

EXHIBIT 5-A



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March 27, 2018

Larry Hampson
District Engineer
Monterey Peninsula Water Management District
5 Harris Court, Bldg. G
Monterey CA 93940

Subject: Budget Amendment Request for Los Padres Dam & Reservoir Alternatives & Sediment Management Study, AECOM Project No. 60536296

Dear Mr. Hampson,

The AECOM Team is requesting additional budget for the Los Padres Dam and Reservoir Alternatives and Sediment Management Study. The attached scope describes the additional work already completed or requested by the TRC that is outside of the original scope of the project. This work includes resolving data discrepancy issues during characterization of accumulated reservoir sediments and incorporating new topography data into the reservoir sediment volume calculation (Subtask 2-1), TRC requests for additional work related to the development of the sediment transport model (Subtask 2-3), an additional TRC meeting (Task 4-1), and project management resulting from an extended project schedule (Task 6). We have also included an optional task that consists of an additional BESMo simulation and a 10 percent allowance for additional supplementary services. Table 1 summarizes the budget we are requesting for this additional scope.

Table 1. Summary of budget amendment request

Task	Description	Hours	Budget
2	Sediment Management Options	362	\$81,981
2-1	Obtain and Analyze Reservoir Sediment Samples	189	\$31,560
2-3	Evaluate Geomorphic Effects of Changes in Sediment Load	173	\$50,421
4	Identify Feasible Alternatives	128	\$20,221
4-1	TRC Meeting No. 2b	128	\$20,221
6	Project Management	103	\$19,804
6-1	Project Administration	51	\$8,890
6-2	Meetings and Conference Calls	52	\$10,914
	Subtotal	593	\$122,006
Task	Description	Hours	Budget
C	Optional Tasks		
C-1	Additional BESMo Simulation	29	\$5,920
C-2	10 Percent Allowance for Supplementary Services	N/A	\$12,201
	Subtotal	29	\$18,121
		Hours	Budget
	Total with Optional Tasks	622	\$140,127

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To maintain project schedule and to facilitate tracking of project progress and budgets, we recommend that this amendment be reviewed and approved within the next month. If you have any questions, please contact Katie McLean at 510-874-3170.

Sincerely,

A handwritten signature in blue ink that reads "Katie McLean".

Katie McLean
Interim Project Manager
AECOM

A handwritten signature in blue ink that reads "Noel Wong".

Noel Wong
Project Director, Vice President
AECOM

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Los Padres Dam and Reservoir Alternatives and Sediment Management Study Budget Amendment Request (3/27/2018)

The following scope of work describes additional work or effort, beyond that included in the original scope of work approved by MPWMD February 2017, required to complete the Los Padres Dam and Reservoir Alternatives and Sediment Management Study. These scope additions are primarily related to data discrepancy issues discovered and resolved during characterization of accumulated reservoir sediments and incorporation of new topography data into the reservoir sediment volume calculation in the Sediment Characterization TM (Subtask 2-1), accommodation of the Technical Review Committee's desire to have greater involvement in development of the sediment transport model (Subtask 2-3), an additional TRC meeting (Task 4-1), and an extended project schedule (Task 6). We have included an optional task that consists of an additional BESMo simulation and a 10 percent allowance for additional unanticipated services. Some of this work has already been completed in order to allow the Sediment Characterization TM and the Geomorphic Effects TM to proceed, and some of it is upcoming. Additional details are provided below.

Subtask 2-1 Obtain and Analyze Reservoir Sediment Datasets

The level of effort to complete this task was greater than anticipated due to discrepancies in existing data upon which the sediment characterization analysis relied. These data discrepancies are described in detail in the progress report dated October 13, 2017, and this work was completed in October 2017. The first data discrepancy was between bathymetric datasets that describe the lower, basin portion of Los Padres Reservoir. Bathymetry data collected by HDR in 2016 shows a surface significantly lower compared to the more recent 2017 survey by California State University, Monterey Bay (CSUMB). Although the reason for the discrepancy remains unknown, the AECOM Team spent substantial staff resources analyzing and attempting to resolve the issue because we had intended to use both datasets in our analysis.

The more significant level of effort resulted from a second data discrepancy discovered after AECOM had completed the planned analysis to quantify and characterize sediment accumulated in Los Padres Reservoir. The analysis was first completed as planned, with heavy reliance on the storage volume and stage-storage curve for Los Padres Reservoir that was developed by others based on the 1947 topographic survey of the original ground surface now under the reservoir. A quality control check that involved comparing cross sections of a surface created from the 1947 survey data to the 2017 surface revealed that the 1947 survey shows a valley width in the reservoir area narrower than what actually exists, in some cases by as much as 50 feet. Therefore, the original storage volume of Los Padres Reservoir, as well as the amount of sediment accumulated in the reservoir, is probably less than has previously been estimated by others. After substantial analysis of the available surfaces, internal discussion, and discussion with MPWMD, AECOM concluded that the analysis already completed did not accurately reflect current conditions in Los Padres Reservoir. Therefore, we completed a second and

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more labor-intensive approach to estimating sediment accumulation in Los Padres Reservoir that involved creating multiple cross sections and end area calculations. In light of the discrepancy between the 1947 survey data and actual valley width conditions, this end area analysis provided results that are more accurate, and produced a new estimate of the original reservoir storage volume. The analysis and results were presented in the Sediment Characterization TM. (Completed December 2017)

In March 2018, MPWMD requested that the AECOM Team incorporate recent topography data collected by USGS and CSUMB into the Sediment Characterization TM. In the Sediment Characterization TM delivered in December 2017, the reservoir sediment volume below the normal maximum water surface (NMWS) elevation was estimated using bathymetric data collected by CSUMB in 2017, while the volume above the NMWS elevation was estimated based on LiDAR data collected by USGS in 2010. The topography at Los Padres Reservoir has changed significantly since the LiDAR data was collected in 2010, particularly in 2016, which was a wet water year. Therefore, adjusting the reservoir volume calculation using the more recent topography data will improve the reservoir sediment volume estimate, particularly in the region upstream of the NMWS elevation.

Subtask 2-3 Evaluate Additional Geomorphic Effects of Changes in Sediment Load

1. New Spin-up run: At the request of the TRC, the AECOM Team built a “San Clemente Dam No Action” simulation to permit comparison of BESMo model results vs. those generated and reported by URS in 2011 as a part of the Carmel River Reroute and Dam Removal final EIR process. Of note, the work involved substantial and careful review of the Mussetter and URS modeling efforts in order to understand BESMo model performance vs. these other channel evolution modeling efforts. The primary emphasis of the careful reviews was to understand how earlier modeling efforts treated the mainstem Carmel bed erodibility and subsurface sediment size gradations, and the District authorized this effort. (Completed November 2017)
2. Recently compiled additional long profile evaluation and work up for analysis: At the request of MPWMD, the AECOM Team is pursuing two different profile analyses. First, MPWMD has forwarded profiles from 1980 and 2017, in an attempt to identify general river bed elevation adjustment trends over the period of the two profiles. MPWMD has requested that we consider these data in our analysis and interpretation of model performance, and incorporate the 2017 profile within our analysis and reporting of BESMo simulation results. Second, the TRC has requested that the AECOM Team evaluate BESMo performance vs. profile adjustments measured at the former San Clemente site following Water Year 2017. Local profiles collected by the USGS and CSUMB will be used for the latter request. This will require time to build input files, align stationing between data sets and develop reporting specific to the WY2017 simulation results. Last, the TRC and MPWMD requested that we use this new dataset in the process of validating and comparing BESMo performance versus that measured via the profiles. In order to prepare a meaningful comparison, we may need to modify the model build to include nodes that are roughly 50 meters apart through the former San Clemente site and for a

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few hundred meters downstream of the former dam. The present model build has only two nodes through this roughly 1,000 meters of reach length.

Deliverable(s): For the second request, results will be summarized in a brief technical memorandum (TM) to be delivered to the TRC in April 2018, which includes details on simulation build and possible constraints related to simulation departure from measured conditions if there are significant differences.

3. Model build pre-approval (new requisite): At the request of the TRC, the AECOM Team will prepare summary TMs which document model build for each selected project alternative. The purpose of the summary TMs is to provide the TRC with the information needed to approve or request modification of model build with respect to each selected project alternative.

Deliverable(s): Brief TMs with sufficient detail of each model build for each selected dam alternative to facilitate TRC/MPWMD review, comment, and ultimate approval, scheduled for submittal between March and June 2018.

4. Reservoir volume available for evacuation: At the request of the TRC, the AECOM Team will analyze the reservoir deposit geometry in order to estimate a volume of sediment available for evacuation in the event that a channel establishes in the deposit. Under this scenario, the channel dimensions will be set by the channel slope and the side slope steepness, which is set by the geotechnical/engineering geologic properties of the deposit materials. This additional effort will be necessary to constrain the volume of sediment available under certain dam alternative scenarios. Existing model build assumes sediment volume evacuated from the reservoir represents 100% of the total sand and gravel volume deposited in the reservoir since dam construction. Given the sensitivity of downstream sedimentation potential to the evacuated sediment volume, a more refined available sediment estimate is warranted.

Assumptions

- Provided all information needed is available, one week will be needed to construct model builds for each of the simulations described under #3. Each of the three proposed simulations will go through a separate approval process summarized and documented by a model build summary memo which the AECOM Team will provide for TRC and MPWMD review and approval and/or comment. Up to one day of model build refinement is assumed with each approval process.

Subtask 4-1 TRC Meeting No. 2b

- In December 2017, the AECOM Team and MPWMD discussed whether to hold TRC Meeting No. 2 on January 18, 2018. The TRC's request to review the BESMo spin up run and trial runs and to provide input on the model scenarios had extended the timeline for Task 2-3, and therefore results of Tasks 2-3 and Task 3 would not be available by the time of the meeting. During a conference call on December 15, 2017, MPWMD and the AECOM Team decided to hold TRC Meeting No. 2 on January 18, 2018 to review the recently completed Final Sediment

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Characterization TM and Draft Alternatives Descriptions TM, to review the BESMo spin up run and trial runs, and to solicit TRC input on the BESMo model scenarios. MPWMD and the AECOM Team agreed that an additional TRC meeting, TRC Meeting No. 2B, will be held after results of Tasks 2-3 and Task 3 are available and will cover the other topics originally scoped for TRC Meeting No. 2.

Deliverable(s): Workshop agenda provided prior to TRC Meeting No. 2B. Meeting report with notes from TRC Meeting No. 2B describing the alternatives considered and discarded, conclusions, and recommendations for further analysis, to be provided 2 weeks after completion of the meeting.

Assumptions

- Costs for TRC Meeting No. 2B are assumed to be the same as TRC Meeting No. 2.

Subtask 6-1 Project Administration

The March 7, 2018 draft schedule extended the project timeline to 128 weeks, an increase of 54 weeks from the original project schedule. The Consultant Project Manager will continue to perform standard project management tasks, including coordination among AECOM Team participants and subconsultants, the TRC, MPWMD, and third parties; scheduling; budget tracking; invoicing; health and safety; and quality management during these additional 54 weeks.

Subtask 6-2 Meetings and Conference Calls

The December 21, 2017 schedule update extended the project timeline to 128 weeks, an increase of 54 weeks from the original project schedule. The Consultant Project Manager will continue to facilitate meetings and conference calls (in addition to the TRC meetings) with MPWMD, Cal-Am, and other interested parties to coordinate various aspects of the Study.

Optional Tasks

1. Additional BESMo Simulation: We are assuming that the TRC will request simulation of a 4th project alternative. This task will only be executed with written request from MPWMD.
2. Supplementary Services: A 10 percent allowance has been included to account for unanticipated additional requests from MPWMD or the TRC. This task will only be executed with written request from MPWMD.