

Lake Elsinore & San Jacinto Watersheds Authority



City of Lake Elsinore • City of Canyon Lake • County of Riverside
Elsinore Valley Municipal Water District • Santa Ana Watershed Project Authority

LAKE ELSINORE & CANYON LAKE NUTRIENT TMDL TECHNICAL ADVISORY COMMITTEE

REQUEST FOR QUALIFICATIONS

CONSULTING SERVICES

to

UPDATE AND REVISE THE LAKE ELSINORE & CANYON LAKE NUTRIENT TMDLS

October 2015

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REQUEST FOR QUALIFICATIONS (RFQ)

Lake Elsinore and San Jacinto Watersheds Authority (LESJWA) is currently requesting Statement of Qualifications from qualified firms for the preparation of the essential technical and regulatory documents required to update and revise the Lake Elsinore and Canyon Lake nutrient TMDLs. [Attachment A: TMDL Technical Support Document](#) provides important background on the TMDLS and includes a proposed project scope of work identifying key deliverables.

Each Statement of Qualifications packet shall specify each and every item as set forth in the specifications indicated.

SPECIFICATIONS

1. Skills, Qualifications, and Related Experience

For this effort LESJWA will look for firms and teams that have broad experience, expertise and capability in the following areas:

- a. State of California Water Code and related water quality regulations and policies
- b. Santa Ana RWQCB Basin Plan and Amendments
- c. Total Maximum Daily Loads (TMDLs)
- d. Limnology and Aquatic Biology
- e. CEQA Regulations
- f. Understanding of studies and results produced by the Lake Elsinore & Canyon Lake TMDL Task Force
- g. Facilitation and project management skills to work with the diverse stakeholders that will be involved in guiding the workgroup to reach a consensus on resolving issues

2. Required Content:

Submit an electronic copy of your Statement of Qualifications as a single Adobe Acrobat (PDF) file not more than **50 pages** long, and not more than **10 megabytes** in size.

- a. Using [Attachment A: TMDL Technical Support Document](#) as a guide, provide a detailed description of your proposed approach to update and revise the Lake Elsinore & Canyon Lake nutrient TMDLs and meeting the defined schedule with available resources. Identify potential barriers to success and your strategy for overcoming these obstacles.
- b. Provide a brief profile of the firm, including the types of services offered; the year founded; form of the organization (corporation, partnership, sole proprietorship); number, size and location of offices; and number of employees.
- c. Describe the firm's experience in performing consulting services of a similar nature to that solicited in this RFQ, and highlight the participation in such work by the key personnel proposed for assignment to this project.

- d. Provide contact information for the selection process including their name, phone numbers, address and email.
- e. Provide as a minimum three (3) California references for the services cited as related and comparable experience, and furnish the name, title, address and telephone number of the person(s) at the client organization who is most knowledgeable about the services performed. The consultant may also supply references from other work not cited in this section as related experience.
- f. Provide a list of relevant technical reports prepared by the consultant including at least one example of a technical report prepared for a California based client.
- g. Submit statement of standard billing rates.

As a separate attachment consultant will provide a copy of one relevant technical report prepared for a California based client as a separate Adobe Acrobat (PDF) file not more than 10 megabytes in size.

3. General Requirements:

Consultant is required to carefully and fully investigate all of the requirements of this RFQ. By submitting a Statement of Qualifications, Consultant represents and certifies to LESJWA that such investigation has been completed.

Any correction and resubmission by the proposer will not extend the time for evaluation of the proposal.

Any and all exceptions must be clearly stated in the Statement of Qualifications packet. Failure to set forth any item in the specifications without taking exception may be grounds for rejection. LESJWA reserves the right to reject all qualification packets and to waive any informality.

All proposals must be received by **5:00 P.M. on Friday, November 20, 2015**. Thereafter, a review panel, composed of LESJWA staff and the LE/CL TMDL Task Force Technical Advisory Committee, will rate and rank proposals and thereafter conduct interviews with the top scoring consultant teams with final award approval by the LESJWA Board.

In preparation of contracting with LESJWA, the Proposer should review the following: [Draft LESJWA Contract Agreement](#).

If you have any questions about the Request for Statement of Qualifications process, please contact Rick Whetsel at (951) 354-4222 or rwhetsel@sawpa.org.

Mark Norton PE, LEED AP, ENV SP
LESJWA Authority Administrator

Attachment A: Lake Elsinore & Canyon Lake Nutrient TMDL Technical Support Document

This document contains pertinent background material to aid consultants in understanding the role sought by LESJWA in issuing the Request for Qualifications Issued to support stakeholders of the LE&CL TMDL Task Force to update and revise the Lake Elsinore and Canyon Lake nutrient TMDLs.

This includes a brief background on LESJWA, the San Jacinto Watershed and the Lake Elsinore & Canyon Lake nutrient TMDLs identifying a number of the key TMDL documents.

Next, the key tasks to prepare the essential technical and regulatory documents required to revise the Lake Elsinore and Canyon Lake nutrient TMDLs are outlined including a schedule of key dates and a description of key deliverables.

This is followed by a number of key documents to support the project including:

- June 18, 2015, petition to the Santa Ana Regional Board by LESJWA on behalf of stakeholders of the LE&CL TMDL Task Force to reopen and revise the Lake Elsinore and Canyon Lake nutrient TMDLs.
- October 7, 2014, draft list of key tasks presented to stakeholders to support the revision of the Lake Elsinore and Canyon Lake nutrient TMDLs prepared by Tim Moore, Risk Sciences.
- August 13, 2014, draft outline of the essential technical and regulatory documents required to revise the Lake Elsinore and Canyon Lake nutrient TMDLs prepared by Tim Moore, Risk Sciences.
- July 3, 2014, technical memorandum: Rationale for updating the Source Identification and Loading Analysis Used to Implement the Nutrient TMDLs in Canyon Lake and Lake Elsinore prepared by Tim Moore, Risk Sciences.
- May 27, 2014, technical memorandum: Updating the TMDL Water Quality Model for Lake Elsinore prepared by Tim Moore, Risk Sciences.
- October 23, 2013, technical memorandum: Navigating a Mid-course Correction for the Nutrient TMDL in Lake Elsinore and Canyon Lake prepared by Tim Moore, Risk Sciences.

LESJWA

LESJWA is a Joint Powers Authority and is governed by five member agencies: Elsinore Valley Municipal Water District, the City of Lake Elsinore, the City of Canyon Lake; the County of Riverside, and the Santa Ana Watershed Project Authority, which serves as the Authority Administrator.

LESJWA has established the following goals and objectives for its organization:

- To support planning, design and implementation of projects to improve water quality at both Lake Elsinore, Canyon Lake and the San Jacinto River Watershed
- To work with stakeholders to secure reliable funding to operate and maintain water quality improvement projects at both Lake Elsinore, Canyon Lake and the San Jacinto River Watershed
- To serve as administrator of the Lake Elsinore and Canyon Lake TMDL Task Force
- To seek ongoing reliable revenue to operate LESJWA JPA in fulfillment of its mission

LESJWA's duties as administrator of the Lake Elsinore and Canyon Lake TMDL Task Force include the following:

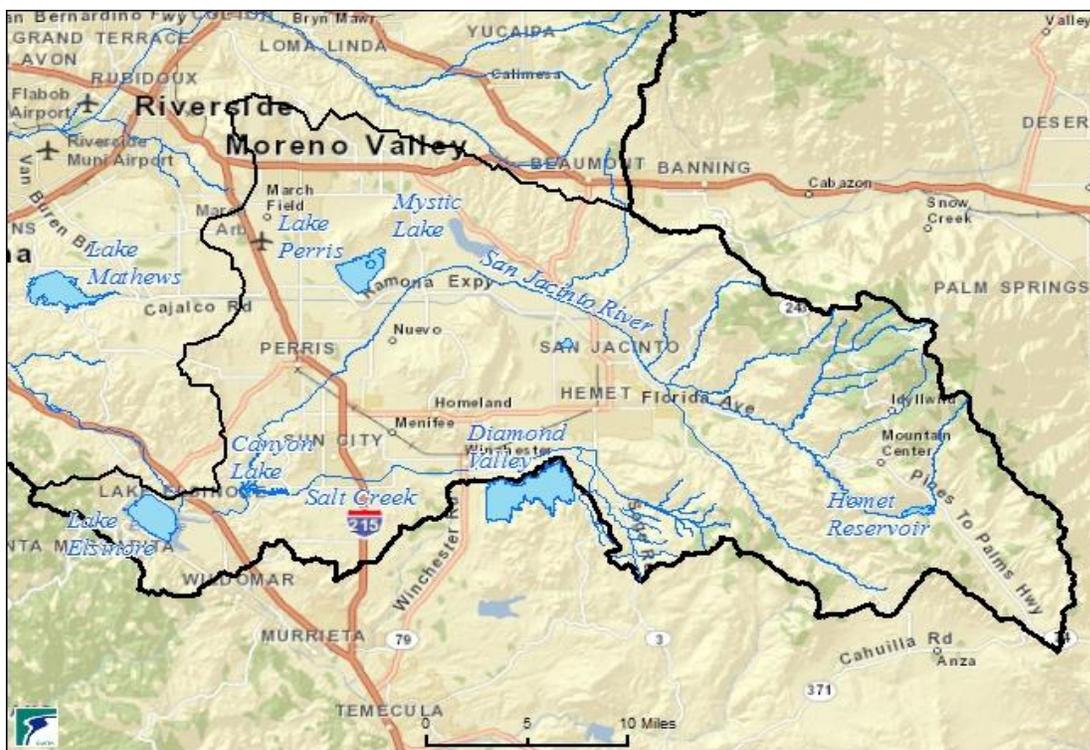
- Organize and facilitate TMDL Task Force and TAC meetings,
- Perform secretarial, clerical and administrative services, including providing meeting summaries to TMDL Task Force members,
- Manage TMDL Task Force funds and prepare annual reports of TMDL Task Force assets and expenditures,

- Serve as the contracting party, for the benefit of the TMDL Task Force, for contracts with all consultants, contractors, vendors and other entities,
- Seek funding grants to assist with achieving goals and objectives of the TMDL Task Force.
- Coordinate with other agencies and organizations as necessary to facilitate TMDL Task Force work.
- Administer the preparation of quarterly and annual reports, as required by the TMDL Implementation Plan, and submit them as required by the TMDL Implementation Plan on behalf of the TMDL Task Force.

PROJECT AREA

The San Jacinto Watershed (Figure 1) is approximately 735 square miles. There are two main watercourses in the Watershed: the San Jacinto River and Salt Creek. Over 90 percent of the San Jacinto Watershed drains to Canyon Lake from the San Jacinto River, about 3 miles upstream from Lake Elsinore. The San Jacinto River drains the western slopes of the San Jacinto Mountains and flows through the communities of San Jacinto and Perris before entering Canyon Lake. Salt Creek is tributary to the San Jacinto River and flows into Canyon Lake from the East. Discharges from Canyon Lake Dam flow southwest in the San Jacinto River to Lake Elsinore, a natural sink. Lake Elsinore's direct watershed comprises approximately 47 square miles making the total drainage basin 782 square miles.

Figure 1. Lake Elsinore & Canyon Lake TMDL Project Area



BACKGROUND

Canyon Lake and Lake Elsinore are on California's 303(d) list of Impaired Waterbodies due to excessive algae and low dissolved oxygen resulting from elevated nutrients concentrations. In December of 2004, the Santa Ana Regional Water Quality Control Board adopted a Total Maximum Daily Load (TMDL) to

address these water quality impairments (R8-2004-0037).¹ Most of the critical documents related to this TMDL are available on the Regional Board's website.²

The TMDL established Final Causal Targets for nitrogen and phosphorus. The TMDL also established Interim and Final Targets for chlorophyll-a and dissolved oxygen. The TMDL specified Wasteload Allocations for point sources and Load Allocations for non-point sources. Compliance with these allocations, and attainment of the Final Targets, is required by the end of 2020.

Immediately after the TMDL was approved, stakeholders in the watershed formed a voluntary Task Force to manage and coordinate all implementation efforts. The Task Force is comprised of representatives from Riverside County and all of the incorporated cities named in the TMDL. It also includes representatives from the Western Riverside County Agricultural Coalition (WRCAC) and several state and federal agencies. The Task Force meets monthly and Regional Board staff regularly attends these meetings.

In the decade since the TMDL was adopted, the Task Force has implemented a comprehensive water quality monitoring program for both lakes and the surrounding watershed.³ The Task Force developed a long-term nutrient management strategy.⁴ The MS4 co-permittees developed a Comprehensive Nutrient Reduction Plan⁵ and WRCAC developed a similar plan for agricultural operators.⁶ All of the implementation plans described above have been approved by the Regional Board and the stakeholders are currently executing those plans. Several large-scale remediation projects, including alum application in Canyon Lake and Aeration/Mixing Systems in Lake Elsinore, have already been implemented. Numerous Best Management Practices (BMPs) have also been initiated throughout the watershed.⁷

While working to achieve compliance with the nutrient TMDLs, the Task Force also provided significant financial support to update the water quality models used to develop the original TMDL. This includes more recent land use maps, more accurate watershed runoff models and more sophisticated in-lake models. Collectively, all of this effort has resulted in a better understanding of the various natural and anthropogenic factors that influence water quality in both lakes. These prior work products will serve as the primary resources for updating and revising the current TMDL.

In June of 2015, the Task Force petitioned the Regional Board to reopen and revise the TMDL based on the wealth of new information developed over the last 10 years (copy attached).⁸ And, the Regional Board agreed to make this effort a high priority as part of the recent Triennial Review (R8-2015-0085).⁹ As part of this agreement, the Task Force has accepted responsibility to develop the documentation needed to update and amend the nutrient TMDL for Canyon Lake and Lake Elsinore.

¹ http://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2004/04_037.pdf

² http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/elsinore_tmdl.shtml

³ http://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2006/06_031.pdf

⁴ http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/elsinore/implemetation/Lake_Elsinore_Sediment_Nutrient_Reduction_Plan_10-22-07.pdf

⁵ http://www.waterboards.ca.gov/santaana/water_issues/programs/stormwater/docs/rcpermit/cnpr/CNRP_Final_1-28-2013.pdf

⁶ http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/elsinore/agnmp/Final_AgNMP_4-30-13.pdf

⁷ http://www.waterboards.ca.gov/santaana/water_issues/programs/stormwater/docs/rcpermit/rowd/Santa_Ana_Region_Report_of_Waste_Discharge_07292014.pdf

⁸ http://www.waterboards.ca.gov/santaana/board_info/agendas/2015/07_24/Item_13_Triennial_Review_of_the_WQ_Control_Plan_Basin_Plan_R8-2015-0034.pdf (letter submitted by Lake Elsinore San Jacinto Watershed Authority).

⁹ http://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/resolutions/R8-2015-0085_Triennial_Review_Priority_List_and_Work_Plan_2015-2018.pdf

PRELIMINARY SCOPE OF WORK

The scope of this project will include the following:

Task 1: Prepare a TMDL Technical Document to support proposed changes to the current TMDL. This new Technical Document will be similar in form and content to a similar report prepared by the Regional Board (dated June 4, 2004). The following table describes the major chapters in the document and the significant revisions likely to be proposed.

Chapter	Description
1) Background	Summarizes the current TMDL, Task Force process, previous implementation activities and need for revising the TMDL.
2) Problem Statement	Summarizes the basis for the original 303(d) listing and characterizes current water quality conditions and trends. Highlights the asymmetric nature of external nutrient loads to both lakes. Separate Main Body and East Branch of Canyon Lake. Describe constraints on zooplankton populations caused by naturally elevated salinity conditions in Lake Elsinore.
3) Numeric Targets	Translate narrative water quality objective into appropriate response targets for chlorophyll-a, dissolved oxygen, and ammonia. Specify appropriate causal targets for nitrogen and phosphorus to assure attainment of the recommended response targets. All targets should take into consideration modeling data indicating the concentrations estimated to occur under natural, pre-development land use conditions and should recommend appropriate averaging periods. Separate Main Body and East Branch of Canyon Lake.
4) Source Analysis	Estimate current internal and external nutrient loads to both lakes from all significant point and non-point sources. This task will rely on the updated watershed runoff model (2010), updated land use maps (2015), and updated lake model simulations previously developed by the Task Force. Separate Main Body and East Branch of Canyon Lake. Explicitly account for loads that originate above Canyon Lake but are ultimately transferred to Lake Elsinore.
5) Linkage Analysis	Develop a Total Maximum Daily Load to meet the numeric targets using the updated lake simulation models. Prepare justification for using averaging periods other than "daily" time steps.
6) Wasteload Allocation and Load Allocation	Specify the Wasteload Allocation for point sources and the Load Allocation for non-point sources required to meet achieve consistent compliance with the TMDL developed in the Linkage Analysis. Separate Main Body and East Branch of Canyon Lake.
7) Implementation and Planning Requirements	Identify the specific implementation obligations required for regulated discharges (including a schedule of deliverables). Establish legal basis for authorizing Offset Programs to achieve necessary load reductions. Prepare technical justification for long-term compliance schedules if necessary.
8) Monitoring Requirements	Describe minimum monitoring requirements for Lake Elsinore and Canyon Lake and the watershed tributary to these lakes. Specify when a new monitoring plan must be submitted for Regional Board approval.
9) References	Comprehensive bibliography (with corresponding document reference ID# in the Administrative Record).

It is estimated that the TMDL Technical Document will be 100-150 pages long and will include approximately 200 additional pages of supporting appendices. The contractor is responsible for preparing two drafts of each chapter and one final version of the complete report.

- Task 2:** Prepare a Substitute Environmental Document (SED) to support any proposed revisions to the Nutrient TMDL and comply with CEQA requirements. The SED should follow the general format and structure used by the Regional Board for other recent TMDLs and Basin Plan amendments.¹⁰ The SED should include a thorough Alternatives Analysis and a complete CEQA "Checklist." It should identify the "reasonably foreseeable methods of compliance" and discuss the potential environmental impacts associated with revising the TMDL. For purposes of preparing the SED, the "No Project Condition" is defined as continuing to implement the current Nutrient TMDL (adopted in December, 2004) without revision. It is estimated that the SED will comprise approximately 75-100 pages. The contractor is responsible for preparing one draft and one final version of the SED.
- Task 3:** Prepare an Economic Analysis that characterizes the costs and benefits associated with revising the TMDL and compares those impacts (both positive and negative) with the No Project Alternative. The purpose of this document is not to justify costs based on benefits but, rather, to describe both as accurately as possible in order to inform the Regional Board's decision-making process as specified in §13000 and §13241 of the California Water Code. The Economic Analysis should take into consideration the reasonably foreseeable methods of compliance identified in the SED (above). It is estimated that the Economics Analysis will comprise approximately 80-100 pages. The contractor is responsible for preparing one draft and one final version of the Economic Analysis.
- Task 4:** Compile, organize and index the entire Administrative Record (AR) for the recommended TMDL revisions and the proposed Basin Plan amendments. The AR must contain copies of all documents used to develop the revised TMDL. This includes all technical reports, scientific studies, meeting minutes and agendas, handouts, Powerpoint presentation, letters, memoranda, public comments and responses. Where multiple drafts and final documents were considered, copies of all such versions should also be included in the AR. The contractor should prepare four complete hard copies of the entire AR (one for SAWPA, one for the Regional Board, one for the State Board, and one for the Office of Administrative Law). In addition, every document in the AR should be scanned or otherwise converted to a PDF file and the entire AR should be assembled onto DVD storage media. The contractor should prepare a searchable electronic index, in Excel format, for the entire AR. The AR must be updated as necessary until the final version is submitted to the OAL. It is estimated that the complete AR may comprise up to 10,000 pages.
- Task 5:** Assemble all of the above deliverables into a package to support the proposed Basin Plan amendments. This includes a detailed description of any recommended changes to the current Basin Plan (in both Track-Changes and Clean versions), the final version of the TMDL Technical Document prepared in Task 1, the SED prepared in Task 2, the Economic Analysis prepared in Task 3, and the AR prepared in Task 4. It does not include the Scientific Peer Review report, the Regional Board staff report, the response to public comments, the final Basin Plan amendment language, or the adoption resolution as the Regional Board staff has primary responsibility for preparing these five items.
- Task 6:** Prepare for and attend regular meetings of the TMDL Task Force in order to coordinate development of the various deliverables and report on current progress. It is estimate that approximately 30 such meetings will likely take place over the next three years. Numerous additional teleconferences, with Regional Board staff, Task Force representatives and other consultants assisting the effort, will also be necessary to complete the project.

¹⁰http://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/rec_standards/BPA_REC_Standards_Staff_Rpt_AttC.pdf

PRELIMINARY PROJECT SCHEDULE

The current TMDL (adopted in December, 2004) specifies a final compliance date of December 31, 2020. It is essential that any recommended revisions to that TMDL be through the entire regulatory approval process (Regional Board, State Board, OAL and U.S. EPA) well before that deadline. The TMDL Task Force suggests the following project development schedule:

Task	Description	Deadline
1A	1 st draft of Chapter 1 of Technical Document (Introduction)	Jan., 2016
1B	1 st draft of Chapter 2 of Technical Document (Problem Statement)	Feb. 2016
1C1	1 st draft of Chapter 3 of Technical Document (Numeric Response Targets)	Mar., 2016
1C2	1 st draft of Chapter 3 of Technical Document (Numeric Causal Targets)	Apr., 2016
1D	1 st draft of Chapter 4 of Technical Document (Source Analysis)	May, 2016
1A & B	2 nd draft of Chapters 1 & 2 of Technical Document (Intro. & Problem Statement)	June, 2016
1C	2 nd draft of Chapter 3 of Technical Document (Numeric Targets)	July, 2016
1D	2 nd draft of Chapter 4 of Technical Document (Source Analysis)	Aug., 2016
1E	1 st draft of Chapter 5 of Technical Document (Linkage Analysis)	Sep., 2016
1F	2 nd draft of Chapter 5 of Technical Document (Linkage Analysis)	Nov., 2016
4	1 st compilation of Administrative Record (to date)	Jan., 2017
1G	1 st draft of Chapter 6 of Technical Document (WLA & LA)	Feb., 2017
1G	2 nd draft of Chapter 6 of Technical Document (WLA & LA)	Apr., 2017
1H	1 st draft of Chapter 7 of Technical Document (Implementation Plan)	June, 2017
1I	1 st draft of Chapter 8 of Technical Document (Monitoring Requirements)	July, 2017
1H	2 nd draft of Chapter 7 of Technical Document (Implementation Plan)	Aug., 2017
1I	2 nd draft of Chapter 8 of Technical Document (Monitoring Requirements)	Sep., 2017
1J	Bibliography and References Chapter of Technical Document	Oct., 2017
1	Final version of TMDL Technical Document	Nov., 2017
4	2 nd compilation of Administrative Record (to-date)	Dec., 2017
2	1 st draft of Substitute Environmental Document (SED)	Jan., 2018
3	1 st draft of Economic Analysis	Feb., 2018
RB	Independent Scientific Peer Review	Mar., 2018
2	Final version of SED and CEQA Checklist	Apr., 2018
3	Final version of Economic Analysis	May, 2018
RB	Regional Board Staff Report	June, 2018
4	3 rd compilation of Administrative Record (to date)	June, 2018
5	Basin Plan Amendment Package	July, 2018
RB	Regional Board Workshop and Request for Public Comments	Aug., 2018
RB	Prepare Response to Public Comments submitted to Regional Board	Oct., 2018
RB	Regional Board Hearing to Consider Adopting Basin Plan Amendment	Nov., 2018
4	4 th compilation of Administrative Record (for submission to SWRCB)	Jan., 2019
RB	Prepare Response to Public Comments submitted to State Board	May, 2019
RB	State Water Resources Control Board Hearing for Basin Plan Amendment	July, 2019
5	5 th and final compilation of Administrative Record (for submission to OAL)	Aug., 2019
RB	Submit Basin Plan amendment and AR to OAL	Sep., 2019
RB	OAL Review Complete	Dec., 2019
RB	Submit Basin Plan amendment to U.S. EPA for review and approval	Jan., 2020

Note: Regional Board staff is responsible for tasks marked "RB"; these items are not contract deliverables.

DELIVERABLES

The key final products that must be delivered by the selected firm(s) include:

- 1) An updated TMDL Technical Document similar in form and content to the one published by the Regional Board staff in June of 2004 that was used to justify the original TMDL.¹¹
- 2) A Substitute Environmental Document (SED) to comply with relevant provisions of CEQA (including a CEQA checklist and an appropriate Alternatives Analysis).
- 3) An Economic Analysis of the proposed TMDL revisions compared to the existing TMDL.
- 4) A comprehensive compilation of the entire Administrative Record related to the proposed Basin Plan amendment in both hard copy and electronic (PDF) form with a searchable index in Excel (xls) format.
- 5) A Basin Plan amendment package that includes all of the items described above plus a detailed description of the actual proposed changes to the current Basin Plan.

The Regional Board staff will have primary responsibility for: (a) coordinating any necessary scientific Peer Review, (b) responding to public comments, and (c) preparing a formal staff report and recommendation. The technical consultant(s) is not responsible for tests tasks, however, they may be asked to assist the Regional Board staff with some of these tasks by organizing and providing additional background documentation.

The complex Scope-of-Work and accelerated project development schedule will require that the technical consultant(s) selected to perform the work have a thorough understanding of the key documents cited in the RFQ and numerous additional background documents available on the Regional Board's website¹² and SAWPA's website.¹³

¹¹ http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/elsinore/final_1.pdf
http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/elsinore/final_2.pdf
http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/elsinore/final_3.pdf

¹² http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/elsinore_tmdl.shtml

¹³ <http://www.sawpa.org/collaboration/projects/lake-elsinore-canyon-lake-tmdl-task-force/>