

## Early Intake Switchyard Slope Stabilization

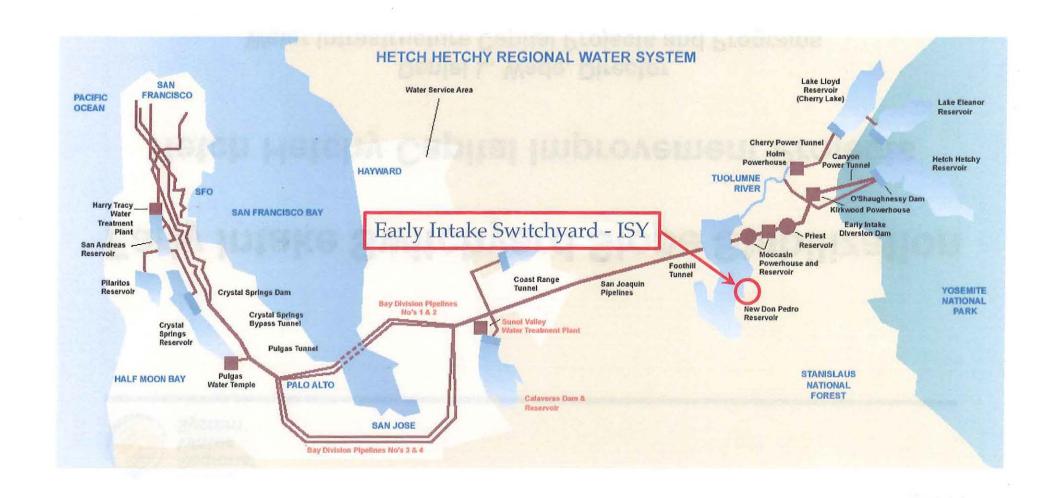
### **Hetch Hetchy Capital Improvement Projects**

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Water Infrastructure Capital Projects and Programs

San Francisco Board of Supervisors
Budget & Finance Committee
February 9, 2017



### **Early Intake Switchyard**



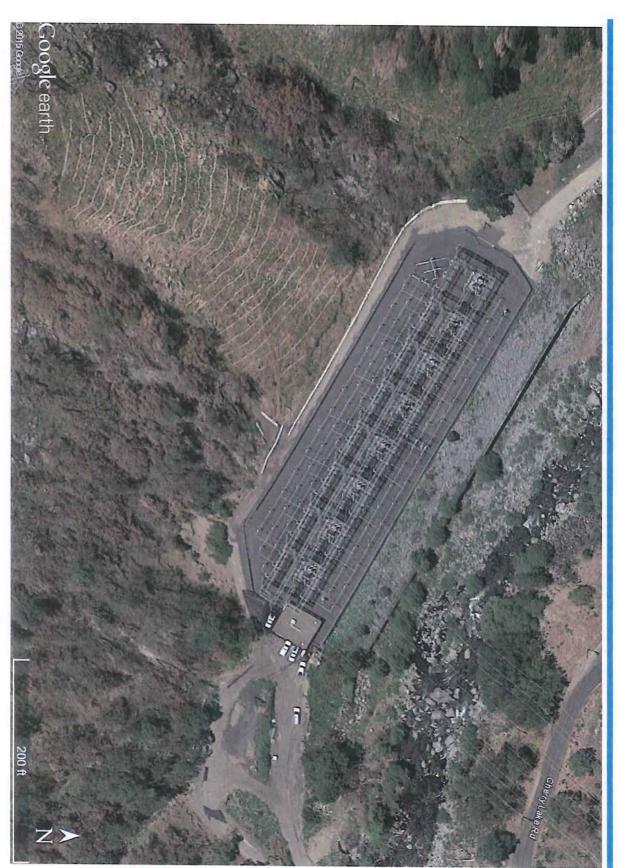


### **Background**

- June 2016 FEMA awards SFPUC a grant of \$404,208 in federal funds for Pre-Award and Phase One of the Early Intake Slope Stabilization project.
- The Pre-Award phase includes: preparation of the Hazard Mitigation Grant Program sub-application; definition of project scope; and a Cost-Benefit analysis.
- The Phase 1 work scope is limited to Engineering Design and Environmental Studies and Reporting.



# Early Intake Switchyard - Aerial View





### **Project Goal**

### Mitigate slope hazards threatening Early Intake Switchyard



Fallen rocks, triggered by Rim fire, along edge of Switchyard

Boulder breaches two fences before coming to rest inside Switchyard







Flooding after heavy rainfall



Mud after spring storms



Flooding at Control Building



Active slide area above Switchyard



# **Budget & Schedule for Pre-Award & Phase 1**

**BUDGET ESTIMATE:** \$594,341

### SCHEDULE

- June 2016 Received the Grant Approval
- Jan to May 2017 Design Phase
- May to December 2017 Perform Detailed Design
- February to September 2017 Environmental Phase
- July 2017 to July 2018 Prepare Draft NEPA Environmental Assessment & Permits
- September 2018 Finalize contract documents



### Request

Authorize the SFPUC General Manager to accept and expend a grant for \$404,208 from FEMA through California Governor's Office of Emergency Services for the Hazard Mitigation Grant Program for the Early Intake Switchyard Slope Stabilization Project.