



Distribution System Rehabilitation Projects

Authorize 4 Distribution System Rehabilitation
Projects

Engineering and Operations Committee

Item 7-2

June 7, 2010

Current Action

- Appropriate \$420,000 in budgeted funds
- Authorize preliminary design of stray current drain stations for Allen McColloch Pipeline, Sepulveda Feeder, and Second Lower Feeder
- Authorize final design of a stray current drain station for Calabasas Feeder

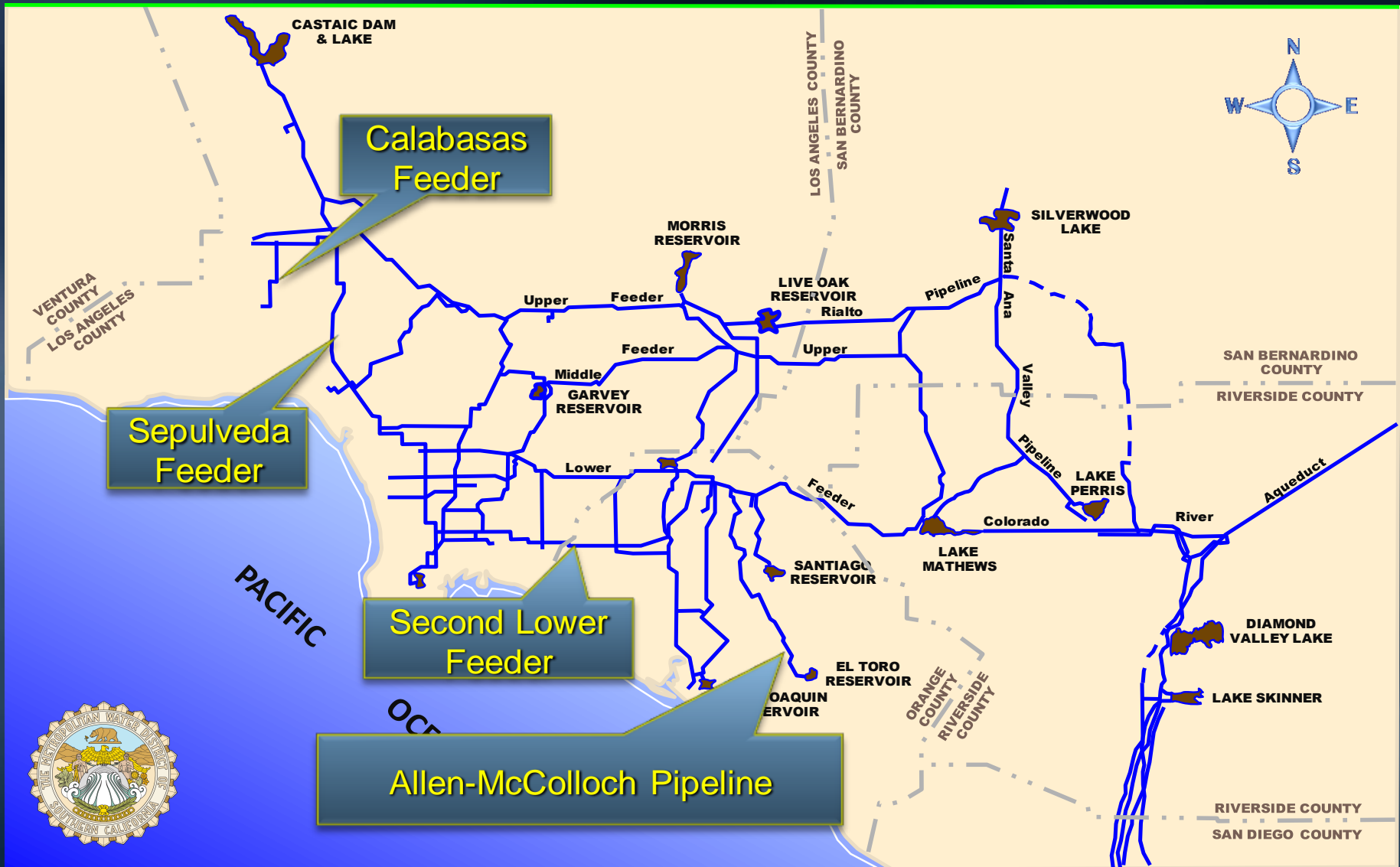


LEGEND

- Freeways
- Steel Pipe
- Prestressed Pipe
- Reinforced Concrete Pipe
- Other
- Canals

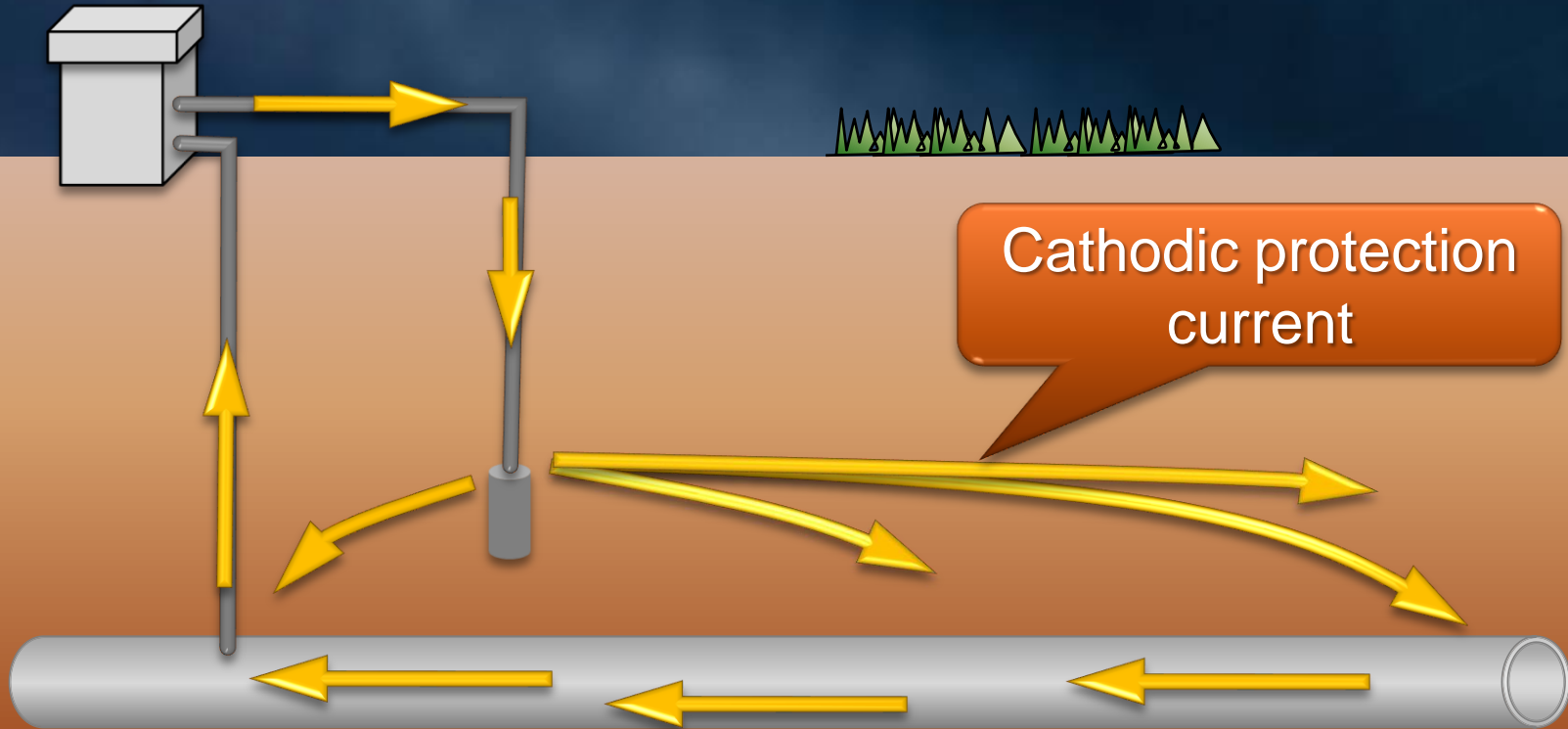
NOTE: Dashed lines indicate tunnels

Proposed Stray Current Drain Station Projects



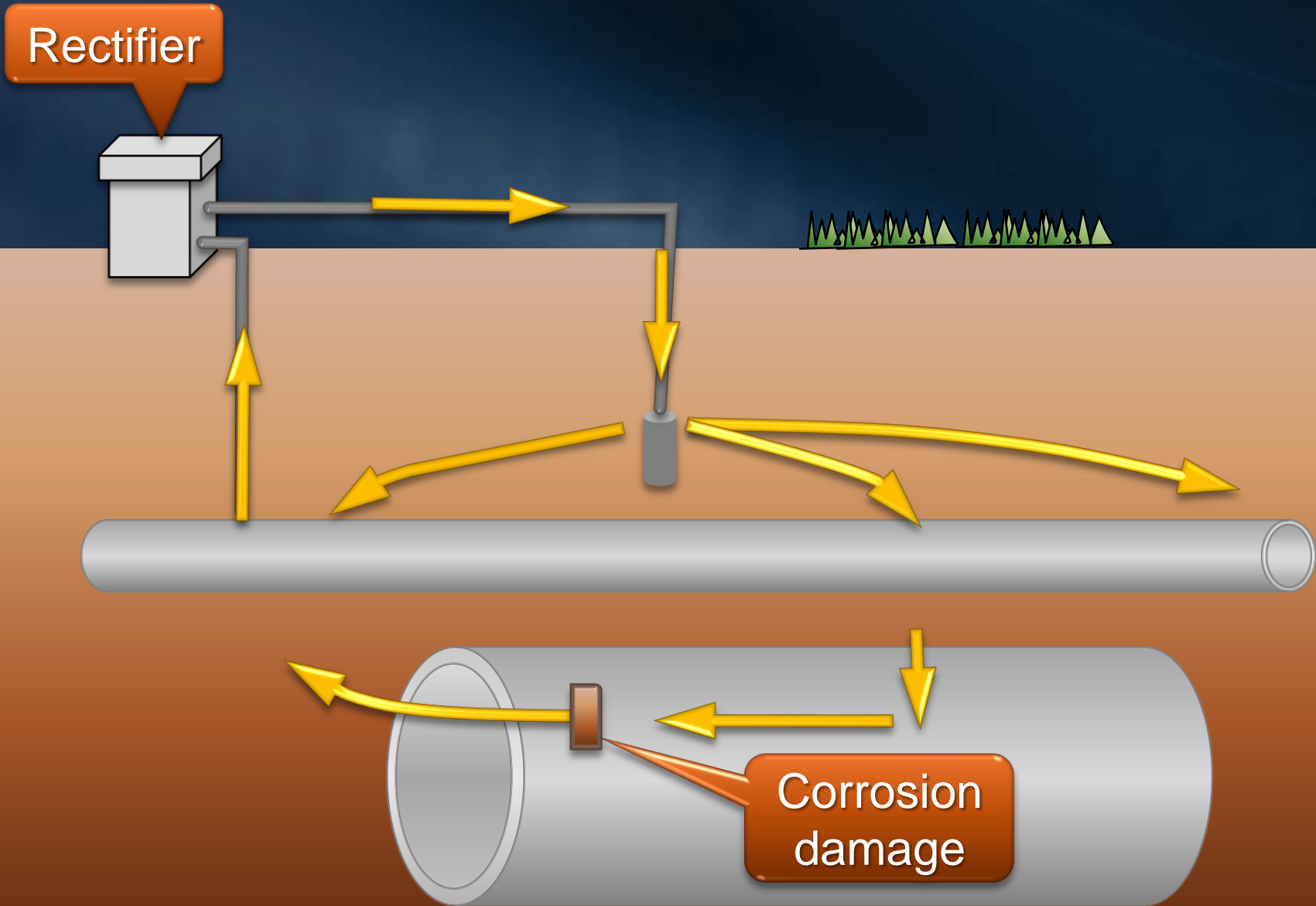
Cathodic Protection Adjacent Pipeline

Rectifier



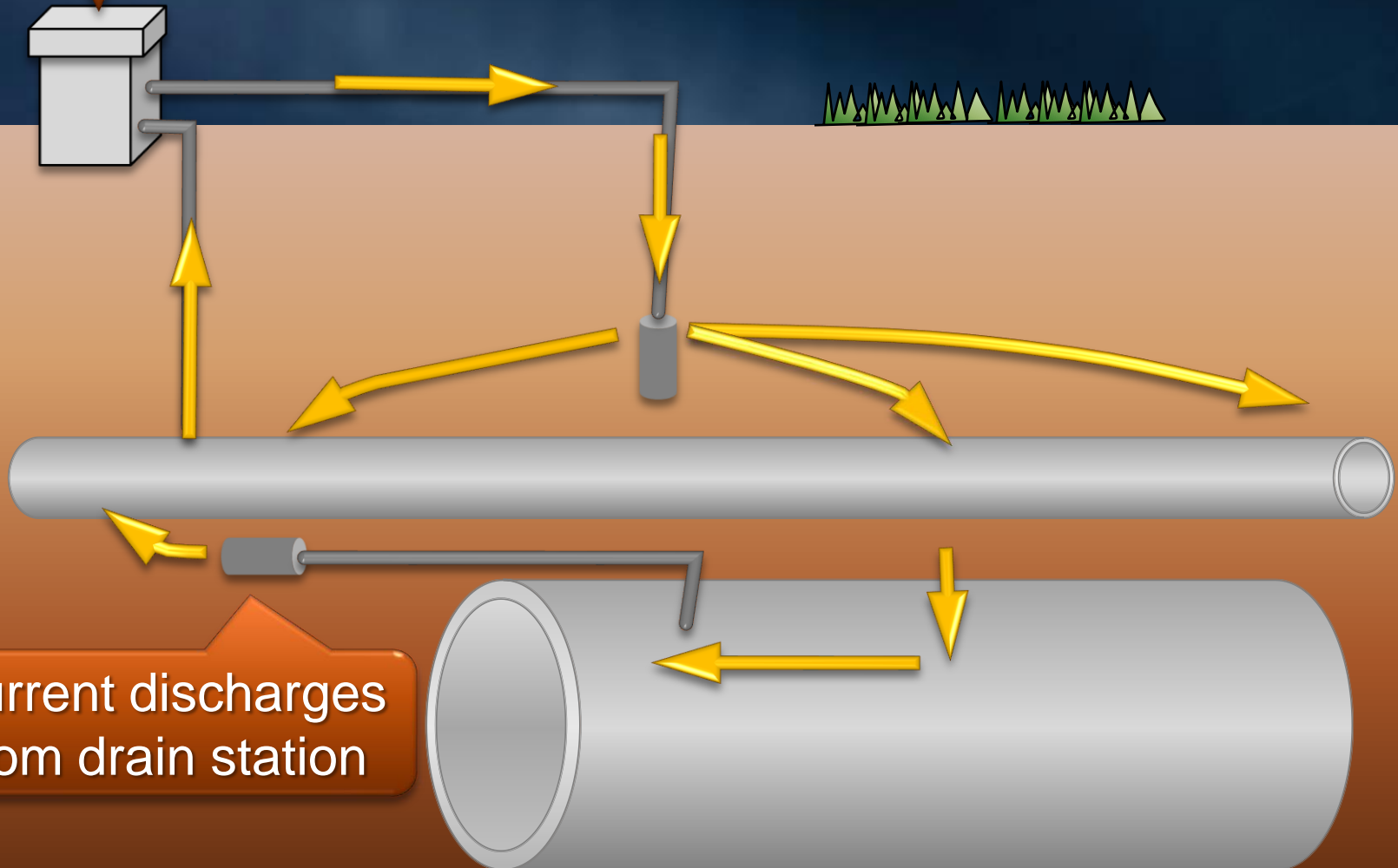
Cathodic protection current

Damage Caused by Stray Current Interference



Installation of Drain Station

Rectifier



Current discharges from drain station

Stray Current Anodes



Anodes

Drilling Anode Well



Anode well

Scope of Work for 4 Stray Current Drain Station Projects

- Allen Mc-Colloch Pipeline
 - 18 new current drain stations
- Sepulveda Feeder
 - 12 new drain stations, replacement of 24 drain stations
- Second Lower Feeder
 - 10 new drain stations, replacement of 33 drain stations
- Calabasas Feeder
 - One current drain station

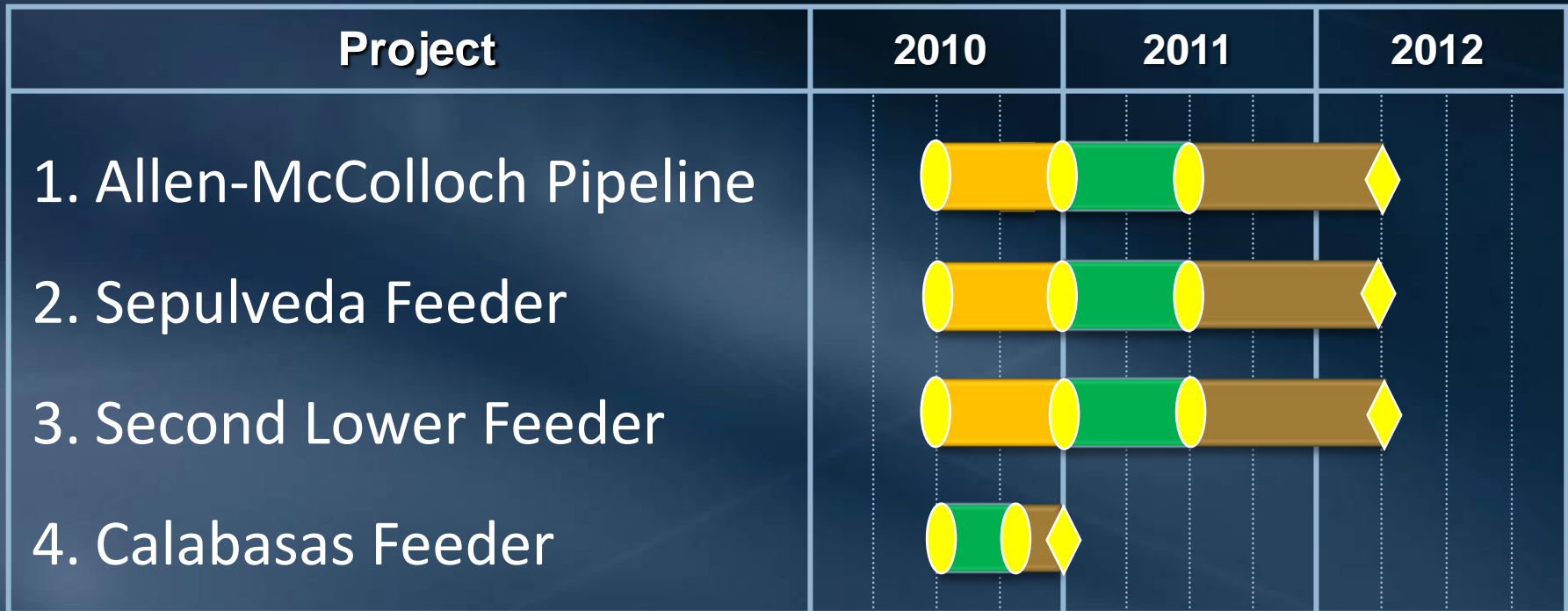
Design for 4 Stray Current Drain Station Projects

- Preliminary Design Phase Activities (3 projects)
 - Field measurements and technical analyses, site surveys, preparation of preliminary design report and environ. docs, and permitting
- Final Design Phase Activities (1 project)
 - Engineering design, preparation of drawings and specifications, receipt of competitive bids, development of construction cost estimate

Requested Funds

	Prelim. Design AMP, SLF, SEP	Final Design Calabasas
Preliminary Design	\$ 227,250	\$ 0
Final Design	0	14,250
Owners Costs	105,500	13,100
Metropolitan Force Construction	0	5,900
Materials & Incidentals	5,5000	5,000
Remaining Budget	36,750	6,750
Total	\$ 375,000	\$45,000

Schedule



 Study/Prelim. Design

 Construction

 Completion of Construction

 Final Design

 Board Action

Board Options

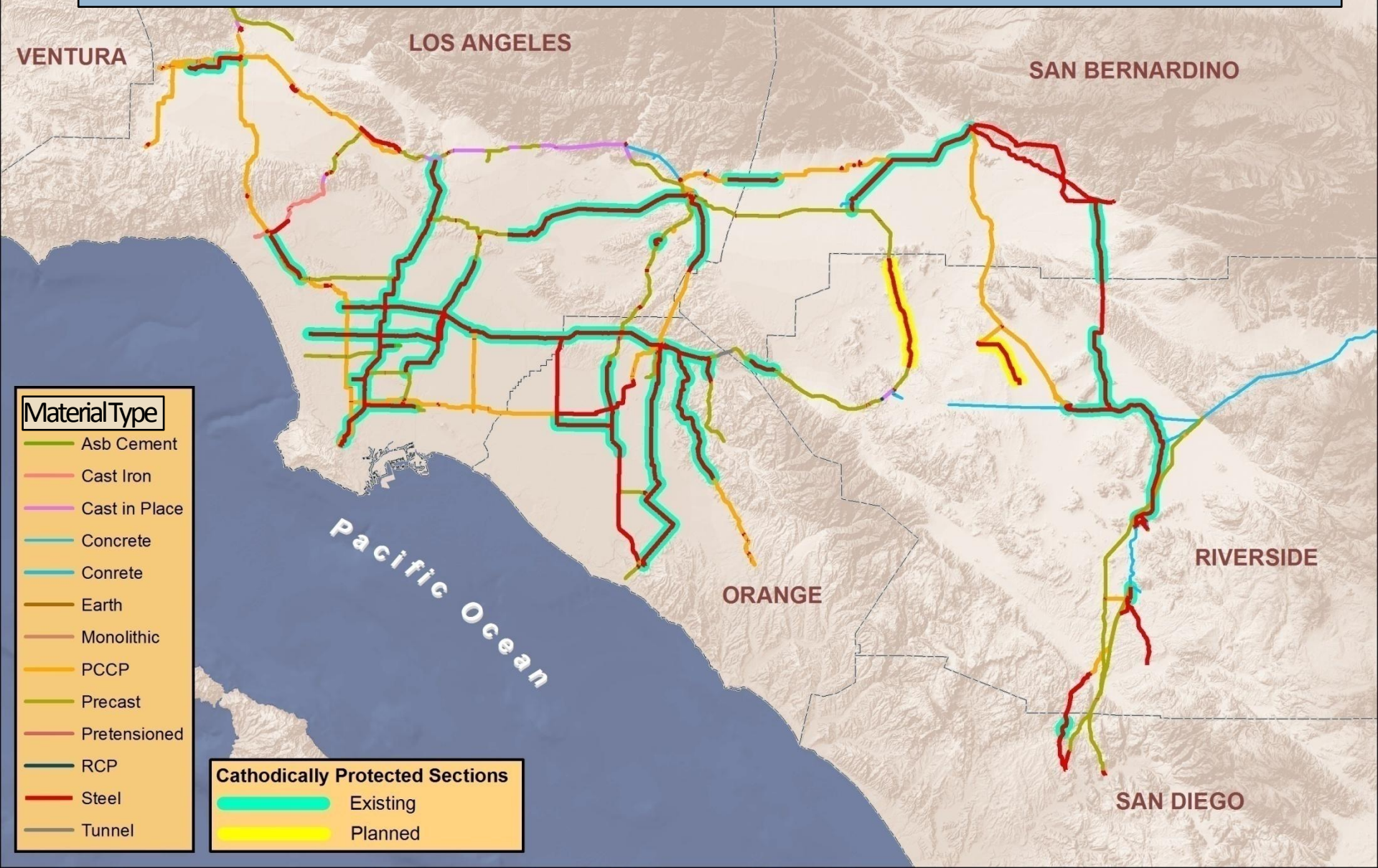
- Option #1
 - Adopt CEQA determination
 - Appropriate \$420,000 in budgeted funds
 - Authorize preliminary design of stray current drain stations for AMP, Sepulveda Feeder, and Second Lower Feeder
 - Authorize final design of a Stray Current Drain Station for Calabasas Feeder
- Option #2
 - Do not authorize the stray current drain station projects at this time

Staff Recommendation

- Option #1



Metropolitan Cathodically Protected Pipelines Impressed Current



Metropolitan Cathodically Protected Pipelines Current Drain Stations



Stray Current Interference

