La Jolla Scripps ASBS Natural H2O Quality Committee Meeting October 25, 2005, Westminster, CA

The first meeting of the ASBS Natural Water Quality Committee, a requirement of the Scripps exception, was held on October 25, 2005, at the Southern California Coastal Water Research Project (SCCWRP) office in Westminster.

Members

Dr. Steven Murray, California State University, Fullerton

Dr. Andrew Dickson, UC San Diego Scripps Institution (SIO)

Dr. Burton Jones, University of Southern California

Pete Michael, Senior Environmental Scientist, San Diego Regional Water Board

Richard Gossett, Director, CRG Marine Laboratories

Dr. Steve Weisberg, Director, SCCWRP

Alternate: Ken Schiff, Deputy Director, SCCWRP

Dominic Gregorio, Senior Environmental Scientist, State Water Board DWO

Alternate: Constance Anderson, Environmental Scientist, State Water Board DWQ

Minutes

1. Introductions:

In attendance were Peter Michael, Steven Murray, Andrew Dickson, Burton Jones, Richard Gossett, Ken Schiff, Dominic Gregorio, and Constance Anderson.

Dominic informed the group that Eric Terrill of SCCOOS, who was asked to give a presentation on current patterns in La Jolla and flows from Los Penasquitos Lagoon, was unable to attend this meeting.

2. Regulatory background

Dominic gave a brief overview of the recent ASBS history. In the late 1990s increased development in Orange County occurred at Crystal Cove, with accompanying Caltrans modification to Pacific Coast Hwy. Environmentalists were in uproar over storm water/nonpoint source discharges. Region 8 issued CDO's to Irvine Co, State Parks, Caltrans and the School District. Caltrans petitions CDO to State Board but the CDO is upheld (2000). State Water Board asked how many discharges there are statewide, as there was a perception that there were not supposed to be any.

State Water Board contracted with SCCWRP to identify all discharges throughout the coast of California. The survey identified 1658 discharges plus 66 seeps. In the survey the discharges were divided into point source, large and small storm water, and nonpoint source.

To address these discharges staff's plan was to work south to north and to work with the Regional Boards to contact Point Source Marine Labs. State Water Board would be requested to issue an "Exception" for each lab, both their point and non-point sources. Scripps was the first to go through the Exception process and recieve an Exception to comply with the Ocean Plan. Staff also plans to develop a general exception approach for all storm water/nonpoint source that are not associated with a point source.

Also mentioned City of San Diego, Avenida de Playa area has 2 large tandem storm drains that drain to ASBS south of Scripps.

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ASBS Workshops/Stake Holder Meetings were held in La Jolla, Monterey and San Pedro, to convey information on ASBS and to provide input on how to proceed with the exception process for storm runoff. The staff goal is to protect beneficial uses, requiring clean storm water and the maintenance of natural water quality in the ASBS, while allowing essential discharges that serve the public (defense, flood control and marine research for example).

Mentioned that AS 2800 ASBS name changes – interagency effort to simplify names, approved in 2005 Ocean Plan.

3. Ground rules and expectations:

Dominic described the requirement in State Board resolution 2004-052, Section 3.a., for this advisory committee. The mission is to evaluate the UCSD/SIO Monitoring Data, advise the Regional Board regarding impacts of Scripps' discharges to ASBS and to answer the question: is natural water quality being altered, and is the marine aquatic life beneficial use in the ASBS being protected?

The committee will focus on Scripps and other relevant La Jolla data to answer this main question over the permit cycle. All were in agreement regarding the mission as proposed. The committee also clearly recognized the importance of their work in the context of the greater ASBS, Ocean Plan, and storm water issues. In response all agreed that their work should provide guidance for assessing impacts to water quality in any ASBS in the State.

Regarding committee membership, the framework of the committee is described in the Board resolution (i.e., the "exception"). Dominic described how staff added two more non-voting members (SCCWRP and CRG Marine Lab) to round out the necessary expertise for the committee to meet its mission. Steve Murray stated that we need 1-2 more people on this committee, particularly a fish expert. Dominic agreed to look into this and report back at the next meeting.

Regarding the ground rules for conducting the meeting, Dominic offered to chair the group and suggested that meeting would be informal. Regarding decision-making, he proposed that we would strive for consensus if possible, but any dissenting votes would be recorded (with the rational for dissenting). Dominic, acting as chair of the committee, would not vote unless there was a tie among the other members. The opinions of non-voting members, if not in agreement, would also be recorded. The group was all in agreement with this approach.

Also, the issue of travel expenses and stipends was raised. Dominic stated that he was in the process of looking into this and would report back at the next meeting. He stated that at a minimum he expected travel expenses to be covered.

Steve Murray commented on the need for a solid scientific approach:

- 1) It will be decades to see the results impacts from urban runoff.
- 2) Must put in place valid scientific program and funding to carry out robust studies
 - a. What do we want to follow?
 - b. What habitats to look at? Sandy beach, rock areas, sub-tidal, inter-tidal
 - c. What geographic area?

Steve's experiences and work in the 1970s study of sewage discharges at San Clemente Island was discussed. Dominic stated that the Navy is presently moving Viegas Island facility from Puerto Rico

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Island to San Clemente. The Navy has a "donut hole" exclusion zone in their existing exception. However they do not meet effluent limits, in part because the Navy takes water from San Diego (potable water has relatively high copper). There is currently no mixing zone, treated sewage is dumped onto beach, so copper limits are often violated.

4. Available data for SIO and ASBS

Scripps also has a history of copper in the discharge. Folders were distributed including pertinent background materials and available data. Dominic gave a brief overview and pointed out some relatively important constituents and associated results (e.g., toxicity, copper, etc.) Rich Gossett discussed seawater analysis for copper and other metals. Mentioned chelation, and a two-step extraction process for copper analysis.

Dominic also discussed the available biological data. Regarding the biological data, the Initial Study for Scripps was based on very limited biological data from the 1979/80 recon surveys and what was supplied by UC/Scripps. The species list in not quantitative. Based on the submitted data, staff cannot make any judgment on impacts.

Steve Murray suggested the "harvesting" of existing data, and find out who is doing research in Marine Protected Areas with Fish and Game. The MMS/MARINe intertidal program data was also briefly discussed.

5. Discussion of specific questions to address:

The group joined in a group discussion of the specific questions that should be addressed in order to fulfill the stated mission. Need to define: What is needed, what are we looking for, And what is natural water quality?

Pete Michael gave a Regional Board perspective: At the north end of Beach Club is the LaJolla Submarine Canyon. Historically the question arises: Should you treat waste? Point-source way of thinking. Are standards met? yes/no. Is there a chronic violator? Now with an emphasis on storm water and ASBS the Regional Board recognizes that natural H2OQ varies with weather, El Nino events. There are so many variables to mask the impacts. ASBS supposed to be protected from discharges of waste. Effluent samples/standards are/can be measured and pollutants/impacts should be quantified.

Benthic communities change and a time series of adverse impacts should be considered. Regarding the question "what is background?" a reference "envelope" approach might be considered. . Statistical outliers must also be addressed. There was a brief discussion of the approaches to sampling in the perturbed communities in the Toxic Hot Spot Program (1990's).

Ken Schiff suggested that one way was to look at the SIO effluent limits and compare to quality objectives as layed out in permit...site specific. Also important is the status of beneficial uses, and ecosystem health—is ecosystem healthy? Regarding ambient ecosystem health, he suggested choosing indicators (short-term such as metals in mussels), or populations and communities (slower, more complex and variable). What conditions would be expected if there were no discharges?

Steve Murray also stressed the question: How is ecosystem working and functioning? Burt brought up the issue of surf zone discharges, sandy beach ecosystem, and pollutant mixing and transport. The

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group brought up the question of the broad range of beneficial uses involved, and what should be concentrated on (e.g., contact recreation vs. marine life). Dominic responded that while natural water quality must be determined through the sum of the physical, chemical, bacterial, and biological constituents, there was a clear need to focus on the marine life beneficial use.

Three areas of emphasis were agreed on:

Are water quality objectives and permit limits being met? What are impacts to marine species and communities? What would ambient marine water quality be like without waste discharges, and how does effluent impact that water quality?

6. Next Meeting:

The second meeting will be held in early 2006, possibly in January. State Board staff will prepare draft minutes, consult everyone's schedules, and arrange the next meeting.