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

### August 11, 2015

**PARTICIPANTS** REPRESENTATIVE Garth Engelhorn Alta Environmental Chris Stransky **AMEC Foster Wheeler** John Rudolf **AMEC Foster Wheeler** 

Richard Meverhoff CDM Smith David Jensen **CDM Smith** Hisam Baga City of Beaumont Nancy Horton City of Canyon Lake Linda Nixon City of Hemet

Rita Thompson City of Lake Elsinore James Ozout City of Murrieta Cynthia Gabaldon City of Perris Michael Morales City of Perris City of Riverside Kevin Street City of Riverside Steve Horn City of Riverside Mike Roberts John Jackson Eastern MWD

Elsinore Valley MWD Mike Ali Elsinore Valley MWD Ganesh Krishnamurthy

Lauren Churchman March JPA Ankita Vyas RBF/Caltrans Tim Moore Risk Sciences

Steven Pastor Riverside County FB

Riverside County Flood Control & WCD Stuart McKibbin Riverside County Flood Control & WCD Jason Uhlev Mike Venable Riverside County Flood Control & WCD Kyle Gallup Riverside County Flood Control & WCD Regional Water Quality Control Board Ken Theisen Regional Water Quality Control Board Mark Smythe

Lynn Merrill San Jacinto Michael Anderson **UC** Riverside **WRCAC** Pat Boldt

Roger Turner Consultant/WRCAC

Mark Norton Santa Ana Watershed Project Authority Rick Whetsel Santa Ana Watershed Project Authority

Via Conference Call:

Steve Wolosoff **CDM Smith** 

Phil Williams Elsinore Valley MWD Elsinore Valley MWD **Bobby Gustufson** 

**Ivette Jones** Moreno Valley

# Call to Order & Introductions

The Lake Elsinore/Canyon Lake TMDL Task Force meeting was called to order at 9:35 a.m. by the Chair, Jason Uhley at Santa Ana Watershed Project Authority, Riverside, California.

### Meeting Notes from the Task Force Meeting held January 13, 2015

Meeting Notes were approved by the Task Force for the Task Force meeting held on March 11, 2015, and the LE&CL TMDL TAC meeting held June 16, 2015.

### Presentation: Mystic Lake Hydrology (Maureen Hamilton / Fresno St.)

Maureen Hamilton of Fresno State University provided a presentation on the impacts of Mystic Lake hydrology on the San Jacinto River flows to the Lake Elsinore and Canyon Lake and the TMDLs.

The issue with Mystic Lake is subsidence. Scientific studies estimate subsidence rates vary from 2.5-5 cm annually, with Mystic Lake storage capacity increasing approximately 2,000 acre feet every 10 years.

Historical data back to the early 1920's and the construction of Railroad Canyon Dam shows that Mystic Lake overflowed only nine of 98 years, for a 9% frequency of nutrient discharge to Lake Elsinore. Recent hydrological modeling of Mystic Lake conducted by the Task Force shows that nutrient contributions from typical overflow events are relatively insignificant.

A question was raised regarding how this information impacts the revision of the TMDLs.

Tim Moore/Risk Sciences suggested that the Task Force conduct some sort of modeling to estimate the magnitude of overflow under current conditions, and recalibrate the stakeholders' contributions from the upper watershed, with the caveat that he is not suggesting that the Task Force spend a great deal of money to evaluate these relatively insignificant loadings.

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/

### **Update: Canyon Lake Alum Treatment Project (LESJWA Staff)**

### September 2015 Application

Rick. Whetsel informed stakeholders that the next Canyon Lake alum treatment is planned for September and that there is an alum treatment project stakeholder coordination meeting scheduled for tomorrow, August 12, 9:00am at SAWPA.

### **CEQA Update**

Mr. Whetsel requested direction from stakeholders on a proposal by Tom Dodson and Associates to provide environmental support for the modification of the Canyon Lake Alum Treatment Project CEQA Mitigated Negative Declaration document.

Stakeholders requested that in addition to revising the document, to allow for additional alum applications that the area of Canyon Lake above the causeway also be included as eligible for alum treatment.

Following discussion, a motion was put forward to authorize LESJWA to enter into an agreement with Tom Dodson and Associates to provide environmental support for the modification of the Canyon Lake Alum Treatment Project CEQA Mitigated Negative Declaration document. This motion was seconded by Ms. Nancy Horton. The motion passed unanimously.

Mr. Whetsel will work to prepare a task order with Tom Dodson to revise the CEQA document.

# Effectiveness Monitoring Program

Mr. Whetsel requested direction from stakeholders on the preparation of a formal Effectiveness Monitoring Report summarizing the results of the canyon lake Alum Treatment project and the next steps. This item was deferred to the spring of 2016.

# Presentation: Stable Isotope Composition, Bulk Elemental and Mobile-P Concentrations in Lake Elsinore Sediment (Simone Boudreau, UC Riverside)

Ms. Simone Boudreau of UC Riverside was introduced by Dr. Michael Anderson/UC Riverside to provide a presentation on "Stable isotope composition, bulk elemental and mobile-P concentrations in Lake Elsinore sediment".

The objective of this presentation was to provide stakeholders with a better understanding of the processes that affect the cycling of organic matter and nutrients in Lake Elsinore, as well as infer past changes in nutrient dynamics

Conclusions drawn from the work of Ms. Boudreau are that the change in mean depth (from the completion of the LEMP project which reduced the area of the lake in 1995 and addition of recycled water in 2002) has changed the sediment biogeochemistry and that organic matter is highly recycled in the water column prior to sedimentation resulting in a half-life of nitrogen of approximately 10 years and phosphorus of approximately 15 years.

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)** Chris Stransky/AMEC Foster Wheeler provided a brief overview to stakeholders of the updated TMDL Compliance Monitoring program.

John Rudolph/AMEC Foster Wheeler followed with a brief overview of the July 31 in-lake monitoring event.

Next Mr. Stransky discussed the satellite imagery task and costs. He informed stakeholders that during recent discussions with Blue Water Satellite that their costs have increased significantly and he has identified another vendor, EOMaps, which claims to provide a comparable analysis of satellite imagery to quantify chlorophyll-a concentrations.

Following a review of the vendors, stakeholders requested that Mr. Stransky work with Mr. Moore to evaluate the EOMaps methodology to determine if the results are comparable to our previous work with Blue Water Satellite.

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

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Jason Uhley/RCFC&WCD brought up the issue of Regional Board staff comments to the Phase 2 TMDL Compliance monitoring, where Regional Board staff is looking to approve the plan with one small caveat. Regional Board staff is requesting that monthly in-lake monitoring for both Lake Elsinore and Canyon Lake be conducted during the summer months (versus bi-monthly as proposed in the plan).

Tim Moore requested that stakeholders be provided an opportunity to conduct an analysis of the available historical data to determine if the data shows any trends that would support the proposed bi-monthly monitoring. He noted that there is a difference between measuring compliance for the two lakes; Lake Elsinore has a summer average, whereas Canyon Lake has an annual average.

Following discussion, the Task Force asked that Tim Moore work with Chris Stransky to analyze the historical data to evaluate if the data shows any trends that would support the proposed bi-monthly monitoring. The Task Force requested that that this analysis be completed by August 31<sup>st</sup>.

Last on this topic, Rick Whetsel informed stakeholders that the FY 2014-15 Annual Lake Elsinore and Canyon Lake TMDL Water Quality report has been completed by Weston Solutions. This report will be distributed to stakeholders and submitted on schedule to the Regional Board by August 15<sup>th</sup>.

### Task Force Administration (LESTWA Staff)

Mr. Whetsel informed stakeholders that FY 2015-16 invoices have been mailed to stakeholders and to contact him with any questions.

# **Lake Updates**

### Lake Elsinore

Rita Thompson/City of Lake Elsinore provided an update on the fish kill in Lake Elsinore that occurred between Wednesday August 5<sup>th</sup> and Sunday August 9<sup>th</sup>. She said that over 10 tons of fish have been removed from the lake between Wednesday August 5<sup>th</sup> and Saturday August 8<sup>th</sup>, with a large die off of shad on Sunday August 9<sup>th</sup>, and that the die off could continue with temperatures in the 100's expected over the next week.

It was noted that the lake level is at its lowest since 2004.

A question arose about the operation of the aeration/de-stratification system and if it has been operated as designed. Ganesh Krishnamurthy/EVMWD confirmed that the system is operating daily from 8:00am to 2:00pm as designed.

It was recommended by Tim Moore that the Task Force collect fish tissue samples to quantify the amount of nitrogen being removed from the lake with the fish carcasses.

Mark Norton/LESJWA requested that Chris Stransky/AMEC Foster Wheeler investigate laboratory services to conduct the fish tissue analysis.

# Canyon Lake

Nancy Horton/EVMWD informed stakeholders that water clarity is high and the lake looks good overall.

Ms. Horton noted that recent summer storms have brought in an estimated 750 acre feet of water increasing lake level to 1378 feet above sea level.

### Other Business

Ken Theisen/Santa Ana RWQCB informed stakeholders that a letter is being prepared to approve the reopening of the Lake Elsinore and Canyon Lake TMDL.

Nancy Horton/EVMWD informed stakeholders that grant funding was secured to assist residents of Quail Valley in construction of sewer connections.

It was suggested by Ms. Horton that this could serve as a BMP to support the TMDL effort.

### **Schedule Next Meeting**

The next LE&CL TMDL meeting is scheduled for September 9, 2015 at 9:30 a.m. at SAWPA

### **Adjourn**

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