

**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 3, 2023
9:00 AM**

COMMISSIONERS PRESENT

Diane Fleck — *U.S. Environmental Protection Agency, Region 9*
Justine Kimball — *California Ocean Protection Council*
Karen Mogus — *State Water Resources Control Board*
Jenny Newman (Chair) — *Los Angeles Regional Water Quality Control Board*
Jayne Joy — *Santa Ana Regional Water Quality Control Board*
Jeremy Haas — *San Diego Regional Water Quality Control Board*
Mas Dojiri — *City of Los Angeles*
Robert Ferrante — *Los Angeles County Sanitation Districts*
Rob Thompson — *Orange County Sanitation District*
Peter Vroom — *City of San Diego*
David Laak — *Ventura County Watershed Protection District*
Keith Lilley — *Los Angeles County Department of Public Works*
Amanda Carr — *County of Orange*
Crystal Benham — *County of San Diego*

OTHER COMMISSIONERS PRESENT

Lan Wiborg — *Orange County Sanitation District*
Grant Sharp — *County of Orange*

STAFF PRESENT

Stephen Weisberg — *Executive Director*
Bryan Nece — *Administrative Officer*
Wes Beverlin — *Legal Counsel*
Ken Schiff — *Deputy Director*
John Griffith — *Department Head*
Eric Stein — *Department Head*
Martha Sutula — *Department Head*
Charles Wong — *Department Head*
Karen McLaughlin — *Principal Scientist*
Scott Martindale — *Communications Director*
Adriana Gonzalez-Fernandez — *Scientist*
Leah Hampton — *Scientist*
Emily Lau — *Communications Specialist*
Joshua Steele — *Senior Scientist*

Executive Director Weisberg welcomed the Commission and audience members to the first in-person Commission meeting since going remote in March 2020. The meeting was also broadcast on Zoom for audience members. Remote audience members were invited to address the Commission by making a request via the Zoom Q&A box.

Commissioner Newman called the meeting to order at 9:08 AM. It was announced that there would be three one-time replacements for Commissioners at this meeting: Diane Fleck is attending for Commissioner Blake, Jeremy Haas for Commissioner Gibson, and David Laak for Commissioner Anselm.

CONSENT AGENDA

- 1. Minutes of Meetings Held December 2, 2022**
- 2. Quarterly Financial Statement for the Period Ended December 31, 2022**
- 3. Quarterly Statement of Investments on December 31, 2022**
- 4. Minutes of CTAG Meetings Held February 2, 2023**

REGULAR AGENDA

5. Personnel and Finance Committee Report

Commissioner Ferrante, Chair of the Personnel and Finance Committee, reported that after many years of running positive cash flows, SCCWRP is looking at a \$500,000 deficit this year, although the deficit is expected to be net zero when looking at the three-year average. He stated that the loss was related to additional investments in projects such as the Southern California Bight Regional Monitoring Program. He reinforced that SCCWRP's long-term finances, reserves and work backlog all remain strong. The Committee will discuss formalizing a reserve policy at the next meeting and consider increasing the portion of SCCWRP's budget set aside for reserves, which is currently one-third of annual expenses. Ferrante said the Committee is working with SCCWRP to develop contingency plans in the event of a financial downturn; mitigation measures could include reducing travel and capital expenses, and being more proactive about marketing SCCWRP's services. Ferrante said results from a DEI (diversity, equity and inclusion) staff survey conducted in January indicate positive staff sentiment about the state of DEI at SCCWRP. A committee is being established to plan DEI training seminars for SCCWRP staff.

Ferrante reported that the Committee will be recommending minor changes to the annual salary resolution that the Commission will be asked to approve at its June 2023 meeting. The Committee decided that annual increases in staff salary ranges should remain tied to the Consumer Price Index (CPI), which is expected to be 6% for 2023. Ferrante said the Committee has completed the Executive Director's performance review, and the Chair and Vice Chair will be meeting with the Director to discuss it in the coming weeks. Ferrante reminded the Commission that SCCWRP will be holding an all-day Commission strategic planning retreat in person on October 20, 2023.

6. Executive Director's Report

Executive Director Weisberg welcomed Rob Thompson from the Orange County Sanitation District as the newest SCCWRP Commissioner; Thompson, who replaced Jim Herberg, said he looks forward to being part of the Commission. Weisberg introduced SCCWRP's two newest staff members: Dr. Adriana González-Fernández, a Scientist in the Microbiology Department, and Emily Lau, a Communications Specialist. Weisberg announced that SCCWRP had just published its 2022 Annual Report, and encouraged Commissioners to request extra copies to hand out to executive staff, governing boards and others.

Weisberg reported that the number of in-person meetings at SCCWRP has been ramping up over the past few months. While SCCWRP has not fully returned to its pre-pandemic average of 14 meetings a month, SCCWRP hosted five large, in-person meetings in February and has another eight planned for March. Weisberg highlighted some of these upcoming high-profile meetings: (1) an international microplastics workshop to develop standardized methods for collecting samples in the field, (2) the California Estuarine Research Society's annual conference, which is expected to attract about 120 people from across California and Baja California, (3) a California Water Quality Monitoring Council meeting scheduled for June 2023, (4) a meeting of the Southern California Coastal Ocean Observing System (SCCOOS) governing board, and (5) a two-day NOAA Science Advisory Board meeting in July. Weisberg highlighted two additional upcoming meetings that will be of particular interest to member agencies: (1) the biennial SCCWRP Symposium, an all-day opportunity for member agency staff who don't regularly attend CTAG or Commission meetings to interact with SCCWRP and other member agencies; Weisberg encouraged Commissioners to interact with their CTAG representatives to invite staff from their agencies, and (2) an all-day Commission strategic planning retreat on October 20, 2023 to discuss long-term directions and visioning for the organization. Weisberg mentioned that a previous Commission planning retreat led SCCWRP to invite stormwater agencies to become SCCWRP member agencies. He indicated that some Commission members had expressed interest in exploring how SCCWRP can strengthen interactions with drinking water management agencies and introduced Michael Markus, General Manager at the Orange County Water District, who was in attendance at the Commission meeting.

Weisberg recommended that the Commission establish a planning committee to plan the retreat and set the meeting agenda for the planning retreat. Commissioners Carr, Vroom, Newman, and Wiborg agreed to serve on that committee. Commissioner Mogus suggested that Commissioners review SCCWRP's existing strategic plan prior to the retreat. Weisberg responded that while SCCWRP doesn't have a written strategic plan, it does have a set of goals and strategies that the Commission approved about a decade ago; the planning committee will review these goals and strategies.

Weisberg reported that SCCWRP staff members have been especially busy as a result of recent storm events in Southern California. He provided updates on two projects that involve wet-weather sampling: (1) SCCWRP completed wet-weather field sampling in March for the second phase of a Newport Bay study re-visiting the technical foundation for California's water-quality standard that is intended to protect the health of people who consume locally harvested shellfish; SCCWRP staff successfully collected samples before,

during, and after recent rainstorms, and (2) SCCWRP has been making progress during both wet and dry weather on a San Diego study examining exfiltration from sewer lines; the project is part of a broader effort to identify and quantify all major sources of fecal pollution to the San Diego River.

Finally, Weisberg stated that SCCWRP was honored with a three-hour visit by NOAA Administrator Richard Spinrad, U.S. Under Secretary of Commerce for Oceans and Atmosphere, who wanted to learn more about SCCWRP after hearing how effective we are at transitioning science to management.

7. CTAG Report

CTAG Chair David Laak reported that he was elected Chair in February 2023, after serving as CTAG Vice Chair for the previous year, and that Ryan Kempster from the City of San Diego Public Utilities Department was elected Vice Chair. Emily Duncan, the previous CTAG Chair, rotated to Past Chair, and Past Chair Sam Choi is rotating off the CTAG Executive Committee. CTAG has decided to hold two in-person meetings and two remote meetings in 2023: The February meeting was held remotely, the May meeting will be remote, and the August and November meetings will be in person. May's meeting will be held remotely due to close timing with the SCCWRP Symposium on May 24, 2023. Laak reported that CTAG has agreed on a process for selecting members of an independent expert review panel that will be convened to review SCCWRP's ROMS-BEC computer modeling of Southern California's coastal ocean; the modeling explains how Southern California's coastal ocean is being affected by land-based nutrient discharges. Laak said the expert panel will likely begin meeting in about six months and will include an *ex officio* science advisor.

Laak reported that CTAG is meeting in person on April 4, 2023 for an intersessional planning workshop to review SCCWRP's Ecohydrology research theme, which has been voted as one of the lowest-ranked research themes over the past few years. He encouraged Commissioners to participate in SCCWRP's annual research prioritization exercise, which lets SCCWRP know how member agencies prioritize among SCCWRP's research themes, including Ecohydrology.

Laak said CTAG recommends Commission approval of the Southern California Stormwater Monitoring Coalition (SMC) Master Agreement (Agenda Item 8).

8. Contract Review

SCCWRP's Joint Powers Agreement requires Commission approval of contracts of more than \$250,000, and the State of California requests a resolution of acceptance for contracts exceeding \$100,000 offered by the State or Regional Water Boards. Weisberg recommended approval of the following contracts.

- 1) County of Orange (\$68,515)
County of Los Angeles (\$68,515)
County of San Diego (\$68,515)
County of Riverside (\$68,515)
County of San Bernardino (\$68,515)

County of Ventura (\$62,404)
City of San Diego (\$53,059)
City of Los Angeles (\$42,471)
City of Long Beach (\$34,259)
Caltrans (\$47,401)
SMC 2023-2024 Technical Support

Commissioner Carr motioned to approve the contract, and Commissioner Benham seconded the motion. The Commission approved the motion unanimously with Commissioner Fleck and Commissioner Laak abstaining.

Weisberg presented the remaining four contracts, all of which have values of \$250,000 or less and thus do not require Commission approval. The contracts were presented to ensure consistency of the agency's directions with the Commission's intentions.

- 2) California State University, Long Beach (\$20,000)
Microplastic Fiber Toxicity in Marine Species
- 3) California State University, Long Beach (\$10,000)
Condition Assessment & Monitoring of Estuary MPA's
- 4) Coastal Quest (\$13,300)
Development of Post-fire Monitoring Recommendations
- 5) University of California, Los Angeles (\$6,000)
PCR Technical Services

The Commission did not raise any objections to the contracts.

9. Bight '23 Planning Update

Principal Scientist McLaughlin opened this presentation by explaining that the 2023 cycle of the Southern California Bight Regional Monitoring Program (Bight '23) will be bigger and include more partners than ever before. A record 94 organizations will collaboratively participate in seven study elements: Sediment Quality, Water Quality, Harmful Algal Blooms, Microbiology, Trash and Microplastics, Estuaries, and Submerged Aquatic Vegetation. A bonus "eighth" element will focus on assessing shellfish as an indicator of multiple aspects of coastal ocean health, including CECs, toxins produced by harmful algal blooms, and pathogens. During Bight '23, multiple high-priority CECs (contaminants of emerging concern) will be investigated, including PFAS (per- and polyfluoroalkyl substances) and tire wear compounds. Through a partnership with CalCOFI (California Cooperative Oceanic Fisheries Investigations), Bight '23 will examine changing species compositions across the coastal ocean by monitoring environmental DNA (eDNA), which is the DNA that organisms shed into their environment. The Bight program also is planning to assess the health of native and restored eelgrass beds and probe the stressors affecting these habitats. Finally, the Bight program is planning to conduct the first integrated regional assessment of the health of all estuarine habitats (subtidal, intertidal and marsh).

The Bight program is finalizing all Bight '23 study designs and data management plans, and field sampling will launch in July 2023.

Asked by Commissioner Haas if the Bight '23 estuarine assessments will encompass SQO (Sediment Quality Objectives) regulatory assessments, Department Head Stein said the sediment portion of the assessment is designed to shed light on overall ecosystem functioning, not focus on SQO regulatory assessments. Haas said a conversation might be needed to ensure estuarine SQO assessments are not overlooked by Bight '23 participants. Commissioner Carr said that the Bight program's estuarine monitoring is viewed by Orange County Public Works as augmenting what the agency already is doing with SQO assessments, as it provides more spatially extensive data.

10. Ceriodaphnia Study

Deputy Director Schiff began this presentation by explaining that the State Water Resources Control Board delayed statewide implementation of toxicity provisions for the *Ceriodaphnia dubia* chronic reproduction test as a result of stakeholder concerns about variability in test results among the laboratories that perform the test. SCCWRP was asked to facilitate a study to identify sources of variability among the labs, and develop recommendations for improving the precision of the test results. SCCWRP began by convening a stakeholder advisory committee, as well as an expert science panel with a combined 140 years of toxicology expertise that is overseeing the study. The expert panel reviewed *Ceriodaphnia* data from 17 accredited labs across California, and found that no laboratory uses the same exact protocols for conducting this test. The labs participating in the study performed split-sample testing to see if they could get the same test results with the same sample, albeit using their own methods; variability during this laboratory intercalibration exercise was widespread, and no single issue emerged as the logical explanation for variability of the results. In the absence of clear answers, the Stakeholder Committee and Science Panel both recommended that the final phase of the study focus on education and training for the laboratories, including lab visits from expert panel members and a roundtable workshop, plus a second laboratory intercalibration exercise. The study will finalize its recommendations for reducing variability in results by July 2023, and a final report will be drafted by September 2023.

Asked by Commissioner Mogus if the study has already developed a list of aspects about the *Ceriodaphnia* test that participants will work to standardize, Schiff said yes. Asked by Commissioner Dojiri about the study's investigation into what foods are being fed to the *Ceriodaphnia* fleas, Schiff said there is almost no documentation or guidance in existing methods for how labs deal with brood boards, but that participants are planning to discuss this issue during an upcoming roundtable workshop.

11. Microplastics Field Methods Standardization Workplan

Scientist Thornton Hampton began this presentation by explaining that the California Ocean Protection Council about a year ago adopted a comprehensive statewide strategy for managing microplastics in the coastal ocean. One of the strategy's four pillars is building statewide capacity to monitor microplastics, which includes standardization and accreditation of microplastics monitoring methods as part of a broader effort to develop a

monitoring toolbox for microplastics. Already, SCCWRP helped lead an international effort to standardize sample processing and analysis methods for measuring microplastics in drinking water, followed by surface water, sediment and biological tissue. With much of this work now complete, SCCWRP is shifting its focus to standardizing the field methods used to collect environmental samples prior to measuring their microplastics content. This work is important because different sample collection methods can lead to results that are orders of magnitude different. SCCWRP is starting this work by hosting an upcoming workshop to discuss how to standardize methods and develop a method evaluation study that will probe issues with method performance, uncertainties and limitations. SCCWRP is also simultaneously working with microplastics experts to develop health risk-based thresholds that define for managers the levels at which microplastics exposure is expected to trigger adverse biological effects.

12. ROMS-BEC Nutrient Modeling Update

Department Head Sutula began this presentation by explaining that SCCWRP is part of a team of researchers that has been developing computer models for investigating the effects of land-based nutrients on coastal ocean health. SCCWRP is now transitioning to using the ROMS-BEC (Regional Ocean Modeling System + Biogeochemical Elemental Cycling) models to examine hypothetical management scenarios in which levels of nutrient discharges are reduced and the modeling is used to predict how ocean health is affected. Given that managers have important questions about how much confidence they should place in this modeling work, CTAG has been working with SCCWRP to: (1) validate the model's predictive capabilities using newer data sets, (2) contextualize how much of the change predicted by the model is caused by natural variability vs. climate change and ocean acidification, and (3) organize an independent expert review panel to review SCCWRP's modeling work to date. The expert panel will offer advice on how to quantify uncertainty in the modeling predictions, as well as how to improve management confidence in these predictions. SCCWRP is supportive of convening the expert panel, as the modeling team will benefit from the expert advice and insights offered by the independent panel. To ensure the process of convening the expert panel is fair, transparent and balanced, CTAG is convening a steering committee that will vet and select the panelists as well as a non-voting, *ex officio* science adviser. Kevin Hardy from the National Water Research Institute (NWRI) has agreed to serve as the expert panel's facilitator. The expert panel will be convened in fall 2023 and deliberate over the course of about a year.

Commissioner Mogus recommended that the steering committee's composition be expanded to include a representative from the NGO community. Jared Voskuhl of the California Association of Sanitation Agencies (CASA) expressed support for this idea and recommended inviting Sean Bothwell, Executive Director of the California Coastkeeper Alliance, to serve on the steering committee. Kevin Hardy of NWRI commented that he is looking forward to facilitating the expert panel and that it will be an excellent opportunity for NWRI and SCCWRP to work collaboratively to advance science.

Asked by Commission Chair Newman about the proposed pacing of the expert panel's meeting schedule, Sutula said that the Panel meetings will occur at about three-month intervals, which will provide time for SCCWRP staff to respond to information requests that

develop at the meetings. However, Sutula said the schedule is preliminary and there may be opportunities to accelerate/compress it.

Executive Director Weisberg encouraged Commissioners to read his Director's Message that appears in SCCWRP's 2022 Annual Report, as it discusses the inherent challenges and opportunities associated with using predictive modeling to understand how the health of aquatic ecosystems is changing and could change in the future.

13. CEC Expert Panel Update

Department Head Wong began this presentation by explaining that about a decade ago, an expert panel was convened to help California develop a management strategy for how to prioritize which CECs (contaminants of emerging concern) to monitor in aquatic ecosystems. The strategy developed by the panel relies on periodically revisiting chemical occurrence and effects data; however, at the time the panel was deliberating, insufficient data were available. As more data have been generated and technology has advanced, California reconvened this expert panel in 2020 to examine how to update its CEC monitoring strategy; the panel is made up of leading international CEC experts. Following two years of deliberations, the reconvened panel in late 2022 published a draft report that affirms that California's strategy is fundamentally sound, and that provides a prescriptive workflow that the State Water Resources Control Board can use to analyze and complete quality-control steps for CEC occurrence and effects data, in advance of using the data to produce updated lists of CECs that should become monitoring priorities for California. Significantly, the panel's workflow has enabled State Water Board staff to complete these analyses and work with other agencies on this issue, rather than relying on an expert panel to do this work on behalf of staff. The State Water Board plans to publish the reconvened expert panel's final report in May 2023.

Commissioner Mogus commended the panel's work, noting that the panel's recommendations have enabled the State Water Board to build in-house capacity to prioritize which CECs should be monitored in aquatic ecosystems.

Asked by Commission Chair Newman if it was the panel's original intention to develop these recommendations and guidelines, Wong said the panel decided to move in this direction after realizing that much of the data were not readily usable until after the data went through extensive data analysis and quality-control steps. Executive Director Weisberg added that the original panel's recommendations included using bioanalytical cell assays to help monitor the occurrence of bioactive CECs, and that as a result, SCCWRP has invested over the past decade in facilitating the incorporation of these bioassays into routine CEC monitoring statewide.

14. Two Page Fact Sheets

Communications Director Martindale began this presentation by explaining that the Commission in June 2022 asked SCCWRP to resume production of a series of two-page educational fact sheets that are intended for Commissioners to be able to hand to board members of their agencies and similar audiences. CTAG completed its review of the two fact sheets at its February 2023 meeting, and is recommending that the Commission

approve both fact sheets for publication. The first fact sheet is on modeling as a tool to support coastal water-quality decisions, and the second fact sheet is on genetic technology to protect beachgoers from fecal contamination. CTAG is working with SCCWRP to produce a third fact sheet on environmental DNA (eDNA) monitoring as an effective complement to traditional bioassessment monitoring.

Commissioners Carr and Dojiri requested minor edits to the beach monitoring genetic technology fact sheet. Commissioner Dojiri motioned to approve the fact sheets, and Commissioner Carr seconded the motion. The Commission approved the motion unanimously with Commissioner Fleck abstaining. Commissioners were asked whether they prefer to receive the fact sheets as PDFs or as professionally printed hard copies, to which they responded they preferred receiving pdfs. Commissioner Carr recommended that the next fact sheet focus on SCCWRP's value to managers.

15. Other Business and Communications

Commissioner Mogus noted that SCCWRP will brief the State Water Resources Control Board on the ROMS-BEC modeling effort (Agenda Item 12) at an upcoming March 21, 2023 board meeting. Mogus said this will be just an informational item at this meeting, but she anticipates the modeling will serve as part of the technical foundation for the State Board as it moves forward with developing a proposed incentives program to encourage removal of nutrients from coastal discharges.

16. Future Meeting Agenda Items

Executive Director Weisberg said that at the June 2023 Commission meeting, Commissioners will review and consider approving SCCWRP's annual research plan, annual budget, and annual salary resolution. Also in June 2023, the Commission will react to initial plans for the Commission's strategic planning retreat on October 20, 2023.

Commissioner Chair Newman asked that results from the San Diego sewer exfiltration study be agendized for a future Commission meeting. Newman also suggested that SCCWRP's Ecohydrology research theme be agendized for future Commission discussion. Weisberg said he or the CTAG Chair will present outcomes of the Ecohydrology intersessional research planning workshop, which is scheduled for April 2023, at the June Commission meeting.

Commissioner Haas suggested agendizing a discussion about the recent quality-control issues with Bight '18 data that affected Sediment Quality Objectives (SQOs) calculations. Weisberg said that SCCWRP has been working with CTAG to enhance quality assurance procedures, but that a second underlying challenge is there are two SQO calculation methods presently in use: one method is used for regulatory purposes, which was adopted a decade ago, while the other method is an updated version that is used as part of the Southern California Bight Regional Monitoring Program. Commissioner Mogus said the State Water Board will begin by looking at whether the older calculator tool is codified into the California's SQO regulatory framework, or whether it's simply the version of the tool that happens to still be used. Mogus said she will consult with the Regional Boards on this

issue and report back to the Commission if a presentation is warranted. Commissioner Carr expressed support for clarifying this issue.

17. Public Comments

None

18. Adjournment

Commission Chair Newman adjourned the meeting at 11:40 AM until the next Commission meeting on June 2, 2023 at 9:00 AM.

Attest:

Bryan Nece
Secretary