

CALIFORNIA OCEAN PROTECTION COUNCIL

Staff Recommendation
October 17, 2016

**Ocean Protection Council Science Advisory Team (OPC-SAT) Working Group to Summarize
Best Available Science on Sea-level Rise**

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RECOMMENDED ACTION: Authorization to disburse up to \$250,000 to the California Ocean Science Trust to convene an Ocean Protection Council Science Advisory Team (OPC-SAT) Working Group, provide technical support and develop outreach materials to support OPC in conducting an update to *State Sea-level Rise Guidance Document* that reflects new scientific understanding and projections of sea-level rise.

LOCATION: Statewide

STRATEGIC PLAN OBJECTIVE(S): Climate Change, Science-Based Decision Making

FINDINGS AND RESOLUTION:

Staff recommends that the Ocean Protection Council (OPC) adopt the following findings:

“Based on the accompanying staff report, 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. If it were determined to be a ‘legal project’ under CEQA, the proposed project is categorically exempt from review under CEQA pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves information collection, consisting of data collection, research, and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource.”

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 \$250,000 to the California Ocean Science Trust (OST) to convene an Ocean Protection Council Science Advisory Team (OPC-SAT) Working Group, provide technical support and develop outreach materials to support OPC in conducting an update to *State Sea-level Rise Guidance Document* that reflects new scientific understanding and projections of sea-level rise.

This authorization is subject to the condition that prior to disbursement of funds, the California Ocean Science Trust 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 work will be conducted in close coordination with OPC staff for design of the update process, as well as management and delivery of documents.”

PROJECT SUMMARY:

The OPC is working with other state leaders to produce an update to the *State Sea-level Rise Guidance Document* (“*State SLR Guidance Document*”) to reflect new scientific understanding and projections of sea-level rise and policy guidance on use of sea-level rise projections. The OPC will be convening a Policy Advisory Committee comprised of state agency leaders to guide the development of this update. The funding for this grant will enable the California Ocean Science Trust to convene an OPC-SAT Working Group in order to support OPC in conducting an update to *State SLR Guidance Document*. The OPC-SAT Working Group will synthesize the best available science on sea-level rise, including recent ice melt research, to inform a 2017 update to the *State SLR Guidance Document*. The OPC-SAT Working Group, facilitated by OST, will respond to questions posed by the Policy Advisory Committee so that the Policy Advisory Committee and OPC can develop the sea-level rise projections and policy recommendations for the update to the *State SLR Guidance Document*. The OPC-SAT and external experts will be the primary authors of the science summary. OPC and OST will work together to support the OPC-SAT and external experts in writing the science summary to ensure that the science summary meets the intended use of the *State SLR Guidance Document* and is applicable to the intended audiences, which are primarily state agencies and local governments. OST will document the process for updating the *State SLR Guidance Document*. Working in close partnership with OPC, OST will develop outreach materials for the updated guidance document, pending its approval by the Council.

Background

Sea-level rise will cause many harmful economic, ecological, physical and social impacts. Incorporating sea-level rise information into decisions can help mitigate some of these

potential impacts. For example, sea-level rise will threaten water supplies, coastal development, and infrastructure, but early integration of projected sea-level rise into project designs will lessen these potential impacts.

The *State SLR Guidance Document*¹, initially adopted in 2010 and updated in 2013, provides guidance to state agencies for incorporating sea-level rise projections into planning and decision making for projects in California. Specifically, the document provides information and recommendations to enhance consistency across agencies in their development of approaches to sea-level rise. Because state agencies have differing mandates and decision-making processes, they interpret and use this document in a flexible manner, taking into consideration risk tolerances, timeframes, economic considerations, adaptive capacities, legal requirements and other relevant factors. Under the proposed project, the *State SLR Guidance Document* will be revised as necessary to reflect the latest scientific understanding of how the climate is changing and how this change may affect the rates of sea-level rise.

The sea-level rise projections in the current *State SLR Guidance Document* are based on a 2012 National Research Council (NRC) report²; the NRC report is primarily based on scientific publications through 2010, and thus is representative of the best available science through that time. The NRC report does include consideration of publications on ice melt contributions to sea-level rise that had been conducted through 2010; however, it does not include more recent research findings, including significant publications released earlier in 2016, which suggest faster ice melt. The current *State SLR Guidance Document* does emphasize the importance of integrating coastal storms, El Niño and shoreline change into sea-level rise assessments, and it does encourage using a risk framework approach which considers adaptive capacity, consequences, and emphasis on avoiding high risk decisions.

The OPC is planning to lead the process to update the *State SLR Guidance Document* by 2017, and this proposed work will support the OPC through partnering with the OST to convene an OPC-SAT Working Group to provide input on the best available science and projections for sea-level rise. The update to the guidance document will be applicable to state agencies that are implementing Governor's Executive Order B-30-15, which requires that state agencies take climate change into account in their planning and investment decisions. The update to the *State SLR Guidance Document* will also support local governments, which are required by recent legislation (SB 379, Jackson) to include climate change impacts as part of updates to General Plans. Additionally, the update to the *State SLR Guidance Document* will support local

¹ State SLR Guidance Document:

http://www.opc.ca.gov/webmaster/ftp/pdf/docs/2013_SLR_Guidance_Update_FINAL1.pdf

² 2012 National Research Council (NRC) Report: [NRC Report](#)

governments who are updating or developing new Local Coastal Programs.

Specifically, the proposed work will result in the following deliverables:

1. The OPC-SAT Working Group will produce a summary of best available science on sea-level rise, including changes to understanding of ice melt dynamics and discussion of uncertainty, projections and ranges. The summary of best available science will likely be an appendix to the *State SLR Guidance Document*.
2. The OPC-SAT Working Group will answer questions posed by the Policy Advisory Committee (convened by OPC) so that the Policy Advisory Committee and OPC can develop the sea-level rise projections and policy recommendations for the update to the *State SLR Guidance Document*.
3. OST will document the process for updating the *State SLR Guidance Document*. The OPC-SAT and external experts will be the primary authors of the science summary. OPC and OST will work together to support the OPC-SAT and external experts in writing the science summary to ensure that the science summary meets the intended use of the *State SLR Guidance Document* and is applicable to the intended audiences, which are primarily state agencies and local governments.
4. Working in close partnership with OPC, OST and the OPC-SAT Working Group will develop outreach materials for the updated *State SLR Guidance Document*, pending its approval by the Council.

This proposed work will provide the best available science to allow coastal managers and decision-makers to assess the vulnerability of coastal communities, ecosystems, and economies to sea-level rise in the state of California, and will facilitate coastal management, planning and adaptation decisions. This project will also support local and state decision-makers to develop and implement flexible approaches for a range of future options, to make the best choices for today and in the future.

Project Timeline: November 2016 – June 2017

PROJECT FINANCING:

Staff recommends that the OPC authorize disbursement of up to \$250,000 to California Ocean Science Trust to convene an OPC-SAT Working Group in order to support OPC in conducting an update to *State SLR Guidance Document* that reflects new scientific understanding and projections of sea-level rise. The proposed project may not require expenditure of the full \$250,000.

Ocean Protection Council	\$250,000
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TOTAL	\$250,000
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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.

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 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;
- 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 proposed project will provide the scientific foundation for coastal managers and planners statewide to protect and conserve coastal resources and communities through using the best available science on sea-level rise to inform planning and adaptation decisions. This proposed project has the potential to improve the management of coastal waters and ecosystems through providing the best available science to allow decision-makers to assess the vulnerability of coastal communities, ecosystems, and economies to sea-level rise statewide and to implement effective adaptive management planning.

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 improve decision-making by synthesizing the best available science on

sea-level rise to inform and assist state agencies and local governments as they develop approaches for incorporating sea-level rise into planning decisions that are based on the best available science.

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 it includes the development of scientific data needed to adaptively manage the state's marine resources and reserves. This project convenes an Ocean Protection Council Science Advisory Team (OPC-SAT) Working Group in order to support OPC in conducting an update to *State SLR Guidance Document* that reflects new scientific understanding and projections of sea-level rise. This information will allow coastal planners and managers to adaptively manage the state's coastal resources.

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 coast because it will provide a synthesis of the best available science on sea-level rise, including updating the sea-level rise projections, to support an update to the State SLR Guidance Document.*
2. Greater-than-local interest: *This is a statewide sea-level rise guidance document that will be applicable to both state agencies and local governments.*

Additional Criteria

3. Improvements to management approaches or techniques: *The current State SLR Guidance Document was last updated in March 2013. The proposed work will improve management approaches or techniques by providing the current, best available science to inform coastal management and planning decisions.*
4. Timeliness or Urgency: *Many cities and counties are in the process of updating their Local Coastal Programs (LCPs) in order to guide short- and long-term conservation and use of coastal resources in their coastal zone. Further, state agencies depend on the State SLR Guidance Document, including as part of implementing Governor's Executive Order B-30-15, which requires state agencies to consider climate change as part of planning and investment decisions. This project would update the State SLR Guidance Document and ensure that the best available science is included, as well as update the sea-level rise projections, which state agencies and local governments use to analyze their vulnerability to sea-level rise.*

5. *Coordination: While state agencies and local governments differ in their mandates and decision-making processes and therefore will use this document in a flexible manner, the document provides information and recommendations to enhance consistency across agencies and local governments in their development of approaches to sea-level rise.*

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. If it were determined to be a 'legal project' under CEQA, the proposed project is categorically exempt from review under CEQA pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves information collection, consisting of data collection, research, and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. Staff will file a Notice of Exemption upon approval by the OPC.