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Subject: **Proposal for Technical Support to Lake Elsinore/Canyon Lake TMDL Task Force, including Update to the 2018 TMDL Technical Report**

Background

In June 2015, the Lake Elsinore Canyon Lake Task Force (“Task Force”) petitioned the Santa Ana Regional Water Quality Control Board (Regional Board) to reopen and revise the Nutrient TMDLs for Lake Elsinore and Canyon Lake based on the wealth of new information developed over the previous 10 years. Following approval of the petition, a consulting team led by CDM Smith was contracted to develop the technical documentation (“TMDL Technical Report”) and administrative record needed to support adoption of revised TMDLs. This team also supported the Task Force in fiscal years 2019-20, 2020-21, and 2021-22 to provide guidance on regional project implementation, prepare a 2020 TMDL compliance report with regard to current nutrient loads and the 2004 TMDL allocations, prepare responses to peer reviewed comments on the Technical TMDL Report, and conduct supplemental in-lake modeling requested by Regional Board staff.

In October 2020, Regional Board staff requested an alternative reference condition be evaluated based on a consensus comment from the peer review about seemingly high nutrient concentrations used in the 2018 TMDL Technical Report. The CDM Smith team collaborated with the Regional Board, Rick Whetsel, and Tess Dunham to review the models and discuss technical details around alternative reference condition simulations. The requested alternative reference condition involved use of the 25th percentile nutrient concentrations from the Cranston Guard Station site, as well as using the post-levee bathymetry in Lake Elsinore. Results of the supplemental modeling were completed in June 2021 and presented to the Task Force over the course of several meetings. A technical memorandum documenting the modeling results was submitted to the Task Force on March 28, 2022.

The use of an alternative nutrient concentration to represent a reference watershed impacts multiple elements of the revised TMDLs as documented in the TMDL Technical Report, including allocations, linkage analyses, and numeric targets. In addition, the Task Force and Regional Board seek to revise the TMDL implementation program to prescribe a new adaptive framework with interim and final targets, and incorporate a process to allow for consideration of new confirmatory monitoring results below undeveloped canyons within the watershed in the future. For these reasons, the Task Force believes revision to the previously submitted TMDL Technical Report is necessary. This undertaking would also allow water quality data, watershed analyses, and lake models to be updated using data collected through December 2020.

Proposed Scope of Work

CDM Smith will support the Task Force in the revision of the 2018 TMDL Technical Report. Changes will be made to incorporate the 25th percentile of the Cranston Guard Station data to serve as the reference watershed nutrient concentrations for final allocations and targets. Interim allocations and targets will be based on the median of the same data set. The implementation program will be revised to prescribe the adaptive framework for moving from interim to final targets, allowing for consideration of new confirmatory monitoring results from special studies of other undeveloped canyons. The revision to the TMDL Technical Report will also update the water quality data characterization, source assessment, and lake modeling analyses based on data available through 2020. Lastly, the presentation of lake water quality models in the existing linkage analysis will be updated to be based on new models and relevant modeling documentation will be packaged for inclusion in the administrative record. CDM Smith will use regular Task Force meetings to report progress. Changes stemming from the update will be presented. Key technical content and notification of any specific items that the team seeks agreement on will be provided one week prior to Task Force meetings to allow time for review by members in advance of meetings. The purpose of this scope of work and budget is to prepare revisions to the 2018 TMDL Technical Report as described in the tasks below. These tasks would be conducted in a phased manner from July 1, 2022 through June 30, 2023.

Task 1. Revise Implementation Elements

The CDM Smith team will update existing Sections 7 (Implementation) and 9 (Demonstrating Compliance) of the 2018 TMDL Technical Report. This effort includes revising (1) the Program of Implementation to be consistent with the key principals document developed to gain consensus from the Task Force (watershed stakeholders and Regional Board staff) on a path forward to revise the TMDLs; and (2) related elements in Sections 7 and 9 including revising the summary of previous studies, characterization of existing controls, and description of approaches for demonstrating compliance. The updates to these Sections will not include any quantitative assessment of the effectiveness of watershed or in-lake controls.

It is assumed that key decisions affecting the revisions to Sections 7 and 9 will be agreed upon by the Task Force prior to receiving a notice to proceed on Task 1. Work on Tasks 2 through 4 will not begin until this task is completed and a notice to proceed with revisions to the remainder of the TMDL Technical Report is provided by the Task Force.

Task 2. Key Technical Updates

The CDM Smith team will complete updates to models, data analyses, and the related supporting technical content in the following TMDL Technical Report sections:

- Numeric Targets (Section 3) - update numeric target figures and tables with new lake water quality model results, rework "Characterization of Reference Condition", incorporate interim milestone for numeric target cumulative distribution frequency (CDF) curves.
- Source Assessment (Section 4) - update to 2020 hydrology inputs, update to 2020 graphs, tables, including Mystic Lake overflow analysis, watershed model update with updated 2019 land use mapping, and export daily internal load from GLM and AEM3D.
- Linkage Analysis (Section 5) - complete revision of section to describe new models and document calibration from recently completed migration tasks.
- Allocations (Section 6) - create tables for interim milestone, incorporate errata developed in 2019 as needed, update existing load reductions by jurisdiction based on the updated watershed model.

Task 3. Other Document Updates

The CDM Smith team will ensure consistency with modifications to other sections where less substantial changes to technical content are anticipated, including:

- Executive Summary
- Section 1 - Introduction
- Section 2 - Problem Statement – update water quality figures and tables consistent with materials included in the 2020 compliance assessment report, update sections on Lake Elsinore fish community, zooplankton, and phytoplankton based on recently complete Fishery Management Report.
- Section 8 - Monitoring Program
- Section 10 – CEQA (cost estimate assumes CEQA findings will remain the same as described in the existing TMDL Technical Report)
- Section 11 - Economic Considerations (cost estimate does not include any new or revised supporting cost analyses)

Task 4. References/Administrative Record

The CDM Smith team will update the administrative record with new information used in the preparation of the revised TMDL Technical Report including pertinent correspondence since the 2018 submittal of the existing report, complete packages of model inputs, parameters, and other model related documentation.

Task 5. Meeting Participation and Regional Project Implementation Support

Routine Task Force meetings will occur in fiscal year 2022-23 to coordinate regional project implementation activities and maintain collaboration among stakeholders. The CDM Smith team will prepare technical presentation materials as needed to support any of these meetings and attend up to four Task Force meetings to participate in discussions regarding ongoing or new TMDL implementation activities, including, for example, the Canyon Lake alum addition project and provide updates on any activities associated with TMDL revision. The basis for this level of effort estimate involves a total of 3 hours for participation in each meeting. Labor to prepare slides, handouts, and supporting technical analyses is assumed to be 8 hours to be completed by CDM Smith. As needed technical analysis to support the TMDL Task Force in coming to consensus on implementation elements of the TMDL revision is included within this task. Travel expenses for CDM Smith are included to cover up to three in-person meetings. CDM Smith will also participate in periodic teleconferences with LESJWA, Tess Dunham, and Task Force Stakeholders on an as needed basis to facilitate execution of the overall project. Any project management activities, e.g., processing of subcontractor invoices and preparation of invoices by CDM Smith's contract administrator will be covered under this task. The level of effort for this task is summarized below.

CDM Smith will collaborate with LESJWA and stakeholders to provide technical support for regional project implementation including estimation of alum dosages, guidance on decisions on timing of future alum applications, review of Lake Elsinore Aeration and Mixing System (LEAMS) effectiveness demonstration to support credit sharing with watershed stakeholders, or any other supporting technical analyses of supplemental projects as requested by the Task Force.

Key Personnel

Key personnel for the proposed additional services include Steven Wolosoff (CDM Smith) and Richard Meyerhoff (GEI Consultants). Additional technical expertise for lake modeling will be provided by Paula Kulis (CDM Smith) and Dr. Michael Anderson.

Estimated Budget

The CDM Smith team proposes to complete the selected elements within this scope of work based on a time and materials basis in accordance with 2022 bill rates. The proposed budget for each of the tasks identified in this scope of work is \$138,300 as shown in the table below. This work will be performed over the period of July 1, 2022 through June 30, 2023 (as authorized by notices to proceed).

Task	Hours		Cost
	GEI	CDM Smith	
1. Revise Implementation Elements	44	40	\$ 20,780
2. Key Technical Updates	8	356	\$ 71,780
3. Other Document Updates	16	52	\$ 14,860
4. References/Administrative Record	40	8	\$ 13,360
5. Project Management & QA/QC	-	72	\$17,520
Total	108	528	\$ 138,300

Closing

Please call me at (949) 930-7252 or Steven Wolosoff at (617) 452-6393 if you any questions regarding our proposal or need any further information. We look forward to assisting LESJWA in conducting these proposed tasks.

Very truly yours,



Alberto Acevedo
CSL | Sr Project Manager