



Whitewater Siphons Erosion Protection

Engineering & Operations Committee

Item 7-6

March 11, 2013

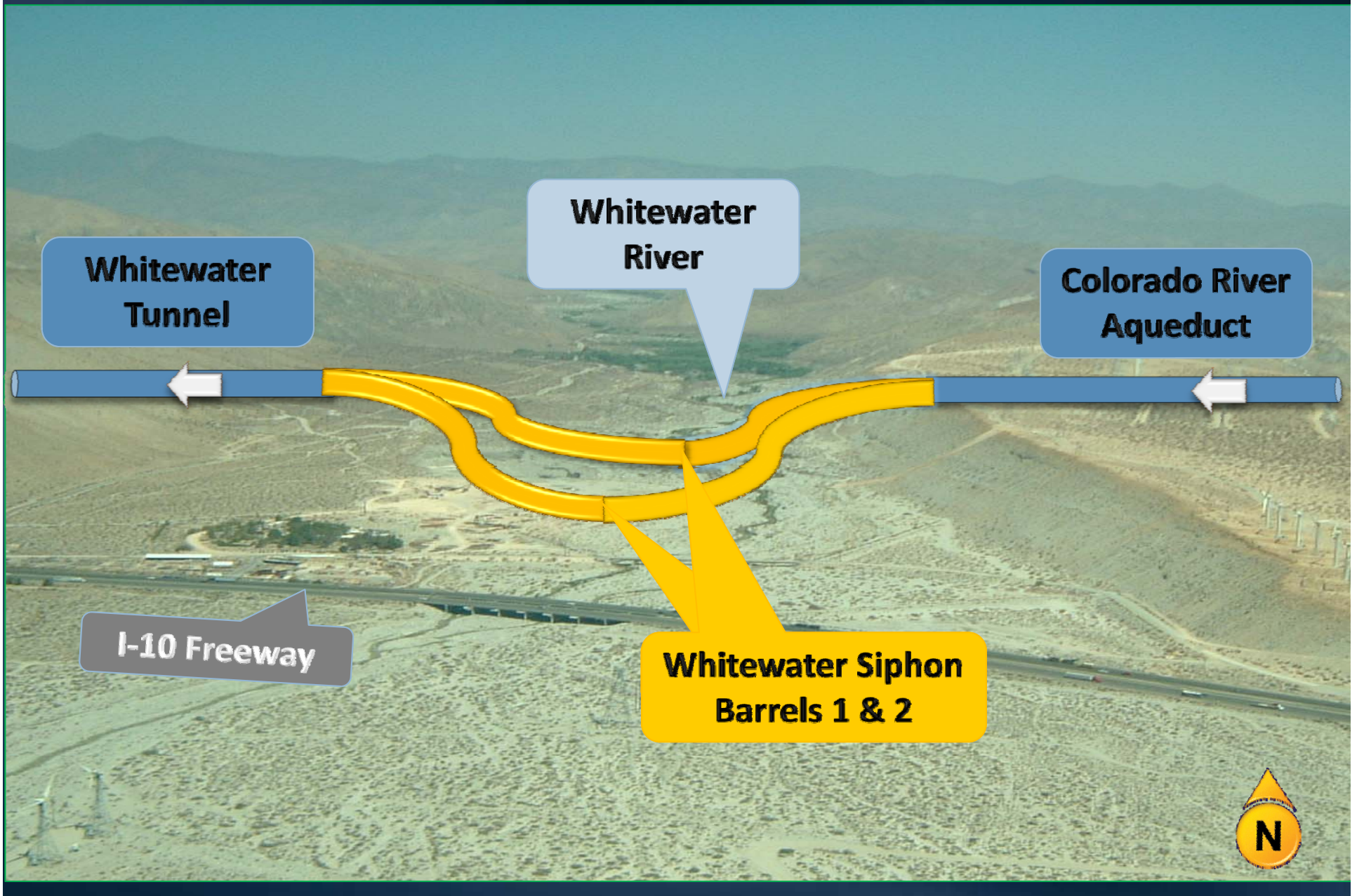
Current Action

- Appropriate \$580,000
- Authorize final design of erosion protection measures for the Colorado River Aqueduct Whitewater Siphons
- Authorize environmental permitting activities

Location Map

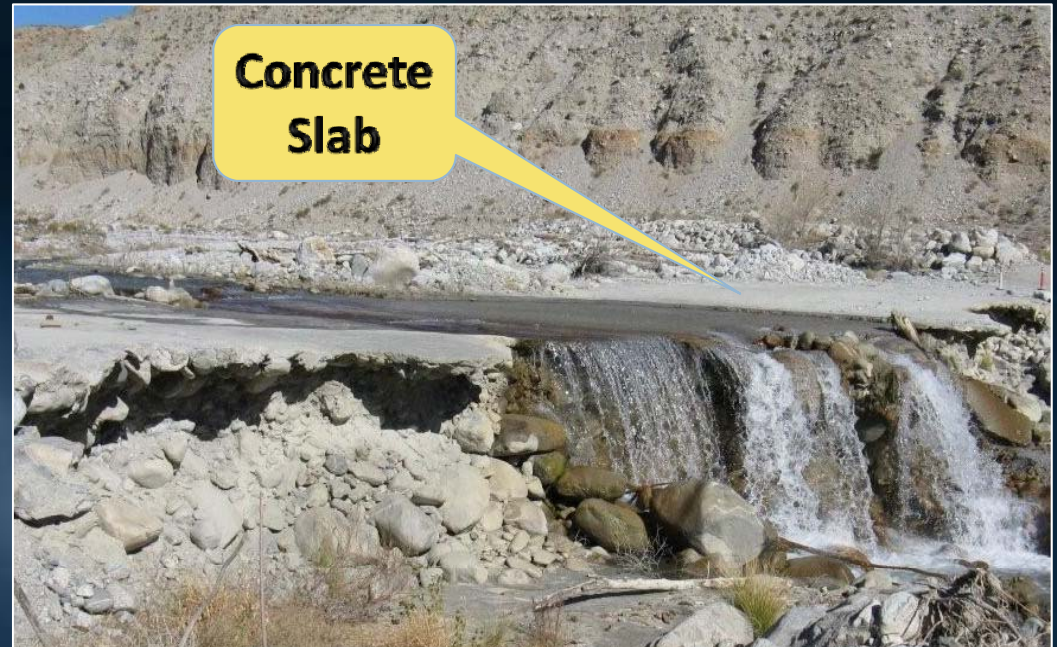


Background



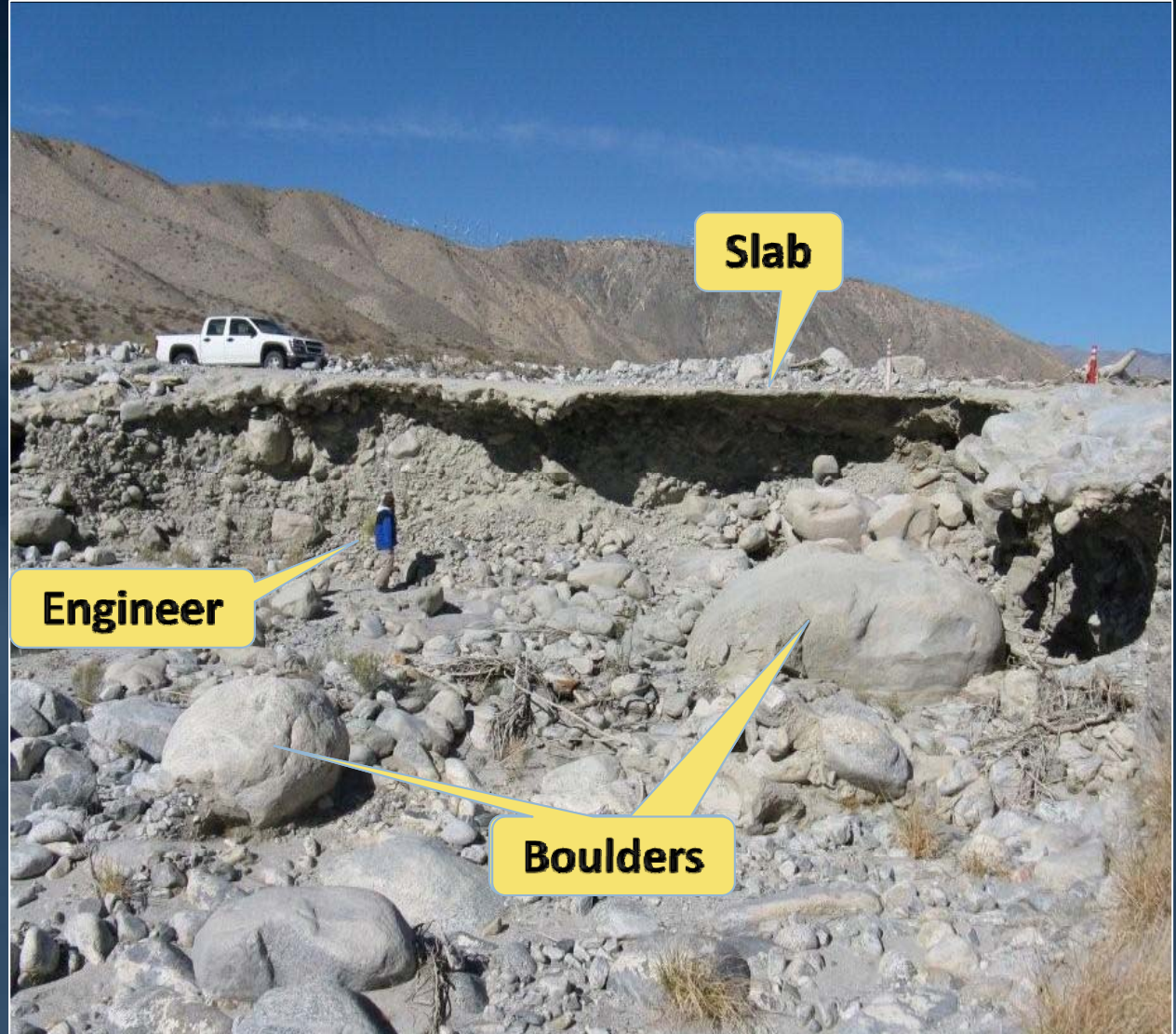
Background

- Whitewater Siphons constructed in phases
 - Barrel #1 – 1939
 - Barrel #2 – 1950
- 1993 Flood
 - Barrel #2 partially uncovered
 - Emergency Erosion Protection Measures
 - Concrete slab
 - Diversion berm to direct flows



Background

- Current Conditions
 - Erosion downstream of concrete slab
 - Diversion berm unable to handle higher flood flows



Erosion Protection Measures

- Planned Project Scope
 - Backfill eroded area
 - Repair & extend depth of concrete slab
 - Replace diversion berm w/ gabion structure
- Final Design Scope
 - Develop design dwgs
 - Acquire permits
 - Receive competitive bids
 - Work performed by Metropolitan staff



**Gabion
Wall**

Permitting Activities

- CRA Projects in vicinity of Whitewater River
 - Whitewater Siphons Erosion Protection
 - Whitewater Mining Pit Remediation
 - Cabazon Radial Gate Improvements
- Helix Environmental – No action required
 - Prepare permit applications & public notifications
 - Prepare wetland delineation plans
 - Draft Biological Opinion to USFWS
 - Consult w/ regulatory agencies
 - Competitively selected (RFQ 956)
 - SBE Participation level – 18%
 - Amount NTE \$103,000

Requested Funds

Labor

Final Design	\$ 225,000
Bidding, CEQA, PM	63,000
Permit Fees	107,000
Professional Services – Permitting	103,000
Remaining Budget	82,000
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Total	\$ 580,000

Estimated Construction Cost: \$2.2 M to \$2.5 M

Schedule



 Study/Prelim. Design

 Construction

 Completion of Construction

 Final Design

 Board Action

Board Options

- Option #1
 - Adopt CEQA determination
 - Appropriate \$580,000
 - Authorize final design of erosion protection for CRA Whitewater Siphons
 - Authorize environmental permitting activities
- Option #2
 - Do not proceed with project at this time

Staff Recommendation

- Option #1