COMMISSIONERS PRESENT
Ellen Blake — U.S. Environmental Protection Agency, Region 9
Deborah Halberstadt (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
James Herberg — Orange County Sanitation District
Peter Vroom — City of San Diego
Arne Anselm — Ventura County Watershed Protection District
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
John Griffith — Principal Scientist
Keith Maruya — Principal Scientist
Eric Stein — Principal Scientist
Martha Sutula — Principal Scientist
Scott Martindale — Communications Coordinator
Eric Shearer — Communications Assistant
Jayme Smith — Scientist
Kristine Taniguchi-Quan — Scientist
Amy Zimmer-Faust — Scientist

OTHERS PRESENT
Carrie Boyle — Coastal Conservancy
Chris Crompton — County of Orange
Lisa Haney — Orange County Sanitation District
Jill Harris — Regional Water Quality Control Board
Hassan Rad — City of Los Angeles
George Robertson — Orange County Sanitation District
Mary Small — Coastal Conservancy
Commission Chair Deborah Halberstadt called the meeting to order at 9:09 AM.

CONSENT AGENDA

1. Minutes of Meetings Held December 7, 2018
2. Quarterly Financial Statement for the Period Ended December 31, 2018
3. Quarterly Statement of Investments at December 31, 2018
4. Minutes of CTAG Meetings Held February 7, 2019

Commissioner Carr motioned to approve Consent Items 1-4 with a minor spelling correction to the minutes, and Commissioner Ferrante seconded the motion. The Commission approved the motion unanimously with Commissioner Smythe abstaining.

REGULAR AGENDA

5. Personnel and Finance Committee Report
Commissioner Vroom, Chair of the Personnel and Finance Committee, reported that SCCWRP remains in strong financial health and is on track to more than break even in fiscal year 2018-19. The Personnel and Finance Committee was briefed on SCCWRP’s plans to pursue creation of a health spending account option for employees, as well as a financial incentive for employees to switch to a lower-cost HMO insurance provider network. SCCWRP also is planning to update its position descriptions for employee job classifications, as well as its relocation allowance policy, items that would be brought to the full Commission for approval at their June meeting. The Personnel and Finance Committee also discussed Executive Director Weisberg’s annual performance review.

6. Purchasing Policy
Executive Director Weisberg described the Agency’s draft purchasing policy, which was updated to comply with newly revised rules for federal contracts. Commissioner Dojiri said he supported the new purchasing policy – in particular, provisions that allow SCCWRP to select the “best value” among bidders instead of the lowest bidder. Dojiri requested that a minor typo in the purchasing policy be fixed to improve readability.

Commissioner Dojiri motioned to approve the purchasing policy with the minor edit, and Commissioner Anselm seconded the motion. The Commission approved the motion unanimously.

7. Executive Director’s Report
Executive Director Weisberg highlighted two recent points of pride for SCCWRP. First was SCCWRP’s recently published 2018 Annual Report. The new Annual Report contains a two-page “snapshot of success” summarized in the first two pages, which was developed in
response to a Commission recommendation. Amongst the success metrics tallied in the summary is SCCWRP’s goal to do good science, but also to build strong scientific consensus around its research. Hence, these success metrics focus on collaboration: Nearly 98% of SCCWRP’s peer-reviewed journal article and book chapter publications in 2018 were written with external co-authors. In total, SCCWRP wrote scientific manuscripts and reports with 114 external co-authors from 19 countries in 2018.

The second recent point of pride for SCCWRP is preparing for the Agency’s 50th anniversary in October 2019. One aspect of this celebration is to highlight SCCWRP’s biggest accomplishments. CTAG had compiled a list of 40 key SCCWRP accomplishments that fall into four categories: technical accomplishments, science discourse to advance the use of science in management, internal processes, and an improved environment. SCCWRP asked three sectors – CTAG, SCCWRP senior staff, and the 50th Anniversary Planning Committee – to vote for their top six choices; 28 of the 40 candidate accomplishments received votes, and individuals anecdotally expressed that it was difficult to pick only six. The top eight accomplishments will be spotlighted during SCCWRP’s 50th anniversary celebration.

Asked by Commission Chair Halberstadt why SCCWRP’s ocean acidification work did not make the list, Weisberg said it received some votes, but hasn’t yet reached the level of maturity where it is widely viewed as a top SCCWRP accomplishment, at least compared to other areas where SCCWRP’s work has already affected management decision-making. Commissioner Carr commented that SCCWRP should also highlight the agency’s anticipated research directions over the next 50 years. Weisberg replied that he will ask CTAG to help create this list and identify ways to work this list into the 50th anniversary materials.

Weisberg reported on two upcoming high-profile workshops that speak to SCCWRP’s strengths as a relationship- and consensus-builder among scientists and managers. First, SCCWRP will host a two-day microplastics measurement methods workshop in April that will bring together leading international experts to work toward standardization of measurement methods. This issue is timely because new legislation requires California to develop standardized measurement methods and implement microplastics monitoring. The second high-profile workshop will be co-hosted with the Southern California Alliance of POTWs (SCAP) and the California Stormwater Quality Association (CASQA). This workshop will bring together the wastewater, stormwater and regulatory sectors to work through engineering, regulatory and relationship-building barriers associated with routing stormwater through wastewater treatment plants. The workshop will take place in the August timeframe.

Commissioner Purdy commented that the Las Virgines Municipal Water District already has developed a whitepaper on how to capture dry-weather flows. Commissioner Ferrante expressed excitement about POTWs helping to treat dry-weather flows and some wet-weather flows. He noted that as conservation practices have reduced wastewater flows, POTWs have more capacity to treat dry-weather flows, and the Sanitation Districts of Los Angeles County is completing its own case study. Commissioner Smythe suggested inviting resource agencies, including the California Department of Fish & Wildlife, to the workshop.
Weisberg encouraged Commissioners to talk to CTAG Representative Lisa Haney, who is coordinating the workshop, with their ideas for the workshop and to get more information.

Weisberg said he has been meeting with federal officials to understand the current administration’s priorities on ocean-related issues. Aquaculture-related issues are by far the highest priority on this list, and the West Coast is viewed as an ideal place for aquaculture. Continuing down the list includes marine debris, harmful algal blooms, fisheries management (which was a top-ranked priority of prior administrations), and coastal resilience. Commissioner Blake commented that the USEPA Administrator’s priorities include tackling marine debris, with the EPA interested in partnering with Southeast Asia to work on this issue.

Weisberg said Commissioners can now charge their electric vehicles free of charge when they visit SCCWRP. Our charging station can be accessed either by obtaining a key fob at the front desk or using a downloadable web application to their smartphone.

Weisberg introduced Scientist Jayme Smith, who has taken over the harmful algal bloom (HAB) research program previously run by Meredith Howard. Smith has been working with SCCWRP since her dissertation at the University of Southern California, where she had previously obtained a joint post-doctoral research appointment at SCCWRP.

8. CTAG Report
Executive Director Weisberg presented the CTAG Report on behalf of CTAG Chair Chad Loflen, who was unable to be in attendance. At CTAG’s February meeting, Loflen was elected CTAG Chair, Neil Searing was elected CTAG Vice Chair, and Phil Markle rotated to Past Chair. CTAG held two recent intersessional research planning workshops focusing on: (1) a revisit of the Microbial Water Quality research theme, which showed that CTAG and SCCWRP research priorities are in strong agreement, and (2) development of a best management practices (BMP) Effectiveness research area as SCCWRP’s ninth research theme, which had strong cross-sector support. A 20-page Research Plan that provides a long-range vision for this research thematic area has been drafted and is undergoing CTAG review.

CTAG has reviewed and supports all SCCWRP contracts (Agenda Item 10).

CTAG has endorsed a plan for moving forward with capturing historical benthic invertebrate data collected by POTWs since the 1970s for use in studies analyzing Bight biological trends over time (Agenda Item 11).

9. Contract Review
Weisberg presented 11 contracts, all of which have values of $250,000 or less and thus do not require Commission approval. All 11 contracts were presented to ensure consistency of the agency’s directions with the Commission’s intentions.
1) California Department of Corrections and Rehabilitation (through SHN Engineering) ($200,000)  
   Mule Creek State Prison Source Identification

2) County of San Diego (through Weston Solutions) ($78,080)  
   San Luis Rey River MST Wet Weather Sample Analysis

3) County of San Diego (through Weston Solutions) ($3,575)  
   Green Infrastructure Wet Weather Sample Analysis

4) County of Nevada ($20,000)  
   Lake Wildwood

5) City of San Diego (through Wood Environmental) ($85,000)  
   Evaluate Sources of Human Fecal Contamination

6) San Elijo JPA ($62,889)  
   Encina Wastewater Authority ($30,398)  
   Bight’18 Field and Laboratory Services

7) California Stormwater Quality Association ($25,000)  
   Spatial Representativeness of Bioassessment Results for Channels

8) Larry Walker Associates ($5,000)  
   Update of Delta Sediment Quality Survey Technical Report

9) Orange County Public Works ($100,000)  
   Stormwater Monitoring Program Review and Guidance

10) CA Department of Public Health ($125,000)  
    Method Development for Tobacco Waste

11) U.S. EPA ($50,000)  
    Escaped Trash Assessment Protocol (ETAP) Method Evaluation

The Commission did not raise any objections to the contracts.

10. **Alternative Compliance Strategies for Achieving Successful Water Quality Improvement Plans**

Deputy Director Schiff provided an update on alternative compliance, an approach to watershed management that relies on implementation of offsite management measures where on-site management measures are infeasible or ineffective. There are two distinct types of alternative compliance strategies being developed in southern California: (1) Alternative compliance for receiving water objectives, where the focus is on planning for implementation of BMPs over the course of multiple decades; reasonable assurance analysis (e.g., watershed modeling) is used to evaluate whether the long-term alternative
compliance strategy will achieve its intended watershed management goals. The Los Angeles Regional Water Quality Control Board is ahead of both the State and the nation in determining alternative compliance for receiving water objectives. (2) Alternative compliance for land development standards, where the focus is more site-specific and short-term. In this case, planned development projects can use a BMP credit and trading system to implement offsite BMPs in lieu of onsite BMPs. This strategy is empirically based and does not require watershed models. The San Diego region has developed an equivalency trading program and is well ahead of the rest of the California. Both approaches to alternative compliance share similar technical challenges with accounting for varied stormwater inputs, properly evaluating BMP performance, ensuring that BMPs will achieve intended beneficial-use goals, and legal issues associated with transfer of pollutants. In part to address these issues, SCCWRP is compiling a BMP performance monitoring database that is intended to be more relevant and applicable to California than other sources of performance data such as the international BMP database. To enhance the utility of the database, SCCWRP has developed a web application whereby users select their BMP, choose their pollutant of concern, input their runoff influent concentration, and the app predicts the BMP effluent concentration (with estimates of confidence).

Commissioner Carr commented that most BMP performance data sets focus on performance shortly after implementation. Schiff said evaluating long-term performance is a top goal for SCCWRP's new stormwater BMP research agenda. Carr also noted that the South Orange County region already has incorporated alternative compliance into its water quality improvement plans, with a focus on protecting stream health and public health risk.

11. Historical Benthic Data
Executive Director Weisberg provided an update on a project to compile historical monitoring data collected by SCCWRP member agencies going back to the 1970s. SCCWRP and CTAG developed a strategy whereby specific study questions are developed first, and then the necessary data sets are compiled to answer the study questions, rather than starting with expensive data compilation and determining use of the data later. As a result, SCCWRP and its member agencies have had excellent success compiling selected historical data for examining changes to the condition of Bight benthic invertebrate communities in response to anthropogenic stressors, including the biological impacts of coastal ocean acidification. A side benefit of this data compilation effort is that older taxonomists have had valuable opportunities to train younger taxonomists and look at site-specific trends that can be correlated with local historical events, such as changes in the composition of the taxonomist team or relocation of a wastewater outfall. SCCWRP and CTAG will evaluate the success of this approach upon completion of the benthic invertebrate historical study.

CTAG Alternate Representative George Robertson said member agency staff have expressed interest in moving forward with follow-up studies, including examining how benthic communities have been impacted by changes in sediment grain size. Commissioners Halberstadt and Purdy urged SCCWRP and CTAG to find a way to make the data sets publicly accessible. Commissioner Vroom stressed the importance of ensuring taxonomic updates are done consistently to ensure data comparability. Commissioner Carr
said she appreciated the targeted approach to historical data compilation, noting it will foster buy-in among stakeholders for pursuing larger studies in the future.

12. Topics Under Consideration for the Ocean Plan Triennial Review
Executive Director Weisberg presented this item on behalf of Karen Mogus, who was absent with illness. The State Water Board has initiated its next cyclical review of the Ocean Plan. The previous review was completed in 2011. Based on stakeholder and public input, State Water Board staff has developed a list of about 20 issues/projects for prioritization in the review. While the prioritization effort is still ongoing, four project areas seem to be elevating above others: (1) revising the desalination implementation provisions to improve clarity, (2) revisions to beneficial uses and bacteria objectives for shellfish harvesting, (3) designation of beneficial uses and development of objectives for tribal cultural and subsistence issues, and (4) review of Areas of Special Biological Significance (ASBS) to ensure they are protective of water quality. There are a few other issues that could potentially elevate, including emerging contaminants, ocean acidification, and harmful algal blooms, but these may be premature for Ocean Plan revisions since the scientific foundation for these items is still developing. The next steps include a public workshop, likely in June 2019, with the final list of Ocean Plan projects to be brought before the board in October 2019.

Weisberg transitioned to explaining how priority projects under the Ocean Plan dovetail with SCCWRP’s own research plan. This research falls into three categories: (1) Areas that are presently high priority research areas for SCCWRP and where we see many possible ways to provide support. These include projects like the shellfish project in Newport Bay designed to evaluate the SHEL beneficial use standard in the Ocean Plan; (2) Areas where SCCWRP might be of help, but have no studies presently planned. This might include ASBS-related projects where SCCWRP has been a historic leader statewide, and; (3) Areas where SCCWRP is not presently working and which seem unlikely to become a focal point. The best example is the desalination clarification, where the issues are less technical and more policy-related.

13. Living Shorelines
Executive Director Weisberg introduced Mary Small, Deputy Executive Officer for the California State Coastal Conservancy, who was invited to give a presentation on strategies for responding to the threat of sea level rise. Small explained that the Coastal Conservancy was created as the project implementation counterpart to the regulatory-focused California Coastal Commission. Small said that living shorelines are a key management strategy being pursued in response to the threat of sea level rise. Living shorelines are multi-benefit restoration projects that combine more natural elements with engineered ones. Living shorelines can absorb wave energy, accrete sediment, and provide recreational and habitat benefits. Small described multiple site restoration projects in Southern California, focusing on outcomes and lessons learned.

Principal Scientist Eric Stein delivered the second half of this presentation, focusing on a long-term regional strategy for managing Southern California wetlands that was recently released by the California State Coastal Conservancy and to which he was an author. To
inform the design of wetland restoration projects going forward, researchers are conducting pilot studies examining how to design projects in a way that maximizes their multiple benefits, including flood risk mitigation.

Commissioner Herberg said the Orange County Sanitation District is doing long-term planning for its coastal facilities, including identifying whether there are opportunities for multi-benefit projects and/or to transition facilities to higher ground. Asked by Commissioner Blake about how permitting might be streamlined, Small said that although these multi-benefit solutions traditionally have been more difficult to permit, progress is being made to expedite the permitting process; the Coastal Conservancy is building a team that will focus on accelerating this pace. Commissioner Carr commented that shoreline multi-benefit projects are not directly relevant to stormwater managers, but that others at the county and city levels would be interested; Commissioner Anselm echoed this comment, noting that stormwater managers deal with hydromodification and sediment transport issues but not directly with coastal infrastructure. Commission Chair Halberstadt said it will be important to collect data on the economic and ecological benefits of these projects, regardless of whether the intent is to protect specific facilities. Commissioners Smythe and Gibson said they were interested in exploring how living shorelines could be incorporated into the permitting process for sea walls.

14. Other Business and Communications
None

15. Future Meeting Agenda Items
Executive Director Weisberg reminded the Commission of the meeting themes they had previously prioritized for the remainder of 2019: The June meeting will focus on ocean acidification modeling, with additional presentations providing an update on the State’s recycled water policy in relation to environmental flows management, and on the Biotic Ligand Model as an alternative approach to the Water Effect Ratio for setting site-specific objectives in water bodies impacted by metal toxicity. The September meeting will focus on microbiology, including an update on SCCWRP’s source identification work to distinguish among specific sources of human contamination, and a Newport Bay study that will revisit the recreational shellfishing water-quality standard. The December meeting will have a CEC theme.

Asked by Commissioner Alva when SCCWRP will provide an update on the development of its Stormwater BMPs research theme, Weisberg said it would be part of the June discussion in which the Commission will be asked to approve SCCWRP’s 2019-20 Research Plan.

16. Public Comments
None

17. Adjournment
Commission Chair Halberstadt adjourned the meeting at 12:13 PM until the next Commission meeting on June 21, 2019 at 9:00 AM.

Attest:
Bryan Nece
Secretary