

**Minutes of the Regular Commission Meeting of the
Southern California Coastal Water Research Project Authority (SCCWRP)**

**Held at the offices of the Authority:
3535 Harbor Blvd., Costa Mesa, California 92626**

**March 8, 2013
9:30 AM**

COMMISSIONERS PRESENT

David Barker - *San Diego Regional Water Quality Control Board*
Kurt Berchtold (Vice-Chair) - *Santa Ana Regional Water Quality Control Board*
Grace Chan - *Los Angeles County Sanitation Districts*
Mas Dojiri - *City of Los Angeles*
Gerhardt Hubner - *Ventura County Watershed Protection District*
Vicky Whitney - *State Water Resources Control Board*
Mary Anne Skorpanich - *County of Orange*
Cid Tesoro - *County of San Diego*
Sam Unger - *Los Angeles Regional Water Quality Control Board*
Janet Hashimoto (*by phone*) - *US Environmental Protection Agency, Region IX*

STAFF PRESENT

Stephen Weisberg - *Executive Director*
Bryan Nece - *Administrative Officer*
Wesley Beverlin - *Legal Counsel*
Ken Schiff - *Deputy Director*
Steve Bay - *Principal Investigator*
John Griffith - *Principal Investigator*
Keith Maruya - *Principal Investigator*
Eric Stein - *Principal Investigator*
Steve Steinberg - *Principal Investigator*
Karen McLaughlin - *Scientist*
Alvina Mehinto - *Scientist*
Karen Setty - *Science Writer*

OTHERS PRESENT

Diana Messina - *State Water Resources Control Board*
Phil Friess - *Los Angeles County Sanitation Districts*
Joe Gully - *Los Angeles County Sanitation Districts*
Ron Coss - *Orange County Sanitation District*
Bruce Posthumus - *San Diego Regional Water Quality Control Board*
Wanda Cross - *Santa Ana Regional Water Quality Control Board*
Gerald McGowen - *City of Los Angeles*
Brock Bernstein - *Independent Consultant*

Commission Vice-Chair Berchtold called the meeting to order at 9:38 AM. He announced he would run the meeting since the Commission Chair was unable to attend.

CONSENT AGENDA

- 1. Minutes of Meeting Held December 7, 2012**
- 2. Quarterly Financial Statement for the Period Ended December 31, 2012**
- 3. Quarterly Statement of Investments at December 31, 2012**
- 4. Minutes of CTAG Meeting Held November 1, 2012**

Commissioner Chan motioned to approve the consent items. The motion was seconded by Commissioner Dojiri and unanimously approved.

REGULAR AGENDA

5. Executive Director's Report

Executive Director Weisberg introduced two new full-time staff members. Alvina Mehinto recently completed a postdoctoral position at the University of Florida with SCCWRP collaborator Nancy Denslow and now works in SCCWRP's Toxicology Department. Mark Engeln is finishing his Master's degree at California State University, Fullerton and recently became a research technician in the Microbiology Department.

Weisberg next showed the 2012 SCCWRP Annual Report, which contains the most articles of any Annual Report in the organization's history, illustrating SCCWRP's high productivity. He expected next year's Annual Report to be even larger.

Weisberg indicated the biological objectives project had reached a milestone, with the State having recently held a public meeting to begin the implementation process, and SCCWRP's science to support that policy development had received positive feedback from stakeholders at the meeting. Commissioner Whitney observed that the state is shifting toward managing physical and biological integrity in addition to the traditional water chemistry standards.

Finally, Weisberg reported SCCWRP would miss collaborator Dr. Rainer Hoenicke, who is leaving his position as Director of the San Francisco Estuary Institute (SFEI).

6. CTAG Report

Newly elected CTAG Chair Wanda Cross described items discussed at the February 6 CTAG meeting:

- Chair election;

- Postponement of joint CTAG meeting with counterparts at SFEI (pending appointment of a new director and their potential formation of a new, parallel advisory committee);
- Debrief from the annual SCCWRP Symposium;
- Consideration of the draft 2013-14 SCCWRP Research Plan;
- New project presentation on Sediment Quality Objective applications in the Ports of Los Angeles and Long Beach;
- Mid-term project presentation on DNA barcoding; and
- Progress update on capturing historical monitoring data.

Cross next offered several recommendations, including endorsement of the draft fact sheet on hydromodification, endorsement of SCCWRP's role in ocean acidification research, and recommendation of the four contracts that were reviewed by CTAG.

Regarding the CTAG Vice-Chair election, she asked if the Commission had any feedback on revising the leadership structure to accommodate the addition of a second Vice-Chair, allowing for representation by each sector (regulators, dischargers, and stormwater managers) in CTAG leadership. The Commissioners supported the change. Commissioner Dojiri asked if CTAG required formal Commission approval, and Weisberg and Wesley Beverlin responded they do not. Dojiri also questioned how CTAG would decide which Vice-Chair became Chair at the end of the one-year term, to which Cross responded they would vote.

Commissioner Barker arrived at 10:00 AM.

7. Contract Review

Weisberg asked the Commission to approve a resolution regarding contracts offered to SCCWRP. Some require Commission action under SCCWRP's Joint Powers Agreement because the value exceeds \$250,000. In addition, the State of California requests a resolution of acceptance for those exceeding \$100,000 offered by the State or Regional Water Boards.

- 1) State Water Resources Control Board (\$1,402,806)
Fecal Marker Aging Characteristics for Use in Microbial Source Tracking
- 2) State Water Resources Control Board (\$1,300,985)
Autonomous Systems for Monitoring Beach Water Quality
- 3) State Water Resources Control Board (\$293,750)
California Data Center
- 4) State Water Resources Control Board (\$300,000)
Screening Study for Chemicals of Emerging Concern in Los Angeles Watersheds
- 5) State Water Resources Control Board (\$200,000)

Chemicals of Emerging Concern Monitoring Plan

- 6) State Water Resources Control Board (\$73,000)
Beach Watch
- 7) Wildlife Conservation Board (\$70,000)
Coastal Wetland Change Assessment
- 8) Moss Landing Marine Laboratory/San Jose State (\$418,403)
SWAMP Special Studies

Commissioner Unger motioned to approve the contracts and was seconded by Commissioner Whitney. The motion was unanimously approved with Commissioner Whitney abstaining on the first six contracts.

As an informational item, Weisberg also presented contracts with a value of \$250,000 or less that the Authority has accepted or indicated a willingness to accept. While SCCWRP's governing agreement requires no Commission action on these, they were presented to ensure the Authority's directions are consistent with the Commission's intentions.

- 9) City of Malibu (\$38,024); County of Los Angeles (\$38,024); City of Newport Beach (\$38,024); City of Laguna Beach (\$38,024); City of San Diego (through AMEC) (\$38,024); University of California, San Diego (\$38,024); Catalina/Connelly Pacific (\$28,941); Catalina Island Company (\$28,941); US Navy (\$21,600); University of Southern California (\$18,141); and Caltrans (\$66,965)
Southern California Regional ASBS Monitoring Program
- 10) Environment Canada (\$75,000)
Molecular Toxicity Identification
- 11) Riverside County Flood Control District (through Stetson Engineers) (\$19,500)
LID Impacts Special Study
- 12) Coastal and Estuarine Research Federation (\$17,000)
Meeting Support

No objections were raised to any of these contracts.

The Commissioners also received a memo in response to questions they had raised at the last meeting regarding whether Commission approval was required when supplemental funding for existing or closely related projects led to a total contract value in excess of \$250K. The Commission agreed with staff's recommendation to require approval for contracts if total funding for a contract exceeds \$250,000, but not require approval when the total for similar work originates from multiple contracts from different entities.

8. Ocean Acidification

Weisberg gave a presentation on ocean acidification and activities that SCCWRP and other entities are undertaking to address it. He reminded the Commission that increased atmospheric CO₂ affects ocean pH and carbonate chemistry, making it harder for organisms to form shells. More CO₂ exchange with the atmosphere occurs in cold water near the poles, and deeper waters are generally more corrosive. The West Coast is particularly vulnerable to acidification due to deep water upwelling, and scientists predict conditions will worsen in the future.

Weisberg explained that this issue concerns the Commission because scientists cannot currently quantify the extent to which local aqueous and atmospheric nutrient inputs contribute to the effects of acidification in coastal waters. Further, the California Ocean Plan regulates pH, but existing methods to monitor and manage this parameter are not accurate.

In terms of existing efforts to address ocean acidification, the State of Washington recently sponsored an expert panel whose recommendations include reducing local carbon and nutrient inputs. The California Ocean Protection Council recently formed an expert panel including two SCCWRP scientists to continue building on the work of the Washington panel. Ocean acidification is one of four priority areas for the West Coast Governors' Alliance on Ocean Health and SCCWRP has been asked to help them prepare their strategic plan. In addition, SCCWRP is playing a central role in the California Current Acidification Network (C-CAN) to develop coordinated monitoring along the west coast and to foster modeling activities that address management questions. As part of that, SCCWRP will upgrade monitoring protocols for the 2013 Bight Regional Monitoring Program and extend the role of the water quality compliance committee to consider consistency in pH monitoring. Finally, SCCWRP will host a workshop to begin combining physical and biogeochemical models in a way that allows assessment of local discharge effects on acidification.

Commissioner Skorpanich asked if air regulators are involved and how SCCWRP will consider atmospheric sources in its water research. Weisberg responded that California's AB32 places a large focus on reducing atmospheric CO₂ emissions, but that SCCWRP was not involved with those activities. Skorpanich also asked if air and water regulators are working together on this issue. Weisberg indicated that he was unaware of any cooperation and Commissioner Whitney offered to arrange for him to give a presentation to the California Air Resources Board.

9. EPA's New Beach Criteria

The US Environmental Protection Agency (EPA) adopted new beach water quality criteria in November 2012 and Weisberg described the changes, as well as how California's Beach Water Quality Workgroup (BWQWG) felt about them. He indicated that the new policy contains three water quality thresholds instead of two, recommending use of *Enterococcus* for both fresh and marine waters. It also permits use of rapid monitoring methods, other

alternative indicators, quantitative microbial risk assessment (QMRA) for site-specific standards, and predictive models for health warnings.

In reference to the threshold changes, Commissioner Skorpanich asked if the scientific basis for the new criteria was superior to that of the existing thresholds. Weisberg responded that there was a lot of scientific study that went into the new thresholds, but expressed concern that the new thresholds were based on beaches with known sewage discharges on the beach and may not be reflective of runoff-dominated contamination that is prevalent in California. He indicated that the BWQWG also felt there was stronger scientific relevance for the State's existing criteria, which were based on a 1995 epidemiology study in Santa Monica Bay.

Weisberg next described SCCWRP's scientific activities relevant to potential adoption of the new criteria, indicating that that SCCWRP has focused on QMRA since this is the least scientifically developed portion of the new criteria. In addition, rapid quantitative polymerase chain reaction (qPCR) methods are being refined by SCCWRP scientists, who hope to develop a field-portable unit over the next three years. For the modeling aspects, SCCWRP serves on the advisory committee for the Stanford/Heal the Bay modeling study.

Commissioner Whitney stated the State Water Board is putting together a team to consider adoption of the standards and incorporate these with a bacterial objectives effort for multiple habitats. Commissioner Unger's agency is developing work plans for two QMRA studies, and he planned to speak with Weisberg about coordinating these efforts. Lastly, Commissioner Skorpanich asked if it was possible to drill down to bacterial species, rather than rely on the larger enterococcal group, to provide additional information. Weisberg responded that SCCWRP had evaluated this in its earlier epidemiological studies and had not found a material improvement in the health risk relationship from using species level information.

10. DNA Barcoding

Eric Stein presented a progress report on the DNA barcoding project, which has promise for making bioassessment methods better, faster, and cheaper. He stated that SCCWRP was making good progress toward building a reference library and was now the largest contributor to the Barcode of Life Database on the west coast for benthic invertebrates. He indicated that SCCWRP had conducted studies to evaluate DNA preservation methods and found a need for only minor modifications to the typical freshwater benthos sampling protocol. SCCWRP has also starting to use these methods in initial pilot applications and found that barcoding data was producing more robust indices of biotic integrity, and improved diagnostic abilities, compared to traditional morphological taxonomic approaches. A new larger-scale pilot is planned in conjunction with the San Gabriel River Regional Monitoring Program.

11. Fact Sheet

Karen Setty presented a revised fact sheet on hydromodification, along with a memo and highlighted version describing changes made as a result of CTAG's review. She responded to questions regarding the fact sheet and memo. The Commissioners did not raise any suggestions for additional revision.

Commissioner Dojiri motioned to approve the fact sheet. The motion was seconded by Commissioner Chan and unanimously approved.

12. Future Meeting Agenda Items

Two items were identified for future meetings:

- Presentation from the water quality compliance workgroup
- Tracking actions on the new EPA beach criteria, with recognition that the next meeting would be too soon for this item.

13. Other Business and Communications

Commissioner Chan commented that the Commission's Personnel and Finance Committee is in the process of developing a new contract for the Executive Director, as his present contract expires in June. Commissioners should see Chan if they have any input on that matter.

Weisberg reported that when he met with Commission Chair Meyer to conduct his performance review, one goal that was identified for next year was to implement a full-day Commission strategic planning meeting, supplemental to the regular quarterly meetings. He indicated that he would like to precede that with an external review of the organization that would provide fodder for Commission discussion about future directions for the organization. The Commission felt this was a reasonable approach and urged Weisberg to interface through the Personnel and Finance Committee to work through the details.

14. Public Comments

No public comments were raised.

15. Adjournment

The meeting was adjourned at 11:59 AM until the next Commission meeting on June 7, 2013.

Attest:
Bryan Nece
Secretary