

**MEETING NOTES
OF THE
LAKE ELSINORE/CANYON LAKE TMDL TASK FORCE**

October 27, 2015

PARTICIPANTS

Richard Meyerhoff
Tiffany Smith
Patrick Hally
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Kirsten Rowe
Linda Nixon
Rae Beimer
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Steve Horn
John Jackson
Nancy Horton
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Lauren Churchman
Greg Smith
Ankita Vyas
Tim Moore
Steven Pastor
Jason Uhley
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Ken Theisen
Mark Smythe
Lynn Merrill
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Pat Boldt
Roger Turner
Mark Norton
Rick Whetsel

REPRESENTATIVE

CDM Smith
CDM Smith
CalTrans
City of Beaumont
City of Canyon Lake
City of Hemet
City of Moreno Valley
City of Murrieta
City of Perris
City of Riverside
City of Riverside
County of Riverside
Eastern MWD
Elsinore Valley MWD
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March JPA
PACE
RBF/Caltrans
Risk Sciences
Riverside County FB
Riverside County Flood Control & WCD
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Regional Water Quality Control Board
Regional Water Quality Control Board
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UC Riverside
WRCAC
Consultant/WRCAC
Santa Ana Watershed Project Authority
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Via Conference Call:

Steve Wolosoff
Nicole Dailey
Phil Williams
Bobby Gustufson
Ivette Jones

CDM Smith
City of Lake Elsinore
Elsinore Valley MWD
Elsinore Valley MWD
Moreno Valley

Call to Order & Introductions

The Lake Elsinore/Canyon Lake TMDL Task Force meeting was called to order at 9:00 a.m. by Task Force Chair, Jason Uhley at Santa Ana Watershed Project Authority, Riverside, California.

Meeting Notes

The Meeting Notes were approved by the Task Force for the meeting held on September 9, 2015.

Presentation: WaterSavr (lake evaporation reduction product)

Representatives from Flexible Solutions provided stakeholders an overview on WaterSavr, a product designed to help reduce evaporation and water loss from lake surfaces. WaterSavr is 100% biodegradable oil, composed of only food grade ingredients (palm oil and lime) that are applied to the water surface every three days. A number of studies claim that WaterSavr can reduce evaporation from reservoirs up to 35%.

WaterSavr is estimated to cost about \$150 per acre-foot as compared to the current cost of water estimated at \$400 per acre-foot. If applied to both Lake Elsinore and Canyon Lake during the summer months, it is estimated to save approximately 3,600 acre-feet of water.

Questions were raised as to 1) its effectiveness on a water body such as Lake Elsinore, which experiences a great deal of wind action and 2) if it would inhibit the oxygenation of the lake. The representative from Flexible Solutions noted that there had not been issues with wind action nor oxygenation of lakes, and offered to provide a link to studies performed to demonstrate the effectiveness of WaterSav .

This presentation is available on the Lake Elsinore and Canyon Lake TMDL webpage on the SAWPA website (“Stakeholder Effort” tab).

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

Lake Updates

Lake Elsinore

Nichole Dailey/City of Lake Elsinore provided an update on Lake Elsinore and noted that the City feels fortunate to have made it through the summer without a major fish kill, and at this time the City is preparing its residents for the possible impacts of El Nino.

Canyon Lake

Kirsten Rowe/City of Canyon Lake noted that like Lake Elsinore, the City has been working to get residents prepared for the impacts of an El Nino event this winter.

Nancy Horton/EVMWD added that the East Bay is looking good.

Canyon Lake Alum Treatment Project (LESJWA Staff)

September 2015 Application

Mark Norton/LESJWA provided an update on the Canyon lake Alum treatment project, noting that there were no issues with the September alum application conducted during the week of September 21-24. Water quality results will be shared with stakeholders when they are available from Dr. James Noblet.

Mr. Norton noted that this concludes the five planned alum applications for Canyon Lake and we have seen great improvements with phosphorus and chlorophyll a. The Task Force is looking to continue to use alum as a treatment strategy for Canyon Lake, and is planning to use the remaining Prop 84 grant funds estimated at \$170,000 to conduct two additional applications to Canyon Lake.

CEQA Update

LESJWA has executed a Task Order with Tom Dodson and Associates to amend the CEQA. This will extend the previously approved project to allow the stakeholders to continue to apply alum treatment to Canyon Lake’s Main Body and East Bay, as well as expand the area of consideration—the transition area from the San Jacinto River—with alum up to twice a year for the next 10 years.

Aquatechnex Change Order

LESJWA staff is working on a change order with Aquatechnex to add two additional alum applications, currently planned for 2016.

A question arose regarding El Nino and if the lakes receive a large volume of runoff, whether the planned 2016 alum applications should be delayed for a year, as it is expected that we will have good water quality for the first year following a wet winter. It was agreed that the Task Force would evaluate the water quality in Canyon Lake prior to applying alum.

Presentation: Lake Elsinore & Canyon Lake Modeling (Dr. Michael Anderson/UC Riverside)

Dr. Michael Anderson/UC Riverside presented to stakeholders on “Long-Term Water Quality Simulations for Lake Elsinore: Effects of Supplementation with Recycled Water (v.2)”.

This presentation provided an update to stakeholders on the model developed for Lake Elsinore to assess the impacts of recycled water inputs on in-lake water quality in Lake Elsinore, relative to no recycled water addition. This presentation is available on the Lake Elsinore and Canyon Lake TMDL webpage on the SAWPA website (tab Stakeholder Effort).

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

Proposal Questions

Dr. Anderson followed his presentation to stakeholders by providing an update on each of the specific modeling questions outlined in his project proposal.

He noted that questions #2 and #5 have been fully addressed through the modeling. Question #2 (How does the addition of recycled water change the natural variations in lake level that would otherwise occur and what is the net effect on nutrient, salinity and algae concentrations over time?), and #5 (What is the net effect of using recycled water to stabilize water levels in Lake Elsinore over a long period of time? Specifically, how do all of the following change with and without the presence of recycled water? And, what is the net effect on each of adding more/less recycled water?).

Questions #1, #6, #7 and #8, will be addressed as part of the next steps of his modeling analysis. Question #1 (How do nutrient concentrations, salinity concentrations, dissolved oxygen (DO) concentrations, and algae concentrations vary with lake level under pre-development and modern land use conditions?), #6 (What is the estimated effect on water quality in Lake Elsinore if additional measures are implemented to further reduce the average phosphorus concentration in recycled water (e.g. from the current 0.5 mg/L down to as low as 0.1 mg/L in 0.1 mg/L increments)?), #7 (To what extent, if any, will reducing algae populations in Lake Elsinore affect ammonia concentrations in the lake?), and #8 (Based on our best understanding of dynamic lake levels, asymmetric precipitation/runoff/loading patterns and nutrient cycling in Lake Elsinore, how much reduction in new external nutrient loads and/or existing sediment loads would be required to achieve compliance with the TMDL response targets for chlorophyll-a and DO?).

Dr. Anderson raised a concern of how his model could adequately address question #3 (What is the estimated effect on water quality [nutrients, algae, DO] of limiting the carp population?). Note: similar to the question previously addressed in Dr. Anderson's 2006 sensitivity study. Tim Moore/Risk Sciences suggested for this question that the results of the 2006 carp population assessment, which stipulated that the impact was about 2%, be applied as a constant 2% reduction in the current model to see what the impacts would be to DO and algae. Dr. Anderson offered to perform this analysis to satisfy the needs of the Task Force.

Dr. Anderson noted that he was not satisfied with how his model was addressing question #4 (What is the estimated effect on water quality [nutrients, algae, DO] of stocking hybrid game fish to reduce the shad population and protect the zooplankton population?), as his model under-predicted the fish populations in the lake, but he will continue to look into the question. It was suggested that Dr. Anderson manually increase the fish populations and scale the nutrient concentrations appropriately.

Following discussion of these modeling questions, Dr. Anderson said he had all of the data required to complete his modeling analysis and would have the project wrapped up by the end of the year. This was followed by a question to Dr. Anderson regarding the potential impacts of El Nino and if there were any data that should be collected to help the Task Force better understand the impacts of El Nino on the lakes.

It was suggested that the Task Force collect sediment samples for Canyon Lake, to measure the amount of total aluminum present in the samples, and confirm that the aluminum is present in the form of aluminum phosphate. This will require careful speciation of both aluminum and phosphorus. Tim Moore noted that this is very similar to work that Dr. Anderson performed for Big Bear to justify future alum applications.

LESJWA staff was requested to follow-up with Dr. James Noblet regarding his ability to conduct this sampling as part of the Canyon Lake Alum Effectiveness Monitoring Program.

Discussion: TMDL Revision (Tim Moore /Risk Sciences)

Draft RFQ

Tim Moore /Risk Sciences discussed the schedule for revising the TMDLs and the approach to selecting a consultant or team of consultants to conduct the work. He explained that after careful thought it was decided to issue a Request for Qualifications (RFQ) rather than a Request for Proposals (RFP), due to the complexity in trying to detail out all of the work involved with revising the TMDLs.

The Stakeholders agreed with the approach to issue a RFQ, and requested that it be shared with the Task Force in the next few days when it is ready to be issued.

Jason Uhley requested volunteers to participate on the proposal review committee. Pat Boldt and Steve Horn agreed to participate on the committee.

Task Force Administration (LESJWA Staff)

Revised FY 2015-16 Budget

Rick Whetsel was tasked to look at revising the FY 2105-16 TMDL Task Force budget to accommodate the TMDL Interim Progress Report due to the Regional Board in June 2012.

Mr. Whetsel recommended that the Task Force consider using Task Force reserves, estimated at over \$300,000 rather than formally revising the Task Force budget. Stakeholders agreed with this approach and requested that this item be brought back to the next Task Force meeting for further discussion.

Draft FY 2016-17 Budget

Rick Whetsel presented the Draft FY 2016-17 LE&CL TMDL Task Force budget to stakeholders noting the major budget line items. After a brief discussion of the budget, it was requested that Mr. Whetsel incorporate the individual stakeholder cost shares into the budget and distribute via email to stakeholders for review.

Jason Uhley noted that this budget does not include cost share allocations for the LEAMS project because there is still much to be discussed regarding the cost share agreement, and he reminded stakeholders participating that they will be responsible to budget for this item on their own.

He also noted the added budget line item for Phase 2 TMDL Implementation projects and asked stakeholders if there was anything related to the potential El Nino that we could do to take advantage of having the lakes reset with a large volume of fresh water to off-set the loading coming into the lake. It was suggested that we look at adding game fish to Lake Elsinore.

Nichole Dailey followed up with a request for assistance from the Task Force regarding the next steps for Lake Elsinore.

Jason Uhley requested that LESJWA staff setup a meeting with the City of Lake Elsinore to discuss potential post El Nino BMP projects.

Other Business

No other business was discussed.

Schedule Next Meeting

The next LE&CL TMDL meeting is scheduled for December 2, 2015 at 9:00 a.m. to Noon at SAWPA

Adjourn

As there was no further business for review, the meeting adjourned at 4:05 p.m.