# Request for Qualifications
# Calleguas Creek Watershed Total Maximum Daily Load Monitoring Program Assistance

## Water and Sediment Toxicity Analysis Services

Calleguas Municipal Water District acting as Fiscal Agent for the Responsible Parties implementing the Calleguas Creek Watershed Total Maximum Daily Load Monitoring Program (CCWTMP) is seeking a qualified toxicity laboratory to conduct analysis of water and sediment samples for the Calleguas Creek Watershed Monitoring and Reporting Program Plan for the Nitrogen, OC and PCBs, Toxicity, and Metals and Selenium Total Maximum Daily Loads (TMDLs). The toxicity laboratory (Contractor) will provide services to the Fiscal Agent as a subconsultant to the Fiscal Agent's TMDL Implementation Coordinator (Larry Walker Associates). Based on material submitted in the April 15th, 2008 DRAFT Calleguas Creek Watershed Management Plan Quality Assurance Project Plan (QAPP), selected Contractors are now invited to provide a Statement of Qualifications (SOQ) and a cost estimate of costs.

**INSTRUCTIONS TO BIDDERS**

Please provide 10 printed copies and one electronic copy on compact disc of your submittal no later than **4:00 pm, August 25, 2008** to:

Henry Graumlich
Calleguas Municipal Water District
Fiscal Agent for TMDL MOA Parties
2100 Olsen Road
Thousand Oaks, CA 91360

Submissions via FAX or email will not be accepted. Those making deliveries in person may leave their submittal package with the Administrative Assistant in the foyer.

All bidders should inform Mr. Graumlich of their intention to respond by **4:00 pm, August 13, 2008** via email (HGraumlich@calleguas.com and Chrism@LWA.com), in order to be notified of any additional information regarding this solicitation. Questions regarding this SOQ are welcome and should also be directed to Mr. Graumlich via email using both e-mail addresses above; no phone calls please. Questions are due no later than **4:00 pm, August 18, 2008**. Responses to questions received will be sent to all bidders who have notified the Fiscal Agent of their intention to submit a proposal.

The Fiscal Agent on behalf of the Responsible Parties reserves the right to reject any and all bids, to waive any informality, and to make selections in the best interests of the Responsible Parties. The Fiscal Agent reserves the right to use any ideas and/or concepts

submitted in response to this RFQ. Each firm submitting a response waives the right to object to the use of any such information contained in said bid by the Fiscal Agent.

The selected Contractor must be prepared to begin work no later than **September 15, 2008**. The initial contract term will be for approximately one year, and is renewable for up to two additional years subject to satisfactory performance and available funding.

# 1 PROJECT BACKGROUND

Located in Ventura County California, the Calleguas Creek Watershed (CCW), though relatively small in area, suffers from more water quality impairments than most California watersheds, as defined by the USEPA's 303(d) list. Calleguas Creek drains an area of approximately 343 square miles from the Santa Susana Pass in the east to Mugu Lagoon in the southwest.

The Clean Water Act requires TMDLs be developed to restore 303(d) listed waterbodies, and the State of California Porter-Cologne Water Quality Act requires that an Implementation Plan be developed to achieve water quality objectives. States must develop water quality management plans to implement the TMDL (40 CFR 130.6). Four TMDLs addressing impairments within the CCW have been adopted. The corresponding Basin Plan Amendments (BPA) for the following TMDLs require the development and implementation of monitoring programs:

- Nitrogen Compounds and Related Effects in Calleguas Creek (Nitrogen TMDL)
- Organochlorine (OC) Pesticides, Polychlorinated Biphenyls (PCBs) and Siltation in Calleguas Creek, its Tributaries, and Mugu Lagoon (OCs TMDL)
- Toxicity, Chlorpyrifos, and Diazinon in the Calleguas Creek, its Tributaries and Mugu Lagoon (Toxicity TMDL)
- Metals and Selenium in Calleguas Creek, Its Tributaries, and Mugu Lagoon (Metals TMDL)

The CCWTMP outlined in the QAPP is a coordinated effort with the various stakeholders that are identified as responsible parties in the TMDLs. Responsible parties identified in the TMDL have developed a Memorandum of Agreement (MOA) that outlines an agreement to implement the QAPP. The QAPP (dated April 15th, 2008) and appendices (June 19th, 2007) are available at **www.calleguascreek.org/ccwmp/index.asp**.

The CCWTMP was developed to meet the monitoring requirements for the four aforementioned TMDLs. The goals of the CCWTMP include:

1. To determine compliance with numeric targets, waste load and load allocations.
2. To test for sediment toxicity at sediment monitoring stations.
3. To identify causes of unknown toxicity.
4. To generate additional land use runoff data to better understand pollutant sources and proportional contributions from various land use types.

5. To monitor the effect of implementation actions by urban, POTW, and agricultural dischargers on in-stream water, sediment, and fish tissue quality.
6. To implement the program consistent with other regulatory actions within the CCW.

The CCWTMP is intended to answer the following monitoring questions to meet the goals of the program:

1. Are numeric targets and allocations met at the locations indicated in the TMDLs?
2. Are conditions improving?
3. What is the contribution of constituents of concern from various land use types?

Water, sediment, and fish tissue samples collected throughout the watershed will be analyzed to determine whether targets and allocations are being met. Data collected through the CCWTMP will be used in conjunction with historical data to evaluate whether conditions are improving. Samples collected at land use sites will provide data to evaluate the contribution of constituents of concern from each type of land use to receiving waterbodies. Lastly, the data will be used to evaluate the CCWTMP's effectiveness at answering the monitoring questions and provide guidance for modifications.

# 2 SCOPE OF SERVICES

The Responsible Parties are seeking a qualified toxicity laboratory (Contractor) to conduct analysis of water and sediment samples for toxicity. The scope of work is described below and based upon the QAPP. The selected Contractor will be responsible for coordinating with Larry Walker Associates (LWA); analyzing samples, conducting toxicity identification evaluations (TIEs), if appropriate; and providing data in electronic format.

The requested services in the RFQ are based on the QAPP. Standard operating procedures (SOPs) for analyzing toxicity samples are provided in the Appendices associated with the QAPP. The winning Contractor will be expected to conduct analysis in a manner consistent with the SOPs. All bids will be assumed to meet the requirements of the SOPs. The contract amount will not be revised to address situations where the Contractor submitted a bid assuming samples would be analyzed in a manner not consistent with the SOPs. Briefly the scope of services includes:

- Review and understand the approved QAPP.
- Participate in a coordination call with LWA and their monitoring subcontractor.
- Coordinate with field staff to provide necessary containers.
- Submit required reports and compiled data sets to LWA's monitoring subcontractor.
- Work with LWA's monitoring subcontractor to resolve any conflicts, data errors, missing data, and other issues associated with obtaining a complete and correct data set.

The following describes the scope of water and sediment toxicity analysis requested in more detail and represents a consolidated version of the overall requirements outlined in the QAPP.

## 2.1 Water and Sediment Toxicity Sampling

Freshwater water toxicity sampling will occur on a quarterly basis. All efforts will be made to include two wet weather water sampling events for compliance monitoring during targeted storm events between October and April. The wet weather events will be in addition to the quarterly events. As such, there will be no more than six water toxicity sampling events. Freshwater sediment toxicity sampling will occur on an annual basis. Sediment toxicity sampling in Mugu Lagoon will occur every three years.

There may be overlap of freshwater water toxicity sampling sites with existing programs. For this RFQ, it is assumed the selected Contractor will analyze water toxicity samples for all sites identified for toxicity monitoring in the QAPP. The determination of the exact number of sites will be finalized after awarding the contract. Contract amounts will be revised if necessary to account for any changes in sites.

Figure 1 through Figure 4 present the locations of water and sediment toxicity sampling sites. Table 1 outlines the sampling schedule for the first year of monitoring.

**Table 1. CCW TMDL Toxicity Monitoring Sampling Schedule and Number of Sites per Month**

| Site Type | Nov | Feb DRY/WET[1] | Mar WET[1] | May | Aug |
|---|---|---|---|---|---|
| **Freshwater** | | | | | |
| Water Toxicity | 8 | 8/8 | 8 | 8 | 8 |
| Sediment Toxicity | | | | | 4 |
| **Mugu Lagoon** | | | | | |
| Sediment Toxicity | | | | | 5 |

1 Includes two wet events, which could occur between October and April. For the purposes of this table it was assumed the wet events would be conducted in February and March. A dry weather quarterly event is also scheduled for February.

## 2.2 Toxicity Testing and Toxicity Identification Evaluations (TIEs)

For the CCWTMP, standard test species will be used for toxicity testing. *Ceriodaphnia dubia* will be used for the aquatic toxicity testing. *Hyalella azteca* will be used for the bulk sediment and porewater toxicity testing. *Eohaustorius estuarius* will be used for aquatic, bulk sediment, and porewater toxicity at sampling locations where salinity levels adversely affect the other test species. *Americamysis bahia* (formerly *Mysidopsis bahia*) will be used to conduct aquatic toxicity testing if sample salinity exceeds 1 part per thousand (PPT) but is less than 15 PPT.

The test species selected are standard USEPA test species considered to be among the most sensitive species to many different types of pollutants. The test species are particularly sensitive to constituents previously identified as contributing to toxicity in water and/or sediment in the CCW. *C. dubia* is a water flea known to be extremely sensitive to organophosphate pesticides and some metals and also is used as an indicator of ammonia toxicity. *H. azteca* is a sediment dwelling invertebrate that is sensitive to ammonia and organochlorine pesticides. *E. estuarius* is a burrowing amphipod that is sensitive to organochlorine and organophosphate pesticides. *A. bahia* is a shrimp known to be sensitive to organophosphate pesticides. At such a time as toxicity numeric targets are consistently met, alternative species may be considered if it is determined the aforementioned species are not completely assessing toxicity in the CCW.

The following is an optional monitoring element as discussed in Element 6 (Project Description) of the QAPP. Sediment toxicity testing to either *Mytilus edulis* or *Crassostrea gigas* embryos may be conducted for comparison to the California Sediment Quality Objectives. Because embryo testing is not required to meet the requirements of the TMDL monitoring, the decision to implement this component of the CCWTMP will be made by the Management Committee per the process outlined in the QAPP. However, for the purposes of the toxicity cost estimate the costs for toxicity analysis of both species are requested.

Water and toxicity testing will be conducted according to current USEPA guidelines. Chronic tests will be used to assess both survival and reproductive/growth endpoints for each species. Test species may be added or removed in the future to adequately identify the presence/absence of toxicity.

Multiple dilution tests on water samples will be conducted to determine the magnitude of toxicity and subsequently the value of the toxic unit chronic (TUc). At the initiation of monitoring the following five dilutions will be used: 100%, 50%, 25%, 12.5%, and 6.25%. The number of dilutions and percent dilutions may be adjusted based on analytical results.

The results of toxicity testing will be used to trigger further investigations to determine the cause of observed laboratory toxicity. If testing indicates the presence of significant toxicity in the sample, TIE procedures may be initiated to investigate the cause of toxicity. For the purpose of triggering TIE procedures, significant toxicity is defined as at least 50% mortality. The 50% mortality threshold is consistent with the approach recommended in guidance published by USEPA for conducting TIEs (USEPA, 1996), which recommends a minimum threshold of 50% mortality because the probability of completing a successful TIE decreases rapidly for samples with less than this level of toxicity. A targeted Phase 1 TIE will be conducted to determine the general class of constituent (*i.e.*, non-polar organics) causing toxicity. The targeted TIE will focus on classes of constituents anticipated to be observed in drainages dominated by urban and agricultural discharges and those previously observed to cause toxicity. These classes of constituents are non-polar organics. Phase 2 TIEs may also be utilized to identify

specific constituents causing toxicity if warranted. TIE methods will generally adhere to USEPA procedures documented in conducting TIEs (USEPA, 1991, 1992, 1993a-b). For samples exhibiting toxic effects consistent with carbofuran, diazinon, or chlorpyrifos, TIE procedures will follow those documented in Bailey *et al*. (1996).

As stated above, chronic tests will be used to assess both survival and reproductive/growth endpoints for each species to allow for an evaluation of compliance with the 1 TUc endpoint in water established in the Toxicity TMDL BPA and in the Conditional Waiver. Therefore, the sensitivity of this endpoint is conserved. Similar to the VCAILG QAPP TIE approach, the 50% mortality endpoint is for TIE initiation only not for assessing compliance with the TMDL.

Any project-specific modifications to these methods will be documented in future amendments to the QAPP. TIE procedures will be initiated as soon as possible after toxicity is observed to reduce the potential for loss of toxicity due to extended sample storage.

Substantial work has been completed in the CCW utilizing TIEs conducted on sediment porewater, the most common and accepted approach for the performance of sediment TIEs (USEPA 1991). While there has been significant advancement regarding the application of the TIE process to bulk sediments, USEPA accepted methods for the performance of bulk-sediment TIEs are yet to be finalized and accepted; however, USEPA is planning to update its Sediment TIE Guidance manual in the near future to include methods for performance of bulk-sediment TIEs in addition to the current accepted porewater TIE methods. Until bulk sediment TIE procedures are more completely developed and accepted and/or it is felt their use in the CCW will significantly improve the determination of causes of unknown toxicity, the CCWTMP will utilize porewater TIE methods. To address toxicity of unknown causes in sediment, sediment porewater will be extracted and tested for toxicity when significant toxicity, defined as at least 50% mortality, is observed in the bulk sediment sample. If the subsequent sediment porewater toxicity testing results in greater than 50% mortality, a Phase 1 TIE may be initiated on the sediment porewater.

The decision to initiate TIE procedures on any sample, including samples exceeding the mortality threshold, as well as the focus and scope of TIE procedures, will be determined through consultation between the Project Manager, the toxicity laboratory, and Regional Board staff. When deciding whether to initiate TIE procedures for a specific site and monitoring event, a number of factors will be considered, including the level of toxicity, history of toxicity at the site, the species and endpoints exhibiting toxic effects, as well as the primary technical basis for triggering TIEs described above. The rationale for initiating TIE procedures for a specific sample will be clearly documented in subsequent reports.

## 2.3 Data Management and Reporting

The selected Contractor will be responsible for managing laboratory data. The

acceptability of data is determined through data verification and data validation. Both processes are discussed in detail in the QAPP. Upon completion of the sampling event, the Contractor shall conduct data verification prior to providing the lab report as outlined in the QAPP, and briefly described as follows:

1. Verify that methods and procedures have been followed at all stages of the data collection process, including sample receipt, sample preparation, sample analysis, and documentation review for completeness.
2. All data will be compiled into a SWAMP compatible database in either a Microsoft Access® or Microsoft Excel® file format to be developed in coordination with LWA.

# 3 INFORMATION TO BE PROVIDED IN THE RESPONSE TO RFQ

The following section details the information requested from the Contractor as part of the RFQ. Submittals are limited to no more than nine (9) single sided pages (excluding the cover page) in Times New Roman 12-point font. A potential use of the pages is provided below as guidance. Attachments do not have a page limit, but are limited to the requested materials below. Additional information not explicitly requested in the RFQ or over the page limit will not be reviewed. Bidders must submit 10 double sided printed copies and one electronic copy of the entire package. Also include the Budget Template spreadsheet in Microsoft Excel®.

1. Firm Background (1 page)
2. Project Understanding (3 pages) – Please include a discussion of the following:
    - General project understanding
    - Approach to conducting TIEs
    - Discuss testing capacity, particularly during storm related events
    - Other relevant information
3. Staff Bios (2 pages) – Do not attach resumes
    - Briefly summarize the experience and location of project manager, no more than 2 key lab personnel, and 1 data management staff that will be directly involved with the CCWTMP.
    - Briefly describe their roles in the CCWTMP.
4. Relevant Project Experience (3 pages)
    - Briefly summarize your firm's experience and qualification for conducting the requested services.
    - Provide at least 3 prior project examples and include:
        - A description of the project
        - Duration of project
        - Cost of project managed by Contractor
        - References
        - Key Staff – only include key staff identified in Staff Bios (i.e., do not include staff that will not be working on the CCWTMP).

5. Cost Information
    - Fill out the attached Excel® spreadsheet. If you identify any computational or formatting issues please notify us immediately.
    - Include a Staff Rate Sheet
    - One page of text may be included in the Excel® spreadsheet to provide cost information if necessary.
6. Lab Management Information
    - Fill out the attached Excel® spreadsheet.
7. Proof of Insurance
    - The Contractor shall, at their sole expense, maintain in effect the following insurance coverage for the duration of the contract and include LWA and Calleguas Municipal Water District as an additional insured on their policy
    - Workers' Compensation insurance shall be held and maintained by the Bidders as required by applicable laws of the State of California with a minimum amount and limit of One Million Dollars ($1,000,000) for each accident.
    - Professional Liability insurance shall be held and maintained by the Bidders covering liabilities arising from Bidder's acts, errors or omissions for services, activities, tasks and / or the scope of work rendered or that should have been rendered to and/or on behalf of LWA.
    - General Liability insurance shall be held and maintained by the Bidders covering all operations by or on behalf of the Bidders providing insurance for bodily injury liability and property damage liability. The combined single limits of liability for bodily injury or property damage shall be One Million Dollars ($1,000,000) for each occurrence, and Two Million Dollars ($2,000,000) aggregate.
    - Automobile Liability (Bodily Injury and Property Damage Liability) insurance shall be held by the Bidders, including coverage for all owned, hired, and non-owned automobiles. The combined single limit of liability shall be One Million Dollars ($1,000,000) for any one accident or loss.

# 4 EVALUATION CRITERIA

The selection committee will review the proposals. Contractors will be evaluated to determine the best value for the Responsible Parties based on the following criteria:

1. Contractor Team Member experience and qualifications. (45%)
2. Contractor Team's Relevant Project Experience and past record of performance in similar projects. (45%)
3. Proposed Costs. (10%)

# 5 CONSULTANT SELECTION PROCESS AND IMPORTANT DATES

1. A Contractor selection committee will be established for this project and will include representatives from the Responsible Parties listed in the QAPP.
2. Based upon the proposals submitted, the selection committee may select a short-list of qualified contractors for this project and conduct interviews, if deemed appropriate. The Responsible Parties reserves the right to make a final consultant selection based solely upon evaluation of the written proposals, without short-listing firms or conducting oral interviews, should it be in the Responsible Parties' best interest to do so.
3. Based upon the proposals and interviews (if held), the committee will evaluate the finalists as to qualifications. The committee will recommend the selected contractor and the Fiscal Agent will enter into negotiations with the selected contractor.
4. If the Fiscal Agent is unable to reach an acceptable agreement with the selected contractor, the Fiscal Agent will recommend that negotiations be terminated and that negotiations with the second ranked contractor commence. The Fiscal Agent has final authority to terminate negotiations and move to the next ranked consultant.
5. After negotiating a proposed agreement that is fair and reasonable, the Project Fiscal Agent will recommend LWA enter into an agreement.
6. The contract shall begin upon approval and execution by the LWA, and the Contractor shall commence work after notification to proceed by the LWA.
7. The Contractor is advised that any recommendation for contract award is not binding until the Agreement is fully executed and approved.

**RFQ Important Dates**

| | |
|---|---|
| RFQ Distributed | August 4, 2008 |
| Notify Intention to Submit | 4 pm August 13, 2008 |
| Questions Due | 4 pm August 18, 2008 |
| RFQ Submittal Deadline | 4 pm August 25, 2008 |
| Contractor Selection, Negotiations, Contract Awarded | August 26 – September 5, 2008 |
| Initiate Program | September 15, 2008 |

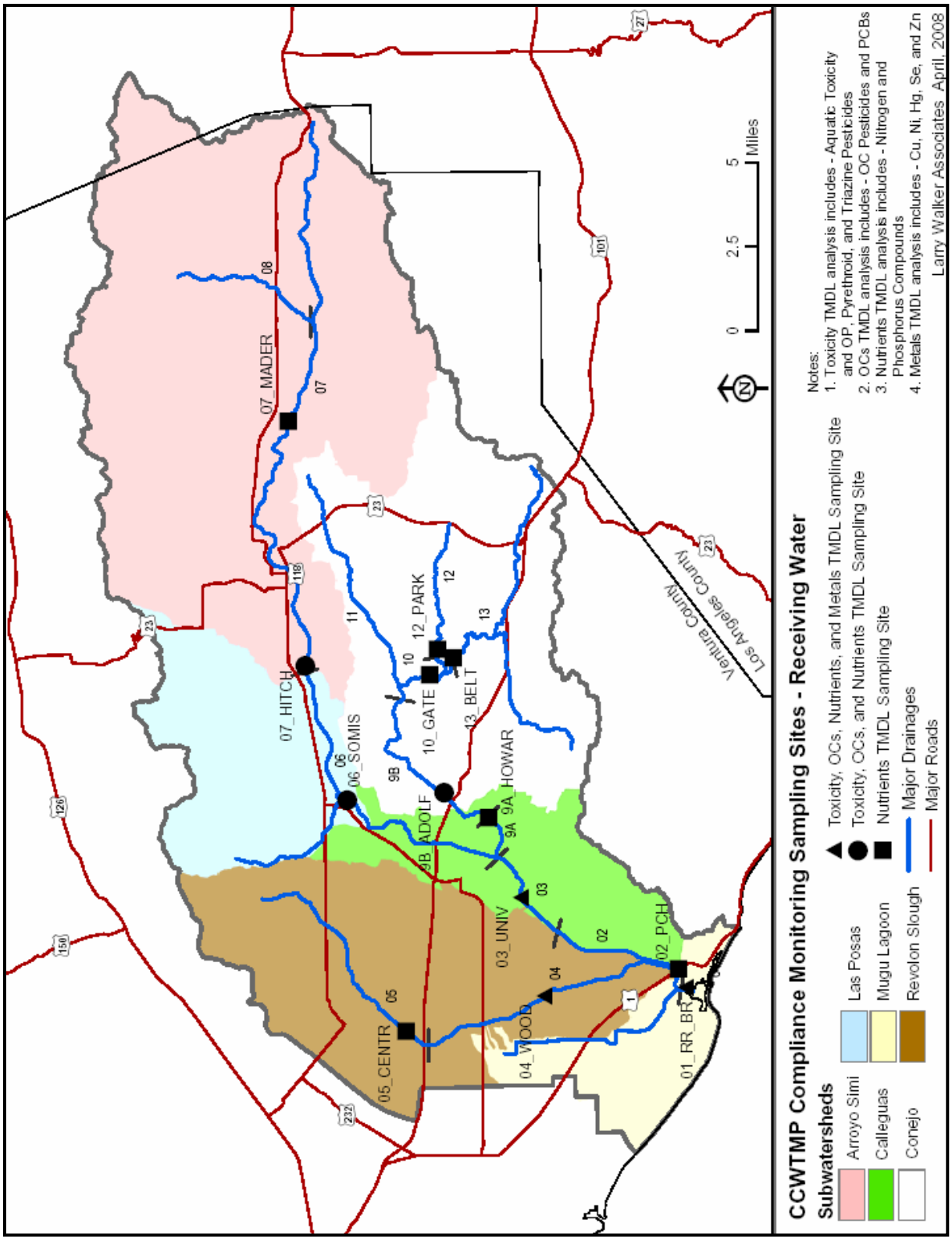


Figure 1. CCWTMP Compliance Monitoring Sampling Sites – Receiving Water

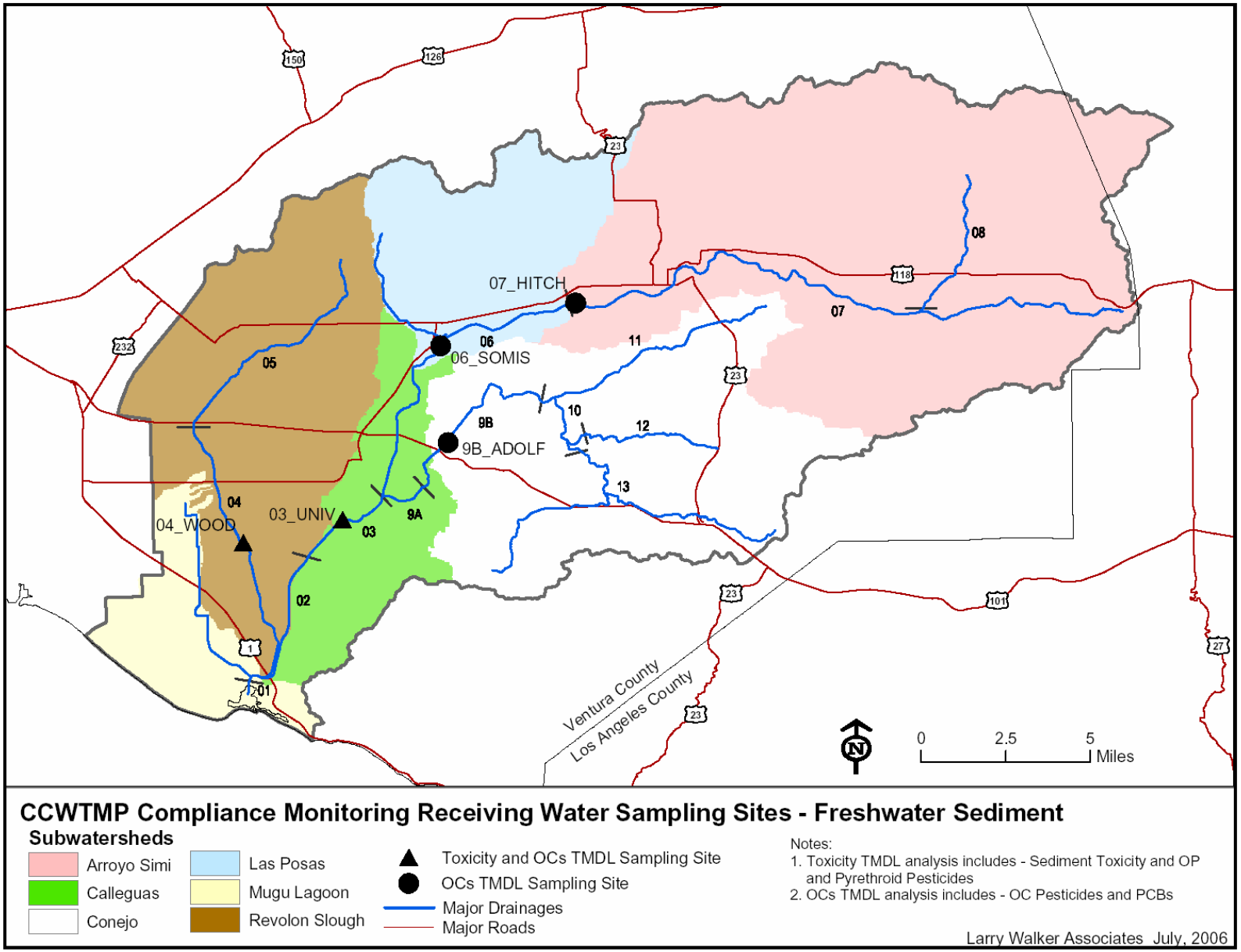


Figure 2. CCWTMP Compliance Monitoring Receiving Water Sampling Sites – Freshwater Sediment

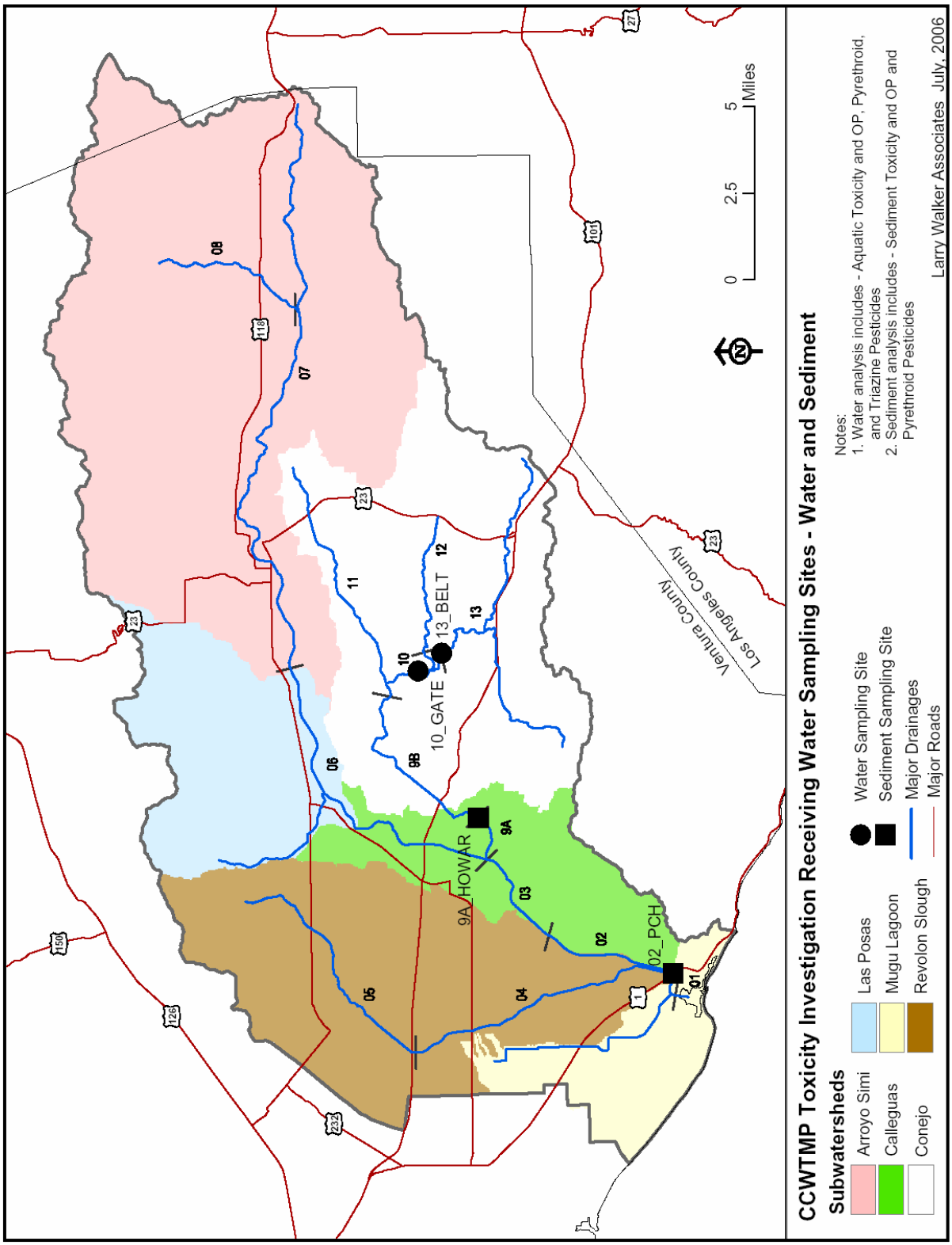


Figure 3. CCWTMP Toxicity Investigation Receiving Water Sampling Sites – Water and Sediment

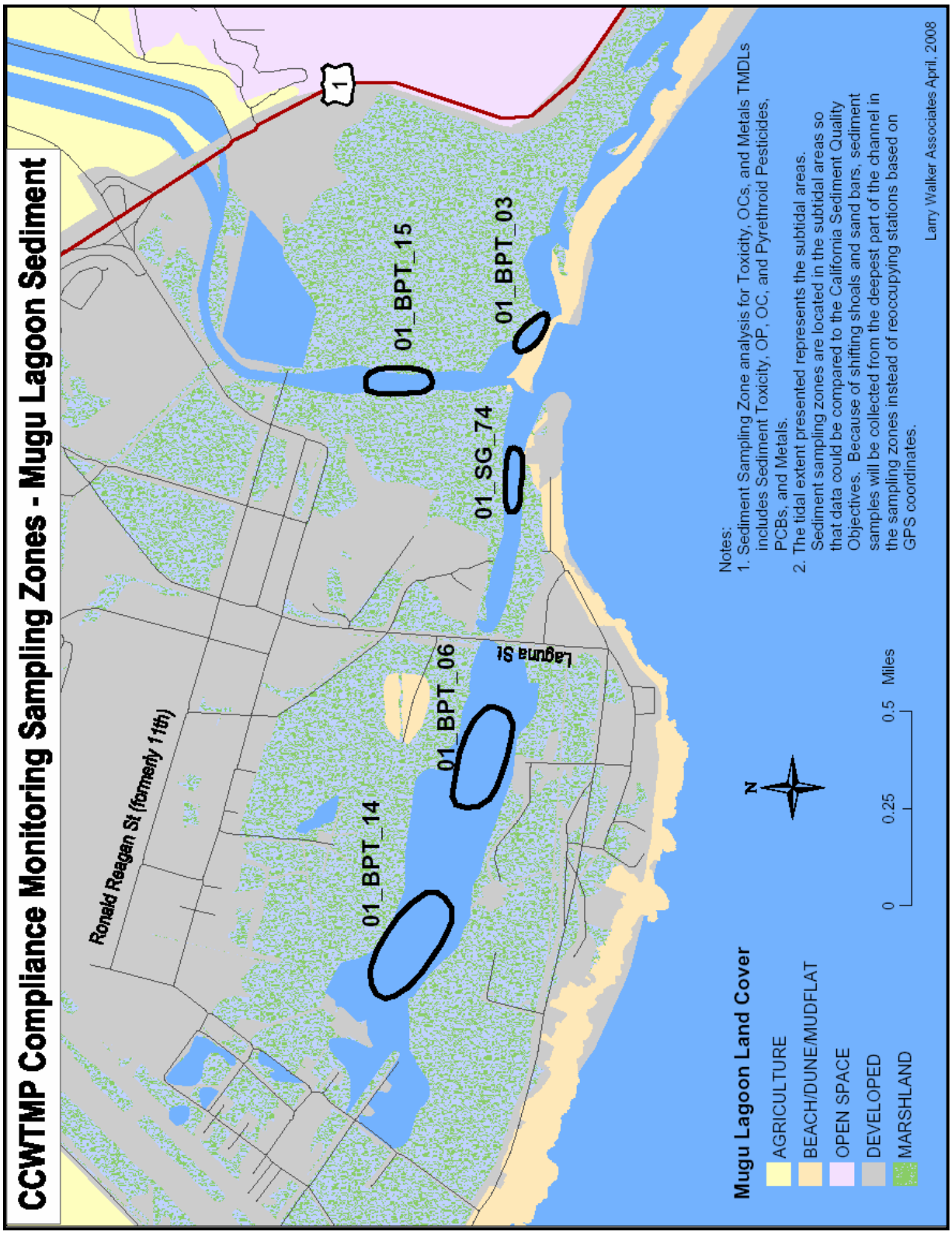


Figure 4. CCWTMP Compliance Monitoring Sampling Zones – Mugu Lagoon Sediment