

WP&S Committee (ORAL REPORT required, hide slide)

Item 6c

Subject: Potential Lake Perris Seepage Recovery Project

Purpose: To provide an update on the Lake Perris Dam Remediation project and to inform the Board of a new potential project at Lake Perris that would involve recovering seepage.

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Summary

Summary: The Lake Perris Dam Remediation project is on-schedule to be complete by the end of 2017. In conjunction with ongoing dam remediation efforts, DWR has initiated a project to design and construct a foundation seepage recovery system at Lake Perris. DWR is currently studying the deep seepage that is occurring at Lake Perris. DWR will be looking to partner with Metropolitan on the project and for Metropolitan to take delivery of the water into the CRA. The water would be in addition to Table A and is estimated to cost between \$250-\$350 per acre-foot.



Potential Lake Perris Seepage Recovery Project

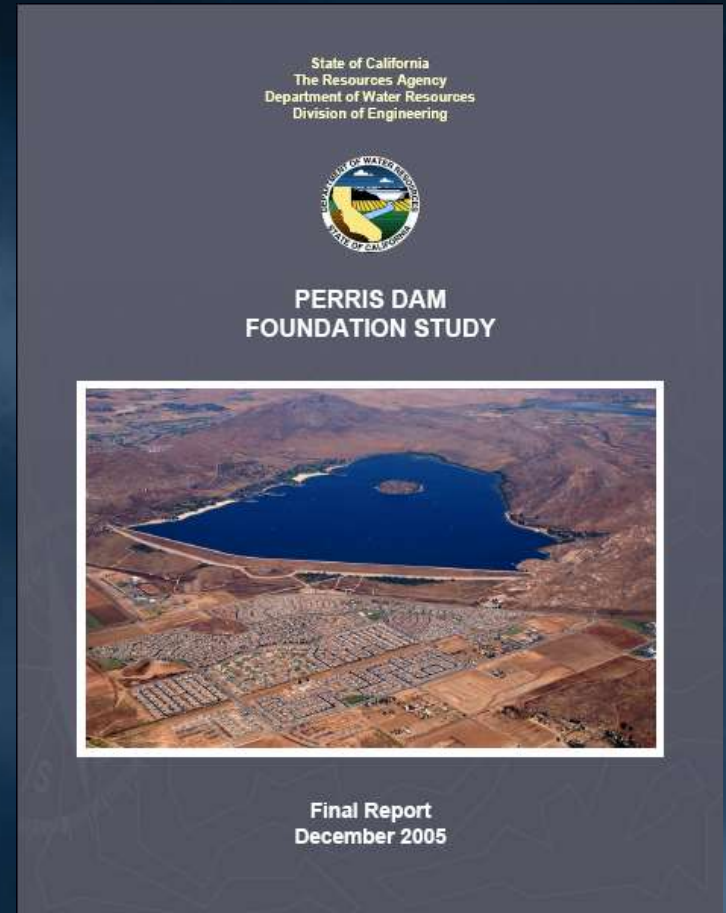
Water Planning and Stewardship Committee

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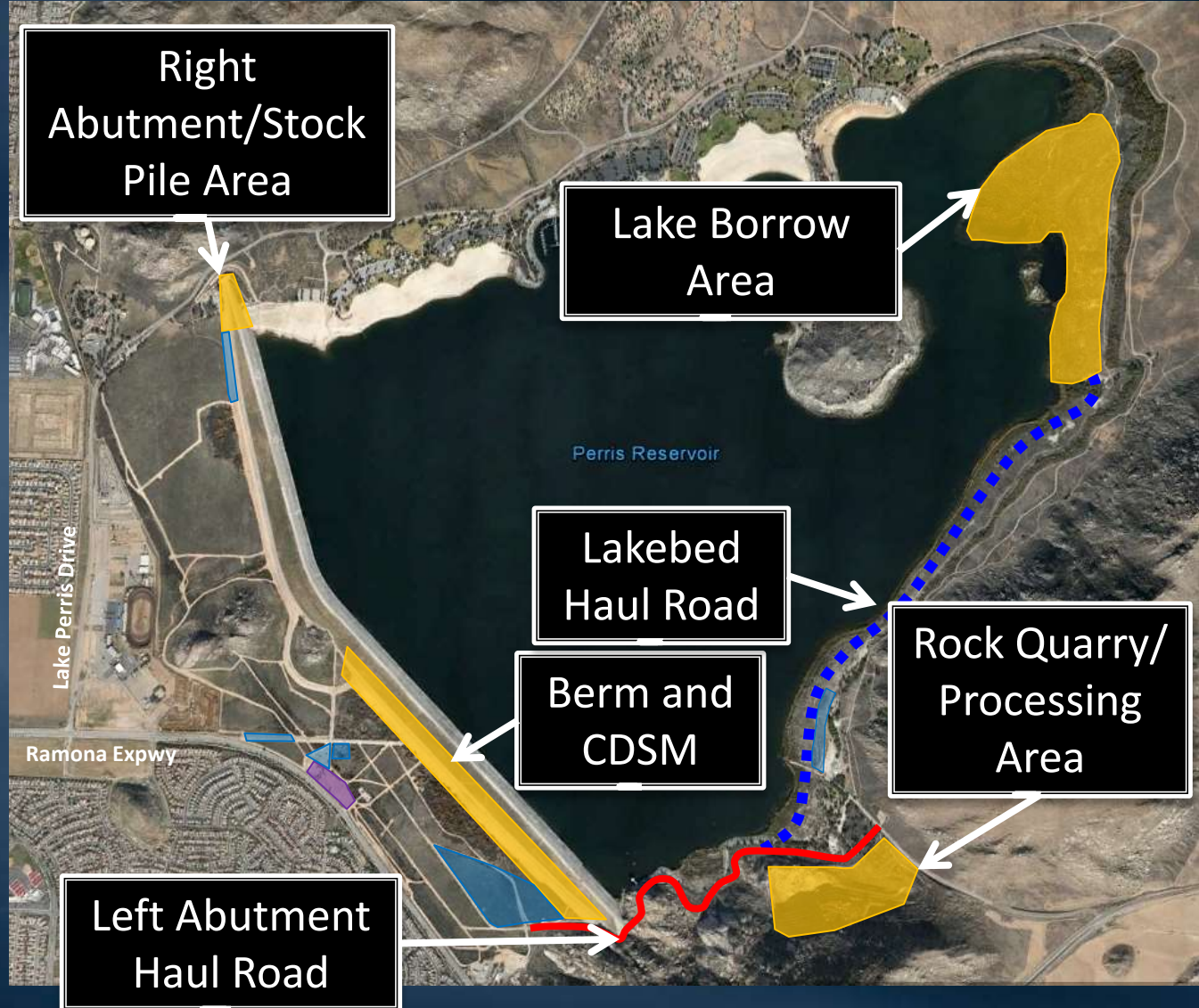
October 10, 2016

Lake Perris Dam Remediation Background

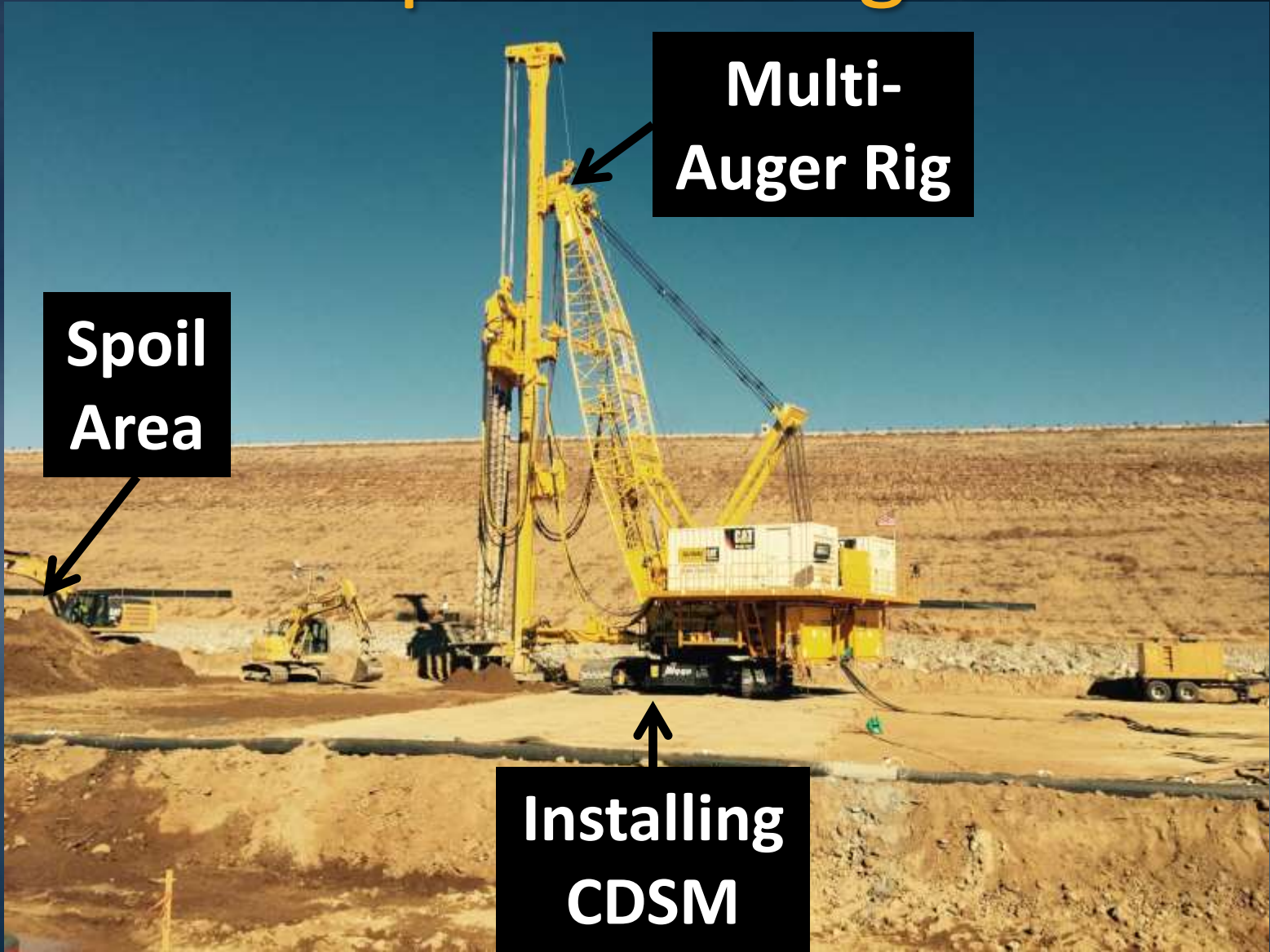
- Perris Dam Foundation Study
 - Recommended lower operation level
 - Goal: Return dam to normal operation



Project Elements – Berm, Cement Deep Soil Mixing (CDSM), Access Road and On-Site Quarry



Cement Deep Soil Mixing Installation



Multi-Auger Rig

Spoil Area

Installing CDSM

Contractor's Rock Processing Plant



Current Status – Complete by End of 2017

- Overall: 70% Complete
- On-time/Complete
 - Cement Deep Soil Mixing
- Delays
 - Obtaining line power from Southern California Edison
 - Blasting

Proposed Active Seepage Recovery Facility

Background – Existing Seepage Collection

- Existing shallow seepage recovery facility
- Gravity collection and flow
 - **Approximately 2,000 AF per year**
- Discharged to Colorado River Aqueduct
- Accounted for as part of Table A

Potential Deep Seepage Recovery

Description

- Additional investigation for deep seepage recovery
- DWR estimates that 6,000 – 8,000 AF per year is lost to seepage
- DWR conducting a study of deep seepage. Current investigation goals include:
 - Determine quantity of seepage
 - Determine aquifer properties/geologic characterization
 - Preliminary design for seepage recovery

Project Location



Project Details

- DWR Partner with MWD
 - In-kind services
 - O&M Agreement
- Potentially partner with DWA/CVWD
- MWD Cost Estimate
 - Total project cost: \$27,000,000
 - Unit cost: \$250 - \$350 per AF

Future Actions

- Approve agreement with DWR and preliminary design
- Approve CEQA and final design
- Award construction contract
- Potential O&M Agreement with DWR

