WATERSHED MANAGEMENT AND SOURCE REDUCTION SUBCOMMITTEE
MEETING SUMMARY – FEBRUARY 27, 2002

Michael Lyons, Lilia Martinez, Ginachi Amah, LA Regional Water Quality Control Board
Jessica Morton, California Coastal Commission
Steve Bay, Ken Schiff, Southern California Coastal Water Research Project
Kathryn Curtis, Paul Johansen, Port of Los Angeles
Alex Hernandez, U.S. Army Corps of Engineers
Rick Cameron, Port of Long Beach
Guangyu Wang, Santa Monica Bay Restoration Project
Bill DePoto, Los Angeles County Department of Public Works

Stormwater Monitoring Database

The subcommittee plans to analyze stormwater data to try to understand pollutant inputs into to coastal zone. We want to create an integrated electronic database of monitoring data from the most relevant stormwater studies (using the same structure as the sediment monitoring database). SCCWRP has not started to compile database, partly because the subcommittee has not really discussed the goals of the analytical task in detail. In addition, we are still collecting new stormwater data this winter via the CSTF-funded portion of a TMDL-related land use study.

The key questions to be answered by the analysis of the database are: 1) What is the role of stormwater runoff in creating sediment contamination problems?; 2) What are the changes in temporal inputs?; 3) What are the dynamics of non-point source runoff contributions, including wet and dry weather changes?; 4) What are the sources of contaminants of concern (e.g., land uses)?; 5) What management actions could be taken to reduce or eliminate the sources of contamination and avoid contaminated sediment problems in areas that need to be dredged?

The subcommittee agreed upon the need to create an inventory of the monitoring studies that potentially could be integrated into the electronic database. This will allow the subcommittee then to prioritize the studies and move forward with creation of a database containing the critical studies which are most relevant for the analyses to follow. SCCWRP identified several studies that should be considered, including LA County Department of Public Works database (mass emissions/composite data at 5-6 stations from 1994 to present), SCCWRP data collected over the past 2 years (pollutographs for land uses and model development, @ 40 site-events x 10 samples), historical data from LA River, UCLA/Santa Monica Bay Restoration Project studies on Ballona Creek, research data from SCCWRP (trace organics from molecular marker studies), City of Long Beach data (two years at 4 stations), NPDES monitoring data (dry weather), aerial deposition study, LA Regional Board's Industrial Stormwater Database (trace metals for some facilities, but mostly conventional pollutants), Port of Long Beach data (5 years), CALTRANS monitoring (first flush studies, BMP effectiveness), Army Corps' Ballona Creek studies. SCCWRP already has much of this data, so it may not be too hard to assemble; however, we may be missing flow data from these studies, which will need to be gathered from other sources. **Action item: SCCWRP will assemble a data inventory and send it to subcommittee members for review prior to the next meeting.**

There was a lot of general discussion about the objectives of the subcommittee for the analysis of the stormwater database. Although we would like to determine the contribution of stormwater runoff to sediment deposition in areas of interest, we would need other studies to develop a transfer model for pollutants moving from water to sediment; this probably is beyond the scope of what the subcommittee can accomplish. We should be able to make some assessment of sources and loadings of pollutants of concern, including particulate-associated contaminants. We also should be able to quantify the magnitude of stormwater loadings in comparison to other sources. Ultimately, we will need to integrate our effort with the TMDL effort if we hope to implement management actions that will improve sediment quality.

SCCWRP outlined several major types of analysis that could be applied with the stormwater database and sought subcommittee input on their relevance. We agreed that we want to estimate the relative mass emissions of contaminants from various sources (e.g., stormwater, industrial facilities, POTWs); this effort

might focus on the mouth of each watershed, although a different approach might be required for Los Angeles-Long Beach Harbor, where there are more inputs than just Dominguez Channel). We also agreed that we want to evaluate the contributions of stormwater over time (historical changes from decade to decade, year to year changes depending on magnitude and frequency of storms, within storm changes such as first flush effect via pollutographs, dry vs wet weather changes, storm to storm changes within a wet season depending on number of dry days prior to a storm event). Finally, we agreed that we want to identify the sources of contamination to stormwater runoff, perhaps looking at watersheds on a tributary by tributary basis, as well as by land use; we will need to use modelling to extrapolate results to specific watersheds, so we probably will need data in our database from other areas beyond LA County to help validate the models.

Action Item: SCCWRP will translate today's discussions into a draft scope of work for the analysis task and transmit it to the subcommittee for review prior to the next meeting.

Next Meeting: March 25, 2002 – 1 to 3 pm, Los Angeles Regional Water Quality Control Board
We will discuss analysis of the stormwater monitoring data being assembled into an electronic database and try to finalize a scope of work for this task.