

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

**February 22, 2011**

**PARTICIPANTS**

Cathy Jochai  
James Grimm  
Linda Nixon  
Lori Wolfe  
Kent Wegelin  
Pat Kilroy  
Rita Thompson  
Scott Sewell  
Ron Young  
Andy Komor  
Gian Villareal  
Hope Smythe  
Tim Moore  
Steve Pastor  
Jason Uhley  
Robert Vasquez  
Pat Boldt  
Ray Stinnett  
Mark Norton  
Rick Whetsel  
Sara Villa

**REPRESENTATIVE**

Caltrans  
City of Canyon Lake  
City of Hemet  
City of Meniffee  
City of Moreno Valley  
City of Lake Elsinore  
City of Lake Elsinore  
Department of Fish & Game  
Elsinore Valley Municipal Water District  
PACE Engineering  
RBF/Caltrans  
Regional Water Quality Control Board  
Risk Sciences  
Riverside County Farm Bureau  
Riverside County Flood Control & WCD  
Riverside County Flood Control & WCD  
WRCAC  
Stinnett Enterprise  
Santa Ana Watershed Project Authority  
Santa Ana Watershed Project Authority  
Santa Ana Watershed Project Authority

**Call to Order & Introductions**

The Lake Elsinore/Canyon Lake TMDL Task Force meeting was called to order at 9:40 a.m. by the Chair, Ron Young at Elsinore Valley Municipal Water District, Lake Elsinore, California.

**Public Comments**

The public was invited to address the Task Force on matters within its jurisdiction. There were no comments.

**Approval of the Meeting Notes**

The Task Force meeting notes of August 23, 2010, and TAC meeting notes of December 15, 2010; were approved as submitted. It was asked to distribute to the Task Force the four letters that were submitted to the Regional Board in December 2010.

**Presentation: Canyon Lake Aeration/Hypolimnetic Oxygenation System Design Alternatives (Andy Komor)**

Mr. Komor provided a power point presentation of *Canyon Lake Hypolimnetic Oxygenation System Preliminary Design Phase I Report*. He noted that the last time he met with the LE&CL TMDL Technical Advisory Committee in December he presented the oxygen data that showed that in the summer as soon as you applied oxygen it was quickly absorbed, which resulted in having really high rates of oxygen depletion. Mr. Komor stated that they went out in December and re-sampled and the oxygen depletion rate was a lot less. He feels that the December rates are going to be a lot more representative of what's going to happen out in the field if they were to put in an oxygenation system, because at the end of the winter the oxygen is high and as long as we oxygenate the lake in the summer there should never be anaerobic condition at the bottom of the lake.

Mr. Komor provided the Preliminary Design recommendations. It was asked what he meant about using the December rates, as a constant rate for all 12 months, and Mr. Komor noted that it was the constant rate for

the summer period because they will only be running it in the summer. He noted that the lake was broken into three zone sections where they took water and sediment samples to calculate the oxygen level. He said that the soil oxygen depletion was about the same in zone 1 and zone 2. The water depletion rates on all three zones were all very similar. Mr. Komor stated that you need to multiply the oxygen depletion rates times the volume in the Hypolimnion to get a mass of oxygen. He noted that the full lake is 1382 with the water surface all the way up on top of the dam. A brief discussion ensued in regards to the sediment oxygen demand for Canyon Lake.

Mr. Komor noted there were a lot of different options, though PACE Engineering is recommending Option 10; a shoreline system that provides 3,000 pounds per day of oxygen using a standard high pressure/high oxygen concentration BlueInGreen system for zone 1 and a modified side-stream low pressure/low oxygen concentration BlueInGreen system for zones 2 and 3. He then compared the costs of the various alternates discussing both the Capital, O&M and Life Cycle costs. He showed a diagram of the site location and gave a brief explanation on the Blue InGreen technology.

It was asked if the BlueInGreen Systems were in use now, and he noted that they were being used in the Midwest and in Texas. He was then asked about the risks with transporting liquid oxygen and it was noted that liquid oxygen is commonly used for many industrial applications and that the risk was low. It was noted that it would be good to track the number of truck loads. A brief discussion ensued amongst the stakeholders.

It was asked if the pumps could be designed smaller and if they will be set on a timer or has a flow meter to control the oxygen flow and increase the pump rate. Mr. Komor noted that the way its set up is on a demand basis and that the pumps could be smaller. Mr. Young then noted that there are still questions regarding how big of an oxygen system we might really need. After much discussion it was suggested that these questions regarding the system design be reviewed with Dr. Michael Anderson/UC Riverside. It was then requested that the Task Force review the report and provide comments to Andy Komor/ PACE Engineering or Mr. Whetsel within the next three weeks. It was asked if they could get an electronic copy of the cost comparison. Mr. Whetsel noted that the presentation and the report will be distributed to the Task Force.

Additionally, members of the Task Force requested that PACE Engineering provide additional more information on the BlueInGreen System. Andy Komor said that he would provide information on the BlueInGreen system to be shared with the stakeholders.

### **Discussion: Proposed TMDL Implementation Strategy Schedule (Tim Moore)**

Mr. Moore provided a handout titled *Phosphorus in Lake Elsinore*. He then went on to review the existing condition for Lake Elsinore in relation to phosphorus and then discussed the two nutrient control projects (aeration/mixing and carp control) for Lake Elsinore with respect to their ability to reduce phosphorus loading and provide opportunities for pollutant trading. This was followed by much discussion and a number of questions. It was asked if these scenarios assumed that reclaimed water continues to get added into the lake. Mr. Moore said that he used the 2003-2005 TMDL as a basis for the scenario and that any variation of the nutrient source loads could be included or excluded depending how the stakeholders choose to proceed. A brief discussion ensued. It was noted that some of the load reduction necessary to achieve the TMDL for Lake Elsinore will still be necessary in Canyon Lake. Mr. Moore stated that we could get Dr. Anderson and calculate the load reductions and convert the 2003 numbers to the 2010. It was asked what the purpose of this data and Mr. Moore noted that we owed the Regional Board the list of Phase II alternatives (CNRP). Mr. Moore also stated that one Pollutant Trading Program that EPA is comfortable with is the idea of trading point source loads to non point source loads, and loads that sit at the bottom of the lake are non point. He noted that this is only addressing Lake Elsinore to make it easier to comply in Canyon Lake.

Mr. Norton asked that he get into contact with Dr. Anderson and Mr. Whetsel to prepare a scope of work for the Lake Elsinore TMDL Implementation Study.

It was recommended that the Task Force extend the Amendment to the Task Force Agreement for another year, due to it not meeting the June deadline.

**Discussion: Draft FY 2011-12 Task Force Budget (Rick Whetsel)**

Mr. Whetsel provided copies of the *Draft FY2011-12 Task Force Budget*. He gave a brief description of the items and how the transition will take place from the current Task Force design to the proposed implementation strategy, which includes the Implementation Project for Canyon Lake. It was noted that the cost shares are to remain the same proportionally, with an allocation derived for Federal/State/Tribal lands. It was noted that the budget doesn't reflect the reduced costs proposed for in-lake monitoring only watershed and that it was suggested that some in-lake monitoring be included to the FY2012-13 budget. Mr. Whetsel stated that the FY 2011-12 budget included work to prepare a Pollutant Trading Plan and under Canyon Lake Management activities for a design plan for the hypolimnetic oxygenation system for Canyon Lake. It was noted that at the moment we are looking for approval only on the FY2011-12.

**FY 2011-12 Task Force Agreement (Rick Whetsel)**

It was noted that we can extend the Agreement for an additional year to keep the same allocations for FY2012-13 and once we are able to articulate the new allocation we could go retroactive on the FY2011-12. Mr. Young stated that they can vote to extend the Agreement with an Amendment at the next meeting.

**Update: Prop 40 Grant (LESJWA) Lake Elsinore Back Basin Wetlands BMP Implementation Project (Rick Whetsel)**

Mr. Whetsel noted that the State is on board with extending the Back Basin Wetlands BMP Implementation Project to March 2012, and we are just waiting on the actual contract. He hopes to have an Agreement by the State so that he can pass it on to Mr. Kilroy. Mr. Norton noted that the LESJWA Board will meet tomorrow and possibly approve the scope of work extending the agreement with the City of Lake Elsinore to complete the grant project.

**Other Business**

It was noted that a presentation from Stinnett Enterprise will be presented at the next Task Force Meeting scheduled for April 19th.

**Schedule Next Meeting**

The next Technical Advisory Committee Meeting is scheduled for Tuesday, March 22, 2011 at 9:00 a.m. The next Task Force meeting is scheduled for Tuesday, April 19, 2011 at 1:00 p.m. at EVMWD.

**Adjourn**

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