



# Seismic Assessment of Four Hydroelectric Power Plants & Pressure Control Structures

Engineering & Operations Committee

Item 7-1

March 11, 2013

# Current Action

- Appropriate \$800,000
- Authorize seismic assessments of:
  1. Sepulveda Canyon Control Facility
  2. Foothill & Greg Avenue Hydroelectric Plants & Carbon Creek Pressure Control Structure

# Distribution System



# Background

- Facilities Control Pressure & Flow
  - Hydroelectric Plants built as turnkey in 1970s
  - Annual revenues up to \$4.7M
- Seismic Deficiencies
  - Exterior wall & columns
  - Roof connections
  - Liquefiable soil at Sepulveda Canyon Control Facility

Foothill



Sepulveda

# 1. Sepulveda Canyon Control Facility

- Planned Structural Assessment
  - Perform Structural analyses
  - Develop retrofit options
  - Structural evaluation by Metropolitan staff

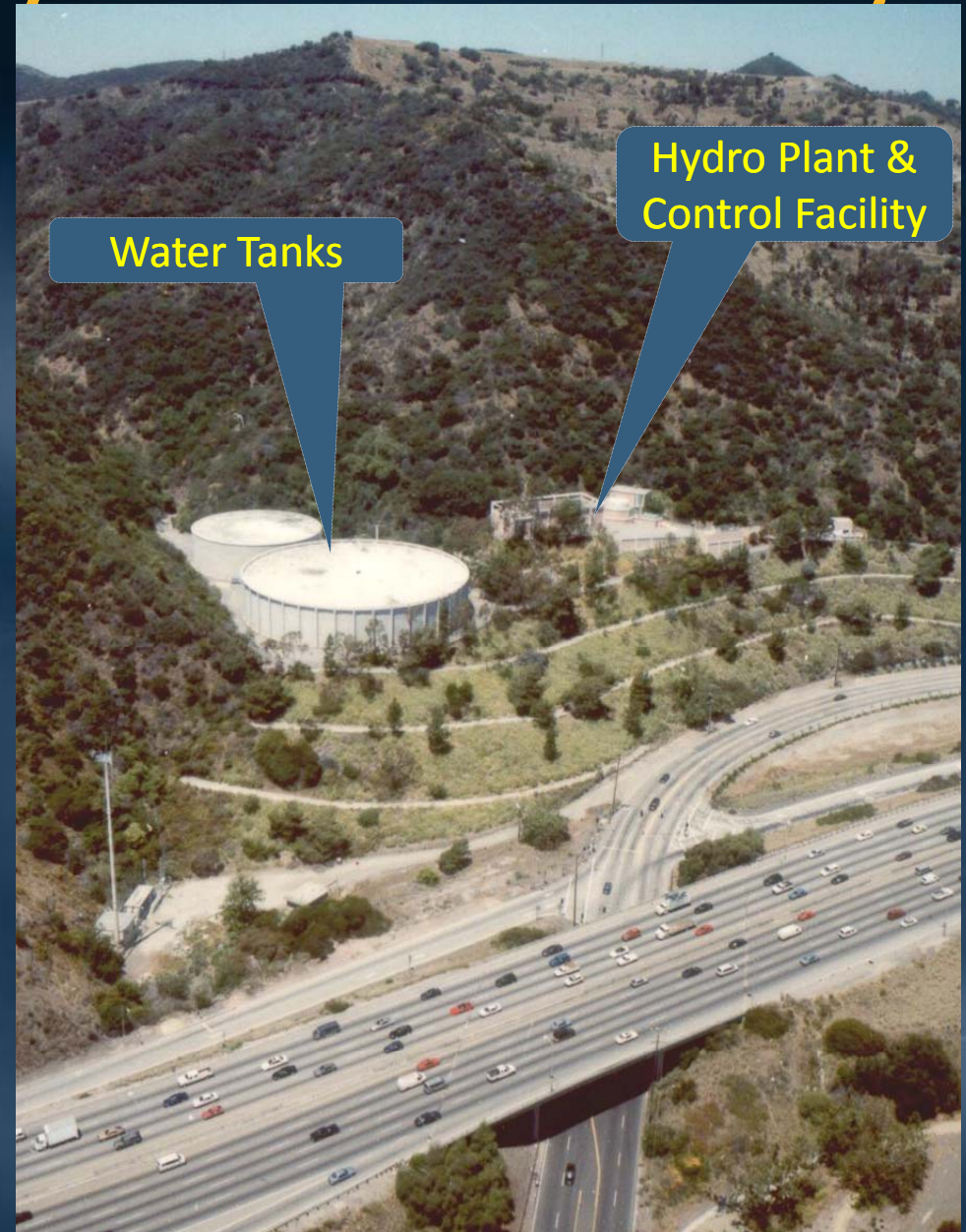
Hydroelectric Plant



Control Structure

# 1. Sepulveda Canyon Control Facility

- Planned Geotechnical Activities
  - Test borings
  - Liquefaction analyses
  - Slope deformation analyses
  - Assess slope remediation options
  - Geotechnical activities by URS



## 2. Foothill, Greg Ave, & Carbon Creek

- Planned Structural Assessments
  - Perform Structural analyses
  - Develop retrofit options
  - Structural evaluation by Metropolitan staff

Greg Avenue



Carbon Creek



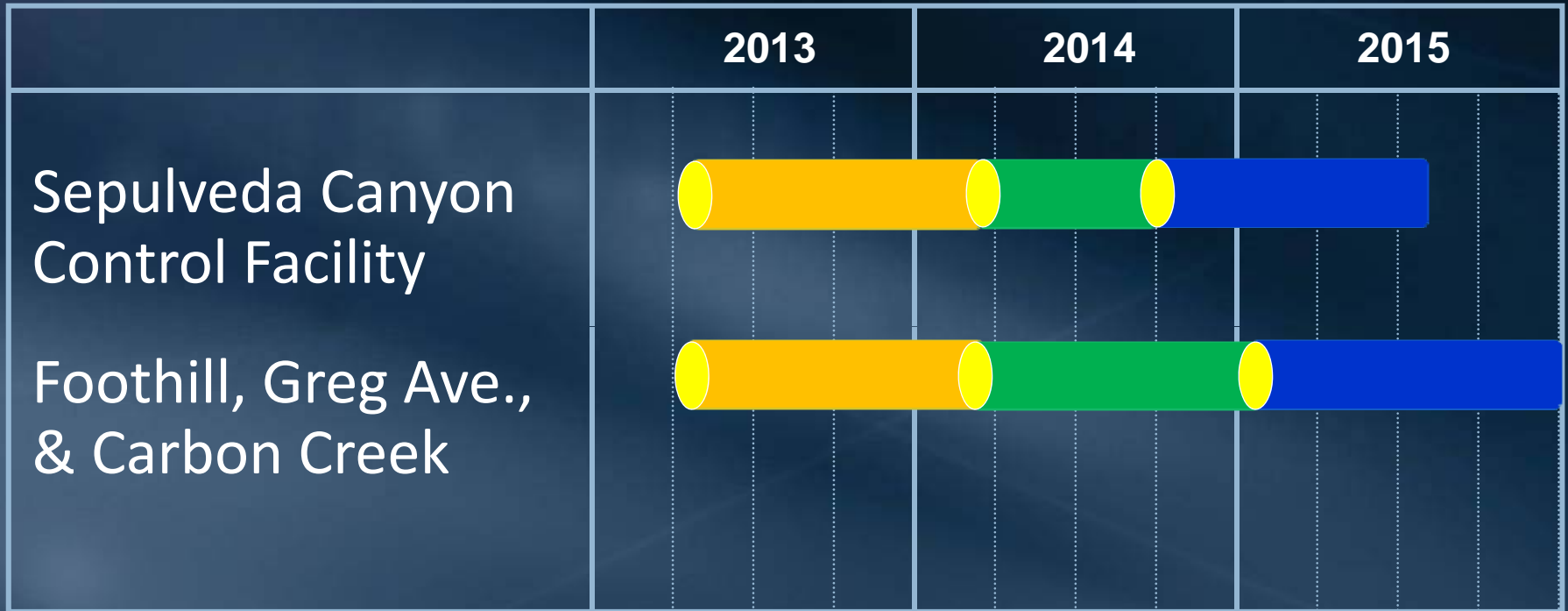
# Requested Funds

	Sepulveda Canyon	Foothill, Greg Ave, Carbon Creek
Labor		
Proj. mgmt, field survey, env. doc.	\$ 65,000	\$ 55,000
Seismic assessment	100,000	270,000
Professional Services - Geotechnical	245,000	-
Remaining Budget	30,000	35,000
<b>Total</b>	<b>\$ 440,000</b>	<b>\$ 360,000</b>

**TOTAL REQUESTED: \$800,000**



# Schedule



 Seismic Assessment

 Preliminary Design

 Board Action

 Final Design

# Board Options

- Option #1

- Adopt CEQA determination
- Appropriate \$800,000
- Authorize seismic assessments of the Sepulveda Canyon Control Facility, Foothill & Greg Ave. Hydroelectric Plants & Carbon Creek Pressure Control Structure

- Option #2

- Do not authorize the seismic assessment at this time

# Staff Recommendation

- Option #1