

ASBS Natural Water Quality Committee Meeting  
April 28, 2006

Members in attendance

Andrew Dickson, SIO  
Pete Michaels, San Diego Regional Water Board  
Burt Jones, USC  
Jim Allen, SCCWRP  
Ken Schiff, SCCWRP  
Dominic Gregorio, State Water Board  
Rich Gossett, CRG Labs

Member on the telephone

Steve Murray, CSU Fullerton

Also in attendance

Jack Gregg, Coastal Commission  
Scott Jenkins, SIO  
Connie Anderson, State Water Board  
Kimberly O'Connell, UCSD  
Eric Terrill, SIO

Meeting Notes

- 1) The minutes from the previous meeting were approved.
- 2) Dominic and Ken discussed the funding of committee, possibly through a SWRCB contract with SCCWRP.
- 3) Jim Allen was welcomed as a member of the committee, to provide needed expertise on the potential impacts to fish.
- 4) Dominic provided a status report on the recent USC WMSC exception. The State Board approved the exception in February. The USC exception is similar to Scripps but there is no provision for a expert committee. The USC exception also differs from Scripps in that it has provisions for marine operations nonpoint source pollution management.
- 5) Dominic described the development of Special Protections to address storm water runoff in ASBS statewide. An early rough draft was passed out for discussion of the monitoring provisions. The Committee provided useful insights and comments. Burt brought up and cautioned on the issue of setting parameters on the types of storms to be measured (essentially, this may require more discussion). Ken recognized the use of the model storm water program in the draft. All drafts were returned to Dominic.
- 6) Connie Anderson updated the committee on the collaboration between the State Board staff and some dischargers with the MARINE intertidal monitoring consortium. There is a potential for use of some of the MARINE data for ASBS and there has been a discussion on developing a program or methodology to test for the question: "are storm drains impacting intertidal life?"

- 7) Scott Jenkins gave a power point presentation on the modeling of dilution of the SIO discharges in the surf zone and nearshore waters. This modeling effort was required under the State Board exception. Model runs were developed for dry weather worst case (peak seawater discharge during stagnant ocean conditions), and for wet weather worst case (peak combined storm water & seawater discharges during storm seas). The model results show dilution exists for both waste seawater and storm water.
  - a. Dry weather dilution rates range from  $10^2 - 10^6$  to 1 in ASBS everywhere seaward of the surf zone.
  - b. The lowest dilution rates occur inside surf zone during stagnant dry weather.
  - c. Wet weather dilution rates range from  $10^2 - 10^4$  to 1 in ASBS everywhere seaward of the surf zone.
  - d. The minimum dilution inside the surf zone averaged 29:1 when the maximum discharge rates are perpetuated over the long term. The least dilution was 7:1.
  
- 8) Eric Terrill provided a powerpoint presentation on the SCCOOS program and the potential for SCCOOS to provide information for the Committee. No data yet with the HF radar on nearshore waters at Scripps and specifically on the sources upcoast and downcoast. Looking at satellite images plumes from regions north (Los Penasquitos Lagoon) and south of this area, may influence ASBS water quality. Burt stated that satellite images are limited in use because of cloud cover during the rainfall events. Andrew suggested the use of Scott's model for Los Penasquitos outflow.
  
- 9) Kimberly O'Connell provided handouts on wet and dry weather monitoring for 2005.
  - a. TCDD (dioxin) is a constituent of concern. The question comes up regarding whether it is ubiquitous. The committee discussed this issue at length. Rich suggested for Kim to check subcontract lab details for QA/QC. Another thought was to check tissues for dioxin levels, but this would be very expensive. Jim Allen said that he would look into OEHHA for fish tissue data.
  - b. Chlorine was high in some samples and there may be issues with regard to analytical methods used. Kimberley requested a new analytical method from Regional Board.
  - c. Bacteria was high during wet weather and during a dry weather runoff incident.
  - d. Toxicity was high in some samples.
  - e. Kimberly brought up the issue of a red tide during dry weather sampling. The group discussed the potential for interference but nothing firm could be attributed to red tides. Ken brought up the potential degradation of red tides in the sample. Steve and Burt thought that ammonia would actually encourage kelp germination during the bioassays.
  
- 10) Kimberly also presented the status and design of the bioaccumulation study. Dominic brought up the issue of using local mussels instead of mussels from a more pristine location (i.e. Bodega); however the regional board approved the study. With the use

of local SIO pier mussels. Still the results will be comparing to State Mussel Watch program historical data (85 and 95% elevated levels).

11) General discussion: Ken brought the 3 questions that were agreed upon at the first meeting and that we should use those questions to focus our efforts.

- Are water quality objectives and permit limits being met? Some progress is being made here, but there are questions raised about TCDD and chlorine.
- What would ambient marine water quality be like without waste discharges, and how does effluent impact that water quality? The modeling results sheds some light on this but more work is necessary, including the bioaccumulation study. One comment was that it might be a good idea to increase the sample size to test for some not all constituents.
- What are impacts to marine species and communities? Steve stressed the importance of this question. Regarding the question of impacts to marine life, the benthic marine life survey has not yet been designed. Jim Allen mentioned some specific fish species for soft bottom substrate of Scripps for the baseline survey. Perhaps some hard bottom species in and around the pier may be used as well. The bioaccumulation study may also shed light on this.

All were in agreement that we need to devote ourselves at the next meeting to considering the data presented today.

Next Meetings:

A special dedicated conference call, to provide more input on the monitoring in the final draft of the Special Protections, would be scheduled for late spring/early summer. A regular in-person meeting would be scheduled for this summer to discuss the data received to date.