

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

AGENDA

BOARD OF DIRECTORS MEETING

ELSINORE VALLEY MUNICIPAL WATER DISTRICT

31315 Chaney Street
Lake Elsinore, California 92531
951.674.3146 (EVMWD) / 951.354.4247 (LESJWA)

Wednesday, August 7, 2013; 4:00 p.m.

CALL TO ORDER/PLEDGE OF ALLEGIANCE (Chair Nancy Horton)

ROLL CALL: SAWPA__ EVMWD__ CITY OF LAKE ELSINORE__ CITY OF CANYON LAKE__
COUNTY OF RIVERSIDE__

PUBLIC COMMENTS:

Members of the public may address the Board on any item that is within the jurisdiction of the Board; however, no action may be taken on any item appearing on the agenda unless the action is otherwise authorized by Subdivision (b) Section 54954.2 of the Government Code. Members of the public are requested to provide a public comment notice card to the Board Secretary prior to the Board meeting in order to speak. The public is given a maximum of five minutes to speak on an issue following discussion of an agenda item.

Any person with a disability who requires accommodation in order to participate in this meeting may contact LESJWA Board Secretary, Dawna Munson at 951.354.4247, at least 48 hours prior to the meeting in order to request a disability-related modification.

Materials related to items on this Agenda submitted to the Board after distribution of the agenda packet, are available to the public during regular business hours at the Authority's office: 11615 Sterling Avenue, Riverside, CA 92503.

CONSENT CALENDAR

Consent Calendar items are considered routine and non-controversial, to be acted upon by the Board at one time without discussion. If a Board member, staff member, or interested person requests that an item be removed from the Consent Calendar, the request will become the first item of business on the agenda.

- 1.0 MINUTES.....3**
RECOMMENDATION: Approve the Minutes of the Board of Directors meeting held June 20, 2013.
- 1.1 TREASURER'S REPORTS.....9**
RECOMMENDATION: Receive and file financial statements from May and June 2013.
- 1.2 COMMITTEE STATUS REPORT (Memo727).....15**
RECOMMENDATION: Receive and file a status report from the Education and Outreach Committee meeting held July 9, 2013.

End of Consent Calendar

2.0	CANYON LAKE ALUM APPLICATION (Memo 728)	19
	RECOMMENDATION: That the Board of Directors:	
	1) Ratify the June 5, 2013 CEQA approval of the Canyon Lake Alum Application, and file a Notice of Determination to implement alum dosing in Canyon Lake as part of the Proposition 84 grant funded Phase 1 – Canyon Lake Hybrid Treatment Project, and	
	2) Approve Task Order No. AQUA160-01 with AquaTechnex, LLC for an amount not-to-exceed \$488,490 to implement the alum dosing in Canyon Lake.	
3.0	REGULATORY STRATEGIST/ TMDL COMPLIANCE SUPPORT SERVICES (Memo 729)	37
	RECOMMENDATION: Approve Task Order No. RISK160-07 with Tim Moore of Risk Sciences for an amount not-to-exceed \$48,640 to continue support for FY 2113-14 as the regulatory strategist and compliance expert for the Lake Elsinore and Canyon Lake TMDL Task Force.	
4.0	CANYON LAKE PERFORMANCE MONITORING PROGRAM (Memo 730)	43
	RECOMMENDATION: Approve Task Order No. MWH160-01 with MWH Americas for an amount not-to-exceed \$94,650 to conduct Effectiveness Monitoring for the Alum Dosing in Canyon Lake, as part of the Phase 1 – Canyon Lake Hybrid Treatment Project.	
5.0	ADMINISTRATOR’S COMMENTS	
6.0	DIRECTORS’ COMMENTS	
7.0	ADJOURN	

NEXT BOARD OF DIRECTORS MEETING: Thursday, October 17, 2013 at 4:00 p.m.

**MINUTES OF THE
REGULAR BOARD OF DIRECTORS MEETING
OF THE
LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY**

June 20, 2013

DIRECTORS PRESENT

Nancy Horton, Chair
Phil Williams
Robert Magee

REPRESENTING

City of Canyon Lake
Elsinore Valley Municipal Water District
City of Lake Elsinore

DIRECTORS ABSENT

Kevin Jeffries
Tom Evans

County of Riverside
Santa Ana Watershed Project Authority

OTHERS PRESENT

Judy Guglielmana
Steve Horn
Pat Kilroy
Philip Southard
Joe Aklufi
Karen Williams
Mark Norton
Dawna Munson

EVMWD
County of Riverside
City of Lake Elsinore
O'Reilly Public Relations
LESJWA Legal Counsel
LESJWA/SAWPA CFO
LESJWA Authority Administrator
LESJWA Board Secretary

The Regular Board of Directors meeting of the Lake Elsinore and San Jacinto Watersheds Authority was called to order at 4:10 p.m., by Chair Nancy Horton at the Elsinore Valley Municipal Water District, located at 31315 Chaney Street, Lake Elsinore, California. Chair Horton asked for roll call. A quorum was present with representation as follows: City of Canyon Lake, EVMWD, and City of Lake Elsinore.

Chair Horton asked if there were any comments from members of the public wishing to address the Board on matters within its jurisdiction. There were no public comments.

1.0: CONSENT CALENDAR

Chair Horton presented the Consent Calendar for review and approval.

Upon motion by Director Magee, seconded by Director Williams, the motion unanimously carried.

2013/6-1

MOVED, approval of the Consent Calendar including the Treasurer's Reports from March and April 2013, and the Minutes from the April 18, 2013 Board Meeting.

2.0: Canyon Lake Alum Application (Memo #721)

Mark Norton reviewed the RFP process for the Canyon Lake Alum Application that went out in May 2013, sent to several firms and posted to the website. From the solicitation, only two proposals were received—one from AquaTechnex LLC and one from Marino Biochemists. The proposals were reviewed on June 12 by a technical review committee comprised of representatives from EVMWD, the City of Canyon Lake, Riverside County Flood Control District, and LESJWA. The Committee used a rating and ranking form for the initial assessment that was a qualification-based selection rather than a low-bid based selection. The low bidder was contacted with a few questions, and based on their responses and comments, the Committee believes that AquaTechnex has the most experience and expertise of the two proposals. The cost is below the engineer's estimate and will result in a significant savings to the Task Force. Further, the references contacted had very strong and positive comments.

The work will be done in five separate applications over the 2013 through 2015 time span. EVMWD also provided feedback that they will have staff there on site to assure the application is to specific standards. The Project Manager from AquaTechnex has assured us that they will follow all the requirements of the CEQA. There also will be continued outreach with the residents of Canyon Lake to make sure they are aware that this is all safe and performed using correct procedures, and following the procedures of the Property Owner's Association as well. Staff is pleased to recommend approval of this project, which is the first implementation project by the TMDL Task Force. The start date would be September 2013.

Upon motion by Director Magee, seconded by Chair Horton, with Director Williams voting in the negative, the motion failed pursuant to the LESJWA JPA, Item 4.4, Voting, that *...all actions of the Board shall be passed upon the affirmative vote of a majority of the Board of Directors...*

2013/6-2

MOVED, approval of a Task Order with AquaTechnex, LLC for an amount not-to-exceed \$488,490 to apply alum to Canyon Lake from 2013 to 2015.

The above motion failed with the following roll call vote:

Ayes:	Horton, Magee
Noes:	Williams
Absent:	Evans, Jeffries
Abstain:	None

Chair Horton requested that this item be remanded to the next meeting; the Board concurred.

3.0: Regulatory Strategist/TMDL Compliance Support Services (Memo #722)

Mark Norton said this item is to request approval of a task order with Tim Moore of Risk Sciences to continue as compliance expert for the Lake Elsinore/Canyon Lake (LE/CL) TMDL Task Force. This support function is funded by the TMDL Task Force, and the work would be to support the Task Force and provide the necessary expertise to assure that the regulations are being met. Tim Moore also would prepare and support the credit sharing agreements. Staff has made one change to the task order shown in the packet. Under Item II, No. 2 on the Scope of Work, strike "BMP" and replace it with "TMDL". Mr. Norton said this change broadens the parameters of agreements to be developed.

Director Williams moved approval. Director Magee said he would like to second the motion to accept staff's recommendation; however, the City of Lake Elsinore would like the inclusion of some language that it believes would add more clarity to the existing scope of work. After the Item II, No. 2 sentence, "prepare and revise cost allocations and credit sharing agreements to support development of TMDL implementation projects", the City suggests adding the language, "*...including supplemental water addition, aeration mixing systems, and fishery management. Assist in obtaining nutrition offset credits from the RWQCB for operators of the BMP Implementation Projects*", which, instead of "BMP" has now been changed to "TMDL" Implementation Projects, as amended by staff. The idea is to provide more specific detail and clarity, and to make sure everyone knows it includes all these different options.

Mark Norton said staff had received that suggested language, which was shared with the TMDL Task Force, Tim Moore, and the LESJWA Chair. They have concerns with the revised language that it may open up some controversy in the specific citing of supplemental water, although it was included in the implementation recommendation by Tim Moore in an earlier document. There are ongoing negotiations among the operators of aeration systems as to whether or not supplemental water should be included in the cost sharing agreement among the three parties, the County of Riverside, the City of Lake Elsinore, and EVMWD. There was consideration of adding the MS4s to this discussion. There also may be concern that it wasn't brought back to the Task Force for discussion before adding this additional text. Therefore, the LE/CL TMDL Task Force Chair feels that this additional language would not be recommended. Upon some discussion, Director Magee expressed his dissatisfaction with the Task Force's position on this issue, and noted that he was not going to add any comments at this time.

Chair Horton said she regularly attends the TMDL meetings, and the core issue is that this is the agreement with Tim Moore. It is very broad, and the TMDL Task Force would be the one to vote that Risk Sciences is to work on the addition of water to Lake Elsinore – it’s not to say that they wouldn’t do so, but it’s the TMDL’s prerogative to decide what Mr. Moore’s tasks are once the agreement is in place. All these things will occur just as discussed in the past. The Task Force would make its recommendations and if any money were to be expended, then it would come before this Board. These changes (to the scope) would be tinkering with Risk Sciences’ contract, and that isn’t where this should go. Director Williams noted that those are items that this Board built and the precise reasons that we’re here today, and it all worked up to meeting the TMDLs. He would agree with the City of Lake Elsinore’s suggested additional language to the task order, as recited by Director Magee. Chair Horton commented that the TMDL Task Force must have a say and they will approve these things, but it needs to come at the TMDL Task Force level and not LESJWA dictating what they’ll work on.

Discussion ensued as to concerns that without the additional detailed language, the Task Force may think that’s all they have to do, and that perhaps language could be added with regard to “...as studies progress, or as funds are available...” to avoid the appearance of dictating the scope of work. Director Williams suggested adding to the beginning of the language proposed by Director Magee, “...to include, but not limited to”. Director Magee concurred and said to let the motion stand with the language modified to, “to include but not limited to.” Chair Horton added that it all will be discussed and whatever it takes, she believes the Task Force members are committed to it.

Upon motion by Director Williams, seconded by Director Magee, with Chair Horton voting in the negative, the motion failed, pursuant to the LESJWA JPA, Item 4.4, Voting, that *...all actions of the Board shall be passed upon the affirmative vote of a majority of the Board of Directors...*

2013/6-3

MOVED, approval of Task Order No. RISK160-07 with Time Moore of Risk Sciences for an amount not-to-exceed \$68,847 to oversee and implement the FY 2013-2014 Phase 1 watershed-wide monitoring for the Lake Elsinore and Canyon Lake Nutrient Total Maximum Daily Load (TMDL), with additional language added to Section II of the Scope of Work, Item 2 that reads, “Prepare and revise cost allocation and credit sharing agreements to support development of TMDL implementation projects...” Add the language,

“to include but not limited to supplemental water addition, aeration mixing systems, and fishery management. Assist in obtaining nutrition offset credits from the RWQCB for operators of the TMDL implementation projects.”

The above motion failed with the following roll call vote:

Ayes: Magee, Williams
Noes: Horton
Absent: Evans, Jeffries
Abstain: None

Chair Horton requested that this item be remanded to the next meeting; the Board concurred.

4.0: Watershed-wide Nutrient TMDL Monitoring Program (Memo #723)

Mark Norton said this is to authorize Weston Solutions to oversee and implement the Phase 1 watershed-wide monitoring for the Lake Elsinore and Canyon Lake Nutrient TMDL for fiscal year 2013-14. The cost is \$68,847. This was discussed at the TMDL Task Force level. This monitoring is required under the TMDL requirements. Staff recommends proceeding with Weston Solutions.

Upon motion by Director Williams, seconded by Director Magee, the motion unanimously carried.

2013/6-4

MOVED, approval of Task Order No. WES60-03 with Weston Solutions for an amount not-to-exceed \$68,847 to oversee and implement the FY 2013-14 Phase 1 watershed-wide monitoring for the Lake Elsinore and Canyon Lake Nutrient TMDL.

with the following roll call vote:

Ayes: Horton, Magee, Williams
Noes: None
Absent: Evans, Jeffries
Abstain: None

5.0: LESJWA Education and Outreach (Memo #724)

Mark Norton said this is a recommendation to approve a task order with O’Reilly Public Relations in the amount not-to-exceed \$17,050 for the continuation of the LESJWA Education and Outreach Program for Fiscal Year 2014-15. Philip Southard of O’Reilly Public Relations is here today to provide an overview.

Philip Southard provided a PowerPoint presentation on LESJWA accomplishments and some potential action items. He reviewed the LESJWA Water Summit, the education and outreach activities for the alum application, the proactive community engagement by attending the “Splash in the Spring” event, and holding a booth at the SAWPA 2013 OWOW Conference that gave them the opportunity to provide materials and information about LESJWA. They want to make sure they are consistently educating the media and assisting in developing Op-Ed pieces—informing them of LESJWA’s activities to improve the water in both lakes and the watershed. He reviewed the 2013-14 education and outreach plan and the approaching key milestones. They hope for a third LESJWA Water Summit, which helps to highlight the issues in the watershed and LESJWA’s active involvement.

Director Magee said O’Reilly does a great job representing LESJWA. He then shared an unfavorable newspaper article about the lakes needing to meet the water quality targets deadline. He noted that the TMDL deadline is seven years away, and the article is misleading and offensive. He supports retaining O’Reilly Public Relations, and he also wants to “punch back” at this article by preparing an Op-Ed piece signed by LESJWA’s Chair. Director Magee moved to continue with this contract, provided they respond to the recent article he shared. Director Williams seconded the motion, adding that we all know it takes a lot to change opinions about the Lakes, and there still are embedded beliefs and jokes. Everything O’Reilly Public Relations has done is superb, and it’s unfortunate that we can’t afford a larger contract with the firm.

Chair Horton commented that we all need to be proactive in educating our reporters. We’re falling behind. Mr. Southard said it is definitely something O’Reilly wants to work on moving forward.

Director Magee noted that the City of Lake Elsinore has some amazing staff assets at EVMWD and the City. O’Reilly can tap into both those organizations. The good news needs to get out. The City of Lake Elsinore is going to have a workshop with the Press Enterprise and shareholders are invited. They plan to discuss with them LESJWA’s values and that they need to pick up the pace. Chair Horton requested inviting Philip Southard and her to the meeting.

Upon motion by Director Magee, seconded by Director Williams, the motion unanimously carried.

2013/6-5

MOVED, approval of Task Order No. OREIL477-12 with O’Reilly Public Relations (OPR) in the amount not-to-exceed \$17,050 for continuation of LESJWA’s Education and Outreach Program, with the provision that OPR immediately respond to the recent unfavorable article written by the Press Enterprise regarding the lakes needing to meet the water quality target deadline.

with the following roll call vote:

Ayes: Horton, Magee, Williams
Noes: None
Absent: Evans, Jeffries
Abstain: None

6.0: Authorize SAWPA to Continue as LESJWA Authority Administrator and Aklufi and Wysocki to Continue as LESJWA Legal Counsel (Memo 725)

Mark Norton said there were questions at the last meeting about the roles of the TMDL Task Force and SAWPA. He displayed via PowerPoint the operating revenue where 70% is from TMDL stakeholders, and where money will be spent for the coming fiscal year—vastly toward alum treatment for Canyon Lake, SAWPA 14%, and monitoring studies 27%; and he displayed a chart of the projected budget for the next five years. In looking at the JPA operations, the majority of cost is SAWPA support along with some lesser expenses. He displayed the SAWPA organizational chart showing the LESJWA-affiliated staff, and provided some input on an analysis comparing the cost of using SAWPA as administrator to costs using another consultant. It's comparable, but it cost less to go with SAWPA. Staff also recommends continuing with Joe Aklufi of A&W Law, which costs less than using SAWPA's current Legal Counsel.

He discussed the Board agenda items and breakdown; 55% of Board meetings are TMDL related. There is a dual activity and they aren't being charged for that, but perhaps they should be. He showed the five-year projected revenue for the LESJWA JPA administration alone, and discussed the funding gaps. Staff will examine ways to address these issues, and will look at it in detail over the next six months and bring back a proposal for how we may close that gap. Staff recommends, assuming a three-year timeframe, to continue with SAWPA as administrator and with Joe Aklufi of A&W Law as Legal Counsel.

Director Williams said he appreciates Mark Norton's report and efforts preparing it. He recommended approval with a caveat. He asked if there is somewhere to show that SAWPA expenses have been or can be reduced. Without going out to bid, the public perception may be that we could do a better job at seeking some cost savings. Although he's 100% behind keeping Joe Aklufi as legal counsel, and the Board can vote to continue SAWPA's services for another few months if need be, it may be best to table this item to a future meeting to provide time to find other savings. Joe Aklufi asked if staff had an answer to the question about LESJWA being required to pay for insurance—if there's any savings there. Karen Williams addressed the Board saying that as a JPA, LESJWA can be sued, and therefore it must have insurance. Joe Aklufi suggested examining the risks. Discussion ensued about the risks and exposures, and how contractors have insurance where LESJWA is named as the additional insured.

Director Magee commented that SAWPA gives tremendous value for the money charged. However, seeing that O'Reilly Public Relations has taken a 45% cut in pay and the Directors have taken a 100% cut in pay, he recommends a 3% cut in SAWPA's pay. The Board will assign Mark Norton the task of deciding how to best carry that out.

Chair Horton suggested that perhaps a better way than a straight 3% cut would be to examine what SAWPA provides, and determine which services are essential and which aren't. We have no way to reduce individual salaries. It may be better to look at line items rather than SAWPA making decisions about services and potentially withholding a service. There are only seven years left before having to be on target with TMDL approvals; this wouldn't be a good time to cut SAWPA's services. The Board should give Mark Norton suggestions as to potential cuts and have him come back with proposals. Director Williams replied that he believes Mark Norton would be able to work on this with the help of his staff, and the Board should be willing to give him leeway to make the choices. It's a good message to send out that this Board runs a tight, fiscally-responsible organization.

Discussion ensued and the Board concurred to vote on this agenda item in two separate votes.

Upon motion by Director Williams, seconded by Director Magee, the motion unanimously carried.

2013/6-6

MOVED, approval to retain Joe Aklufi of A &W Law as LESJWA's Legal Counsel.

with the following roll call vote:

Ayes: Horton, Magee, Williams
Noes: None
Absent: Evans, Jeffries
Abstain: None

Upon motion by Director Williams, seconded by Director Magee, the motion unanimously carried.

2013/6-7

MOVED, approval to retain SAWPA as LESJWA's Authority Administrator, with a 3% cut from the total Budget. Mark Norton will provide recommendations to the Board at a future meeting as to how that will be accomplished.

with the following roll call vote:

Ayes: Horton, Magee, Williams
Noes: None
Absent: Evans, Jeffries
Abstain: None

7.0: LESJWA Water Summit (Memo 726)

Mark Norton said that the LESJWA Water Summit was a successful event with a good turnout. There also was more attendance by our politicians. Money was saved by holding the event at a public facility, and it set up a good template for future water summit events.

8.0: ADMINISTRATOR'S COMMENTS

Mark Norton said that staff will need to do some homework on the actions taken today.

9.0: DIRECTORS' COMMENTS

None.

As there was no further business, Chair Horton adjourned the meeting at 5:24 p.m.

APPROVED: August 7, 2013

Nancy Horton, Chair

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY
 CASH FLOW STATEMENT
 AS OF 05/31/13

Balance as of 04/30/13 \$ 485,656.36

**Funds Received
 Deposits:**

Open - Grant Invoices
 N/A

\$ -

Open - Member & Other Contributions

N/A

\$ -

\$ -

Total Due LESJWA

\$ -

Disbursement List - May 2013

(32,955.48)

Funds Available as of 05/31/13

\$ 452,700.88

Funds Available:

Checking

\$ (4,155.99)

LAIF

\$ 456,856.87

Total

\$ 452,700.88

Lake Elsinore San Jacinto Watersheds Authority
LE/CL TMDL Invoice History
FYE 2009 - 2013

Agency	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13
March ARB	10,000.00	10,000.00	10,000.00	10,000.00	13,050.00
CalTrans	10,000.00	10,000.00	10,000.00	10,000.00	13,050.00
City of Beaumont	2,957.00	3,940.00	4,719.53	3,900.00	1,865.00
City of Canyon Lake	3,670.00	4,890.00	4,109.46	3,396.00	644.00
City of Hemet	22,308.00	29,723.00	27,460.77	22,696.00	6,286.00
City of Lake Elsinore	21,403.00	67,782.00	89,889.28	73,133.00	-
City of Menifee	-	-	24,752.77	20,458.00	23,649.00
City of Moreno Valley	50,638.00	67,469.00	63,546.31	52,520.00	15,425.00
City of Murrieta	2,006.00	2,673.00	786.96	650.00	-
City of Perris	15,000.00	19,985.00	20,060.94	16,580.00	5,752.00
City of Riverside	2,071.00	2,759.00	3,587.28	2,965.00	1,575.00
City of San Jacinto	9,565.00	12,744.00	13,470.59	11,133.00	4,315.00
City of Wildomar	-	-	4,668.93	3,859.00	4,461.00
County of Riverside	57,352.00	76,415.00	39,829.77	32,919.00	-
Dept of Fish and Game	10,000.00	10,000.00	10,000.00	10,000.00	13,050.00
Eastern Municipal Water District	10,000.00	10,000.00	10,000.00	10,000.00	13,050.00
Elsinore Valley Municipal Water District	13,656.00	57,460.00	75,294.20	61,070.00	-
March JPA	10,000.00	10,000.00	10,000.00	10,000.00	13,050.00
San Jacinto Agricultural Operators *	159,074.00	-	-	143,320.00	28,278.00
San Jacinto Dairy & CAFO Operators *	41,634.00	37,252.80	25,000.00	10,000.00	10,211.00
Total	451,334.00	433,092.80	447,176.79	508,599.00	167,711.00
Total Paid Contributions	451,334.00	433,092.80	447,176.79	379,290.00	141,611.00
Total Outstanding Contributions	-	-	-	129,309.00	26,100.00

Total Outstanding Contributions

CalTrans	-	-	-	-	13,050.00
Dept of Fish and Game	-	-	-	-	13,050.00
Total Outstanding All Years	-	-	-	-	26,100.00

Lake Elsinore/San Jacinto Watershed Authority
Statement of Net Assets
For the Eleven Months Ending Friday, May 31, 2013

Assets

Checking - Citizens	(\$4,155.99)
L.A.I.F.	456,856.87
Total Assets	<u><u>\$452,700.88</u></u>

Liabilities

Accounts Payable	<u>28,817.56</u>
Total Liabilities	<u>\$28,817.56</u>

Retained Earnings	687,740.55
Excess Revenue over (under) Expenditures	<u>(\$263,857.23)</u>

Total Net Assets	<u>\$423,883.32</u>
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Total Liabilities and Net Assets	<u><u>\$452,700.88</u></u>
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Lake Elsinore/San Jacinto Watershed Authority
Revenues, Expenses and Changes in Net Assets
For the Eleven Months Ending Friday, May 31, 2013

	Period Actual	YTD Actual	Annual Budget	% Used	Budget Variance
Revenues					
State Grant Proceeds	\$0.00	\$59,765.27	\$41,535.00	143.89%	(\$18,230.27)
LAIF Interest	0.00	1,603.68	1,660.00	96.61%	56.32
Member Agency Contributions	0.00	(128,671.00)	50,000.00	-257.34%	178,671.00
Other Agency Contributions	0.00	199,978.00	481,000.00	41.58%	281,022.00
Total Revenues	\$0.00	\$132,675.95	\$574,195.00	23.11%	\$441,519.05
Expenses					
Salaries - Regular	5,648.15	50,507.43	61,543.00	82.07%	11,035.57
Payroll Burden	2,490.84	22,273.80	27,141.00	82.07%	4,867.20
Overhead	8,980.56	80,306.79	97,853.00	82.07%	17,546.21
Audit Fees	0.00	5,230.00	5,230.00	100.00%	0.00
Consulting - General	8,721.64	232,491.20	435,998.00	53.32%	203,506.80
Legal Fees	0.00	825.00	1,500.00	55.00%	675.00
Meeting & Conference Expense	0.00	509.81	3,123.00	16.32%	2,613.19
Shipping & Postage	0.00	0.00	50.00	0.00%	50.00
Office Supplies	0.00	0.00	60.00	0.00%	60.00
Board Compensation	0.00	1,500.00	2,250.00	66.67%	750.00
Other Expense	0.00	32.40	100.00	32.40%	67.60
Insurance Expense	0.00	2,811.00	3,658.00	76.85%	847.00
Interest Expense	0.00	45.75	100.00	45.75%	54.25
Total Expenditures	\$25,841.19	\$396,533.18	\$638,606.00	62.09%	\$242,072.82
Excess Revenue over (under) Expenditures	(\$25,841.19)	(\$263,857.23)	(\$64,411.00)	409.65%	\$199,446.23

Lake Elsinore San Jacinto Watersheds Authority
Revenues, Expenses and Changes in Net Assets by Project
For the Month Ending May 31, 2013

	JPA Administration	TMDL Task Force	TMDL BMP Implementation	Total	Budget	% Used	Budget Variance
Revenues							
State Grant Proceeds	\$ -	\$ -	\$ 59,765.27	\$ 59,765.27	\$ 41,535.00	143.89%	\$ (18,230.27)
LAIIF Interest	1,603.68	-	-	1,603.68	1,660.00	96.61%	56.32
Member Agency Contributions	50,000.00	(178,671.00)	-	(128,671.00)	50,000.00	-257.34%	178,671.00
Other Agency Contributions	-	199,978.00	-	199,978.00	481,000.00	41.58%	281,022.00
Total Revenues	\$ 51,603.68	\$ 21,307.00	\$ 59,765.27	\$ 132,675.95	\$ 574,195.00	23.11%	\$ 441,519.05
Expenditures							
Salaries	\$ 23,488.53	\$ 26,610.14	\$ 408.77	\$ 50,507.43	\$ 61,543.00	82.07%	\$ 11,035.57
Benefits	10,358.46	11,735.07	180.27	22,273.80	27,141.00	82.07%	4,867.20
G&A Allocation	37,346.76	42,310.09	649.94	80,306.79	97,853.00	82.07%	17,546.21
Audit Fees	5,230.00	-	-	5,230.00	5,230.00	100.00%	-
Consulting	23,000.00	149,334.81	60,156.39	232,491.20	435,998.00	53.32%	203,506.80
Studies	-	-	-	-	-	0.00%	-
Other Contract Services	-	-	-	-	-	100.00%	-
Legal Fees	825.00	-	-	825.00	1,500.00	55.00%	675.00
Project Construction	-	-	-	-	-	0.00%	-
Meeting & Conference Expense	168.00	341.81	-	509.81	3,123.00	16.32%	2,613.19
Office Expense	-	-	-	-	110.00	0.00%	110.00
Board Compensation	1,500.00	-	-	1,500.00	2,250.00	66.67%	750.00
Other Expense	32.40	-	-	32.40	100.00	32.40%	67.60
Insurance Expense	2,811.00	-	-	2,811.00	3,658.00	76.85%	847.00
Interest Expense	45.75	-	-	45.75	100.00	45.75%	54.25
Total Expenditures	\$ 104,805.90	\$ 230,331.92	\$ 61,395.37	\$ 396,533.18	\$ 638,606.00	62.09%	\$ 242,072.82
Excess Revenue over (under) Expenditures	\$ (53,202.22)	\$ (209,024.92)	\$ (1,630.10)	\$ (263,857.23)	\$ (64,411.00)	409.65%	\$ 199,446.23
Cash Balance @ 05/31/13	\$ 97,115.62	\$ 357,215.36	\$ (1,630.10)	\$ 452,700.88			

**Lake Elsinore San Jacinto
Watersheds Authority
Disbursements
May 31, 2013**

Check #	Check Date	Type	Vendor	Check Amount
1680	05/09/13	CHK	Williams, Phillip Robert	\$ 100.00
1681	05/09/13	CHK	Aklufi and Wysocki	\$ 37.50
1682	05/09/13	CHK	Tom Evans	\$ 100.00
1683	05/09/13	CHK	Santa Ana Watershed Project Authority	\$ 10,888.19
1684	05/09/13	CHK	Horton, Nancy C.	\$ 100.00
1685	05/09/13	CHK	Robert E Magee	\$ 100.00
1686	05/09/13	CHK	Weston Solutions Inc	\$ 12,996.37
1687	05/31/13	CHK	O'Reilly Public Relations	\$ 3,967.13
EFT015	05/31/13	CHK	Risk Sciences	\$ 4,666.29
Total Disbursements May 2013				<u><u>\$ 32,955.48</u></u>

LESJWA BOARD MEMORANDUM NO. 727

DATE: August 7, 2013
SUBJECT: Committees Status Report
TO: LESJWA Board of Directors
FROM: Mark Norton, P.E., Authority Administrator

RECOMMENDATION

That the Board of Directors receive and file the status report of the LESJWA Education & Outreach Committee (EOC).

DISCUSSION

Attached are the meeting notes from the Education and Outreach Committee meeting held July 9, 2013.

RESOURCES IMPACT

None.

dm/

Attachment:

1. EOC Meeting Notes 7-9-13

LESJWA Education and Outreach Committee
Meeting Notes
July 8, 2013

Members Present: Mark Norton, Chair, SAWPA
Steven Horn, County of Riverside
Nicole Dailey, City of Lake Elsinore
Nancy Horton, City of Canyon Lake
Bonnie Woodrome, EVMWD

Others Present: Philip Southard, O'Reilly Public Relations

Members Absent: Greg Morrison, EVMWD

1. Call to Order

Mark Norton called the meeting to order at 12:10 noon at Elsinore Valley Municipal Water District (EVMWD), located at 31315 Chaney Street, Lake Elsinore, California.

2. Additions/Corrections to the Agenda

None.

3. Approval of the Meeting Notes

The meeting notes from April 10, 2013 were reviewed and deemed acceptable by the Committee.

4. Project Status

- **Canyon Lake Improvements** – Nancy Horton said that because of the rainy season the lake levels at Canyon Lake are two feet higher than this time last year, which is good news. EVMWD began taking their water in June 2013 and now will be providing disinfection using UV treatment.
- **Lake Elsinore** – Mr. Norton asked Nicole Daily, the new Management Analyst, for the City of Lake Elsinore to discuss the Lake Elsinore fish farm proposed by the City. She explained that the project still is undergoing regulatory review, but the \$125,000 project has been included in the capital improvement plan for the City for this year. The project would raise striped bass fingerlings that eventually when released could help feed on the shad, which will help maintain a balanced fishery and help control the shad that feed on the zooplankton that feed on algae. The location of the fish farm would be near the La Laguna Resort and would be cordoned off from the rest of the lake.

A question was asked whether the aeration compressors operate 24 hours a day now. Bonnie Woodrome indicated that she would check on this and get back to the Committee. With the summer heat, EVMWD, who operates the compressors for the lake aeration system, may be increasing the pumping of air into the lake for enhanced mixing and air/oxygen exchange.

- **TMDL Task Force** – Mr. Norton reported that the main project that the TMDL is engaged in is the alum application of Canyon Lake. It is hoped that the project contract for the alum application as well as the performance monitoring can be approved by the LESJWA Board in early August. The plan is to have the alum applied to the lake over five applications occurring in Sept and Feb for two and a half years. The CEQA has been adopted by the City of Canyon Lake and LESJWA will be the responsible agency for the implementation. The project is anticipated to be funded by a Prop 84 IRWM grant from the CA DWR.
- **Lake Levels** – The lake levels at the last meeting were 1242.29' at Lake Elsinore, and 1379.97' at Canyon Lake. The current lake levels are 1241.23' at Lake Elsinore, and 1378.44' at Canyon Lake.

5. O'Reilly Public Relations Scope of Work Review (FY 2013-14)

Mr. Norton reported that the LESJWA Board approved the task order for FY 13-14 with O'Reilly Public Relations. Philip Southard shared copies of the scope and indicated that no changes are anticipated at this time but if the Committee requests changes, adjustments can be made.

6. Opinion-Editorial and Media Follow-up

Mr. Southard shared copies of the latest draft of the op-ed prepared to share with the media the accomplishments of LESJWA and to respond to concerns that little of value had been accomplished to achieve the TMDL targets as implied by a recent news article in the Press Enterprise reported by Pete Surowsky. Mr. Norton recommended that we include another paragraph explaining that LESJWA is being responsive to the public by taking a 3% cut in administrative expenses and eliminating stipends to the LESJWA Board for participation as board members. Mr. Horn recommended that reference to the TMDL op-ed should indicate that this is a mandated state regulation from the Santa Ana Regional Water Quality Control Board. Ms. Dailey also provided a few minor edits. Mr. Southard indicated that the op-ed would be good to share with the Press Enterprise prior to the big upcoming alum project. Ms. Dailey said that there has been a lot of turnover among the reporters now that the Californian newspaper was discontinued. Some of the reporters from the California have now been hired by the Press Enterprise so we may see more changes in reporting in the future. These reporters recently hired on a part time basis include Michael Williams and Aaron Clavery.

The Committee agreed that providing a tour of the both lakes would be helpful and Ms. Horton offered to provide a boat tour of Canyon Lake for them.

Mr. Norton also indicated that with the warm temperatures currently on the lake, it would be good to make sure we have our talking points ready in case a fish kill should occur. Mr. Norton said that there were some crisis messaging points that O'Reilly had prepared in the past and that he would send it out to the Committee. Mr. Norton said as he will be on vacation from July 15-28, he recommends that the talking points be shared by the Committee with elected officials and senior staff of all LESJWA member agencies if an incident such as a fish kill or major algae bloom should occur in his absence.

7. Alum Outreach and Schedule

Mr. Norton explained that we are still on track to apply alum in Sept. 2013 and as discussed LESJWA needs to conduct another outreach event to the Canyon Lake community informing them of the details of the alum application such as where boat launches and beaches may be temporarily closed. The alum application is anticipated to occur in mid-Sept. after the Labor Day holiday. The audience for the messaging will be to the fishermen, young families and users of the boat launches. Ms. Horton recommended that the outreach event be held at the City of Canyon Lake's multi-purpose room which can seat over 100 people. It is located below the City Hall. The Committee recommended that Tim Moore and the alum contractor be present at the event to answer questions and address any safety concerns that the public may have similar to the Canyon Lake lodge event. It was suggested that the event be held on a Tuesday to allow the Canyon Lake Friday flyer sufficient time to report on the event in their newspaper the following Friday. Two dates were suggested Sept. 10th and Sept. 17th. Mr. Norton said he would contact both Tim Moore and Terry McNabb of Aquatechnex to confirm their availability.

8. Discuss Items for Next Agenda

The Committee had not additional items at this time to suggest for discussion in their next meeting.

9. Next Meeting Date

The next LESJWA Education and Outreach Committee will meet on October 7, 12:00 p.m. at EVMWD.

LESJWA BOARD MEMORANDUM NO. 728

DATE: August 7, 2013
SUBJECT: Canyon Lake Hybrid Treatment Project – Phase 1 Alum Dosing
TO: Board of Directors
FROM: Mark R. Norton, P.E., Authority Administrator

RECOMMENDATION

The Lake Elsinore & Canyon Lake Nutrient TMDL Technical Advisory Committee recommends that the Board of Directors:

- 1) Ratify the June 5, 2013 CEQA approval of the Canyon Lake Alum Application, and file a Notice of Determination to implement alum dosing in Canyon Lake, as part of the Proposition 84 grant funded Phase 1- Canyon Lake Hybrid Treatment Project, and
- 2) Approve Task Order No. AQUA160-01 with AquaTechnex, LLC for an amount not-to-exceed \$488,490 to implement alum dosing in Canyon Lake, as part of the Proposition 84 grant funded Phase 1- Canyon Lake Hybrid Treatment Project.

DISCUSSION

In response to a request for proposals issued in May 2013, the members of the Task Force recommend AquaTechnex, LLC to implement Alum dosing in Canyon Lake to support the Lake Elsinore & Canyon Lake Nutrient Total Maximum Daily Load (TMDL).

The request for proposals was issued to the following eight firms, posted on the SAWPA website, and shared with other lake management associations:

AquaTechnex, LLC
Marine Biochemists
South West Aquatics
Clean Lakes Inc.

HAB Aquatic Solutions
Environmental Research & Design
Diversified Waterscapes, Inc.
General Chemical Corporation

Two proposals were received from the solicitation, AquaTechnex and Marino Biochemists. A technical review committee composed of representatives from EVMWD, City of Canyon Lake, Riverside County Flood Control and Water Conservations District, and LESJWA met on June 12, 2013. A rating and ranking form was used for a preliminary assessment based on a qualification-based selection rather than a low bid cost selection. Based on the review of the criteria indicated in the RFP, AquaTechnex was selected by a proposal technical review committee composed of task force agencies based upon the consultant's approach to the tasks, technical expertise, previous work experience with the Task Force, and costs to conduct the work laid out in their proposal.

The task order with AquaTechnex will be to implement Alum Dosing in Canyon Lake to support the Lake Elsinore & Canyon Lake Nutrient TMDL. Included with the task order is a scope of work and budget providing a detailed description of support services to be performed by the consultant, as highlighted below:

Canyon Lake Alum Dosing

- Coordination Meetings to Develop Treatment and Safety Plans
- 5 Alum Treatments (the first scheduled for September 2013)
- Final Project Report

The City of Canyon Lake is serving as the lead CEQA agency on the project approved CEQA on June 5, 2013. This entailed the preparation of an Initial Study/Mitigated Negative Declaration for the Canyon Lake Hybrid Treatment Process-Phase 1 Project, which recommended that a Mitigated Negative Declaration be issued. LESJWA serving as a responsible agency for the project under CEQA has considered a Mitigated Negative Declaration and concurs with the findings of the document.

BACKGROUND

In July 2012, LESJWA submitted a grant proposal to SAWPA for funding of the Canyon Lake Hybrid Treatment Project under the Proposition 84 Integrated Regional Water Management (IRWM) Program Round 2. Although the grant program is administered ultimately by the CA Department of Water Resources, SAWPA is the designated IRWM region for the Santa Ana River Watershed. The Lake Elsinore and San Jacinto River sub-watersheds are located within the Santa Ana River Watershed.

The grant proposal sought \$1 million in funding of the next main TMDL improvement project, the Canyon Lake Hybrid Treatment Process, a combination of alum and oxygenation, if necessary. In 2010, a preliminary design report for the Hypolimnetic Oxygenations System (HOS) was completed by PACE, Inc. It was funded by the Lake Elsinore/Canyon Lake (LE/CL) TMDL Task Force. In 2011 and early 2012, additional studies by Dr. Michael Anderson showed that a more effective strategy may be to first apply alum to Canyon Lake for a few years, and then consider if a downsized HOS was necessary to assure that TMDL response targets are met. Consequently, a hybrid approach was deemed by the LE/CL TMDL Task Force to be a more appropriate path.

In February 2013, staff reported that the LESJWA grant proposal was approved for \$500,000 by the SAWPA Project Selection Committee, the OWOW Steering Committee, and the SAWPA Commission.

On March 29, 2013, LESJWA staff submitted for review and approval to DWR a portfolio of 19 IRWM projects that include the LESJWA grant proposal. Grant funding is expected from the State after execution of grant agreements among DWR, SAWPA, and LESJWA, which likely will occur in the fall 2013.

The local minimum match for the LESJWA Canyon Lake improvement grant is 25% and past expenses related to the project are eligible. Based on past monitoring and studies conducted in support of Canyon Lake improvements, the local match requirement has been met. Other funding options to support LESJWA goals and mission will continue to be explored by staff.

On June 5, 2013, CEQA was approved by the City of Canyon Lake. The City will serve as the lead CEQA agency, and LESJWA will serve as a responsible agency for the project.

EVWMD staff has agreed to provide on-site application inspection of the process and alum application rates for the project.

RESOURCES IMPACT

All staff administration time for the RFP has been budgeted under the LE/CL TMDL Task Force budget that is also shown in the LESJWA budget.

MN:dm

Attachments:

1. Q&A with firm by Technical Review Committee to assure proposal requirements - 6-12-13
2. Task Order No. AQUA160-01 and Scope
3. Engineer's Estimate of Project Quantities, Application Rates, and Project Costs
4. Quantities and Application Rates Estimated for the Main Body and East Bay for Sept. and Feb. Applications
5. NOD to implement Alum dosing in Canyon Lake, as part of Proposition 84 grant-funded Phase 1 Canyon Lake Hybrid Treatment Project

Q&A with firm by Technical Review Committee to assure proposal requirements - 6-12-13

Q1: Do the labor rates and cost estimates meet the labor compliance requirements to address the payment of prevailing wages for work done for this project in accordance with California Labor Code?

Yes.

Q2: Does the proposal include the costs to transport and deliver alum to the project site?

Yes, the chemical supplier, General Chemical Performance Products includes within the purchase price the costs to transport and deliver alum to the project site

Q3: Does the proposal include a safety plan?

Yes, a safety plan that addresses the needs of this project will be prepared that meets requirements of the Canyon Lake Property Owners Association, material handling safety, spill prevention and equipment to mitigate spill, local resources for medical and emergency support and all other components necessary to complete this project with safety for the HOA residents, the environment and our team of applicators.

Q4: Does the alum application firm agree to a “not to exceed” contract amount of \$488,490 to perform the work?

Yes, alum costs with supplier were confirmed and expected to be adequate for this and next year. However, since aluminum and sulfate are commodities, the commodity price may change depending on demand.

In consultation with legal counsel, LESJWA staff can prepare a change order if necessary in the future to adjust the contract for the purchase cost of alum, with the appropriate documentation provided by alum application firm.

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

TASK ORDER NO. AQUA160-01

CONSULTANT: AquaTechnex, LLC **VENDOR NO.** 1727
P.O. Box 4193
Palm Desert, CA 92261

COST: Not-to-exceed \$488,490

PAYMENT: Upon proper invoice

REQUESTED BY: Rick Whetsel, Senior Watershed Planner August 7, 2013

FINANCE: _____
Karen Williams, CFO Date

FINANCING SOURCE: Acct. Coding: 160-TMDL-6113-01
Acct. Description Consulting General

BOARD AUTHORIZATION REQUIRED: YES (X) NO ()

Funding for this work was authorized by Board Memo LES721/LES728.

This Task Order is issued by the Lake Elsinore & San Jacinto Watersheds Authority (hereafter “LESJWA”) to **AquaTechnex, LLC** (hereafter “Consultant”) pursuant to the Agreement between LESJWA and Consultant entitled *Agreement for Services*, dated April 29, 2010 (*expires 12-31-2013*).

I. PROJECT NAME OR DESCRIPTION

Canyon Lake Alum Treatment Project

II. SCOPE OF WORK / TASKS TO BE PERFORMED

Consultant shall process implement Alum Dosing in Canyon Lake to support the Lake Elsinore & Canyon Lake Nutrient TMDL. Project includes the Coordination Meetings to develop treatment and safety plans; up to 5 Alum Treatments and the preparation of a Final Project Report.

Consultant shall provide all labor, materials and equipment for the Project to perform the specific tasks as described in Attachment A.

Please refer to Appendix X for acceptable formats, also found at www.sawpa.org/html/e_req.htm

III. PERFORMANCE TIME FRAME

Consultant shall begin work within five days of the date this Task Order is signed by the Authorized Officer and shall complete performance of such services by or before **December 31, 2015**.

IV. LESJWA LIAISON

Rick Whetsel and/or Mark Norton shall serve as liaison between LESJWA and Consultant.



June 3, 2013

Mark Norton
Santa Ana Watershed Project Authority
11615 Sterling Avenue
Riverside, CA 92503-4979

Dear Mark,

Thank you for the opportunity to submit our proposal for the Canyon Lake Alum Treatment Project. It's exciting to see this moving to an operational phase and we hope to qualify to help your agency in these efforts. Our contact information is presented here.

Our headquarters is Aquatechnex, LLC, PO Box 30824 Bellingham, WA, 98228, 360-527-1271. Our regional office is Aquatechnex, LLC, PO Box 4193 Palm Desert, CA 92261, 760-272-5842. I will be the project manager for this mission should we be selected to perform this work, my contact information is cell phone 360-201-2612 and email tmcnabb@aquatechnex.com. Ian Cormican, our regional manager will also be involved in managing staff, his contact information is 760-272-5842 and email ian@aquatechnex.com.

We believe our submittal covers all your requested information. If there are questions about it, we would be happy to answer them.

Thank you for your consideration.

Sincerely,

Terry McNabb, CLM
Manager/Aquatic Biologist/Certified Lake Manager

Proposed scope of work

Our first step would be to organize meetings with the key agency staff responsible for managing our contract and operations. This meeting would be to introduce our team, present our proposed treatment operational plan, obtain comments or address concerns and finalize our operational program.

Our team would perform a pre application planning process utilizing the Afterburner Flawless Execution Model. This planning process identifies and clarifies the goals of the project, analyzes all threats to effective completion of the mission and allows for planning to mitigate for them, identifies all resources necessary to complete the mission, reviews lessons learned from previous experiences with respect to this mission, build the operation plan and task list and plans for contingencies. This process is very effective and insures all aspects of the mission are defined, assigned and potential obstacles to completion are identified and solved.

Our team would develop a safety plan that addresses the needs of this project. This would take into account the requirements of the Canyon Lake Property Owners Association, material handling safety, spill prevention and equipment to mitigate spill, local resources for medical and emergency support and all other components necessary to complete this project with safety for the HOA residents, the environment and our team of applicators.

Alum treatments on the water need to be calibrated for water depth, speed of the application vessel, swath width and a number of other factors. We utilize ArcGIS to develop treatment map shapefiles, these files are uploaded into RAVEN Cruzier II precision application guidance systems on our treatment vessels. These systems display the treatment paths the vessel should track to, the flow rate of Alum based on water volume under the boat, record acres treated and display steering information to the vessel operator to insure complete coverage and overlap of the treatment paths. This programing is performed, examined, made part of the operational plan and uploaded to the treatment boat guidance systems.



RAVEN Precision Application Management Systems are used on all of our application equipment to help insure complete coverage on the water and dosing based on water volume under the boat

Our next step would be to mobilize equipment to the lake and stage it for alum application. We would also purchase and schedule delivery of Alum to the project site. We work with General Chemical Performance Products for our large bulk Alum needs. We feel they are the best provider of water treatment plant grade Alum in the United States. They do an excellent job of supporting lake treatment operations in terms of on time delivery and scheduling of tank trucks. Their drivers to an excellent job

of working around urban lakes, the tight spaces that they have to access to get to the water and staging deliver to our treatment vessels. We will also utilize storage containers at the lake as necessary.

The key to getting Alum into the lake at this volume rapidly and with minimal disruption to lake users is staging the shore side operations strategically around the lake margins. The POA has provided access to a number of locations where park facilities would allow a truck to nurse our treatment vessels. Our plan would be to operate from a site and treat areas within a 0.5 mile radius of that site so that treatment boats can get back rapidly to fill after each application pass. We have developed the attached map that shows this in a preliminary fashion (to be approved by the POA prior to implementation).

We would operate three treatment vessels on the lake to perform this work. The primary work will be performed using 30 foot modified Bayliner boats. These systems have the capacity to haul 8,000 pounds each and tanks to receive that volume of Alum are installed on each of these. They have 225 HP inboard out board engines so they can return rapidly to the shoreline Alum staging and fill site. The third boat would be equipped with a handling tank for Alum and a hose application system that can discharge material up to 60 feet from the boat. This system with trained operators can place alum throughout the fingers on this lake in and around tight spaces such as boat docks and moored vessels. All of these boats will be equipped with GPS/GIS precision guidance systems.



We have a fleet of application vessels for larger open water application of alum. These two vessels can move 8,000 pound on the water, perform precision application and move back quickly to the access site to reload. We can process on tank truck of alum in approximately two-three hours under most conditions.

Each of our boats are equipped with InsituSmarTROLL multi parameter water quality monitoring probes and software. This equipment can be used to measure real time key parameters such as pH and dissolved oxygen and collect profiles. It is assumed that the Agency may also be involved in monitoring these parameters, we can support that effort and keep track of this data real time as we apply Alum.

The Precision Application equipment we utilize generates reports that document treatment tracks, volume applied and acres treated. This information will be downloaded each day and used to develop a final report. It can also be make available to the contract administrator at any point during the project mission.



Fanjet application technology allows us to apply Aluminum Sulfate across a 40 foot swath per pass to effectively speed up application on the water and reduce the time necessary to be onsite while obtaining excellent coverage.



Aquatechnex biologists applying Aluminum Sulfate with a system that allows for working in tight spaces such as the fingers on the East Arm.

This system with a good operator can reach inside and between dock slips and around moored boats very effectively and this will be key in areas where these conditions occur. A traditional boom injection system cannot maneuver in tight spaces and evenly apply Alum or other products.

We work doing applications around high value watercraft every day and are extremely experienced with both accurate application and no impacts to those vessels.

The last step at the lake would be to bring the sites used back to pretreatment conditions. The team would attempt to insure that no impact to facilities provided by the POA would be affected. The management team would conduct a detailed survey of conditions prior to use and post treatment, anything of concern would then be addressed.

Our team would then demobilize from the lake and be available for the next scheduled treatment in the contracted mission.

We would develop a final report that documented all operations, any observations or lessons learned that would help future treatments on this lake and deliver that to the Agency. We would also be available to meet with the agency at any point there is a need or concern. We are also available to participate in presentations to the public as the Agency deems our support in that role helpful.

Detailed Project Schedule

The exact dates for application are not known, however we can provide the following as a detailed project schedule.

Task	Schedule
Preliminary meeting with Agency	Within two weeks of contract award Agency staff schedule permitting
Development of treatment and safety plans	Within four weeks of contract award
Mobilization for September Treatment	Once dates of proposed treatment are provided to our team, we can mobilize within one week.
Treatment in September	Based on the volume of material (19 truck loads) it is anticipated that one week of operations on the water will be necessary to effectively apply this material with no interruptions due to weather or other conditions
Demobilize from September treatment	We can be demobilized from the site within 24 hours of completion of treatment.
Final report	We can generate and deliver the final report within two weeks of treatment completion
Mobilize for February Treatments	Within one week of notice to proceed
Treatment in February	Based on treatment volume (12 truck loads) it is estimated that we can perform this application in approximately 4 days without interruption for weather or other events
Demobilization	We can be clear of this site within 24 hours of treatment completion
Final Report	Within 2 weeks of treatment completion
Other communications or meeting	We can generally accommodate necessary meeting as attendance is requested within 2-4 days.

Fee Proposal

Based on the scope of work and the specified amounts of Alum to be applied to the lake our fee proposal would be as follows.

Task	Unit Costs	Estimated Total Cost
Task 1, preliminary meeting	Time and materials	\$500.00
Task 2, develop treatment plan for both Fall and Spring application events	Time and materials	\$500.00
Task 3, Safety Planning	Time and Materials	\$0.00
Task 4, GIS mapping and Application System Programing	Time and materials	\$500.00
Task 5a, mobilize for September 2013 treatment	Time and materials	\$1,000.00
Task 5b, secure and receive 190,000 kg dry alum for application	General Chemical Performance Products Cost	\$82,000.00
Task 5c apply 190,000 kg dry alum to both arms Canyon Lake	Lump sum	\$20,500.00
Task 5d, demobilize from Canyon lake	Time and materials	\$500.00
Task 6a, mobilize for February 2014 treatment	Time and materials	\$1,000.00
Task 6b, secure and deliver 120,000 kg dry alum for application	General Chemical Performance Products Cost	\$53,500.00
Task 6c apply 120,000 kg dry alum to both arms Canyon Lake	Lump sum	\$18,000.00
Task 6d, demobilize from Canyon Lake	Time and materials	\$500.00
Task 7a, mobilize for September 2014 treatment	Time and materials	\$1,000.00
Task 7b, secure and deliver 190,000 kg dry alum to both arms of Canyon Lake	General Chemical Performance Products cost	\$82,000.00
Task 7c Apply 190,000 kg dry alum to both arms Canyon lake	Time and materials	\$20,500.00
Task 7d, demobilize from Canyon Lake	Time and materials	\$500.00
Task 8a mobilize for February 2015 treatment	Time and materials	\$1,000.00
Task 8b, secure and deliver 120,000 kg dry alum for application	General Chemical Performance Products Cost	\$53,500.00
Task 8c apply 120,000 kg	Time and materials	\$18,000.00

Task 8c demobilize from Canyon lake	Time and materials	\$500.00
Task 9a mobilize for September 2015 application	Time and materials	\$1,000.00
Task 9b, secure and deliver 190,000 kg dry alum for application	General Chemical Performance Products Cost	\$82,000.00
Task 9c, apply 190,000 kg Alum to Canyon lake	Time and materials	\$20,500.00
Task 9d, demobilize from Canyon Lake	Time and materials	\$500.00
Final Report and meetings	Time and materials	\$750.00
Total Project Costs		\$460,250.00
Sales Tax at 8%		\$28,240.00
Total Cost and Tax		\$488,490.00

Hourly Billing Rates

The following hourly billing rates are generally used by Aquatechnex to support our work

Position	Hourly Rate
Senior Scientist	\$120.00
Project Manager	\$95.00
GIS Specialist	\$75.00
Licensed Applicator	\$75.00
Support Staff	\$65.00

Thank you for your consideration, if questions develop please contact Terry McNabb (tmcnabb@aquatechnex.com) or Ian Cormican (ian@aquatechnex.com)



Liquid Aluminum Sulfate being applied to 900 surface acres of Lake Stevens today June 5th, 2012 to sequester phosphorus and mitigate cyanobacteria blooms that have been problematic in the past by the Aquatechnex team.

Engineer's Estimate - Steve Wolosoff/ CDM Smith

Alum Application Plan Parameters:

Area of Main Body alum application (acres)	270
Area of East Bay alum application (acres)	125
Main Body lake volume (AF)	5,055
Main Body Hypolimnion volume (AF)	1,340
East Bay lake volume (AF)	1,191
Dry Alum Annual Average Application (kg/yr)	310,000
Equivalent liquid alum (kg/yr)	645,833
Equivalent liquid alum (gallons)	126,531
Equivalent Al (kg/yr)	28,210
Unit Cost (\$/kg dry alum)	\$0.44

Quantities and Application Rates Estimated for the Main Body and East Bay for September and February Applications

Zone	Application Schedule	Alum (kg dry alum)	Treated Volume (AF)	Dosage as Al (mg/L)	Liquid Alum (Gal)	Number of Truckloads	Gallons per acre	Cost of Alum (\$/event)	Labor Cost (\$/event)	Total Cost (\$/event) w/ 25% contingency
Main Body	February	70,000	5,055	1.0	28,571	7	106	\$30,948	\$20,000	\$64,000
Main Body	September	140,000	5,055	2.0	57,143	14	212	\$61,896	\$20,000	\$102,000
East Bay	February	50,000	1,191	2.7	20,408	5	163	\$22,106	\$20,000	\$53,000
East Bay	September	50,000	1,191	2.7	20,408	5	163	\$22,106	\$20,000	\$53,000

Project Totals

Zone	Application Schedule	Alum (kg dry alum)	Treated Volume (AF)	Dosage as Al (mg/L)	Liquid Alum (Gal)	Number of Truckloads	Gallons per acre	Cost of Alum (\$/event)	Labor Cost (\$/event)	Total Cost (\$/event) w/ 25% contingency
Project Total 5 events (2013-2015)		810,000			330,612	81		358,115	200,000	\$ 699,000

Quantities and Application Rates Estimated for the Main Body and East Bay for September and February Applications

Zone	Application Schedule	Alum (kg dry alum)	Treated Volume (AF)	Dosage as Al (mg/L)	Liquid Alum (Gal)	Number of Truckloads	Gallons per acre
Main Body	February	70,000	5,055	1.0	28,571	7	106
Main Body	September	140,000	5,055	2.0	57,143	14	212
East Bay	February	50,000	1,191	2.7	20,408	5	163
East Bay	September	50,000	1,191	2.7	20,408	5	163

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

NOTICE OF DETERMINATION

To: Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: Lake Elsinore and San Jacinto
Watersheds Authority
11615 Sterling Avenue
Riverside, CA 92503

and

Riverside County, County Clerk
2724 Gateway Drive
Riverside, CA 92507

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

CANYON LAKE HYBRID TREATMENT PROCESS – PHASE 1

Project Title

SCH #2013041082
State Clearinghouse Number

Mr. Mark Norton
Lead Agency Contact Person

(951) 354-4221
Area code/
Telephone/Extension

Project Location: Canyon Lake, Riverside County, California

Project Description:

Canyon Lake was formed in 1928 when the Canyon Lake / Railroad Canyon Dam was constructed. Canyon Lake is located in Riverside County, and is within the City of Canyon Lake. It is owned and operated by the Elsinore Valley Municipal Water District (EVMWD). EVMWD has used the reservoir as a potable water source since 1957 when the Canyon Lake Water Treatment Plant began operation. The reservoir is supplied by stormwater runoff from both the upper San Jacinto River Watershed and Salt Creek watershed. The reservoir, covers approximately 525 acres (212 ha), has 14.9 miles (24.0 km) of shoreline, and has a storage capacity of 11,586 acre-feet (14,291,000 m³). The lake has three main sections – the relatively shallow East Bay (depths generally less than 10 ft), the deeper Main Lake portion of the lake (depths in excess of 40 ft), and the area north of the causeway that connects with the San Jacinto River. The proposed Project consists of application of alum to Canyon Lake to remove nutrients that contribute to algal blooms. A wide-range of management options, ranging from oxygenation, aeration, mixing, and dredging to application of alum, Phoslock, and other nutrient binders have been considered. The document (Initial Study and Mitigated Negative Declaration), including more details is available at City Hall (31516 Railroad Canyon Road, Canyon Lake) for review Monday through Friday between the hours of 8 a.m. and 5 p.m.

This is to advise that Lake Elsinore and San Jacinto Watersheds Authority has approved the
 Lead Agency Responsible Agency

above described project on August 15, 2013 and has made the following determination
(Date)
regarding the above described project:

1. The project [will will not] have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
 A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA by the City of Canyon Lake and the LESJWA Board has considered a Mitigated Negative Declaration and concurs with the findings of the document.
3. Mitigation measures [were were not] made a condition of the approval of the project and a Mitigation Monitoring and Reporting Plan was adopted.
4. A Statement of Overriding Considerations [was was not] adopted for this project.

This is to certify that the Mitigated Negative Declaration/Initial Study and record of project approval is available to the general public at:

City of Canyon Lake, 31516 Railroad Canyon Road, Canyon Lake, CA 92587

Signature *Title* *Date*

LESJWA BOARD MEMORANDUM NO. 729

DATE: August 7, 2013
SUBJECT: Regulatory Strategist and TMDL Compliance Support Services
TO: LESJWA Board of Directors
FROM: Mark R. Norton, P.E., Authority Administrator

RECOMMENDATION

Staff recommends that the Board of Directors approve Task Order No. RISK160-07 with Tim Moore of Risk Sciences for an amount not-to-exceed \$48,640 to serve as regulatory strategist and compliance expert to the Lake Elsinore and Canyon Lake TMDL Task Force.

BACKGROUND

Risk Sciences has provided important regulatory compliance support and facilitation to the Lake Elsinore and Canyon (LE/CL) Lake TMDL Task Force. The Technical Advisory Committee and the TMDL Task Force have reviewed and recommended for approval a new task order with LESJWA. On July 31, 2013, the LE/CL TMDL Task Force reviewed the specific description of the tasks and recommended the revised language to the LESJWA Board for approval.

Under this Task Order, Risk Sciences will continue to serve as regulatory strategist and compliance expert for the Task Force. Risk Sciences also will work closely with the scientists and technical experts who are assisting the Task Force to implement actions to address the TMDLs. Risk Sciences will prepare for and participate in up to eight meetings of the TAC and /or Task Force. At these meetings, Mr. Moore will work with stakeholders to implement the following:

- 1) Assist in obtaining Regional Board approval of the CNRP and AgNMP.
- 2) Prepare and revise cost sharing and credit allocation agreements.
- 3) Develop water quality monitoring plan to evaluate effectiveness of the in-lake nutrient control projects (e.g. aeration and alum).

To accomplish these ends, Mr. Moore will work with stakeholders to review and select alternative regulatory implementation strategies designed to achieve compliance with the TMDL.

BUDGET IMPACT

All funding for this Task Order is provided by the TMDL Task Force for an amount not-to-exceed \$48,640. All staff contract administration time for this work will be taken from the TMDL budget and funded by the TMDL stakeholders.

MN/RW/dm

Attachment:

1. Risk Sciences Task Order No. RISK160-07

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY
TASK ORDER NO. RISK160-07

CONSULTANT: Risk Sciences **VENDOR NO.** 1174
125 New Dawn Road
Rockvale, TN 37153

COST: \$48,640

PAYMENT: Monthly upon receipt of invoice

REQUESTED BY: Mark Norton June 20, 2013
Authority Administrator

FINANCE: _____
Karen Williams, CFO Date

FINANCING SOURCE: Acct. Coding 160TMDL-6113-01
Acct. Description General Consulting

BOARD AUTHORIZATION REQUIRED: YES (X) NO ()

Funding for this work was authorized by Board Memo LES722/729.

This Task Order is issued by the Lake Elsinore & San Jacinto Watersheds Authority (hereafter "LESJWA") to **Risk Sciences** (hereafter "Consultant") pursuant to the Agreement for Services between LESJWA and Consultant dated April 20, 2006; and Amendment No. 2 extending the term of service (*expires 12-31-15*).

I. PROJECT NAME OR DESCRIPTION

Lake Elsinore and Canyon Lake TMDL Task Force – Compliance Expert

II. SCOPE OF WORK / TASKS TO BE PERFORMED

Consultant shall support the Lake Elsinore/Canyon Lake TMDL Task Force in FY2013-14. In the coming year, most of the Task Force efforts will be devoted to the following tasks, and further detailed in Attachment A:

- 1) Assist in obtaining Regional Board approval of the CNRP and AgNMP.
- 2) Prepare and revise cost sharing and credit allocation agreements.
- 3) Develop water quality monitoring plan to evaluate effectiveness of the in-lake nutrient control projects (e.g. aeration and alum). Consultant shall prepare for and participate in up to eight meetings of the Technical Advisory Committee (TAC) and/or Task Force to review and select alternative regulatory implementation strategies designed to achieve compliance with the TMDL.

III. TIME OF PERFORMANCE

Consultant shall begin work within five days of the date this Task Order was signed by the Authorized Officer, and shall complete performance of such services by **June 30, 2014**.

IV. LESJWA LIAISON

Mark Norton and/or 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 **\$48,640** including travel expenses. Payment of the fees and expenses incurred shall be made monthly upon receipt of timely and proper invoices from Consultant, as required by the above-mentioned Agreement. Each such invoice shall be provided to LESJWA/SAWPA by Consultant within 15 days after the end of the month in which the services were performed. The compensation to be paid herein is subject to LESJWA/SAWPA's receipt of funds for this Task Order from third parties. The Consultant shall limit activities to ensure not to expend funds that have been collected and shall curtail activities, as required, to stay within the funds available. LESJWA/SAWPA will endeavor to obtain the funds needed to fully fund the scope of work.

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.
- e. Drawings incorporated by reference.

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

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

Nancy Horton, LESJWA Chair

Date

RISK SCIENCES

Timothy F. Moore, President

Date



Attachment A

June 6, 2013

Rick Whetsel
 Lake Elsinore - San Jacinto Watersheds Authority
 11615 Sterling Ave.
 Riverside, CA 92503

RE: Proposed Scope-of-Work for LECL TMDL Task Force in 2013-14

Dear Mr. Whetsel:

Per your request, I have prepared the following preliminary scope of work and cost estimate to support the Lake Elsinore/Canyon Lake TMDL Task Force in FY2013-14. In the coming year, most of our effort will be devoted to three large tasks:

- 1) Obtain approval of the CNRP/AgNMP (extended from FY2012-13)
- 2) Negotiate the implementation agreements for both Canyon Lake and Lake Elsinore (extended from FY2012-13)
- 3) Develop a water quality monitoring plan to demonstrate the effectiveness of all in-lake nutrient control projects (coordinated with CDM-Smith).

As in the past, my role will be to serve as regulatory strategist and compliance expert for the Task Force. To accomplish these ends, I will prepare for and participate in up to eight meetings of the Technical Advisory Committee (TAC) and/or Task Force to review and revised the various regulatory implementation strategies as necessary to assure compliance with the TMDL. A summary task schedule is shown in Table 1.

Table 1: Task Summary for 2013-14

Task	Description	Due Date
1	Assist in obtaining Regional Board approval of the CNRP and AgNMP.	Oct., 2013
2	Prepare and revise cost sharing and credit allocation agreements.	Mar., 2014
3	Develop water quality monitoring plan to evaluate effectiveness of the in-lake nutrient control projects (e.g. aeration and alum).	Aug., 2013
4	Task Force & TAC Meetings (up to 8 trips)	To Be Scheduled

I estimate that meeting the proposed schedule will require approximately 12 hours per month. My professional fee is \$285 per hour plus travel expenses. All other direct expenses (telecommunications, postage, photocopies, etc.) are already included in the fee. The total estimated cost, including travel, is shown in Table 2 and is approximately \$1,000 less than our current contract for FY2012-13.

Table 2: Proposed Compensation for 2013-14

Description	Amount
Professional Fees (144 hours)	\$41,040
Travel Expenses (8 trips * \$950/trip)*	\$7,600
Total	\$48,640

*Trip expenses are routinely shared among multiple clients to minimize costs. The estimate is based on the historical average cost for previous travel on behalf of the LE/CL Task Force.

I appreciate the opportunity to continue supporting with the Lake Elsinore/Canyon Lake TMDL Task Force and look forward to working together next year.

Respectfully submitted,



Timothy F. Moore

Risk Sciences
125 New Dawn Rd.
Rockvale, TN 37153

Phone: 615-274-2745
Fax: 615-370-5188
Email: tmoore@risk-sciences.com

LESJWA BOARD MEMORANDUM NO. 730

DATE: August 7, 2013
SUBJECT: Canyon Lake Hybrid Treatment Project – Phase 1 Alum Dosing Effectiveness Monitoring
TO: Board of Directors
FROM: Mark R. Norton, P.E., Authority Administrator

RECOMMENDATION

The Lake Elsinore & Canyon Lake Nutrient TMDL Technical Advisory Committee recommends that the Board of Directors approve Task Order No. MWH160-01 with MWH Americas, Inc. for an amount not-to-exceed \$94,650 to conduct Effectiveness Monitoring for the Alum Dosing in Canyon Lake, as part of the Phase 1- Canyon Lake Hybrid Treatment Project.

DISCUSSION

In response to a request for proposals issued in July 2013, the members of the Task Force recommend MWH Americas, Inc. to conduct Effectiveness Monitoring for the Alum dosing in Canyon Lake to support the implementation of the Phase 1- Canyon Lake Hybrid Treatment Project and the Lake Elsinore & Canyon Lake Nutrient Total Maximum Daily Load (TMDL).

The request for proposals was issued to the following eight firms, posted on the SAWPA website and shared with other lake management associations:

Tetra Tech, Inc.	University of California, Riverside, Dr. Michael Anderson
Wildermuth Environmental	Inland Empire WaterKeeper
Montgomery Watson Harza	Weston Solutions
CDM Smith	EIP Associates
MACTEC	
Brown and Caldwell	

MWH Americas, Inc. was selected by a proposal technical review committee composed of Task Force agencies based upon the consultant's approach to the tasks, technical expertise, and costs to conduct the work laid out in their proposal.

The Task Order with MWH Americas, Inc. will be to conduct Effectiveness Monitoring for the Alum dosing in Canyon Lake to support the implementation of the Phase 1- Canyon Lake Hybrid Treatment Project and the Lake Elsinore & Canyon Lake Nutrient TMDL. The Task Order includes a scope of work and budget providing a detailed description of support services to be performed by the consultant, as highlighted below:

Canyon Lake Alum Dosing Effectiveness Monitoring

- Prepare Sampling and Analysis Plan
- Conduct Canyon Lake Alum Effectiveness Water Quality Monitoring
- Prepare and Distribute Monitoring Reports, Attend Meetings

The proposal for MWH Americas, Inc. was reviewed by the LE/CL TMDL Task Force and is recommended for approval by the LESJWA Board.

BACKGROUND

In July 2012, LESJWA submitted a grant proposal to SAWPA for funding of the Canyon Lake Hybrid Treatment Project under the Proposition 84 Integrated Regional Water Management (IRWM) Program Round 2. Although the grant program is administered ultimately by the CA Department of Water Resources, SAWPA is the designated IRWM region for the Santa Ana River Watershed. The Lake Elsinore and San Jacinto River sub-watersheds are located within the Santa Ana River Watershed. The grant proposal sought \$1 million in funding of the next main TMDL improvement project, the Canyon Lake Hybrid Treatment Process, a combination of alum and oxygenation, if necessary. In 2010, a preliminary design report for the Hypolimnetic Oxygenations System (HOS) was completed by PACE, Inc. The preliminary design report was funded by the Lake Elsinore/Canyon Lake (LE/CL) TMDL Task Force. In 2011 and early 2012, additional studies by Dr. Michael Anderson showed that a more effective strategy may be to first apply alum to Canyon Lake for a few years and then consider if a downsized HOS was necessary to assure that TMDL response targets are met. Consequently, a hybrid approach was deemed by the LE/CL TMDL Task Force to be a more appropriate path.

In February 2013, staff reported that the LESJWA grant proposal was approved for \$500,000 by the SAWPA Project Selection Committee, the OWOW Steering Committee, and the SAWPA Commission.

On March 29, 2013, LESJWA staff submitted to DWR for review and approval a portfolio of 19 IRWM projects that includes the LESJWA grant proposal. Grant funding is expected from the State after execution of grant agreements among DWR, SAWPA, and LESJWA, which likely will occur in the fall 2013.

The local minimum match for the LESJWA Canyon Lake improvement grant is 25%, and past expenses related to the project are eligible. Based on past monitoring and studies conducted in support of Canyon Lake improvements, the local match requirement has been met. Staff will continue to explore other funding options to support LESJWA goals and mission.

On June 5, 2013, the CEQA was approved by the City of Canyon Lake. The City will serve as the lead CEQA agency and LESJWA as a responsible agency for the project.

EVWMD staff has agreed to provide on-site application inspection of the process and alum application rates for the project.

RESOURCES IMPACT

All staff administration time for the RFP has been budgeted under the LE/CL TMDL Task Force budget that is also shown in the LESJWA budget.

MN/RW:dm

Attachments:

1. Task Order No. MWH160-01

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY
TASK ORDER NO. MWH160-01

CONSULTANT: MWH Americas, Inc. **VENDOR NO.** 1129
618 Michillinda Ave., Ste. 200
Arcadia, CA 91007

COST: \$94,650

PAYMENT: Upon receipt of proper invoice

REQUESTED BY: Rick Whetsel, Sr. Watershed Planner August 7, 2013

FINANCE: _____
Karen Williams, CFO

FINANCING SOURCE: Acct. Coding 160-TMDL-6113-01
Acct. Description General Consulting

BOARD AUTHORIZATION REQUIRED: YES (X) NO ()

Funding for this work was authorized by Board Memo LES730.

This Task Order is issued by the Lake Elsinore & San Jacinto Watersheds Authority (hereafter "LESJWA") to **MWH Americas, Inc.** (hereafter "Consultant") pursuant to the Agreement between LESJWA and Consultant entitled *Agreement for Services*, dated August 7, 2013 (*expires December 31, 2017*).

I. PROJECT NAME OR DESCRIPTION

Canyon Lake Alum Treatment Effectiveness

II. SCOPE OF WORK/TASKS TO BE PERFORMED

Consultant shall provide all labor, materials and equipment for the Project to perform the specific work of preparing a Sampling and Laboratory Analysis Plan (SLAP) to describe the effectiveness of monitoring activities conducted within the lake, and the analysis methods to be conducted in the CSUSB laboratory. The MWH team will perform sampling and analysis from September 2013 through September 2015 before and after five alum application events. MWH will present in a report the water quality monitoring results for each of the five alum application events. Further details are provided in Attachment A.

Deliverables

Consultant shall deliver to LESJWA a report for each of the five alum application events:

Please refer to Appendix X for acceptable formats, found at www.sawpa.org/html/e_req.htm

III. PERFORMANCE TIME FRAME

Consultant shall begin work within five days of the date this Task Order is signed by the Authorized Officer and shall complete performance of such services by or before **December 31, 2015**.

IV. LESJWA LIAISON

Rick Whetsel shall 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 **\$94,650** in accordance with the rate schedule, attached hereto. Payment for such expenses shall be made monthly upon receipt of proper invoices from Consultant, as required by the above-mentioned 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.
- e. Drawings incorporated by reference.

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

LAKE ELSINORE & SAN JACINTO WATERSHEDS AUTHORITY

Phil Williams, Chair Date

MWH AMERICAS, INC.

(Signature) Date

Print or Type Name



BUILDING A BETTER WORLD

July 26, 2013

Mr. Mark R. Norton, Authority Administrator
Lake Elsinore and San Jacinto Watersheds Authority
11615 Sterling Avenue
Riverside, CA 92503

Proposal submitted via email to: mnorton@sawpa.org

Subject: Proposal to Conduct Canyon Lake Alum Treatment Effectiveness Monitoring

Dear Mr. Norton:

MWH Americas, Inc., together with our subconsultant partner, California State University San Bernardino (CSUSB), is pleased to submit this proposal to provide water quality monitoring services on Canyon Lake.

Founded in southern California, MWH is recognized as one of the world's leading environmental engineering firms. Known world-wide for our water and wastewater project management, design, and construction, MWH also provides a wide range of environmental and business services, including environmental monitoring and compliance reporting. MWH Americas, Inc. is headquartered in Broomfield, Colorado (370 Interlocken Blvd. Suite 300, Broomfield, Colorado 80021). While Broomfield is home to our corporate managers, our large Arcadia office is home base for 147 technical professionals and supporting staff. The Arcadia office is located at 618 Michillinda Avenue, Suite 200, Arcadia, CA 91007, 626-796-9141.

MWH and CSUSB have worked on the monitoring programs on Lake Elsinore and Canyon Lake since 2006. The partnership provides high quality sampling, analysis and reporting services while affording a valuable educational experience for CSUSB students. To date, over 30 students have been involved with the program. We look forward to working with the LESJWA Task Force on the evaluation of alum effectiveness in Canyon Lake. If you have any questions or require any additional information, please do not hesitate to contact Sarah Garber at (626) 568-6910.

Sincerely,

MWH Americas, Inc.

Steven Weber, PhD
Southwest Regional Manager

Sarah Garber, PMP
Principal Environmental Scientist

618 Michillinda Avenue
Suite 200
Arcadia, CA 91007

TEL 626 796 9141
FAX 626 568 6101
www.mwhglobal.com

Canyon Lake Alum Treatment Effectiveness Monitoring

MWH, together with our subconsultant partner, California State University San Bernardino (CSUSB), is pleased to submit this proposal to provide water quality monitoring services on Canyon Lake.

Section 1 – Project Understanding

Canyon Lake is listed on the Clean Water Act Section 303(d) list as impaired for excessive nutrients and high bacteria concentrations. Consequently, the Santa Ana Regional Water Quality Control Board (Regional Board) adopted Resolution No. R8-2004-0037 in December 2004 to amend the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) to incorporate total maximum daily loads (TMDLs) for Lake Elsinore and Canyon Lake. The TMDLs address beneficial use impairment due to excessive nutrients (phosphorus and nitrogen) discharged to the lakes from various sources.

From 2006 to 2012, a formal monitoring program for Canyon Lake (in compliance with the TMDL program) was conducted. The in-lake samples were analyzed for a suite of parameters from four stations (two to three depths monitored bi-weekly in the wet season and three depths monitored once per month in the dry season). Modifications to the sampling program adopted in 2011 eliminated one of the sampling stations and several parameters (BOD, COD, TOC, and DOC). MWH conducted water quality reporting during this period with sample collection and analysis by CSUSB from 2007 to 2012. MWH also coordinated with Regional

Board staff in 2011 to reduce the scope of the sampling program based on monitoring results.

To control nutrients and resultant algae blooms in Canyon Lake, the LESJWA Task Force is planning to implement five alum applications to the lake, over approximately the next 2 years. Alum will be applied in two locations: the Main Lake and the East Bay. Water quality monitoring at four stations will establish the effectiveness of alum applications for phosphorus removal, and the resultant effect on algal concentrations and water quality.

Section 2 - Qualifications and Experience

MWH conducts a range of regulatory compliance projects for our clients, including technical studies to support environmental documents and environmental restoration and remediation projects. Relevant surface water quality monitoring programs and watershed studies conducted by MWH are highlighted below.

MWH is proud of our past work. The references listed for the related projects will confirm that the MWH Team has the technical excellence and responsiveness required to meet LESJWA's water quality monitoring needs.

Lake Elsinore and Canyon Lake TMDL Water Quality Monitoring Program

Canyon Lake Bacteria Monitoring and Assessment Project

Canyon Lake Alum Jar Tests

Client: Elsinore Valley Municipal Water District

Period of Service: 2006 to 2012

Project Manager: Sarah Garber, PMP, CPP

Laboratory Manager: Dr. Jim Noblet

Technical Reviewer: Dr. Janet Fahey, PE



Project Description: The Regional Board identified Lake Elsinore as an impaired water body, due in part to excessive levels of nutrients (hypereutrophication), algae blooms and fish kills. In an effort to improve water quality conditions in the lakes, the Regional Board adopted Resolution No. R8-2004-0037 in December 2004 to amend the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) to incorporate TMDLs for Lake Elsinore and Canyon Lake. The TMDLs address beneficial use impairment due to excessive nutrients (phosphorus and nitrogen) discharged to the lakes from various sources.

Canyon Lake TMDL Water Quality Monitoring. MWH, in coordination with CSUSB, conducted water quality monitoring for 6 years on both Lake Elsinore and Canyon Lake as required by the California Regional Water Quality Control Board, Santa Ana Region (Regional Board) total maximum daily load (TMDL) program for both lakes, and NPDES No. CA8000027 for the Regional Water Reclamation Plant (Regional Plant) for discharges to Lake Elsinore. The objective of the monitoring program is to describe water quality trends in both lakes. For Lake Elsinore, water quality conditions before and after operation of an in-lake mixing and aeration system and recycled water addition can be compared. MWH managed sample collection, data analysis, report preparation, and coordination with Regional Board staff and the TMDL stakeholders. MWH also prepared the Quality Assurance Project Plan (QAPP) for the sampling program. Sarah Garber served as the Quality Assurance Manager for the program.

Canyon Lake Bacteria Monitoring. 2009, MWH and CSUSB conducted additional monitoring on Canyon Lake to determine if Canyon Lake is in continuous compliance with the EPA promulgated water quality objective for *E. coli*. Grab samples of lake water were collected during two periods of the year (winter and summer) on a weekly basis at six locations. MWH also updated the QAPP for the Canyon Lake Bacteria Monitoring and Assessment Project.

Based on the data collected from these six stations during the wet and dry season sampling periods, the geometric means of *E. coli* densities at each station were consistently below the 126 per 100/ml standard.

Canyon Lake Alum Jar Tests. In 2012, CSUSB conducted jar tests on Canyon Lake water to investigate the feasibility of treating lake water with alum (hydrated Aluminum Sulfate) for the removal of the turbidity and phosphorus. Four field samples were collected from Canyon Lake - two locations in the Main Body, and two locations in the East Bay. Jar tests were performed on the collected samples using 1.0 L samples, using a 10,000 ppm alum stock solution. Before and after treatment, samples were measured for pH, temperature, turbidity, conductivity, dissolved aluminum concentration, total nitrogen and total phosphorus. The goal of the testing was to identify the dose of alum required to achieve a turbidity of less than 1.0 NTU.

Reference

Mr. Norris Brandt, EVMWD
31315 Chaney Street
P.O. Box 3000
Lake Elsinore, CA 92531
Phone: 951-674-3146, Fax: (951) 674-1752, Email: nbrandt@evmwd.net

**San Gabriel River Sediment Management Plan
Water Quality and Sediment Monitoring**

Client: Los Angeles County Department of Public Works
[MWH as sub-consultant to Chambers Group, Inc.]

Period of Service: 2001 to 2006
Project Manager: Sarah Garber, PMP, CPP
Technical Reviewer: Dr. Janet Fahey, PE



Project Description: The County of Los Angeles Department of Public Works (LADPW) developed a Sediment Management Plan to guide the removal of accumulated sediments from the San Gabriel and Morris Reservoirs. In order to maintain capacity in the reservoirs, sediment removal was initially to be accomplished via sluicing and flushing the sediments downstream. LADPW monitored conditions (riparian habitat, wildlife, hydrological regime, aquatic habitat, and water and sediment quality) on the San Gabriel River prior to sluicing of Morris Reservoir in late 1998. Monitoring requirements related to sediment removal are described in the environmental document for the project and in permits issued to the County.

MWH was responsible for water and sediment quality monitoring for the 2001 baseline sampling period and continued to perform these services from 2002 through 2006. Sampling stations from Bear Creek to below Santa Fe Dam were sampled twice per year. The MWH Work Plan was specifically intended to meet the requirements of the Regional Board Monitoring and Reporting Program No. 7905. The Work Plan also incorporated the requirements of Section 5.3 of the Final EIS/EIR for the project, the California

Department of Fish and Wildlife Streambed Alteration Agreement and the U.S. Army Corps of Engineers 404 Permit. Monitoring included field and laboratory water quality analysis, stream morphology and flow measurements, and streambed sediment characterization.

Reference:

Ms. Mari Quillman, Principal Biological Resources Program Manager/Wildlife Biologist
ECORP Consulting, Inc. (formerly with Chambers Group)
1801 Park Court Place, B-103, Santa Ana, CA 92701
Phone: 714.648.0630, Cell: 714.222.5932, Fax: 714.648.0935, Email: mquillman@ecorpconsulting.com

Tujunga Wash Water Quality Monitoring Program

Client: Los Angeles County Department of Public Works
[MWH as subconsultant to ECORP Consulting, Inc.]

Period of Service: 2000 – present
Project Manager: Sarah Garber, PMP, CPP
Technical Reviewer: Dr. Janet Fahey, PE



Project Description: Since 2000, MWH has conducted water quality and streamflow monitoring at Big Tujunga Wash. The 207-acre project site is a mitigation bank for flood control projects implemented by the LADPW. Potential impacts to aquatic species from pesticide and nutrient-laden run-on to the site are key issues for the sampling program. Sampling of two on-site creeks and two on-site ponds is conducted. Water quality samples are analyzed at Eurofins Eaton Analytical (formerly MWH Laboratories) in Monrovia.

Reference:

Ms. Mari Quillman
Contact information as above

Temescal Wash Vegetation and Hydrologic Monitoring Program

Client: Elsinore Valley Municipal Water District

Period of Service: 2007 - 2008

Project Manager: Sarah Garber, PMP, CPP



Project Description: EVMWD effluent from its Regional Plant has been a major contributor to flow in Temescal Wash. However, since late June 2007, EVMWD has diverted most wastewater flows from Temescal Wash to Lake Elsinore in order to maintain lake levels. Therefore, MWH conducted the Temescal Wash monitoring program to assess hydrologic and biologic conditions in and along the Wash from the Regional Plant to Lee Lake (Corona Lake) to identify the impacts of decreased flows resulting from changes in effluent discharges to the Wash. The Temescal Wash monitoring program was originally defined as a mitigation measure in the 2005 LESJWA Program EIR for Lake Elsinore Stabilization and Enhancement and subsequently refined in the EVMWD Mitigated Negative Declaration for the Recycled Water Use Ordinance in 2006.

The monitoring program, which began in Spring 2007, consisted of surface water quantity monitoring, shallow groundwater level monitoring and vegetation monitoring at identified locations in and adjacent to Temescal Wash between the Regional Plant and Lee Lake. Vegetation monitoring focused on the health of the riparian forest as this habitat supports least Bell's vireo, an endangered species, and other riparian-obligate birds.

Reference

Mr. Norris Brandt, *Contact information as above*

San Jacinto Watershed Sanitary Survey

Client: Elsinore Valley Municipal Water District; **Refs:** Mr. Norris Brandt, *contact information as above*

Period of Service: 1996 (original WSS), updated in 2001, updated in 2006, updated in 2012

Project Manager: Sarah Garber, PMP, CPP (2001 and 2006; Technical Reviewer in 2012)

Project Description: MWH prepared the original, and all subsequent updates to, the Watershed Sanitary Survey for the 718 sq mi San Jacinto Watershed tributary to Canyon Lake. This comprehensive document was prepared in compliance with Surface Water Treatment Rule and the 2006 version was also submitted to the California Legislature in compliance with Senate Bill 979.

Section 3 - The MWH Team

The project team comprises the same Project Manager from MWH and Laboratory Director from CSUSB who recently completed the NPDES monitoring and TMDL coordination for Canyon Lake and Lake Elsinore. Sarah Garber, Principal Environmental Scientist, will serve as the Project Manager and will coordinate sampling and reporting. Sarah will monitor the project to ensure the LESJWA's goals are met through timely and prompt allocation of resources. Sample collection, field analyses, and laboratory analyses will be conducted by Dr. Noblet and his students. A field team of at least two CSUSB students will collect water quality samples. For the first sampling event, students will be accompanied by Dr. Noblet. Dr. Janet Fahey, MWH Principal Environmental Scientist, will perform Quality Control review. Brief summaries of key personnel are provided below; full resumes for key staff are appended.

Sarah Garber, PMP, CPP – Project Manager.

Ms. Garber is a principal environmental scientist with 25 years of experience in environmental impact assessments for infrastructure projects. In addition to National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) documentation, Ms. Garber also specializes in permit acquisition from a wide-range of regulatory agencies. Ms. Garber routinely conducts public scoping meetings for environmental documents, participates in stakeholder coordination meetings, and presents the environmental issues of projects at public hearings. In addition, Ms. Garber is involved in surface water investigations and permitting for stream discharges. She has worked as a field biologist, concentrating in water quality analysis, including fisheries investigations and natural resource surveys. Ms. Garber is also a certified Project Management

Professional (PMP) with the Project Management Institute (PMI).

James A. Noblet, Ph.D., Professor and Director, CSUSB Water Quality Laboratory

(Subconsultant to MWH). Dr. Noblet has over 20 years of experience in environmental sampling, analysis and project management. He has been involved in projects encompassing all types of aquatic systems - coastal marine, estuarine, stormwater, rivers, lakes, streams and creeks, and groundwater. Past projects include 6 years of water quality monitoring of Canyon Lake and Lake Elsinore, special Fecal Indicator Bacteria study on Canyon Lake, A Study on the use of Alum for the Removal of Turbidity and Nutrients in Canyon Lake, and 2 years of bacteriological monitoring of Lytle Creek. Current projects include removal of arsenic from rural groundwater systems in Coachella Valley, and a study of the occurrence of manganese precipitation problems in drinking water wells in Hinkley, CA. Dr. Noblet and his students are also working with a local company to evaluate a new nanomaterial for potential use in water treatment.

Dr. Janet Fahey, PE – Quality Control Reviewer.

Dr. Fahey is a technical reviewer for many of MWH's environmental studies and regulatory compliance projects. She has over 36 years of experience, both domestic and overseas, in the areas of water supply and wastewater facilities planning and analysis, watershed and receiving water studies, wastewater reclamation, and environmental permitting and analysis. Her background includes evaluation of environmental impacts relative to water development, treatment, and storage; wastewater collection, treatment, and disposal including recharge; wastewater reuse and recycling; endangered species evaluation; and revegetation. Dr. Fahey has worked in the Lake Elsinore area for over 30 years, and served

as the Quality Control Reviewer for the Lake Elsinore and Canyon Lake Water Quality Monitoring Program from 2006 to 2012.

Student Field and Laboratory Technicians. In addition to the Laboratory Director, the CSUSB Water Quality Laboratory is staffed by undergraduate and/or graduate students of the University. All students recruited to work for the laboratory must have at minimum completed 1 year of general chemistry, and must have completed or be currently enrolled in organic chemistry and analytical chemistry. Students must have received a grade of B or better in these courses, as well as have an overall GPA of 3.0 or better in their science courses. They must be chemistry or biochemistry majors. With these requirements, the students working in the lab are at least sophomores, but more frequently juniors and seniors. Special consideration is given to hiring those students who have expressed an interest in the water industry as a career, or in water as a field of interest for graduate study. All students are trained starting with washing glassware, sampling containers and equipment as per EPA protocols. Students are trained on various analytical methods as needed and then allowed to perform only those methods in which they have demonstrated proficiency. All training and evaluation of lab personnel is under the general supervision of the Laboratory Director, Dr. Noblet.

The training of field personnel is done initially by Dr. Noblet, and then continued under the supervision of senior field staff. All field work will be conducted by two students; students will be highly proficient in all aspects of the sampling and field parameter measurements. All students performing field work must know how to swim. For each round of sampling events, Dr. Noblet will accompany students in the field to ensure that all equipment is working

properly and that students are proficient in the sampling methodologies. Subsequently, student teams will be allowed to perform field work on their own, but Dr. Noblet will be available by cell phone at all times during the field work to address any questions or problems that may arise.

Current CSUSB Water Lab Personnel

Many students are interested in working in the CSUSB Water Quality Laboratory for both the interesting nature of the work, and the valuable experience they gain. For the past 10 years, more than 30 talented students have been employed in the water quality laboratory. Dr. Noblet has his choice of outstanding students to staff the laboratory. CSUSB will be able to meet the personnel requirements of this project by hiring new students and training them as necessary. Brief biographies of current laboratory personnel follow.

Emmett Campbell - Senior Laboratory Analyst. Emmett is a senior Biochemistry major, and has been working in the lab for nearly 2 years. He is proficient in nearly all the analyses the water quality lab performs, and is quite proficient in all of the methods and procedures that will be used for this project. Emmett worked on the Canyon Lake and Lake Elsinore monitoring programs in 2012. Moreover, he was the primary student that performed the lab and field work on the alum jar test study in 2012. He is thoroughly familiar with Canyon Lake and the pertinent water quality issues. In addition to being an excellent analyst and student, Emmett is working on his D1 and T1 certifications through the Office of Water Programs at CSU Sacramento. He will be available for the initial phase of the project (through December 2013, and possibly February 2014).

Ingrid Williams - Laboratory Analyst. Ingrid is a recent addition to the lab and a junior Chemistry major. She has a deep interest in water quality, and has had previous internships with the US Forest Service and the Santa Ana Watershed Project Authority (SAWPA). She recently completed Dr. Noblet's analytical chemistry course and was one of the top students in the class. She is an outdoor type of person who will excel in both field and laboratory work. It is anticipated that Ingrid will be working in the laboratory for the duration of the project.

Crystal Carver Steil - Laboratory Analyst. Crystal is a senior Chemistry major. She also just completed Dr. Noblet's analytical chemistry class with top marks. She has a profound interest in pursuing a career in the water industry, and wants to gain experience working in our laboratory. She has shown an aptitude for analytical work and she has an outstanding work ethic. It is anticipated that Crystal will be on staff for the first two rounds of sampling and analysis, December 2013 and February 2014.

Section 4 - Scope of Work

Alum application in Canyon Lake is proposed in order to remove nutrients from the water column that contribute to algal blooms in the lake. By binding phosphorus and reducing algae growth, the continued use of alum is expected to reduce nutrient cycling and associated sediment oxygen demand in the lake sediments. The goal is compliance with the interim and final chlorophyll *a* TMDL targets. Alum application is also anticipated to indirectly increase dissolved oxygen in the hypolimnion as well as reduce the frequency of ammonia toxicity. MWH understands that the LESJWA Task Force wants to establish the effectiveness of alum applications in binding phosphorus, reducing algal growth, and indirectly increasing

oxygen levels. Additionally, monitoring results will be used to evaluate, and hopefully confirm, that alum addition does not result in acute or chronic aluminum toxicity. Water quality monitoring results will help assess alum application effectiveness, the extent of the lake-wide impact, seasonal variations and impacts of various alum doses. Both winter (February - following wet season storms, prior to spring algal bloom) and late summer (September - prior to turnover/fall algal bloom) applications are proposed.

Since the effectiveness of in-lake alum addition will be evaluated as part of the adaptive management process, water quality monitoring prior to and after alum application will provide important data for modification of the program. Ultimately, based on the effectiveness of alum addition, the LESJWA Task Force may need to evaluate constructing supplemental in-lake management systems such as aeration or hypolimnetic oxygenation (HOS) and/or supplemental watershed based source controls.

The following scope of work and fee estimate are based on the sampling program described in the Request for Proposal. However, the LESJWA Task Force may want to modify the sampling program after review of initial data. After initial results are available from the first sampling event, the MWH Team will review the data with the LESJWA Task Force. Modifications to sampling stations, frequency of post application monitoring, water quality parameters, or depth of sample collection will be considered. If applicable, changes to the monitoring program may result in reduction and/or amendment to the scope of work.

Task 1 – Prepare Sampling and Analysis Plan
A Sampling and Laboratory Analysis Plan (SLAP) will be prepared to describe the effectiveness monitoring activities conducted within the lake

and the analysis methods to be conducted in the CSUSB laboratory. The SLAP will be consistent with the Water Quality Monitoring Plan and Quality Assurance Project Plan (QAPP) prepared in April 2007. Sarah Garber was the Quality Assurance Manager identified in the QAPP for the 2007 - 2012 Lake Elsinore and Canyon Lake Monitoring Program. Sarah will ensure that quality control procedures are again followed for the Alum Effectiveness Monitoring.

Task 2 - Conduct Canyon Lake Alum Effectiveness Water Quality Monitoring

The MWH team will perform sampling and analysis from September 2013 through September 2015 before and after five alum application events. Sampling will be conducted up to 25 times (one week before application, and once per week for four weeks after application) at four locations in the lake. Water quality parameters, collection location, analysis method, and quality control procedures are summarized in **Table 1**. MWH understands that the LESJWA Task Force may also collect monthly data to evaluate long term water quality trends.

Sampling Stations. Samples will be collected in the morning hours (approximately 0800 to 1200) at the following four stations:

- CL7 - deepest part of the lake near the dam (33 deg 40.675 N / -117 deg 16.517 W)
- CL8 - mid-lake, main body of lake (33 deg 41.296 N / -117 deg 16.155 W)
- CL9 - shallow site in the East Bay (33 deg 40.874 N / -117 deg 15.528 W)
- CL10 - shallow site without thermal stratification in the East Bay (33 deg 40.779 N / -117 deg 15.046 W)

Description of Equipment: Individual water samples and depth integrated samples will be collected from specified depths using a 2.2 L horizontal beta-plus type clear acrylic van Dorn Sampler. For depth integrated samples, a water

sample will be collected at 1 meter intervals, and a consistent volume will be delivered to a polypropylene bucket, and mixed. Then a single homogenized sample will be poured from the bucket into the sample bottles. Samples will be collected in pre-cleaned brown opaque HDPE bottles, and kept on ice until returned to the laboratory. All samples will be stored at 4 degrees C until processed and preserved if necessary according to method protocols. As in the previous sampling program, it is assumed that watercraft and pilots for the sampling team will be provided by the Canyon Lake Marine Patrol for all sampling events.

Depth profiles for temperature, pH, turbidity, and dissolved oxygen will be measured using a Hach Hydrolab DS-5 water quality sonde connected via a 30 m cable to a Surveyor 4 data display. Data will be collected at 1 meter intervals and recorded on field data sheets. Data from the sheets will be transferred to and stored in an electronic database as soon as possible.

Task 3 – Prepare and Distribute Monitoring Reports, Attend Meetings

MWH will present the water quality monitoring results for each of the five alum application events in a report. After each event, the data set will be expanded and the report updated. Report sections will include: Introduction, Background and Objective, Materials and Methods, and Results. MWH will prepare a draft report for LESJWA Task Force review, incorporate comments, and prepare and distribute up to 10 copies of the final report. Additionally, data will be submitted in Excel.

MWH will attend up to three meetings at EVMWD, SAWPA, or Regional Board offices to present the results of the monitoring program and coordinate with LESJWA Task Force members regarding lake monitoring issues.

Table 1. Summary of Analysis Method and Quality Control Notes by Parameter

Parameter	Sample Collection	Sample Analysis	QA/QC Notes
Temperature	Vertical profile at each station (4 stations) (1 m intervals)	Field Measurements Hydrolab DataSonde 5 and Surveyor	<ul style="list-style-type: none"> Hydrolab is calibrated against solutions of known pH, DO and turbidity each morning. Calibration check values are recorded on a Hydrolab calibration sheet. Concentration of DO standard is calculated from known temperature-dependence of O₂ solubility in water corrected for local atmospheric pressure/elevation; over a lab temperature (T) range of 20-25 °C and elevation of 1600 ft above MSL. Turbidity is calibrated against a 40 NTU Hach StablCal Primary turbidity standard.
Dissolved Oxygen (DO)			
pH			
Turbidity			
Secchi Depth (transparency)	1 reading per station (4 stations)	Visual observation in field	<ul style="list-style-type: none"> Measured to nearest 0.01 m
Total Phosphorus (TP)	Three samples per station (3 stations): Epilimnion Hypolimnion Depth Integrated (when lake is stratified) and One single depth-integrated sample at East Bay station CL10	Laboratory Analyses: SM 4500-P F (total); Lachat 10-115-01-4-B	<ul style="list-style-type: none"> Laboratory duplicates at a frequency of no less than one per 10 samples. Duplicate analyses of field splits will be used to assess the precision of analytical methods. Duplicate analysis of a sample on the same instrument will provide instrumental precision data. Reference materials to be run with each batch of laboratory samples. Spike samples to be run at a frequency of no less than one per 20 samples or one per batch (whichever is more frequent). Matrix spike replicates to be run at a frequency of no less than one duplicate per 20 samples or one per batch (whichever is more frequent). Laboratory and field blanks. Samples for analysis of dissolved constituents will be filtered and acidified as appropriate.
Soluble Reactive Phosphorus (SRP)		SM 4500-P C (SRP)	
Total Nitrogen (TN)		SM 4500-N C; Lachat 10-107-04-B	
Ammonia (NH ₃)		SM 4500-NH3 D	
Aluminum – dissolved (Al _{diss})		EPA 200.9	
Aluminum – total (Al _{total})			
Total Dissolved Solids (TDS)		SM 2540 C	
Total Suspended Solids (TSS)		SM 2450D	
Chlorophyll a	SM 10200 H		

Source for laboratory methods: American Public Health Association, American Waterworks Association, and Water Environment Federation. 1992 and 2005. Standard Methods for the Examination of Water and Wastewater, 18th and 21st Editions.

Section 5 - Project Schedule

The SLAP will be prepared and distributed for LESJWA Task Force review prior to the first sampling event.

Water quality samples will be collected from the four compliance monitoring sites (CL07, CL08, CL09, and CL10) once within one week prior to the alum application and for four consecutive weeks following the alum applications. Each alum application is anticipated to take approximately 7 – 10 days to complete. A total of 25 water quality monitoring events will be conducted: 5 each, starting in September 2013, February 2014, September 2014, February 2015, and September 2015.

Date	Milestone	Reporting
September - October 2013	5 sampling events over 5-6 weeks	Initial Data Summary Report
February - March 2014	5 sampling events over 5-6 weeks	Updated Report
September - October 2014	5 sampling events over 5-6 weeks	Updated Report
February - March 2015	5 sampling events over 5-6 weeks	Updated Report
September - October 2015	5 sampling events over 5-6 weeks	Updated Report

A draft report will be prepared within 2 weeks of receipt of final laboratory data for each round of sampling (five sampling days). The report will be submitted to the LESJWA Task Force for review, and after incorporation of

comments, distributed to interested parties as appropriate.

The MWH Team, including the CSUSB students, are available to begin the water quality sampling program in September 2013.

Section 6 - Compensation Budget

The compensation budget is based on a schedule of approximately 2 years - sampling from September 2013 to September 2015, and analysis and report until December 2015. Hourly rate schedules for MWH personnel classifications are presented in **Table 2**. Hourly rates are inclusive of salary, overhead, and fee. A breakdown of the cost by personnel classification for each task is included as **Table 3**. The anticipated budget for this project is \$94,650.

Table 2. MWH Schedule of Hourly Billing Rates

Job Titles / Classification	Hourly Rate
Principal Professional II (Engineer/Scientist) (Janet Fahey, Technical Reviewer)	\$ 225
Principal Professional I (Engineer/Scientist) (Sarah Garber, Project Manager)	\$ 200
Supervising Professional (Engineer/Scientist)	\$ 180
Senior Professional (Engineer/Scientist) (Jackie Silber, GIS)	\$ 160
Professional (Engineer/Scientist)	\$ 140
Associate Professional (Engineer/Scientist)	\$ 125
Assistant Professional (Engineer/Scientist)	\$ 100
Sr. Contracts Administrator (Belinda Howell)	\$ 125
Administrative Assistant	\$ 100

Compensation is based on a single not-to-exceed fee based on the following contract terms:


1. Payment of the invoiced amount for the professional engineering services shall be based on monthly invoices describing the work performed and expenses incurred during the preceding month.
2. Non-salary expenses and outside services attributable to the Project shall include:
 - Living and traveling expenses including mileage of employees and subcontractors when away from the home office on business connected with the services.
 - The identifiable costs of reproduction, printing and binding applicable to the Project.
 - The actual cost of outside and subcontracted services, and other direct costs identifiable to the Project will be charged at cost plus MWH General and Administrative (G&A) costs plus 10 percent.
3. Payment shall be due within 30 days after date of monthly invoice describing the work performed and expenses incurred during the preceding month.

Rates will be escalated on an annual basis in January to account for labor cost increases based on the Global Insights index forecast for Private, Professional, Scientific, Technical wages for the Western US. The rate increase will not exceed the change in Consumer Price Index (CPI), for Los Angeles, Riverside, and Orange County Area, all urban consumers for the most recently available 12 month period or as approved by the LESJWA Task Force.

MWH has reviewed the Draft LESJWA Contract Agreement. We request the following modifications of the text contained in the sample LESJWA AGREEMENT FOR SERVICES BY INDEPENDENT CONSULTANT attached to the Request for Proposal for Canyon Lake Alum Treatment Effectiveness Monitoring dated July 2013:

1. At the bottom of page 2 (hanging paragraph of Section 4.03), insert “to the extent” before “caused by the negligence”
2. In 4.04 (third line), insert “to the extent” before “caused by the negligence”
3. In 6.04 strike “as determined by LESJWA”.

**Table 3
Lake Elsinore and San Jacinto Watersheds Authority
Canyon Lake Alum Treatment Effectiveness Monitoring
MWH Fee Proposal**

		Hourly Rate											Other Direct Costs (ODCs)	Subconsultant (CSUSB)	TOTAL TASK PROPOSAL FEE
		\$225	\$200	\$180	\$160	\$140	\$125	\$100	\$125	\$100					
	ACTIVITY DESCRIPTION	Principal Professional II	Principal Professional I	Supervising Professional	Senior Professional	Project Professional	Associate Professional	Assistant Professional	Sr. Contracts Administrator	Administrative Assistant	TOTAL HOURS	MWH LABOR FEE			
1	Prepare Sampling Plan		10		2				2	2	16	\$2,770		\$500	\$3,270
2	Conduct Monitoring and Lab Analysis		30		6				12	12	60	\$9,660		\$51,700	\$61,360
3	Reporting and Meetings	6	58		2		80		12	20	178	\$26,770	\$1,250	\$2,000	\$30,020
	TOTALS	6	98	0	10	0	80	0	26	34	254	\$39,200	\$1,250	\$54,200	\$94,650