

CREST
**Cleaner Rivers through Effective Stakeholder
TMDLs**

Technical Committee Meeting No. 12

October 25 2005, 2005

Minutes

DRAFT

Attendees: Morad Sedrak (City of Los Angeles)
Wing Tam (City of Los Angeles)
Melanie Winter (The River Project)
Kristen James (Heal the Bay)
Ginachi Amah (Regional Board)
Melinda Becker (Regional Board)
Penny Weiland (City of Los Angeles)
Alfredo Magallanes (City of Los Angeles)
Sheila Brice (City of Los Angeles)
Donna Toy-Chen (City of Los Angeles)
Gerry McGowen (City of Los Angeles)
Zora Baharance (City of Los Angeles)
Nancy Steele(LA/SG Watershed Council)
Gerry Greene (City of Downey)
Jennifer Newton (Consulting Team)
Don Schroeder (Consulting Team)
Dave Jones (Consulting Team)
Don Schroeder (Consulting Team)
Frank Wu (Los Angeles County)
Gerry McGowen (City of Los Angeles)
Michele Pla (Consulting Team)
Eric Stein (SCCWRP)

Copies: CREST Technical Committee members and Steering Committee members

On Tuesday, October 25, 2005, the twelfth CREST Technical Committee meeting was held at 2714 Media Center Drive, Dodgers Conference Room.

Purpose of the Meeting

- To review revised information for Ballona Creek, including cost estimates, compliance and monitoring approaches and draft technical memorandum.
Understand and agree on what needs to be accomplished before the November joint

Technical and Steering Committee meetings in order to present a final draft technical memorandum.

- Presentation on SCCWRP Ballona Creek Modeling

I. Introductions/Meeting Objectives

Michele Pla welcomed attendees to the twelfth CREST Technical Committee (TC) meeting. Following self-introductions, the minutes from the September 27 meeting were approved with the following revisions:

- Section II, last paragraph – change seem to offer conflicting perspectives on regrowth of bacteria to are two studies about regrowth in different stream systems
- On page 3, last line of first bullet of three bullets – change 700 to 700 cfs

Don Schroeder presented on TMDL Implementation Strategies for Ballona Creek Bacteria and also presented a Compliance Monitoring proposal. The goal of the TC is to create a Technical Memorandum for the Ballona Creek Bacterial TMDL for review by the next TC meeting so that it can be finalized by the end of the year.

II. Implementation Options and Strategies

Combined strategies would be required for both dry and wet weather. Preferred strategies emphasize watershed based integrated solutions, while the alternative would be diversion of dry weather flow and treatment and discharge of wet weather flow. Examples for in-stream solutions (under the preferred strategy option) include opening storm drain conduits for potential reduction of bacteria, wetlands, and naturalization of portions of streams or creeks.

Capital and operation and maintenance cost estimates for preferred and alternative implementation strategies were presented. The cost estimates were taken from metals and other TMDLs or IRP data, and were not based on assumptions or pre-conceived percentages, but did involve some educated guesswork.

Some of the cited strategies have already been instituted in some cities. TC members would like to get more details and sources of the cost estimates. Other issues such as low infiltration rates (in some areas) and land acquisition costs at the Ballona Creek watershed were mentioned, however these items were not factored in cost yet. A combination of various options is needed to capture wet weather flows. Portions of flows may be treated differently (e.g. disinfected, diverted). To predict the extent of each strategy, factors such as capacity and cost/volume need consideration. A completely volume based approach may be inappropriate because it will result in the alternative strategy of end of pipe treatment and discharge. In such a scenario, 3 treatment plants would be needed at a cost of approximately one billion dollars. Furthermore, there would still be a storage problem and the discharge would be inappropriate for reuse.

Some feel there is merit in considering end of pipe treatments because the potential upfront cost of building treatment plants may be less than the combined cost of multiple solutions in the long run. An example was referenced where infiltration trenches that

were recently installed had cost five times more than the actual estimate from the TMDL implementation plan.

It was clarified that the proposed implementation strategies are merely bookmarks to help decide an optimum strategy. It was commented that the alternative strategy may offer lower risk and certainty but may also not result in protecting beneficial uses and achieving multi use benefits.

More details of the costs estimates will be distributed to TC members prior to next meeting for their review.

III. Compliance Monitoring for BC / Ideas for Special Studies

As an action item from last TC meeting, a TC Subcommittee was formed to discuss issues and strategies related to Compliance and Monitoring portion of the Ballona Creek Bacteria TMDL. The Subcommittee held meetings on 10/13 and 10/21. Minutes from the two meetings were distributed to CREST along with a write-up from Terry Fleming on his recommendations on compliance and monitoring for Ballona Creek Bacteria TMDL. Terry participated in the Subcommittee meetings but was unable to attend the TC meeting. The write-up summarized his ideas to share with the TC group.

Don presented the discussions from the Subcommittee meetings, with most of the issues/suggestions reflecting Terry's recommendations. The following summarizes Don's presentation and discussion:

The compliance and monitoring Subcommittee identified three types of monitoring which includes ambient, compliance, and special studies. It was suggested that only the "compliance monitoring" be specified in TMDL. Further details can be worked out by responsible agencies in the post-TMDL monitoring plan development stage as in the SMBBB. Depending on the data available, certain special studies may be recommended.

Comment [R91]: I don't agree with this statement that only compliance monitoring be specified in the TMDL. I hope my comments were interpreted as suggesting that.

For compliance monitoring guidelines, it was recommended that the three impaired reaches and one impaired tributary be monitored, and also to build on existing monitoring programs as much as possible.

The monitoring framework should consider the beneficial uses at the various reaches. Reaches 1 and 2 are in the high-flow exemption category of the Basin Plan for inland waters during storms above 0.5 inches. To meet geometric mean requirements, the impaired reaches should be monitored at an agreed minimum weekly interval. To better identify pollutant trends, monitoring should be continuous and consistent. The current monitoring may be altered once the monitoring plan is developed.

Based on the discussion, Regional Board commented that they need to clarify some issues related to application of exceedance days, and geo mean standards, especially for wet weather periods (including storms for 0.1-0.45 rainfall, and over 0.5) Regional Board indicated that they will develop a memo by the end of the week or early next week to

clarify. The compliance and monitoring subcommittee should meet at least once more to discuss and clarify issues for the Technical Memorandum.

Further discussions included moving a monitoring location to cover reach 1 and allowing the use of *E. coli* as a surrogate for fecal coliforms using a one to one translator with a clause for optimizing the translator if there is supporting data. The group was mostly in agreement with the use of *E. coli* as surrogate for fecal coliform.

A list of potential special studies was presented and the TC's input was requested by Friday. The issue of diversion was regarded as important in influencing special studies.

IV. Ballona Creek Modeling

Eric Stein presented on the application of SCCWRP's watershed models for BMP evaluation.

These models were developed as tools for assessing water quality in multiple watersheds in the greater Los Angeles area. Model development occurred via an inter-agency collaborative workgroup. Past and current collaborators in the region were listed. The models have been used to assist in TMDL evaluation and SCCWRP is now doing work to demonstrate the application of watershed models for BMP evaluation. As such, the model output does not exactly match the way the TMDLs were constructed. For example, the model output used to evaluate BMP effectiveness is 10-year loads, whereas the TMDL is event (or daily) and is based on concentration.

The presentation included an illustration of the model framework that considers initial input, which then undergoes transformation (transport and dynamics in stream) and is eventually conveyed downstream. Applications of the model were discussed, specifically pertaining to TMDL development and also evaluating BMP efficiencies. The selection of specific BMPs and the associated assumptions were developed in consultation with staff from the City and County of LA.

Examples of BMPs evaluated for percent effectiveness included cisterns (which capture runoff in rainy periods, to be used for irrigation in the summer), source reduction, and rubber dams (used for impoundment and diversion to the WRP). The BMPs evaluated resulted in between 8 and 20% reduction in bacteria over a ten-year period, with source reduction being more effective than downstream capture. These numbers could vary considerably based on the assumptions about how the BMPs are implemented. For example, cisterns were applied to commercial and public open space, whereas high-density residential areas comprise a high percentage and contribute most of the runoff compared to other land use types. BMPs would be more effective if applied in all land use types.

SCCWRP's modeling also included simulations of various years with differing weather conditions. The data shows that BMPs for dryer years are more effective, and that long

tailing storms (that may last 7 days) may have a load coming over the tailing period. As a result, the storm type and duration dictate how effective the BMPs will actually be

SCCWRP will be continuing this modeling, and will investigate concentration-based output (in addition to load). Finally, the Coastal Conservancy is funding Ballona wetlands research that will involve modeling of the estuary and adjacent wetlands. The wetland restoration may potentially influence water quality in the estuary, so it will be important for these two efforts to be coordinated

Comment [R92]: Was this really the consensus of the group?

Next Meeting

Tuesday, November 29, 2005, 12:30 pm – 3:00 pm, Joint Technical and Steering Committees' meeting