



Palos Verdes Feeder & Middle Feeder Valve Replacements

Engineering & Operations Committee

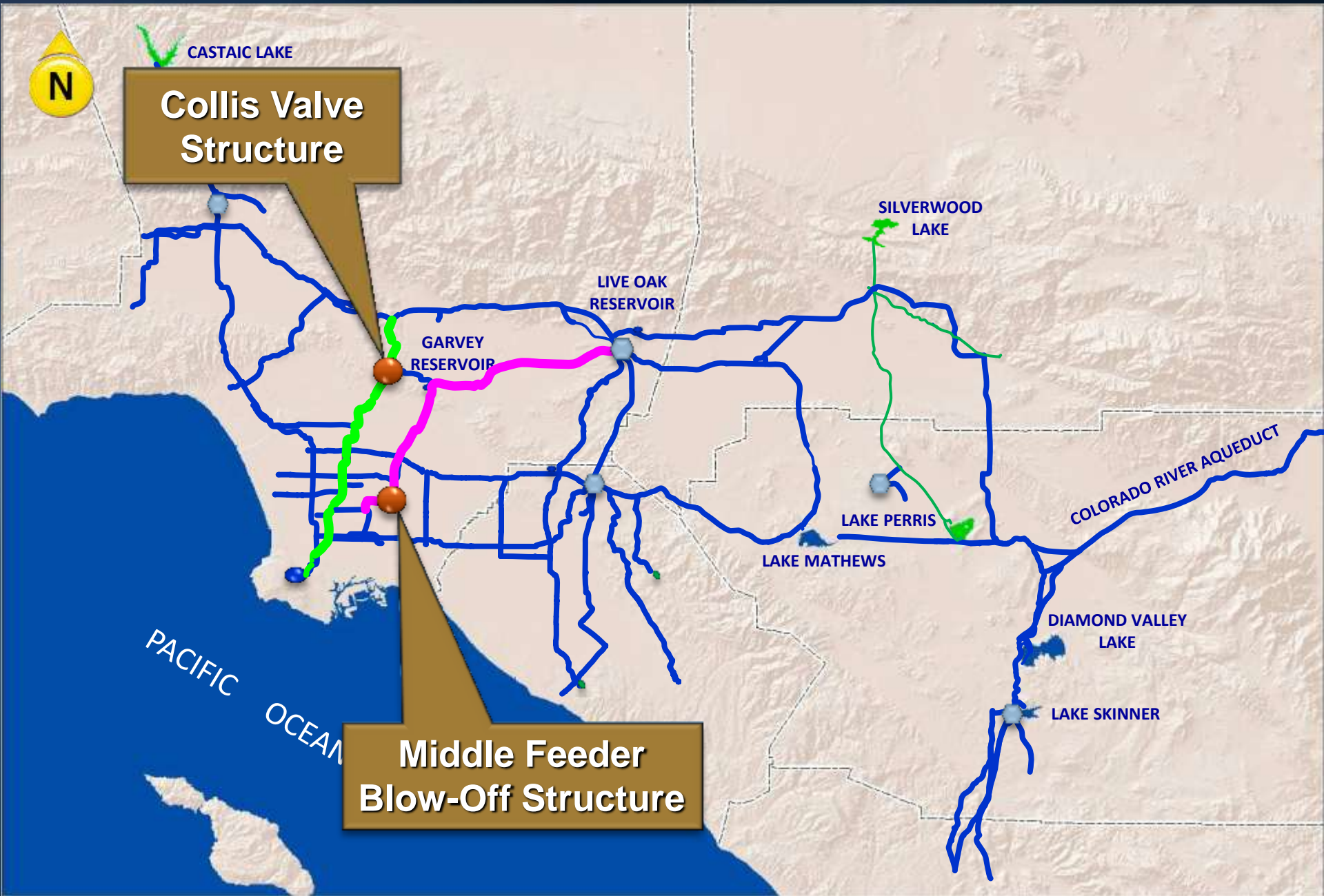
Item 7-1

November 17, 2014

Current Action

- Appropriate \$1.58 M
- Authorize design & procurement to replace valves on the Palos Verdes Feeder & the Middle Feeder

Distribution System

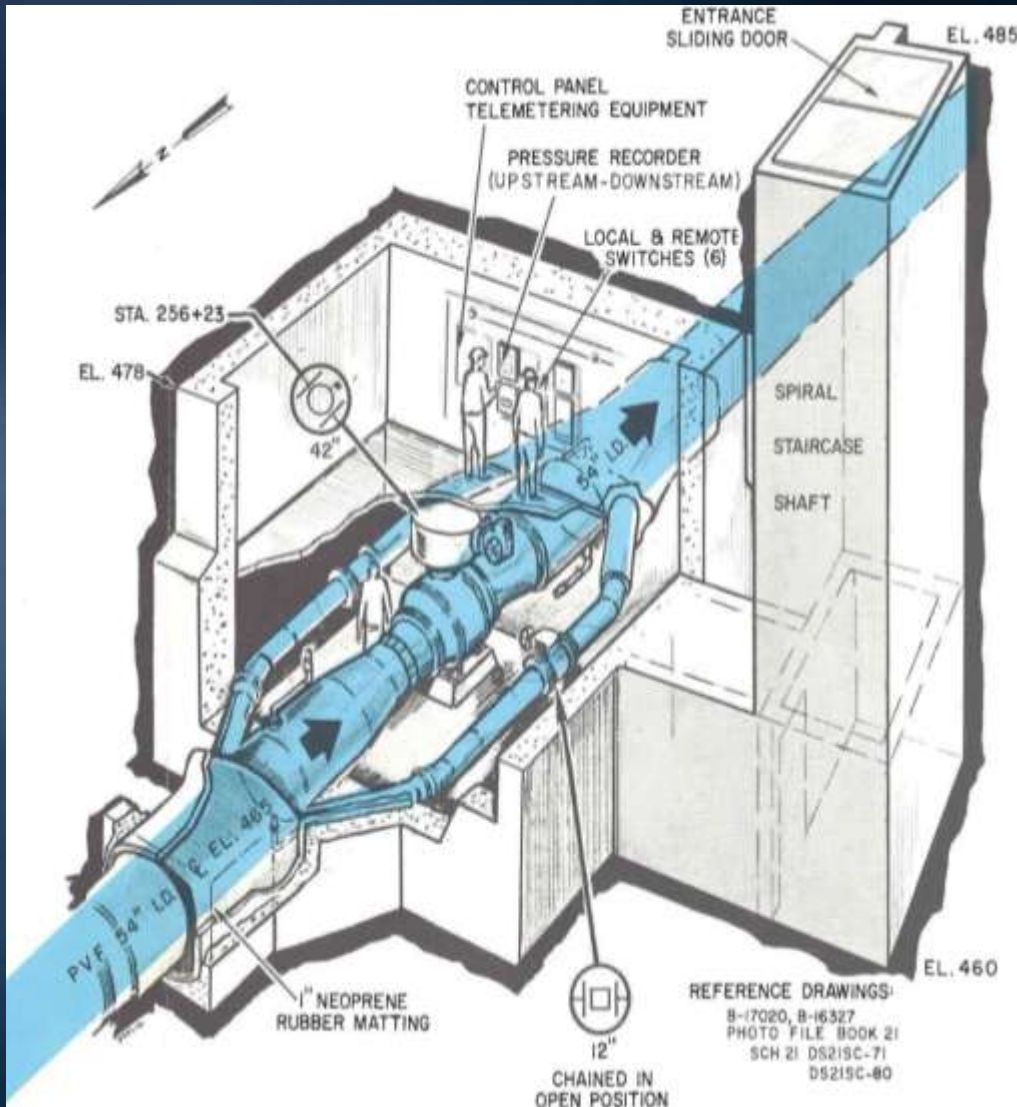


1. Collis Valve Structure

- Constructed in 1962
- Controls flow in the Palos Verdes Feeder
 - 42-inch main spherical valve throttles flow
 - Two 12-inch bypass valves used for low flow
- Spherical valve has difficulty opening & closing, frequently freezes in position
 - Spherical valves not designed for throttling
- Failure of the main valve would affect treated water deliveries from the Weymouth plant into the Central Pool

1. Collis Valve Structure

- 24' by 16' underground vault with limited access
- Roof needs to be removed & replaced
- Located at intersection of Huntington Drive & Collis Avenue



1. Collis Valve Structure



42-inch Spherical Valve



Bypass Line

● Project Scope

- Remove existing valves, piping, & eqpt.
- Install new 42-inch multi-orifice valve & piping
- Install new bypass lines with plunger valves, butterfly valves & piping
- Excavate & remove roof; traffic control

1. Collis Valve Structure

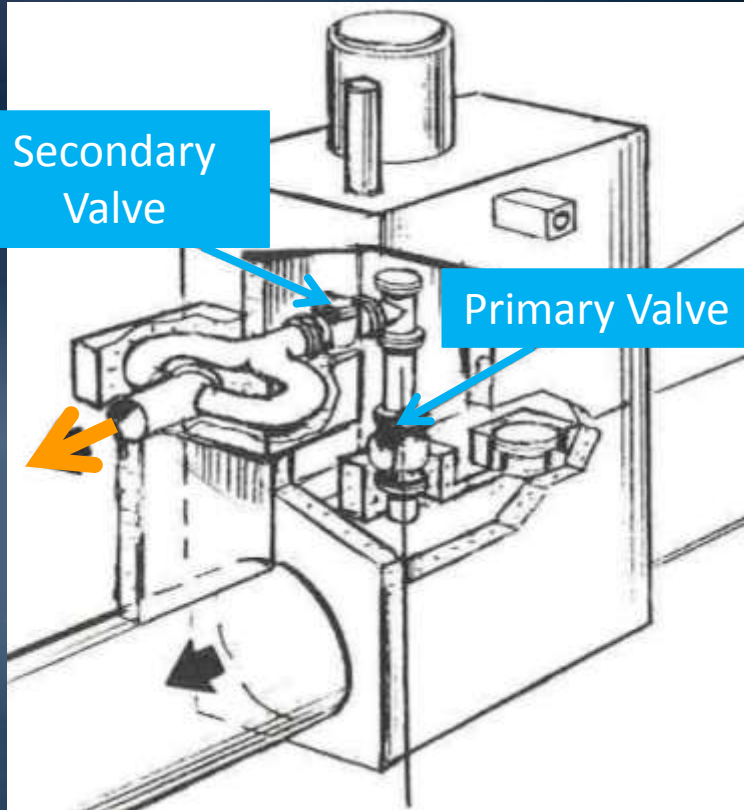
Scope of Work

- Design
 - Preparation of plans & specifications
 - Receipt of bids
 - Local agency permitting
 - Shutdown planning with member agencies
- Procurement & Fabrication
 - Procurement of 7 valves
 - Valve factory inspection
 - Fabrication of piping
- All activities by Metropolitan staff

2. Middle Feeder Blow-Off Structure

- Constructed in 1953
- Used to dewater Middle Feeder during shutdowns for maintenance & repairs
- Primary valve has difficulty opening & closing
- Secondary valve is frozen in open position
- Failure of the valves could result in unplanned discharge of water into adjacent drainage area, or an extended shutdown to dewater the feeder

2. Middle Feeder Blow-Off Structure



- 11' by 8' underground vault with limited access
- Roof needs to be removed & replaced
- Located within Greenleaf Blvd, east of Alameda Street



2. Middle Feeder Blow-Off Structure



Primary Valve



Secondary Valve

● Project Scope

- Replace existing 12-inch lubricated plug valves & piping
- Excavate & remove roof; traffic control

2. Middle Feeder Blow-Off Structure

Scope of Work

- Design
 - Field survey
 - Preparation of plans & specifications
 - Receipt of bids
 - Local agency permitting
 - Shutdown planning with member agencies
- Valve procurement & inspection
- All activities by Metropolitan staff

Requested Funds

	1. Collis Valve Structure	2. Middle Fdr Blow-Off Structure
Labor		
Design	\$ 264,000	\$ 120,000
Permitting, Bidding & PM	94,000	66,000
Inspection & Support	32,000	26,000
Contracts	693,000	100,000
Remaining Budget	147,000	38,000
Total Project Cost	\$ 1,230,000	\$ 350,000

Total Requested Funds

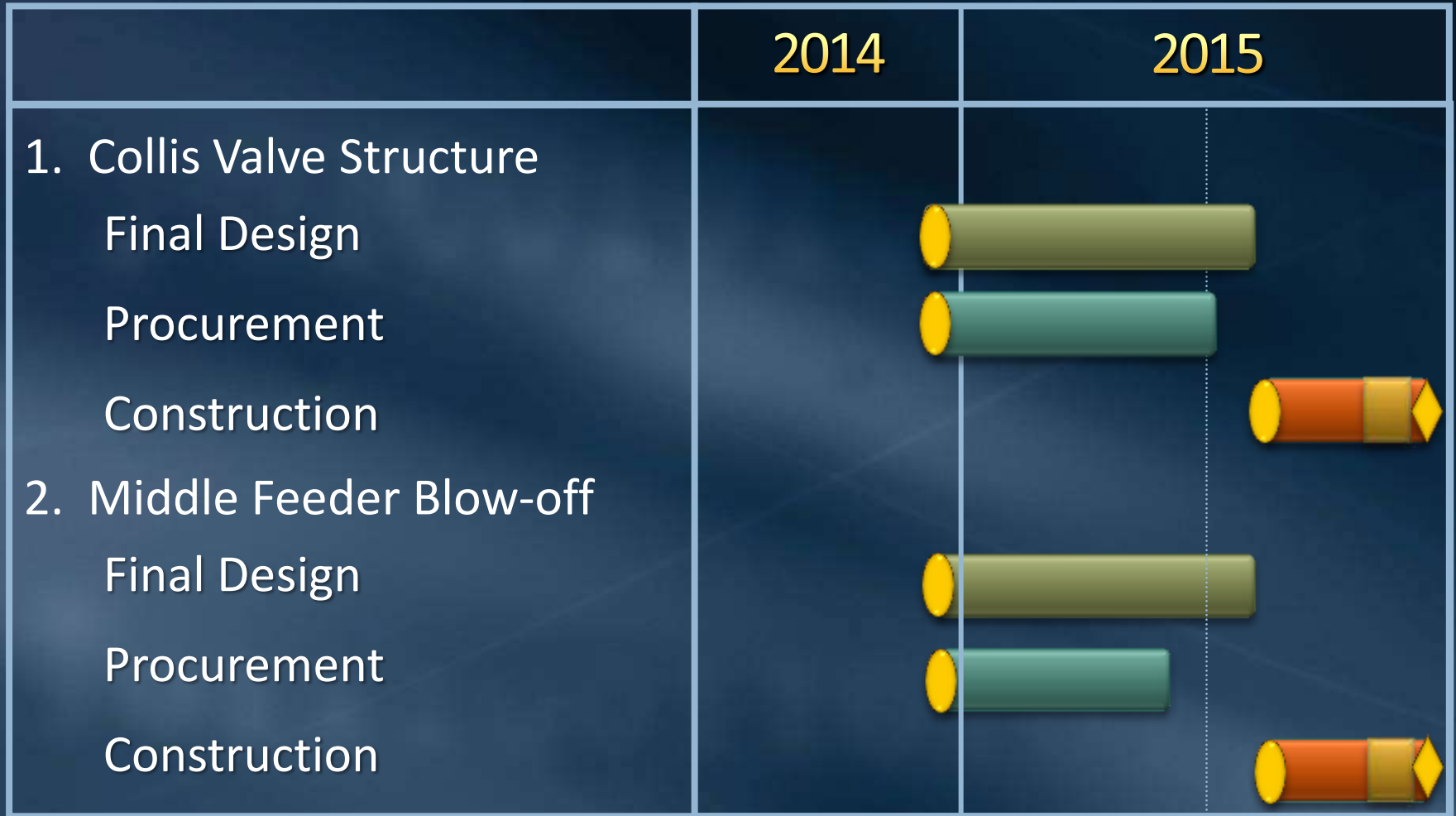
\$1,580,000

Estimated Construction Cost:

\$2M to \$2.3M

\$850K to \$1.05M

Schedule



Board Options

- Option #1

- Adopt CEQA determination that this action is categorically exempt
- Appropriate \$1.58 M
- Authorize design & procurement to replace valves on the Palos Verdes Feeder & Middle Feeder

- Option #2

- Do not proceed with the project at this time

Staff Recommendation

- Option #1

