

# Cleaner Rivers through Effective Stakeholder TMDLs

## Steering Committee Meeting

April 12, 2007

### Minutes

**Attendees:** Shahram Kharaghani (City of Los Angeles)  
Kathleen Bullard (Consulting Team)  
Catherine Tyrrell (Consulting Team)  
Don Schroeder (Consulting Team)  
Dustin Bambic (Consulting Team)  
Ken Farfsing (City of Signal Hill)  
Sheila Kennedy (Enfact Solutions for City of Pasadena)  
Nancy Steele (Los Angeles/San Gabriel Watershed Council)  
Susannah Turney (City of Arcadia)  
Scott Shales (Los Angeles County Department of Public Works)  
Desi Alvarez (City of Downey)  
Gerry Greene (City of Downey)  
Maurice Oillataguerra (City of Glendale)  
Susan Paulsen (Flow Science)  
Nancy Steele (Los Angeles/San Gabriel Watershed Council)  
L.B. Nye (Los Angeles Regional Water Quality Control Board)  
Terry Fleming, (EPA Region 9)  
Sheila Brice (City of Los Angeles)  
Vivian Marquez (City of Los Angeles)  
Alfredo Magallanes (City of Los Angeles)  
Lisa Carlson (City of Los Angeles)  
Shokoufe Marashi (City of Los Angeles)

**Copies:** CREST Steering Committee members

On Thursday, April 12, 2007 the CREST Steering Committee meeting was held at the City of Los Angeles Media Center from 1:30-3:30 P.M.

Agenda:

- Introduction and Objectives of Meeting
- Operations of Steering Committee
- Update on Bacteria Source Identification Conceptual Approach
- Update on LA River Metals TMDL Watershed Funding
- Progress of other working groups
- Plan for Scheduling Steering Committee meetings

## Group Updates and Questions

### **Introductions and Objectives**

The meeting was chaired by Shahram Kharaghani and facilitated by Catherine Tyrrell.

Attendees introduced themselves.

### **Introduction and Objectives of Meeting**

The objectives of the meeting were stated as a discussion of the following: the scope of the studies; the cost sharing for these studies as based on the Los Angeles River (LAR) Metals TMDL cost sharing, and decision making by consensus.

### **Operations of Steering Committee**

The definition of decision making by consensus (see attached) which could be applied to group processes was read aloud.

In the discussion, it was suggested that if a vote is necessary, the decision should default to a majority vote, with the minority vote recorded. It was also suggested that in the event of a vote without a large majority, that members go back to discussion and attempt to reach consensus. There was a concern expressed on resorting to voting even if it as a last option, and it was suggested that arriving at large majority consensus should really be the most preferred resolution.

There was a discussion of how members of the Steering Committee were chosen. In general, they were chosen for being in the LAR watershed and for their interest. The following were suggestions regarding establishing membership for SC:

- 1) Roles including decision making, funding, and voting rights, of the advisory members of the SC should be specified.
- 2) Establish and record formal membership in the SC, with alternates also being identified and recorded
- 3) CREST SC membership should parallel with membership for the LA River Metals TMDL.

There was a comment that more cities in the LAR watershed should attend CREST meetings. It was suggested that efforts to increase/ outreach to other cities should be divided among the members. The Regional Board should also assist in the outreach effort if possible.

The Principles for Participating in CREST are attached.

### **Update on Bacteria Source Identification Conceptual Approach**

Dustin Bambic of the Consulting Team gave a brief review of data from previous (or ongoing) monitoring efforts in the LAR, and described the Bacteria Source Identification (BSI) study. He gave a PowerPoint presentation which is summed up below.

Reach 6 exhibits the highest bacteria concentrations, but the lowest flow rates. Upstream to downstream, the bacteria load increases in Reach 2 (R2) and Reach 4 (R4). In fact, at the upstream ends of Reach 2 and 4, which are just downstream of POTW outfalls, bacteria concentration are in compliance with standards. The EPA-funded Tier 2 Study (monitoring conducted in the summer of 2006 and report dated December 2006) was briefly reviewed, which monitored outfalls along the LAR and found that bacteria loading did not seem to be derived primarily from storm drain discharges and tributaries. Results suggest that “in-channel” sources – such as homeless individuals, birds or regrowth – may be a predominant source of bacteria. More monitoring to identify sources is needed to assess the problem, due to (1) the variability and error associated with measuring bacteria loading and (2) the complexities of the LAR watershed.

The unaccounted-for loading that was highlighted during the Tier 2 Study can be the focus of the BSI study. The BSI study design was discussed. The BSI study design resulted from three meetings of the Working Technical Group with members from Regional Board, USEPA, SCCWRP, cities, Los Angeles County, Caltrans, Heal the Bay, LASGRWC and consultants. The study objective is to improve the likelihood of success for bacteria source control efforts associated with implementation of the LAR bacteria TMDL, to prioritize TMDL best management practice (BMP) efforts. This will be accomplished by combining mass-balance “snapshots” using traditional indicators with microbial source tracking assays based on *Bacteroidales* (also called *Bacteroides*) on human viruses. A detailed draft of the report describing the study design, called the Conceptual Approach Report, will be distributed to stakeholders.

It is proposed that the BSI Study be conducted in dry weather and will seek to identify the inputs that may be responsible for impairments to Reach 2 and Reach 4. In addition it is proposed to screen Reach 6 (R6). There were questions regarding why an agency in other reaches (e.g. Reach 1) would help pay for the study. The response was that (1) bringing Reach 2 and 4 into compliance may also bring the downstream reaches into compliance and (2) the lessons learned from Reach 2, 4 and 6 will likely be applicable to other reaches.

The cost for this study is estimated to be from approximately \$600,000 to just over \$1million, based on the number of monitoring events (from 6 – 10) and the number of follow-up samples used to evaluate the contribution of individual storm drain outfalls. Sampling could start as soon as 7/2007 if SC provides funding approval to the Working Technical Group. The study will help in prioritizing BMPs by providing better information on human bacteria loading and indicator bacteria loading. The highest priority for BMP would go to locations that had both high human and indicator bacteria loading or concentrations. Additionally, BMPs could be chosen depending on the type of bacteria found in any given location. Finally, the mass balance results of the Tier 2 Study

could be re-evaluated with the BSI Study results to evaluate whether control of storm drain and tributary discharges will result in compliance with bacteria standards.

Staff (LB Nye) from Regional Board, as well as Terry Fleming (USEPA) indicated that they concur with the design of the study. In particular, Terry indicated that the BSI study is a good start and will help assess the various problematic drains, as well as sources (human versus non-human). He believes that the study will be the first comprehensive look at the bacteria issues of the river, although the study should not be oversold as a “silver bullet” study that provides all the answers. The other members from the Working Technical Group, including Susan Paulsen from Flow Science, and Gerry Greene of City of Downey were also in agreement that the BSI Study will be useful to TMDL development and implementation.

Questions that the study will address include:

- Are storm drain and tributaries responsible for the significant bacteria loads entering Reaches 2 and 4 and causing water quality objective (WQO) exceedances?
- Which storm drains and/or tributaries are contributing the highest indicator bacteria loads?
- Are human or non-human sources responsible for the significant bacteria loads entering Reaches 2, 4, and 6?
- How do human and non-human loading from storm drains and tributaries compare to loading to Reaches 2 and 4?
- Which runoff sources or areas exhibit the highest human fecal discharges?
- What are the land uses and drainage areas of the subwatersheds that are draining to the most problematic storm drain outfalls?

Other items discussed include:

- A GIS effort to determine the drainage area boundaries, and encompassed land uses, will be conducted for “hot spot” storm drains.
- Study will likely not resolve the issue of bacteria regrowth but will yield useful information that will help assess the issue of regrowth, particularly through the analysis of the *Bacteroidales* and human virus data.
- Study design includes “compositing” of samples from nearby storm drains for the microbial source tracking in order to reduce costs. But all individual samples will be archived, and the budget will include options for follow-up analyses for composite samples that exhibited exceptionally high concentrations in order to evaluate which individual storm drain(s) were the “hottest”

## **Update on LA River Metals TMDL Watershed Funding**

The LA River Metals Group involves an estimated 30 agencies, with the County and Caltrans acting as the fiduciary agent. The Gateway COGs will collect the funds, and contract with consultants. The structure and process will be part of the implementation agreements among the different agencies/ cities.

Ken Farfsing handed out a calculation of cost sharing for LAR Metals group. The cost is formulated based on a combination of land area and \$500 per \$100,000 for each entity. Population and land uses were not considered as it may complicate the calculations.

The effort for the cost sharing and participation from the cities involved is gaining traction. It was estimated that by August, the effort would have gained significant participation. Some suggested that the cost sharing effort by CREST be delayed by around a couple of months so as not to confuse the smaller cities which are still being educated/ informed on the cost of TMDLs.

The EPA staff stated that if cities want to be part of the TMDL development, and want to ensure good science, now is the time for cities to participate. Los Angeles County is in favor of this funding. There was a request to split the list of cities involved and have SC members call and educate other cities on CREST. A member wanted a conference call with members around the table.

## **Progress of other working groups**

The waterbody survey (WBS) was discussed. The study will characterize existing activities and potential activities, and note areas with significant trash and debris that could increase bacteria.

The study will cover seasonal variation. It will require about 10 months. The cost will be about \$300,000 for key reaches and tributaries without digitized as-builts or cameras on site. Cameras would be an additional \$50,000 per year for each camera including reviewing photos and maintaining equipment. As-built drawings of storm drains to the Los Angeles River may be available from the EPA.

## **Plan for Scheduling Steering Committee meetings**

Meetings may be every two months.

## **Next Meeting Date**

Tentative date for next SC is June 14 at 1:30. A regular meeting schedule will be determined in the future. Subsequent date for meeting is September 13 at 10:00 AM at the City of Los Angeles Public Works Building.