

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

**September 9, 2015**

**PARTICIPANTS**

Debbie Johnson  
Lisa Cotterman  
John Rudolf  
Richard Meyerhoff  
David Jensen  
Hisam Baga  
Nancy Horton  
Aerieal Hall  
Kirsten Rowe  
Linda Nixon  
Rita Thompson  
Nino Abad  
Janna Lee  
Cynthia Gabaldon  
Steve Horn  
Mike Roberts  
Al Javier  
John Jackson  
Mike Ali  
Ganesh Krishnamurthy  
Sudhir Mohleji  
Yung Nguyen  
Dan Fairbanks  
Lauren Churchman  
Ankita Vyas  
Tim Moore  
Steven Pastor  
Stuart McKibbin  
Jason Uhley  
Mike Venable  
Kyle Gallup  
Ken Theisen  
Mark Smythe  
Lynn Merrill  
Michael Anderson  
Pat Boldt  
Roger Turner  
Mark Norton  
Rick Whetsel

**REPRESENTATIVE**

AIS  
AIS  
AMEC Foster Wheeler  
CDM Smith  
CDM Smith  
City of Beaumont  
City of Canyon Lake  
City of Canyon Lake  
City of Canyon Lake  
City of Hemet  
City of Lake Elsinore  
City of Menifee  
City of Moreno Valley  
City of Perris  
City of Riverside  
City of Riverside  
Eastern MWD  
Eastern MWD  
Elsinore Valley MWD  
Elsinore Valley MWD  
Elsinore Valley MWD  
March AFB  
March JPA  
March JPA  
RBF/Caltrans  
Risk Sciences  
Riverside County FB  
Riverside County Flood Control & WCD  
Regional Water Quality Control Board  
Regional Water Quality Control Board  
San Jacinto  
UC Riverside  
WRCAC  
Consultant/WRCAC  
Santa Ana Watershed Project Authority  
Santa Ana Watershed Project Authority

**Via Conference Call:**

Steve Wolosoff  
Phil Williams  
Bobby Gustufson  
Ivette Jones

CDM Smith  
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 9:05 a.m. by Mark Norton substituting for Chair, Jason Uhley at Santa Ana Watershed Project Authority, Riverside, California.

## **Meeting Notes**

The Meeting Notes were approved by the Task Force for the Task Force meeting held on August 11, 2015.

### **Presentation: Land Use Update (Debbie Johnson /Aerial Information Systems (AIS))**

Debbie Johnson /AIS introduced Lisa Cotterman /AIS to provide an overview of the land use update for the San Jacinto Watershed funded by the San Jacinto River Watershed Council, Western Riverside County Agriculture Coalition, and Riverside County Flood Control and Water Conservation District.

The land-use land-cover was developed using 2014 National Agriculture Imagery Program (NAIP) imagery supported by Google Earth Imagery. Data was mapped down to the highest level of detail (Anderson Level 4) including 95 land use classes including 12 classes of residential and 17 classes of agricultural land use.

Following this meeting, the land-use land-cover will be distributed to stakeholders for review.

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 noted that they have seen an improvement in dissolved oxygen levels in the lake and that there have not been any further fish die offs, however she is concerned due to the extreme warm temperatures predicted for the upcoming week. She did note that 23 tons of fish were removed from the lake from the recent fish die off. A question was asked if the city had been able to collect fish for tissue analysis, to determine the amount of nutrients removed from the lake from the recent fish kill. She noted that due to the timing of the fish kill the City was not able to collect samples at this time, but are prepared to collect samples in the future.

Bobby Gustufson/EVMWD asked if the City still required daily DO reports from the water District, Ms. Dailey replied that at this time due to the high temperatures that they would like to continue to receive this data on a daily basis.

Mr. Gustufson also noted that due to the high temperatures the District has changed the operation of the aeration system, typically the district would operate the system from 8:00am to 2:00pm, but due to the high temperatures is not operating the system from 6:00am to 4:00pm. There were no objections from stakeholders.

Ms. Dailey then noted that the city had been operating the axial flow pumps 24/7, which she thought was causing more harm to the lake by churning up sediments from the lake bottom, due to the low lake level. The City has since reduced the time the axial flow pumps operate and they have seen an improvement in dissolved oxygen levels. She was unsure of the actual operation time, but believed the pumps were operating from 8:00 a.m. to 2:00 p.m. Mark Norton noted that in the past Pat Kilroy had turned off the axial flow pumps under similar conditions. Dr. Michael Anderson confirmed that it is best to turn off the axial flow pumps under these conditions when the lake level is low.

### Canyon Lake

Nancy Horton/EVMWD informed stakeholders that water quality conditions are very good in the main body of Canyon Lake. The East Bay is not as good, but much better than in past summers.

### Canyon Lake Alum Treatment Project (LESJWA Staff)

#### September 2015 Application

Rick Whetsel informed stakeholders that the next Canyon Lake alum treatment is planned for the week of September 21 through 25.

### CEQA Update

Mr. Whetsel said staff is working to prepare an agreement with Tom Dodson and Associates to modify the Canyon Lake Alum Treatment Project CEQA Mitigated Negative Declaration document. Modifications to CEQA will include revising the document to extend the time period covered by CEQA to allow for additional alum applications, and to expand the area of Canyon Lake eligible for alum treatment to above the causeway in the main body of the Lake.

### September 9th Public Workshop

Mr. Whetsel informed stakeholders that a Public Workshop is scheduled for tonight (Tuesday September 9<sup>th</sup>) at City Hall to update the public on the progress of the alum application project.

### **Discussion: TMDL Revision (Tim Moore /Risk Sciences)**

Tim Moore /Risk Sciences distributed to stakeholders a schedule to revise the nutrient TMDL for Lake Elsinore and Canyon Lake. He noted under this ambitious schedule he expects to get an RFP out by the end of September to have a consultant on board by the beginning of December to prepare the TMDL technical document.

Mr. Moore noted that the plan is to have all of this work complete before the 2020 TMDL deadline. Under this proposed plan, stakeholders would be expected to pay for the preparation of a TMDL technical document, a supplemental CEQA document, and an economic analysis, whereas the Regional Board would conduct a peer review of the documents and prepare a staff report for the TMDL update.

It is anticipated that a sub-committee will be created from Task Force stakeholders to review TMDL documents through monthly meetings and workshops.

Ms. Pat Boldt noted that WRCAC will be providing new agricultural application rates for nutrients to replace those in the original TMDL report.

Mr. Moore will work with LESJWA staff to have an RFP ready for stakeholder review by early October.

### **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".

The objective of this presentation is to provide stakeholders with a better understanding of 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).

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### **Update: TMDL Compliance Monitoring Program (Chris Stransky /AMEC Foster Wheeler)**

John Rudolph/AMEC Foster Wheeler provided a brief update to stakeholders on questions regarding the optimal sampling frequency for in-lake monitoring (monthly or bi-monthly) and an evaluation of the accuracy of the data provided by EOMAPS as compared to BlueWater Satellite.

### Frequency of in-Lake Monitoring

Mr. Rudolph and staff at AMEC Foster Wheeler conducted a statistical analysis of historical water quality results at a monthly interval, and bi-monthly interval looking at both even months and odd months.

The results of the analysis showed no statistical difference between any of the sampling regimes.

Mark Smythe / Santa Ana Regional Water Quality Control Board requested to see the data breakdown for the analysis

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#### QA/QC of Satellite Data

Next, Mr. Rudolph presented a statistical analysis of the data provided by EOMAPS as compared to BlueWater Satellite.

The results of the analysis showed the results of the EOMAPS analysis to be similar or better than the results provided by BlueWater Satellite

Based upon these results, the stakeholders confirmed the selection of EOMAPS by AMEC Foster Wheeler to provide the complimentary satellite analysis to the in-lake water quality monitoring program

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#### **Mystic Lake Bathymetry (Michael Venable/RCFC&WCD)**

Michael Venable/RCFC&WCD presented to stakeholders on the results a study conducted by RCFC&WCD to show how the storage volume of Mystic Lake had changed between 2004 and 2014.

This included an examination of the current lake boundary as compared to historical data, and the change in storage volume over time. He also discussed issues with the San Jacinto River levee and the likelihood of flow to remain in the San Jacinto River channel and bypass Mystic Lake.

Form this study RCFC&WCD concluded the following:

- Majority of storm runoff will flow into Mystic Lake through breach in SJR levee.
- Mystic Lake must be filled to a minimum surface elevation of 1430' before the SJR will continue to flow in the levee. In this scenario the Mystic Lake outlet would already be flowing.
- It appears that Mystic Lake is being affected by subsidence. It should be noted that the majority of the subsidence is occurring within the current lake boundary (1423' contour line) and is not necessarily expanding horizontally by a significant rate.
- Mystic Lake's volume increased roughly 200 acre-feet per year from the year 2004 to 2014.

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#### **Task Force Administration (LESJWA Staff)**

Mr. Whetsel informed stakeholders that a draft budget will be available soon.

Jason Uhley requested that he setup a meeting with Jason, Mark Norton and Tim Moore to discuss the schedule of the TMDL revision process and a draft budget

#### **Other Business**

Mr. Uhley informed stakeholders that it appears that there is a better than average chance that the El Nino will bring us a wet winter.

Nancy Horton/EVMWD updated stakeholders on the grant funding secured to assist residents of Quail Valley in construction of sewer connections, noting that EMWD scheduled a meeting in October to discuss the project.

#### **Schedule Next Meeting**

The next LE&CL TMDL meeting is scheduled for October 27, 2015 at 1:00 p.m. at SAWPA

#### **Adjourn**

As there was no further business for review, the meeting adjourned at 12:15 p.m.