

Staff Report

TO: Board of Directors

FROM: Gabe Aronow, P.E., Director of Engineering

DATE: July 8, 2026

SUBJECT: **Scotts Flat Spillway Upper Plunge Pool Design Change, FERC PFMA Process, and Bid Support**

ENGINEERING

RECOMMENDATION:

Approve Task Order No. 8 with HDR to perform the Scotts Flat Spillway Upper Plunge Pool Design Change, complete the FERC-mandated design PFMA (Potential Failure Mode Analysis) workshop, support the project during bidding, and authorize the General Manager to execute the necessary Documents.

BACKGROUND:

Since its construction in the 1940s, the Scotts Flat Spillway has experienced recurring spalling of the chute slabs. In early 2017, severe concrete spalling damage, including ripping of some of the steel rebar mats, was found during spilling caused by winter storms. The District repaired the damage.

In 2019, the California Division of Safety of Dams (DSOD) downgraded its condition assessment of Scotts Flat Dam and Reservoir from “satisfactory” to “fair” because of the major deficiencies associated with the spillway. Later that year, the Board of Directors (Board) approved a contract with HDR to perform the Scotts Flat Spillway Upgrade Alternatives Development and Design to address physical chute and underdrain repairs. That work found that the existing spillway chute and the lower plunge pool are deficient to handle the probable maximum flood (PMF), and the Federal Energy Regulatory Commission (FERC) and DSOD required a physical model to be built to change the geometry of the spillway.

In 2020, the Board approved HDR to perform a physical hydraulic model for Scotts Flat Spillway. As the analysis continued with input from the physical model and DSOD, it was determined that the original scope of performing repairs to the existing chute was not feasible and that the spillway chute would need to be replaced. Replacement of the spillway chute resulted in a new scope of design services,

including design of the complete spillway replacement; analysis to support design, including geotechnical analysis, structural and stability analyses, hydraulic analyses; development of a Basis of Design Report; development of multiple construction drawings and specification submittals; and supplemental survey.

In 2023 the Board approved the HDR scope. Work progressed on the spillway design for the lower chute and lower plunge pool to the 90% completion level.

In February 2025, DSOD amended its requirements to require that the District also replace the entire upper plunge pool and underdrain system, and FERC comments on the 60% design submittal added significant design detail and review-and-approval processes (PFMA) to the design effort. The HDR scope to support these design changes and facilitate the FERC process required new Task Order No. 7. The design was completed to the 100% completion level, including the new upper plunge pool.

As a result of implementation complications revealed through the PFMA review process to construct a new upper plunge pool, the significant added construction costs it incurred, and the fact that an alternative expanded anchorage alternative of the existing upper plunge pool was presented, DSOD provided a letter in May 2026 removing the requirement for a completely new upper plunge pool. The letter permits the use of the expanded anchorage alternative for the existing upper plunge pool, resulting in significant cost savings for the project. To support this project change, pay for additional PFMA process time than was originally scoped, and provide technical support during the bidding process, a new engineering scope is required. The HDR scope to support these changes requires a new Task Order for \$298,991.

To date, seven (7) Task orders have been issued to HDR totaling \$2,863,798. Of that, \$2,709,454 has been paid, with a remaining balance of \$102,380 (Unused balances from previous task orders totaling \$51,965 were unencumbered).

APPROVED TASK ORDERS – Amounts and Remaining Balances

Task Order	Amount	Remaining	Reason
TO#1	\$193,481	Closed with unused balance of \$12,079	Project Management and Phase 1 of the original proposal – alternative analysis and conceptual design
TO#1 CO#1	\$18,925	\$0	Downstream tailwater analysis and DSOD stability analysis
TO#2	\$26,484	Closed, with unused balance of \$1,058	Development of Hydraulic Physical Modeling Plan and addressing regulatory comments
TO#3	\$374,540	\$0	Physical Hydraulic Modeling

TO#4	\$65,283	Closed with unused balance of \$37,513	Additional Physical Modeling – Evaluation of revised spillway chute and construction cost estimate
TO#5	\$1,470,000	\$0	Design of Lower Chute and Plunge Pool
TO#5 CO#1	\$66,835	\$0	Modify the Upper Plunge Pool Design
TO#5 CO#2	\$0	N/A	Time Extension
TO#6	\$65,600	Closed with unused balance of \$1,315	CFD Modeling
TO#7	\$582,650	\$102,380	Upper Plunge Pool Hydraulic Analysis, Design, FERC PFMA process, and FERC and DSOD Comment Review and Responses
Subtotal	\$2,863,798	\$102,380	

Staff recommends that the Board approve Task Order No. 8 in the amount of \$298,991, with a contingency of \$29,899, for a total of \$328,890. For a total contract authorization of \$3,162,780 (not including the \$29,899 contingency).

BUDGETARY IMPACT:

No budget amendment is required. The FY2026 capital budget for this project has an unencumbered balance of \$751,527. The task order is anticipated to be completed between 2026 and 2028.

Attachments: (none)