

**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**

**September 9, 2011  
9:30 AM**

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**COMMISSIONERS PRESENT**

Steve Meyer (Vice-Chair) - *City of San Diego*  
Kurt Berchtold - *Santa Ana Regional Water Quality Control Board*  
Janet Hashimoto - *US Environmental Protection Agency, Region IX*  
Vicky Whitney - *State Water Resources Control Board*  
Sam Unger (Chair) - *Los Angeles Regional Water Quality Control Board*  
Mas Dojiri - *City of Los Angeles*  
Steve Maguin - *Sanitation Districts of Los Angeles County*  
Robert Ghirelli - *Orange County Sanitation District*  
Gerhardt Hubner - *Ventura County Watershed Protection District*  
Chris Crompton - *County of Orange*  
Cid Tesoro - *County of San Diego*

**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*  
Martha Sutula - *Principal Investigator*  
Steve Steinberg - *Principal Investigator*  
Kelly Wu - *Visiting Scientist, Beijing Hydraulic Research Institute*  
Margaret Ma - *Visiting Scientist, Beijing Hydraulic Research Institute*  
Karen Setty - *Science Writer*  
Lisa Fong - *Senior Research Technician*  
Bryan White - *Laboratory Assistant*

**OTHERS PRESENT**

Jon Bishop - *State Water Resources Control Board*  
Tim Stebbins - *City of San Diego*  
Joe Gully - *Sanitation Districts of Los Angeles County*  
Dean Pasko - *Orange County Sanitation District*  
Mike Von Winckelmann - *Orange County Sanitation District*

Commission Chair Unger called the meeting to order at 9:37 AM.

## **CONSENT AGENDA**

### **1. Minutes of Meeting Held June 3, 2011**

Commissioner Maguin motioned to approve the minutes. The motion was seconded by Commissioner Dojiri and unanimously approved with Commissioner Hashimoto abstaining.

### **2. Quarterly Financial Statement for the Period Ended June 30, 2011**

### **3. Quarterly Statement of Investments at June 30, 2011**

### **4. Minutes of CTAG Meeting Held May 19, 2011**

Commissioner Unger asked for comments on the remaining consent agenda items. Hearing none, Commissioner Berchtold motioned to approve the remaining consent items. The motion was seconded by Commissioner Dojiri and unanimously approved, with Commissioner Hashimoto abstaining.

Commissioner Unger asked for a change to the agenda, moving up item 11 to accommodate a Commissioner who had to leave the meeting early. No opposition was raised.

Commissioners Tesoro and Crompton arrived at 9:40 AM.

## **REGULAR AGENDA**

### **11. Beach Water Quality Criteria**

Executive Director Weisberg provided a presentation on beach water quality criteria being developed by the US Environmental Protection Agency (EPA). He indicated that this was an informational briefing, as SCCWRP is not involved in developing the new criteria, but that his presentation had been reviewed by relevant EPA personnel. Weisberg explained the EPA will allow quantitative polymerase chain reaction (qPCR) to be used as a rapid water quality monitoring method, but will not require it at all beaches. They will also suggest thresholds for interpreting the qPCR results, but retain criteria for culture-based methods. They will not provide qPCR-based criteria, but will allow states to do so as long as they maintain or increase stringency. EPA will propose a specific qPCR methodology, but recognizes that their method is already a little dated and intends to provide flexibility for method substitution, but specific details are not yet available.

Weisberg next explained that beyond extending the criteria to allow for use of qPCR, EPA's will modify existing water quality criteria for culture based methods. They planned to shift from the terminology "single sample maximum" to "statistical threshold value", and to change its application. Weisberg compared and contrasted these criteria with California's 303(d) listing approach. He also indicated that they intended to eliminate tiered criteria for lower use beaches. He also indicated that for beaches with primarily (more than 85%) non-human bacteria sources, the EPA will develop guidance for quantitative microbial risk assessment (QMRA) to allow site-specific objectives. In closing, Weisberg listed issues the

EPA has not yet addressed, including availability of standard reference materials, training, financial incentives, quality assurance, and laboratory certification. He also shared thoughts from California's Beach Water Quality Workgroup (BWQW), and the EPA's future schedule. He indicated that more information is available on the EPA website and they will hold a public webinar September 20.

Commissioner Maguin indicated the current directions resolved some of his concerns, but he remained uncertain if these directions would change going forward. Commissioner Crompton asked about the BWQW's reaction to elimination of use tiers, which Weisberg responded was divided. Commissioner Unger asked about the limitations of QMRA. Weisberg replied that it is early in its development and is subject to a number of assumptions, including precision in assessing which fecal sources are present at a beach, something that SCCWRP was working on assessing with its source identification method evaluation study. Commissioner Dojiri asked if Weisberg's presentation would be made available to the Commission and Weisberg explained it would be posted to SCCWRP's website after the meeting, as are all presentations to the Commission. Commissioner Hashimoto lastly commented that Weisberg's presentation focused on marine applications, but that the new criteria will be implemented for both marine and freshwater beaches and may pose some conflicts with California's current freshwater beach monitoring approaches.

#### **5. Executive Director's Report**

Executive Director Weisberg began by commenting on efforts to infuse new ideas into the organization through encouragement of visiting scientists. He asked Eric Stein to introduce two visiting scientists, Drs. Margaret Ma and Kelly Wu from the Beijing Hydraulic Research Institute, who are spending six weeks at SCCWRP. He also described his efforts to build a sabbatical program at SCCWRP and indicated Chuck Hagedorn, a bacterial source identification researcher from Virginia Tech, will conduct a six months sabbatical at SCCWRP starting in June 2012.

Weisberg next discussed partnerships with other organizations. He described two projects that SCCWRP is embarking on with the Center for Ocean Solutions, the first of which involves the Monterey Bay Aquarium Research Institute's efforts to build an *in situ* automated qPCR sample processor. The second is a joint effort with Stanford University to study increased hypoxia on the West Coast resulting from climate change-induced ocean stratification. Weisberg next indicated that he is part of an EPA panel for national benthic assessments and introduced to them the idea of developing a national benthic index based on the European AZTI Marine Biotic Index (AMBI). The idea was well-received, and a workshop inviting top benthic ecologists from around the US will be held September 27-29 at SCCWRP to start index development.

Weisberg lastly introduced a new staff member, Lisa Fong, who is working toward her doctoral degree at UCLA. As a senior research technician in the Biology department, she will conduct research related to her dissertation on stream restoration performance.

## **6. CTAG Report**

Tim Stebbins provided a summary of CTAG's August 11 meeting and subsequent activities. CTAG has been looking at ways to improve some review processes and has revised their meeting format. The first implementation of the new format was successful, but somewhat hurried. It focused on organizing the agenda around project life-cycle, with defined portions of the meeting for projects just beginning, ones in the middle of implementation and ones near completion, with different types of feedback required at each step. He explained that CTAG had also developed a refined review/communication process for publications, fact sheets, work plans, and advisory committees.

In closing, Stebbins announced the next SCCWRP Symposium will be held January 26, 2012, and joint meeting with technical advisors for the San Francisco Estuary Institute (SFEI) is being planned for March 2012 at SFEI. Stebbins lastly communicated several CTAG recommendations to the Commission:

- Approve new contracts
- Approve CEC fact sheet
- Approve fact sheet review process

Commissioner Unger asked for a second change to the agenda, moving up item 12. There was no opposition to this change.

## **12. Toxicity Testing Protocols**

Steve Bay gave a technical briefing on the State Water Board's new Test of Significant Toxicity (TST), reminding the Commission that this was informational as SCCWRP was not involved in development of the new protocol. He indicated that the State conducted a test drive of the new method using nearly 800 California data points and that they were also planning to compare the TST to the point estimate method used in the San Francisco Bay area. The revised policy was presently scheduled for release in November, with a public hearing in early 2012. Commissioner Maguin expressed concern about false positives on blank samples and asked if SCCWRP could investigate this issue. Commissioners Ghirelli and Whitney, as well as former Commissioner Bishop, agreed it would be beneficial for all parties to agree on the false positive rate. Weisberg indicated that SCCWRP would conduct an analysis and present the results at the next Commission meeting.

## **7. Contract Review**

The Executive Director requested the Commission approve a resolution regarding the following contract that has been offered to the Authority:

- 1) US EPA (\$343,758)  
Improving Assessment Tools for Episodic and Non-Perennial Streams

Commissioner Meyer motioned to approve the contract, and was seconded by Commissioner Maguin. It was unanimously approved with Commissioner Hashimoto abstaining.

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 the governing agreement of SCCWRP requires no Commission action on these, they were presented to ensure the Authority's directions are consistent with the Commission's intentions.

- 2) United States Department of Agriculture (\$68,500)  
Estimating Wet and Dry Deposition of Nitrogen to Southern California Streams
- 3) Aquatic Science Center (\$86,800)  
Performance Curves and Watershed Profiles
- 4) Aquatic Science Center (\$126,000)  
Validation of CRAM for Depressional Wetlands
- 5) US Army Corps of Engineers (\$20,000)  
Training for California Rapid Assessment Method
- 6) San Diego Regional Water Quality Control Board (\$99,000)  
Implementation Support for Sediment Quality Objectives
- 7) San Luis Obispo County - Environmental Health Services (\$4,000)  
Beach Water Quality Data Visualization

There were no objections to any of these contracts. Commissioner Meyer asked about contract 6, and Steve Bay explained it was capped at \$99,000 owing to the approval process at the State Water Board. Commissioner Unger inquired about contract 4, and Eric Stein responded it would support the State's Surface Water Ambient Monitoring Program moving into different water body types. Commissioner Hubner asked about the Aquatic Science Center (ASC), which Weisberg explained is the joint powers authority adjunct to SFEI. The ASC and SFEI share staff and may soon merge their governing boards.

#### **8. Appointment of Commission Chair and Vice-Chair**

Commission Chair Unger requested nominations for the position of Chair over the next year and asked not to be considered for a second term due to needs within his organization. Commissioner Maguin nominated Commissioner Meyer as Chair, and was seconded by Commissioner Dojiri. The nomination was unanimously approved with Commissioner Hashimoto abstaining.

Commissioner Unger transferred leadership of the meeting to Commissioner Meyer. Commissioner Meyer then requested nominations for the position of Vice-Chair. Commissioner Ghirelli nominated Commissioner Berchtold from the Santa Ana Regional Water Quality Control Board for Vice-Chair, which was seconded by Commissioner Crompton. The nomination was unanimously approved with Commissioner Hashimoto abstaining.

## **9. Future Meeting Dates**

The following dates were proposed for the 2012 Commission meetings:

- March 2
- June 1
- September 7
- December 7

No Commissioners expressed conflicts with this schedule. Commissioner Ghirelli motioned to approve these dates, and was seconded by Commissioner Unger. They were adopted unanimously with Commissioner Hashimoto abstaining.

Commissioners Ghirelli and Maguin left at 11:15 AM.

## **10. DNA Barcoding**

Eric Stein introduced SCCWRP's research directions and collection of DNA barcoding projects. The technology uses a short genetic sequence to potentially augment traditional morphology-based benthic invertebrate identification. Stein discussed three categories of technical challenges that SCCWRP is working to address. These included sampling, efficacy of DNA markers, and application to routine environmental monitoring. He lastly indicated SCCWRP is well-positioned to transition the technology to potential end users.

Commissioner Dojiri asked how an appropriate barcode region was selected and Stein explained that the region had been selected by previous researchers in the Barcode of Life Project. Weisberg added that SCCWRP is planning to also investigate other regions and assess genetic drift in species found at different locations along the west coast. Commissioner Dojiri also commented on the declining availability of trained taxonomists, to which Weisberg responded that he anticipated the infusion of new technology could reinvigorate the field. Commissioner Whitney asked for further information about the presence/absence benthic index evaluation that Stein presented. Stein explained the study found that indices based on abundance and presence did differ substantially, which is important because some one of the new barcoding approaches that save the most time only provide presence/absence data. Tim Stebbins asked about next steps regarding the samples where morphology-based taxonomy and DNA results differed. Stein communicated the samples were returned to taxonomists and resolutions for all differences had been found.

## **13. Fact Sheet**

In response to the Commission's earlier request, Weisberg presented a proposed fact sheet review process. He noted SCCWRP does not require Commission approval of scientific documents, but he desired that they approve fact sheets because they are targeted as a tool for the Commissioners to communicate these subjects to their Boards. In response to a question from Commissioner Meyer, Weisberg confirmed the Commissioners would be able to participate early in the review process via their CTAG representatives, who would

be reviewing these documents before they reached the Commission. Commissioner Dojiri motioned to approve the review process and Commissioner Whitney seconded the motion. Commissioner Unger opposed the motion and asked for further discussion.

Commissioner Unger requested communication summarizing CTAG's discussion of the fact sheet and highlighting of revisions made as a result. Commissioner Meyer commented this would be helpful, but he also relied on his individual CTAG representative for communication of such discussion points. The group agreed the CTAG Chair would prepare a memo summarizing the issues discussed and include it with the fact sheet in the Commission packet distributed before each meeting. The Commissioners will also receive a version with changes based on the CTAG review highlighted. Commissioner Dojiri motioned to approve the Fact Sheet Review Process with these changes, and was seconded by Commissioner Whitney. It was adopted unanimously with Commissioner Hashimoto abstaining.

The Commission next discussed approval of the CEC fact sheet. Commissioner Unger felt the box on "Why the Attention?" reflected a bias, while others felt it was well-balanced. Weisberg suggested asking the State's CEC expert panel to review the document and address this issue. The Commission agreed to receive the panel's input and review the document again at their December meeting. Lastly, Commissioner Crompton suggested aligned all text as center justified.

#### **14. Bight '08 Update**

Due to time constraints, this item was tabled until the next meeting.

#### **15. Joint Powers Agreement**

Commission Chair Meyer reported that the Joint Powers Agreement Committee met prior to the Commission meeting and planned to discuss additional items by conference call. He indicated that the discussion so far was straightforward and the he anticipated the Committee should have a draft JPA for Commission consideration at the next meeting. He indicated that Commission members should communicate any questions or concerns to Steve Maguin, who had been elected Chair of the Committee.

#### **16. Future Meeting Agenda Items**

Commissioner Unger asked for a presentation on coastal hypoxia and Commissioner Whitney asked for a presentation on coastal acidification. Dr. Weisberg indicated that these were related and would be good topics for the March meeting since the work SCCWRP was beginning with the Center for Ocean Solutions was likely to mature by then. Both Commissioners agreed that March would be acceptable. Joe Gully reminded the Commission to ask for an update on the toxicity testing protocols.

#### **17. Other Business and Communications**

Steve Weisberg reminded the Commission that they had asked for a “dashboard” style budget and schedule update on SCCWRP’s research activities and presented them with two options. The first was organized by projects in SCCWRP’s Research Plan and the second was organized by SCCWRP’s contracts. After some discussion, Commissioner Dojiri motioned to express a preference for the format organized around the Research Plan. The motion was seconded by Commissioner Berchtold and unanimously approved, with Commissioner Hashimoto abstaining.

**18. Public Comments**

Joe Gully thanked SCCWRP for consistently meeting CTAG’s needs for increased review. He also thanked Ken Schiff and Kerry Ritter for meeting with his agency’s air quality staff and giving them advice on short notice.

**19. Adjournment**

The meeting was adjourned at 12:30 PM until the next Commission meeting on December 2, 2011.

Attest:  
Bryan Nece  
Secretary