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

LESJWA BOARD OF DIRECTORS REGULAR MEETING

EVMWD, 31315 Chaney Street, Lake Elsinore, CA 92531

PUBLIC VIDEO ACCESS

	Access Via Computer:
Meeting ID: 892 1300 9671	https://sawpa.zoom.us/j/89213009671?pwd=5ZblbBMDbZIZHDS9F5XvTTnrw1QQab.1
Passcode: 361003	Access Via Telephone:
	1 (669) 900-6833

This meeting will be conducted in person at the address listed above. As a convenience to the public, members of the public may also participate virtually using one of the options set forth above. Any member of the public may listen to the meeting or make comments to the Board using the call-in number or Zoom link above. However, in the event there is a disruption of service which prevents the Authority from broadcasting the meeting to members of the public, the meeting will not be postponed or rescheduled but will continue without remote participation. The remote participation option is provided as a convenience to the public and is not required. Members of the public are welcome to attend the meeting in-person.

THURSDAY, APRIL 17, 2025 – 4:00 P.M. <u>AGENDA</u>

1. <u>CALL TO ORDER/PLEDGE OF ALLEGIANCE</u> (Robert Magee, Chair)

2. ROLL CALL

3. PUBLIC COMMENTS

Members of the public may address the Board on items within the jurisdiction of the Board; however, no action may be taken on an item not appearing on the agenda unless the action is otherwise authorized by Government Code §54954.2(b).

Members of the public may make comments in-person or in writing for the Board's consideration by sending them to <u>publiccomment@sawpa.gov</u> with the subject line "LESJWA Public Comment". Submit your written comments by 5:00 p.m. on Wednesday, April 16, 2025. All public comments will be provided to the Chair and may be read into the record or compiled as part of the record. Please note, individuals have a limit of three (3) minutes to make comments and will have the opportunity when called upon by the Board.

4. ITEMS TO BE ADDED OR DELETED

Pursuant to Government Code §54954.2(b), items may be added on which there is a need to take immediate action and the need for action came to the attention of Lake Elsinore & San Jacinto Watersheds Authority subsequent to the posting of the agenda.

5. CONSENT CALENDAR

All matters listed on the Consent Calendar are considered routine and non-controversial and will be acted upon by the Board by one motion as listed below.

Α.	APPROVAL OF MEETING MINUTES: MARCH 20, 2025	5
	Recommendation: Approve as posted.	
В.	LESJWA STRATEGIC PLAN (LES#2025.4))

Recommendation: Approve the LESJWA Strategic Plan.

6. NEW BUSINESS

Presenter: Rachel Gray

Recommendation: Approve the FY 2025-2026 and FY 2026-2027 LESJWA budget, which includes the Lake Elsinore and Canyon Lake Total Maximum Daily Load (TMDL) Task Force budget, and invoice each LESJWA member agency and RCFC&WCD at the start of the new fiscal year based on:

- Option 1: Maintain current contribution levels.
- Option 2: Implement Strategic Plan Goal 1 Tasks.

Recommendation: Approve the following:

- Change Order to the GEI Consultants agreement, Task Order No. GEI160-03 for an amount not-to-exceed \$20,000 to provide technical support services to the Lake Elsinore and Canyon Lake TMDL Task Force for the remainder of Fiscal Year (FY) 2024-25.
- Task Order No. GEI160-05 with GEI Consultants for an amount not-to-exceed \$55,000 to provide technical support services to the Lake Elsinore and Canyon Lake TMDL Task Force for FY 2025-26.

C. LAKE ELSINORE & CANYON LAKE TMDL COMPLIANCE MONITORING PROGRAM

(LES#2025.7) Presenter: Rick Whetsel

Recommendation: Approve the following to oversee and implement the TMDL Compliance Monitoring Program for Lake Elsinore and Canyon Lake TMDL Task Force for Fiscal Years (FYs) 2026-2028:

- 1. General Services Agreement with GEI Consultants; and
- 2. Task Order No. GEI160-04 for an amount not-to-exceed \$880,801, (based upon annual amounts not to exceed \$284,966 for FY 2025-26, \$293,515 for FY 2026-27, and \$302,320 for FY 2027-28) for three years with an option to exercise a two-year extension.

7. ADMINISTRATOR'S COMMENTS

8. DIRECTORS' COMMENTS

9. CLOSED SESSION

A. <u>CONFERENCE WITH SAWPA LEGAL COUNSEL – ANTICIPATED LITIGATION</u> Significant exposure to litigation pursuant to paragraph (2) or (3) of subdivision (d) of Section 54956.9: one case.

10. CLOSED SESSION REPORT

11. ADJOURNMENT

PLEASE NOTE:

Americans with Disabilities Act: If you require any special disability related accommodations to participate in this meeting, call (951) 354-4244 or email zramirez@sawpa.gov. 48-hour notification prior to the meeting will enable staff to make reasonable arrangements to ensure accessibility for this meeting. Requests should specify the nature of the disability and the type of accommodation requested.

Materials related to an item on this agenda submitted to the Board of Directors after distribution of the agenda packet are available for public inspection during normal business hours at the LESJWA's office, 11615 Sterling Avenue, Riverside, and available at <u>www.mywatersheds.com</u>, subject to staff's ability to post documents prior to the meeting.

Declaration of Posting

I, Zyanya Ramirez, serving as the Clerk of the Board of the Lake Elsinore and San Jacinto Watersheds Authority declare that on Thursday, April 10, 2025, a copy of this agenda has been uploaded to the LESJWA website at <u>www.mywatersheds.com</u> and posted at LESJWA's office, 11615 Sterling Avenue, Riverside, California.

2025 - LESJWA Board of Directors Meetings

Third Thursday of Every Other Month (February, April, June, August, October, December) (Note: All meetings begin at 4:00 p.m., unless otherwise noticed, and are held at Elsinore Valley Municipal Water District, 31315 Chaney Street, Lake Elsinore, CA 92531)

February	/	March	
2/20/25	Regular Board Meeting [cancelled]	3/20/25	Special Workshop Meeting
April		June	
4/17/25	Regular Board Meeting	6/19/25	Regular Board Meeting
August		October	
8/21/25	Regular Board Meeting	10/16/25	Regular Board Meeting
Decemb	er		
12/18/25	Regular Board Meeting		

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LESJWA BOARD OF DIRECTORS MEETING SPECIAL WORKSHOP MARCH 20, 2025

DIRECTORS PRESENT

Robert Magee, Chair, City of Lake Elsinore Andy Morris, Vice Chair, Elsinore Valley Municipal Water District [arrived at 1:36] Brenda Dennstedt, Secretary-Treasurer, Santa Ana Watershed Project Authority Jeremy Smith, City of Canyon Lake Karen Spiegel, County of Riverside

DIRECTORS ABSENT

ALTERNATE DIRECTORS PRESENT; NON-VOTING

STAFF PRESENT

OTHERS PRESENT

None.

None.

Rachel Gray, John Leete, Jeff Mosher, Zyanya Ramirez, Dean Unger, Rick Whetsel, Karen Williams

Adam Gufarotti, City of Lake Elsinore; Greg Thomas, Elsinore Valley Municipal Water District; Thomas Bunn, Lagerlof LLP; Parag Kalaria, Elsinore Valley Municipal Water District; Gil Botello, San Bernardino Valley Municipal Water District; T. Milford Harrison, San Bernardino Valley Municipal Water District; Fred Jung, Orange County Water District;

The Regular Board of Directors meeting of the Lake Elsinore & San Jacinto Watersheds Authority (LESJWA) was called to order at 1:32 p.m. by Chairman Magee on behalf of the Lake Elsinore & San Jacinto Watersheds Authority, 32040 Riverside Drive, Lake Elsinore, CA 92530.

1. CALL TO ORDER/PLEDGE OF ALLEGIANCE (Robert Magee, Chair)

2. ROLL CALL

An oral roll call was noted and recorded by the Clerk of the Board.

3. PUBLIC COMMENTS

There were no other public comments.

4. ITEMS TO BE ADDED OR DELETED

There were no items to be added or deleted.

5. CONSENT CALENDAR

- A. <u>APPROVAL OF MEETING MINUTES: DECEMBER 19, 2024</u> Recommendation: Approve as posted.
- B. TMDL TASK FORCE MEETING MINUTES: JANUARY 15, 2025 AND MARCH 3, 2025
- C. LESJWA STRATEGIC PLAN: CHANGE ORDER #1 (LES#2025.1)
- D. REPORT ON AUDIT FOR FISCAL YEAR ENDING JUNE 30, 2024 (LES#2025.2)

Recommendation: Approve as posted.

MOVED, to approve the Consent Calendar as posted.Result:Adopted by Roll Call VoteMotion/Second:Dennstedt/SpiegelAyes:Dennstedt, Magee, Morris, Smith, SpiegelNays:NoneAbstentions:NoneAbsent:None

6. WORKSHOP DISCUSSION

A. LESJWA STRATEGIC PLAN (LES#2025.3)

Amy Stevens, WSC, emphasized that the LESJWA Strategic Planning process is open to input from all participants, not just the LESJWA Board of Directors, and highlighted the progress made thus far. This included previous workshops on vision, mission, values, and follow-up goal-setting sessions with individual member agencies.

The discussion began with a review of LESJWA's vision to position itself as a key driver of community and ecological success. The vision was well-supported, and the core values focused on stewardship, collaboration, sustainability, financial prudence, and science-based decision-making were endorsed. Participants acknowledged the solid groundwork laid in prior sessions and emphasized the importance of building on these elements. The focus then shifted to refining the draft goals, which included defining a "healthy lake," enhancing collaboration, promoting sustainability, improving transparency, and securing funding.

The majority of the discussion centered on Goal 1, which involves defining what constitutes a "healthy lake." The group agreed that this is a complex, long-term effort that would require ongoing work. Practical metrics, such as lake closures, were suggested as indicators of health, though some participants proposed convening an expert panel to develop a more scientific definition. Despite concerns about the potential cost and need for further study, there was consensus that defining lake health is a foundational aspect of guiding LESJWA's efforts. Measurable progress indicators like water clarity and ecosystem vitality were identified as crucial to tracking success.

The group also discussed the term "safe" in relation to water bodies, considering the need for both internal technical definitions and public-facing definitions. There was a focus on creating a clear, simple public definition that is easy for constituents to understand, while the internal definition would be more detailed for staff. The importance of clear communication was emphasized, with suggestions for using simple, digestible documents or one-page sheets with icons for public consumption, while offering more detailed technical data for those interested in deeper insights.

The meeting also touched on other strategic goals, such as fostering collaboration and data sharing between agencies, promoting transparency, securing funding for watershed projects, and exploring new technologies for lake stewardship. A few adjustments to the wording of the goals were suggested, emphasizing a proactive and efficient approach rather than merely reducing inefficiencies. The group agreed to incorporate the feedback and present updated versions of the goals at the next board meeting.

The workshop highlighted the need for a strategic plan that includes public-facing components, regular updates, and clear communication with the public about progress, especially regarding water quality metrics.

7. ADMINISTRATOR'S COMMENTS

Rachel Gray reminded the board to submit their Form 700 by due date April 1.

8. DIRECTORS' COMMENTS

There were no comments.

9. CLOSED SESSION

There was no closed session.

A. CONFERENCE WITH SAWPA LEGAL COUNSEL - ANTICIPATED LITIGATION

Significant exposure to litigation pursuant to paragraph (2) or (3) of subdivision (d) of Section 54956.9: one case.

CLOSED SESSION REPORT

Chair Magee resumed the Open Session and Legal Counsel, Thomas S. Bunn announced that the LESJWA Board of Directors received a report from Counsel; no action was taken on Agenda Items No. 9.A.

10. ADJOURNMENT

There being no further business for review, Chairman Robert Magee adjourned the meeting at 2:57 p.m.

Approved at a Regular Meeting of the Lake Elsinore and San Jacinto Watersheds Authority Board of Directors on Thursday, April 17, 2025.

Robert Magee, Chair

Attest:

Zyanya Ramirez, Serves as Clerk to the Board

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LESJWA BOARD MEMORANDUM NO. 2025.4

DATE:	April 17, 2025
TO:	LESJWA Board of Directors
SUBJECT:	LESJWA Strategic Plan
PREPARED BY:	Rachel Gray, Authority Administrator

RECOMMENDATION

It is recommended that the Board of Directors approve the LESJWA Strategic Plan.

DISCUSSION

WSC, Inc.'s Project Manager and Facilitator, Amy Stevens facilitated the development of a LESJWA Strategic Plan with LESJWA staff and the LESJWA Board of Directors through an iterative process. Engagement included the following collaborative process to refine LESJWA's strategic direction:

- Board Workshop: Established a shared understanding of vision and mission; began goals discussion.
- Goals Sessions with LESJWA Member Agencies: Gathered insights and perspectives from all LESJWA member agencies.
- Two LESJWA Member Agency Staff Review Workshops: Refined goals, vision, and mission with input from all LESJWA member agencies.
- Final Board & Staff Review Workshop: Reviewing and finalizing the strategic plan • together.

This process supports alignment, shared commitment, and a strong foundation for the future. This plan includes the following components:

- Vision: A long-term aspiration that defines LESJWA's desired future.
- Mission: A clear statement of LESJWA's purpose and core responsibilities.
- Values: The guiding principles that shape decision-making and actions.
- Goals: Broad outcomes that LESJWA aims to achieve.
- Objectives: Specific, measurable steps to accomplish each goal.

BACKGROUND

In October 2023, the Board of Directors authorized LESJWA staff to execute an Agreement for Services with Water Systems Consulting, Inc. (WSC, Inc.) for Strategic Plan Facilitator Consultant Services in an amount not-to-exceed \$61,600.

In March 2025, the Board of Directors Approve Change Order No. 1 to Task Order WSC477-01 with Water Systems Consulting, Inc., for an amount not-to-exceed \$6,720 to conduct additional work required to finalize the strategic plan.

RESOURCE IMPACTS

The FY 2023-24 LESJWA Budget did not account for the preparation of a LESJWA Strategic Plan. Funding for this plan came from additional one-time contributions from LESJWA member agencies, with the County of Riverside contributing \$25,000, and the City of Canyon Lake, City of Lake Elsinore, Elsinore Valley Municipal Water District, and Santa Ana Watershed Project Authority, each contributing \$9,150 per agency.

Attachments:

1. LESJWA Strategic Plan



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

HEALTHY LAKES, CONNECTED COMMUNITIES: A Strategic Plan for the Lake Elsinore and San Jacinto Watersheds Authority

2025

The Lake Elsinore and San Jacinto Watersheds Authority (LESJWA) is a joint powers authority comprised of five member agencies: City of Canyon Lake, City of Lake Elsinore, County of Riverside, Elsinore Valley Municipal Water District, and the Santa Ana Watershed Project Authority. This Strategic Plan continues that legacy by unifying our efforts around a shared vision, mission, and a set of guiding values and goals. It is a commitment that reflects LESJWA's collaborative spirit and long-standing dedication to protecting Canyon Lake and Lake Elsinore.

This document presents our key strategic elements in a concise, clear format. Our overarching aim is to provide a framework that drives results while honoring the unique character of our watershed. Through collaboration with partner agencies, local communities, and various stakeholders, we strive to ensure that our lakes remain resilient, healthy, and welcoming for current and future generations.







Background

LESJWA's role in managing these vital water resources has evolved over time, guided by scientific research and shaped by community needs. In developing this Strategic Plan, we revisited our former business plans, gathered feedback from member agencies and stakeholders, and re-examined the physical and social factors impacting Canyon Lake, Lake Elsinore, and the surrounding watershed.

The process built upon decades of experience in addressing water quality challenges, implementing remediation efforts, and balancing competing interests in the watershed. Informed by lessons learned and successes achieved, this plan incorporates the latest data and methodologies to keep our lakes healthy in the face of climate uncertainties, growing populations, and changing economic conditions.

NAY 9, 1893



Purpose of the Plan

The purpose of this Strategic Plan is to provide a focused blueprint for action—one that outlines key priorities, fosters partnerships, and aligns all participants on a common path. By articulating a unifying vision, a clear mission, and well-defined goals, LESJWA ensures that future initiatives reflect shared values, meet community needs, and deliver measurable progress in environmental stewardship.



LESJWA is the beacon that drives community and ecological success in the San Jacinto River Watershed.

What the Vision Means

A vision paints a long-term picture of our desired future. For LESJWA, it means becoming the guiding force that unites agencies, stakeholders, and communities under the shared goal of achieving a healthy watershed—one that nurtures both the natural environment and local livelihoods. It serves as our north star, inspiring us to continuously innovate and collaborate for the overall success of the region.



Sustain the health of Canyon Lake and Lake Elsinore to enhance water quality, recreational opportunities, and regional economic viability.

Why the Mission Is Important

While the Vision is our aspiration, the Mission is our day-to-day compass. It sets out the core responsibilities we must fulfill—protecting water quality, supporting recreational experiences, and sustaining economic vitality. This ensures that each program, partnership, and project we pursue remains firmly rooted in practical, results-driven work that serves our watershed's communities and ecosystems.

VALUES



Stewardship

Prioritize actions and decisions that maintain public health and improve water quality.



Collaboration

Work together across agencies, regulators, organizations, and communities, maintaining transparent communication to achieve common goals.



Sustainability

Commit to long-term environmental health and economic prosperity, building the capacity of our lakes and watershed to thrive under changing conditions.



Financial Prudence

Consistently seek the most advantageous outcomes when funding, supporting, and achieving our goals.



Sound Decision-Making

Use scientific research and data-driven approaches to guide our decisions.



How Values Guide LESJWA

Values reflect the core principles that govern how LESJWA operates and makes decisions. They anchor everything from planning to on-the-ground actions, ensuring that we remain accountable and that our approach is transparent, equitable, and thoughtful. These values foster trust with our partners, stakeholders, and the public, reinforcing the integrity of our work.

GOALS

Why Goals Matter

Our goals translate the Vision, Mission, and Values into actionable priorities. Each goal targets a key area of focus, ranging from clarifying what "healthy lakes" means in measurable terms to securing the resources needed for long-term resiliency. By defining clear objectives, we can more effectively gauge progress, adjust strategies, and build on successes as conditions and challenges evolve.

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- Define what constitutes healthy lakes and promote efforts to meet that definition.
- Strengthen collaboration and data sharing between agencies, communities, and the upper watershed.
- J. Improve the long-term sustainability of the lakes by adapting to the impacts of climate uncertainties and evolving environmental challenges.
- Promote a culture of transparency and accountability.
- 5. Secure and leverage funding for watershed projects, ensuring long-term financial sustainability.
- → 6. Investigate promising technologies to advance the stewardship of the lakes.

Goal-Specific Action Items

The follow pages include initiatives and strategies LESJWA may pursue in support of each goal. These items reflect a collaborative approach that engages expert panels, local communities, regulatory partners, and other stakeholders



GOAL 1

Define what constitutes healthy lakes and promote efforts to meet that definition.

Describe What Defines Healthy Lakes

 Establish a clear understanding and definition of what constitutes a healthy lake. This sets the foundation for all subsequent efforts.

Define Healthy Lakes from Stakeholder Perspectives

• Identify and define the beneficial uses of the lake from various agencies, cities, and stakeholder perspectives.

Develop an Approach to Define Lake Metrics for Healthy Lakes

 Independent expert panel to define short-, mid-, and long-term options for achieving healthy lakes.

Develop a Work Plan and Schedule

 Create a detailed plan for LESJWA and partners outlining specific actions (including mitigation and treatment options), milestones, and timelines to achieve the defined Healthy Lakes.

Implement Projects and a Monitoring Program

• Execute the projects and establish a monitoring program to ensure ongoing assessment and maintenance of the lakes' health.

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GOAL 2

Strengthen collaboration and data sharing between agencies, communities, and the upper watershed.

Streamline Processes and Reduce Inefficiencies

• Communicate and coordinate with member agencies on information sharing.

Strengthen Collaboration Among LESJWA Member Agencies

Hold quarterly planning managers' meetings.

Engage Watershed Stakeholders

- Provide regular presentations at stakeholder events.
- Engage with Lake Elsinore and Canyon Lake TMDL Task Force stakeholders on a watershed approach.

Educate and Inform the Public

- Create and update a public dashboard.
- Host and attend local community events with all members.

Improve the long-term sustainability of the lakes by adapting to the impacts of climate uncertainties and evolving environmental challenges.

Conduct Sustainability Assessment of Lakes

• Assess the impacts of climate change and environmental challenges on the lakes and local communities.

Participate in SAWPA Climate Adaptation and Resilience Plan Development

• Define climate risks, vulnerabilities, and adaptation strategies that support the vision of Healthy Lakes.

Evaluate Historical Trends and Model Future Climate Change Scenarios

 Combining historical data with future forecasts provides a comprehensive approach to lake management in support of achieving the vision of Healthy Lakes.

GOAL 4

Promote a culture of transparency and accountability.

Establish Clear Roles and Responsibilities

- LESJWA Board of Directors
- LESJWA Member Agencies
- LESJWA/SAWPA Staff
- LE/CL TMDL Task Force Stakeholders

Encourage Active Involvement in Decision-making

LESJWA Member Agencies

Promote Integrity and Transparency in Organizational Actions and Decisions

 Provides a forum for open communication to facilitate collaborative decision-making Secure and leverage funding for watershed projects, ensuring long-term financial sustainability.

- Develop Budget to Reflect LESJWA Goals
- Develop Cost-Share Agreements as Needed
- Identify Additional Funding Partners, Including Within the Upper Watershed
- Pursue Grant Funding Based on Defined Need and Approach

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GOAL 6

Investigate promising technologies to advance the stewardship of the lakes.

- Convene an Independent Expert Panel to Develop a Roadmap for Healthy Lakes
- Facilitate Regular Engagement Between Member Agencies and Advanced Technology Experts
- Support Pilot Projects to Rigorously Test Available Technologies

This Strategic Plan represents a balanced and collaborative roadmap designed to protect and enhance Canyon Lake and Lake Elsinore while fostering economic growth and community well-being. Guided by a clear Vision, Mission, Values, and Goals, LESJWA is poised to implement these strategies in coordination with our partners and stakeholders. By investing in sound science, engaging local voices, and prioritizing transparency, we reaffirm our commitment to preserving these vital water resources now and for generations to come.

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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

mywatersheds.com

LESJWA BOARD MEMORANDUM NO. 2025.5

DATE: April 17, 2025

SUBJECT: LESJWA FYE 2026 and 2027 Budget

TO: LESJWA Board of Directors

FROM: Rachel Gray, LESJWA Authority Administrator

RECOMMENDATION

Approve the FY 2025-2026 and FY 2026-2027 LESJWA budget, which includes the Lake Elsinore and Canyon Lake Total Maximum Daily Load (TMDL) Task Force budget, and invoice each LESJWA member agency and RCFC&WCD at the start of the new fiscal year based on:

- Option 1: Maintain current contribution levels.
- Option 2: Implement Strategic Plan Goal 1 Tasks.

BACKGROUND

The attached budget (Attachment 1) covers activities of the Authority for the next two fiscal years, from July 1, 2025, to June 30, 2027. It lists the existing projects, studies, and administrative costs associated with operating the agency and implementing TMDL projects. Based on projections of costs, funding by member agencies and additional funding provided by the Lake Elsinore/Canyon Lake (LE/CL) TMDL Task Force and Riverside County Flood Control and Water Conservation District (RCFC&WCD) will be sufficient to cover all projected JPA activities. With increased contributions from the LESJWA member agencies and funding from RCFC&WCD, LESJWA's reserve funding is adequate and can be used for discretionary items.

The major activities planned for the next two fiscal years include implementing the tasks associated with Goal 1 of the LESJWA Strategic Plan, support for the Basin Plan Amendment associated with the new TMDL Revision, continuing the alum application at Canyon Lake and continuing the Education and Outreach Program. Ongoing activities of watershed and lake monitoring will also continue.

For the next two fiscal years, the main source of funding coming into LESJWA will continue to be from the TMDL parties that are supporting the TMDL implementation, as well as LESJWA's staff cost for Task Force administration. The source of this funding will be from the TMDL stakeholders; some are the LESJWA member agencies. Staff will continue to monitor outside funding sources for future planning and projects that LESJWA can undertake.

Attachment 2, shown as additional information, reflects the FY 2025-2026 LE/CL TMDL Task Force Budget. This budget was reviewed and approved by the Task Force in March 2025 by the task force agencies. Their budget revenue is reflected as "TMDL stakeholder contributions" under Revenue, and "TMDL-Administration," and "TMDL studies and monitoring" under Expenditures.

The budget assumes continued administration of LESJWA by SAWPA with their projected labor support.

RESOURCES IMPACT

Funding of SAWPA staff time for LESJWA activities will be provided by TMDL stakeholder funding, grant administration funding, and local contributions from LESJWA member agencies.

Attachments:

- 1. Draft LESJWA Budget for FY 2025-2026 and FY 2026-2027
- 2. Approved FY 2025-2026 LE/CL TMDL Task Force Budget
- 3. PowerPoint

Attachment 1 Draft LESJWA Budget for FY 2025-2026 and FY 2026-2027

Budget Attachment Options	F	FY 24-25 Budget		FY 25-26 Budget		FY 26-27 Budget		Y 25-26 Budget (Goal 1)		FY 26-27 Budget (Goal 1)
Operating Revenue										
JPA Cash Balance Transfer	\$	10,410	\$	6 (274)	\$	716	\$	(274)	\$	716
JPA LAIF Interest	\$	1,650	\$	5 10,000	\$	10,000	\$	10,000	\$	10,000
Member & Other Agency Contributions*	\$	110,000	\$	5 110,000	\$	110,000	\$	130,000	\$	165,000
JPA Adm Subtotal	\$	122,060	\$	5 119,726	\$	120,716	\$	139,726	\$	175,716
Operating Expenditures										
JPA Administration										
Salaries, burden & OH (SAWPA)	\$	85,500	\$	5 75,500	\$	80,500	\$	75,500	\$	80,500
Audit Fees	\$	6,200	\$	5,625	\$	5,725	\$	5,625	\$	5,725
Public Relations Consultant	\$	24,550	Ś	\$ 31,675	\$	23,550	\$	31,675	\$	23,550
Legal Fees	\$	1,100	\$	5 1,000	\$	1,000	\$	1,000	\$	1,000
Meetings and Conference Expense	\$	-	\$	500	\$	500	\$	500	\$	500
Shipping & Postage	\$	50	\$	5 50	\$	50	\$	50	\$	50
Other Expense	\$	400	\$	5 200	\$	200	\$	200	\$	200
Insurance Expense	\$	3,000	\$	3,100	\$	3,500	\$	3,100	\$	3,500
Banking Fees	\$	1,000	\$	500	\$	500	\$	500	\$	500
Office Supplies	\$	60	\$	60	\$	60	\$	60	\$	60
Interest Expense	\$	200	\$	800	\$	800	\$	800	\$	800
Goal 1 Tasks	\$	-	\$	-	\$	-	\$	20,000	\$	55,000
JPA Adm Subtotal	\$	122,060	\$	5 119,010	\$	116,385	\$	139,010	\$	171,385
	-				1				i	
* Member agency allocation - City of LE		\$20,000		\$20,000		\$20,000		\$25,000		\$33,750
* Member agency allocation - EVMWD		\$20,000		\$20,000		\$20,000		\$25,000		\$33,750
* Member agency allocation - Co of Riv		\$20,000		\$20,000		\$20,000		\$25,000		\$33,750
* Member agency allocation - City of CL		\$20,000		\$20,000		\$20,000		\$25,000		\$33,750
* Member agency allocation - SAWPA		\$10,000		\$10,000		\$10,000		\$10,000		\$10,000
* Other agency contribution - RCFCWCD		\$20,000		\$20,000		\$20,000		\$20,000		\$20,000
Total Contribution	\$	110,000	\$	5 110,000	\$	110,000	\$	130,000	\$	165,000

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19-Mar-25

	Summary Task Force Expenditures	A	pproved 2025-26
	Part A: TMDL Task Force Budget		
1.	Task Force Administration	\$	85,000
	Task Force Administrator (LESJWA)	\$	85,000
2.	TMDL Compliance Expert	\$	100,300
	Tess Dunham / Kahn, Soares & Conway	\$	100,300
3.	TMDL Compliance Monitoring	\$	284,959
	Watershed-wide Nutrient Monitoring Program	\$	88,349
	Lake Elsinore Nutrient Monitoring Program (includes TMDL Compliance report support)	\$	118,104
	Canyon Lake Nutrient Monitoring Program	\$	78,507
4.	TMDL Compliance Reporting & Modeling	\$	70,000
	TMDL Technical Support Services	\$	30,000
	TMDL Update / Approval Process	\$	25,000
	Task 4 Canyon Lake Project Alternatives (develop work plan in 2025-26)	\$	15,000
	Task 9 Minor Sources Study	\$	-
	Aerial Land Use Surveys (every 5 years)	\$	-
5.	Contingency	\$	35,000
	Part A: TMDL Task Force Budget:	\$	575 259

Part B: TMDL Project Budget

6.	Lake Eisinore Project Alternatives	
	Lake Elsinore Aeration and Mixing System (LEAMS) Offset Credit Purchase	\$ 124,500
	LEAMS O&M	\$ 124,500
	Fishery Management	\$ -
	Fishery Survey	\$ -
	Carp Removal Program (Fishery Management O&M)	\$ -
	Project Administration	\$ -
7.	Canyon Lake Project Alternatives	\$ 338,513
	Chemical Additions - Alum Dosing	\$ 328,513
	Project Administration	\$ 10,000
	Project Contingency	\$ -
	TMDL Task Force Part B Implementation Budget	\$ 463,013

LE&CL TMDL Implementation Budget: \$ 1,038,272

Task Force Administration

- Organize and facilitate TMDL TASK FORCE meetings,

- Perform secretarial, clerical and administrative services, including providing meeting summaries to TMDL TASK

- Manage TMDL TASK FORCE funds and prepare annual reports of TMDL TASK FORCE assets and expenditures,

- Act 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 the work of the TMDL TASK FORCE and other 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,

- Coordinate and facilitate the addition of other Monitoring Programs to the Task Force,

- Provide TMDL TASK FORCE members an opportunity to comment and approve any reports or other work product developed.

TMDL Compliance Expert

- Serve as regulatory strategist and compliance expert for the Task Force

TMDL Support Services

- Support Task Force in tracking individual nutrient load allocations/reductions

- Support LEAMS effectiveness demonstration
- Support Canyon Lake Alum Project (evaluate need / calculate dose)
- Conduct Technical Analyses as requested by the Task Force

Task Force Agency Contributions Summary

Approved 2025-26

Task Force Agency Allocation	Total
MS4 Co-Permittees (Total)	\$ 773,563
Riverside County	\$ 155,392
City of Beaumont	\$ 34,213
City of Canyon Lake	\$ 43,628
City of Hemet	\$ 57,139
City of Lake Elsinore	\$ 38,831
City of Moreno Valley	\$ 104,813
City of Murrieta	\$ 40,715
City of Perris	\$ 87,942
City of Riverside	\$ 34,213
City of San Jacinto	\$ 34,213
City of Menifee	\$ 108,477
City of Wildomar	\$ 33,986
Elsinore Valley Municipal Water District (EVMWD)	\$ 31,942
San Jacinto Agricultural Operators (WRCAC)	\$ 40,447
San Jacinto Dairy & CAFO Operators *	\$ 3,000
CA Department of Transportation	\$ 43,298
CA DF&W - San Jacinto Wetlands	\$ 31,213
Eastern Municipal Water District	\$ 31,213
March Air Reserve Base Joint Powers Authority	\$ 41,428
US Air Force (March Air Reserve Base)	\$ 42,168

Total Funding Required \$ 1,038,272

Note: * San Jacinto Dairy & CAFO Operators contributions to the LE&CL TMDL Task Force are made through WRCAC

Lake Elsinore Aeration and Mixing System (LEAMS) Offset Credit Allocation (to be handled by separate agreement)	ŀ	Approved 2025-26
MS4 Co-Permittees	\$	110,100
Riverside County		partner
City of Beaumont	\$	3,000
City of Canyon Lake	\$	3,900
City of Hemet	\$	8,400
City of Lake Elsinore		partner
City of Moreno Valley	\$	31,500
City of Murrieta	\$	3,000
City of Perris	\$	15,900
City of Riverside	\$	3,000
City of San Jacinto	\$	3,000
City of Menifee	\$	31,200
City of Wildomar	\$	7,200
Elsinore Valley Municipal Water District (EVMWD)		partner
San Jacinto Agricultural Operators (WRCAC)	\$	-
San Jacinto Dairy & CAFO Operators	\$	3,000
CALTRANS - freeway	\$	5,100
CA DF&W - San Jacinto Wetlands	\$	-
Eastern Municipal Water District (EMWD)	\$	-
March Air Reserve Base Joint Powers Authority	\$	3,000
US Air Force (March Air Reserve Base)	\$	3,300

Funding Required \$ 124,500

Notes: LEAMS Excess Offset Credits are based upon modeling conducted by Dr. Alex Horne (Horne Dec. 2012 and Horne Mar. 2015). Credit Allocations are estimated as the number of credits to bring stakeholder into compliance (CDM Smith 2020).

Task Force Agency Contributions Detailed Tables

Part A: Task Force Regulatory/Administrative Budget

Task Force Regulatory/Administrative Expenses

MS4 Co-Permittees	\$ 118,710
Riverside County	\$ 9,892
City of Beaumont	\$ 9,892
City of Canyon Lake	\$ 9,892
City of Hemet	\$ 9,892
City of Lake Elsinore	\$ 9,892
City of Moreno Valley	\$ 9,892
City of Murrieta	\$ 9,892
City of Perris	\$ 9,892
City of Riverside	\$ 9,892
City of San Jacinto	\$ 9,892
City of Menifee	\$ 9,892
City of Wildomar	\$ 9,892
Elsinore Valley Municipal Water District (EVMWD)	\$ 9,892
San Jacinto Agricultural Operators (WRCAC) (72.8% of Irrigated Ag)	\$ 7,236
San Jacinto Dairy & CAFO Operators *	\$ -
CALTRANS - freeway	\$ 9,892
CA DF&W - San Jacinto Wetlands	\$ 9,892
Eastern Municipal Water District	\$ 9,892
March Air Reserve Base Joint Powers Authority	\$ 9,892
US Air Force (March Air Reserve Base)	\$ 9,892
Funding Required	\$ 185,300

Note: * San Jacinto Dairy & CAFO Operators contributions to the LE&CL TMDL Task Force are made through WRCAC

TMDL Compliance Monitoring Expenses

Watershed-wide Nutrient Monitoring Program		A	Allocation		
MS4 Co-Permittees		\$	59,791		
Riverside County		\$	4,983		
City of Beaumont		\$	4,983		
City of Canyon Lake		\$	4,983		
City of Hemet		\$	4,983		
City of Lake Elsinore		\$	4,983		
City of Moreno Valley		\$	4,983		
City of Murrieta		\$	4,983		
City of Perris		\$	4,983		
City of Riverside		\$	4,983		
City of San Jacinto		\$	4,983		
City of Menifee		\$	4,983		
City of Wildomar		\$	4,983		
Elsinore Valley Municipal Water District (EVMWD)			-na-		
San Jacinto Agricultural Operators (WRCAC)	(72.8% of Irrigated Ag)	\$	3,645		
San Jacinto Dairy & CAFO Operators *		\$	-		
CALTRANS - freeway		\$	4,983		
CA DF&W - San Jacinto Wetlands		\$	4,983		
Eastern Municipal Water District		\$	4,983		
March Air Reserve Base Joint Powers Authority		\$	4,983		
US Air Force (March Air Reserve Base)		\$	4,983		
	Funding Required	\$	88,349		

Funding Required \$

Note: * San Jacinto Dairy & CAFO Operators contributions to the LE&CL TMDL Task Force are made through WRCAC

Approved

2025-26

Allocation

35

MS4 Co-Permittees	\$ 75,661
Riverside County	\$ 6,305
City of Beaumont	\$ 6,305
City of Canyon Lake	\$ 6,305
City of Hemet	\$ 6,305
City of Lake Elsinore	\$ 6,305
City of Moreno Valley	\$ 6,305
City of Murrieta	\$ 6,305
City of Perris	\$ 6,305
City of Riverside	\$ 6,305
City of San Jacinto	\$ 6,305
City of Menifee	\$ 6,305
City of Wildomar	\$ 6,305
Elsinore Valley Municipal Water District (EVMWD)	\$ 6,305
San Jacinto Agricultural Operators (WRCAC) (72.8% of Irrigated Ag)	\$ 4,612
San Jacinto Dairy & CAFO Operators *	\$ -
CALTRANS - freeway	\$ 6,305
CA DF&W - San Jacinto Wetlands	\$ 6,305
Eastern Municipal Water District	\$ 6,305
March Air Reserve Base Joint Powers Authority	\$ 6,305
US Air Force (March Air Reserve Base)	\$ 6,305
Funding Required	\$ 118,104

Note: * San Jacinto Dairy & CAFO Operators contributions to the LE&CL TMDL Task Force are made through WRCAC

Canyon Lake Nutrient Monitoring Program

MS4 Co-Permittees 48,702 \$ **Riverside County** \$ 4,427 \$ 4,427 City of Beaumont \$ 4,427 City of Canyon Lake \$ City of Hemet 4,427 City of Lake Elsinore \$ 4,427 \$ 4,427 City of Moreno Valley \$ 4,427 City of Murrieta City of Perris \$ 4,427 City of Riverside \$ 4,427 City of San Jacinto \$ 4,427 City of Menifee \$ 4,427 City of Wildomar -na-Elsinore Valley Municipal Water District (EVMWD) 4,427 \$ San Jacinto Agricultural Operators (WRCAC) \$ (72.8% of Irrigated Ag) 3,239 San Jacinto Dairy & CAFO Operators * \$ -CALTRANS - freeway \$ 4,427 CA DF&W - San Jacinto Wetlands \$ 4,427 \$ Eastern Municipal Water District 4,427 \$ 4,427 March Air Reserve Base Joint Powers Authority \$ 4,427 US Air Force (March Air Reserve Base) 78,507

Funding Required \$

Note: * San Jacinto Dairy & CAFO Operators contributions to the LE&CL TMDL Task Force are made through WRCAC
Part B: TMDL Implementation Project Budget Lake Elsinore Project Alternatives

Fishery Management O&M **

Allocation

MS4 Co-Permittees	\$ -
Riverside County	\$ -
City of Beaumont	\$ -
City of Canyon Lake	\$ -
City of Hemet	\$ -
City of Lake Elsinore	\$ -
City of Moreno Valley	\$ -
City of Murrieta	\$ -
City of Perris	\$ -
City of Riverside	\$ -
City of San Jacinto	\$ -
City of Menifee	\$ -
City of Wildomar	\$ -
Elsinore Valley Municipal Water District (EVMWD)	\$ -
San Jacinto Agricultural Operators (WRCAC) (72.8% of Irrigated Ag)	\$ -
San Jacinto Dairy & CAFO Operators *	-na-
CALTRANS - freeway	\$ -
CA DF&W - San Jacinto Wetlands	\$ -
Eastern Municipal Water District	-na-
March Air Reserve Base Joint Powers Authority	\$ -
US Air Force (March Air Reserve Base)	\$ -

Funding Required \$

Note: * San Jacinto Dairy & CAFO Operators contributions to the LE&CL TMDL Task Force are made through WRCAC

Canyon Lake Project Alternatives

Alum Addition	Allocation
MS4 Co-Permittees	\$ 293,332
Riverside County	\$ 124,179
City of Beaumont	-na-
City of Canyon Lake	\$ 8,515
City of Hemet	\$ 17,526
City of Lake Elsinore	\$ 7,618
City of Moreno Valley	\$ 42,100
City of Murrieta	\$ 6,502
City of Perris	\$ 40,829
City of Riverside	-na-
City of San Jacinto	-na-
City of Menifee	\$ 46,064
City of Wildomar	-na-
Elsinore Valley Municipal Water District (EVMWD)	\$ 5,712
San Jacinto Agricultural Operators *	\$ 17,615
San Jacinto Dairy & CAFO Operators	-na-
CALTRANS - freeway	\$ 6,984
CA DF&W - San Jacinto Wetlands	-na-
Eastern Municipal Water District	-na-
March Air Reserve Base Joint Powers Authority	\$ 7,215
US Air Force (March Air Reserve Base)	\$ 7,655

Funding Required \$ 338,513

Notes: * San Jacinto Dairy & CAFO Operators contributions to the LE&CL TMDL Task Force are made through WRCAC

1) Offset demand estimates for TP; TN data not used in this allocation

2) Jurisdictions with zero offset demand are designated as not applicable "-na-"

TMDL Compliance Reporting & Modeling

TMDL Compliance Support

Allocation

MS4 Co-Permittees		\$ 44,844
Riverside County		\$ 3,737
City of Beaumont		\$ 3,737
City of Canyon Lake		\$ 3,737
City of Hemet		\$ 3,737
City of Lake Elsinore		\$ 3,737
City of Moreno Valley		\$ 3,737
City of Murrieta		\$ 3,737
City of Perris		\$ 3,737
City of Riverside		\$ 3,737
City of San Jacinto		\$ 3,737
City of Menifee		\$ 3,737
City of Wildomar		\$ 3,737
Elsinore Valley Municipal Water District (EVMWD)		\$ 3,737
San Jacinto Agricultural Operators (WRCAC)	(72.8% of Irrigated Ag)	\$ 2,733
San Jacinto Dairy & CAFO Operators *		\$ -
CALTRANS - freeway		\$ 3,737
CA DF&W - San Jacinto Wetlands		\$ 3,737
Eastern Municipal Water District		\$ 3,737
March Air Reserve Base Joint Powers Authority		\$ 3,737
US Air Force (March Air Reserve Base)		\$ 3,737
	Funding Required	\$ 70,000

Note: * San Jacinto Dairy & CAFO Operators contributions to the LE&CL TMDL Task Force are made through WRCAC

Contingency		Co	ntingency
MS4 Co-Permittees		\$	22,422
Riverside County		\$	1,869
City of Beaumont		\$	1,869
City of Canyon Lake		\$	1,869
City of Hemet		\$	1,869
City of Lake Elsinore		\$	1,869
City of Moreno Valley		\$	1,869
City of Murrieta		\$	1,869
City of Perris		\$	1,869
City of Riverside		\$	1,869
City of San Jacinto		\$	1,869
City of Menifee		\$	1,869
City of Wildomar		\$	1,869
Elsinore Valley Municipal Water District (EVMWD)		\$	1,869
San Jacinto Agricultural Operators		\$	1,367
San Jacinto Dairy & CAFO Operators		\$	-
CALTRANS - freeway		\$	1,869
CA DF&W - San Jacinto Wetlands		\$	1,869
Eastern Municipal Water District		\$	1,869
March Air Reserve Base Joint Powers Authority		\$	1,869
US Air Force (March Air Reserve Base)		\$	1,869
	Funding Required	\$	35,000

Funding Required \$

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

LESJWA Budget for FY 2025-2026 and FY 2026-2027

Rachel Gray, LESJWA Authority Administrator LESJWA Board Meeting | April 17, 2025 Item No. 6.A.





Recommendation

It is recommended that the Board of Directors approve the FY 2025-2026 and FY 2026-2027 LESJWA budget, which includes the Lake Elsinore and Canyon Lake Total Maximum Daily Load (TMDL) Task Force budget, and invoice each LESJWA member agency and RCFC&WCD at the start of the new fiscal year based on:

- Option 1: Maintain current contribution levels.
- Option 2: Implement Strategic Plan Goal 1 Tasks.

LESJWA

Agenda:

- JPA Operating Revenues
- JPA Operating Expenses
- Summary
- Strategic Plan: Goal 1
- Recommendation





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JPA Operating Revenues

Operating Revenues	FY 24-25	FY 25-26	FY 26-27
JPA Cash Balance Transfer	\$ 10,410	\$ (274)	\$ 716
JPA LAIF Interest	\$ 1,650	\$ 10,000	\$ 10,000
Member & Other Agency Contributions*	\$ 110,000	\$ 110,000	\$ 110,000
JPA Administrative Revenues	\$ 122,060	\$ 119,726	\$ 120,716

Contributions						
Entity	FY 23-24	FY 24-25				
* Member agency allocation - City of LE	\$20,000	\$20,000				
* Member agency allocation - EVMWD	\$20,000	\$20,000				
* Member agency allocation - Co of Riv	\$20,000	\$20,000				
* Member agency allocation - City of CL	\$20,000	\$20,000				
* Member agency allocation - SAWPA	\$10,000	\$10,000				
* Other agency contribution - RCFCWCD	\$20,000	\$20,000				
Total Contributions	\$110,000	\$110,000				

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JPA Operating Expenses

Operating Expenditures	F	Y 24-25	F	Y 25-26	F	Y 26-27	
Salaries, Burden & OH (SAWPA)	\$	85,500	\$	75,500	\$	80,500	
Audit Fees	\$	6,200	\$	5,625	\$	5,725	
Public Relations Consultant	\$	24,550	\$	31,675	\$	23,550	
Legal Fees	\$	1,100	\$	1,000	\$	1,000	
Meetings and Conference Expense	\$	-	\$	500	\$	500	
Shipping & Postage	\$	50	\$	50	\$	50	
Other Expense	\$	400	\$	200	\$	200	
Insurance Expense	\$	3,000	\$	3,100	\$	3,500	
Banking Fees	\$	1,000	\$	500	\$	500	
Office Supplies	\$	60	\$	60	\$	60	
Interest Expense	\$	200	\$	800	\$	800	
JPA Administrative Expenditures	\$	122,060	\$	119,010	\$	116,385	

Summary



FY	25-26	FY	26-27
5	119,726	\$	120,716
5	119,010	\$	116,385
\$	716	\$	4,331

GOAL 1

Define what constitutes healthy lakes and promote efforts to meet that definition.

Describe What Defines Healthy Lakes

• Establish a clear understanding and definition of what constitutes a healthy lake. This sets the foundation for all subsequent efforts.

Define Healthy Lakes from Stakeholder Perspectives

• Identify and define the beneficial uses of the lake from various agencies, cities, and stakeholder perspectives.

Develop an Approach to Define Lake Metrics for Healthy Lakes

 Independent expert panel to define short-, mid-, and long-term options for achieving healthy lakes.

Develop a Work Plan and Schedule

 Create a detailed plan for LESJWA and partners outlining specific actions (including mitigation and treatment options), milestones, and timelines to achieve the defined Healthy Lakes.

Implement Projects and a Monitoring Program

 Execute the projects and establish a monitoring program to ensure ongoing assessment and maintenance of the lakes' health.



Strategic Plan Goal 1 Tasks

Tasks 1

- Staff Led
- 6-month process
- Est. \$10,000
- Deliverable: Memo with descriptions of healthy lakes

Task 2

- Staff-Led
- 6-month process
- Est. \$10,000
- Deliverable: Memo documenting beneficial uses by entity

Task 3

- Staff-Led
- Convene panelists
- 3-month process
- Est. \$30,000
- Deliverable: Technical Memo (short-, mid-, and long-term solutions for lakes to achieve healthy lakes definitions)



FY 25-26



Task 4

Consultant-led
Develop Work Plan and Schedule
3-month process
Est. \$25,000

Task 5

- Implement Projects
- Implement Monitoring Program
- TBD



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JPA Operating Revenues: Goal 1 Tasks

Contributions						
Entity	FY 25-26	FY 26-27	FY 25-26 (Goal 1)	FY 26-27 (Goal 1)		
* Member agency allocation - City of LE	\$20,000	\$20,000	\$25 <i>,</i> 000	\$33 <i>,</i> 750		
* Member agency allocation - EVMWD	\$20,000	\$20,000	\$25 <i>,</i> 000	\$33 <i>,</i> 750		
* Member agency allocation - Co of Riv	\$20,000	\$20,000	\$25 <i>,</i> 000	\$33 <i>,</i> 750		
* Member agency allocation - City of CL	\$20,000	\$20,000	\$25 <i>,</i> 000	\$33 <i>,</i> 750		
* Member agency allocation - SAWPA	\$10,000	\$10,000	\$10,000	\$10,000		
* Other agency contribution - RCFCWCD	\$20,000	\$20,000	\$20,000	\$20,000		
Total Contributions	\$110,000	\$110,000	\$130,000	\$165,000		

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Recommendation

It is recommended that the Board of Directors approve the FY 2025-2026 and FY 2026-2027 LESJWA budget, which includes the Lake Elsinore and Canyon Lake Total Maximum Daily Load (TMDL) Task Force budget, and invoice each LESJWA member agency and RCFC&WCD at the start of the new fiscal year based on:

- Option 1: Maintain current contribution levels.
- Option 2: Implement Strategic Plan Goal 1 Tasks.

LESJWA

Thank You

Rachel Gray LESJWA Authority Administrator Office (951) 354-4242 | Cell (951) 539-0261 rgray@sawpa.gov





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LESJWA BOARD MEMORANDUM NO. 2025.6

DATE:	April 17, 2025
то:	LESJWA Board of Directors
SUBJECT:	Lake Elsinore and Canyon Lake TMDL Task Force Consultant Support
FROM:	Rick Whetsel, Senior Watershed Manager

RECOMMENDATION

It is recommended that the Board of Directors approve the following:

- 1. Change Order to the GEI Consultants agreement, Task Order No. GEI160-03 for an amount not-to-exceed \$20,000 to provide technical support services to the Lake Elsinore and Canyon Lake TMDL Task Force for the remainder of Fiscal Year (FY) 2024-25.
- Task Order No. GEI160-05 with GEI Consultants for an amount not-to-exceed \$55,000 to provide technical support services to the Lake Elsinore and Canyon Lake TMDL Task Force for FY 2025-26.

DISCUSSION

The Lake Elsinore and Canyon Lake Total Maximum Daily Load (LE&CL TMDL) Task Force has procured the services of GEI Consultants to provide technical support for activities related to regional project implementation and the adoption of revised TMDLs, including preparation of a revised Technical Report. GEI Consultants has completed much of the work that was originally planned and budgeted for prior to the start of the FY 2024-25 budget cycle. However, several unanticipated tasks have emerged requiring LE&CL TMDL Task Force to request additional technical support from GEI Consultants through the remainder of the FY 2024-25.

The attached Change Order with GEI Consultants provides Technical Support to the LE&CL Task Force through the remainder of FY 2024-25. Included with this Task Order is a scope of work and budget providing a detailed description of the technical support services to be performed through FYE 2025 by the consultant, as highlighted below:

- **Technical Support for Adoption of Revised TMDL** Public comments were received from the city of Banning and Western Riverside County Agricultural Coalition (WRCAC) in February 2025 that will require additional review and technical support to provide responses that give the Santa Ana Regional Water Quality Control Board members information needed to decide upon the TMDL revision in June 2025. Responses to comments will be created to support the adoption process prior to May 10, 2025.
- **Regional Project Implementation Support** Public comments received from the city of Banning and WRCAC include arguments regarding minor sources and appropriateness of inclusion within the list of responsible parties in the revised TMDL. Work has begun on Task 9 of the Phase II program of implementation in the revised TMDL to conduct a Study to Define and Identify Minor Sources and Identify Responsibility Levels of TMDL Implementation for Such Sources. GEI will continue to support this task by providing technical support to the Task Force workgroup that aims to consider all sources in the watershed in decisions for potential thresholds for determining 'minor' sources. For minor sources, GEI will provide technical support to determine reduced TMDL obligations or potential to exclude a source from the list of responsible parties in revised TMDL.

It is the recommendation of LESJWA staff as administrator of the LE&CL TMDL Task Force that this additional work is implemented to address emerging needs and to secure a more comprehensive, aligned, and actionable strategic plan.

Moving forward, continued technical support will be needed by the LE&CL TMDL Task Force to implement regional water quality controls, and evaluate the effectiveness of these controls as well as identify monitoring or special studies to most effectively implement the LE&CL TMDLs.

The attached Task Order with GEI Consultants provides Technical Support to the LE&CL Task Force through FY 2025-26. Included with this Task Order is a scope of work and budget providing a detailed description of the technical support services to be performed through FYE 2026 by the consultant, GEI Consultants, as highlighted below:

- **Regional Project Implementation** GEI will collaborate with LESJWA and stakeholders to provide technical support for regional project implementation including estimation of watershed best management practices (BMP) effectiveness, assessment of compliance with TMDLs, estimation of alum dosages for Canyon Lake, California Environmental Quality Act (CEQA) support, support for in-lake treatment in Lake Elsinore, and review of other supplemental project concepts. A key outcome of this task involves nutrient offset demand and cost share determinations for regional project participation between watershed stakeholders accounting for deployments of watershed nutrient reduction measures. The level of effort for these types of services is limited to the following budget.
- **Technical Support for Revised TMDL** GEI is currently supporting the finalization of supporting documents for revision of the LE&CL TMDLs. A Regional Board hearing is anticipated to occur in summer of 2025. GEI will provide technical support to the Regional Board and Task Force to help facilitate regulatory approval processes, such as preparation of materials and participation in meetings with EPA. GEI will also support the Task Force as requested to initiate key tasks in the Phase II program of implementation.

These costs were provided to the LE&CL TMDL Task Force and are deemed acceptable and important to fund.

BACKGROUND

In June of 2015, the LE&CL Task Force petitioned the Santa Ana Regional Water Quality Control Board (Regional Board) to reopen and revise the Nutrient TMDLs based on the wealth of new information developed over the last 10 years. The Regional Board agreed to make this effort a high priority as part of the recent Triennial Review (R8-2015-0085). As part of this agreement, the LE&CL Task Force has accepted responsibility to develop the documentation needed to update and amend the Nutrient TMDL for Canyon Lake and Lake Elsinore.

The reason for the TMDL update is to reflect the significant amount of new data that has developed since the LE&CL nutrient TMDLs were first enacted. This information has fundamentally transformed our understanding of how nutrient loading affects the lakes under both natural and undeveloped, and current land use conditions. The scientific studies commissioned by the LE&CL Task Force have shown conclusively that many of the modeling assumptions used to develop the original TMDL were not accurate. Further, the land use has changed, regulatory policies and permits have been revised, and more specificity is needed to clarify compliance. The work by CDM Smith over the next three fiscal years includes significant scientific and regulatory justification for approval by the Regional Board and EPA.

In October 2015, in response to a request for qualifications issued by LESJWA, the members of the LE&CL Task Force Technical Advisory Committee unanimously recommend the selection of CDM Smith to lead the effort to revise and update the LE&CL nutrient TMDLs. CDM Smith was selected by a proposal technical review committee composed of task force agencies, based upon the consultant's substantial knowledge of the TMDLs and professional expertise of consultants assembled for their team.

On December 17, 2015, the LESJWA Board approved the selection of CDM Smith and authorized the first of a series of Task Orders with CDM Smith to revise and update the LE&CL nutrient TMDLs. Expenses incurred by CDM Smith to date remain within budget of the overall TMDL Update effort proposed by the consultant, and on time according to their original schedule.

On October 20, 2016, the members of the LE&CL Task Force unanimously recommended the second in a series of Task Orders prepared by CDM Smith to complete the effort to revise and update LE&CL nutrient TMDLs Technical Document and submit a final Basin Plan Amendment package to the Regional Board.

On December 21, 2017, the members of LE&CL Task Force unanimously recommended the third in a series of Task Orders prepared by CDM Smith to complete the effort to revise and update the LE&CL Nutrient TMDLs Technical Document and submit a final Basin Plan Amendment package to the Regional Board.

On December 10, 2018, the members of the LE&CL Task Force unanimously recommended a Change Orders to the CDM Smith agreement to further support the TMDL adoption process and TMDL related implementation activities ongoing during the Basin Plan amendment process.

On June 18, 2020, the members of the LE&CL Task Force unanimously recommended a Task Order for CDM Smith agreement to further support the TMDL adoption process and TMDL related implementation activities ongoing during the Basin Plan amendment process.

On September 28, 2021, the members of the LE&CL Task Force unanimously recommended for approval a proposal from CDM Smith for technical support to LE&CL Task Force and update and revise the technical document. Included in this proposal were additional technical support services to the LE&CL Task Force during this ongoing process.

On August 18, 2022, the members of the LE&CL Task Force unanimously recommended for approval a proposal from CDM Smith to further support the process to update and revise the technical document. Included in this proposal were additional technical support services to the LE&CL Task Force during this ongoing process.

On November 14, 2022, the members of the LE&CL Task Force unanimously recommended for approval a proposal from GEI Consultants to transition the contract work supported by Steven Wolosoff from CDM Smith to GEI Consultants and enter into an agreement with GEI Consultants starting on January 1, 2023, through the balance of the fiscal year.

On June 19, 2023, the members of the LE&CL Task Force unanimously recommended for approval a proposal from GEI Consultants to further support the process to update and revise the technical document through FYE 2024. Included in this proposal were additional technical support services to the LE&CL Task Force during this ongoing process.

On June 26, 2024, the members of the LE&CL Task Force unanimously recommended for approval a proposal from GEI Consultants to further support the process to update and revise the

technical document through FYE 2025. Included in this proposal were additional technical support services to the LE&CL Task Force during this ongoing process.

RESOURCES IMPACT

Sufficient funding is available within the Lake Elsinore and Canyon Lake TMDL Task Force account to address the Change Order request for FY 24-25.

All funding for this Task Order is provided by the TMDL Task Force FY 2025-26 Budget. All staff contract administration time for this contract will be taken from the TMDL budget and funded by the TMDL Stakeholders.

Attachments:

- 1. GEI Consultants Change Order No. GEI160-03
- 2. GEI Consultants Proposal for Amendment to Fiscal Year 2024-25 Technical Support to LE&CL TMDL Task Force
- 3. GEI Consultants Task Order No. GEI160-05
- 4. GEI Consultants Proposal for Fiscal Year 2025-26 Technical Support to LE&CL TMDL Task Force

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY CHANGE ORDER NO. 1 TO TASK ORDER NO. GEI160-03

CONSULTANT:	GEI Consultants, Inc. 400 Unicorn Park Drive Wobourn, MA 01801		,	VENDOR NO.: 2213
PROJECT:	TMDL Update & Technical Support	to LE&CL TME	DL Task For	ce FY 2024-25
COST:	\$20,000.00			
REQUESTED BY:	Rick Whetsel, Senior Watershed M	anager		April 17, 2025
FINANCE:	Karen Williams, Deputy GM/CFO	Date		
FINANCING SOURC	E: Acct. Coding: Acct. Description:	160TMDL-61 General Cons	13-01 sulting	
BOARD AUTHORIZA Authorization: April 1	TION REQUIRED FOR THIS CHA	NGE:	YES (X)	NO ()

Consultant is hereby directed to provide the work necessary to comply with this change order.

DESCRIPTION / JUSTIFICATION OF CHANGE: The purpose of this change order is for additional technical support for the LE&CL TMDL Task Force relating to 1) Technical Support for Adoption of Revised TMDL relating to the submittal of additional comments at the February 14, 2025, Regional Board Hearing on the LE&CL TMDL update, and 2) Regional Project Implementation Support relating to Task 9 of the Phase II program of implementation on the revised TMDL to conduct a Study to Define and Identify Minor Sources, and Identify Responsibility Levels of TMDL Implementation for such sources. See proposal attached.

CHANGE IN CONTRACT TIME: N/A

CHANGE IN TASK ORDER PRICE:	Original Task Order Amount:	\$ 80,000.00
	Change Order No. 1 Amount:	\$ 20,000.00
	Amended Contract Total:	\$ 100,000.00

ACCEPTANCE:

Consultant accepts the terms and conditions stated above as full and final settlement of any claims arising from or related to this Change Order. Consultant agrees to perform the above-described work in accordance with the terms and in compliance with applicable sections of the Consultant Specifications. This Change Order is hereby agreed to, accepted and approved, all in accordance with the General Provisions of the Consultant Specifications.

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

Jeffrey J. Mosher, General Manager

Date

GEI CONSULTANTS, INC.

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April 2, 2025

Rachel Gray Senior Engineer Lake Elsinore and San Jacinto Watershed Authority (LESJWA) Santa Ana Watershed Project Authority 11615 Sterling Way Riverside, CA 92501

Subject: Proposal for Amendment to Fiscal Year 2024-25 Technical Support to Lake Elsinore/Canyon Lake (LECL) Nutrient TMDL Task Force

The LECL TMDL Task Force coordinates implementation of regional water quality controls, evaluates effectiveness of controls, and supports the Regional Board in the revision of the LECL nutrient TMDLs. The Task Force procured GEI to provide technical support for these ongoing activities for fiscal year 2024-25. To support the above activities in Fiscal Year (FY) 2024-2025, three tasks were authorized for implementation: 1) Task Force meeting participation, 2) regional project implementation, and 3) technical support for adoption of revised TMDLs, including preparation of a revised Technical Report. GEI has completed the scoped level of effort associated with Tasks 2 and 3 involving regional project implementation and technical support for adoption of a revised TMDL and is seeking an amendment to be able to continue providing ongoing support through June 30, 2025. A brief summary of activities completed to support the TMDL revision within FY 2024-2025 includes:

- Completion of the draft Technical Report for the proposed TMDL revision in August 2024 that addressed extensive comments received on draft chapters. Major changes were made to update the margin of safety, economic considerations, incorporate tabular summaries for baseline load, calculate new performance metrics for lake models, improve presentation of Phase 2 tasks to highlight the adaptive management approach.
- Preparation of a detailed response to comments matrix showing how all stakeholder comments on the December 2023 draft Technical Report were addressed or providing responses where changes were not made.
- Meetings with EPA, Regional Board staff, and stakeholders to address questions and concerns in the period leading up to the August technical report submittal and December public draft.
- Presentation on the alum program at a Canyon Lake Town Hall meeting in September 2024
- Collection of additional samples for total and dissolved aluminum from Canyon Lake following a fish kill in November 2024.
- Support for the Regional Board to refine the August draft and update responses to 2019 peer review comments in advance of the December 2024 public draft.



- Review of comments on public draft and development of preliminary responses to comments to support Regional Board.
- Scoping special study for post-fire monitoring in Cleveland National Forest.
- Prepare and present slides at the public workshop on February 14, 2025.
- Provide alum doses to support implementation of the regional project in Canyon Lake
- Canyon Lake Town Hall meeting participation on March 4, 2025.
- Support to Task Force administrators with cost share calculations for budget allocations
- Development of technical support documentation for update to CEQA to allow for ongoing use of the alum addition program in Canyon Lake.
- Supporting analysis for the Task Force comment letter regarding the proposed 303d listing of aluminum in Reach 1a of the San Jacinto River.

Scope of Work

Adoption of the revised LECL TMDL is not yet completed. A public draft was released for comment on December 27, 2024. Extensive comments were received on the public draft Technical Report and Basin Plan amendments in February 2025. During the February 14 Board workshop, the Regional Board approved additional time for staff to provide detailed responses to the public comments from the City of Banning and WRCAC prior to an anticipated June 2025 adoption hearing. Additional support from GEI is proposed that is beyond the FY 2024-2025 approved scope of work to support adoption of a revised TMDL as well continuation of support for regional project implementation. Accordingly, GEI has prepared the following scope of work and budget for work to be completed by June 30, 2025.

Technical Support for Adoption of Revised TMDL – Public comments were received from the city of Banning and WRCAC in February 2025 that will require additional review and technical support to provide responses that give Board members information needed to decide upon the TMDL revision in June 2025. Responses to comments will be created to support the adoption process prior to May 10, 2025.

- Deliverable: Comment responses and support developing materials for Regional Board adoption hearing
- Labor: 40 hours: \$10,000

Regional Project Implementation Support – Public comments received from the City of Banning and WRCAC include arguments regarding minor sources and appropriateness of inclusion within the list of responsible parties in the revised TMDL. Work has begun on Task 9 of the Phase II program of implementation in the revised TMDL to conduct a *Study to Define and Identify Minor Sources and Identify Responsibility Levels of TMDL Implementation for Such Sources*. GEI will continue to support this task by providing technical support to the Task Force workgroup that aims to consider all sources in the watershed in decisions for potential thresholds for determining 'minor' sources. For minor sources, GEI will provide technical support to determine reduced TMDL obligations or potential to exclude a source from the list of responsible parties in revised TMDL.



• Deliverable: Technical analyses and writeups as needed to support the Task Force workgroup with implementation of Task 9: 40 hours: \$10,000

Key Personnel

Key personnel for the proposed scope of work include Steve Wolosoff, John Rudolph, Chris Stransky, and Kelcey Chung, with support from word processing professionals.

Estimated Budget

GEI proposes to complete the proposed scope of work on a time and materials basis in accordance with the same 2023 bill rates used in the 2024-25 contract. The proposed not to exceed budget for tasks identified in this scope of work is \$20,000.

Closing

Please call me at 781-430-9150 or John Rudolph at 760-795-1994 if you any questions regarding our proposal or need any further information. We look forward to assisting LESJWA in conducting these proposed tasks.

Sincerely,

GEI CONSULTANTS, INC.

An Sloy

Steve Wolosoff, BCES, PMP Senior Project Manager

John Rudolph Senior Aquatic Ecologist

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LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY TASK ORDER NO. GEI160-05

CONSULTANT:	GEI Consulta 400 Unicorn Woburn, MA	ants, Inc. Park Drive 01801		VEND	DOR NO.: 2213
COST:	\$55,000.00				
PAYMENT:	Upon Receipt of Proper Invoice				
REQUESTED BY:	Rick Whetsel, Senior Watershed Manager April			April 17, 2025	
FINANCE:					
K	Karen Williams, Deputy GM/CFO		Date		
FINANCING SOURCE: Acct. Acct.		Acct. Coding: Acct. Description:	160-TMDL-6 General Cor	6113-01 nsulting	
BOARD AUTHORIZATION REQUIRED: Authorization: April 17, 2025; LES#2025.6			YES (X)	NO ()	

This Task Order is issued upon approval and acceptance by the Lake Elsinore & San Jacinto Watersheds Authority (LESJWA) and GEI Consultants, Inc. (Consultant) pursuant to the Agreement for Services between LESJWA and Consultant, entered into on April 17, 2025, expiring December 31, 2028.

I. PROJECT NAME OR DESCRIPTION

FYE 2025-26 TMDL Update & Technical Support to LE&CL TMDL Task Force

II. SCOPE OF WORK / TASKS TO BE PERFORMED

Consultant is to provide technical support for the LE&CL TMDL Task Force for FY 2025-26, which includes: 1) Regional Project Implementation – Consultant will work with LESJWA and stakeholders to deliver technical assistance for regional project implementation. This includes estimating watershed BMP effectiveness, evaluating compliance with TMDLs, determining alum dosage requirements for Canyon Lake, provide CEQA support, assist with in-lake treatment for Lake Elsinore, and reviewing other supplemental project concepts. 2) Technical Support for Revised TMDL – Consultant is currently assisting with the finalization of supporting documents for the revision of the LECL TMDLs.

III. PERFORMANCE TIME FRAME

Consultant shall begin work July 1, 2025, and shall complete performance of such services by June 30, 2026.

IV. LESJWA LIAISON

Rick Whetsel will serve as liaison between LESJWA and Consultant.

V. COMPENSATION

For all services rendered by Consultant pursuant to this Task Order, Consultant shall receive a total not-to-exceed sum of **\$55,000.00**. Payment for such services shall be made within 30 days upon receipt of proper and timely invoices from Consultant, as required by the abovementioned Agreement. Each such invoice shall be provided to LESJWA by Consultant within 15 days after the end of the month in which the services were performed.

VI. CONTRACT DOCUMENTS PRECEDENCE

In the event of a conflict in terms between and among the contract documents herein, the document item highest in precedence shall control. The precedence shall be:

- a. The Agreement for Services by Independent Consultant/Contractor.
- **b.** The Task Order or Orders issued pursuant to the Agreement, in numerical order.
- **c.** Exhibits attached to each Task Order, which may describe, among other things, the Scope of Work and compensation therefore.
- **d.** Specifications incorporated by reference.

In witness whereof, the parties have executed this Task Order on the date indicated below.

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

Jeffrey J. Mosher, General Manager

GEI CONSULTANTS, INC.

(Signature)

Date

Date

Print/Type Name and Title



April 2, 2025

Consulting Engineers and Scientists

Rachel Gray Senior Engineer Lake Elsinore and San Jacinto Watershed Authority (LESJWA) Santa Ana Watershed Project Authority Sterling Way Riverside, CA 92501

Subject: Proposal for Fiscal Year 2025-26 Technical Support to Lake Elsinore/Canyon Lake (LECL) Nutrient TMDL Task Force

The Lake Elsinore Canyon Lake (LECL) TMDL Task Force coordinates implementation of regional water quality controls, evaluates effectiveness of controls, and identifies monitoring or special studies to most effectively implement the LECL nutrient TMDLs. The Task Force seeks technical support for these ongoing activities and guidance with regard to supplemental projects and changing regulations. The Task Force has also been collaborating on the development of revisions to the existing 2004 LECL TMDLs. In December 2018, a TMDL Technical Document was completed to support adoption of a Basin Plan Amendment (BPA) to revise the LECL nutrient TMDLs. After several years of peer review and model updates, a revised public draft of the Technical Report and BPA language for the revised TMDL was released in December 2024. Currently, the Task Force is collaborating with Regional Board staff to address public comments with an adoption hearing anticipated for June 2025. In the coming fiscal year, additional technical support is needed to support regulatory approvals and documentation and to begin scoping of activities to begin the Phase II program of implementation.

To support the above activities in Fiscal Year 2025-2026, three tasks are proposed for implementation. These tasks and the assumptions used to prepare the proposed budget are provided below.

Scope of Work

GEI has prepared a scope of work and budget for three tasks to be implemented from July 1, 2025 through June 30, 2026.

Task Force Meeting Participation – It is anticipated that nine Task Force meetings will occur in fiscal year 2025-26 to support the TMDL revision, coordinate regional project implementation activities and maintain collaboration among stakeholders. GEI will prepare technical presentation materials as needed to support any of these meetings, 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 2.5 hours for participation in each meeting. Labor to prepare slides, handouts, and support technical analyses is assumed to be 3.5 hours per meeting. GEI 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 GEI's contract administrator will be covered under this task. The level of effort for this task is summarized below.

o Labor (76 hours): \$19,000

Regional Project Implementation – GEI will collaborate with LESJWA and stakeholders to provide technical support for regional project implementation including estimation of watershed BMP effectiveness, assessment of compliance with TMDLs, estimation of alum dosages for Canyon Lake, CEQA support, support for in-lake treatment in Lake Elsinore, and review of other supplemental project concepts. A key outcome of this task involves nutrient offset demand and cost share determinations for regional project participation between watershed stakeholders accounting for deployments of watershed nutrient reduction measures. The level of effort for these types of services is limited to the following budget:

o Labor (62 hours): \$11,000

Technical Support for Revised TMDL – GEI is currently supporting the finalization of supporting documents for revision of the LECL TMDLs. A Regional Board hearing is anticipated to occur in summer of 2025. GEI will provide technical support to the Regional Board and Task Force to help facilitate regulatory approval processes, such as preparation of materials and participation in meetings with EPA. GEI will also support the Task Force as requested to initiate key tasks in the Phase II program of implementation.

o Labor: 112 hours: \$25,000

Key Personnel

Key personnel for the proposed additional services include Steve Wolosoff, John Rudolph, Chris Stransky, and Kelcy Chung.

Estimated Budget

GEI proposes to complete the proposed scope of work within the estimated budgets provided above on a time and materials basis in accordance with the 2025 bill rates. The proposed not to exceed budget for tasks identified in this scope of work is \$55,000.



Rachel Gray, LESJWA April 2, 2025

Closing

Please call me at 781-430-9150 or John Rudolph at 760-795-1994 if you any questions regarding our proposal or need any further information. We look forward to assisting LESJWA in conducting these proposed tasks.

Sincerely,

GEI CONSULTANTS, INC.

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Steve Wolosoff, BCES, PMP Senior Project Manager

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John Rudolph Senior Aquatic Ecologist

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LESJWA BOARD MEMORANDUM NO. 2025.7

DATE:	April 17, 2025
SUBJECT:	Lake Elsinore & Canyon Lake TMDL Compliance Monitoring Program
TO:	LESJWA Board of Directors
FROM:	Rick Whetsel, Senior Watershed Manager

RECOMMENDATION

It is recommended that the Board of Directors approves the following to oversee and implement the TMDL Compliance Monitoring Program for Lake Elsinore and Canyon Lake TMDL Task Force for Fiscal Years (FYs) 2026-2028:

- 1. General Services Agreement with GEI Consultants; and
- 2. Task Order No. GEI160-04 for an amount not-to-exceed \$880,801, (based upon annual amounts not to exceed \$284,966 for FY 2025-26, \$293,515 for FY 2026-27, and \$302,320 for FY 2027-28) for three years with an option to exercise a two-year extension.

DISCUSSION

On January 6, 2020, LESJWA staff on behalf of members of the Lake Elsinore and Canyon Lake Nutrient Total Maximum Daily Load (TMDL) Task Force (LE&CL TMDL) released a request for proposals (RFP) through Planet Bids seeking consulting firms to oversee and implement the LE&CL TMDL Compliance Monitoring Program.

On February 24, 2025, LESJWA staff received one single proposal from GEI Consultants in response to the RFP. Following staff's evaluation process, a proposal technical review committee composed of LESJWA staff and members from the LE&CL TMDL Task Force reviewed and provided a recommendation to LESJWA to proceed with the one proposal based on their expertise and experience performing the scope of work.

On March 4, 2025, based upon feedback from the proposal technical review committee, LESJWA staff recommended to the LE&CL TMDL Task Force to proceed with an Agreement for Services with GEI Consultants to oversee and implement the LE&CL TMDL Compliance Monitoring Program. Following a brief discussion, a motion was put forward by the Task Force to approve the recommendation to proceed with an Agreement for Services with GEI Consultants to oversee and implement the LE&CL TMDL Compliance Monitoring Program. This recommendation was based upon the GEI Consultants' proposal meeting the requirements of the RFP and the firm's qualifications to perform the work based on project understanding and past experience working with the LE&CL TMDL Task Force.

The attached Task Order with GEI Consultants provides support services to oversee and implement the LE&CL TMDL Compliance Monitoring Program. Included with this Task Order is the GEI proposal detailing the scope of work and budget providing a detailed description of support services will be performed by the consultant, GEI Consultants, for FYs 2026-28 as highlighted below:

- Task 1 Project management & coordination with the lake Elsinore and Canyon Lake TMDL Task Force
- Task 2 Contract with analytical laboratories
- Task 3 Monitoring program Implementation

- o Watershed stormwater monitoring
- o In-lake monitoring
- Quality Assurance and Quality Control
- Task 4 Data management
- Task 5 Draft and final annual water quality monitoring report

Task 6 – Americans with Disabilities Act (ADA) standards for accessible design

BACKGROUND

In April 2015, the Task Force submitted to the Regional Board an updated Lake Elsinore and Canyon Lake Nutrient TMDL Phase 2 Compliance Monitoring Work Plan. That plan detailed an approach for compliance monitoring in the near term (2015 through 2019) to address compliance with the Lake Elsinore & Canyon Lake Nutrient Total Maximum Daily Loads (TMDLs) and demonstrated progress toward attaining compliance with respective waste load allocations (WLAs) and/or TMDL response targets.

In June 2015, the LESJWA Board approved a contract with Wood to oversee and implement the Phase 2 LE&CL nutrient TMDL Compliance monitoring program for Lake Elsinore, Canyon Lake and the upstream San Jacinto Watershed.

In June 2018, the LESJWA Board approved a 2-year contract extension with Wood Environment & Infrastructure Solutions Inc. to oversee and implement the Phase 2 LE&CL nutrient TMDL Compliance monitoring program for Lake Elsinore, Canyon Lake and the upstream San Jacinto Watershed.

In April 2020, the LESJWA Board approved a 3-year Task Order with an option to exercise a twoyear extension with Wood Environment & Infrastructure Solutions Inc. to oversee and implement the FYs 2020-22 TMDL compliance monitoring program for the LE&CL Task Force.

In December 2022, the LESJWA Board approved a request from the LE&CL TMDL Task Force to exercise the option for a two-year extension with Wood Environment & Infrastructure Solutions Inc. to oversee and implement the TMDL compliance monitoring program for the Lake Elsinore and Canyon Lake TMDL Task Force for Fiscal Years 2023-25.

RESOURCES IMPACT

The TMDL Task Force FYs 2026-28 budgets provide a sufficient budget to conduct the nutrient TMDL Compliance & LEAMS monitoring. All staff contract administration time for this contract will be taken from the TMDL budget and funded by the TMDL Stakeholders.

Attachments:

- 1. GEI Consultants General Services Agreement
- 2. GEI Consultants Task Order GEI160-04
- 3. GEI Consultants proposal detailing the Scope of work, cost estimate and rate schedule
- 4. PowerPoint Presentation

AGREEMENT FOR SERVICES BY INDEPENDENT CONSULTANT

This Agreement is made this **day of _____, 20** by and between the Lake Elsinore & San Jacinto Watersheds Authority (LESJWA) whose address is 11615 Sterling Avenue, Riverside, CA. 92503, and ______("Consultant") whose address is ______.

RECITALS

This Agreement is entered into on the basis of the following facts, understandings, and intentions of the parties to this Agreement:

- LESJWA desires to engage the professional services of Consultant to perform such professional consulting services as may be assigned, from time to time, by LESJWA in writing.
- Consultant agrees to provide such services pursuant to, and in accordance with, the terms and conditions of this Agreement and has represented and warrants to LESJWA that Consultant possesses the necessary skills, qualifications, personnel, and equipment to provide such services.
- The services to be performed by Consultant shall be specifically described in one or more written Task Orders issued by LESJWA to Consultant pursuant to this Agreement.

AGREEMENT

Now, Therefore, in consideration of the foregoing Recitals and mutual covenants contained herein, LESJWA and Consultant agree as follows:

ARTICLE I TERM OF AGREEMENT

1.01 <u>Term of Agreement.</u> This agreement shall become effective on the date first above written and shall continue until ______, **202**_, unless extended or sooner terminated as provided for herein.

ARTICLE II SERVICES TO BE PERFORMED

2.01 Consultant agrees to provide such professional consulting services as may be assigned, from time to time, in writing by the Board and the Authority Administrator of LESJWA. Each such assignment shall be made in the form of a written Task Order. Each such Task Order shall include, but shall not be limited to, a description of the nature and scope of the services to be performed by Consultant, the amount of compensation to be paid, and the expected time of completion.

2.02 Consultant may, at Consultant's sole cost and expense, employ such competent and qualified independent professional associates, subcontractors, and consultants as Consultant deems necessary to perform each such assignment; provided, however, that Consultant shall not subcontract any of the work to be performed without the prior written consent of LESJWA.

ARTICLE III COMPENSATION

3.01 In consideration for the services to be performed by Consultant, LESJWA agrees to pay Consultant as provided for in each Task Order.

3.02 Each Task Order shall specify a total not-to-exceed sum of money and shall be based upon the regular hourly rates customarily charged by Consultant to its clients, as set forth on an exhibit to be attached to each Task Order issued to Consultant.

3.03 Consultant shall not be compensated for any services rendered nor reimbursed for any expenses incurred in excess of those authorized in any Task Order unless approved in advance by the Board of Directors and Authority Administrator of LESJWA, in writing.

3.04 Unless otherwise provided for in any Task Order issued pursuant to this Agreement, payment of compensation earned shall be made in monthly installments after receipt from Consultant of a timely, detailed, corrected, written invoice by LESJWA's Project Manager, describing, without limitation, the services performed, the time spent performing such services, the hourly rate charged therefore, and the identity of individuals performing such services for the benefit of LESJWA. Such invoices shall also include a detailed itemization of expenses incurred. Upon approval by an authorized SAWPA employee, SAWPA will pay within 30 days after receipt of a valid invoice from Consultant.

ARTICLE IV OBLIGATIONS OF CONSULTANT

4.01 Consultant agrees to perform all assigned services in accordance with the terms and conditions of this Agreement and those specified in each Task Order.

4.02 Except as otherwise provided for in each Task Order, Consultant will supply all personnel and equipment required to perform the assigned services.

4.03 Consultant shall be solely responsible for the health and safety of its employees and agents in performing the services assigned by LESJWA. Consultant hereby covenants and agrees to:

- a. Obtain a comprehensive general liability and automobile insurance policy, including contractual coverage, with combined single limits for bodily injury and property damage in an amount of not less than \$1,000,000.00. Such policy shall name LESJWA, and any other interested and related party designated by LESJWA, as an additional insured, with any right to subrogation waived as to LESJWA and such designated interested and related party;
- b. Obtain a policy of professional liability insurance in a minimum amount of \$1,000,000.00 per claim or occurrence to cover any negligent acts or omissions committed by Consultant, its employees and/or agents in the performance of any services for LESJWA;
- c. Comply with all local, state and federal laws, rules and regulations;
- d. Provide worker's compensation insurance or a California Department of Insurance-approved self-insurance program in an amount and form that meets all applicable Labor Code requirements, covering all persons or entities providing services on behalf of the Consultant's and all risks to such persons or entities.
- e. Consultant shall require any subcontractor that Consultant uses for work performed for LESJWA under this Agreement or related Task Order to obtain the insurance coverages specified above.
- f. Consultant hereby agrees to waive subrogation which any insurer of Consultant may seek to require from Consultant by virtue of the payment of any loss. Consultant shall obtain an endorsement that may be necessary to give effect to this waiver of subrogation. In addition, the Workers Compensation policy shall be endorsed with a waiver of subrogation in favor of LESJWA for all work performed by Consultant, and its employees, agents and subcontractors.

All such insurance policy or policies shall be issued by a responsible insurance company with a minimum A. M. Best Rating of "A-" Financial Category "X", and authorized and admitted to do business in, and regulated by, the State of California. If the insurance company is not admitted in the State of California, it must be on the List of Eligible Surplus Line Insurers (LESLI), shall have a minimum A.M. Best Rating of "A", Financial Category "X", and shall be domiciled in the United States, unless otherwise approved by LESJWA in writing. Each such policy of insurance shall expressly provide that it shall be primary and noncontributory with any policies carried by LESJWA and, to the extent obtainable, such coverage shall be payable notwithstanding any act of negligence of LESJWA that might otherwise result in forfeiture of coverage. Evidence of all insurance coverage shall be provided to LESJWA prior to issuance of the first Task Order. Such policies shall provide that they shall not be canceled or amended without 30 day prior written notice to LESJWA. Consultant acknowledges and agrees that such insurance is in addition to Consultant's obligation to fully indemnify and hold LESJWA free and harmless from and against any and all claims arising out of an injury or

damage to property or persons caused by the negligence, recklessness, or willful misconduct of Consultant in performing services assigned by LESJWA.

4.04 Consultant hereby covenants and agrees that LESJWA, its officers, employees, and agents shall not be liable for any claims, liabilities, penalties, fines or any damage to property, whether real or personal, nor for any personal injury or death caused by, or resulting from, or claimed to have been caused by or resulting from, any negligent act or omission of Consultant. Further, Consultant hereby covenants and agrees to fully indemnify and save LESJWA, its agents, officers and employees, free and harmless from and against any and all of the foregoing liabilities or claims of any kind, and shall reimburse LESJWA for all costs or expenses that LESJWA incurs (including attorneys' fees) on account of any of the foregoing liabilities, including liabilities or claims made by reason of defects in the performance of consulting services pursuant to this Agreement, unless the liability or claim is proximately caused by LESJWA's negligent act or omission.

4.05 In the event that LESJWA requests that specific employees or agents of Consultant supervise or otherwise perform the services specified in each Task Order, Consultant shall ensure that such individual (or individuals) shall be appointed and assigned the responsibility of performing the services.

4.06 In the event Consultant is required to prepare plans, drawings, specifications and/or estimates, the same shall be furnished with a registered professional engineer's number and shall conform to local, state and federal laws, rules and regulations. Consultant shall obtain all necessary permits and approvals in connection with this Agreement, any Task Order or Change Order. However, in the event LESJWA is required to obtain such an approval or permit from another governmental entity, Consultant shall provide all necessary supporting documents to be filed with such entity, and shall facilitate the acquisition of such approval or permit.

ARTICLE V OBLIGATIONS OF LESJWA

5.01 LESJWA shall

- a. Furnish all existing studies, reports and other available data pertinent to each Task Order that are in LESJWA's possession;
- b. Designate a person to act as liaison between Consultant and the Authority Administrator and Board of Directors of LESJWA.

ARTICLE VI ADDITIONAL SERVICES, CHANGES AND DELETIONS

6.01 During the term of this Agreement, the Board of Directors of LESJWA may, from time to time and without affecting the validity of this Agreement or any Task Order issued pursuant thereto, order changes, deletions, and additional services by the issuance of written Change Orders authorized and approved by the Board of Directors of LESJWA.

6.02 In the event Consultant performs additional or different services than those described in any Task Order or authorized Change Order without the prior written approval of the Board of LESJWA, Consultant shall not be compensated for such services.

6.03 Consultant shall promptly advise LESJWA as soon as reasonably practicable upon gaining knowledge of a condition, event, or accumulation of events, which may affect the scope and/or cost of services to be provided pursuant to this Agreement. All proposed changes, modifications, deletions, and/or requests for additional services shall be reduced to writing for review and approval or rejection by the Board of Directors of LESJWA.

6.04 In the event that LESJWA orders services deleted or reduced, compensation shall be deleted or reduced by a comparable amount as determined by LESJWA and Consultant shall only be compensated for services actually performed. In the event additional services are properly authorized, payment for the same

shall be made as provided in Article III above.

ARTICLE VII CONSTRUCTION PROJECTS: CHANGE ORDERS FOR CONSTRUCTION CONSULTANT

7.01 In the event LESJWA authorizes Consultant to perform construction management services for LESJWA, Consultant may determine, in the course of providing such services, that a Change Order should be issued to the construction contractor, or Consultant may receive a request for a Change Order from the construction contractor. Consultant shall, upon receipt of any requested Change Order or upon gaining knowledge of any condition, event, or accumulation of events, which may necessitate issuing a Change Order to the construction contractor, promptly consult with the liaison, Authority Administrator and Board of LESJWA. No Change Order shall be issued or executed without the prior approval of the Board of Directors of LESJWA.

ARTICLE VIII TERMINATION OF AGREEMENT

8.01 In the event the time specified for completion of an assigned task in a Task Order exceeds the term of this Agreement, the term of this Agreement shall be automatically extended for such additional time as is necessary to complete such Task Order, and thereupon this Agreement shall automatically terminate without further notice.

8.02 Notwithstanding any other provision of this Agreement, LESJWA, at its sole option, may terminate this Agreement at any time by giving 10 day written notice to Consultant, whether or not a Task Order has been issued to Consultant.

8.03 In the event of termination, the payment of monies due Consultant for work performed prior to the effective date of such termination shall be paid after receipt of an invoice as provided in this Agreement.

8.04 This Agreement may be terminated by Consultant for cause upon thirty (30) days written notice to LESJWA .

ARTICLE IX STATUS OF CONSULTANT

9.01 Consultant shall perform the services assigned by LESJWA in Consultant's own way as an independent contractor, and in pursuit of Consultant's independent calling, and not as an employee of LESJWA. Consultant shall be under the control of LESJWA only as to the result to be accomplished and the personnel assigned to perform services. However, Consultant shall regularly confer with LESJWA's liaison, Authority Administrator, and Board of Directors as provided for in this Agreement.

9.02 Consultant hereby specifically represents and warrants to LESJWA that the services to be rendered pursuant to this Agreement shall be performed in accordance with the standards customarily applicable to an experienced and competent professional consulting organization rendering the same or similar services. Further, Consultant represents and warrants that the individual signing this Agreement on behalf of Consultant has the full authority to bind Consultant to this Agreement.

ARTICLE X AUDIT; OWNERSHIP OF DOCUMENTS

10.01 All draft and final reports, plans, drawings, specifications, data, notes, and all other documents of any kind or nature prepared or developed by Consultant in connection with the performance of services assigned to it by LESJWA are the sole property of LESJWA, and Consultant shall promptly deliver all such materials to LESJWA. Consultant may retain copies of the original documents, at its option and expense. <u>Any use of the documents for purposes other than those for which they were explicitly prepared shall be at LESJWA 's sole</u>
risk and liability. LESJWA agrees to defend, indemnify, and hold Contractor harmless from and against any claims, losses, liabilities, and damages arising out of or resulting from the unauthorized use of the documents.

10.02 Consultant shall retain and maintain, for a period not less than four years following termination of this Agreement, all time records, accounting records, and vouchers and all other records with respect to all matters concerning services performed, compensation paid and expenses reimbursed. At any time during normal business hours and as often as LESJWA may deem necessary, Consultant shall make available to LESJWA's agents for examination of all such records and will permit LESJWA's to audit, examine and reproduce such records.

ARTICLE XI MISCELLANEOUS PROVISIONS

11.01 This Agreement supersedes all previous agreements, either oral or written, between the parties hereto with respect to the rendering of services by Consultant for LESJWA and contains all of the covenants and agreements between the parties with respect to the rendering of such services in any manner whatsoever. Any modification of this Agreement will be effective only if it is in writing signed by both parties.

11.02 Consultant shall not assign or otherwise transfer any rights or interest in this Agreement without the prior written consent of LESJWA. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

11.03 In the event Consultant is an individual person, and Consultant dies prior to completion of this Agreement or any Task Order issued hereunder, any monies earned that may be due Consultant from LESJWA as of the date of death will be paid to Consultant's estate.

11.04 Time is of the essence in the performance of services required hereunder. Extensions of time within which to perform services may be granted by LESJWA if requested by Consultant and agreed to in writing by LESJWA. All such requests must be documented and substantiated and will only be granted as the result of unforeseeable and unavoidable delays not caused by the lack of foresight on the part of Consultant. Consultant will be given enough time to work prudently and safely.

FORCE MAJEURE

- a) Force Majeure "Event of Force Majeure" means an event beyond the control of Consultant and LESJWA, which prevents a Party from complying with any of its obligations under this Agreement, including but not limited to, acts of God (such as, but not limited to, fires, explosions, earthquakes, drought, tidal waves and floods); war, hostilities, acts of terrorism, riot, commotion, strikes, go slows, lock outs or disorder, unless solely restricted to employees of Consultant or its subcontractors.
- b) Neither LESJWA nor Consultant shall be considered in breach of this Agreement to the extent that performance of their respective obligations (excluding payment obligations) is prevented by an event of Force Majeure. Either LESJWA or Consultant shall give written notice to the other upon becoming aware that an Event of Force Majeure.

11.05 Consultant shall comply with all local, state and federal laws, rules and regulations including those regarding nondiscrimination and the payment of prevailing wages.

11.06 LESJWA expects that Consultant will devote its full energies, interest, abilities and productive time to the performance of its duties and obligations under Agreement, and shall not engage in any other consulting activity that would interfere with the performance of Consultant's duties under this Agreement or create any conflicts of interest. If required by law, Consultant shall file Conflict of Interest Statements with LESJWA.

11.07 Any dispute which may arise by and between LESJWA and the Consultant, including the Consultant's associates, subcontractor or other consultants, shall be submitted to binding arbitration. Arbitration shall be conducted by the Judicial Arbitration and Mediation Service, Inc., or its successor, or any other neutral,

impartial arbitration service that the parties mutually agree upon, in accordance with its rules in effect at the time of the commencement of the arbitration proceeding, and as set forth in this paragraph. The arbitrator must decide each and every dispute in accordance with the laws of the State of California, and all other applicable laws. The arbitrator's decision and award are subject to judicial review by a Superior Court of competent venue and jurisdiction only for material errors of fact or law in accordance with Section 1296 of the Code of Civil Procedure. Limited discovery may be permitted upon a showing of good cause and approved by the assigned arbitrator. Unless the parties stipulate to the contrary, prior to the appointment of the arbitrator, all disputes shall first be submitted to non-binding mediation, conducted by the Judicial Arbitration and Mediation Services, Inc., or its successor, or any other neutral, impartial mediation service that the parties mutually agree upon, in accordance with their rules and procedures for such mediation.

11.08 During the performance of the Agreement, Consultant, and its subcontractors, shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Consultant, and its subcontractors, shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Consultant, and its subcontractors, shall comply with the provisions of the Fair Employment and Housing Act (Government Code, Section 12290 et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 et seq., set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Consultant, and its subcontractors, shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. Consultant shall include the non-discrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.

11.09 This contract may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, and such counterparts shall together constitute one and the same Contract. The parties shall be entitled to sign and transmit an electronic signature of this Contract (whether by facsimile, PDF or other email transmission), which signature shall be binding on the party whose name is contained therein. Each party providing an electronic signature agrees to promptly execute and deliver to the other party an original signed Contract upon request.

IN WITNESS WHEREOF, the parties hereby have made and executed this *Agreement for Services* as of the day and year first above-written.

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

Jeffrey J. Mosher, General Manager

(CONSULTANT NAME)

Date

Print/Type Name and Title

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY TASK ORDER NO. GEI160-04

CONSULTANT:	GEI Consulta 400 Unicorn F Woburn, MA (nts, Inc. Park Drive 01801		VEND	OOR NO.: 2213
COST:	FY 2025-26 FY 2026-27 FY 2027-28 Total	\$284,966.00 \$293,515.00 \$302,320.00 \$880,801.00			
PAYMENT:	Upon Receipt	of Proper Invoice			
REQUESTED BY:	Rick Whetsel,	Senior Watershed M	lanager		April 17, 2025
FINANCE:	Karen Williams, I	Deputy GM/CFO	Date		
FINANCING SOUR	CE:	Acct. Coding: Acct. Description:	6113-01 nsulting		
BOARD AUTHORI	ZATION REQUI	YES (X)	NO ()		

Authorization: April 17, 2025; LES#2025.7

This Task Order is issued upon approval and acceptance by the Lake Elsinore & San Jacinto Watersheds Authority (LESJWA) and GEI Consultants, Inc. (Consultant) pursuant to the Agreement for Services between LESJWA and Consultant, entered into on April 17, 2025, expiring December 31, 2028.

I. PROJECT NAME OR DESCRIPTION

Lake Elsinore/Canyon Lake Nutrient TMDL & LEAMS Monitoring FYEs 2026-2028

II. SCOPE OF WORK / TASKS TO BE PERFORMED

Consultant shall implement the FYE 2026-28 Lake Elsinore and Canyon Lake Nutrient TMDL Compliance Monitoring Program. This includes Watershed Monitoring, In-lake monitoring, Data Analysis and Reporting, Project Management, Coordination Activities, Meeting Attendance, and Laboratory Contracting. In addition, it also includes the additional monthly Lake Elsinore monitoring required to validate the TN/TP Offset Program and Monitoring of Canyon Lake to support the Alum Project. See proposal attached.

III. PERFORMANCE TIME FRAME

Consultant shall begin work July 1, 2025, and shall complete performance of such services by December 31, 2028, with the option to exercise two additional one-year extensions.

IV. LESJWA LIAISON

Rick Whetsel will serve as liaison between LESJWA and Consultant.

V. COMPENSATION

For all services rendered by Consultant pursuant to this Task Order, Consultant shall receive a total not-to-exceed sum of **\$880,801.00**. Payment for such services shall be made within 30 days upon receipt of proper and timely invoices from Consultant, as required by the abovementioned Agreement. Each such invoice shall be provided to LESJWA by Consultant within 15 days after the end of the month in which the services were performed.

VI. CONTRACT DOCUMENTS PRECEDENCE

In the event of a conflict in terms between and among the contract documents herein, the document item highest in precedence shall control. The precedence shall be:

- a. The Agreement for Services by Independent Consultant/Contractor.
- **b.** The Task Order or Orders issued pursuant to the Agreement, in numerical order.
- **c.** Exhibits attached to each Task Order, which may describe, among other things, the Scope of Work and compensation therefore.
- **d.** Specifications incorporated by reference.

In witness whereof, the parties have executed this Task Order on the date indicated below.

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

Jeffrey J. Mosher, General Manager

Date

GEI CONSULTANTS, INC.

(Signature)

Date

Print/Type Name and Title



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Implement the Lake Elsinore and Canyon Lake Nutrient TMDL Compliance Monitoring Program

Proposal prepared for: Santa Ana Watershed Project Authority February 24, 2025



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COVER LETTER

February 24, 2025

Lake Elsinore & San Jacinto Watersheds Authority ATTN: Rick Whetsel, Senior Watershed Manager 11615 Sterling Avenue, Riverside, California 92503

Subject:Proposal to Implement the Lake Elsinore and Canyon Lake Nutrient TMDLCompliance Monitoring Program

Dear Mr. Whetsel:

GEI Consultants, Inc. (GEI) recognizes the critical need for accurate and cost-effective water quality compliance monitoring in the San Jacinto River Watershed for the Lake Elsinore & San Jacinto Watersheds Authority (LESJWA) member agencies. Our core team, which includes the same senior technical experts from GEI and NV5 who have successfully managed this program for the past decade, brings extensive experience and a deep understanding of the LE/CL Total Maximum Daily Load (TMDL) requirements. This long-term involvement has equipped us with insights into the environmental conditions impacting beneficial uses in Lake Elsinore and Canyon Lake, especially as the TMDL revision is being finalized. Our highly experienced team is well-prepared to continue supporting the LE/CL TMDL Task Force with the ongoing implementation of the Water Quality Monitoring Program and any innovative adjustments to the monitoring program that may be required to accommodate this TMDL revision moving forward. The GEI Team offers LESJWA the following unique strengths:

John Rudolph, the proposed Program Manager, is a highly respected watershed scientist in southern California. He has built a strong reputation and maintains close working relationships with our expert teaming partners and task leaders. With over 25 years of experience, John has successfully led the LE/CL TMDL monitoring program for the past decade and has managed numerous inland and marine water quality resource projects. His extensive experience includes work for several individual Task Force member agencies and projects directly related to the tasks outlined in this Request for Proposal (RFP).

Our multidisciplinary team including aquatic scientists, water quality experts, limnologists, chemists, statisticians, and biologists, has unparalleled experience in the San Jacinto River Watershed. For over 10 years, we have been integral to the Lake Elsinore and Canyon Lake Nutrient TMDL program, providing monitoring, expert advice, and helping to draft and implement the current LE/CL Nutrient TMDL Comprehensive Phase 2 Compliance Monitoring Plan and Quality Assurance Project Plan (QAPP). Our staff stay updated on evolving science, guidance, and regulations related to lake nutrient loading/cycling and associated harmful algal blooms (HAB) by participating in scientific committees, task forces, lake management and HAB conferences, and educational outreach events.

Innovative and well-maintained field equipment to deliver thorough and accurate data. The GEI Team has supplemented the Elsinore Valley Municipal Water District (EVMWD) in-situ water quality data sondes with our own continuous in-situ data sondes to measure real-time dissolved oxygen and temperature at the surface of Lake Elsinore, providing critical data to understand internal lake dynamics and valuable supporting information in the event of a fish kill. Our team has inventory and hands-on knowledge of field monitoring equipment, vessels, satellite imagery, and monitoring techniques to support the TMDL assessment, providing a critical reality check and perspective on the utility, limitations, and costs and benefits associated with different methodologies.

Our strong reputation and relationships with regulators and stakeholders, along with our knowledge of applicable regulations, enables us to achieve mutually beneficial solutions. Our team of scientists are highly regarded as leaders in their fields and are recognized by federal, state, and local regulators. We stay updated on the ever-changing rules and regulations affecting the LE/CL stakeholders and understand the issues important to them and the surrounding community.

Local resources allow our team to rapidly deploy staff to conduct stormwater sampling and special time-sensitive study requests for in-lake monitoring, with offices and personnel located within a one-hour drive of both lakes.



Consulting Engineers and Scientists

Mr. Rick Whetsel

A proven project management approach includes regular and clear communication, thorough QA/QC, and timely and accurate completion of all job tasks.

We have included the required forms in Appendix A and staff resumes in Appendix B of our proposal.

Thank you for the opportunity to submit this proposal. We are looking forward to continuing to serve the LE/CL TMDL TF. Please feel free to contact me at the number or email below.

Sincerely,

GEI Consultants, Inc.

John Rudolph Program Manager Phone: 858.243.8158 Email: <u>jrudolph@geiconsultants.com</u>

Chris Stransky Deputy Program Manager Phone: 858.775.5547 Email : <u>cstransky@geiconsultants.com</u>

1. EXHIBIT A

PROPOSER'S SIGNATURE BLOCK

Name of Firm:	GEI Consultants, Inc.	Title:	Program Manager
Authorized Signature:	gen them	Date:	February 24, 2025
Printed/Typed Name:	John Rudolph	Mailing Address:	5901 Priestly Drive, Suite 301
Phone:	858.243.8158	City, State, Zip	Carlsbad, CA 92008
Fax:	916.631.4501	E-Mail Address:	jrudolph@geiconsultants.com

Your signature on this document, should you be awarded a contract as defined in this RFP, signifies that you have fully read and understood this proposal and will comply with all specifications, conditions, unit prices, terms, and delivery of the proposal unless otherwise noted in the "exceptions" portion of the proposal.

INTRODUCTION

The core team members proposed for the LE/CL TMDL monitoring program are the same senior scientists who have successfully implemented the program and assisted with the Nutrient TMDL revision over the past decade. Lake Elsinore and Canyon Lake each present unique challenges, with one being a deeper dammed reservoir and the other a shallow natural lake with limited connection to the San Jacinto River (SJR) watershed. Our experienced team has the institutional knowledge and historical context to start immediately without a learning curve. We have harmonized data from numerous disparate sources to create a comprehensive historical database, which supports management decisions and tracks historical trends.

In the current regulatory environment, along with the upcoming TMDL revision, ensuring the quality of data collected and its integration with historical results is crucial for assessing progress towards TMDL goals. Our team offers much more than just sample collection and reporting; we bring a spectrum of specialized expertise that allows us to adapt our collective experience to the unique challenges of these water bodies. Over the past 10 years, we have been in collaboration with key limnology experts, including Dr. Michael Anderson (UC Riverside), Dr. Alex Horne (UC Berkeley), Dr. Mark Beutel (UC Merced) providing a wealth of scientific knowledge in lake management and processes. We have also worked closely with TMDL stakeholders over the last 10 years such as Sudhir Mohleji of Elsinore Valley Municipal Water District (EVMWD), Adam Gufarotti and Ben Foster (City of Lake Elsinore), Cynthia Gabaldon (CGRME), and Abigail Suter and Rebekah Guill of Riverside County Flood Control and Water Conservation District (RCFCWCD) on data collection, analysis, and interpretation for their own individual water quality monitoring programs. This proposal outlines our team and approach to continue implementing the Phase 2 Water Quality Compliance Monitoring Program in these lakes and the SJR watershed.

THE GEI TEAM

GEI is a nationally recognized consulting firm specializing in ecological, environmental, geotechnical, and water resources engineering. Founded in 1970 and headquartered in Massachusetts, GEI has grown steadily to include over 1,500 engineers, scientists, and professionals across 57 offices nationwide. Most of our staff hold advanced degrees and are registered in their professional disciplines. As an employee-owned firm, we foster personal relationships with our clients and cultivate our staff through a partnership model underpinned by continuous learning and knowledge sharing. We retain industry experts and attract the best young minds, delivering a blend of technical expertise, collaborative spirit, and innovation that is rare in our profession.

GEI stands out as one of the few consulting firms in California with a specialized focus on the comprehensive study, monitoring, and reporting of the complex relationships between water, sediment, and ecological quality. The combined experience of the GEI Team proposed for this program totals multiple decades for programs similar to the LE/CL TMDL program, including wet and dry weather watershed, in-lake, estuary, and ocean monitoring, TMDL support, nutrient monitoring, regulatory support, stakeholder facilitation, and public outreach and education.

Some of our team's current and former clients include the Santa Ana Watershed Project Authority (SAWPA), RCFCWCD, San Bernardino County Flood Control District (SBCFCD), San Bernardino Valley Municipal Water District (SBVMWD), EVMWD, City of Lake Elsinore, City of San Diego, City of Escondido, City of Vista, City of Oceanside, City of Compton, City of Rancho Palos Verdes, County of San Diego, Los Angeles County Department of Public Works, Scripps Institution of Oceanography, Port of San Diego, Port of Long Beach, Port of Los Angeles, U.S. Navy, Southern California Coastal Water Research Project (SCCWRP), and Caltrans, among others.

KEY RESPONSIBILITIES OF GEI FOR THIS CONTRACT INCLUDE THE FOLLOWING:

- Program and project management
- In-lake and watershed monitoring and associated data analysis and reporting
- Stakeholder support: monitoring updates, as-needed research, solicitation of input and response to comments, monitoring program suggestions
- Collaboration with outside experts
- All final deliverables
- Database management
- Regulatory support/liaison as needed
- Presentation of annual results at Task Force Meeting

UNDERSTANDING OF THE PROJECT

Approach and Understanding

This section lays out our team's approach and understanding of the project, ensuring the successful completion of all tasks specified in the RFP. The GEI Team distinguishes itself from other consultants through our extensive institutional knowledge and deep understanding of this monitoring program, unparalleled scientific expertise in limnology and lake management, and strong regulatory relationships.

Our approach to continuing to implement the 2016 Lake Elsinore & Canyon Lake Nutrient TMDL Comprehensive Monitoring Work Plan is grounded in our extensive experience and deep understanding of the unique challenges these waterbodies present. The GEI Team, with its proven track record in managing previous LE/CL TMDL monitoring contracts, is well-equipped to execute this plan effectively. We will employ advanced monitoring techniques and methodologies as well as lessons learned from the previous 10 years of implementing this program to ensure accurate and reliable data collection. Our team's expertise in limnology, lake management, and regulatory compliance will be important in addressing the complex dynamics of nutrient levels in Lake Elsinore and Canyon Lake. By leveraging our institutional knowledge and innovative approaches, we aim to provide comprehensive insights and actionable recommendations for improving water quality.





Lake Elsinore

Canyon Lake

Understanding the specific characteristics of the SJR watershed, including the intermittent nature of its tributaries and the Mediterranean climate, is crucial to our strategy. Lake Elsinore, as a terminal lake, faces significant water quality challenges due to limited water input as a result of the upstream Canyon Lake Dam restricting flow to Lake Elsinore, typically allowing water to flow from the upper SJR watershed to Lake Elsinore only after multiple years of above-average rainfall. Additionally, the Canyon Lake Dam acts as a sink for watershed sediment loads and the associated nutrients, much of which settle behind the dam. This factor, in addition to the successful reduction of water column phosphorous in Canyon Lake resulting from the bi-annual addition of alum, both benefit Lake Elsinore by reducing incoming nutrients and suspended sediments.

While Canyon Lake receives flow from the upper watershed, it essentially consists of two characteristically distinct water bodies: (1) the deeper and more open western main body where the SJR enters, and (2) the much shallower and constricted eastern arm, where the Salt Creek tributary enters. These differing characteristics create contrasting water quality conditions; greater eutrophication is apparent in the eastern arm, while the main lake body tends to have more stratification. All these factors are well known to the GEI Team, and we are prepared to tackle these challenges head-on through innovative and costefficient techniques that have characterized our performance on the Nutrient TMDL monitoring contract thus far.

Our approach will focus on tailored monitoring efforts that address these unique conditions, particularly the contrasting water quality issues between these two lakes. By diligently implementing the Work Plan's protocols for sample collection, handling, and analysis, and drawing on decades of experience, we will ensure compliance with regulatory requirements and contribute to the long-term health and sustainability of these vital water resources. Our commitment to innovative solutions and collaboration with regulatory bodies positions us to successfully implement the 2016 Nutrient TMDL monitoring Work Plan

and also work towards an updated Work Plan in the future in support of the revised TMDL which will require modifications to existing methodologies once approved.

Scope of Work

Our team of seasoned professionals brings a wealth of experience and tools to help the LE/CL TMDL TF achieve its objectives. Our team's understanding of the program will be particularly beneficial as the revised TMDL is implemented, monitoring plans are revised, and TMDL targets shift. The continuity of our staff ensures no learning curve, as our team thoroughly understands the TMDL monitoring program, the proposed revised TMDL, and the LE/CL TMDL TF priorities and procedures.

We bring a high level of expertise and commitment to this program, aiming to implement a top-tier watershed and lake monitoring program according to the established Work Plan and QAPP, meets deliverable deadlines, and enhances program efficiency and effectiveness. Our highly trained and experienced staff are well-prepared to execute consistent and objective sample process design, sampling methods, techniques, equipment calibration and maintenance, and quality control to ensure accurate monitoring and data collection. We recognize the importance of data defensibility and place a high value on programmatic Quality Assurance and Quality Control (QA/QC) to ensure data quality and validity.

The elements included below to support compliance monitoring are based on the specific scope of work requirements listed in the RFP. Specific tasks are highlighted below, with a summary of our expertise and experience related to each one, including details of the work to be completed, equipment utilized, project deliverables, and responsible staff.

TASK 1 – PROJECT MANAGEMENT & COORDINATION WITH LAKE ELSINORE CANYON LAKE TMDL TASK FORCE

The GEI team and our key partners bring a wealth of experience in collaborating with the LE/CL TMDL Task Force. Our SJR watershed expertise spans in-lake and storm event sampling, alum application monitoring, refining the TMDL and LEAMS monitoring programs, and conducting various special studies of value to stakeholders. Our lead technical staff from GEI and NV5 maintain strong relationships and contracts with several Task Force stakeholders for other monitoring programs within the Santa Ana and San Diego River Watersheds. These programs often face challenges and scopes of work similar to the Lake Elsinore and Canyon Lake Nutrient TMDL program.

Mr. Rudolph, our Program Manager, has been deeply involved with the LE/CL TMDL Task Force since 2015. He, along with Mr. Stransky, Mr. Engelhorn, and Mr. Wolosoff, will support stakeholders at meetings. These individuals are highly respected technical experts in Southern California, each bringing specialized experience to the table. Having contributed to the drafting of the Phase 2 Monitoring Work Plan and QAPP, these task leaders possess a thorough understanding of the monitoring requirements and challenges specific to Lake Elsinore and Canyon Lake and their watersheds. All GEI team members actively participate in local scientific committees and stakeholder meetings related to water, sediment, and biological quality issues crucial to the health of local water bodies.

Additionally, several of our team's leads for the LE/CL Monitoring Program are frequently sought after by clients to provide input on new regulatory requirements and policy. Our staff have often been involved in developing regional and statewide initiatives before they are publicly distributed. For instance, Mr. Rudolph has extensive knowledge of the BioStimulatory-BioIntegrity Policy and Biological Objectives Policy at the State Water Board and Region 9 Water Board, respectively. He has played a significant role in the technical underpinning of these policies, serving on scientific sub-committees, participating in numerous stakeholder meetings, and providing technical feedback on behalf of our clients regarding the scientific validity and potential impact of these policies on water agencies in southern California. Similarly, Mr. Stransky has been consulted by both the EPA and the California Stormwater Quality Association (CASQA) to offer comments and suggestions on the Statewide Toxicity Policy and associated statistical methods before public distribution. These examples highlight our team's capability to serve as an effective regulatory liaison for the LE/CL stakeholders. Our strong technical reputation and communication skills in the regulatory arena foster a level of trust essential for driving positive change.

Our team also offers extensive historical knowledge dating back to Phase 1 of the TMDL monitoring program. Since 2015, GEI and WSP staff have led the in-lake TMDL monitoring efforts, compiling watershed and lake data dating back to 2001 and developing a comprehensive historical database. Mr. Engelhorn of NV5 has been providing stormwater monitoring services for the TMDL Task Force since 2011.

TASK 2 - CONTRACT WITH ANALYTICAL LABORATORIES

The GEI team will continue to engage qualified and certified analytical laboratories for all monitoring services under this program. Choosing the right laboratory is crucial for a monitoring program of this nature. To effectively support the TMDL goals, the program must employ appropriate laboratory methods that meet project objectives, including sufficiently low detection/reporting limits (MDL/RL) and a rigorous QA/QC program. Over the past decade of the LE/CL TMDL monitoring program, the GEI team has evaluated numerous certified analytical laboratories through technical cost proposals, site visits and audits, and performance standards to ensure the selection of the most qualified and best value firms to meet the needs of the TMDL and its stakeholders. GEI has once again chosen to utilize two certified analytical laboratories, Weck Laboratories and Physis Laboratories, under this contract to ensure that the required MDL/RLs are met for all analytes and to provide analytical service redundancy in case of instrument failure or other unforeseen lab issues. These are the same two laboratories that have served the LE/CL TMDL monitoring program in the past and have delivered excellent service.

Additionally, we have included GreenWater Labs and Bend Genetics in our team to provide redundant cyanobacteria taxonomy and cyanotoxin analysis services. Both laboratories are highly regarded nationwide and are currently listed on the California State Water Board Surface Water Ambient Monitoring Program (SWAMP) CyanoHAB list of approved labs.

GEI has requested each of its sub-service partners designate a single point of contact for any QA/QC-related issues. GEI requires that all data generated by its sub-service providers (field collection and laboratories) be fully reviewed, verified, and approved by signature before being forwarded to the GEI project management team for further review and analysis. Furthermore, GEI will require its field personnel and laboratories to report any QA/QC issues immediately to the GEI Project Manager within 24 hours of being identified, rather than simply including them in the data deliverable after the fact.

TASK 3 - MONITORING PROGRAM IMPLEMENTATION

Monitoring Plan

Creating a well-thought-out Monitoring Plan with stakeholder and regulatory approval is essential for the success of a monitoring program. The Monitoring Plan is crucial for defining program goals and objectives, key questions, QA/QC requirements, and ensuring that data are collected appropriately and with sufficient statistical power to address project-specific monitoring questions. Monitoring programs that lack careful consideration of study design risk either collecting data that can only detect large-scale changes or wasting resources by gathering excessive unnecessary data. The GEI team has a long history of contributing to the sampling design and associated analyses for complex and large-scale monitoring programs.

For instance, GEI played a key role in drafting the latest Phase 2 Monitoring Plan and QAPP that the Nutrient TMDL program currently operates under. Our team has been involved in several significant studies that involved multi-agency stakeholder groups and required development of complex, multi-discipline monitoring plans including the Regional Harbor Monitoring Program in San Diego County and the Comprehensive Biological Assessment of the Ports of Los Angeles and Long Beach.

A thorough understanding of prior studies and historical data is vital when developing a Work Plan. Our team has already invested significant effort in reviewing previous data and has been involved in either data collection or data QA/QC for all available prior datasets for the LE/CL TMDL monitoring program going back to its inception. To develop the Phase 2 Monitoring Plan, we leveraged our unique knowledge of the lakes and the associated watershed, along with our strong grasp of the extensive information already existing for both lakes. The result was a Monitoring Plan that establishes a cost-effective approach to assess progress toward compliance with current TMDL requirements, while also providing data of the proper type to support future analyses and decisions.

During the development of the proposed revisions to the TMDL, our team analyzed historical data sets with new database tools, supporting the revised proposed targets using an innovative reference condition and a lake volume-based approach, which can be cost-effectively implemented once the new TMDL is in effect. As the LE/CL TMDL revision nears completion, updating the current TMDL Monitoring Plan to align with the new goals will be necessary. This update will require careful planning to ensure that the data collected under the revised TMDL Monitoring Plan are of the appropriate type, frequency, and quality to effectively inform

compliance under the new TMDL. The GEI Team is uniquely well-equipped to tackle this challenge, thanks to the institutional knowledge gained from key senior team members who have implemented this monitoring program over the past decade, in

addition to GEI's Mr. Steve Wolosoff serving as the Task Force's technical lead for the TMDL revision. With the GEI Team having drafted both the current Phase 2 LE/CL TMDL Monitoring Plan and the TMDL revision document, we have an intimate understanding of the nexus points and leveraging opportunities for the multiple tasks involving additional monitoring proposed TMDL revision for Lake Elsinore and Canyon Lake (see Section 5 on Program Leveraging Opportunities). This level of program understanding will manifest as cost efficiencies within the program, ultimately saving stakeholder funds while gaining valuable additional data.

Monitoring Program Overview

Our team has a long history of successfully executing complex and challenging monitoring programs in freshwater, marine, and estuarine environments with nutrient concerns. Over the past decade, the GEI Team has provided monitoring services for the LE/CL TMDL Task Force, becoming very familiar with both lakes and the watershed runoff dynamics. This familiarity has allowed us to develop a cost-effective methodology and integrate with other regulatory programs by leveraging resources.

A prime example of this is the combination of the TMDL monitoring effort with the LEAMS effectiveness monitoring program at Lake Elsinore. Although these two programs had different sample designs and were previously sampled separately by different consultants, they shared many elements. GEI and WSP field teams were able to coordinate the TMDL monitoring to incorporate LEAMS program parameters, saving Lake Elsinore stakeholders valuable funds that could be used for other aspects of the monitoring program.

We pride ourselves on our QA/QC and attention to detail, not only in collecting samples and reporting data but also in carefully scrutinizing data as it is being collected in the field. Our team is keenly aware of the often-dramatic temporal and spatial variability in Lake Elsinore, including its polymictic nature and diurnal cycles of dissolved oxygen due to phytoplankton photosynthesis and respiration, as well as changes in phytoplankton distribution and resulting chlorophyll-a concentrations due to both biotic and abiotic factors (e.g., zooplankton abundance and light/wind patterns). Similarly, Canyon Lake has its own internal dynamics, such as the close link between stratification, dissolved oxygen concentration, and nutrient cycling, all of which impact the lake's ecology, as observed with recent minor Threadfin Shad die-offs. These factors can substantially influence sample representation and must be carefully considered when interpreting data for reporting purposes.

In response to these characteristics, GEI has implemented additional no-cost data collection efforts on both lakes to better understand their internal dynamics. These efforts include:

- 1. Performing morning and afternoon water quality profiles on both lakes to capture extreme fluctuations of temperature and dissolved oxygen in the upper water column leading to better estimates of dissolved oxygen compliance,
- Attaching surface mounted dissolved oxygen data sondes to the EVMWD in-lake sondes to fill a dissolved oxygen data gap in the upper 1-meter of the water column that the EVMWD probes do not capture (additional new data used by Dr. Alex Horne in LEAMS calculations), and
- 3. Collecting additional data and observations to evaluate the cause of Threadfin Shad die offs in Canyon Lake and interpreting it in the light of natural lake processes

Additional observations and photographs noted during routine data collection efforts are also critical to document conditions during monitoring and to help tease out potential confounding factors during the data analysis and reporting stage. Our team's experience and expertise in this program lead to appropriate foresight and planning to evaluate and address these issues before and during data collection efforts.

Watershed Stormwater Monitoring

Our team has a long-standing relationship with the LE/CL TMDL Task Force and is thoroughly familiar with the watershed-wide stormwater monitoring program. Mr. Garth Engelhorn, who has been responsible for implementing this program since 2011, will serve as the primary point of contact. He will communicate regularly with the LE/CL TMDL Task Force to ensure the program's successful implementation.

Our team's knowledge of the SJR Watershed, understanding of the unique weather patterns in the area, and pre-storm planning enable us to efficiently and successfully implement this portion of the monitoring program. Our attention to proper installation and careful weather tracking allows us to mobilize our sampling crews cost-effectively, avoiding excessive field

costs and false starts. With local resources, we can rapidly deploy staff to conduct sampling and support other needs with quick turnaround times. Additionally, all our staff participate in yearly storm season training, review pre-storm checklists, and review the project Monitoring Plans and QAPP to ensure consistent sampling procedures and accurate water quality data.

We will successfully implement monitoring, sampling, analysis, QA/QC, and data management in accordance with the Work Plan and QAPP. Our data management and QA team have extensive experience in California Environmental Data Exchange Network (CEDEN) formatting and uploading, performing this function for many agencies. We continuously upgrade our data input processes, structure, QC, and database delivery to meet the LE/CL TMDL Task Force's needs. Our team includes regulatory experts who have supported numerous municipalities with diverse datasets for annual reporting, ensuring an organized and clear presentation of monitoring results.

Our current and historical knowledge of this program and other monitoring programs within the watershed will ensure proper implementation to comply with the LE/CL Nutrient TMDL and demonstrate progress toward attaining compliance with respective waste load allocations (WLAs) and/or TMDL response targets.

Monitoring Site Preparation

Our team will prepare all sampling equipment, site-specific logbooks, detailed analyte lists, and a pre-storm checklist to ensure all equipment needs and sampling

requirements are met for each monitoring location. Before the monitoring season (October 1 through April 30), field staff will install ISCO 6712 automated samplers, Teflon-lined sample tubing, and intake strainers at each monitoring location. The equipment will be housed inside existing Knaack[™] equipment boxes bolted on concrete pads at each site. Our field technicians will inspect all equipment, make necessary repairs, and ensure everything is calibrated and functioning properly well in advance of any incoming storm event.

Monitoring equipment will be calibrated immediately before deployment and use, and field-verified for proper sample volume pacing before each sampling event. All calibrations will be conducted according to the manufacturer's specifications. We understand the importance of collecting quality data through consistent quality controls for calibrating (and post-calibrating) field equipment, applying thorough QA/QC practices throughout, and validating data for accuracy and defensibility.

Wet Event Monitoring

In accordance with the Phase 2 Monitoring Plan and QAPP, the team will conduct water quality monitoring for up to three qualifying storm events each monitoring season (October 1 through April 30) at the four historical sampling stations located throughout the SJR Watershed with discharges to Lake Elsinore and Canyon Lake. Three of the four sites are inputs to Canyon Lake originating from the main stem of the SJR, Salt Creek, and the watershed above Mystic Lake. The fourth site, located below the Canyon Lake Dam, is the input entering Lake Elsinore from Canyon Lake and the upstream watershed (when the dam is spilling). The sampling stations are located in proximity to stream gauge stations installed by the U.S. Geological Survey to facilitate flow monitoring.

The sampling location along the SJR at Ramona Expressway is located downgradient of Mystic Lake, an area of land that is subsiding. Flow has not been observed at this location since a strong El Niño event in the mid-1990s. Because of the active subsidence, this sampling station is not expected to flow except under extremely high rainfall conditions. The team anticipates that stormwater monitoring will typically be conducted each monitoring season at three stations: SJR at Goetz Road, Salt Creek at Murrieta Road, and the Canyon Lake Spillway.

However, this scope of work includes the labor and equipment associated with monitoring all four sites three times per monitoring season. It is anticipated that in a typical monitoring season when Canyon Lake Dam spills over and sampling is



Storm Event Monitoring at Canyon Lake Spillway in February 2023





Storm Event Monitoring at Salt Creek at Murrieta Road in January 2023

conducted at the spillway, approximately four to five separate mobilization events (included in the scope of work and budget) will be needed to complete the required monitoring at all three locations. This is due to the fact that Canyon Lake Dam will generally spill over midway through the monitoring season after earlier sampling events at SJR and Salt Creek have already been completed. The additional fourth and fifth mobilization events may be necessary to conduct sampling at the spillway up to three times when Canyon Lake Dam finally spills over.

During the monitoring season, the team will consistently track weather forecasts to stay informed about upcoming storm events. They will coordinate with the RCFCWCD and the LE/CL TMDL TF to identify storms for mobilization and make go/no-go decisions for sampling events. The storm size criteria for mobilization are a forecast storm rainfall total of greater than 1 inch within 24 hours from October through December, and a forecast storm rainfall total of greater than 0.5 inches within 24 hours from January through April.

As described in the Monitoring Plan, flow-weighted composite sample collection protocols will be used during each sampling event. The flow-weighted sampling provides representative sample coverage across the hydrograph and provides accurate and representative event mean concentration (EMC) and load calculations. Flow-weighted composite samples will be collected using automatic sampling equipment. Sample aliquots will be collected across the hydrograph of the storm event; the first sample aliquot will be taken at or shortly after the time that stormwater runoff begins, and each subsequent aliquot of equal volume will be collected at intervals of approximately 1/2 to 2 hours across the rising limb (increasing flow), the peak, and the falling limb (decreasing flow) of the hydrograph, depending on the forecast size of the storm event. Flow rates and volumes will be based on data from US Geological Survey stream gauges located near the sampling stations. Upon completion of sampling, field teams will download the flow data and subsample each discrete sample to create a single flow-weighted composite samples.

At the conclusion of each monitored storm event, a field technician will visit each site to remove the unused sample bottles, download the data, and turn off the sampling equipment. The team will communicate with the RCFCWCD and LE/CL TMDL TF staff regarding the completion of the sampling activities and provide an overall assessment of the storm event.

In-Lake Monitoring

In-lake compliance monitoring under the Nutrient TMDL Program is detailed in the 2016 Phase 2 Monitoring Plan, the Canyon Lake Alum Application Program Water Quality Monitoring Memorandum, and the LEAMS Effectiveness Monitoring Plan.

The GEI Team has led the in-lake portion of the monitoring program for the past decade, making us thoroughly familiar with the Nutrient TMDL Monitoring Program, LEAMS, and Canyon Lake Alum Effectiveness monitoring programs. Mr. Rudolph, with his extensive freshwater monitoring experience, will continue as the primary contact for in-lake monitoring, ensuring successful implementation and regular communication with the LE/CL TMDL Task Force.

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The GEI Team has numerous redundant expert staff available in various offices, providing responsive support as needed. Mr. Jeremy Burns and others at Rick Engineering have also been brought on board the team

GEI used satellite imagery to develop maps showing significant chlorophyll variability across the lake.

to address potential out-of-scope technical items or optional tasks. In addition, with the USEPA's final 304(a) criteria for cyanotoxins and the State Water Board's BioStimulatory Policy development, and the recommendation in the revised TMDL Technical Report to evaluate how to address cyanotoxin data as part of the routine TMDL monitoring program, having two leading cyanotoxin analytical laboratories on our team is a valuable resource.

One challenge in monitoring these lakes is the diurnal cycle of dissolved oxygen (DO). Twice-daily water quality measures were added to the 2016 Monitoring Plan revision to capture this variability. Morning and afternoon vertical profile monitoring provided a more representative insight into the lakes' dynamics. A wealth of information has been gathered over the past 10 years cataloging this diurnal fluctuation, giving us a much better understanding of the Lake Elsinore DO dynamics. Given this, the twice daily morning and afternoon measurements will be discontinued during the next 3-year term and replaced by a

single mid-morning representative measurement. In addition to routine water quality profiles recorded during monitoring events, DO sensors may be installed near the bottom of Lake Elsinore to support the demonstration effectiveness of a future oxygenation system replacing LEAMS. These sensors will measure whether oxic conditions are maintained at the sediment-water interface to reduce nutrient flux.

Nutrient concentrations (nitrogen, phosphorus, and ammonia) and total dissolved solids vary less than DO. Samples will be collected at a single mid-lake location in Lake Elsinore (Site LEO2) and four locations in Canyon Lake (CLO7, CLO8, CLO9, and CL10) as depth-integrated samples for TMDL compliance. Samples collected in support of the LEAMS effectiveness monitoring program will be collected as depth-integrated and specific-depth grab samples (top and bottom), coinciding with TMDL events for efficiency when possible. Samples will be collected before noon to avoid sediment disturbance from afternoon winds.

Capturing representative chlorophyll-a samples is challenging due to high lake-wide variability. Satellite imagery is a powerful tool that can provide a more comprehensive estimate of lake-wide chlorophyll-a concentration, that a single point sample cannot provide, helping to put the compliance point sample into greater perspective. GEI has again contracted with EOMAP for remote sensing using both LandSat and Sentinel-2 imagery to estimate chlorophyll-a and turbidity concentrations. These images provide datasets with up to 1,000 data points for Canyon Lake and 11,000 for Lake Elsinore. All TMDL monitoring dates are chosen to coincide with satellite overpasses to provide a comprehensive view of lake conditions. In addition, GEI quantifies this satellite imagery pixel data into cumulative frequency distribution (CDF) plots (Figure 1), showing lake-wide chlorophyll-a concentrations and superimposing in-lake compliance analytical samples. Data collected under the LEAMS program will be summarized monthly and submitted to EVMWD.



FIGURE 1. CANYON LAKE SATELITE IMAGERY DATA CONVERTED TO CDF PLOTS OF LAKE-WIDE CHLOROPHYLL-A DATA

Quality Assurance and Quality Control

QA/QC practices are crucial for ensuring the reliability and accuracy of the data collected. Ensuring high-level and continuous QA/QC review of all field monitoring and analytical data is a top priority for GEI. We are committed to implementing a comprehensive QA/QC structure, building on lessons learned from our 2015-2025 monitoring experience. This structure will ensure that field and analytical programs are carefully planned and executed, and that deliverables meet the highest standards.

"The [LEAMS] sampling data is of high quality – so thanks John and his lab and field crews"

Dr. Alex Horne Professor Emeritus, Ecological Engineering University of California, Berkeley

We recognize the intense scrutiny on data collected as part of this program, which can significantly impact stakeholders in the current complex and often contentious regulatory climate. Understanding the pressures on the LE/CL TMDL TF stakeholders to ensure defensible data, we ensure that all reported data withstands the highest level of scrutiny. We take great pride in our well-established and rigorous QA/QC program, which includes multiple layers of checks throughout the process.

By adhering to stringent QA/QC protocols, we can:

- Ensure Data Integrity: Consistent calibration and validation of equipment help maintain the accuracy of the data, making it reliable for analysis and reporting.
- Enhance Credibility: Thorough QA/QC practices build trust with regulators by demonstrating a commitment to high standards and meticulous attention to detail.

- Facilitate Compliance: Accurate and defensible data are essential for meeting regulatory requirements and demonstrating compliance with environmental standards.
- Optimize Resources: Effective QA/QC practices reduce the likelihood of errors and the need for costly re-sampling, ensuring efficient use of resources.
- Support Decision-Making: High-quality data provide a solid foundation for informed decision-making.

QA/QC for sampling processes will include the proper collection of the samples to minimize the possibility of contamination. Water quality samples will be collected and delivered to the chemistry laboratory within the proper temperature and hold time requirements allowing for adequate sample processing at the laboratory. Samples will be collected in laboratory-supplied and certified, contaminant-free sample bottles. Field staff will wear powder-free nitrile gloves at all times during sample collection. Sample chain-of-custody (COC) forms will be reviewed to ensure that sample labels and proper documentation procedures were followed. An additional layer of QA/QC will entail detailed field checklists that will encompass all aspects of planning and execution of the field activities. Project-specific checklists applicable to data analysis and reporting have been used during the previous 5-year contract and will continue to be used for this program.

The GEI Team has a robust QA/QC program developed over many years for numerous municipal and agency monitoring programs and has always stood up to stringent review. Our QA program is designed to:

- 1. Ensure that sample collection and testing adhere to applicable protocols and regulations, meeting all acceptability criteria.
- 2. Guarantee test performance accuracy and precision.
- 3. Establish a clear data and reporting pathway with documented QA/QC checks and qualified peer review throughout the entire collection, analysis, and reporting process. Only experienced and properly trained staff will participate in data collection, analysis, and reporting efforts. A senior staff member will be directly involved in all data collection activities, as outlined in our staff responsibilities matrix.

This proven QA/QC approach of our team will ensure that all monitoring data are acquired in accordance with QAPP requirements, which in turn will allow the GEI project management team, as well as the LESJWA Agencies, to have the utmost confidence in the accuracy and validity of the monitoring results.

Description of Equipment

Our team is fully equipped for both watershed and in-lake monitoring as part of the TMDL program. We have multiple survey vessels, Solinst peristaltic pump ambient water samplers, Van Dorn water samplers, Teledyne ISCO 6712 Automated Samplers, and calibrated YSI ProDSS Multi-parameter units that connect to a field laptop for real-time profiling of water quality parameters (pH, DO, temperature, conductivity, turbidity, and ORP). Additionally, we use WildCo ponar sediment grabs, real-time in-situ temperature, DO, conductivity datasondes, plankton sampling equipment, and various other biota sampling tools. To help save costs during the next 3-year contract term, the GEI team plans to use a City of Lake Elsinore-supplied vessel for all monitoring activities on Lake Elsinore. This will significantly reduce expenses for the TMDL TF stakeholders by eliminating the GEI boat usage fee as well as the additional time and effort required for Merkel and GEI staff to transport their own boat to and from the lake. The GEI team will continue to provide a boat for all monitoring efforts on Canyon Lake.

To ensure reliability, our team maintains redundant equipment as a backup in case of malfunctions during field operations. Field technicians thoroughly inspect and repair equipment before fieldwork, ensuring everything is calibrated and functioning correctly. Monitoring equipment is calibrated immediately before deployment or use and field-verified for proper sample volume before each sampling event, following the





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manufacturer's specifications. Additionally, all equipment is thoroughly cleaned after each use to ensure smooth and uninterrupted sampling during subsequent events.

TASK 4 – DATA MANAGEMENT

Analytical data will be reviewed and verified by the lead scientist for in-lake and watershed monitoring events to ensure data quality objectives are met and appropriate corrective actions are taken, if necessary. Mr. Stransky and Mr. Renfrew, the programmatic QA/QC leads, will follow up on any QA/QC issues identified during the review for the in-lake and watershed portions, respectively. Once the data review and QA/QC verification are complete, the results will be imported into the team's database system.

After QA/QC verification, all analytical and field data from each monitoring event will be formatted into an Electronic Data Deliverable (EDD) and submitted to the LE/CL TMDL TF quarterly, and as an appendix to the annual report. Additionally, all data will be formatted to be compatible with CEDEN and uploaded monthly. Submittal receipts for CEDEN can be provided upon request.

TASK 5 - DRAFT AND FINAL ANNUAL WATER QUALITY MONITORING REPORT

The team will prepare a draft and final Lake Elsinore and Canyon Lake Nutrient TMDL Annual Water Quality Monitoring Report at the end of each monitoring season. This report will include watershed-wide storm monitoring data, in-lake water quality data, satellite imagery for the entire year, as well as summaries of annual TMDL compliance for both incoming nutrient loads and in-lake TMDL targets. An electronic draft report in Microsoft Word format will be provided to LE/CL TMDL TF for review by August 15th of each year. After receiving comments, a comment-response matrix will be created, and the revised draft will be resubmitted along with the matrix. Once all comments are addressed to the satisfaction of stakeholders, the final report and all appendices will be submitted as a PDF to LESJWA. All analytical data and reports will undergo a multi-tiered internal peer review before submission to the LE/CL TMDL TF.

Long-term historical data for both lakes and associated watersheds will be integrated to assess water quality trends. Using consistent methods with historical data is crucial for evaluating progress toward TMDL compliance as well as a QA step to assess potentially anomalous results to revisit. The GEI team is skilled in trend analysis and advanced statistical and graphical procedures, which have been beneficial for the LE/CL monitoring program and will continue to be used. Analyzing statistical power and potential confounding factors is essential in such programs, and we have extensive experience in these areas, with a strong reputation for addressing water quality trends in all types of water bodies.

The team's combined expertise in statistical and data analysis will generate overall program conclusions based on data synthesis across disciplines (e.g., water quality, chemistry, biology). Properly identifying methods and conveying information clearly and concisely is essential. Graphical presentations are often effective for conveying both simple and complex datasets and analyses. Lead scientists Mr. Rudolph, Mr. Stransky, and Mr. Engelhorn with their extensive backgrounds in monitoring and statistical methods, will oversee the analytical and graphical methods required for the core TMDL compliance monitoring program and any special studies. Results of the monitoring provided in the annual report are also presented at one of the regularly scheduled TMDL TF meetings in the fall of each year.

In addition to submission of the LE/CL Nutrient TMDL annual monitoring report, the GEI Team will provide LEAMS monitoring data to the LE/CL TMDL TF and EVMWD on a quarterly basis. This will be submitted as an EDD for all data that is available through the end of each quarter.

TASK 6 - AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN

GEI is committed to making sure that all our deliverables are compliant with the new ADA Standards for Accessible Design. Our team is knowledgeable of Universal Design Principles and incorporates these into our work whenever possible.

Cost Proposal

We are pleased to present our Summary Cost Proposal in tabular format in Table 1 below, which aligns closely with the specific tasks outlined in the RFP. We have carefully considered the details and logistics of the program to ensure maximum efficiency while delivering high-quality service.

The cost proposal is described in further in a detailed cost estimate included in Exhibit B is provided in Appendix A, with individual subtasks broken down as outlined in the RFP into task hours by labor category, hourly billing rates for each labor category, costs for subconsultants, and reimbursable expenses. Please note that this cost proposal does not include funds for any out-of-scope items that may be requested, such as expert support for special studies or optional tasks associated with the revised TMDL.

TABLE 1. SUMMARY OF 2025-2026 LAKE ELSINORE AND CANYON LAKE NUTRIENT TMDL COMPLIANCE MONITORING FEE PROPOSAL

Task	Task Description	Total (\$)
Task 1	Project Management/Meetings/Coordinate Activities with TMDL Task Force	\$24,959
Task 2	Contracting with Laboratories	\$0
Task 3	Monitoring Program Implementation	\$207,136
Task 4	Data Management	\$13,321
Task 5	Draft and Final Annual Water Quality Monitoring Report	\$39,550
Task 6	Americans with Disabilities Act (ADA) Standards for Accessible Design	\$0
	2025-2026 ANNUAL PROGRAM GRAND TOTAL	\$284,966

Note: If awarded to GEI, an escalation would apply for each subsequent monitoring year following the initial 3-year contract term.

Cost Control

GEI uses an intranet-based cost tracking system known as BST[®]. The basic tools of this system are weekly electronic timesheets and real-time cost reports. Timesheets are filled out daily by all employees and show the hours charged to each separate project in which an employee is participating for each day of the week. Weekly cost reports for each project task are generated the week following timesheet submission and can be viewed online by project managers. Our financial tracking system permits easy/accurate preparation of monthly invoices, project manager budget tracking, and subconsultant documentation.

Schedule

Table 2 outlines the project schedule for the first monitoring year of this contract. In addition to the LE/CL TMDL TF regulatory deadline of August 15th, many of the individual LE/CL TF stakeholders incorporate this LE/CL Nutrient TMDL Annual Report into their own annual monitoring report submissions. We have designed our approach and assembled our team to meet the schedule of both the TMDL TF and individual stakeholders needs. Assuming each monitoring year runs from July 1st to June 30th, we have tentatively set the project schedule as outlined below.

TABLE 2. LE/CL TMDL MONITORING PROGRAM SCHEDULE OF ACTIVITIES AND DELIVERABLES FOR YEAR 1 OF THE CONTRACT

	Description	Start Date	Finish Date			
1.	Project Management, Administration	07/01/2025	11/30/2026			
2.	Meeting Attendance, Monitoring Updates	07/01/2025	06/30/2026			
3.	Stormwater Monitoring Site Preparation	07/01/2025	10/01/2026			
4.	Wet Event Monitoring	10/01/2025	04/30/2026			
5.	In-Lake Monitoring ^a	07/01/2025	06/30/2026			
6.	Data QA/QC, CEDEN Formatting and Uploads	07/01/2025	09/30/2026			
7.	LEAMS Monitoring EDDs b	Quarte	erly			
8.	Draft Annual TMDL Report	08/15/2	025			
9.	Final Annual TMDL Report	Within 2 weeks of receipt of all stakeholder comments				

a Monthly LEAMS and Lake Elsinore monthly summer sampling to begin July 2025, Bimonthly Canyon Lake sampling to begin August 2025.

b LEAMS Monitoring EDDs will be delivered to the TMDL TF and EVMWD on a quarterly basis for data that is available at the end of each quarter.

Program Leveraging Opportunities of the GEI Team

The LE/CL TMDL compliance monitoring provides a baseline monitoring program that may be leveraged to more cost effectively implement other special studies that involve field sampling and water quality reporting activities. The Phase 2 program of implementation included in the proposed TMDL revision for Lake Elsinore and Canyon Lake includes multiple tasks that will involve additional monitoring in the SJR watershed and within Canyon Lake and Lake Elsinore. The TMDL compliance monitoring program could serve as a baseline program to reduce efforts associated with planning, mobilization, and equipment procurement for additional supplemental field and laboratory analysis needed to support these required tasks. There are multiple areas of synergy between the TMDL monitoring program and potential future special studies within the watershed (Figure 2).



FIGURE 2. REVISED TMDL TASK LEVERAGE OPPORTUNITIES WITH THE TMDL MONITORING PROGRAM

By making small refinements to the baseline monitoring program, we can enhance the impact of special studies. This approach allows for data collection over multiple years, reducing or even eliminating the need for new data collection when task-specific analyses and reports are conducted. Some specific special study tasks proposed in the revised TMDL that could benefit from coordination with the routine TMDL compliance monitoring include:

- <u>Canyon Lake Project</u> Task 4 requires stakeholders to evaluate the effectiveness of existing in-lake controls (i.e., alum addition program). Potential studies needed to implement this task could include updated jar testing to refine current effectiveness assumption of 150 kg dry alum for 1 kg TP sequestered. Such a study could support a formalized offset demonstration basis for the Regional Board to approve. Secondly, the toxicity of alum addition has been a concern in recent years with instances of small fish kills around the time of alum additions. A special study could involve updating toxicity testing to span a wider range of alum doses and water conditions (e.g. pH) than what was performed to support the current alum program. Mr. Rudolph gave a technical presentation at a LESJWA Canyon Lake Alum Town Hall Public Meeting for the local Property Owners Association (POA)¹ to educate residents regarding the purpose, mechanism, and toxicology of aluminum (Mr. Rudolph's presentation starts at 22:15 of the video noted in the footnote below).
- Lake Elsinore Project Tasks 5 and 6 requires stakeholders to evaluate alternatives for in-lake treatment in Lake Elsinore and implement the recommended replacement for LEAMS. Once constructed and operational, the TMDL compliance monitoring effort could support collection of data needed to support effectiveness demonstration (e.g., use of DO sensors to measure whether oxic conditions are maintained

"I just wanted to convey my heartfelt appreciation to you for your time, effort, and dedication on the presentations and support for the Canyon Lake Public Meeting... Thanks, from the bottom of my heart."

Rachel Gray, SAWPA Water Resources & Planning Manager

¹ Link to the LESJWA Canyon Lake Alum Town Hall Meeting video: <u>https://drive.google.com/file/d/1GQiHFabRoV6q2hpMc4CZwT569NErgm6i/view</u>

with oxygenation project operation). Additionally, Task 12 requires a sediment nutrient study (like the study conducted by GEI to support in-lake alternatives analysis) that would also be valuable to demonstrate the effectiveness of the in-lake project. Collection of sediment for this study and day zero water quality would be streamlined with coordination with the baseline monitoring program.

- <u>Cyanobacteria</u> Task 8 involves conduct of a study to evaluate harmful algae blooms in Lake Elsinore and management options for cyanobacteria. The City of Lake Elsinore has initiated a routine sampling program working with WSP and GEI Consultants that could provide valuable data for this task. In addition, coordination of field and lab work through the TMDL compliance monitoring could streamline conduct of the study in the future. Mr. Rudolph (while with WSP) was able to assist the City of Lake Elsinore with its Lake Watch Program by recording a Q&A session (noted in the footnote below) to educate the public on what cyanobacteria are, what causes algal blooms, the current status of Lake Elsinore, and how the city can help to mitigate the algal blooms².
- Watershed Controls Study Task 10 involves a study to assess the effectiveness of watershed controls. Data collection for this study could employ equivalent methods used for downstream mass emission monitoring that is part of the baseline TMDL compliance monitoring. This study could involve monitoring at select locations within the developed watershed with and without watershed controls. Different study designs could be important when looking at controls on urban versus agricultural lands.
- San Jacinto River Reference Watershed Task 11 requires stakeholders to implement a special study to collect more data to characterize nutrients within reference watershed streams. The Task Force has expressed criticism of the methods used by the U.S. Forest Service during 2003-2010 to collect wet weather grab samples to characterize nutrients in the reference stream, SJR at Cranston Guard Station. A method comparable to the flow-weighted composite sampling done at the lake inflows through the baseline TMDL compliance monitoring program would be far more scientifically defensible when results of Task 11 are used to make decisions about potential future TMDL reconsiderations. Thus, the existing program could be leveraged to expand to additional sites to characterize reference nutrient event mean concentrations (e.g., SJR at Cranston Guard Station and other undeveloped canyons within SJR watershed) with flexibility to monitor one or more events per year over a long-term period.

PROJECT TEAM AND QUALIFICATIONS

HIGHLY EXPERIENCED AND SPECIALIZED TEAM

GEI has brought together a highly skilled team of professionals, each with extensive knowledge and experience, to effectively plan and execute this important TMDL monitoring program. The team structure is illustrated in Figure 3, while the qualifications and experience of key project staff are further detailed in Table 3. Resumes for GEI staff and subconsultant team members can be found in the Appendix B. As depicted in Figure 3, Mr. Rudolph will act as the Overall Program Manager and primary contact for the LE/CL TMDL TF, with Mr. Stransky serving as the Deputy Program Manager and secondary contact.

Our core monitoring team consists of GEI, NV5, Merkel & Associates (Merkel), Rick Engineering, and WSP, along with specialized analytical chemistry laboratories Weck Laboratories (Weck), Physis Environmental Laboratories (Physis), GreenWater Laboratories (GreenWater), and Bend Genetics. We will also again be partnering with EOMAP Satellite to provide lake-wide chlorophyll estimates from satellite imagery.

We have kept our core team intact from the previous LE/CL Nutrient TMDL monitoring program due to their extensive and unparalleled knowledge of the lakes and the associated watersheds, technical expertise, familiarity with the LE/CL TMDL program, and understanding of applicable regulations and methodologies pertinent to the program. Our team brings the expertise, commitment and capacity to continue to implement an outstanding water quality monitoring program for the LE/CL TMDL TF starting on day one, with no learning curve or ramp up time. Our analytical laboratories, Weck and Physis, also have a long history with the program and are certified for all of the analytes measured in support of this project. Our team members all have outstanding reputations for delivering top-quality water resources consulting services, producing cost-effective and quality work products, and possessing the ability to consistently provide innovative ideas to solve complex environmental issues. Our collective team will continue to work collaboratively with the LE/CL TMDL TF and draw on our experience to provide cost-effective and innovative monitoring program support that delivers meaningful information.

² City of Lake Elsinore Lake Watch Update Q&A with John Rudolph (Facebook).

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Joining the previous core LE/CL TMDL monitoring team as field support are Merkel and Rick Engineering. In concert with GEI staff, Merkel will provide in-lake monitoring vessel and sampling support. Based in San Diego, Merkel is renowned for its marine and freshwater resource monitoring expertise, including resource assessments, long-term biological monitoring, discharge impact assessments, permitting, marine/estuarine construction, and shallow marine habitat management and restoration. They have a fleet of well-equipped vessels and a wide array of field sampling and laboratory analysis equipment. Rick Engineering will provide as-needed in-lake monitoring services and special studies support. Rick Engineering is a full-service, multidisciplinary firm offering engineering, design, and planning services, including watershed science and water resource planning.

GEI will be managing this contact from our Carlsbad, CA office with additional as-needed GEI field support available from our office in Pasadena, and our subconsultants located in the cities of Carlsbad, Irvine, Riverside, and San Diego.

GEI's general approach to successful program management and implementation is based on the following principles:

- Communicating with the LE/CL TMDL TF early and often
- Responding promptly to LE/CL TMDL TF requests
- High regard for Health & Safety of all team members
- Working with the LE/CL TMDL TF to develop a clear understanding of the goals for each program task
- Adaptability to implement TF requests quickly
- Communicating program expectations to all team members on a routine basis
- Delegating program tasks to the most appropriate and qualified staff
- Adhering to all project milestones and deliverable schedules
- Implementing a rigorous QA/QC program with multiple levels of peer-review for all data, results, and deliverables
- Identifying collaborative opportunities to enhance program efficiency and address data gaps
- Assist with public outreach and education opportunities

The following sections of our proposal present our project organization with personnel and staffing and a brief overview of our team's experience and qualifications. Specific responsibilities of key subcontractor team members, lead points of contact, and history of working with the LE/CL TMDL TF is provided in Table 3.

TABLE 3. TEAM RESPONSIBILITIES, PRIMARY LEAD POINTS OF CONTACT, HISTORY WITH LE/CL TMDL TF

Firm Name	Points of Contact	Primary Areas of Responsibility	Work History With the LE/CL TMDL TF
GEI Consultants, Inc.	John Rudolph San Diego, CA 858.243.8158 Chris Stransky San Diego, CA 858.775.5547 Steve Wolosoff Boston, MA 617.452.6393	 Overall Program Support and Project Management In-Lake Monitoring, Associated Data Analysis, and Reporting Integration of In-Lake Data and Observations, Satellite Imagery, and Watershed Monitoring Analyses Final Deliverables – Annual Monitoring Reports, CEDEN submittals Database Management Stakeholder Support – Monitoring Updates, Research, Suggestions As-Needed Out-of-Scope Regulatory Support 	 Assisted in drafting the initial Phase 2 Nutrient TMDL Monitoring Plan & QAPP Drafted a revised Phase 2 Nutrient TMDL Monitoring Plan & QAPP Implemented the Phase 2 Nutrient TMDL Monitoring Plan Conducted the Lake Elsinore LEAMS Effectiveness Program Monitoring Conducted the Fisheries Management Plan Monitoring Assisted in the development of the proposed revised TMDL Data analysis/modeling support for the revised TMDL
NV5	Garth Engelhorn San Diego, CA 760.644.0167	 Watershed Monitoring and Associated Data Analysis; and Reporting Stakeholder Meeting Support for Watershed Monitoring Updates Special Study Support 	Conducted watershed stormwater monitoring since 2011 under the leadership of Mr. Engelhorn
Merkel & Associates, Inc.	Lawrence Honma San Diego, CA 858.560.5465	 Primary field support for in-lake monitoring Data summarization Provide boats, field equipment, field staff 	New to the LE/CL TMDL Task Force
Rick Engineering	Jeremy Burns San Diego, CA 619.291.0707	 As-Needed in-lake monitoring support Special study support 	New to the LE/CL TMDL Task Force, but Jeremy (former WSP) has supported in-lake monitoring previously
WSP	Nicholas Jernack San Diego, CA 732.966.5162	As-Needed in-lake monitoring support	Worked with the LE/CL TMDL TF since 2015
Weck Laboratories	Kim Tu City of Industry, CA 626.531.0278	Chemical Analyses – State-Certified Laboratory	Worked with the LE/CL TMDL TF since 2018
Physis Environmental Laboratories, Inc.	Mark Baker Irvine, CA 714.602.5320	Chemical Analyses – State-Certified Laboratory	Worked with the LE/CL TMDL TF since 2021
GreenWater Laboratories, Inc.	Amanda Foss Palatka, FL 213.740.0203	 Phytoplankton Identification / Enumeration (ID/E) As-needed cyanotoxin analysis 	Has been conducting phytoplankton ID/E under the LE/CL TMDL program since 2018
Bend Genetics, LLC	Tim Otten Sacramento, CA 916.550.1048	 Phytoplankton Identification / Enumeration (ID/E) As-needed cyanotoxin analysis 	 New to the LE/CL TMDL Task Force Will serve as a back up to GreenWater Labs in case of capacity or unavailability issues
EOMAP Satellite	Edward Albada Santa Barbara, CA 805.335.0495	Enhanced Satellite Imagery of Lake Chlorophyll- a Concentrations and Turbidity	Provided Satellite Imagery for the TMDL Monitoring Program since 2015

The GEI Team depth and breadth of watershed and lake monitoring services and expertise are summarized in a matrix provided in Table 4 below. This table lists our Team's recent and relevant project experience in relation to the specific needs identified in the RFP, and future needs during the TMDL revision process. The table below clearly illustrates our team's ability to successfully complete the scope elements required for this contract. We have also included five detailed project descriptions with references in this section. Please feel free to contact any of these references who can attest to the quality, thoroughness, and responsiveness of the GEI Team.

TABLE 4. RECENT RELEVANT EXPERIENCE OF THE GEI PROJECT TEAM

Project Name	Client(s)	Team Member(s)	Lake Monitoring	Stormwater Monitoring	Water Quality Studies	Analytical Chemistry	TMDL Program Support	Statistical Analyses/ Integrative Data Analysis	Limnology	Toxicology	Biological Studies	Reporting	Regulatory Support
LE/CL Nutrient TMDL Monitoring	LESJWA	GEI* NV5 WSP	•	•	•	•	•	•	•			•	•
LEAMS Effectiveness Monitoring	LESJWA	GEI* WSP	•	•	•	•	•		•		•	•	•
Canyon Lake Alum Effectiveness Monitoring	LESJWA	GEI* WSP	•		•	•	•	•	•	•		•	•
City of LE On-Call Harmful Algal Bloom Monitoring	City of Lake Elsinore	WSP	•		•	•				•	•	•	
LE Holy Fire Sediment Plume Characterization	City of Lake Elsinore	GEI* WSP	•		•	•		•		•	•	•	
LEAMS Future Options Study	EVMWD	GEI	•		•	•		•	•			•	
Lake San Marcos Eutrophication Risk Assessment	Lake San Marcos Trust	GEI	•	•	•	•	•	•	•	•	•	•	•
As-Needed Water Quality Monitoring and Related Services Program	Los Angeles County Public Works	NV5		•	•	•	•	•	•	•	•	•	•
Loma Alta Slough Long-Term Nutrient Water Quality Monitoring and Microbial Source Tracking Study	City of Oceanside	NV5		•	•	•	•	•	•	•	•		•
Water Quality Monitoring and Reporting	County of San Diego	NV5		•	•	•	•	•	•	•		•	•
Lake Hodges Nutrient Investigation	City of San Diego	Rick* WSP	•	•	•	•		•				•	
Regional Harbor Monitoring Program	Port of San Diego	GEI WSP			•	•		•		•	•	•	•
San Bernardino County Stormwater Sampling	San Bernardino County Flood Control District	WSP		•	•	•	•	•				•	
Shelter Island Yacht Basin TMDL Support	Port of San Diego	GEI* WSP			•	•	•	•		•		•	•
San Diego River Investigative Order Work Plan Development and Implementation	SCCWRP	Rick		•	•	•		•			•	•	
Famosa Slough Nutrient TMDL Compliance Monitoring	City of San Diego	Rick* WSP		•	•	•	•	•			•	•	•
As-Needed Stormwater Engineering- Regulatory Support	City of San Diego	Rick			•	•	•					•	•

*Work performed while current GEI and Rick staff were employed by WSP.

SUBCONTRACTORS

NV5 is a leading provider of water quality monitoring and reporting services in Southern California. NV5 staff have been instrumental in the development and implementation of monitoring and reporting programs for Municipal Separate Storm Sewer System (MS4) Permits and TMDLs for over 20 years. NV5 has a strong corporate commitment to our water resources practice, and we make significant investments in ensuring we maintain and grow our strong technical capabilities. NV5's recent acquisition of Weston Carlsbad expands our range of experts across multiple technical disciplines and equips us to deliver new technical capabilities, expertise, and cutting-edge solutions for our municipal clients. While NV5 is a global company, our largest presence is in San Diego, with over 350 engineers, scientists, professionals, and technical staff located throughout Southern California. We have staff at all levels to successfully implement all elements of the LECL TMDL monitoring program.



Merkle & Associates, Inc. is a San Diego-based environmental consulting firm specializing in biological resource and regulatory issues. The stated mission of M&A is to offer technical information and insightful solutions to difficult and complex biological and regulatory issues. M&A provides its clients with a full range of ecological services in terrestrial, freshwater aquatic and marine environments including water quality investigations and regional monitoring

programs, biological surveys of flora and fauna in marine and freshwater habitats, monitoring and compliance reporting.

Rick Engineering is an award-winning, full-service, multi-disciplinary engineering, design, and planning firm that has served thousands of public and private sector clients across the West since its founding in 1955. With over 400 RICK employees, Rick offers a full range of services, including watershed science, water resource planning, environmental permitting, GIS services, civil engineering, surveying & mapping, urban planning, and more. Our San Diego office is comprised of over 140 registered professionals and support personnel.

WSP has a long history with the LE/CL Nutrient TMDL Monitoring Program having implemented the program for the previous 10 years. WSP field staff have an intricate working knowledge of both Lake Elsinore and Canyon Lake, and a deep understanding of their internal natural processes. WSP's earth and environment services has over 4,200 multidisciplinary experts in more than 150 US offices. WSP tackles complex projects globally, providing specialized services in highly regulated industries like oil and gas, energy, mining, industrial, property and buildings, water, and transportation. WSP professionals support clients through the entire project lifecycle, from design and permitting to decommissioning and remediation. These experts use advanced technologies and innovative ideas to meet clients' challenges and ensure regulatory compliance at all levels. WSP has deep and intricate knowledge of regulatory changes and strong

relationships with regulatory agencies nationwide.

Weck Laboratories Inc. (Weck) is an ELAP certified (#1132), SBE full-service analytical laboratory that specializes in the low-level, high-precision analysis of metals in seawater samples. Weck was first approved in 1972 by the WECK LARORATORIES, INC California DOHS for complete chemical and bacteriological analysis of water. The laboratory is also involved in hazardous waste, drinking water, industrial hygiene, and air testing. Weck holds a nationwide accreditation under the NELAC program in California and other states, and is accredited by the USEPA, DoD, and other agencies. Weck has been providing analytical testing services for the annual SIYB Dissolved Copper TMDL monitoring program since 2012.

Physis Environnemental Laboratoires, Inc. (CA DGS SBE Cert. #1732152, CA SWRCB ELAP Cert. #2769) is a PHYSIS performance-based analytical chemistry practice in a cutting-edge 12,000 square-foot facility primarily populated with Senior Staff of over 125 years combined experience conducting mountain to-coast, urban-to-marine water analysis to comply with rigorous regulatory monitoring program requirements and water quality project design for watershed protection from Pre-treatment, BMP Effectiveness Evaluations, TMDL Implementations and Contaminants of Emerging Concern (CEC) detection to identification of sources of exceedance, impairment, and toxicity.

GreenWater Laboratories established in 2001, stands as the premier private full-service laboratory GreenWate dedicated exclusively to the study of cyanobacteria and the toxins they produce. With over two decades of experience, they have become a key player in environmental and biological sciences, providing precise and reliable results. Their team of expert chemists and biologists ensures rigorous quality control and reproducibility. Equipped with advanced LC-MS/MS systems and various assay-based testing options, they meet the highest scientific standards. GreenWater Laboratories also offers specialized services in algal species taxonomy and enumeration, addressing environmental and public health concerns.



Bend Genetics was founded in 2016 with the goal of offering customers rapid and integrated algal bloom testing for their environmental and public health monitoring needs. Our laboratory routinely conducts analyses of phytoplankton community composition, algal pigments, nutrients, microbial genetics, and

cyanobacterial toxins from diverse substrates including water, sediment, animal tissue, and solid phase adsorption toxin tracking (SPATT) resins. Bend Genetics has been the sole provider of cyanobacteria testing services to the California State Water Resources Control Board since 2017.



EOMAP provides optical remote sensing of marine and freshwater aquatic environments. EOMAP has supported both industry and governments to successfully complete hundreds of projects requiring the practical management of coastal zones and wetland ecosystems. They are experts in Satellite-Derived Bathymetry (SDB), Seafloor Classification and Water Quality Monitoring. EOMAP is on GEI's team for our current water quality monitoring program implementation with LESJWA. They understand the LESJWA well and have the capability to continue to provide exceptional service and data analysis of satellite images catered to and validated against analytical results of chlorophyll and turbidity in LE and CL.

EXPERIENCE

1. Lake Elsinore and Canyon Lake Water Quality Nutrient TMDL Monitoring Program Implementation



Client: LESJWA Client's Project Manager: Rick Whetsel 11615 Sterling Avenue Riverside, CA 92503 Tel: 951.354.4222 rwhetsel@sawpa.org Project Date: 2015–ongoing Key Staff: Chris Stransky, John Rudolph, Steve Wolosoff, Garth

Engelhorn, Nick Jernack

by LESJWA to implement the Lake Elsinore and Canyon Lake Nutrient TMDL Comprehensive Phase 2 Compliance Monitoring Program in 2015. These same staff also helped to develop the Phase 2 Monitoring Program. This includes watershed-wide stormwater sampling to determine nutrient loading into Canyon Lake and Lake Elsinore from upstream watershed sources, as well as in-lake sampling to assess progress towards TMDL compliance. The watershed-wide monitoring consists of sampling three storm events each monitoring season (October 1st through April 30th) at four strategically selected locations within the San Jacinto watershed for a suite of nutrients and conventional analytes. In-lake TMDL monitoring consists of six annual sampling events at four locations in Canyon Lake and eight annual sampling events at three locations in Lake Elsinore. Complete water quality column profile data (1-meter intervals) is recorded at all locations (temperature, dissolved oxygen, pH, ORP, and conductivity). Depth

Senior staff currently at GEI (at WSP at the time), as well as NV5 were contracted

integrated samples representing the entire water column are collected for a suite of nutrients, total dissolved solids, and chlorophyll-a at one location in Lake Elsinore and four locations in Canyon Lake. Chlorophyll-a is also measured in a "surface" sample which is then compared to chlorophyll-a data derived from remote satellite imagery pixels. Comprehensive TMDL reports summarizing compliance with TMDL limits are produced annually for submission to stakeholders.

2. Lake Elsinore Aeration and Mixing System (LEAMS) Effectiveness Monitoring Program

The in-lake aeration system in Lake Elsinore mixes the water column by pushing oxygen-rich surface water to the bottom, reducing phosphorus and nitrogen release from sediments. This process earns phosphorus and nitrogen offset credits for the LE/CL TMDL Task Force stakeholders, contributing to TMDL BMP efforts. To validate the aeration system's effectiveness, the Santa Ana Regional Board requires monitoring. GEI senior staff (at WSP at the time) leveraged its current TMDL monitoring program by integrating the LEAMS effectiveness monitoring program. The LEAMS monitoring program collects top, bottom, and depth-integrated samples for nutrients, iron, chlorophyll-a, and phytoplankton taxonomy monthly, and twice a month in August and September when stratification is most pronounced.



Client: LESJWA

Client's Project Manager: Rick Whetsel 11615 Sterling Avenue Riverside, CA 92503 Tel: 951.354.4222 rwhetsel@sawpa.org

Project Date: 2019–ongoing

Key Staff: John Rudolph, Chris Stransky, Nick Jernack

3. Study to Evaluate Future Alternatives for the Lake Elsinore Aeration and Mixing System



Client: Elsinore Valley Municipal Water District (EVMWD)

Client's Project Manager: Sudhir Mohleji 31315 Chaney Street Lake Elsinore, CA 92530 Tel: 951.674.3146 x8347 smohleji@evmwd.net

Project Date: 2023-ongoing

Key Staff: Steve Wolosoff, John Rudolph, Chris Stransky, Kelcey Chung The Lake Elsinore Aeration and Mixing System (LEAMS) is currently operated to generate internal nutrient load reductions to offset excess external nutrient loads, including watershed runoff and recycled water additions by EVMWD to maintain lake levels. Several studies have demonstrated in recent years that the LEAMS may be nearing the end of its functional life and need to be replaced. GEI was tasked with determining appropriate in-lake treatment options. The goal of this study was to identify and evaluate multiple options to achieve nutrient load reduction goals prescribed in the 2024 revised TMDL. An innovative sediment oxygen demand and nutrient flux study was designed and implemented by GEI aquatic scientists John Rudolph and Chris Stransky, to determine the amount of oxygen needed to be delivered to the lake bottom to satisfy the oxygen demand and maintain oxic conditions. The study also determined the sediment nutrient flux reduction that could be achieved by maintaining oxic conditions at the lake bottom and thereby counted as credit towards offsetting the excess external nutrient loads. Using this information, GEI then developed an initial screening analysis of 17 in-lake treatment options, which narrowed the field of technologies down to two categories: oxygenation and wetland treatment. A multi-factor scoring and ranking process was developed and implemented to support recommendations for the numerous whole lake oxygenation treatment options for Lake Elsinore. This project is currently ongoing with a final recommendation anticipated in early 2025.

4. Canyon Lake Alum Effectiveness Monitoring Program

In an effort to lower phosphorus levels and curb algal blooms in Canyon Lake, alum is applied twice annually, typically in February/ March and September/October. These treatments aim to remove phosphorus from the water and create an alum layer on the lakebed to trap phosphorus from the sediments. This method has successfully reduced both phosphorus and chlorophyll-a levels compared to historical data. Water temperature and pH significantly influence alum's effectiveness in capturing phosphorus, which is why LESJWA collaborates with GEI for water quality monitoring before and after alum applications to ensure optimal conditions. Additionally, total and dissolved phosphorus and aluminum levels are measured before and after treatment to assess the alum's efficiency in removing phosphorus and to ensure aluminum levels remain within safe limits.

5. Santa Margarita River Investigative Order Nutrient Monitoring

Client: RCFCWCD

Client's Project Manager: Rebekah Guill Stormwater Monitoring Manager 1995 Market Street Riverside, CA 92501 Tel: 951.955.2901 rguill@rivco.org

Project Date: 2020-ongoing

Key Staff: Garth Engelhorn, Dave Renfrew, Nicholas Poser, Jacque McMillen





Client: LESJWA 11615 Sterling Avenue Riverside. California 92503

Client's Project Manager: Rick Whetsel 11615 Sterling Avenue Riverside, CA 92503 Tel: 951.354.4222 rwhetsel@sawpa.org

Project Date: 2016-ongoing

Key Staff: Steve Wolosoff, John Rudolph, Chris Stransky, Nick Jernack

NV5 under the NPDES Professional Services On-Call Contract, is conducting Santa Margarita River (SMR) Investigative Order (IO) River Monitoring and Reporting Services. In accordance with the Work Plan and QAPP, NV5 is conducting nutrient monitoring on the main stem of the Santa Margarita River monthly from May through October, and bi-monthly from November to April each year. Monitoring includes collecting grab samples, including any field QC samples, and utilizes the District's Survey123 App for data collection.

NV5 coordinates with the District and Babcock Laboratories on the analyte lists to ensure compliance with the QAPP's measurement quality objectives (MQOs). NV5 supports the District in review of the analytical data reports received from the District's contracted laboratory for QA/QC purposes and conformance with the QAPP. NV5 provides support to the District for the preparation and compiling quarterly event summary

reports and final data packages. On an annual basis, upon the completion of each monitoring year, NV5 prepares a QA/QC report summarizing whether field and laboratory results met the MQOs and acceptance criteria as specified in the QAPP. NV5 also provides CEDEN data formatting and CEDEN upload services for the monitoring data. The monitoring data includes chemistry results, field measurements, and field observations of the water quality sampling and analysis conducted at the river station.

6. Post-Fire Water Quality Monitoring and Reporting

NV5 under the NPDES Professional Services On-Call Contract, developed post-fire monitoring plans to assess the potential water quality impacts of the 2018 Holy Fire and the 2019 Tenaja Fire. The sampling designs focused on characterizing the contaminant flux from post-fire runoff. The goal of the studies was to assess the effects of the Holy and Tenaja Fires on the hydrologic response, sediment loads, and contribution of pollutant loads (metals, nutrients, and organic contaminants) from post-fire runoff to downstream receiving waters.

NV5 implemented wet weather water quality monitoring and flow monitoring to assess post-fire contaminant concentrations and flux by sampling stormwater runoff from the terminal end of burned catchments and reference sites. Monitoring included flow monitoring, water quality sampling, visual observations and aerial drone surveys to assess pre-storm, during storm and post-storm conditions. NV5 calculated the post-fire contaminant flux and compared data from the burned



Client: RCFCWCD

Client's Project Manager: Rebekah Guill Stormwater Monitoring Manager 1995 Market Street Riverside, CA 92501 Tel: 951.955.2901 rguill@rivco.org

Project Date: 2018-2020

Key Staff: Garth Engelhorn, Dave Renfrew, Nicholas Poser, Jacque McMillen catchments to reference sites to assess the effects on the hydrologic response, sediment loads, and contribution of pollutant loads (metals, nutrients and organic contaminants). NV5 worked with RCFCWCD to create final reports and presented the study results to multiple agencies, including the Regional Board. The scientific data gained from the Holy Fire study is helping to guide future management decisions, including strategies used to comply with the LE/CL nutrient TMDL. The data from the Tenaja Fire study is being used to assess the potential post-fire water quality impacts observed at the SMR WMA WQIP most proximate long-term receiving water monitoring station.

REFERENCES

	EXHIBIT C
	REFERENCES
Proposer shall provi services have been p references are prefe	de a <mark>minimum of three (3)</mark> Customer References for whom comparable performed within the last five (5) years. Local and similar size contract rred.
	REFERENCE #1
NAME OF FIRM	Riverside County Flood Control and Water Conservation District
ADDRESS	1995 Market Street
CITY, STATE, ZIP CODE	Riverside, CA 92501
TELEPHONE #	(951) 955-2901
E-MAIL ADDRESS	rguill@rivco.org
CONTACT	Rebekah Guill
PROJECT NAME	Santa Margarita River Investigative Order Nutrient Monitoring
COMPLETION DATE	2020-Present
APPROX. COST	\$52,000 annually
	REFERENCE #2
NAME OF FIRM	EKI Environmental & Water, Inc.
ADDRESS	2355 Main Street, Suite 210
CITY, STATE, ZIP CODE	Irvine, CA 92614
TELEPHONE #	(650) 292-9122
E-MAIL ADDRESS	sfiggins@ekiconsult.com
CONTACT	Steve Figgins
PROJECT NAME	San Marcos CAO Risk Assessment
COMPLETION DATE	2024-Present
APPROX. COST	\$335,000
	REFERENCE #3
NAME OF FIRM	City of Lake Elsinore
ADDRESS	130 S. Main Street
CITY, STATE, ZIP CODE	Lake Elsinore, CA 92530
TELEPHONE #	(951) 674-3124 x314
E-MAIL ADDRESS	aqufarotti@lake-elsinore.org
CONTACT	Adam Gufarotti
PROJECT NAME	Lake Elsinore Environmental Services On-Call
COMPLETION DATE	2017-Present
APPROX. COST	\$70,000 annually

EXHIBIT B - DETAILED COST PROPOSAL

		Tas Mana Coor TMDL Tas M	sk 1 - Proj agement & dination w/ Task Force, sk Force eetings	Task 2 - Con	· Laboratory tracting				TASK 3 - Ir	nplemei	nt Monitoring	Progran	15			Tasl Man	c 4 - Data agement	Task 5 - Reporting			Tas Cor	k 6 - ADA npliance	- ADA TOTA				
			Task 1	т	ask 2	Ta	ask 3.1	Та	sk 3.2a	Та	isk 3.2b	Т	ask 3.3	T	ask 3.4	٦	ask 4	Та	isk 5.1	Ta	ask 5.2	1	Task 6				
GEI LABOR	Rate	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount		
PM	\$ 250.00	55	\$13,750		\$0		\$0	20	\$5,000	20	\$5,000		\$0		\$0	6	\$1,500		\$0	32	\$8,000		\$0	133	\$33,250		
Deputy PM Field Manager 2	\$ 275.00 \$ 136.00	7	\$0 \$952		\$0 \$0		\$U \$0	84	\$0 \$11 424	60	\$U \$8.160	16	\$0 \$2 176	60	\$0 \$8 160	24	\$0 \$3.264	2	\$0 \$272	8 90	\$2,200 \$12,240		\$U \$0	8 343	\$2,200 \$46,648		
Scientist 2 - Grade 2	\$ 120.00		\$0		\$0		\$0		\$0		\$0		\$0		\$0	16	\$1,920		\$0	24	\$2,880		\$0	40	\$4,800		
Scientist 1 - Grade 1 GIS	\$ 108.00 \$ 166.00		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	16	\$1,728 \$0	8	\$864 \$0	32	\$3,456 \$1,328		\$0 \$0	56 8	\$6,048 \$1,328		
Proj Admin	\$ -		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	Ū	\$0		\$0	Ő	\$0		
TOTAL GEI LABOR		62	\$14,702	0	\$0	0	\$0	104	\$16,424	80	\$13,160	16	\$2,176	60	\$8,160	62	\$8,412	10	\$1,136	194	\$30,104	0	\$0	588	\$94,274		
NV5 LABOR	Rate	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount		
Principal	\$ 235.00	2	\$470		\$0 \$0	24	\$0 \$5.400		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	6	\$0 \$1.250		\$0 \$0	10	\$0 \$3.250		\$0 ©0	2	\$470		
Staff 3	\$ 225.00 \$ 170.00	20	\$5,850 \$0		\$0 \$0	24	\$5,400 \$0		\$0 \$0		\$0		\$0 \$0		\$0 \$0	0	\$1,350 \$0		\$0 \$0	10	\$2,250 \$1,700		\$0 \$0	10	\$14,650 \$1,700		
Staff 2	\$ 160.00	10	\$0		\$0		\$0		\$0		\$0		\$0		\$0	12	\$1,920		\$0	4	\$640		\$0	16	\$2,560		
Associate 3 Associate 2	\$ 145.00 \$ 135.00	12	\$1,740 \$0		\$U \$0	48 24	\$6,960 \$3,240		\$0 \$0		\$U \$0		\$U \$0		\$U \$0	10	\$1,450 \$0		\$U \$0	16	\$2,320 \$1.080		\$U \$0	32	\$12,470 \$4,320		
Associate 1	\$ 130.00		\$0		\$0	24	\$3,120		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	24	\$3,120		
Specialist 3 Specialist 1	\$ 125.00 \$ 120.00		\$0 \$0		\$0 \$0	32	\$4,000 \$21,600		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	32	\$4,000 \$21,600		
Proj Admin	\$ 80.00	2	\$160		\$0 \$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	2	\$160		
TOTAL NV5 LABOR		42	\$8,220	0	\$0	332	\$44,320	0	\$0	0	\$0	0	\$0	0	\$0	28	\$4,720	0	\$0	48	\$7,990	0	\$0	450	\$65,250		
MERKEL LABOR	Rate	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount	Hrs	Amount		
Assoc. Environ. Specialist /Biologist Senior Environ. Specialist /Biologist	\$ 172.00 \$ 135.00		\$0 50		\$0 \$0		\$0 \$0	14	\$2,408 \$17.145	60	\$0 \$8.100		\$0 50	66	\$0		\$0		\$0		\$0 \$0		\$0 \$0	14 253	\$2,408 \$34 155		
Admin Support	\$ 115.00	12	\$1,380		\$0		\$0	127	\$0	00	\$0		\$0	00	\$0		\$0		\$0		\$0		\$0	12	\$1,380		
TOTAL MERKEL LABOR		12	\$1,380	0	\$0	0	\$0	141	\$19,553	60	\$8,100	0	\$0	66	\$8,910	0	\$0	0	\$0	0	\$0	0	\$0	279	\$37,943		
GEI DIRECT COSTS	Rate	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount		
Mileage	\$ 0.700		\$0		\$0		\$0	1,200	\$840	900	\$630	300	\$210	600	\$420		\$0		\$0		\$0		\$0	3000	\$2,100		
Misc. sampling supplies (disp. sampling equipment, filters, glouce, etc. per year cost)	\$ 500.00		\$0		\$0		\$0	1	\$500		\$0		\$0		\$0		\$0		\$0		\$0		\$0	1	\$500		
Ice (2 bags per lake per event)	\$ 6.50		\$0		\$0		\$0	16	\$104	12	\$78		\$0	12	\$78		\$0		\$0		\$0		\$0	40	\$260		
Sampling Equipment Usage (per lake, per event)	\$ 75.00		\$0		\$0		\$0	8	\$600	6	\$450		\$0	6	\$450		\$0		\$0		\$0		\$0	20	\$1,500		
TOTAL GEI DIRECT COSTS			\$0	-	\$0	-	\$0	-	\$2,044	-	\$1,158	-	\$210	_	\$948	_	\$0	_	\$0	-	\$0	-	\$0	_	\$4,360		
NV5 DIRECT COSTS	Rate	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount	Units	Amount		
YSI Data Sonde	\$ 0.700	375	\$263 \$0		\$U \$0	1,900	\$1,330 \$1,250		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$U \$0		\$0 \$0		\$0 \$0	5	\$1,593 \$1,250		
12V deep cycle battery	\$ 140.00		\$0		\$0	3	\$420		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0	3	\$420		
Polyethylene Bottles (24) 1-L	\$ 198.00		\$0 \$0		\$0 \$0	8	\$205 \$1,584		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	8	\$205 \$1,584		
Teflon tubing, 100 ft., 3/8 in.	\$ 315.00		\$0		\$0 \$0	2	\$630		\$0		\$0		\$0 \$0		\$0 \$0		\$0		\$0 \$0		\$0 \$0		\$0 \$0	2	\$630		
CEDEN EDD	\$ 30.00		\$0		\$0	5	\$150		\$0		\$0		\$0 \$0		\$0		\$0		\$0		\$0 \$0		\$0	5	\$150		
lce % an ODCa	\$ 6.00		\$0		\$0 \$0	40	\$240		\$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0		\$0		\$0 \$0		\$0 \$0	40	\$240		
	ψ 0.00		\$263		¢0 ¢0		\$6 598		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		¢0 \$0		\$0 \$0		\$0 \$0	0	038 32		
	Pato	Linite	Amount	-	Amount	- Linite	Amount		Amount	- Linite	Amount	- L Inite	Amount	- Linite	Amount	- Linite	Amount		Amount	- Linite	Amount	- Linite	Amount		Amount		
SURVEY/DIVE BOAT	\$ 750.00	onins	\$0	Units	\$0	Units	\$0	Units	\$0	6	\$4,500	Units	\$0	Units	\$0	onits	\$0	Units	\$0	orats	\$0	onits	\$0	6	\$4,500		
MILEAGE VESSEL EUEL	\$ 0.70 \$ 200.00		\$0 \$0		\$0 \$0		\$0 \$0	2,240	\$1,568 \$0	960 6	\$672 \$1,200		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	3200	\$2,240 \$1,200		
TOTAL MERKEL DIRECT COSTS	200.00		\$0 \$0		\$0 \$0		پې ۵۵		\$1.568		\$6.372		φ0 \$0		\$0 \$0		50 \$0		\$0 \$0		\$0		00 \$0	-	\$7,940		
LABORATORY			<u>U</u>	-	<u></u>		ψ		<i>ψ</i> 1,000		40,07Z		ψU		ΨŪ				0+		ψU		<u></u>	_	<i>41,0</i> 40		
Laboratory Chemistry TMDL Testing LE	\$ 230.00		\$0		\$0		\$0	10	\$2,300		\$0		\$0		\$0		\$0		\$0		\$0		\$0	10	\$2,300		
Laboratory Chemistry TMDL Testing CL SWAMP EDDs	\$ 2,753.00 \$ 30.00		\$0 \$0		\$0 \$0		\$0 \$0	2	\$0 \$60	6	\$16,518 \$180		\$0 \$0	6	\$0 \$180		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	6 14	\$16,518 \$420		
Laboratory Chemistry Testing Watershed	\$ 560.00		\$0		\$0	14	\$7,840	-	\$0	0	\$0		\$0	0	\$0		\$0		\$0		\$0		\$0	14	\$7,840		
Laboratory Chemistry Testing LEAMS (stand alone) Laboratory Chemistry Testing LEAMS (concurrent)	\$ 2,107.00 \$ 1.607.00		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	6 8	\$12,642 \$12,856		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	6	\$12,642 \$12,856		
Courier for non-concurrent LE events	\$ 225.00		\$0		\$0		\$0	3	\$675		\$0		\$0		\$0		\$0		\$0		\$0		\$0	3	\$675		
VV ECK courier for stormwater samples (Lab to Oside) EOMAP Satellite Imagery	\$ 250.00 \$ 6.584.00		\$0 \$0		\$0 \$0	5	\$1,250 \$0	0.5	\$0 \$3,292	0.5	\$0 \$3,292		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0		\$0 \$0	5	\$1,250 \$6,584		
TOTAL LABORATORY	,		\$0		\$0		\$9,090		\$6,327		\$19,990		\$0		\$25,678		\$0		\$0		\$0		\$0		\$61,085		
																							- 24				
GEI LABOR TOTAL		_	\$14.702	_	\$0	_	\$0	_	\$16.424	_	\$13.160	_	\$2.176	_	\$8.160	_	\$8.412		\$1.136	_	\$30.104	_	\$0		\$94.274		
NV5 LABOR TOTAL			\$8,220		\$0		\$44,320		\$0		\$0		\$0		\$0		\$4,720		\$0		\$7,990		\$0		\$65,250		
MERKEL LABOR TOTAL			\$1,380		\$0 \$0		\$0		\$19,553 \$2,044		\$8,100		\$0 \$210		\$8,910		\$0		\$0		\$0 \$0		\$0		\$37,943		
NV5 ODC TOTAL			\$263		\$0		\$6,598		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$6,860		
MERKEL ODC TOTAL			\$0		\$0 \$0		\$0		\$1,568		\$6,372		\$0		\$0		\$0 \$4 720		\$0		\$0		\$0		\$7,940		
LABORATORY TOTAL			\$0		\$0		\$9,090		\$6,327		\$19,990		\$0		\$25,678		\$0		\$0		\$0		\$0		\$61,085		
PROJECT SUPPLIES TOTAL			\$263		\$0		\$6,598		\$3,612		\$7,530		\$210		\$948		\$0		\$0		\$0		\$0		\$19,160		
G&A	0.0%		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		\$0		
G&A+% ON ODCs	4.0%		\$395		\$0		\$2,400		\$1,146		\$1,400		\$0		\$1,405		\$189		\$0		\$320		\$0		\$7,254		
TASK TOTAL		1	\$24,959		\$0		\$62,408		\$47,062		\$50,180		\$2,386		\$45,101		\$13,321		\$1,136		\$38,414		\$0		\$284,966		

Lake Elsinore & Canyon Lake Nutrient TMDL and LEAMS Compliance Monitoring Implementation 2025-2026

CONSULTANT / SUB BUSINESS INFORMATION

PROPOSER'S BUSINESS INFORMATION

All proposers shall submit the information as requested below.

- 1. Length of time your firm has been in business: <u>55 years</u>
- 2. Length of time at current location: <u>55 years (multiple San Diego County offices)</u>
- 3. List types and business license number(s): ______
- 4. California State Contractor's License number: C1835910
- Names and titles of all officers of the firm:
 <u>Tom Kahl, President/Chief Financial Officer</u>
 <u>Scott Wallington, Chief Executive Officer</u>
 <u>Ben Sawa, Chief Development Officer</u>
 <u>Jon Mahoney, Chief Counsel</u>
 <u>Dan Wanket, Director of Operations</u>
- 6. Is your firm a sole proprietorship doing business under a different name? YES □ or NO X
- If yes, please indicate sole proprietorship name and the name you are doing business under:
- 8. Please indicate your Federal Tax Number:<u>04-2468348</u>
- 9. Is your firm incorporated? YES **X** or NO
- 10. Name and remittance address that will appear on invoices: <u>GEI Consultants, Inc., 400</u> <u>Unicorn Park Drive, 3rd Floor, Woburn, MA 01801</u>
- 11. Physical Address: 5901 Priestly Drive, Suite 301, Carlsbad, CA 92008

PROPOSER'S BUSINESS INFORMATION

All proposers shall submit the information as requested below.

- 1. Length of time your firm has been in business: 75 Years
- 2. Length of time at current location: <u>75 Years</u>
- 3. List types and business license number(s): Limited Partnership
- 4. California State Contractor's License number:
- 5. Names and titles of all officers of the firm: ______

Avery, Codis Codis Hockr Kay, L Kvanc O'Brie Secre	, Ryan poti, Edward poti, Edward man, Alexando isa Presiden Ial, Scott Ial, Scott n, MaryJo tary	Vice President Co-Treasurer Vice President er Executive Vice President t Vice President Chief Administrative Officer & Co-	Renfrew, David Schack, David Tong, Richard Tong, Richard Tong, Richard Secretary Wright, Dickerson	Vice President of Water Resources Vice President of Building Sciences Annual Report Signer Director Executive Vice President & Co- Executive Vice President
6. Is y	our firm a	sole proprietorship doing bu	usiness under a	different name?

- YES or NO K
- 7. If yes, please indicate sole proprietorship name and the name you are doing business under:
- 8. Please indicate your Federal Tax Number: 27-0250614
- 9. Is your firm incorporated? YES or NO
- 10. Name and remittance address that will appear on invoices: NV5 Environmental, L.P.

11. Physical Address: 15092 Avenue of Science, Suite 200 San Diego, California 92128

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PROPOSER'S BUSINESS INFORMATION

All proposers shall submit the information as requested below.

1. Length of time your firm has been in business: <u>30 years</u>	
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- 2. Length of time at current location: 24.5 years
- 4. California State Contractor's License number: C27 724891
- 5. Names and titles of all officers of the firm: Barbara L. Merkel - President and Treasurer Keith W. Merkel - Vice President and Secretary
- 6. Is your firm a sole proprietorship doing business under a different name? YES □ or NO 区
- 7. If yes, please indicate sole proprietorship name and the name you are doing business <u>under</u>:
- 8. Please indicate your Federal Tax Number: <u>33-0632638</u>
- 9. Is your firm incorporated? YES X or NO \Box

11. Physical Address: same as above

PROPOSER'S BUSINESS INFORMATION

All proposers <u>shall</u> submit the information as requested below.

1.	Length of time your firm has been in business: <u>69 years</u>	
2.	Length of time at current location: <u>69 years</u>	
3.	List types and business license number(s): <u>B1974001388</u>	
4.	California State Contractor's License number: N/A	
5.	Names and titles of all officers of the firm: Kai Ramer - President/CEO, Roger Ball - F	Principal
	Tim Gabrielson - Principal, Don Druse - Principal, Edgar Camerino - Principal	
	Brendan Hastie - Principal, Kelly Druse - Principal, Kevin Gibson - Principal	
	Venkat Gummadi - Principal, Jayne Janda-Timba - Principal, Patricia Trauth - Principa	I
	Kevin Hall - Principal, Brooke Peterson - Principal, Carson Edgington - Principal, Rob	Fitch- Principal
6.	Is your firm a sole proprietorship doing business under a different name? YES 🔲 or NO 🔀	
7.	If yes, please indicate sole proprietorship name and the name you are doing business <u>under: N/A</u>	-
8.	Please indicate your Federal Tax Number: <u>95-1859899</u>	-
9.	Is your firm incorporated? YES $oxtimes$ or NO \Box	
10	Name and remittance address that will appear on invoices: Rick Engineering Compa 5620 Friars Road, San Diego CA 92110	any
11	. Physical Address: 5620 Friars Road, San Diego CA 92110	-

PROPOSER'S BUSINESS INFORMATION

pro	posers shall submit the information as requested below.	
1.	Length of time your firm has been in business: 91 years	
2.	Length of time at current location: 31 years	
3.	List types and business license number(s): <u>CA DIR #10000</u>	12182
4.	California State Contractor's License number: 920405	
5.	Names and titles of all officers of the firm: <u>See following pages</u> .	
-		
6.	Is your firm a sole proprietorship doing business under a difference of NO 🕱	erent name?
7.	If yes, please indicate sole proprietorship name and the name you are doing business <u>under: Not applicable</u>	
8.	Please indicate your Federal Tax Number: 11-1531569	
9.	Is your firm incorporated? YES $oldsymbol{\mathbb{X}}$ or NO $oldsymbol{\square}$	
10.	Name and remittance address that will appear on invoices:	WSP USA Inc.
		Dallas, TX 75373
11.	Physical Address: 9177 Sky Park Court, San Diego, CA 92123	
WSP USA INC. EIN: 11-1531569 OFFICERS AND DIRECTORS

			<u>Business</u>	
			Address	Board
			Reference	Director
<u>Title</u>	<u>Name</u>	Business Address*	<u>Number</u>	
President & CEO	David J. Odeh	North Providence, RI	(1)	Х
Executive Vice President	Joseph J. Sczurko, Jr.	Portland, ME	(2)	
Senior Vice President & Treasurer	Andrew C. Esposito	Irvine, CA	(3)	
Senior Vice President	Sofia M. Berger	New York, NY	(4)	
Senior Vice President	Michael J. Case	Sunrise, FL	(5)	
Senior Vice President	Gerald S. Jannetti	Tampa, FL	(6)	
Senior Vice President	Garry E. Nunes	New York, NY	(4)	
Senior Vice President	Christopher L. Peters	Irvine, CA	(3)	
Senior Vice President	Todd Semonite	Washington, DC	(7)	
Senior Vice President	Stuart R. Sunshine	San Francisco, CA	(8)	
Senior Vice President	David B. Terrv	Morristown, NJ	(9)	
Senior Vice President	John Trotta	Chicago, IL	(10)	
Senior Vice President	Lytle C. Troutt	Brentwood, TN	(11)	
Vice President	David Albers	Buffalo, NY	(12) (12)	
Vice President	Charles B. Gardiner	Altamonte Springs, FL	(13)	
Vice President	Andrew J. Lvnn	New York, NY	(4)	
Vice President	Kevin B. Reed	San Diego, CA	(14)	
Assistant Vice President	Evan Acevedo	Oakland, CA	(15)	
Assistant Vice President	Sandy Bishay	New York, NY	(4)	
Assistant Vice President	Jacob M. Borchers	Wichita, KS	(16)	
Assistant Vice President	David A. Church	Kansas City. MO	(17)	
Assistant Vice President	Scott M. Cogan	Kansas City, MO	(17)	
Assistant Vice President	Charles K. Conner. Jr.	Oakland, CA	(18)	
Assistant Vice President	Amir J. Degany	Boston, MA	(19)	
Assistant Vice President	Stephen Gage	Cleveland, OH	(20)	
Assistant Vice President	Adriel Garcia	Dallas. TX	(21)	
Assistant Vice President	Leslie Gartner	Atlanta, GA	(22)	
Assistant Vice President	Rory Gayle	Kansas City, MO	(16)	
Assistant Vice President	M. Yvonne Hidle	San Bernardino, CA	(23)	
Assistant Vice President	Gregg Hudspeth	Kennesaw, GA	(24)	
Assistant Vice President	Ashok Kothari	Los Angeles	(25)	
Assistant Vice President	Raul Laborin	San Jose, CA	(26)	
Assistant Vice President	Bart Littell	Antioch, CA	(27)	
Assistant Vice President	Domenic Lupo	San Diego, CA	(14)	
Assistant Vice President	Fred E. Lusk III	Rancho Cordova, CA	(28)	
Assistant Vice President	Jared R. Machala	Houston, TX	(29)	
Assistant Vice President	Jillian McLeod	San Francisco, CA	(8)	
Assistant Vice President	Matthew C. Morley	Rancho Cordova, CA	(28)	
Assistant Vice President	Mark Murphy	Costa Mesa, CA	(30)	
Assistant Vice President	David Patterson	Baltimore, MD	(31)	
Assistant Vice President	Glen Rieger	Pittsburgh, PA	(32)	
Assistant Vice President	Robert Rohlfs	Kansas City, MO	(17)	
Assistant Vice President	Michael J. Scott	San Bernardino, CA	(23)	
Assistant Vice President	Christopher Turnage	San Bernardino, CA	(23)	
Assistant Vice President	Mary H. Volpe	New York, NY	(4)	
Assistant Vice President	Fadi S. Walieddine	San Francisco. CA	(8)	
Assistant Vice President	Francis P. Wiegand, Jr.	San Diego. CA	(33)	
Secretary	Hillary F. Jassey	New York, NY	(4)	
<i>.</i>			· /	

WSP USA INC. EIN: 11-1531569

OFFICERS AND DIRECTORS

<u>Title</u> Assistant Secretary Assistant Secretary Controller Assistant Controller Board Director	<u>Name</u> W. Stephen Dale Laura S. Unger Nicholas P. Mitrakis Christopher J. D'Aquino Dennis J. Baker	<u>Business Address*</u> Shelton, CT Ephrata, PA New York, NY Ephrata, PA Boston, MA	Business Address Reference (34) (35) (4) (35) (4) (35) (19)	<u>Board</u> <u>Director</u>
Board Director	Gregory P. Benz	Eliot, ME	(36)	Х
	Business Addresses (1) 1223 Mineral Spring Avenue, North Providence, RI 02904 (2) 511 Congress Street, Portland, ME 04101 (3) 15231 Laguna Canyon Road, Suite 100, Irvine, CA 92618 (4) One Penn Plaza, New York, NY 10119 (5) 1000 Sawgrass Corp Parkway, Suite 578, Sunrise, FL 33323 (6) 5411 Skycenter Drive, Suite 650, Tampa, FL 33607 (7) 1520 23rd Street NW, Suite 300, Washington, DC 20037 (8) 425 Market Street, 17th Floor, San Francisco, CA 94105 (9) 350 Mount Kemble Avenue, Suite 200, Morristown, NJ 07960 (10) 30 N. Lasalle Street, Suite 4200, Chicago, IL 60602 (11) 216 Centerview Drive, Suite 320, Buffalo, NY 14202 (13) 550 S. Northlake Boulevard, Suite 1000, Altamonte Springs, FL 32701 (14) Wells Fargo Bldg., 401 B Street, Suite 1650, San Diego, CA 92101 (15) 1901 Harrison Street, Suite 1575, Oakland, CA 94612 (16) 225 North Market Street, Suite 320, Withita KS 67202		2701	
	(18) 555 12th Street, Suite 2 (19) 100 Summer Street, 131	15, Oakand, CA 94612 h Floor, Boston, MA 0211	0	
	(20) 1660 W 2nd Street, Suit	e 820, Cleveland, OH 44	113	

- (21) 4801 Spring Valley Road, Dallas, TX 75244
- (22) 3340 Peachtree Road NE, Suite 2400 Tower Place, Atlanta, GA 30326
- (23) 862 E. Hospitality Lane, Level 3, San Bernardino, CA 92408
- (24) 1075 Big Shanty Road NW, Kennesaw, GA 30144
- (25) 444 Flower Street, Suite 700, Los Angeles, CA 90071
- (26) 2570 N. First Street, Suite 100, San Jose, CA 95131
- (27) 3260 Lone Tree Way, Suite 104, Antioch, CA 94509
- (28) 10940 White Rock Road, Rancho Cordova, CA 95670
- (29) 808 Travis Street, Suite 200, Houston, TX 77002
- (30) 3560 Hyland Avenue, Costa Mesa, CA 92626
- (31) 1 East Pratt Street, 3rd Floor, Baltimore, MD 21202
- (32) 11 Stanwix Street, Pittsburgh, PA 15222
- (33) 9177 Sky Park Court, San Diego, CA 92123
- (34) 6 Research Drive, Suite 260, Shelton, CT 06484
- (35) 4139 Oregon Pike, Ephrata, PA 17522
- (36) 428 Dow Highway, Eliot, ME 03903

PROPOSER'S BUSINESS INFORMATION

All pro	oposers <u>shall</u> submit the information as requested belo	W.	
1.	Length of time your firm has been in business:61		
2.	Length of time at current location:61		
3.	List types and business license number(s): CA ELAP 1132		
-	DIR 2000003347		
4.	California State Contractor's License number:		
5.	Names and titles of all officers of the firm:		
-	Cecilia Gimenez Pierri, Secretary		
	Agustin Pierri, CEO		
-			
6.	Is your firm a sole proprietorship doing business under YES 🔲 or NO 🔀	er a different name?	
7.	If yes, please indicate sole proprietorship name and the name you are doing business <u>under:</u>		
	954492553		
8.	Please indicate your Federal Tax Number:		
9.	. Is your firm incorporated? YES $oxed{X}$ or NO $igsqcup$		
10.	0. Name and remittance address that will appear on inv Weck Analytical, Inc	oices:	
-	same as physical address		
11.	1. Physical Address: ⁷⁴⁴⁰ Clark Ave		
	Industry, CA 91745		

PROPOSER'S BUSINESS INFORMATION

All proposers <u>shall</u> submit the information as requested below.

1. Length of	time your firm has been in business: 13.75 Years
2. Length of	time at current location: <u>13.75 Years</u>
3. List types	and business license number(s): None
4. California	State Contractor's License number:
5. Names an	d titles of all officers of the firm:
Mark D. Ba	aker President
Evelyn Go	sset Treasurer
Richard G	ossett, Secretary
6. Is your firr YES 🗌 o	n a sole proprietorship doing business under a different name? r NO 🔽
7. If yes, plea doing busi	ase indicate sole proprietorship name and the name you are iness <u>under:</u>
8. Please ind	icate your Federal Tax Number: 27-2503266
9. Is your firr	n incorporated? YES 🗹 or NO 🗌
10. Name and	remittance address that will appear on invoices:
PHYSIS E	nvironmental Laboratories, Inc.
1904 E. W	right Circle Anaheim, CA 92806
11 Physical Δ	ddress: PHYSIS Environmental Laboratories. Inc
	1904 E. Wright Circle Anaheim, CA 92806

PROPOSER'S BUSINESS INFORMATION

All proposers <u>shall</u> submit the information as requested below.

1.	Length of time your firm has been in business: 24 Years		
2.	Length of time at current location: 24 Years		
3.	List types and business license number(s):		
4.	California State Contractor's License number: NA		
5.	. Names and titles of all officers of the firm: President: Amanda Foss		
	Vice President: Andrew Chapman		
6.	Is your firm a sole proprietorship doing business under a different name? YES 🔲 or NO 🗹		
7.	If yes, please indicate sole proprietorship name and the name you are doing business under:		
8.	Please indicate your Federal Tax Number: 20-2428417		
9.	Is your firm incorporated? YES 🖉 or NO 🗌		
10	. Name and remittance address that will appear on invoices:		
	Cyano Holdings INc. DBA GreenWater Laboratories		
	205 Zeagler Drive Ste 302 Palatka FL 32177		
11	. Physical Address: 205 Zeagler Drive Ste 302 Palatka FL 32177		

PROPOSER'S BUSINESS INFORMATION

1.	Length of time your firm has been in business: <u>9 years</u>
2.	Length of time at current location: 3 Years
3.	List types and business license number(s):
4.	California State Contractor's License number:
5.	Names and titles of all officers of the firm:
6.	Is your firm a sole proprietorship doing business under a different name? YES or NO
6. 7.	Is your firm a sole proprietorship doing business under a different name? YES or NO If yes, please indicate sole proprietorship name and the name you are doing business <u>under:</u>
6. 7. 8.	Is your firm a sole proprietorship doing business under a different name? YES or NO 子 If yes, please indicate sole proprietorship name and the name you are doing business <u>under:</u> Please indicate your Federal Tax Number: 웅 1-329 이고2
6. 7. 8. 9.	Is your firm a sole proprietorship doing business under a different name? YES or NO If yes, please indicate sole proprietorship name and the name you are doing business under: Please indicate your Federal Tax Number: S 1-329 0722 Is your firm incorporated? YES or NO
6. 7. 8. 9.	Is your firm a sole proprietorship doing business under a different name? YES

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PROPOSER'S BUSINESS INFORMATION

All proposers shall submit the information as requested below.

- 1. Length of time your firm has been in business: <u>19 years</u>
- 2. Length of time at current location: <u>19 years</u>
- 3. List types and business license number(s): HRA 88424 (Bavaria, Germany)
- 4. California State Contractor's License number: n/a
- 5. Names and titles of all officers of the firm: Thomas Heege, CEO; Knut Hartmann, COO
- 6. Is your firm a sole proprietorship doing business under a different name? YES □ or NO ☑
- 7. If yes, please indicate sole proprietorship name and the name you are doing business <u>under:</u>
- 8. Please indicate your Federal Tax Number: SJAFBC428T48 CAGE NO:CN3B4
- 9. Is your firm incorporated? YES \Box or NO \Box
- 10. Name and remittance address that will appear on invoices: <u>EOMAP GmbH & Co. KG</u> Schlosshof 4, 82229 Seefeld, Germany

11. Physical Address: Schlosshof 4, 82229 Seefeld, Germany

Additions, Deletions, and Exceptions

GEI is requesting the attached changes to 4.04 under ARTICLE IV OBLICATIONS OF CONSULTANT, 8.04 under ARTICLE VII TERMINATION FO AGREEMENT, 10.01 under ARTICLE X, AUDIT; OWNERSHIP OF DOCUMENTS, and 11.04 under ARTICLE XI MISCILLANEOUS PROVISIONS. These changes are consistent with the Professional insurance program as well as California state law, including but not limited to, Senate Bill 496. GEI may also request a limit of liability appropriate to the contract amount. These addition, deletion, and exception requests are noted in Exhibit E on the following pages.

EXHIBIT E

ADDITIONS, DELETIONS AND/OR EXCEPTIONS

Please state any and all Additions, Deletions and Exceptions that you are taking to any portion of this proposal and General Services Agreement (GSA) and Task Order (Attachment A). If not addressed below, then Santa Ana Watershed Project Authority assumes that the vendor will adhere to all terms and conditions listed.

SAWPA will issue an Agreement in its standard form to the successful firm(s) for the services contemplated herein; a copy of which is attached hereto, and incorporated herein. Any deletion, exception, or modification taken to Agency contract terms and conditions will be evaluated, in addition to the specified criteria; and may, itself, result in non-acceptance by the Agency. Any request for deletion, exception, or modification, if so taken, must be submitted at the time of proposal.

See attached		

Strikeout: Text requested to be removed Highlight: Text requested to be added

ARTICLE IV OBLIGATIONS OF CONSULTANT

. . .

4.04 Consultant hereby covenants and agrees that LESJWA, its officers, employees, and agents shall not be liable for any claims, liabilities, penalties, fines or any damage to property, whether real or personal, nor for any personal injury or death to the proportional extent caused by, or resulting from, or claimed to have been caused by or resulting from, any negligent act or omission of Consultant. Further, Consultant hereby covenants and agrees to fully indemnify and save LESJWA, its agents, officers and employees, free and harmless from and against any and all of the foregoing liabilities or claims of any kind, and shall reimburse LESJWA for all costs or expenses that LESJWA incurs (including attorneys' fees) on account of any of the foregoing liabilities, including liabilities or claims made by reason of defects in the performance of consulting services pursuant to this Agreement, unless the liability or claim is proximately caused by LESJWA's negligent act or omission.

LIMITATION OF LIABILITY

To the fullest extent permitted by law, the total liability, in the aggregate, of Consultant and its officers, directors, employees, agents, and independent professional associates and consultants, and any of them, to LESJWA and any one claiming by, through or under LESJWA , for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to Consultant's services, the project, or this Agreement, will not exceed the total compensation received by Consultant under the specific applicable project and/or task order, or Fifty Thousand Dollars (\$50,000) whichever is less. This limitation will apply regardless of legal theory, and includes but is not limited to claims or actions alleging negligence, errors, omissions, strict liability, breach of contract, breach of warranty of Consultant or its officers, directors, employees, agents, or independent professional associates or consultants, or any of them. LESJWA further agrees to require that all contractors and subcontractors agree that this limitation of Consultant's liability extends to include any claims or actions that they might bring in any forum.

ARTICLE VIII TERMINATION OF AGREEMENT

8.01 In the event the time specified for completion of an assigned task in a Task Order exceeds the term of this Agreement, the term of this Agreement shall be automatically extended for such additional time as is necessary to complete such Task Order, and thereupon this Agreement shall automatically terminate without further notice.

8.02 Notwithstanding any other provision of this Agreement, LESJWA, at its sole option, may terminate this Agreement at any time by giving 10 day written notice to Consultant, whether or not a Task Order has been issued to Consultant.

8.03 In the event of termination, the payment of monies due Consultant for work performed prior to the effective date of such termination shall be paid after receipt of an invoice as provided in this Agreement.

8.04 This Agreement may be terminated by Consultant for cause upon thirty (30) days written notice to LESJWA.

ARTICLE X

AUDIT; OWNERSHIP OF DOCUMENTS

10.01 All draft and final reports, plans, drawings, specifications, data, notes, and all other documents of any kind or nature prepared or developed by Consultant in connection with the performance of services assigned to it by LESJWA are the sole property of LESJWA, and Consultant shall promptly deliver all such materials to LESJWA. Consultant may retain copies of the original documents, at its option and expense. Any use of the documents for purposes other than those for which they were explicitly prepared shall be at LESJWA 's sole risk and liability. LESJWA agrees to defend, indemnify, and hold Contractor harmless from and against any claims, losses, liabilities, and damages arising out of or resulting from the unauthorized use of the documents.

ARTICLE XI MISCELLANEOUS PROVISIONS

11.04 Time is of the essence in the performance of services required hereunder. Extensions of time within which to perform services may be granted by LESJWA if requested by Consultant and agreed to in writing by LESJWA. All such requests must be documented and substantiated and will only be granted as the result of unforeseeable and unavoidable delays not caused by the lack of foresight on the part of Consultant. Consultant will be given enough time to work prudently and safely.

FORCE MAJEURE

- a) Force Majeure "Event of Force Majeure" means an event beyond the control of Consultant and LESJWA, which prevents a Party from complying with any of its obligations under this Agreement, including but not limited to, acts of God (such as, but not limited to, fires, explosions, earthquakes, drought, tidal waves and floods); war, hostilities, acts of terrorism, riot, commotion, strikes, go slows, lock outs or disorder, unless solely restricted to employees of Consultant or its subcontractors.
- b) Neither LESJWA nor Consultant shall be considered in breach of this Agreement to the extent that performance of their respective obligations (excluding payment obligations) is prevented by an event of Force Majeure. Either LESJWA or Consultant shall give written notice to the other upon becoming aware that an Event of Force Majeure.

APPENDIX B – KEY STAFF RESUMES

John Rudolph

Program Manager / Senior Aquatic Ecologist and Limnologist

John Rudolph is a senior aquatic ecologist and limnologist in GEI's Carlsbad office. He has over 25 years of experience managing a diversity of aquatic biological, ecological, and toxicological environmental programs for commercial, municipal, academic, and federal clients. In all programs, places a strong emphasis on developing clear goals and objectives and attaining them cost effectively, achieving exceptional data quality, and gaining client, regulatory, and peerscientific approval. Over 17 years specialized experience managing complex environmental sampling programs for both public and private agencies, including stream, estuarine, lake, and ocean sampling. John has extensive aquatic lake and stream ecological and nutrient monitoring experience and has successfully managed field programs ranging from small-scale urban point-source evaluations to full remote watershed assessments.

John has also performed water quality and sediment sampling for hundreds of projects over the course of his 25 years, including support for nutrient and heavy metal Total Maximum Daily Loads (TMDLs), pesticide investigations, stormwater evaluations, and EPA Superfund risk assessments.

In a previous position, John served as Toxicity Bioassay Laboratory Manager at Nautilus Environmental managing toxicity programs conducting freshwater, marine, sediment and soil bioassay testing utilizing a wide variety of test organisms. He is well versed in all aspects of performing bioassays and interpreting toxicological data.

PROJECT EXPERIENCE

Lake Elsinore and Canyon Lake Water Quality Nutrient TMDL Monitoring Program Implementation, SAWPA, City of Lake Elsinore, CA. Managed the LESJWA program to implement the Lake Elsinore and Canyon Lake Nutrient TMDL Phase 2 Compliance Monitoring Plan. This involved watershed-wide stormwater sampling to determine nutrient loading and in-lake sampling to assess TMDL compliance. Watershed monitoring included sampling three storm events per season at four locations, with flow-weighted composite samples analyzed for nutrients. In-lake monitoring involved bi-monthly sampling at one location in Lake Elsinore and four in Canyon Lake, recording water column profiles and collecting depth-integrated samples for nutrients and other constituents. Chlorophyll-a was also measured analytically and compared with satellite imagery to evaluate whole-lake concentrations. This was facilitated by choosing in-lake sampling dates to occur concurrent with satellite overpasses. Satellite images of the lakes are then analyzed using spectral algorithms to determine estimated chlorophyll-a concentration.

Lake Elsinore & Canyon Lake Nutrient TMDL Re-Opener Support, Lake Elsinore San Jacinto Watershed Authority, City of Lake Elsinore, CA. Assisted the LE/CL Task Force in re-evaluating and revising numeric targets in the TMDL for Lake Elsinore and



EDUCATION

M.S., Marine Ecology, San Diego State University, 1995B.A., Ecology, Austin College, 1992

EXPERIENCE IN THE INDUSTRY 25 years

EXPERIENCE WITH GEI Less than 1 year

TRAINING/CERTIFICATIONS

- California Rapid Assessment Method (CRAM) Riverine (2009) and Estuarine (2012) Certified
- American Red Cross, CPR, First Aid Certified, O2 Certified
- PADI Open Water, Advanced, and Rescue Diver Certification (1988)
- OSHA Hazardous Waste Operations and Emergency Response Training (Section 1910.120).

PROFESSIONAL AFFILIATIONS

Society of Environmental Toxicology and Chemistry Local and National Chapters California Stormwater Quality Association North American Lake Management Society

North American Benthological Society Society of Freshwater Science



Canyon Lake to address eutrophication and protect biological resources. Regular review and revision, mandated by the Regional Board to occur at least every three years, ensure continued progress toward water quality standards and beneficial use protection. Assisted with updating the TMDL Problem Statement, focusing on biological components. This involved collating historic data into a CEDEN-compatible database for comprehensive analysis and conducting statistical and graphical analyses to understand nutrient relationships. Led efforts to summarize the lakes' aquatic ecology, considering the cyclical nature of salinity in Lake Elsinore.

Evaluation of Algal Biomass Reduction Technologies in Lake Elsinore – Prop 1 Pilot Study, Lake Elsinore San Jacinto Watershed Authority, City of Lake Elsinore, CA. To inform algal bloom mitigation strategies for Lake Elsinore, a pilot study funded by the State of California Prop 1 IRWMI Grant explored four in-situ technologies to remove algal biomass and suppress growth. The study had two main objectives: 1) short-term feasibility and effectiveness of technologies to reduce algal biomass, and 2) long-term water quality improvement through pilot demonstrations addressing algal bloom causes. Empirical data collection included nutrient analysis, water quality parameters, algal biomass, species composition, and microcystin. Each technology was evaluated over a 5-week period in late summer and early fall 2022 within enclosed mesocosms near the Launch Pointe Boat Ramp.

Lake Elsinore Aeration and Mixing System Offset Monitoring Program, Elsinore Valley Municipal Water District (EVMWD), City of Lake Elsinore, CA. The EVMWD Water Reclamation Facility discharges tertiary treated effluent to Lake Elsinore to stabilize the lake level. Although most nutrients are removed, some remain and are discharged into the lake. LEAMS aims to de-stratify the lake and mix oxygen to suppress nutrient release from sediments, offsetting nutrient input from reclaimed water. To evaluate LEAMS' effectiveness, led a team that conducted monthly monitoring (twice monthly in August and September) at a central lake location, collecting samples for nutrients, iron, and chlorophyll-a at various depths, along with algal taxonomy and water quality profiles.

Lake Elsinore Cyanotoxin Monitoring Program, City of Lake Elsinore, CA. In summer 2016, a large cyanobacterial bloom in Lake Elsinore led to public health warnings. Managed the City of Lake Elsinore's Cyanotoxin Monitoring Program, implementing a Harmful Algal Bloom (HAB) monitoring program to assess public health risks and guide outreach. Helped select sampling locations, frequency, and monitored toxins. This monitoring program has continued through 2024 and into 2025 with sampling frequency dependent upon toxin concentrations observed.

Lake San Marcos & San Marcos Creek Cleanup and Abatement Order, County of San Diego and Lake San Marcos Trustees. Lake San Marcos, located in northern San Diego County, was created in 1946 for agricultural water supply and modified in the early 1960s. The lake, fed by a 42-square-mile watershed, is popular for recreation but suffers from eutrophication due to elevated nutrients. The San Diego Regional Water Quality Control Board issued a Cleanup and Abatement Order to evaluate current conditions and determine remediation strategies. Concerns include nutrients, trace metals, pesticides, PAHs, and TSS. Representing the County of San Diego, hired by the Lake San Marcos Trustees to oversee the development of a Work Plan and QAPP, and to conduct comprehensive water and sediment quality monitoring, bioassessment, fish tissue analysis, and cyanotoxin monitoring. These efforts, conducted from 2024 to 2026, will result in an ecological and human health risk assessment report.

Study to Evaluate Future Options for the Lake Elsinore Aeration and Mixing System, 2024, Elsinore Valley Municipal Water District (EVMWD), Lake Elsinore, CA. EVMWD operates the Lake Elsinore Aeration-Mixing System (LEAMS) to destratify the lake, mix oxygen levels, and offset nitrogen and phosphorus from treated effluent discharged by the Regional Water Reclamation Facility. This treated effluent helps stabilize lake elevation and enhance recreational benefits. The LEAMS Operating Committee, including EVMWD, the City of Lake Elsinore, and Riverside County, collaborates to ensure LEAMS benefits the lake. Currently, they are evaluating LEAMS and alternatives to improve water quality. Another team member leads a Sediment Oxygen Demand (SOD) Study to determine the necessary oxygenation and its effectiveness in reducing nutrient flux from sediments.



Chris Stransky Deputy Program Manager / Senior Aquatic Scientist

Chris Stransky is a senior aquatic scientist in GEI's Carlsbad office. In his previous role as a Vice President and Senior Scientist he was a group leader for an Aquatic Sciences and Toxicology specialty and Director of the Toxicology Laboratory which he designed and built with his Team previously at WSP. Chris' experience and interest have centered on a wide variety of ecological risk assessment programs in support of regulatory compliance, as well as pushing the boundaries to develop and test new innovative methods for monitoring. Characterizing the health of aquatic communities along with understanding causes of impairment and viable remedial solutions is a role and passion. He has supported LESJWA and the Lake Elsinore and Canyon Lake TMDL Monitoring Program over the past 10 years and is thus intimately familiar with the environmental history and regulatory needs within this very dynamic and complex watershed. Chris continues to provide senior expert support on this program and other related efforts in the region. He also has provided many presentations on the monitoring efforts in both lakes and the watershed, including special studies such as the fisheries survey, and water quality impacts to Lake Elsinore related to the Holy Fire to the LESJWA stakeholders, Regional Water Board, State Board, local and national scientific conferences, and the general public. This outreach and reputation has established a long trusting relationship with the regulatory community and resource agencies in the region.

Chris is a well-known expert in the environmental field and currently serves on the Board of Directors for the North America Chapter of the Society of Environmental Toxicology and Chemistry (SETAC). He was recently nominated and voted in as Vice President of this prestigious organization (starting October 2024) which will rotate to President in 2025. Chris also currently serves on the Board of Directors for the Boz Life Science Research and Teaching Institute affiliated with the University of California San Diego (UCSD).

PROJECT EXPERIENCE

Lake Elsinore and Canyon Lake Water Quality Nutrient TMDL Monitoring Program Implementation, Lake Elsinore San Jacinto Watershed Authority (LESJWA), Lake Elsinore, CA. Program Manager/Senior Scientist. As Program Director, led the development and implementation of a Comprehensive Compliance Monitoring Plan in support of a TMDL for nutrients in Lake Elsinore and Canyon Lake. These efforts started in 2014 under WSP and predecessor companies. Since joining GEI, project team members have been retained to continue to provide technical expertise and oversight of the program. The TMDL program includes watershed-wide stormwater sampling to determine nutrient loading into both lakes from upstream watershed sources, as well as in-lake sampling to assess progress towards TMDL compliance. Innovative cost-effective methods to enhance the robustness of data and results have been incorporated into the TMDL monitoring program by the proposed Program Manager and Deputy



EDUCATION

M.S., Marine Ecology, San Diego State UniversityB.A., Aquatic Biology, University of

California, Santa Barbara

EXPERIENCE IN THE INDUSTRY 32 years

EXPERIENCE WITH GEI Less than 1 year

TRAINING/CERTIFICATIONS Environ. Specialist (ENV SP) SCUBA (Scientific Diver Collection Permit) OSHA 40-hour HAZWOPER CA Safe Boater Certified CPR/First Aid Surface Water Ambient Monitoring Program-California Rapid Assessment Method (SWAMP-CRAM) Estuarine and Riverine trained

PROFESSIONAL AFFILIATIONS

Society on Environmental Toxicology and Chemistry (SETAC),1994

- Southern California Academy of Sciences (SCAS), 1994
- California Stormwater Quality Association (CASQA), 2005
- Western Dredging Association (WEDA), The Coastal and Estuarine Research
- Federation, 2005

California Estuarine Research Society, 2010



Program Manager. This has included the incorporation of satellite imagery to better assess spatial patterns of turbidity and chlorophyll-a as a measure of algal blooms, and inclusion and analysis of real-time continuous water quality data provided by sondes owned and managed by the Elsinore Valley Municipal Water District in Lake Elsinore. The Team has also successfully prepared a complete historical database of water quality data collected in both Canyon Lake and Lake Elsinore since 2001. This data has subsequently been analyzed using a variety of innovative techniques to better evaluate trends between water quality conditions, chlorophyll-a, and toxins related to harmful algal blooms (HABs). These evaluations have been critical regarding understanding which appropriate TMDL water quality parameters and targets may be feasible and protective of beneficial uses in both lakes. These efforts have been coordinated closely with GEI, leading the technical documents for the revised TMDL. In addition, the proposed Program Manager and Deputy Program Manager also led a Prop 1 funded grant in coordination with the City of Lake Elsinore to pilot test in situ a variety of in-lake treatments to enhance lake water quality focusing on persistent elevated nutrients and cyanobacteria algal blooms in Lake Elsinore, the largest natural freshwater lake in southern California.

Lake Elsinore Fisheries Management Support, LESJWA, Lake Elsinore, CA. Program Manager and Senior Scientist. This program was implemented in 2019 to assess the conditions of the Lake Elsinore fishery and identify appropriate management measures for improving the fishery and supporting aquatic habitat. The purpose of the program was to conduct fish, zooplankton, and phytoplankton community surveys, and collect fish tissue data to provide updated information on the aquatic communities of Lake Elsinore. Results of these data collection efforts have been used to develop recommendations to improve the Lake Elsinore fishery focused on ways to benefit water quality through biological functions, support efforts towards the implementation of the revised nutrient TMDL, and to determine the need for additional harvesting of fish to control nuisance species impacting water quality (e.g., Asian carp).. Several recommendations were made that have improved the fishery since, although algae blooms remain a big challenge for the lake. Public outreach and participation was an important component of this program which included interviews provided by staff for local newspapers and television stations. https://www.youtube.com/watch?v=P7VcMaUf2kU

Study to Evaluate Future Options for the Lake Elsinore Aeration and Mixing System, 2024, Elsinore Valley Municipal Water District (EVMWD), Lake Elsinore, CA. Project Manager, Senior Scientist. EVMWD operates the main component of the large aeration-mixing system in Lake Elsinore known as (Lake Elsinore Aeration-Mixing System, or LEAMS) whose purpose is to destratify the lake, mix oxygen levels in the lake water column, and offset the nitrogen and phosphorus added to the lake from disinfected tertiary effluent discharged by EVMWD's Regional Water Reclamation Facility. Together, the LEAMS Operating Committee, which consists of the EVWMD, City of Lake Elsinore. Currently, the LEAMS Operating Committee seeks to evaluate the existing LEAMS, or alternatives to LEAMS, to benefit water quality conditions in Lake Elsinore. Mr. Stransky led an innovative Sediment Oxygen Demand Study at the environmental laboratory to help determine the type and degree of oxygenation required for Lake Elsinore, as well as effectiveness at reducing nutrient flux from the sediments under varying conditions.

San Diego Regional Harbor Monitoring Program, Port of San Diego, CA. Program Manager, Senior Scientist. One of the largest multidisciplinary, region-wide harbor monitoring programs of its kind in the U.S. is referred to as the San Diego Regional Harbor Monitoring Program (RHMP). Mr. Stransky led this program in 2013, 2018, and again during the planning and field sampling stages in 2023 before recently joining GEI where he has been retained as a senior technical expert for the program. The RHMP began in 2008 and is conducted every 5 years in coordination with the southern California Bight Regional Monitoring Program. Embayments monitored by the RHMP include Dana Point Harbor, Oceanside Harbor, Mission Bay, and San Diego Bay. The collection of surface sediments is conducted at 75 locations for analysis of physical characteristics, chemistry, toxicity, and benthic infauna. Water column sampling, benthic fish and invertebrate community analyses, and assessment of chemical contaminants in fish tissue to assess human health risk from consumption are also important integrated components of this comprehensive program. This large program requires a well-organized trained team of scientific staff in addition to great writing, analytical, communication, and attention to detail skills. Results have been presented in technical reports and through numerous presentations to stakeholders, the public, and the Regional Water Quality Control Board. A summary of the RHMP goals and objectives was also crafted into a public friendly flyer.



Kelcey Chung

In-Lake Monitoring Lead/Health and Safety / Aquatic Ecologist

Kelcey Chung is an aquatic ecologist in GEI's Carlsbad office with expertise in water chemistry and biological sampling in aquatic and marine habitats, water chemistry laboratory analyses, project management, and report/manuscript preparation and writing. Kelcey has been a technical lead on projects within Southern California, starting with her graduate work at the University of California Irvine conducting habitat and population assessments for the endangered black abalone. She has led and supported many projects involving field sampling, laboratory analyses, and data management. Her field expertise includes deploying/retrieving and sampling from various net tows, Van Veen grab, Van Dorn sampler, CTD rosette, and megacore.

PROJECT EXPERIENCE

Lake San Marcos Monitoring. Lake San Marcos, CA. Currently providing technical support for the in-lake monitoring work for the Lake San Marcos and San Marcos Creek Risk Assessment. Helped with collecting water quality measurements with a YSI field meter and grab samples from a Van Dorn sampler that will yield important data on nutrient loading and other pollutants from the watershed to Lake San Marcos.

Lake Elsinore TMDL Monitoring Program, Lake Elsinore, CA. Has provided technical support for the Lake Elsinore and Canyon Lake TMDL Monitoring Program. Responsible for conducting in-situ monitoring using a pre-calibrated hand-held YSI field meter, collecting depth-integrated samples using a peristaltic pump and grab samples using a Van Dorn sampler.

Lake Elsinore Pre and Post Phoslock Application Monitoring, Lake Elsinore, CA. Served as a technical lead for in-situ water and sediment quality monitoring at three identified Phoslock treatment areas in Lake Elsinore. Was responsible for collecting water quality measurements using a YSI field meter, grab samples for water and sediment using a Van Dorn sampler and Ponar grab sampler, and coordinating sample transport with laboratory couriers.

Scripps Oceanographic Data Facility, San Diego, CA. Served as a chemist at Scripps Institute of Oceanography Data Facility (ODF) sampling and conducting water chemistry analysis for salinity, oxygen, nutrients, and chlorophyll. Provided high-quality technical services and equipment to government agencies, educational institutions, and private organizations throughout the world.



EDUCATION

 M.S. Conservation and Restoration Science, University of California - Irvine
B.S., Global Environmental Science, University of Hawaii at Manoa

EXPERIENCE IN THE INDUSTRY 7 years

EXPERIENCE WITH GEI Less than 1 year

TRAINING AND CERTIFICATIONS PADI Open Water Diver Certification



Steven Wolosoff, BCES, PMP

Regulatory Compliance Lead / Senior Environmental Scientist

Steven Wolosoff is a water resources scientist with 24 years of experience involving water quality planning and project management. His work has covered a wide range of projects, including TMDL development and implementation planning, watershed plan development, receiving water quality studies, integrated resources plan development, hydrologic analysis, water systems analysis, hydraulic and hydrologic modeling, and surface water monitoring. Steven has led multi-agency stakeholder groups in monitoring program oversight, regional project implementation, and TMDL development for freshwater lakes. He is an expert in microbial source tracking study design and analysis of results to support MS4 permit compliance. He also is an expert in the use of watershed models to simulate performance of source control and structural stormwater BMPs. He has developed many creative strategies to design special studies and interpret results to provide answers to complex scientific questions. His experience also has required an understanding of a wide range of environmental policies and regulations. Steven is proficient in several watershed modeling tools and served as editor and chapter author for the WEF Manual, "Stormwater, Watershed, and Receiving Water Quality Modeling".

PROJECT EXPERIENCE

Revision of the Canyon Lake and Lake Elsinore Nutrient TMDLs, Lake Elsinore and San Jacinto Watersheds Authority (LESJWA), Southern CA. Manages a multi-stakeholder project to develop the technical basis for revisions to existing nutrient TMDLs in Canyon Lake and Lake Elsinore in the San Jacinto River watershed in the Santa Ana Region. The TMDL revisions include a combination of watershed and lake water quality modeling to (a) determine allowable external loads to the lakes; and (b) develop new numeric targets for dissolved oxygen, algae as chlorophyll-a, ammonia toxicity, and nutrients that when met will protect beneficial uses in each lake. To facilitate the TMDL revisions, he created a new watershed model for estimating external loads under multiple watershed development scenarios. Was the primary author for the recently completed draft of the technical support for TMDL revision, https://sawpa.gov/wpcontent/uploads/2023/12/LECL-TMDL-Revision-Final-Draft-Tech-<u>Report 122123.docx</u>). A key factor in the success of the project has been facilitating coordination among numerous subject matter experts and stakeholders in the development of reasonable policies that are measurable, achievable, and protective of lake beneficial uses. In recent years, Lake Elsinore and Canyon Lake have experienced harmful algal blooms resulting in cyanotoxins at levels above health advisories. To help address this issue as part of the TMDL revision process, coordinated with the LESJWA-administered TMDL Task Force to identify the most effective approaches to monitoring and public notification related to risk of exposure to cyanotoxins.



EDUCATION

 M.P.S., Watershed Management, State University of New York (SUNY) College of Environmental Science and Forestry
B.A., Environmental Studies, Binghamton University

EXPERIENCE IN THE INDUSTRY 24 years

EXPERIENCE WITH GEI 2 years

REGISTRATIONS AND LICENSES Project Management Professional (PMP) Board Certified Environmental Scientist (BCES)

CERTIFICATIONS

- Certificate Introduction to HEC-RAS, CDMU, 2006
- Certificate Introduction to SWMM, CDMU, 2004

PROFESSIONAL AFFILIATIONS

- Chair, Watershed Management Committee of New England Water Environment Association
- American Academy of Environmental Engineers and Scientists
- Watershed Management Committee, Water Environment Federation
- California Stormwater Quality Association



Lake Elsinore In-Lake Treatment Options Evaluation, Elsinore Valley Municipal Water District (EVMWD), Southern CA. Currently managing a study to evaluate in-lake water quality treatment options for Lake Elsinore. Previous modeling was used to determine the internal nutrient load that would need to be reduced to meet future TMDL allocations. The study has involved concept level engineering, comparison of cost, and recommendation. In addition, overseeing a sediment nutrient study that includes 1) estimation of oxygen demand, 2) nutrient core-flux experiments, and 3) sediment samples for chemical analysis.

Study to Develop Potential Numeric Nutrient Criteria for Massachusetts Lakes, Massachusetts Department of Environmental Protection (MassDEP). Served as the project manager for a study to develop a scientific basis for potential consideration of numeric nutrient criteria (NNC) for MA lakes. The study required in-depth understanding of EPA's 2021 304(a) criteria for nutrients in lakes and reservoirs. Compilation of local data was undertaken to be able to fit empirical models for recreation, aquatic life, and drinking water use endpoints.

MS4 Permit Support, Riverside County Flood Control and Water Conservation District, Riverside County, CA. Provided support to the Riverside County MS4 Program since 2011. Key activities have included serving as the lead modeler for preparation of the Comprehensive Nutrient Reduction Plan (CNRP) for Lake Elsinore and Canyon Lake and the dry weather CBRP for the MSAR watershed. This effort included preparing the necessary reasonable assurance analyses to support the efficacy of the implementation plans including estimation of cost shares for MS4 participation in regional water quality controls involving alum addition to Canyon Lake and operation of an aeration and mixing system in Lake Elsinore.

Santa Ana River Regional Bacteria Monitoring Program (RBMP), SAWPA, Southern CA. The RBMP is administered by SAWPA on behalf of Orange, Riverside and San Bernardino County MS4 Programs to satisfy the surveillance/monitoring program requirements in the 2015-approved Recreation Standards for Inland Fresh Surface Waters Basin Plan amendment and the monitoring requirements included in the MSAR Bacteria TMDL. Served as technical lead in the development of the RBMP and managed [during time with previous employer] the annual program that includes both dry weather and wet weather sample collection and requires close coordination with the regional MS4 Programs, field sample collection teams and laboratories. In addition, leads the preparation of annual reports, updates to the RMBP Monitoring Plan and Quality Assurance Project Plan, creation of a new online data dashboard, and delivers presentations on various topics related to fecal bacteria in inland surface waters in the Santa Ana Basin to the RBMP Task Force.

Middle Santa Ana River (MSAR) Bacteria TMDL Implementation, Santa Ana Watershed Project Authority (SAWPA), Riverside and San Bernardino County MS4 Programs, Southern CA. Worked with SAWPA and the Counties of Riverside and San Bernardino to support implementation of TMDL requirements applicable to urban runoff, including stormwater. This effort has included preparation of Comprehensive Bacteria Reduction Plans (CBRPs) for both MS4 Programs, which involved development of estimates of bacteria reduction targets for the MS4s to meet the TMDL wasteload allocations. In addition, developed estimates of expected reductions of bacteria in urban runoff associated with implementation of various BMPs, e.g., outdoor water use conservation and street sweeping. Technical analyses required to develop bacteria reduction target estimates included a detailed assessment of dry weather hydrology throughout the watershed, compilation and characterization of spatial data for MS4 systems from jurisdictions within the watershed, and prioritization of key outfalls from the MS4 systems to receiving waterbodies. Supported implementation of the CBRPs through implementation of numerous special studies to assess sources of fecal bacteria in the watershed using microbial source tracking methods. The findings from these studies have been used to prepare a number of TMDL Triennial Reports (2013, 2016, 2020).







CONTACT INFO David.Renfrew@nv5.com

EDUCATION

BS, Geological Sciences (Emphasis in Hydrogeology)

Graduate Studies, Hydrogeology-Multiphase Flow, Environmental Fate of Organic Contaminants

EXPERIENCE 28 Years

REGISTRATIONS

Certified Professional in Storm Water Quality (CPSWQ), No. 0249

Project Management Professional (PMP), No. 1703435

Qualified SWPPP Developer/ Qualified SWPPP Practitioner (QSD/P), No. 20993

Qualified Industrial Storm Water Practitioner/Trainer of Record (QISP/ToR)

AFFILIATIONS

California Storm Water Quality Association (CASQA)

Industrial Environmental Association

Building Industry Association

San Diego Environmental Professionals

DAVE RENFREW, CPSWQ, QISP/TOR, QSD/P, PMP

Principal-in-Charge

David Renfrew brings over 28 years of experience in the environmental industry with a focus on Phase I Municipal, Industrial, and Construction NPDES Compliance Programs. Mr. Renfrew provides specialty professional expertise to municipal, industrial, commercial, and institutional clientele. He has implemented full scale monitoring and reporting projects and provided extensive program management support. Through his career, he has conducted extensive regulatory reviews, and developed strategic technical comments to shape regulatory policy and permits on behalf of his clients. His project work includes management of municipal contracts to ensure quality project delivery.

Project Experience

Lake Elsinore And Canyon Lake Nutrient TMDL Watershed Monitoring And Annual Reporting

SANTA ANA WATERSHED PROJECT AUTHORITY | RIVERSIDE, CA

The annual watershed-wide monitoring and reporting program for the Lake Elsinore and Canyon Lake Nutrient TMDL Task Force. Coordinating storm sampling events to determine the total nutrient loads into the lakes from their tributaries. Annual water quality data is used to calculate loads and evaluate nitrogen and phosphorus TMDL compliance with waste load allocations. Tasks include CEDEN data management and annual reporting.

Stormwater Quality Project Overview Portal

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS | LOS ANGELES, CA

David is supporting the Stormwater Quality Division with development of an online dashboard or portal that allows for ease of navigating the extensive amount of data required to operate, maintain, and assess effectiveness of stormwater quality capture and treatment facilities. The team includes subject matter experts in stormwater quality, green infrastructure, telemetry, SCADA, system operation as well as system and software experts in GIS, geospatial solutioning, portal development, and stormwater maintenance software such as Maximo and Cityworks, The tool is being developed in coordination with the Information Technology Division and under their strict protocols so that data management will be integrated into the portal be compatible with the County's IT infrastructure, meet the County's user and functional requirements, and be consistent with the County's IT standards. Ultimately the tool will allow project managers to monitor status and easily assess the effectiveness of stormwater capture facilities over selected durations including daily, weekly, monthly, annually, or for the most recent storm event.

Los Angeles World Airports On-Call Environmental Services LAWA | LOS ANGELES & VAN NUYS, CA

Stormwater Program Manager. Managed the storm water monitoring program for Los Angeles International Airport (LAX) and Van Nuys Airport (VNY). Program included compliance with Industrial and Phase I Permit Requirements at LAX and VNY for compliance with their Industrial Storm Water Permits. Monitoring included flow and load monitoring, sampling of a full suite of priority pollutants, laboratory analysis, data management, and reporting. NV5 prepared the Monitoring and Implementation Plan, prepared SWPPP revisions, and Exceedance Response Action Reports. Conducted a Source Identification Special Study for metals based on 60 discreet land use sampling locations. Installed drain inlet filter BMPs at 62 locations for trash, TSS, and heavy metals to address discharges to the Dominguez Channel. Also conducts facility BMP inspections at over 100 tenant facilities annually, provides technical support for TMDL compliance assessment, review and responses for Regional Water Quality Control Board requests and provided training to LAX Environmental Staff and conducted the annual tenant training.

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DAVE RENFREW, CPSWQ, QISP/TOR, QSD/P, PMP

Program Manager

City Of Compton NPDES Monitoring & Reporting CITY OF COMPTON | COMPTON, CA

Project Manager. Provides the City of Compton with asneeded monitoring and reporting to support compliance with the Los Angeles Regional Water Quality Control Board's (RWQCB) monitoring and reporting requirements of Attachment E of the NPDES Permit No. CASO04001: Order No. R4-2012-0175 (Permit). Conducts wet weather and dry weather sampling at receiving water and MS4 Outfall sites discharging to Compton Creek and the Dominguez Channel including preparation and installation of flow monitoring and autosampling equipment, field staffing and collection of samples for microbiology, chemistry, toxicity, toxicity identification evaluations, Bioassessment, and field parameters, managing sample laboratory delivery under chain of custody protocols, and preparation of field forms including trash assessments.

Riverside County Flood Control & Water Conservation District On-Call Services Contract

COUNTY OF RIVERSIDE | RIVERSIDE COUNTY, CA

Program Manager for the on-call contract. Task orders included the Santa Margarita River Transitional Wet Weather Monitoring at the mass loading stations and MS4 outfall locations, Post-Fire Special Studies, Santa Margarita Investigative Order Monitoring, and Dry Weather Flow Studies, Responsibilities included oversight of field reconnaissance, equipment installations, flow monitoring, automated sample collection, data collection, and CEDEN data formatting. Managed all aspects of the special studies required under the 2010 San Diego County Regional MS4 Permit (Section E. of R9-2010-0016). Studies conducted included Sediment Toxicity Study, Trash and Litter Investigation, and Agricultural, Federal, and Tribal Input Study. The program included develop of study workplans; conducting field monitoring; data analysis; report writing; budget preparation; and client/regulatory agency interaction. Also provided an evaluation of the Coachella Valley 2012 303(d) Toxicity Listing for the Whitewater Region for the purposes of evaluating the potential for delisting based on available data and providing future monitoring recommendations.

Ontario International Airport Authority Storm Water Compliance Program

ONTARIO INTERNATIONAL AIRPORT AUTHORITY | ONTARIO, CA

Industrial Permit Team Manager. Provided stormwater program management services for Ontario International Airport Authority (OIAA). Program included monitoring and reporting activities at Ontario Airport (ONT) for compliance with their Industrial Storm Water Permit. Additional support included preparation of Stormwater Pollution Prevention Plans, annual reporting, training, BMP design and technical support, tenant inspections, regulatory technical reviews and preparation of technical comments, and third-party litigation support. NV5 performs BMP inspections at over 23 tenant locations.

Port of Long Beach As-Needed MS4 Stormwater Monitoring & Reporting Services

PORT OF LONG BEACH | LONG BEACH, CA

Program Manager. Provided regulatory support, development of a consistent sampling and analysis program, quality assurance program plans, and conducted monitoring and reporting for MS4 Permit Compliance. Provided TMDL Program Reviews and Comments, MS4 Program Compliance review, reporting, and engineering assistance for SUSMP Plan Check reviews. Also assisted the Port with literature reviews and recommendations for low impact development mitigation strategies and developed a mitigation banking and water quality credit trading assessment.

Palos Verdes Peninsula CIMP MS4 Outfall Monitoring CITY OF RANCHO PALOS VERDES | RANCHO PALOS VERDES, CA

Managed the MS4 outfall monitoring requirements for the Peninsula CIMP as a key subconsultant. Prior to commencing field work, he conducted field reconnaissance and worked with the Peninsula Watershed Management Group agencies to obtain encroachment and traffic control permits, developed a sampling and analysis plan, and developed a health and safety plan. Procured, installed, calibrated, and maintained two flowmeters at MS4 outfall locations, which have been installed since late 2016. Conducting wet weather monitoring at six MS4 outfall locations during three storm events per year and dry weather MS4 outfall monitoring at four locations monthly which includes protocols for TMDL compliance, including MS4 outfall investigations of non-stormwater discharges to identify potential source(s) of illicit discharges and connections and/or discharges of non-stormwater flows.

Stormwater Permit Strategy Study, John Wayne Airport JOHN WAYNE AIRPORT | ORANGE COUNTY, CA

Program Manager. Supported John Wayne Airport in developing a Conceptual Storm Water Discharge Compliance Plan to assist in managing runoff regulated under the General Industrial Permit as well as the Orange County MS4 Permit and may reduce regulatory exposure. Summarized existing conditions, conducted runoff modelling of discharge points, identified alternative storm water management measures and developed runoff management strategies.



CONTACT INFO Garth.Engelhorn@NV5.com

EXPERIENCE 20 years

EDUCATION

BS, Earth Science/Geology (Emphasis in Geophysics) University of California, San Diego, 2003

REGISTRATIONS

Certified Professional in Storm Water Quality (CPSWQ), No. 953

Qualified Industrial Stormwater Practitioner/Trainer of Record (QISP/ToR), No. 140

AFFILIATIONS

California Stormwater Quality Association (CASQA)

San Diego Environmental Professionals

Industrial Environmental Association

GARTH ENGELHORN, CPSWQ, QISP/TOR

Senior Project Manager

Mr. Engelhorn has over 20 years of experience implementing water quality monitoring programs with 16 years directly supporting municipalities in Southern California with NPDES permit regulations. He designed and implemented monitoring, reporting, and planning strategies for a variety of complex projects and environmental regulatory programs. His experience includes managing permit compliance and water quality monitoring programs for the County of San Diego, City of San Diego, City of Vista, City of Carlsbad, City of Oceanside, City of Escondido, Riverside Flood Control and Water Conservation District, County of Orange, Port of Long Beach, and many others including excellent working relationships with Regional Water Quality Control Board staff. He has extensive experience leading NPDES and TMDL compliance monitoring programs, including the design of watershed assessments, methodologies, facility inspections, source identification studies, BMP effectiveness assessments, and compliance reporting. His work focuses on project development, study design, project management, and quality oversight. His proven project approach includes frequent client and high-quality communications, development of realistic work schedules, adherence to budget, and effective staff communication.

Project Experience

Lake Elsinore And Canyon Lake Nutrient TMDL Watershed Monitoring And Annual Reporting | Project Manager

SANTA ANA WATERSHED PROJECT AUTHORITY | RIVERSIDE, CA

Currently managing the annual watershed-wide monitoring and reporting program for the Lake Elsinore and Canyon Lake Nutrient TMDL Task Force. Coordinating storm sampling events to determine the total nutrient loads into the lakes from their tributaries. Annual water quality data is used to calculate loads and evaluate nitrogen and phosphorus TMDL compliance with waste load allocations. Tasks include CEDEN data management and annual reporting.

Santa Ana River Watershed Post-Fire Monitoring-Holy Fire | Project Manager RIVERSIDE COUNTY FLOOD CONTROL DISTRICT | RIVERSIDE, CA

Developed and conducted a water quality to assess post-fire contaminant concentration and flux by sampling stormwater runoff from the terminal end of burned catchments. The data were compared to reference sites to assess the effects of the Holy Fire on the hydrologic response, sediment loads, and contribution of pollutant loads (metals, nutrients, and organic contaminants) from post-fire runoff. The information provided data to inform management actions, including strategies used to comply with nutrient TMDLs.

CIMP MS4 Outfall Monitoring | Project Manager PALOS VERDES PENINSULA | RANCHO PALOS VERDES,CA

Implementing MS4 outfall monitoring requirements for the Peninsula Coordinated Integrated Monitoring Program (CIMP) as a key subcontractor to Anchor QEA (prime contractor). Prior to commencing field work, conducted field reconnaissance and worked with the Peninsula Watershed Management Group agencies to obtain encroachment and traffic control permits, developed a sampling and analysis plan, and developed a health and safety plan. Procured, installed, calibrated and maintained two flowmeters at MS4 outfall locations, which have been installed since late 2016. Conducting wet weather monitoring at six MS4 outfall locations during three storm events per year and dry weather MS4 outfall monitoring at four locations on a monthly basis which includes protocols for TMDL compliance, including MS4 outfall investigations of non-storm water discharges to identify potential source(s) of

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GARTH ENGELHORN, CPSWQ, QISP/TOR

Senior Project Manager

illicit discharges and connections and/or discharges of nonstorm water flows.

Industrial and MS4 Storm Water Monitoring and Reporting Services | Project Manager

PORT OF LONG BEACH | LONG BEACH, CA

Provided regulatory support, development of a consistent sampling and analysis program, quality assurance program plans, and to provide support during site walks and identification of potential sampling sites. The Port's goals were to collect robust high-quality data that would provide support with analysis of receiving water total maximum daily loads (TMDLs) and to characterize storm water quality from the permittees' facilities. Following transition to individual tenant Permits, the Port required assistance with complying with Phase I MS4 Permit

Santa Margarita River WQIP Wet Weather Monitoring | Project Manager

RIVERSIDE COUNTY FLOOD CONTROL DISTRICT | RIVERSIDE CA

Conducting the Santa Margarita River WQIP wet weather monitoring at the mass loading stations and MS4 outfall locations. Responsibilities include field reconnaissance, equipment installations, flow monitoring, automated sample collection, data collection, and CEDEN data formatting and uploading of field, chemistry, and toxicity data.

NPDES MS4 Outfall Monitoring And Assessment Program | Project Manager

CITY OF OCEANSIDE | OCEANSIDE, CA

MS4 Permit compliance program through evaluation of over 190 major MS4 outfalls on a yearly basis. Paired with the outfall monitoring, NV5 conducts illicit discharge source identification investigations to identify specific sources of flow and has provided continuous flow monitoring with the Flow SystemTM to collect accurate measurements of real-time flow rates and trends to establish baseline flow conditions, measure the effectiveness of strategies implemented toward reducing or eliminating dry weather flows and estimate pollutant load reductions. NV5 collects visual observations on a mobile broadband tablet using the City's asset management database.

Dry Weather Outfall Monitoring And Jurisdictional Compliance Support | Project Manager CITY OF ESCONDIDO | ESCONDIDO, CA

MS4 compliance program in conducting over 170 outfall inspections on a yearly basis as part of the City's Water Quality Improvement Plan (WQIP) requirements. NV5 conducts paired upstream illicit discharge source identification investigations and has provided continuous flow monitoring with the Flow SystemTM to collect accurate measurements of real-time flow rates and trends to establish baseline flow conditions, and measure the effectiveness of strategies implemented toward eliminating dry weather flows. NV5 assists the City in management of their online field database, including desktop and field verification of outfalls to be included in monitoring inventory, data QA/QC, and formatting of visual and analytical data into the regional data sharing template and CEDEN compatible format. In addition, NV5 has been providing Jurisdictional Runoff Management Plan (JRMP) technical support services, including QSP support for a Capital Improvement Project and provided regulatory assistance regarding structural BMP/ TCBMP/land development requirements of the Phase I MS4 Permit.

Dry Weather Ms4 Sampling Services | Project Manager CITY PALOS VERDES ESTATES | PALOS VERDES ESTATES, CA

Conducting dry weather source tracking within the municipal separate storm sewer system (MS4) tributary to drainage outfalls at Malaga Cove Beach. Task included developing a field sampling plan, health and safety plan, and a systematic adaptive follow-up sampling plan to collect dry weather samples from the storm drain network tributary. Conducted field sampling and analysis to track human associated HF183 gene sequences from Bacteroides species.

MS4 Outfall Monitoring Requirements for the Peninsula Coordinated Storm Water Monitoring Program | Project Manager

LOS ANGELES WORLD AIRPORTS | LOS ANGELES, CA

Currently supporting the storm water monitoring program for Los Angeles International Airport (LAX) and Van Nuys Airport (VNY). Program includes monitoring station equipment procurement, installation, maintenance, and continuous monitoring at three mass loading stations at LAX and monitoring at one station at VNY for compliance with their Industrial Storm Water Permits. Monitoring includes flow and load monitoring, sampling of a full suite of priority pollutants, laboratory analysis, data management, and reporting.



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LE&CL TMDL Task Force Compliance Monitoring Program and Technical Support Services

Rick Whetsel, Senior Watershed Manager LESJWA Board Meeting | April 17, 2025

Recommendation

It is recommended that the Board of Directors approves the following to oversee and implement the TMDL Compliance Monitoring Program for Lake Elsinore and Canyon Lake TMDL Task Force for Fiscal Years (FYs) 2026-2028:

- 1. General Services Agreement with GEI Consultants; and
- 2. Task Order No. GEI160-04 for an amount not-to-exceed \$880,801, (based upon annual amounts not to exceed \$284,966 for FY 2025-26, \$293,515 for FY 2026-27, and \$302,320 for FY 2027-28) for three years with an option to exercise a two-year extension.

It is recommended that the Board of Directors approve the following:

1. Change Order to the GEI Consultants agreement, Task Order No. GEI160-03 for an amount not-toexceed \$20,000 to provide technical support services to the Lake Elsinore and Canyon Lake TMDL Task Force for the remainder of Fiscal Year (FY) 2024-25.

2. Task Order No. GEI160-0x with GEI Consultants for an amount not-to-exceed \$55,000 to provide technical support services to the Lake Elsinore and Canyon Lake TMDL Task Force for FY 2025-26.



San Jacinto River



Lake Elsinore and Canyon Lake WQ Problems

- -Algal blooms
- -Fish kills

Cause of WQ Problems

- -Excessive phosphorus and nitrogen (nutrients)
- -Depletion of oxygen

Sources of Nutrients

- -Urban, agriculture, erosion, septic systems
- –Nutrient loading occurs during large storm events



Impairments Triggered Need for TMDLs

Purpose and Goal of TMDLs

- Attain and maintain applicable water quality standards
- Account for seasonal variations
- Pollutant by pollutant basis

Implementation of TMDLs

- Identification of actions/activities (i.e., tasks)
- Numeric targets
- Incorporated into discharge permits

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Lake Elsinore and Canyon Lake TMDL Task Force

- Water Quality Control Plan for the Santa Ana River Basin amended to include nutrient TMDLs for Canyon Lake and Lake Elsinore (2004)
 - DO, Chlorophyll a, Ammonia, Total Phosphorus (TP) and Total Nitrogen (TN)
 - Load Allocations (LA) and Waste Load Allocations (WLA) for discharge (non-point sources and point sources)
 - Implementation Plan (activities to meet water quality standards)
- Lake Elsinore & Canyon Lake TMDL Task Force formed by stakeholders (2005)
- LESJWA administers Task Force
 - Coordinate costs of all implementation efforts.
 - Implement TMDL Implementation Plan
 - Reviews TMDL Basin Plan Amendment

Task Force Agreement

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

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Task Force Members for LECL TMDL Task Force

- Riverside County
- Riverside County Flood Control and Water Conservation District
- City of Beaumont
- City of Canyon Lake
- City of Hemet
- City of Lake Elsinore
- City of Moreno Valley
- City of Murrieta
- City of Menifee
- City of San Jacinto
- City of Riverside
- City of Perris

- City of Wildomar
- d Caltrans
 - CA Dept. of Fish and Wildlife
 - Elsinore Valley Municipal Water District
 - March Air Force Reserve JPA
 - March Air Force Base
 - Eastern Municipal Water District
 - San Jacinto Ag Operators
 - San Jacinto Dairy Operators

Key TMDL Task Force Activities

- Amend the Santa Ana Basin Plan to update the Lake Elsinore and Canyon Lake TMDLs
- Implement tasks as required by the TMDLs
- Conduct annual Lake Elsinore and Canyon Lake TMDL water quality monitoring
- Conduct bi-annual Canyon Lake alum applications
- Conduct special studies and supplemental projects
- ns cts



TMDL Compliance Monitoring Program

Key Components:

- Project Management and Coordination with Lake Elsinore Canyon Lake TMDL Task Force.
- **Contract with Laboratory**
- Implement Monitoring Program
- Data Management
- Draft and Final Annual Water Quality Monitoring Report
- Americans with Disabilities Act (ADA) Standards for Accessible Design





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TMDL Compliance Monitoring Program: Storm Events

Monitor during storm events (3/year) and monthly during dry weather (when conditions allow):

- San Jacinto River @ Goetz Road
- Salt Creek @ Murrieta Road
- San Jacinto River below Railroad Canyon (Canyon Lake) Dam (when dam is spilling)
- San Jacinto River @ Ramona Expressway (not expected to flow except under extremely high rainfall conditions)



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TMDL Compliance Monitoring Program: Lake Elsinore

Lake Elsinore

- Lake Level Stabilization
- Lake Reconfiguration
- Reclaimed Water
- Physical Controls LEAMS effectiveness Biological Control
- Bass Stocking to reduce shad populations
- Carp removal reduce sediment re-suspension
- Phytoplankton and zooplankton population assessment and TDS tolerance studies

Other Special Studies: Nutrient loading source ID studies and modeling



TMDL Compliance Monitoring Program: **Canyon Lake Monitoring**

Canyon Lake:

- Nutrient Loading Source ID **Studies and Modelling**
- **Nutrient Sequestration Special Studies**
- **BMP** Alternative Evaluation
- **Alum Treatments**



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TMDL Technical Support

- Technical Support for Adoption of Revised TMDLs:
 - Prepare TMDL Technical Report
 - Prepare responses to comments
 - Coordination with Regional Board
- Regional Project Implementation Support:
 - Support Canyon Lake Alum Project
 - Calculate alum dosages
 - Review pre-application field data
 - Support public workshops

- Support CEQA amendment
- Review/Design special studies and supplemental projects concepts
- Prepare stakeholder cost share / offset demand calculations
 - Assess compliance with TMDLS (annually)



Recommendation

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Questions

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