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Subject: **Proposal for Fiscal Year 2020-21 Technical Support to Lake Elsinore/Canyon Lake (LECL) Nutrient TMDL Task Force**

## **Background**

In June 2015, the Lake Elsinore Canyon Lake (LECL) Task Force petitioned the Santa Ana Water 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 and administrative record needed to support adoption of revised TMDLs. This team also supported the Task Force in fiscal year 2019-20 to provide guidance on regional project implementation and prepare responses to peer reviewed comments on the Technical TMDL Report. The Task Force has identified the need for technical support in the upcoming fiscal year 2020-21 for basin plan amendment (BPA) adoption, lake simulation modeling, and development of a 2020 compliance demonstration report. These tasks are described in more detail below. Assumptions that were used to prepare the proposed budget are provided.

## **Proposed Scope of Work**

The CDM Smith team has prepared a scope of work and budget for the following potential tasks. These tasks would be conducted over the period from July 1, 2020 through June 30, 2021, to assist the Task Force during the BPA adoption and approval process in the next fiscal year.

- **Basin Plan Amendment Support** – Remaining items to be finalized by the Santa Ana Water Board include a Staff Report, BPA, and resolution to adopt the proposed revisions to the LECL TMDLs. The CDM Smith team will provide as needed support, including technical review to ensure consistency between the TMDL Technical Report and the BPA documents. CDM Smith will also be available to describe the scientific basis for the TMDL revision, including the unique technical approach, key modeling assumptions, data analysis, compliance demonstration metrics, and regulatory interpretation that may arise at the time of adoption in the Region or during approval by the State Water Resources Control Board and EPA. The budgeted level of effort for this task is summarized below:
  - Labor: CDM Smith (40 hours), GEI (40 hours): \$18,900
- **Task Force Meeting Participation** – It is anticipated that bi-monthly Task Force meetings will occur in fiscal year 2020-21 to conduct the adoption of the revised TMDLs, 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 bi-monthly Task Force meetings to participate in discussions regarding ongoing or new

TMDL implementation activities, including, for example, the Canyon Lake alum addition project. The basis for this level of effort estimate involves a total of 4 hours for participation in each meeting. Labor to prepare slides, handouts, and supporting technical analyses is assumed to be 4 hours per meeting to be completed by CDM Smith. Travel expenses of \$700/meeting for either CDM Smith or GEI to attend up to four meetings in person are also included in this proposal. The level of effort for this task for the fiscal year 2019/20 (estimated 6 meetings) is summarized below.

- Labor: CDM Smith (48 hours), GEI (24 hours): \$16,300
- FY 2020/21 Travel Expenses: \$2,800
- **Regional Project Implementation** – CDM Smith will collaborate with LESJWA and stakeholders to provide technical support for regional project implementation including estimation of alum dosages, development of new guidance for 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. The level of effort for these types of services is limited to the following budget:
  - Labor: CDM Smith (58 hours): \$12,000
- **Lake Simulation Modeling** – The proposed TMDL revision provides a means to demonstrate compliance by comparing lake model simulation results for the response targets (chlorophyll-a, dissolved oxygen, and ammonia) under reference conditions in recent years with measured data over the same time period. The Task Force has requested that lake water quality models used to develop the TMDL revision be extended through 2020 for existing and reference conditions. One key task needed to accomplish the extension of the existing models involves migration from the sunseting CAEDYM program (used in the TMDL revision) into modernized tools: Generalized Lake Model (GLM) for Lake Elsinore and the Aquatic Ecosystem Model in 3D (AEM3D) for Canyon Lake. These models were developed by the same team that created CAEDYM and employ the same underlying algorithms for water quality simulation. Simulation results will be compared with those from CAEDYM to ensure the basis for the TMDL revision is unaffected by the model migration. Once this confirmatory step is achieved, the models will be extended through 2020 for the reference watershed condition. The budgeted level of effort for this task is summarized below:
  - Labor: CDM Smith (78 hours), Michael Anderson (54 hours): \$24,000
- **2020 TMDL Compliance Report** – The current TMDL for Lake Elsinore and Canyon Lake adopted in 2004 is effective until the revised TMDL is approved by EPA. The original schedule for the TMDL revision was driven by the need to have the revised TMDL approved prior to the December 2020 final compliance milestone in the current TMDL. Despite a concerted effort by the Task Force as a whole and success in meeting key TMDL revision milestones in the schedule, it is very unlikely that full EPA approval will occur prior to the end of 2020. Thus, dischargers must demonstrate to the Regional Board that the 2020 compliance metrics have been achieved. The report will summarize implementation actions taken to improve water quality in accordance with approved implementation plans. The report will also compare current water quality data with wasteload and load allocations and numeric targets to show how implementation actions have performed toward meeting the requirements of the current TMDL. The CDM Smith team will prepare a 2020 TMDL Compliance Report for review by the Task Force prior to March 15, 2021 (based on hydrologic and water quality data from calendar year 2020). CDM Smith will complete a final report that

addresses comments received from the Task Force to be submitted to the Regional Board prior to June 30, 2021.

- o Labor: CDM Smith (100 hours), GEI (20 hours): \$26,000

### **Key Personnel**

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

### **Estimated Budget**

CDM Smith proposes to complete the selected elements within this amended scope of work within the estimated budgets provided above on a time and materials basis in accordance with the rates used in the ongoing TMDL revision project. The proposed budget for all of the tasks identified in this scope of work is \$100,000. This work will be performed over the period of July 1, 2020 through June 30, 2021.

### **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