Item 4d

CALIFORNIA OCEAN PROTECTION COUNCIL

Staff Recommendation
October 17, 2016

Revision of Ocean Acidification and Hypoxia Water Quality Criteria

Jenn Phillips, Program Manager

RECOMMENDED ACTION: Authorization to disburse up to $400,000 to Southern California Coastal Water Research Project (SCCWRP) to initiate a revision of ocean acidification and hypoxia (OAH) water quality criteria.

LOCATION: Statewide

STRATEGIC PLAN OBJECTIVE(S): Climate change and science-based decision making

---

EXHIBITS

Exhibit A: Support Letters

FINDINGS AND RESOLUTION:

Staff recommends that the Ocean Protection Council (OPC) adopt the following findings:
"Based on the accompanying staff report and attached exhibit(s), the Ocean Protection Council hereby finds that:

1) The proposed projects are consistent with the purposes of Division 26.5 of the Public Resources Code, the Ocean Protection Act.
2) The proposed projects are consistent with the Ocean Protection Council's grant program funding guidelines (Interim Standards and Protocols, August 2013).
3) The proposed project is not a 'legal project' that triggers the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section 21068 and Title 14 of the California Code of Regulations, section 15378."

Staff further recommends that the OPC adopt the following resolution pursuant to Sections 35500 *et seq.* of the Public Resources Code:

"The California Ocean Protection Council hereby approves the disbursement of up to $400,000 to the Southern California Coastal Water Research Project (SCCWRP) to initiate a revision of

ocean acidification and hypoxia OAH water quality criteria.

This authorization is subject to the condition that prior to disbursement of funds, SCCWRP shall submit for the review and approval of the Executive Director of the OPC detailed work plans, schedules, staff requirements, budgets, and the names of any contractors intended to be used to complete the projects, as well as discrete deliverables that can be produced in intervals to ensure the projects are on target for successful completion. All projects will be developed under a shared understanding of process, management and delivery."

PROJECT SUMMARY:

The overarching goal of this project is to initiate a revision of ocean acidification and hypoxia (OAH) water quality criteria.

California's acidification water quality criteria were developed 40 years ago and identified by the West Coast Ocean Acidification and Hypoxia Science Panel (Panel) as dated and scientifically unfounded. This project will initiate the process for updating those criteria. In particular, the project will fund a post-doctoral scholar and several workshops aimed at developing scientific and management consensus about which OA measurement parameters are most appropriate for criteria development, and what is the state of the science necessary for achieving thresholds for those parameters.

The project will fund two workshops, an academic advisory committee to plan and implement those workshops, and a post-doctoral scholar who will assist an academic advisory committee by preparing state of the science review documents prior to the workshops and the consensus products that develop from the workshops.

This project will produce three primary products. Specific deliverables and objectives include:

1. A consensus recommendation about what acidification parameters should form the foundation for water quality criteria in California;
2. Identification of the research needed to define legally-defensible criteria thresholds for those parameters; and
3. A recommendation of the most appropriate thresholds identifiable with existing information that managers can use to inform their decisions while the research identified in product #2 is being conducted.

Further, AB 2139 (Williams) references the West Coast Ocean Acidification and Hypoxia Science Panel report action items, and asks the OPC to work on these action items as well as to report back to the Council annually on what has been done to address ocean acidification. OPC will comply with AB 2139 by working with other agencies to coordinate and ensure that criteria and

standards for coastal water health to address ocean acidification and hypoxia are developed and informed by the best available science.

Project Timeline: 2 years

PROJECT FINANCING:
Staff recommends that the Ocean Protection Council (OPC) authorize disbursement of up to $400,000 to Southern California Coastal Water Research Project (SCCWRP) to initiate a revision of OAH water quality criteria.

Ocean Protection Council	$400,000
TOTAL	**$400,000**

The anticipated source of funds will be from the Ocean Protection Council's appropriation of the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84). Proposition 84 authorizes the use of funds for purposes consistent with Section 35650 of the Public Resources Code, establishing the California Ocean Protection Trust Fund (Pub. Res. Code § 75060(g)). Under Section 35650(b), Ocean Protection Trust Fund monies may be expended for projects authorized by the OPC that are identified as appropriate Trust Fund purposes, as specified. The project is consistent with the Trust Fund purposes as discussed in the following section.

The Resources Legacy Foundation, the Center for Ocean Solutions, and the Stanford Woods Institute for the Environment have provided funding for first workshop of several water quality criteria workshops which will be held October 17-18, 2016 at Stanford University. In addition to working closely with the management community on this, several partners have expressed interest in supporting the research identified in this project that will be needed to achieve new acidification water quality criteria.

CONSISTENCY WITH CALIFORNIA OCEAN PROTECTION ACT:
The proposed project is consistent with the Ocean Protection Act, Division 26.5 of the Public Resources Code, because it is consistent with trust-fund allowable projects, defined in Public Resources Code Section 35650(b) as projects which:

- Improve coastal water quality
- Improve management, conservation, and protection of coastal waters and ocean ecosystems
- Provide monitoring and scientific data to improve state efforts to protect and conserve

ocean resources

- Protect, conserve, and restore coastal waters and ocean ecosystems
- Provide funding for adaptive management, planning, coordination, monitoring, research, and other necessary activities to minimize the adverse impacts of climate change on California's ocean ecosystem, including, but not limited to, the effects of sea level rise, changes in ocean productivity, and ocean acidification on coastal and ocean habitat, wildlife, fisheries, chemistry, and other key attributes of ocean ecosystems and to increase the state's understanding of the ocean's role in carbon sequestration. Adaptive management strategies, planning, research, monitoring, or other activities shall be designed to improve the management of coastal and ocean resources or aid the state to adapt to climate change impacts.

This project will provide the scientific foundation for water quality management to protect and conserve ocean resources. The project specifically responds to Action 3 of the Panel (revise water quality criteria)[1]. The workshops, post-doctoral support, and engagement of subject area experts in conversations with managers will allow us to achieve action 3.1 (agree on parameters that will be part of OAH criteria) and both expedite the process of revising criteria and make sure it is well-coordinated across disciplines, state agencies, and scientists.

CONSISTENCY WITH THE OPC'S STRATEGIC PLAN:
This project implements Focal Area A: Science-based decision making and Focal Area B: Climate Change. This project will leverage the scientific community to support management and policy direction. Specifically, it will improve our understanding of the most scientifically rigorous water quality criteria for application to ocean acidification and by revising and expanding upon existing water quality criteria, we will be better equipped to protect our marine ecosystems.

CONSISTENCY WITH PROPOSITION 84 (The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006; Public Resources Code §75060(g)
This project is consistent with the purposes outlined in Proposition 84, specifically by including the development of scientific data needed to adaptively manage the state's marine resources and reserves. With more appropriate and updated criteria that is established through and founded on a scientifically rigorous process and frequent science-management dialogue, the state will be able to determine the condition of a coastal ocean water body, determine if it is impaired with respect to ocean acidification, and make necessary adjustments to try to protect it and return it to a healthy condition.

[1] http://westcoastoah.org/wp-content/uploads/2016/04/OAH-Panel-Key-Findings-Recommendations-and-Actions-4.4.16-FINAL.pdf

CONSISTENCY WITH THE OPC'S GRANT PROGRAM FUNDING GUIDELINES:

The proposed project is consistent with the OPC's Grant Program Funding Guidelines for Proposition 84 funds, in the following respects:

Required Criteria

1. Directly relate to the ocean, coast, associated estuaries, or coastal-draining watersheds: *This project directly relates to the ocean as it establishing appropriate ocean acidification criteria to assess the ocean's condition and determined when it is impaired with respect to ocean acidification.*
2. Support of the public: *See Exhibit A*
3. Greater-than-local interest: *This project has implications for state and federal regulatory policy.*

Additional Criteria

4. Improvements to management approaches or techniques: *This project initiates a process for revising criteria which is ultimately would update the management and regulatory foundation of ocean acidification.*
5. Leverage: *See the "Project Financing" section above*
6. Timeliness or Urgency: *There is an urgency to act quickly on revising water quality criteria, so this project would move that process along while making sure it is backed by strong science.*
7. Coordination: *This proposed project involves state and federal agencies who will rely on science and data provide by academia, a joint powers authority, and others.*

COMPLIANCE WITH CEQA:

The proposed project is not a 'legal project' that triggers the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section 21068 and Title 14 of the California Code of Regulations, section 15378.