

MINUTES OF THE
BIG BEAR LAKE TMDL TASK FORCE MEETING

July 1, 2008

Agency

Regional Water Quality Control Board
Regional Water Quality Control Board
Big Bear Mountain Resorts
Big Bear Municipal Water District
Brown and Caldwell
California Department of Transportation
California Department of Transportation
City of Big Bear Lake
Risk Sciences
San Bernardino County Flood Control District
U.S. Forest Service
Santa Ana Watershed Project Authority
Santa Ana Watershed Project Authority
Santa Ana Watershed Project Authority

Participant

Hope Smythe
Michael Perez
Brent Tregaskis
Scott Heule
Nancy Gardiner
Cathy Jochai
Gian Villarreal (RBF Consulting)
David Lawrence
Tim Moore
Matt Yeager
Robert Taylor
Mark Norton
Rick Whetsel
Marie Jauregui

Call to Order & Introductions

The Big Bear Lake TMDL Task Force meeting was called to order at 1:30 p.m. by Mark Norton at the San Bernardino County Public Works office, 825 East Third Street, San Bernardino, California.

Approval of June 2, 2008 Minutes

The June 2, 2008, Big Bear Lake TMDL Task Force minutes were unanimously approved.

ISCO Samplers from BBMWD

BBMWD has some water quality samplers that they would like to sell. Discussion briefly ensued regarding whether BBMWD owned all the samplers. Hope Smythe suggested that BBMWD look at the grant agreement because it may have a clause regarding equipment purchased with grant funds.

Status of Task Force Agreement Approval

The *Draft Agreement to form the Big Bear Lake TMDL Task Force (Version 7)* was distributed. San Bernardino County Flood Control (SBCFC) is awaiting comments from their legal counsel. They anticipate receiving the comments within the next couple of weeks.

Caltrans received minor comments from their District Cooperative Agreement staff, and are trying to resolve them internally rather than bringing it back to the Task Force for discussion.

The Regional Board has not heard from their legal counsel.

Big Bear Mountain Resorts (BBMR), BBMWD, and USFS have no further comments on the Agreement.

FY 07-08 and FY 08-09 Invoicing and Funding

BBMWD has received payment from San Bernardino County and BBMR for the FY 2007-08 invoices. Caltrans cannot pay any invoices until they have a fully executed agreement. They pay the invoices for both FY 2007-08 and FY 2008-09 once the Agreement is fully executed.

Watershed and Lake Monitoring Program Status

A revised draft was distributed based on the changes/comments received from the last meeting. The most significant changes were with Table 3. Mr. Moore contacted Steve Carter from Tetra Tech regarding the models. There are two models – a lake model (WASP) and a watershed model (HSPF). The HSPF model chosen to be used is a “public domain model”, very well documented, and the dominant watershed runoff model used in California. The list of parameters is based on previous grant work and is common to other HSPF models. In addition, some of the parameter requirements of the lake model are not necessarily parameter requirements of the watershed model.

At the last meeting, there was concern regarding whether eight discreet samples need to be collected or whether a flow-weighted composite can be used for laboratory analysis. According to Mr. Carter, there only needs to be eight discreet samples for nitrogen, phosphorus, TSS, and VSS. The others parameters can be single flow-weighted composite samples. Mr. Moore thinks that the budget assumed eight discreet samples across the board for each parameter for stormwater sampling. All of the nitrogen species (*i.e.*, total, dissolved, TKN, nitrate + nitrite, and ammonia) are needed for at least the calibration phase of the model, but it is unknown whether they will be needed for the future. Discussion briefly ensued.

The model requires a minimum of eight samples per hydrological event, which is used to create a “pollutograph” (a combination of the flow and the concentration at a given flow over a rain event). Discussion briefly ensued regarding storm events and sampling. Mr. Moore suggested that the budget estimates for meeting the eight samples remain as is.

Matt Yeager asked if the Monitoring Plan can be more specific providing “eight samples are required until the model is calibrated for XYZ conditions” as an example. The point is to state that the eight samples are required only to fulfill a purpose. Hope Smythe said that the language in the TMDL states that a different monitoring program can be proposed. There was a brief discussion. Mr. Moore will add the detail provided to the Monitoring Plan.

Mr. Moore referred to the list of parameters on page 8 of the *Watershed-wide Monitoring Plan*. He noted *Grain Size*, which is the equivalent to particle size, was erroneously removed and should be re-added to the list. *Dissolved Organic Carbon* is required to calibrate the model, but *TOC* is not necessary. *Total Nitrogen in Sediment* and *Total Phosphorus in Sediment* were originally measured values. Theoretically, this can be calculated. This will be a useful tool for QA/QC in that it will help find laboratory errors. The calculated value is acceptable for the work that is going to be done. Mr. Moore proposed using some measured nitrogen or phosphorus for the QAPP/SAP, but that it not be a requirement of the routine monitoring.

Mr. Moore also asked Mr. Carter about the value of doing both *TSS* and *VSS*. He recalled literature stating that *VSS* was a better measure of the potential for nutrients that could be released. He reviewed past documentation looking for the explanation, and could not find it. Mr. Carter said that, from a modeling perspective, only *TSS* will be used. Hope Smythe will look for the memo from EPA that provides the reasoning for *VSS*. *VSS* will remain on the list until the Task Force decides to remove it.

Ms. Smythe asked whether *Chlorophyll-a* and *Dissolved Oxygen* were a requirement of the watershed the model. Mr. Moore said that they were collected in-stream as an independent assessment of the creeks, not to determine loading to the lake. Thus, their measurement in-stream serves no utility for the lake model as a loading issue, and are not essential for the lake TMDL. Ms. Smythe commented that those should be kept separate, and it should be made clear that this monitoring program is only for compliance with the existing Big Bear Lake TMDL. If additional monitoring for *Chlorophyll-a* is necessary, it will be added via 13267. *Chlorophyll-a* will be removed from the list of parameters required for the in-stream monitoring, and *Dissolved Oxygen* will be done as a field probe measurement.

Mr. Moore asked whether the Task Force needs to do two sample sites on Rathburn Creek. One is located where the Creek joins the Lake and the other is at the zoo. He noted that tributary samples are being collected to allow compliance determination with the wasteload or load allocations; not just for modeling inputs into the lake. There is a draft EIS that is being circulated amongst Forest Service staff regarding the relocation of the zoo onto Forest Service land. Currently, the zoo is on private property, operated by the County of San Bernardino, and owned by a private individual. There is a theoretical chance, however, that the zoo will remain on the current land as is. If that is the case, the sample site could be made a source investigation contingently. Mr. Moore proposed rewriting the paragraph (top of page 8) to give the Regional Board staff authority to require this sampling site if the zoo has not relocated by 2010. Mr. Moore would like 13267 letters to be sent to the zoo if the data from the grant shows that they are a potential source. That way, they can join the Task Force and collect the discreet sample that characterizes their location. Discussion briefly ensued regarding which agency had jurisdiction over the zoo. Ms. Smythe suggested keeping the site in the monitoring plan as is, and, within a month, after reviewing the data, determine whether the site needs to be kept in the plan or not.

The zoo will be part of the source identification. The Lake Management Plan is due in August and will include a source identification effort. Mr. Moore would like to move this issue and the zoo site out of the Watershed-wide Plan into the Lake Management Plan. Ms. Smythe said that the move is acceptable.

The cost estimate submitted by Brown and Caldwell was discussed. This does not include the preparation of the Sampling Analysis Plan (SAP) for the watershed wide monitoring program, which will be prepared by Brown and Caldwell through an existing agreement Mr. Moore has with BBMWD. Mr. Moore asked them to develop the cost estimate based on what it would cost them to perform all of the work. That way, there is a number associated with in-kind services performed by other agencies. The approximate total cost of the sampling program, which does not include the \$50,000 for the lake monitoring, is \$303,000. Because the watershed is not very large, there are not many agencies/stakeholders to share the costs. Mr. Moore is concerned that if all the funds are spent on monitoring, there will not be any funds left for addressing the water quality issues. This may be acceptable, in that it needs to be done to know how to spend other funds wisely. This was discussed with the Regional Board. By spending the funds this way, it needs to be understood that it will not immediately change the water quality. A participant commented that he would rather spend funds on BMPs that will provide results than on monitoring that determines that BMPs need to be done. Discussion briefly ensued regarding how the monitoring requirements can be justified, wet-weather events, and whether there is enough data to implement BMPs. Both the Watershed-wide Monitoring Plan and the Lake Management Plan will go before the Regional Board in September. The documents will be sent to the Task Force at the end of next week. Brown and Caldwell will train the stakeholders on sampling. It was decided to pull this item from the Regional Board agenda.

Robert Taylor reported that \$17,500 was sent to Converse Labs for the sample analysis. Also, the Forest Service was given \$700,000 to repair Grout Creek Road and one into Holcomb Valley. Where Grout Creek crosses that road, a cement apron crossing will be installed. Mr. Taylor suggested moving one of the monitoring sites to where the cement apron will be installed. That location would be a fair representation of the natural forest post-fire. Mr. Moore commented that it likely is a GIS question. The part of the watershed that would not be included by monitoring at that site would have to be determined. Additionally, by monitoring at that site, the contribution from the highway and the urbanized section would be lost. Discussion briefly ensued. It was suggested adding the crossing as an additional site. By monitoring "above and below", it will give a sense of what the urbanized sections contribute. Mr. Moore noted that there is a separate task (natural backload) that will require separate monitoring. This suggestion will be included in that task.

Watershed and Lake Monitoring Sampling Analysis Procedure

The Lake QAPP/SAP, prepared by BBMWD, will go before the Regional Board for approval this month. This is separate from the watershed SAP/QAPP.

An update to the Lake and Watershed models are due in August. Discussion briefly ensued regarding having a joint workshop with the Lake Elsinore/Canyon Lake TMDL Task Force to discuss modeling with Tetra Tech.

Schedule Next Meeting

The next meeting is tentatively scheduled for Wednesday, July 30, 2008, at 9:00 a.m. at San Bernardino County Public Works.

Ms. Smythe requested that the Lake Management Plan and the Atmospheric Deposition be put on the next agenda.

Adjournment

There being no further business for review, the meeting adjourned at 3:44 p.m.