypass mode and look for options to expedite the CIP project

Location Map



Background

- Constructed in 1954
- Originally covered in 1984
- Replacement cover in 1999
- Capacity of 1,600 AF



Garvey Reservoir 1954 (Uncovered)



Garvey Reservoir 1984 (Covered)

Maintenance Activities

- Cover inspections
- Cover cleaning
- Repairs
- Cover deterioration & leakage
- Recent increased repairs
- Safety concerns



Cover Leakage

Current Cover Condition

- September 2024 cover tear
 - 150-foot tear
 - Repaired by Met forces
- March 2025 cover tear
 - 200-foot tear
 - Deemed unrepairable
- Reservoir taken out of service



Cover Repair Sept 2024



Cover Failure March 2025

Garvey Reservoir Operations – In Service

Operational Benefits

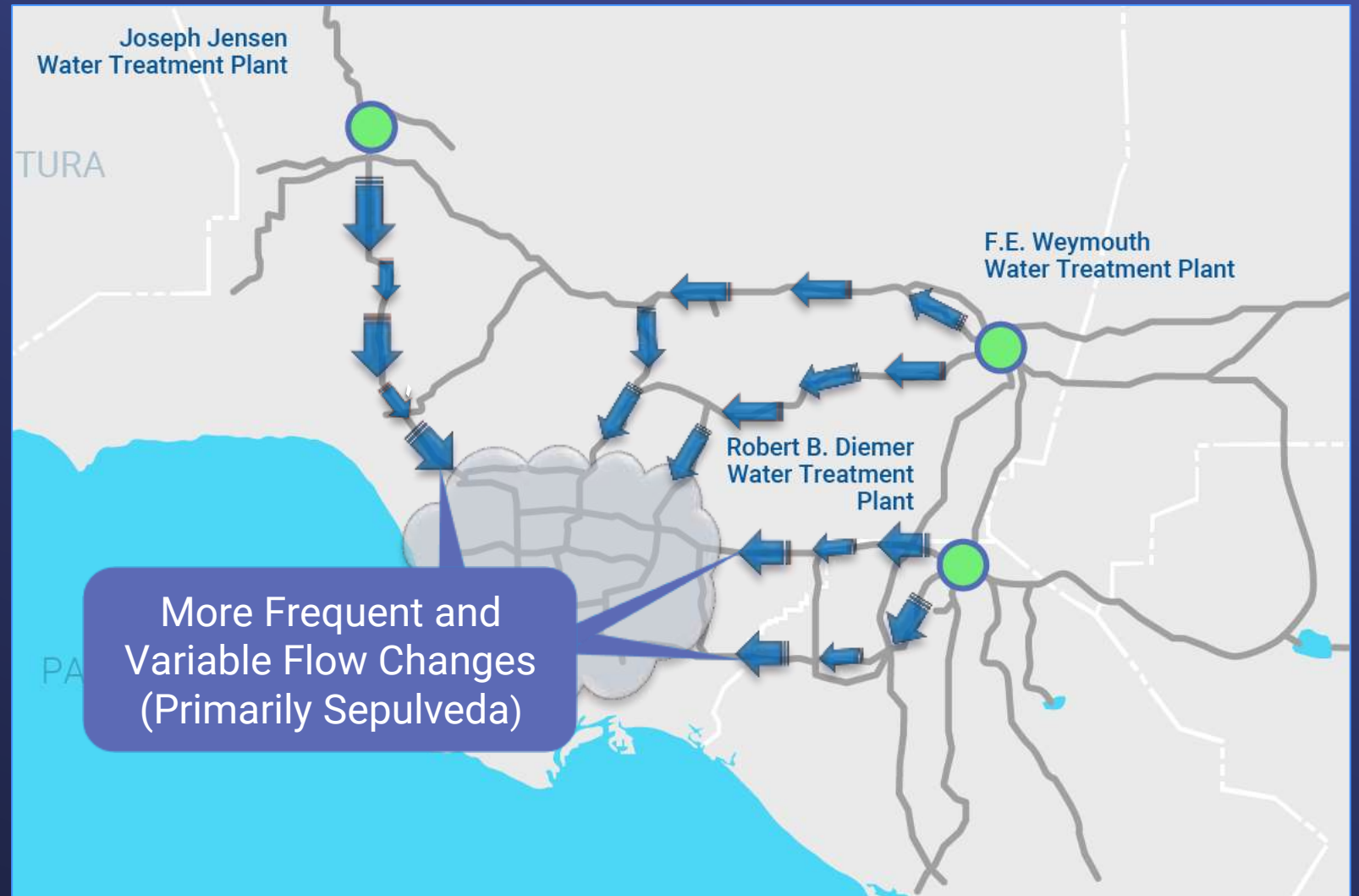
- Operational buffer in the distribution system
- Minimizes flow changes at treatment plants (limited storage at plants)
- Flexibility during drought operations



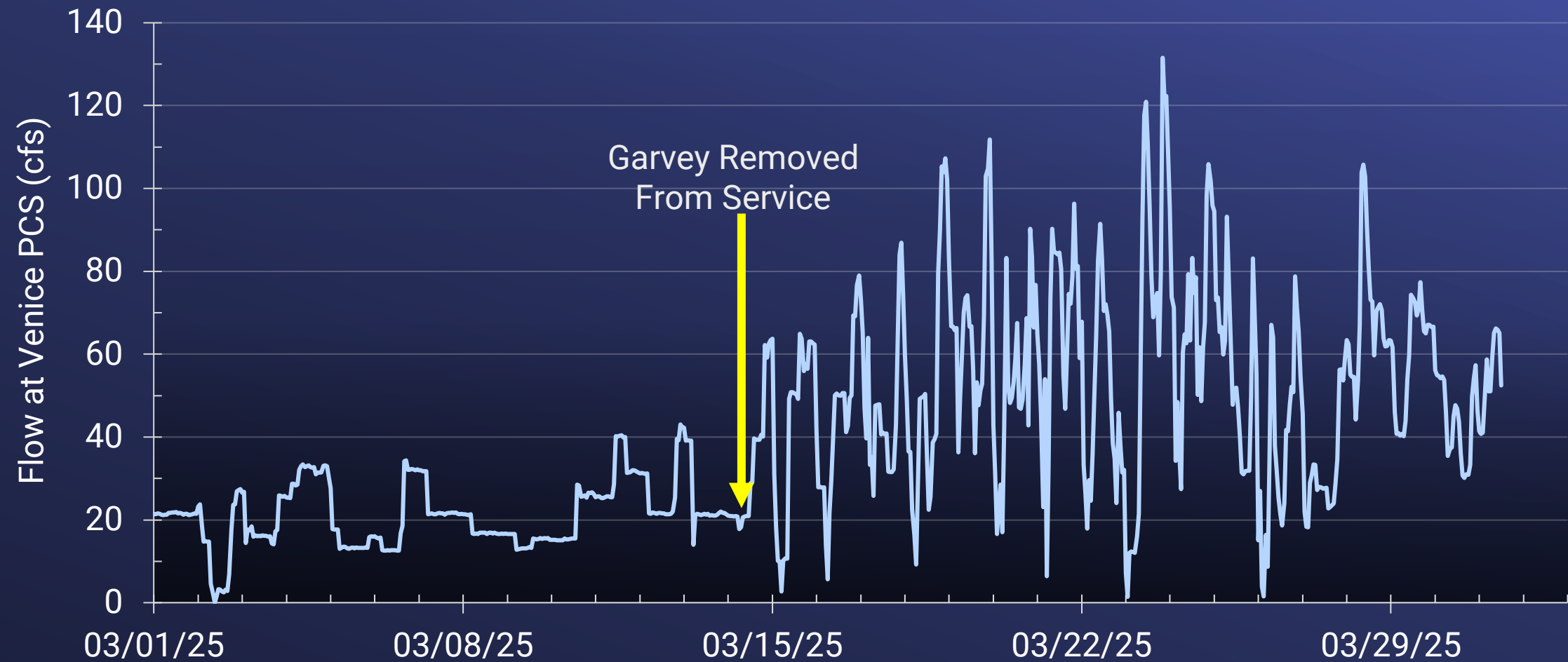
Garvey Reservoir Operations – Out-of-Service

Operational Impacts

- More frequent flow changes select feeders
- More reliant on treatment plant's smaller reservoirs
- More challenges during drought operations



Higher Flow Fluctuation on Distribution System



Garvey Reservoir – Rehabilitation Scope



Status of CIP Project

- Scope of work
 - Replace floating cover & liner
 - Strengthen outlet tower
 - Replace junction structure valves
 - Improve security systems
- Project status
 - EIR certified Nov. 2024
 - Final design 70 percent complete
 - Requires Division of Safety of Dams (DSOD) permit



Garvey Reservoir Outlet Tower

Actions to Accelerate Project

Actions Taken

- Moved up constructability review (CR) by five weeks
- Expedited 90 percent final design submittal
- Started DSOD permit process early

Further Actions for Consideration

- Prepare a demolition contract
- Prepare procurement contract for liner
- Advertise bid package before final approval from DSOD
- Use alternative build contracting



Garvey Reservoir

Project Schedule

