

Erosion at Adit 4 Tunnel Spoils Disposal Site North Fork Stanislaus River Hydroelectric Project



March 2, 2016 Facilities Committee Meeting



Location/Background of Adit 4

 Part of the tunnel between McKays Point & Collierville Powerhouse

 2,000 - 4,000 yards of spoils eroded





Spoils





Water Infiltration Above Failure





Spoils Failure and Interim Mitigation





















Timber Bents Required





Diverting the Tunnel Drain





Diverting the Tunnel Drain





Completed Project Work

- Phase I –Interim site stabilization complete
 - Water bypass system completed February 22nd
 - Minimize active erosion and scope of needed repairs
 - Remain in place until spoils system is stabilized
 - Installed safety fencing and temporary stairs
 - \$129,200 original contract
 - <\$80,000 in actual costs</p>



Ongoing Project Work

- Investigating potential insurance claim
 - Initial site visit conducted February 2nd
 - McLarens, Marsh
 - Follow-up with 3rd party engineers March 15th
 - Madsen Kneppers and Associates, McLarens, Marsh



Ongoing Project Work

- Phase II Preliminary design proceeding
 - Basis of design proposals received February 24th
 - Develop erosion resistant, safe, low-maintenance, and costeffective design
 - Begin work mid-March and complete June
 - Confirm required environmental permits
 - Develop preliminary construction budget and project timelines
 - Supplied requested information to U.S. Bureau of Land Management February 8th and 10th
 - Conducting sensitive species evaluation
 - Provide Committee update at completion of Phase II



Planned Project Work

- Phase III Design/permitting of preferred alternative
 - Engineering contracting
 - CEQA and NEPA
 - Permitting with multiple federal and state agencies
- Phase IV Construct the remediation



Questions?