# MINUTES OF THE REGULAR MEETING OF THE COMMISSION OF SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT AUTHORITY

# HELD AT THE OFFICES OF THE AUTHORITY 3535 Harbor Blvd., Costa Mesa, California 92626

December 2, 2009 9:30 AM

#### **COMMISSIONERS PRESENT**

Mas Dojiri (Chair) - City of Los Angeles

Tracy Egoscue (Vice-Chair) - Los Angeles Regional Water Quality Control Board

Janet Hashimoto - US Environmental Protection Agency, Region IX

Darrin Polhemus - State Water Resources Control Board

Gerard Thibeault - Santa Ana Regional Water Quality Control Board

David Gibson - San Diego Regional Water Quality Control Board

Steve Maguin - Sanitation Districts of Los Angeles County

Robert Ghirelli - Orange County Sanitation District

Steve Meyer - City of San Diego

Gerhardt Hubner - Ventura County Watershed Protection District

Mark Pestrella - Los Angeles County Flood Control District

Mary Anne Skorpanich - 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

Keith Maruya - Principal Investigator

Eric Stein - Principal Investigator

Peter Miller - Principal Investigator

Shelly Moore - Information Systems Manager

John Griffith - Supervising Microbiologist

Nikolay Nezlin - Oceanographic Biologist

Karen Setty - Science Writer

#### **OTHERS PRESENT**

John Robertus - San Diego Regional Water Quality Control Board

Joe Gully - Sanitation Districts of Los Angeles County

Tim Stebbins - City of San Diego

Chris Beegan - State Water Resources Control Board

Art Coe - Public

Commission Chair Dojiri called the meeting to order at 9:39 AM. He began by announcing and welcoming new Commissioners. Amber Mace was the new Alternate Commissioner for the Ocean Protection Council (OPC), replacing Drew Bohan. David Gibson was the new Commissioner for the San Diego Regional Board, replacing John Robertus. Robertus was in attendance and was presented with a plaque thanking him for his service on the Commission. Next, Jim Barrett was announced as the new Commissioner for the City of San Diego, replacing Alan Langworthy, and Steve Meyer was named as the new Alternate Commissioner. Norma Camacho was announced as the new Alternate Commissioner for Ventura County, replacing Jeff Pratt.

Dojiri next brought forward a request from Commissioner Baird to reschedule the March 3, 2010 Commission meeting, as it conflicted with an Ocean Protection Council meeting and he had particular interest in the microbiology topic that was scheduled to be the focus of the next SCCWRP Commission meeting. The Commission agreed to reschedule to March 30, with Commissioner Thibeault motioning, Commissioner Maguin seconding, and all others present approving the date change.

### **CONSENT AGENDA**

- 1. MINUTES OF COMMISSION MEETING HELD SEPTEMBER 2, 2009
- 2. QUARTERLY FINANCIAL STATEMENT FOR THE PERIOD ENDED SEPTEMBER 30, 2009
- 3. QUARTERLY STATEMENT OF INVESTMENTS AT SEPTEMBER 30, 2009
- 4. MINUTES OF CTAG MEETING HELD AUGUST 27, 2009
- 5. 2009 FINANCIAL AUDIT

After minor changes to the minutes, Commissioner Ghirelli motioned for approval of consent items, seconded by Commissioner Maguin, and the items were unanimously approved.

Commissioner Skorpanich arrived at 9:55 AM.

#### **REGULAR AGENDA**

#### 6. EXECUTIVE DIRECTOR'S REPORT

The Executive Director began his verbal report with a financial update, indicating that the State bond freeze had been lifted for about 95% of SCCWRP's frozen projects and that revenues were back to the healthy levels. As a result, he had recently lifted the hiring freeze that he had in place for more than a year. Weisberg expressed thanks for the support of the member agencies, partners, and staff throughout this period of financial hardship. He also expressed his pleasure with high staff productivity during the financially trying time, passing around a draft of the 2009 Annual Report and noting that it contained as many high quality scientific articles as in any previous year.

Weisberg began his technical report by noting that, as Chair of the Ocean Science Trust's Board, he had been serving as their interim director and as Science Advisor to the OPC since Amber Mace's promotion to Executive Director of the OPC. He reported on the most recent

OPC meeting, which had taken place earlier that week and focused on contaminants of emerging concern (CECs). He noted that several SCCWRP activities were discussed at the OPC meeting including the workshop report on CECs in California, the panel for CECs in recycled water, and the Mussel Watch program. He reported that the Ocean Protection Council's session on CECs focused less on POTW outfalls and more on the Department of Toxic Substance Control's Green Chemistry Initiative and source control of pharmaceuticals. The OPC also discussed desalination issues, including ocean water withdrawal (i.e., impingement/entrainment), energy [in]efficiency, and alternatives to desalination like water recycling from treated stormwater and wastewater.

Weisberg moved on to updates related to stormwater, congratulating Eric Stein on a lauded hydromodification workshop at the California Stormwater Quality Association (CASQA) annual meeting. He also noted SCCWRP's involvement as a technical reviewer for the Puget Sound area draft regional stormwater monitoring plan, much of which was based on practices facilitated by SCCWRP in southern California. Weisberg offered to provide copies of the draft Puget Sound plan to anyone interested.

The Executive Director next discussed CTAG's plan to develop a topic-specific integrative report similar to the San Francisco Estuary Institute (SFEI) "Pulse of the Estuary" document. This type of report would be periodically developed collaboratively by SCCWRP and CTAG to supplement SCCWRP's more technical Annual Report. At their November meeting, CTAG selected their first topic: effectiveness of the Clean Water Act in southern California. CTAG will meet March 4, 2010 to discuss preparation of this document. He passed around copies of some SFEI reports and took questions on this topic. In response to an inquiry from Commissioner Skorpanich, the target audience was identified as the board members of SCCWRP's member agencies. Commissioner Hashimoto noted that SCCWRP would want to avoid duplicating the UCLA Institute of the Environment's (IOE) Southern California Environmental Report Card. Weisberg replied that the Institute's Director was giving a seminar at SCCWRP in early March and that he would discuss IOE interest in participating in the document. Commissioner Pestrella reminded Weisberg of the need to make sure that commentary in the document is sensitive to the viewpoints of the member agencies involved, and that a review process is used. Weisberg reassured him that this would be the case and encouraged all of the Commissioners to speak further with their CTAG representatives about their interests in, and concerns about, such a document.

Weisberg next discussed communication, handing out the draft schedule for the SCCWRP Symposium to be held on January 20, 2010. This was now an annual event that evolved from the Commission's strategic planning meeting three years prior. The Symposium will be similar to last years with brief technical oriented presentations and lab demonstrations. A new element for the 2010 Symposium will be panel discussions after the technical talks to incorporate diverse outside perspectives. Weisberg also showed a list of the top ten document downloads from SCCWRP's website over the past year, as a follow-up to a request made during the web analytics presentation at the last Commission meeting.

The Director's last topic dealt with a budding partnership with the Hollings Marine Laboratory in South Carolina, which he considered one of the most advanced molecular methods laboratories in the country. Like many NOAA laboratories, Hollings has tremendous capacity to develop new technology, but not the connections to the management community to apply them. Weisberg invited their scientists to attend the SCCWRP Symposium and stay the next day to discuss potential collaborations. The invitation was well received and a partnership is developing.

#### 7. CTAG REPORT

Tim Stebbins, Vice-Chair of the Commissioner's Technical Advisory Group (CTAG), presented a summary of their meeting on November 16. The meeting was well-attended and had a full agenda, as the November CTAG meeting typically involves a discussion of common research interests among member agencies to inform SCCWRP's research planning process. CTAG approved the minutes from the August meeting and received the Director's Report, much of which overlapped with topics on the Commission agenda. They also set a date for their joint May meeting to be held with SFEI's Regional Monitoring Program Technical Review Committee, which will be held in Oakland this year since SCCWRP hosted the last joint meeting. CTAG reviewed the contract memorandum that will go before the Commission as Agenda Item 8 and recommended that SCCWRP attach the name of a primary investigator to each potential contract. Weisberg confirmed that this had been done for the Commission's version. CTAG's two main agenda items were; (a) presentations by representatives of the publicly owned treatment works, stormwater agencies, regulators, the OPC, and SFEI regarding research interests, and (b) presentations on natural water quality studies. They also discussed writing a joint topic-specific report, and received a presentation on Bight '08 progress. At the next CTAG meeting, they will discuss bio-objectives and rapid microbiological methods, and receive the first draft of the 2010-2011 Research Plan.

#### 8. CONTRACT REVIEW

The Executive Director requested that the Commission approve a resolution regarding the following contracts that had been or would be offered to the Authority.

- State Water Resources Control Board (\$155,330)
   Loma Alta TMDL Study
- 2) State Water Resources Control Board (\$120,000) Hydromodification TAC
- 3) Moss Landing Marine Laboratory/San Jose State (\$500,000) Bio-objectives Technical Support for SWRCB

Upon the motion of Commissioner Ghirelli, seconded by Commissioner Maguin, the above contracts were unanimously approved by Resolution, with Commissioners Hashimoto and Polhemus abstaining.

As an informational item, Weisberg described 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, the contracts were described to inform and ensure that the direction of the Authority's work is consistent with the desires of the Commission.

- 4) State Water Resources Control Board (\$100,000) Effect of Hydromodification on In-stream Biological Condition
- 5) State Water Resources Control Board (\$40,000) Beach Water Quality Information Management
- 6) Santa Monica Bay Restoration Foundation (\$117,727)

Ballona Watershed Historical Ecology Survey

- 7) Santa Monica Bay Restoration Foundation (\$72,727) Water Balance Study for Ballona Watershed
- 8) University of Southern California (\$30,870) MERHAB Project
- 9) Environment Canada (\$50,000) Molecular Toxicity Identification
- 10) San Francisco Estuary Institute (\$57,182) Evaluation of a Molecular Toxicity Identification Evaluation Tool for Sediments
- 11) King County, Washington (\$3,200) Scientific Review of Regional Stormwater Monitoring Plan

There were no objections to any of these contracts.

#### 9. RAPID INDICATORS

Commission Chair Dojiri gave a verbal update on the Commission's Rapid Methods Task Force. He began with background information, first describing how traditional membrane filtration and chromogenic substrate beach monitoring methods require 18-24 hours to process, while beach contamination often lasts for much less time. Thus, once beach warnings are posted, the water may be safe again. SCCWRP has been working for almost a decade to develop rapid bacterial monitoring methods. The Commission had received a presentation from Weisberg at their March 13 meeting on progress toward developing rapid methods, as well as the technical and non-technical issues that would need to be overcome before they could be implemented. After that meeting, the Commissioners opted to form a Task Force to carry out additional technical studies and discuss other hindrances to rolling out the methods. The charge of the Task Force was to review SCCWRP's studies, and then propose a rapid methods rollout strategy at the Commission's March 2010 meeting.

Dojiri indicated that the Task Force held their kickoff meeting on May 27, 2009 at SCCWRP and identified a need for several technical studies. At the second meeting November 18, they received an update on these technical studies (epidemiology, multi-laboratory calibration, post-disinfection signal dissipation, inhibition controls, and development of SOPs and training protocols). Based on the updates, the Task Force felt that the technical issues with rapid methods could be resolved. Their next meeting was planned for mid-February, where they would develop a rollout strategy for presentation to the Commission on March 30. One action item from the November meeting was to identify potential beaches in Orange and Los Angeles Counties for the rollout, which might be based on poor scores from Heal the Bay's Beach Report Cards.

Dojiri next asked whether he needed a motion of the Commission to identify Amanda Griesbach of Heal the Bay as an official alternate for Mark Gold as a member of the Task Force. The Commission agreed that no motion was needed as they had previously entrusted Dojiri to make appointments to the Task Force.

In response to a question from Commissioner Hubner about non-technical impediments to implementation, Dojiri added that the Task Force still needs to discuss whether rapid methods should be used for regulation or only for issuing beach warnings. The Task Force was also concerned with other non-technical issues such as supplier reliability and the scale of the rollout, such as number of beaches. Commissioner Hubner next asked about including beaches with good and bad water quality for the rollout. Dojiri responded that public safety protection was not as critical at beaches with good water quality, and resources to pay for the additional rapid analysis techniques were limited. Weisberg added that timing was an issue, since the collection time made it feasible to collect and process samples for only a few beaches if signs were going to be placed early enough to warn swimmers that day. In response to a question from Commissioner Maguin, Dojiri clarified that the technical impediments were not entirely resolved, but were expected to be resolved as the SCCWRP studies were completed.

#### 10. NATURAL WATER QUALITY

The Executive Director introduced the next topic on natural water quality research studies. Commissioner Maguin left at 11:10 AM.

#### a. Water Quality in Watershed Reference Areas

Eric Stein began with a presentation on watershed reference area studies. Natural sources of contamination are known to exist and are recognized in regulations. Two common regulatory approaches are; (a) using reference sites and (b) natural source exclusion. These projects focused on the reference approach. The first, a natural loadings study involving a variety of contaminant parameters, was conducted in 2004-06. Second, a bacteria-focused reference watershed study, was conducted in 2006-07. Stein showed a map of the sites used in these studies along with several site photos. Results from the first study showed that ambient concentrations of metals in stormwater were much less at natural sites than in urban sites. The difference between natural and urban watersheds was greater during non-storm conditions. Sources of variability included season, flow regime, geology, and degree of development in the watershed. Factors that were less important included catchment size, slope, latitude, and type of natural land cover. Stein concluded that despite widely varying concentrations across different locations, natural conditions can be quantified and predicted. Commissioner Polhemus encouraged SCCWRP not to mix the terms "background" and "natural," as this could cause confusion. Weisberg responded that SCCWRP most commonly uses the term "reference."

#### b. Areas of Special Biological Significance (ASBS)

Ken Schiff continued the presentation series, adding that SCCWRP has also done a study of reference studies in marine waters. He began his presentation with a description of the unique ASBS regulatory framework. The 34 ASBS (water quality protected areas) cover about one-third of California's coastline. Regulations dictate no discharge of waste and maintenance of natural water quality in these areas. While very few point sources of discharge exist in ASBS, there are many surface water discharges. To assess ASBS water quality, the State Board encouraged stakeholders to use a regional reference approach, and as a result, ASBS became a part of the Bight Regional Monitoring Program. The Bight'08 ASBS component asks questions about defining natural water quality, comparisons between natural water quality and ASBS discharge areas, and the status of ASBS water quality as a whole. Schiff distributed a handout, written by the SWRCB's ASBS Natural Water Quality Committee, defining natural water quality via a reference site approach. Thus, Schiff next showed the Bight'08 ASBS primary and secondary reference site selection criteria pointing out that it was difficult to locate reference sites, even in ASBS. Results

indicated that some of the reference sites exceeded water quality standards from the California Ocean Plan. Overall, concentrations near discharge areas in ASBS were similar to reference sites, with a few exceptions.

Weisberg noted that all of the projects described so far had great stakeholder involvement including consensus on reference site selection criteria, but that differences in how reference conditions were defined among stakeholder committees differed.

#### c. Reference Conditions for Shellfish Bacterial Standards

Weisberg gave the next presentation on shellfish harvesting areas, noting that this project is still in the preliminary stages. As background, he indicated that the State has three beneficial uses that relate to shellfish waters (i.e., shellfish harvesting, mariculture, and commercial and sport fishing). This overlap leads to some confusion about the species that are considered shellfish, which bacterial standards should be applied, and the applicability of standards to areas where shellfish occur, might occur, and/or might be harvested. The SWRCB resolution under consideration is to apply shellfish harvesting standards to all wadeable areas throughout the state (where shellfish have the potential to occur) and to consolidate bacterial standards. One issue is that shellfish bacterial standards are much lower than recreational standards, such that many sites will likely fail to meet the shellfish standards. The alternative is to use a reference system approach, in which the frequency of exceedence at any given shellfish harvesting area site should not be greater than that found at the reference site. Weisberg next described data analyses that SCCWRP was conducting to help inform the State as they consider such changes. Weisberg lastly described the next steps for the project, which include gathering more data for the State Water Board Roundtable and supporting a stakeholder input meeting next spring.

#### d. CTD Water Quality Compliance Assessments

Weisberg also gave the final presentation on POTW plume compliance with California's Ocean Plan. This project, like the others, focuses on how to define "natural", which is a component of the standards established in the Ocean Plan. Weisberg noted that this project is being done jointly with the major wastewater dischargers, and the effort is being led by Dominic Gregorio from the State Water Board. While all POTWs monitor their plumes, the methods used to define plume area and compare it to a reference area vary widely. Some possibilities for conducting monitoring to define plume area including; (a) spatially-limited ammonia and bacteria sampling, (b) continuous conductivity, temperature, and depth (CTD) monitoring, or (c) automated gliders that provide vastly greater spatial coverage than CTDs. This study investigated how CTD data can be used to define a plume, how to define natural conditions away from the plume, how instrument variability comes into play, and how to develop a common assessment protocol. Weisberg briefly touched on the project approach.

At the end of his presentation, Weisberg showed a summary table comparing the reference criteria used in the various studies. He reiterated that each project had a different stakeholder committee and had come up with different reference criteria.

## 11. FUTURE MEETING AGENDA ITEMS

Three items were identified for future Commission meetings: 1) Update on rapid indicators (for March meeting); 2) Sediment Quality Objectives applications; and 3) Update on joint SCCWRP-CTAG topic-specific report.

#### 12. OTHER BUSINESS AND COMMUNICATIONS

Weisberg noted that Alan Langworthy, who recently retired, was one of SCCWRP's longestrunning Commissioners. He requested that Commissioner Meyer invite him to one of the Commission's upcoming meetings so that SCCWRP could thank him for his service.

#### 13. PUBLIC COMMENTS

Chris Beegan of the State Water Resources Control Board announced that the State Board would be sponsoring several upcoming Sediment Quality Objective training classes and that it would be possible to add a class in southern California if requested by SCCWRP's member agencies. Weisberg offered to set one up at SCCWRP.

Commissioner Hashimoto announced that she had recently met the new EPA Region 9 Regional Administrator Jared Blumenfield and that he planned to focus on cities as his central issue. She suggested that he might be interested in a southern California site visit. Commissioner Hubner thanked Weisberg and Schiff for visiting and briefing his stormwater copermittees. Weisberg added that they are willing to do this for any of the member agencies.

#### 14. ADJOURNMENT

The meeting was adjourned at 12:08 PM, until the next Commission meeting on March 30, 2010.

ATTEST: Bryan Nece Secretary