Natural Water Quality Committee

Meeting notes, teleconference August 29, 2006,10-12

Committee members in attendance on the telephone:
Steve Murray
Burt Jones
Andrew Dickson
Pete Michael
Rich Gossett
Dominic Gregorio

Also in attendance: Connie Anderson, SWRCB Bruce Fujimoto, SWRCB

Members absent: Ken Schiff Jim Allen

- A) The main topic of discussion was the Special Protections draft monitoring program. The group focused on reference stream monitoring to be used for comparison with storm water effluent. The group agreed that: 1) measurements should be made, and existing data used, at several reference streams in southern California to determine the range of natural levels and variability, 2) this work should be done soon to provide the dischargers a benchmark for planning and compliance purposes during a permit cycle, 3) reference stream possibilities for southern California include: a) SCCWRP's natural loading study may be mined as a data source for any coastal stream (Arroyo Sequit as a possibility), b) USC will be monitoring a reference site on the leeward side of Catalina (Goat Harbor/Italian Gardens), c) San Nicolas Island (also ASBS) may have some undisturbed watersheds, d) other potential reference stream locations discussed were in the Camp Pendleton area and El Moro Creek (Irvine Coast ASBS near Laguna Beach) upstream of the trailer park and highway, 4) the SWAMP program has a budget for ASBS reference stream monitoring, one stream per Region, 5) Dominic and Pete are also going to explore the possibility of relaxing Scripps monitoring requirements to redirect some monitoring to a reference stream(s), 6) this sort of reference benchmark approach is necessary to answer the question of natural water quality for Scripps, and also the reference stream approach should be tried in relation to the Scripps La Jolla case to shed light on its use elsewhere, 7) the concept of time series monitoring of reference streams in each region is valuable in determining trends and should be pursued in addition to the initial determination of current reference conditions described above.
- B) The group also discussed monitoring in the ocean at the mouth of reference streams and storm drains. For chemical monitoring one concept advanced by Andrew was the use of effluent dilution factors to calculate constituent concentrations resulting from mixing with the ASBS seawater. This approach may have general value if a

dilution factor can be agreed upon (possibly using Jenkins modeling results with site specific input data?) but likely cannot completely replace a ground-truthing of actual samples taken occasionally in the ASBS. Another concept discussed was the long shore transport (Burt: about one km/hr) and potential influences (for example, polluted runoff entering an ASBS from along shore).

- C) Biological monitoring in the ocean was also discussed. Rich stated that bioaccumulation studies such as mussel watch have more sensitivity than water column sampling. Jim Allen's email message regarding use of sand crabs as appropriate bioaccumulation specimens was discussed. Jim's message was that he agreed with the inclusion of bioaccumulation assessments of California mussel (*Mytilus californianus*) and/or Pacific sand crab (*Emerita analoga*), or spiny mole crab (*Blepharipoda occidentalis*) for exposed coastal habitats. For more protected areas, the Mediterranean mussel (*Mytilus galloprovincialis*) and/or California mole crab (*Lepidopa californica*) might be suitable to use as ecological counterparts of the exposed coast species. Steve Murray was in agreement with Jim's assessment.
- D) Benthic community changes should be monitored over time. One approach for biological monitoring is to allow the discharger to submit a plan identifying sites and methods. Another approach is to standardize criteria/methods statewide. The upcoming MARINe meetings in southern California are a potential venue to discuss standardized methods specific to the question of storm runoff impacts with a number of intertidal researchers.
- E) Public participation was discussed. The products of all meetings are public record. The meeting notes must therefore be accurate records and approved by the group. Any in-person meetings should be noticed with public attendance allowed but with strict limits on participation (Q&A sessions but no interference with committee discussion).
- F) Meeting date info: Andrew: best on M and F, and teaches T/Th am and W pm, Burt has a blackout Oct. 9-16, otherwise relatively open, Steve was open Oct. 2, 3, 16, 17, 18, 19, 23, 24, 25, Rich was generally open.