

MINUTES OF THE
BIG BEAR LAKE TMDL TASK FORCE MEETING

March 16, 2010

Agency

Regional Water Quality Control Board
Regional Water Quality Control Board
San Bernardino County SW Program
Big Bear Municipal Water District
City of Big Bear Lake
US Forest Service
California Department of Transportation
Brown and Caldwell
Brown and Caldwell
Gian Villarreal
Risk Sciences
Santa Ana Watershed Project Authority
Santa Ana Watershed Project Authority

Participant

Heather Boyd
Hope Smythe
Matt Yeager
Scott Heule
David Lawrence
Robert Taylor
Cathy Jochai
Nancy Gardiner
Khalil Abusaba
RBF Consultants
Tim Moore
Rick Whetsel
Regina Patterson

Call to Order & Introductions

Big Bear Lake TMDL Task Force meeting was called to order at 9:02 a.m. at San Bernardino County Public Works, 825 East Third Street, San Bernardino, California.

Approval of February 10, 2010 Minutes

The February 10, 2010, Big Bear Lake TMDL Task Force meeting minutes were presented for approval. Matt Yeager inquired about an item listed on Brown and Caldwell's "Update to Task Force Members 3/16/10" regarding a February 22nd meeting with the Regional Board. He expressed concern about any meeting taking place to discuss requirements to be met by this Task Force and the interpretation thereof. Khalil Abusaba stated the results of that meeting are being presented today. Tim Moore reassured Mr. Yeager that future meetings will not occur without notifying and inviting the Task Force member agencies. Hearing no additional comments, the meeting minutes were received and filed.

Status Update: Sediment Nutrient Reduction Plan

Khalil Abusaba presented an update on the "Big Bear Lake Sediment Nutrient Management Plan" stating discussions took place in early February on the approach of revising the Plan, and a follow-up conversation with the Regional Board clarified the expectations of what the revised Plan would look like. He proceeded to present detail on information gathered today and thoughts about how it will be pulled together to complete the analysis. Work is continuing concurrently. Although the draft is due in less than two weeks and confidence is high that the deadline will be met, he invited comments/direction today to allow time for incorporation into the revised Plan.

Dr. Abusaba provided handouts and reported progress on Brown and Caldwell's cost estimate and scope of work. The Goal of the Plan is to reduce the amount of nutrients that are being released from the lake bottom sediments to the point you are actually obtaining beneficial uses. This is being done now because the permit states that you have to have this Sediment Nutrient Management Plan submitted by April 15th. Tim Moore added that a section in the back of the permit states "you have to reduce in the sediment to the extent in which you are responsible toward achieving attainment. Hope Smythe asked how responsibility will be demonstrated? Mr. Moore said that will be covered in the modeling discussion. If that question is not answered, there is a default assumption that will apply.

Dr. Abusaba said he is looking for input for what actions will lead us there and what is the engineering and economic feasibility of those actions. Alternatives that would be defined are dredging, treatment with alum or a reasonable alternative, oxygenation / aeration, aquatic nuisance plant management, carp removal, and sequencing and coordination. Matt Yeager referenced Subtask 3.1 where it states “Brown and Caldwell shall expand the summary of in-lake treatment technologies . . .” asking why the abovementioned items would not be listed there and what is meant by “expand”? Dr. Abusaba said it doesn’t look promising to expand with alum because of various regulatory barriers. Mr. Yeager said if it is going to be in the scope, list those that have been done and then proceed with expanding.

Discussion ensued and Dr. Abusaba stated there would be a separate stand-alone technical memorandum that will be provided by Nancy Gardiner that will discuss a process for developing long and short term watershed strategies. She will be speaking with each major stakeholder to discuss what best management practices are currently being implemented to control nutrients and sediment. Ms. Smythe suggested that those discussions should also include information/data on effectiveness.

In depth discussion began on alternatives to alum that included Phoslock, a process developed to remove filterable reactive phosphorous (FRP) from water. Mr. Moore invited the Task Force members to SAWPA on Tuesday, March 23rd at 1:00 p.m. to hear the Phoslock representatives speak.

He displayed a proposed structure of deliverables for the Plan and the short and long term watershed strategies. Deadlines for deliverables are:

- Draft report – March 29th
- Comments on draft to Brown and Caldwell – April 12th
- Final report to SAWPA – April 15th

Ms. Smythe inquired about a developing a plan of action. Dr. Abusaba said they will start with what is being done now and then to add value do pilot tests and documenting as a conceptual framework providing enough that there is a basis for writing a grant proposal and spelling out things to look at like toxicity, Phosphorus removal and pH dependence. Ms. Smythe said she envisioned something that says this is what Task Force needs to do to address sediment in the lake. We want to provide the Board a schedule and an action plan to implement certain projects done when and by whom. Mr. Yeager said it may be unrealistic to set dates in the draft. Heather Boyd said estimates could be made for the pilot studies. Dr. Abusaba provided quantitative estimates for how long it takes to get each project done. Mr. Moore said there is an interim target and a final target that have to be met by 2015. If you are not in compliance with the targets, there is a new obligation to do more. Dr. Abusaba said he could recommend what projects could be done now. He asked that additional comments be emailed to him and copied to Rick Whetsel, Tim Moore and Nancy Gardiner. Mr. Yeager said he will provide a mark-up for technical revisions to Dr. Abusaba.

Mr. Whetsel will prepare a change order to the existing contract with Brown and Caldwell rolling-in the \$42,018.32 amount shown on the cost estimate provided by Brown and Caldwell.

Status Update: Watershed Model

Tim Moore reported that at the end of this month a plan and schedule for updating the Big Bear Lake Watershed Nutrient Model and In-Lake Nutrient Model is due to the Regional Board. This task is connected with the task Brown and Caldwell is working on because until this task is done, you won’t know what pieces of the Brown and Caldwell task to commit. What’s in the TMDL today is the dry wasteload allocation and no further reductions are required but it does ask how ongoing compliance will be demonstrated, the second element. There is no TMDL for wet weather or for moderate conditions, it is expected that one would be developed. The obligation to do that is not in the permit. He discussed the next phase and what the specific requirements as spelled out in either the permit or the TMDL. Both documents require that the model updates consider any additional data that has been or will be generated by the two monitoring programs, the

watershed program or the in-lake program. The second thing is spelled out as a requirement is you have to be able to describe to the Regional Board, how you will determine compliance with the wasteload allocation. He said that just because no reductions are expected, it does not mean there is no obligation to show that you are contributing no more than 475 pounds. He continued providing details of the plan and schedule discussing the stakeholder needs, immediate tasks and his proposed approach. The expectation is to demonstrate compliance as a combination of load calculations, load reductions and load offsets. We will measure success by the biological response targets because the goal is to fix the lake biologically. Defining success means either meeting the response targets that are defined in the TMDL, or demonstrate that what you are doing is better than what would have occurred naturally.

Mr. Moore provided a memorandum dated September 7, 2007 detailing the analysis Tetra Tech wrote about their models. He suggested inviting Tetra Tech, explain how this model works and ask the specific question about how compliance would be determined, today, with everything the way it is. Specify the other high priority model modifications you want to see.

Mr. Moore will work with Khalil to show a master schedule and will lay out questions that must be answered as a permit or TMDL obligation and the track of how that will be answered by default. He said he will then spell out the questions that we want to be able to answer with the model and that will become the track 2 alternative for enhancing the model. That will be pulled with a timetable of a sequence of events. This should be thought of as a two-year exercise and that in approximately a year from now we will begin combining them together. The plan is to have this fully implemented by 2015.

Mr. Moore said he will show the steps and decision points, and prepare a draft by March 31st.

Status Update: Aquatic Plant Management Plan

Mr. Moore said the "Aquatic Plant Management Plan" has been emailed to the Task Force and comments are due by Friday, March 19th.

Status Update: Watershed-wide Nutrient Monitoring Program

Nancy Gardiner reported they are waiting for a rain event.

Ms. Smythe reported Heather Boyd has prepared comments on the annual report submittal. Work is continuing with Stormwater staff about submitting those comments.

Status Update: Task Force Administration

Draft FY 2010-11 Budget

Mr. Whetsel presented the budget reporting the budget has been revised down. Task Force Administration costs will be lower than budgeted, and consultant costs for the Watershed-wide Nutrient Monitoring Program have been budgeted out at the full cost of \$232,200. A change order is being done to roll in the sediment nutrient reduction plan under that cost. Knickerbocker Creek will not be in the budget this year, but will be placed into next year's budget. Partial amounts have been invoiced for Brown and Caldwell. As we look at 2009-10 there is a possibility of approximately \$50,000 of carryover in the budget, but no shortfall. The budget is now estimated lower at an amount of \$458,000. For the 2010-11 budget year, a BMP implementation strategy and model update are estimated at \$60,000 each. Cathy Jochai reported CalTrans' contribution is still under review and it will be lower than projected.

Mr. Yeager inquired about the Knickerbocker Creek item and the Big Bear Municipal Water District item for reconnaissance. Scott Heule said the current aquatic management plan proposes to do this stage 1 and stage 2 sampling in 2011 not 2010, so it may go away.

Mr. Whetsel said he will mail the budget as is to Big Bear Resorts. Ability to pay will continue to be discussed.

Status Update: 303(d) Listing for Mercury
Hope Smythe reported there is nothing new to discuss.

Other Business
There was none.

Future Meeting
The next meeting is scheduled for Tuesday, April 13th at 9:00 a.m. at San Bernardino County Public Works, 825 E. Third Street in San Bernardino.

Adjournment
There being no further business for review, the meeting adjourned at 11:37 a.m.

Handout(s) available at www.sawpa.org

1. Presentation: Task Force Update 3-16-2010 (not handed out, posted to web) (*Brown and Caldwell*)
2. Cost Estimate (*Brown and Caldwell*)
3. Scope of Work on BBL Sediment Nutrient Reduction Plan (*Brown and Caldwell*)
4. Update on BBL Sediment Nutrient Reduction Plan (*Brown and Caldwell*)
5. Bibliography for BBL Sediment Nutrient Reduction Plan (*Brown and Caldwell*)
6. Preparing the Plan and Schedule for Updating the BBL Watershed Nutrient Model and In-Lake Nutrient Model (*Risk Sciences*)
7. Memo to BBMWD re BBL Watershed and Lake Model Plan (*Tetra Tech, Inc.*)
8. Task Force Budget (*SAWPA*)