

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

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

**June 1, 2012
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*
Diego Cadena - *Los Angeles County Department of Public Works*
Grace Chan - *Los Angeles County Sanitation Districts*
Catherine Kuhlman - *Ocean Protection Council*
Steve Meyer (Chair) - *City of San Diego*
Mas Dojiri - *City of Los Angeles*
Robert Ghirelli - *Orange County Sanitation District*
Gerhardt Hubner - *Ventura County Watershed Protection District*
Mary Anne Skorpanich - *County of Orange*
Deborah Smith - *Los Angeles Regional Water Quality Control Board*
Cid Tesoro - *County of San Diego*
Vicky Whitney - *State Water Resources Control Board*

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*
Martha Sutula - *Principal Investigator*
Eric Stein - *Principal Investigator*
Meredith Howard - *Scientist*
Karen McLaughlin - *Scientist*
Angelica Bajza - *Administrative Assistant*

OTHERS PRESENT

Aarthi Ananthanarayanan - *California Environmental Associates*
Ron Cross - *Orange County Sanitation District*
Phil Friess - *Los Angeles County Sanitation Districts*
Joe Gully - *Los Angeles County Sanitation Districts*
Dr. Charles Hagedorn - *Visiting Senior Scientist*
Gerald McGowen - *City of Los Angeles*

Lara Meeker - *Santa Monica Baykeeper*
Dean Pasko - *Orange County Sanitation District*
Bruce Posthumus - *San Diego Regional Water Quality Control Board*
Tim Stebbins - *City of San Diego*

Commission Chair Meyer called the meeting to order at 9:32 AM.

CONSENT AGENDA

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

Commissioner Whitney requested a clarification to the March 22, 2012 Commission minutes regarding the Toxicity discussion (Item 12, last paragraph), clarifying that she meant to say the policy wasn't going to compel any new stormwater monitoring, but if stormwater monitoring was part of an NPDES permit, testing will require the new monitoring protocols. With these changes to the Commission minutes, Commissioner Whitney motioned to approve the consent items. The motion was seconded by Commissioner Cadena and unanimously approved, with Commissioner Kuhlman abstaining.

REGULAR AGENDA

Commissioner Skorpanich arrived at 9:38 AM.

5. Executive Director's Report

Dr. Weisberg started his Executive Director's Report stating that the Agency continues to do well. He then provided four examples. The first example was his interaction with the Department of Fish and Game who is implementing the recently promulgated Marine Protected Areas (MPAs) in Southern California. One issue of concern to member agencies was the ability to implement their monitoring programs in designated "no-take" MPAs. Dr. Weisberg has been selected to serve on the Advisory Panel for Fish and Game to help develop rules for monitoring activities within MPAs. The first meeting is scheduled for late June and the Committee's recommendations to the Fish and Game Commission are due by the end of the year.

The second example was the Agency's interactions on Ocean Acidification (OA). Based on the direction he received at a previous Commission meeting, Dr. Weisberg has been actively developing and coordinating OA monitoring requirements in the southern California Bight. For example, Weisberg re-engaged with the California Current Acidification Network (C-CAN) who, based on staff interaction, set a new goal for how to

integrate existing monitoring efforts such as that conducted by SCCWRP member agencies. In an effort to recruit new monitoring participants, C-CAN will hold a workshop at Scripps Institution of Oceanography on August 27-28. In addition, Weisberg has agreed to serve as moderator for a NOAA-hosted international workshop in Seattle, WA on June 25-28. The goal of this workshop, which will be attended by the top OA scientists from twenty-eight different countries, will be to coordinate technology develop and monitoring applications for OA.

The third example of recent success was the release of Technical Report 692, Monitoring Strategies for Chemicals of Emerging Concern (CECs) in California's Aquatic Ecosystems: Recommendations of a Science Advisory Panel Final Report. Based on a draft version released for public comment, the Commission specifically mentioned their interest in this research at the last Commission meeting. Commissioner Whitney asked if there were any significant changes from the public comment draft. Weisberg replied the two largest changes were: a) increased description of recommended on-ramps and off-ramps for adding or removing specific chemicals, and b) recommendations for how individual regional boards should customize the recommended list of chemicals to specific potential sources in their area. The Commission asked that Dr. Weisberg agendize this report at their next meeting.

The final example, was the Agency's ability to attract prominent external researchers through sabbatical opportunities. He introduced Dr. Charles Hagedorn from Virginia Polytechnic and State University in Richmond, Virginia. Hagedorn is one of the pre-eminent environmental microbiologists in the country. Hagedorn's sabbatical will focus on creating a Source Identification Manual for the State of California in support of AB538 during his six-month stay at SCCWRP.

Lastly, Weisberg introduced Catherine Kuhlman who is the new Commissioner for Ocean Protection Council. Kuhlman replaced Brian Baird and Amber Mace. Before coming to the OPC, Kuhlman was the Executive Officer of the North Coast Regional Water Quality Control Board (RWQCB 1).

6. CTAG Report

Tim Stebbins began his report by stating that over the last quarter, CTAG had held three productive meetings. The first was a joint meeting with the San Francisco Estuary Institute (SFEI) on March 28. This was the fourth joint meeting between SCCWRP and SFEI in as many years, and the two main topics on the agenda were regional monitoring and nutrients. Although several action items were generated at the joint meeting, communication and interaction was perhaps the most advantageous outcome. The second meeting, held April 23, was a special CTAG session devoted to Bight '08 review and their Clean Water Act document. The Commission will hear both of these items later on today's agenda. The fourth was the regularly scheduled quarterly meeting held May 10, where CTAG reviewed new projects and voted on the SCCWRP 2012-13 research plan. CTAG members recommended four items for Commission review and approval: a) SCCWRP 2012-13 Research Plan; b) Clean Water Act document; c) initiating a Harmful Algal Bloom Fact Sheet, and; d) new grants and contracts.

7. Contract Review

The Executive Director requested the Commission approve a resolution regarding three contracts that have been offered to the Authority.

- 1) State Water Resources Control Board (\$250,000)
California Data Center
- 2) U.S. EPA (\$349,728)
Status and Trends Assessment of Wetlands
- 3) Ventura County Watershed Protection District (\$300,000)
Quantitative Microbial Risk Assessment (QMRA)

Commissioner Ghirelli motioned to approve the three contracts, and was seconded by Commissioner Chan. The motion was unanimously approved with Commissioner Whitney abstaining on the first contract and Commissioner Kuhlman abstaining on all three.

As an informational item, the Executive Director 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.

- 4) U.S. EPA (\$120,000)
Tools to Investigate Relationship Between Nitrogen Enrichment and Adverse Effects
- 5) State Water Resources Control Board (\$30,000)
Loma Alta Slough
- 6) UC Riverside (\$60,000)
Bioavailability of Organic Contaminants in Sediments
- 7) Ashland (\$25,000)
Toxaphene Methods Development
- 8) State Water Resources Control Board (\$38,000)
R9 Tracking
- 9) Santa Monica Bay Restoration Foundation (\$37,400)
Level 3 Protocol
- 10) Landing Marine Laboratory/San Jose State (\$100,000)
SWAMP Special Studies
- 11) UC Davis (\$4,600)

Training for California Rapid Assessment Method

There were no objections to any of these contracts.

8. FISCAL YEAR 2012/2013 RESEARCH PLAN AND BUDGET

Commissioner Chan reported that the Personnel and Finance Committee had reviewed the 2012/2013 Budget and recommended approval.

Executive Director Weisberg presented the highlights of 2012-13 Research Plan. The research plan consisted of 39 multi-year projects in which 93% of the projects had external partners. SCCWRP's largest investment areas were biological objectives, nutrient criteria, emerging contaminants, and molecular methods. Weisberg also provided short briefings that summarized each of the new research areas for 2012-13.

Commissioner Dojiri motioned to approve the Research Plan, was seconded by Commissioner Skorpanich, and unanimously approved by the Commission.

9. RESOLUTION ESTABLISHING RULES GOVERNING COMPENSATION, BENEFITS, AND PERSONNEL, POLICIES AND PROCEDURES

Commissioner Chan reported the Personnel and Finance Committee had reviewed the resolution Governing Compensation, Benefits and Personnel Policies and recommended Commission approval. The motion was seconded by Commissioner Dojiri and unanimously approved by the Commission.

10. JOINT POWERS AGREEMENT

Commissioner Chan reported that Los Angeles County Sanitation District legal counsel had reviewed the draft Joint Powers Agreement (JPA). Counsel was prepared to ratify the Agreement, but was uncomfortable with one provision; the Agency's name change from "Project" to "Partnership" because of legal connotations. Therefore, Commissioner Chan motioned for the Agency's name to remain "Project" along with two other minor conforming changes to the Joint Powers Agreement. The motion was seconded by Ghirelli and unanimously approved by the Commission. Weisberg was directed to distribute the revised JPA for signatory approval.

11. CLEAN WATER ACT DOCUMENT

Weisberg presented the first draft of a document constructed and written by CTAG, supported by SCCWRP staff, to assess the effectiveness of the Clean Water Act in the improving condition of the southern California coastal ocean. Besides the Fact Sheets, this is the only document that Weisberg has taken to the Commission for review because like the Fact Sheets, the audience for this document is the Boards and Councils of the Commissioners. The goal is to release the document on the anniversary of the Clean Water Act in October. The Commission will be given a finished version at the September meeting for approval.

Weisberg then requested comment from the Commission on the current draft. Commissioner Meyer praised the document and appreciated that it spoke to a broader

audience. Commissioner Smith recommended adding vignettes to highlight key areas of specific action. She also described certain areas where more sensitivity to wording could be utilized. Commissioner Meyer asked for the remaining schedule. Weisberg responded that all comments from the Commission should be sent to him no later than June 15. Revisions and formatting should be completed by July 30. The final draft will be sent to various stakeholders for writing one-page perspectives, including wastewater, stormwater, industry, regulatory, advocacy, and policy sectors. Commissioner Whitney was asked to contact Phil Atwater and Commissioner Barker was asked to contact Ronald Robie to solicit their perspectives for the document. The Final document, in publication layout, will be sent to the Commission for approval at their next meeting. Commissioner Meyer congratulated the SCCWRP member agency staff.

12. BIGHT'08 SUMMARY

Weisberg gave a brief introduction to the Bight Regional Monitoring program including its inception and history. Next, SCCWRP staff provided a series of briefings that summarized results from the six elements of the Bight'08 regional monitoring program.

1) Coastal Ecology

Ken Schiff presented the Bight '08 Coastal Ecology results. Coastal Ecology focused on assessing the extent of sediment contamination in the southern California Bight. Results were assessed using a combination of chemistry, toxicity, and benthic infauna. While sediment contamination was low overall, the extent was much greater in embayments than offshore habitats. However, the extent of contamination in embayments has been improving over the last decade. Ken then presented the results of several special studies associated with Coastal Ecology including contamination in the deep ocean, contaminants of emerging concern, seafood contamination, and debris. The Coastal Ecology Planning Committee recommended several new challenges for future surveys including developing new assessment tools for habitats not typically monitored and additional special studies for Bight '13.

The Commission had several questions and comments throughout the presentation. The first was how the seafood contamination results compared to Bight '03. Schiff mentioned that this is the first time they have done a Bight wide evaluation of seafood. Additional comments regarding contamination in the deep ocean (>200m) followed. Finally, the Commission asked about the toxicity measurement methods, which Schiff answered were consistent with those in the State's new sediment quality objectives. Weisberg added that new toxicity measurements such as bioanalytical screening tools were targeted for inclusion in Bight '13.

2) Estuarine Eutrophication

Karen McLaughlin presented the Bight '08 Estuarine Eutrophication Assessment. The primary questions addressed by this element focused on assessing the extent of eutrophication in southern California estuaries and determining if algae respond more to nutrient loads or water column concentrations. This study was the first large scale of assessment of eutrophication in southern California estuaries. Results

indicated that eutrophication was widespread in southern California, impacting up to 97% of all estuarine segments sampled. Algal response indicators were more related to nutrient loads than to nutrient concentrations, with different indicators responding to nutrient loading on different time scales. The primary recommendations from the Eutrophication Planning Committee included studies to reduce uncertainty in the assessment tool and to develop predictive load-response models for use by managers to evaluate remediation scenarios.

The Commission followed with several questions including if the results for southern California were valid for northern California. McLaughlin responded by saying comparing to northern and central California would be a good next step, but the only regional information on estuarine eutrophication in the state exists in southern California and San Francisco Bay. The Commission then asked what a "natural" level of algae would be, to which McLaughlin responded it's not zero, but likely a function of total nitrogen and dissolved oxygen. Finally, the Commission asked if eutrophication was based solely on residence time and McLaughlin stated that study results indicated residence time was a major factor, particularly in barrier systems that close off the estuary from the ocean, but not the only factor.

3) **Water Quality**

Meredith Howard presented the results of Bight '08 Offshore Water Quality. This element addressed two questions including quantifying the loads of nutrients to the Bight from different sources and examining how these sources contribute to the production of algal blooms. The largest source of nutrients to the Bight as a whole was coastal upwelling. However, anthropogenic inputs could dominate at local spatial scales. Remote sensing analysis over the last decade has shown an increase in algal blooms, but it is uncertain if the increased production was due to anthropogenic or upwelling inputs. There were two primary recommendations from the Water Quality Planning Committee. The first was to complete additional trend analysis to see if the increased production extends beyond the last 10 years. The second was to improve calibration and validation of coastal productivity models to further examine the anthropogenic contributions of nutrients.

The Commission asked about the certainty in the nutrient load estimates from terrestrial runoff sources. Howard replied that the estimates were coarse, but captured all of the major watersheds in the region. Because of the relatively small runoff loading compared to upwelling and wastewater, even moderate errors in runoff estimates would not change the conclusion about their relative contribution.

4) **Areas of Special Biological Significance (ASBS)**

Ken Schiff presented the Bight '08 ASBS results. The questions for this element focused on defining "natural water quality" as used in the new SWRCB regulation, and how the water quality near ASBS compared to natural. Average chemical concentrations in receiving waters near ASBS discharge were similar to that observed near reference sites and there was no consistent increase in concentration from pre to post-storm at ASBS discharge locations. The biological results, like

chemistry, were also similar between reference and discharge sites. The Planning Committee for ASBS recommended additional storm sampling at reference sites to better characterize natural variability. Another recommendation was to examine the fate and transport of runoff plumes, particularly large plumes discharged adjacent to ASBS that may waft into the water quality protected area.

Weisberg highlighted SCCWRP involvement with ASBS integrated outside agencies that the agency has not worked with in the past.

5) **Rocky Reef**

Ken Schiff presented the Bight'08 Rocky Reef results. The questions focused on: locations of subtidal rocky reefs; biological characterization of bight wide rocky reef conditions, and; linkage to water quality impacts. Schiff noted the crucial contribution from Dan Pondella (Occidental College), co-chair for this Committee. GIS-based products identified 120 rocky reefs that extended across approximately 25% of the near shore habitat in the SCB. Reefs were diverse and productive with 80% containing kelp and 70 different fish species. Four indicators of anthropogenic impacts were observed and compared; kelp density, tubeworm density, sea urchin density, percent rock coverage by sand. Recommendations for future regional Rocky Reef surveys focused on developing assessment tools for judging reef health and integrating with the state's new Marine Protected Area Monitoring Enterprise.

6) **Microbiology**

John Griffith presented the Bight'08 Microbiology results, indicating that element was still ongoing as it's start was delayed due to the bond freeze in 2008. He indicated that the last data from the laboratory just arrived the previous week and all results presented were preliminary. The presentation started with a description of the microbial source tracking method evaluation study that helped identify the specific markers necessary for identifying the host sources of fecal bacteria (i.e., human, birds, horses, etc.). The primary question addressed by the Microbiology element focused on identifying the primary sources of fecal indicator bacteria to chronically impacted beaches. Of the beaches identified as chronically contaminated, only two had persistent "hits" of human fecal markers (Hf183 or HumM2).

The Commission asked about the ability of the new methods to define where human sources arose from (i.e., was it reclaimed water or was it sewage). Griffith replied that additional tools are available for this level of discrimination and Weisberg added that this would be the transition from a regional monitoring program to a site-specific investigation. The Commission asked about the price per sample for human marker analysis, to which Weisberg replied about \$100 per sample, and that SCCWRP will be hosting a training workshop on these methods for local laboratories in spring of 2013.

7) **Ancillary Benefits**

Due to the late hour, Steve Weisberg gave an abbreviated presentation on other accomplishments of the Bight program, such as creating regional data management structures and implementing regional quality control assessments for the participants.

13. BIGHT'13 PLANNING

The Executive Director announced the Bight '13 kick-off meeting on September 24th. SCCWRP has already begun working with CTAG to develop initial ideas. The Bight program is one of SCCWRP's most productive projects in terms of interactions with others, leveraging effort, and publication rates, but also indicated that the program consumes approximately half of SCCWRP's internal resources annually. Weisberg described initial thoughts on focal questions for Bight'13 and the planning process that will be used to reach agreement on these questions. While some elements may shrink or be removed, Weisberg also elaborated on potential new elements such as marine debris and shore bird contamination. He also presented a tentative schedule for Bight '13.

The Commission had several comments and questions. Commissioner Ghirelli wanted to know Weisberg's guiding principles for new partners and project growth. Weisberg responded that there were four guiding principles he uses for planning the Bight program: a) is the question regional and not site specific; b) does the question relate to a management action or endpoint; c) is there sufficient research for publication to keep agency staff engaged; and d) is there sufficient effort/resources being offered by partner agencies. CTAG members Gully and Posthumus re-iterated that base effort is important because there is value to trend monitoring and these monitoring requirements are written into NPDES permits. Commission Kuhlman expressed specific interest from the OPC on marine debris and Commissioner Skorpanich expressed specific interest in wildlife risk. Several Commissioners expressed interest in a regional study of stormwater BMP effectiveness, noting the limitations of BMP effectiveness projects to date. Weisberg responded the Agency's previous efforts on BMP effectiveness have been difficult because they often involve more engineering than monitoring, but agreed to examine the potential research are further.

14. Future Meeting Agenda Items

Commissioner Meyer reiterated the earlier request for a briefing on Technical Report 692, Monitoring Strategies for Chemicals of Emerging Concern (CECs) in California's Aquatic Ecosystems: Recommendations of a Science Advisory Panel final report will be given at the next Commission meeting.

Commissioner Kuhlman asked for an update on SCCWRP's work on marine debris. Commissioner Skorpanich requested an update of Bight '08 Microbiology analysis when it becomes available.

15. Other Business and Communications

None.

16. Public Comments

No public comments were raised.

17. Adjournment

The meeting was adjourned at 3:05 PM until the next Commission meeting on September 7, 2012.

Attest:
Bryan Nece
Secretary