

**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**

**December 13, 2019
9:00 AM**

COMMISSIONERS PRESENT

Diane Fleck— *U.S. Environmental Protection Agency, Region 9*
Mark Gold (Chair) — *California Ocean Protection Council*
Renee Purdy — *Los Angeles Regional Water Quality Control Board*
Hope Smythe — *Santa Ana Regional Water Quality Control Board*
David Barker — *San Diego Regional Water Quality Control Board*
Mas Dojiri — *City of Los Angeles*
Robert Ferrante — *Los Angeles County Sanitation Districts*
Jim Herberg — *Orange County Sanitation District*
Peter Vroom — *City of San Diego*
Paul Alva — *Los Angeles County Department of Public Works*
Amanda Carr — *County of Orange*
Todd Snyder (Vice Chair) — *County of San Diego*

STAFF PRESENT

Stephen Weisberg — *Executive Director*
Bryan Nece — *Administrative Officer*
Wes Beverlin — *Legal Counsel*
Ken Schiff — *Deputy Director*
Steve Bay — *Department Head*
John Griffith — *Department Head*
Eric Stein — *Department Head*
Martha Sutula — *Department Head*
Charles Wong — *Department Head*
Elizabeth Fassman-Beck — *Principal Engineer*
Katie Irving — *Scientist*
Faycal Kessouri — *Senior Scientist*
Scott Martindale — *Communications Coordinator*
Karen McLaughlin — *Senior Scientist*
Alvina Mehinto — *Principal Scientist*
Jayme Smith — *Scientist*
Kristine Taniguchi-Quan — *Scientist*
Amy Zimmer-Faust — *Scientist*

OTHERS PRESENT

Echelle Burns — *Public*
Karen Cowan — *California Stormwater Quality Association*
Scott Jenkins — *South Orange County Wastewater Authority*

Tamara Kahn — *TMA BlueTech*
Chad Loflen — *Regional Water Quality Control Board*
Phil Markle — *Los Angeles County Sanitation Districts*
Nikos Melitos — *Los Angeles County Sanitation Districts*
Darrell Nolta — *Public*
Hassan Rad — *City of Los Angeles*
George Robinson — *Orange County Sanitation District*
Martha Tremblay — *Los Angeles County Sanitation Districts*
Shelly Walther — *Los Angeles County Sanitation Districts*
Lan Wiborg — *Orange County Sanitation District*

Commission Chair Mark Gold called the meeting to order at 9:06 AM.

CONSENT AGENDA

- 1. Minutes of Meetings Held September 6, 2019**
- 2. Quarterly Financial Statement for the Period Ended September 30, 2019**
- 3. Quarterly Statement of Investments at September 30, 2019**
- 4. Minutes of CTAG Meetings Held November 14, 2019**

Commissioner Dojiri motioned to approve Consent Items 1-4, and Commissioner Carr seconded the motion. The Commission approved the motion unanimously with Commissioner Fleck abstaining.

REGULAR AGENDA

5. Personnel and Finance Committee Report

Commissioner Vroom, Chair of the Personnel and Finance Committee, reported that SCCWRP recently underwent its annual audit and the audit had come back clean; the Commission will be asked to accept the audit at its March 2020 meeting. He said SCCWRP remains in strong financial health with sufficient cash reserves. He said the Committee is recommending Commission approval of Agenda Item 9, which would raise the minimum salaries of Senior Research Technicians effective January 1, 2020 to remain in compliance with State wage laws regarding exempt employees. He said the Committee discussed a draft of the agency's tenth amended Joint Powers Agreement (JPA), which would extend the agency's existence by five years beginning July 2021. The Committee reached consensus on the draft JPA, though they are still discussing the possibility of changing SCCWRP's name as the word "Project" does not appropriately describe an institute with a 50 year history. The draft JPA will come before the full Commission for review in March 2020. Vroom said the Committee also discussed the possibility of live-streaming the Commission meetings; the Committee recommended against pursuing this option at this time. Vroom said there has not been a high demand to live-stream the meetings and had concerns about meeting the legal requirements for remote participation of live-streamed meetings.

Commission Chair Mark Gold commented that broadcasting the Commission meetings would create a disincentive for Commissioners to attend the meetings in person, which he said would also be a negative. Darrell Nolta, a member of the public, was recognized to comment; he urged the Commission to broadcast its meetings, saying that the issues the Commission is discussing are of public interest and are funded by the public.

6. Executive Director's Report

Executive Director Weisberg informed the Commission about their newest member, Tina Yin, who was appointed this week to replace David Smith as the Alternate Commissioner from the U.S. Environmental Protection Agency, Region 9. Weisberg said Yin was not able to attend on short notice, but was looking forward to attending in the future.

Weisberg introduced Principal Engineer Elizabeth Fassman-Beck, who started at SCCWRP in November and will lead SCCWRP's research program on stormwater BMP effectiveness. Commissioner Amanda Carr said that Fassman-Beck already had been in the field with Orange County Public Works and that she looked forward to the growth of this research program.

Weisberg announced the upcoming retirement of Toxicology Department Head Steve Bay after a 39-year tenure at SCCWRP. Bay said he is grateful for everything he's learned at SCCWRP and appreciates all of the opportunities to help SCCWRP member agencies.

Weisberg said SCCWRP's 50th anniversary celebration in October 2019 in Long Beach went well and accomplished its main goal of connecting people and strengthening the SCCWRP tribal culture. Weisberg thanked Commissioners Mas Dojiri and Robert Ferrante for serving on the planning committee. Weisberg encouraged Commissioners to request extra copies of the commemorative book that was distributed to guests at the celebration and would serve as the agency's Annual Report for 2019.

Weisberg announced that SCCWRP has been asked to host a national workshop on environmental DNA (eDNA) sponsored by the National Oceanic and Atmospheric Administration and the U.S. Navy. The request is a recognition of SCCWRP's leadership on DNA research and SCCWRP's skill in moving new science into application. The workshop is tentatively scheduled for February 2021. Weisberg finished by introducing Tamara Kahn, who is head of TMA BlueTech, a San Diego-based industry trade group serving the ocean and water-quality sectors that SCCWRP is pursuing partnership opportunities with.

7. CTAG Report

CTAG Chair Chad Loflen provided an update on CTAG activities. Loflen said this would be his last meeting as CTAG Chair, as CTAG will hold its annual leadership election at their next meeting.

Loflen said CTAG's next intersessional research planning workshop will focus on SCCWRP's Bioassessment research theme and will be held January 30, 2020; it will dovetail with the Southern California Stormwater Monitoring Coalition's efforts to put together its next five-year research plan. Regarding SCCWRP's modeling work to understand the influence of

land-based nutrient sources on biogeochemical cycling in the Southern California Bight, Loflen said the next meeting of the modeling validation committee led by George Robertson of the Orange County Sanitation District will be held January 23, 2020, and the first meeting of the modeling application committee led by Katherine Walsh of the State Water Board will be held January 13, 2020. Loflen finished by saying CTAG recommends approval of the contracts the Commission will consider as its next item.

Scott Jenkins, representing the South Orange County Wastewater Authority (SOCWA), was recognized to comment about the CTAG modeling advisory roles. He said SOCWA is concerned that its discharge permits may become conditional on the outputs of a ROMS-BEC (Regional Oceanic Modeling System – Biogeochemical Elemental Cycling) computer model that has been developed to estimate the biogeochemical cycling effects of nutrient discharges to the coastal ocean. Jenkins said SOCWA has not seen peer-reviewed literature showing that the modeling is scientifically sound.

Executive Director Weisberg responded by saying that SCCWRP would be glad to share relevant peer-reviewed manuscripts with SOCWA. He also said that there was opportunity to partner with SOCWA to enhance the model locally around the SOCWA outfall and to evaluate the model output using data local to the SOCWA facility. Commission Chair Mark Gold said he understood SOCWA's point of view, but added that there was still time, as it would take several more years for regulatory decisions to be made based on the modeling work.

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) State Water Resources Control Board (\$250,000)
Stormwater Monitoring

Asked by Commissioner Amanda Carr if the project will include stakeholder input, Deputy Director Ken Schiff said a stakeholder committee will be a focal point to ensure that the monitoring is responsive to stakeholder needs. Commission Chair Mark Gold commented that the use of the term "Alternate Compliance Pathway" in the project's description could imply that SCCWRP is becoming involved with the regulatory aspects of stormwater management, even though that is not the case. Schiff responded by stressing that SCCWRP does not take a position on Alternative Compliance for stormwater management, and will focus on the monitoring aspects regardless of which compliance pathway that managers select. Weisberg said that he appreciated Gold's comments because the Commission's role is to provide feedback on the appropriateness of all SCCWRP contracts.

Commissioner Purdy motioned to approve the above contract requiring Commission approval, and Commissioner Dojiri seconded the motion. The Commission approved the motion unanimously, with Commissioner Fleck abstaining.

- 2) Ocean Protection Council (\$168,298)
State Water Resources Control Board (\$58,847)
CEC Science Advisory Panel for Ambient Waters

Commissioner Snyder motioned to approve the above pair of contracts requiring Commission approval, and Commissioner Carr seconded the motion. The Commission approved the motion unanimously, with Commissioners Fleck and Gold abstaining.

- 3) EPA (through Ecosystem Planning & Restoration) (\$509,520)
Stream Assessment

Commissioner Smythe motioned to approve the above contract requiring Commission approval, and Commissioner Dojiri seconded the motion. The Commission approved the motion unanimously, with Commissioner Fleck abstaining.

Weisberg presented the remaining seven 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.

- 4) City of San Diego (through Tetra Tech) (\$25,000)
Facilitation to Identify Sources of Fecal Material to the San Diego River
- 5) NOAA (through UCLA) (\$45,830)
Integrated Modeling of Harmful Algal
- 6) NOAA (through UC Riverside) (\$135,131)
Modeling to Support Investigation and Management of Microplastics
- 7) Bolsa Chica Land Trust (through Anchor QEA) (\$5,360)
Bolsa Chica Sustainable Alternatives Workshop
- 8) USC Sea Grant (\$130,000)
Interactive Effect of OA and Hypoxia
- 9) City of San Diego (\$13,600)
Bight OA Sample Analysis
- 10) University of California San Diego (\$24,200)
University of Southern California (\$24,200)
City of Laguna Beach (\$24,200)

The Commission did not raise any objections to the contracts.

Commissioner David Barker arrived at 9:40 am.

9. Salary Resolution Modification

Executive Director Weisberg reported that the Commission's Personnel and Finance Committee is recommending that SCCWRP raise the lower end of the salary range for Senior Research Technicians effective January 1, 2020. SCCWRP's Senior Research Technicians are exempt from overtime because they operate with a high degree of autonomy and have flexibility over their own schedules. Under State law, exempt employees are required to be compensated at least twice the State minimum wage. When the State minimum wage rises to \$13/hour on January 1, SCCWRP has the option to either reclassify affected employees as non-exempt or to raise their salary so it is at least twice the State minimum wage.

Asked by Commissioner Mas Dojiri how many employees would be affected by this change, Weisberg said there were only two people affected, with the lowest-paid Senior Research Technician's salary increasing from about \$49,000 to \$54,000. Commissioner Ferrante motioned to amend the 2019-2020 Salary Resolution to reflect the recommended increase in the minimum salary range for Senior Research Technicians, and Commissioner Dojiri seconded the motion. The motion was approved unanimously, with Commissioner Fleck abstaining.

10. Technology Transfer of Cell-line Assay Tools

Executive Director Weisberg introduced this presentation by explaining that SCCWRP's mission extends beyond publishing in the scientific literature and involves additional steps to ensure end-user water-quality managers successfully incorporate SCCWRP's science into their routine activities. He said this presentation will illustrate some of those additional steps staff are taking to promote adoption of cell line assays as an emerging contaminant screening tool. Principal Scientist Alvina Mehinto started her presentation by explaining that managers need a way to efficiently monitor hundreds of thousands of CECs for potential non-lethal and mixture effects; traditional, chemical-specific analysis methods are insufficient. Bioanalytical assays are a tool that enables managers to simultaneously screen for hundreds of CECs that trigger a common biological response. In 2018, the State Water Board amended the State's recycled water policy to require that two types of cell-line assays – the estrogen receptor assay and the aryl hydrocarbon receptor assay – be used to screen recycled water; phased monitoring is scheduled to begin in April 2020. She described technology transfer steps SCCWRP has invested in, including seminars, trainings and laboratory intercalibration exercises. SCCWRP also partnered with the National Water Research Institute to produce a detailed guidance document for application of the test. SCCWRP is planning to host additional training opportunities in 2020 for member agencies. SCCWRP also is planning to facilitate an intercalibration exercise for cell-line assays during the 2023 cycle of the Southern California Bight Regional Monitoring Program, if not sooner.

Asked by Scott Jenkins of the South Orange County Wastewater Authority (SOCWA) if bioassays could be designed to run autonomously, Mehinto said it was possible, but researchers would need to find a way to also perform sample extractions autonomously. Asked by Commission Chair Mark Gold what sort of guidance might be used to help managers interpret bioassay results, Mehinto said SCCWRP is presently working with the State Water Board to help them develop reporting and response thresholds. Asked by

Darrell Nolta, a member of the public, about the appropriateness of extrapolating cellular-level effects to whole organisms, Mehinto said cell-line assays are intentionally designed as early warning indicators of CEC presence that activates a living organism response, but SCCWRP present research is focused on establishing relationships between different early warning response levels and the presence of higher order effects.

11. CEC Pilot Testing

Executive Director Weisberg introduced this presentation by explaining that while the short-term focus of cell-line assays has been on recycled water applications, the tools also are being considered as a screening tool for the ambient environment. Principal Scientist Alvina Mehinto started her presentation by explaining that SCCWRP has developed a multi-tiered framework for monitoring CECs in ambient environments that includes the use of cell-line assays as a cost-effective screening tool, complementing both targeted and nontargeted chemical analysis. Initial investigations using the estrogen receptor assay show that this assay is capable of reliably detecting varying levels of estrogen-mimicking chemicals in the environment to which organisms are being exposed. Although the assay has proven reliable in detecting exposure, SCCWRP and its partners are still working to correlate various exposure responses to whole-organism biological effects. Researchers envision creating a four-tiered set of thresholds for informing management action: (1) High concern, which would trigger in-depth toxicity identification work and source control efforts; (2) Elevated concern, which would trigger targeted and nontargeted confirmatory analysis and expanded monitoring; (3) Moderate concern, which would trigger continued monitoring to ensure bioactivity levels are not increasing; and (4) Little/no concern, which would trigger reductions in the frequency of monitoring.

Asked by Commissioner Hope Smythe to elaborate on differences in assay results among different Southern California water body types, Mehinto said most water bodies were below detection limits during pilot testing; the assays frequently detected CECs in effluent, but rarely in the ambient environment. Asked by Commission Chair Mark Gold about the relevance of using assays in areas that have high known levels of CECs, such as groundwater contamination, Mehinto said it absolutely would be appropriate and encouraged member agencies to suggest groundwater sites for running cell-line assays.

12. Ocean Protection Council Strategic Plan

Commission Chair Mark Gold started this presentation by explaining that an update of the California Ocean Protection Council's Strategic Plan was his first priority when he joined the OPC in July 2019. Gold presented four main goals outlined in the OPC's draft Strategic Plan: (1) Safeguard coastal and marine ecosystems and communities in the face of climate change, which includes a focus on making California's low-lying wetlands and infrastructure resilient to sea level rise; (2) Advance equity across ocean and coastal policies and actions, which includes providing all Californians with access to healthy, sustainable coastal resources; (3) Enhance coastal and marine ecosystems, which includes studying the effectiveness of California's Marine Protected Areas and developing an ocean microplastics management strategy; and (4) Improve ocean health through a blue economy, which includes developing an aquaculture action plan and pursuing offshore wind projects. The Plan includes development of specific objectives, targets and actions,

including identification of the responsible agency to enhance accountability. Gold said that although the formal public comment period on the draft OPC Strategic Plan would be closing at the end of that day, Commissioners could continue to provide him with feedback over the following week.

Asked by Commissioner Robert Ferrante if the objectives contained in the OPC's Strategic Plan would have regulatory implications, Gold said the OPC is not a regulatory agency and cannot commit other agencies to using regulatory means to achieve these objectives. Asked by Commissioner James Herberg how the OPC's draft Strategic Plan has been harmonized with strategic planning by the State Water Board on issues like increased recycled water diversions and reducing wastewater discharges, Gold said discussions are ongoing. Gold at this point entertained questions from the audience. Asked by Hassan Rad of the City of Los Angeles Bureau of Sanitation how the OPC is thinking through tradeoffs associated with reducing wastewater flows to the coastal ocean, Gold said he is supportive of recycling. CTAG Past Chair Phil Markle commented that an additional benefit of increased reliance on wastewater recycling is that it reduces dependence on importing of water supplies, which can have a ripple effect of positive benefits for coastal ecosystems. Ferrante commented that water purveyors should be incentivized to purchase water from water recycling agencies, because increased water recycling is only beneficial if municipalities are willing to accept it. Gold echoed Ferrante's sentiments, saying that he does not feel water recycling is as high of a priority in California as he would like, even though more water recycling could have the co-benefits of reducing microplastics and nutrient loading to the coastal ocean. Scott Jenkins, representing the South Orange County Wastewater Authority (SOCWA), commented that as sea levels rise, there will be pressure to rebuild beaches, which may have the unintended consequence of burying rocky habitats that the State also is invested in protecting. Gold responded by saying that this dilemma highlights the urgency of having a strategic plan to guide these decisions, instead of making these decisions on a case-by-case basis. Asked by Tamara Kahn, Program Manager for TMA BlueTech, about the role of industry in the OPC's Strategic Plan, Gold said the OPC is interested in hearing from industry about potential solutions that could plug into various OPC priorities, from aquaculture to wind energy.

Weisberg said SCCWRP will be asking CTAG to examine the OPC Strategic Plan to help SCCWRP determine how it should refine its research agenda to support the Plan. Ferrante thanked Gold for putting together the presentation on short notice, and Gold thanked Commissioners for their productive dialogue.

13. CASQA's Vision for Sustainable Stormwater Management

Weisberg introduced Karen Cowan, Assistant Executive Director for the California Stormwater Quality Association (CASQA), who presented on behalf of Executive Director Geoff Brosseau, whose travel to SCCWRP was interrupted by weather. Cowan said CASQA in August 2019 updated its vision for stormwater management. CASQA's vision is to manage stormwater as a vital component of California's water resources in a sustainable manner, support human and ecological needs, protect water quality, and enhance and restore waterways. CASQA's principles for achieving its vision revolve around: (1) implementing projects and programs that underscore the value and importance of

stormwater, (2) establishing a framework supporting sustainable management, and (3) enhancing public awareness and support. Cowan said CASQA recognizes that although it has been effective at bringing together stormwater managers to collaborate, it has not been as effective at collaborating with POTWs and other sectors – and thus this will become a focal point going forward. Cowan said CASQA is ultimately working to boost public support for stormwater projects – ideally, to get a statewide funding initiative similar to Los Angeles County’s Measure W.

Commission Chair Mark Gold commented that stormwater should be managed at the watershed scale, with a focus on source water protection, but that this was not necessarily the priority statewide. Asked by Commissioner Peter Vroom about follow-up activities to a recent workshop at SCCWRP that brought together POTWs and stormwater managers, Cowan said the interactions are continuing, with CASQA set to meet soon with the incoming Executive Director of the California Association of Sanitation Agencies. Commissioner Carr added that workshop participants also are still working on a written summary of the workshop. Commissioner Robert Ferrante commented that the Sanitation Districts of Los Angeles County is working on a pilot project with L.A. County Public Works to discharge dry-weather flows into the sewer system; white papers will be written on the project. Carr commented that a perennial challenge for stormwater managers is that resource agencies tend to be reluctant to accept water out of a creek or channel.

14. Other Business and Communications

None.

15. Future Meeting Agenda Items

Executive Director Weisberg explained that the Commission uses a three-step process to develop its Commission meeting agendas for the year: In October, Commissioners and CTAG representatives are invited to submit topic ideas. In November, Commissioners vote on the list of topics. In December, SCCWRP presents voting outcomes and a strawman for meeting agenda topics. Weisberg said SCCWRP received 36 topics, and 11 of 14 Commissioners cast votes. Weisberg said that seven topics had received seven or more votes and thus are top priorities to incorporate into future meeting agendas; he also presented seven topics that had received five votes each. Weisberg presented a strawman of topics for the four 2020 Commission meetings: March would focus on stormwater BMPs (best management practices), June would focus on biological assessment, September would focus on ocean acidification, and December would focus on microbiology. Weisberg said that only two topics that had received five or more votes were not reflected in the strawman: an update on the Southern California Bight 2018 Regional Monitoring Program’s Sediment Quality element, and an update on an ongoing study to evaluate microplastics measurement methods. Weisberg recommended delaying the Bight ’18 update until 2021 when more results would be available, and recommended adding the microplastics topic to the September 2020 agenda.

Commissioners expressed support for the strawman. Asked by Commission Vice Chair Todd Snyder about the status of a pilot project by the Sanitation Districts of Los Angeles County and L.A. County Public Works to discharge dry-weather flows into the sewer

system, Ferrante said the whitepapers that will be written about the project may not be published by the Commission's March 2020 meeting, but perhaps tentative results could be presented verbally at this meeting.

Weisberg recommended that the Commission hold a strategic planning meeting in 2020, which would create an opportunity to look past daily operations and instead focus on strategic, long-term direction for the organization. Weisberg said the last meeting was held five years ago. Historically, the all-day meetings have been important to SCCWRP's evolution. For example, at SCCWRP's 2001 strategic planning meeting, the Commission laid the groundwork to invite stormwater management agencies to join SCCWRP, and determined the funding model and proper size for the organization. In 2007, the Commission decided to invite the California Ocean Protection Council to join SCCWRP, and directed staff to enhance SCCWRP's communications efforts. In 2014, the Commission revised the CTAG Charter and reworked the research planning process. Weisberg suggested three potential topic areas: (1) Secrets to SCCWRP's success over the past 50 years, (2) SCCWRP's biggest research aspirations, and (3) SCCWRP's communications program. Weisberg said the format and structure of the meetings have varied; in the past, SCCWRP has conducted a pre-meeting survey, brought in an Expert Review Panel to evaluate the organization, and invited CTAG. Weisberg recommended that the Commission form a committee to draft an agenda and present the draft agenda at the Commission's March 2020 meeting. Weisberg suggested holding the meeting in September 2020 at SCCWRP.

Commissioners expressed support for moving forward with a strategic planning meeting. Commission Chair Mark Gold suggested trying to hold the meeting at a location where the ocean would be visible. Commissioner Renee Purdy said the Los Angeles Regional Water Quality Control Board holds a strategic planning meeting annually and it has been valuable. Gold asked for volunteers to serve on the planning committee for the meeting. Commissioners Paul Alva, Peter Vroom, James Herberg, Todd Snyder, David Barker and Mark Gold expressed interest in serving on the planning committee.

16. Public Comments

Darrell Nolta, a member of the public, commented that the cleanup of the Palos Verdes Shelf Superfund site should be a top priority for California. He urged the Commission to be vigilant about necrotizing fasciitis, or flesh-eating disease, which could become more prevalent among beachgoers as coastal waters become warmer and thus become more hospitable to the bacteria that cause the disease.

17. Adjournment

Commission Mark Gold adjourned the meeting at 12:02 PM until the next Commission meeting on March 6, 2020 at 9:00 AM.

Attest:

Bryan Nece
Secretary