



9/25/2024

Status Update on the Sweetwater Dam Comprehensive Assessment and Consideration to Authorize a Task Order to Prepare Additional Analyses

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Comprehensive Assessment Work Plan

Task	Status
1. Condition Assessment Summary	Complete
2. Screening Level Risk Analysis Report	Complete
3. South Spillway Alternatives Analysis	Complete
4. Subsurface Exploration Study	With DSOD for Review
5. Seismic Hazard Assessment	Complete
6. Static and Seismic Analyses	In Progress
7. Erosion Potential Evaluation	In Progress
8. Project Management	Ongoing
9. Rock Slope Stability Study	In Process to be submitted to DSOD for Review



Significant Findings to Date

- 41 Potential Failure Modes identified for Sweetwater Dam
- 9 of them found to be non-credible
- From remaining 32:
 - 26 are either being evaluated or would be mitigated by proposed Sweetwater Dam and South Dike Improvements
 - 6 not supported by current scope of work. GEI recommended additional analyses.



Significant Findings to Date

Alternatives for South Spillway:

1. Repair the spillway and maintain discharge capacity - \$21.5 M
2. Replace the spillway and increase discharge capacity - \$24.4 M
3. Abandon spillway - \$4.5 M

GEI recommended Alternative 3



Further Direction from DSOD

- Letter from DSOD received on August 19, 2024 requested additional analyses
- Staff reached out to DSOD to obtain clarification on the letter and on the overall scope of work for Comprehensive Assessment
- Per DSOD, findings from Comprehensive Assessment may require additional analyses to further assess potential failure modes and risk. Therefore, DSOD cannot promise that additional analyses will not be requested. Timeframe for completion will be granted by DSOD if additional analyses are needed.
- Staff then requested proposal from GEI to perform additional analyses:
 - Risk of Failure of North Spillway Concrete Apron
 - Stability Analysis of Rockfill Ballast above North Spillway
 - Hydraulic Analysis of North and Center Spillways (includes updated PMF analysis)



Next Steps

Based on communication with GEI, staff anticipates that the additional tasks would be completed within 12 weeks after issuing a Notice to Proceed.

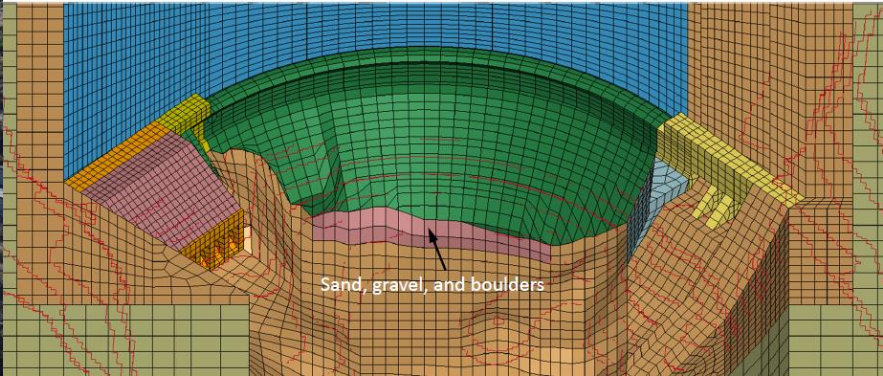
Depending on the findings of the Comprehensive Assessment, the previously-completed Sweetwater Dam and South Dike Improvements Project design may evolve to address any modifications determined in the Comprehensive Assessment process.

In addition, an addendum to the Board adopted environmental document may be needed if findings lead to significant project design changes. An MND was adopted by the Board on January 24, 2018.



Fiscal Impact

Sweetwater Dam and South Dike Improvements (includes Comprehensive Assessment)	
Total project budget as amended by FY24/25 budget	\$ 2,745,000
Less current expenditures	<1,955,907>
GEI remaining expenditures for Comprehensive Assessment	<331,997>
GEI proposal for additional tasks	<89,582>
Project Balance	\$367,514



Options

1. Authorize the General Manager to approve a task order for GEI Consultants, Inc. to prepare additional analyses for Sweetwater Dam, as required by the State of California Division of Safety of Dams, for a not-to-exceed amount of \$89,582.
2. Do not authorize the General Manager to approve a task order to GEI Consultants, Inc. and direct staff to issue a Request for Proposals for the additional analyses requested by the State of California Division of Safety of Dams.
3. Other direction as determined by the Governing Board.

Staff recommends Alternative 1



Questions?

