

Sea-Level Rise Guidance Update: Scope and Process for the OPC Science Advisory Team Working Group

About this Document – This document, prepared by the Ocean Science Trust, describes the scope of an Ocean Protection Council Science Advisory Team Working Group charged with supporting the Ocean Protection Council (OPC) in conducting an update to the state’s sea level rise policy guidance. This work is being advanced as a component of a broader grant to the Ocean Science Trust (OST) to support the sea level rise guidance update.

Request

The California 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 to inform policy guidance on the use of sea-level rise projections. OPC has requested that the OST convene a Working Group of the OPC-Science Advisory Team (OPC-SAT) in order to support OPC with salient scientific information to conduct this update.

Background

The OPC-SAT is a team of 28 interdisciplinary scientists appointed by OPC to provide scientific advice on ocean and coastal issues. Working Groups of the OPC-SAT comprise both SAT members and external experts and are formed to access, analyze and synthesize scientific information on a particular topic or issue to inform policy, management or investment decisions.

The Interim *State SLR Guidance Document*¹, initially developed in 2010 by the OPC with input from a working group of state agencies (“CO-CAT”) and from the OPC-SAT, and then 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.

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 loss 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 future ice loss. 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

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](#)

does encourage using a risk framework approach which considers, among other things, adaptive capacity, consequences, and emphasis on avoiding high-risk decisions.

OPC is leading the process to update the *State SLR Guidance Document* in 2017, working in close partnership with leaders from the Resources Agency and the Governor's office. 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 be applicable to 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 guide local governments updating or developing their Local Coastal Programs.

Working Group Scope and Outputs

The charge to the OPC-SAT Working Group, as described below, was developed in response to the request above and in collaboration with a project team with membership from Ocean Protection Council, California Natural Resources Agency, Ocean Science Trust, and additional project team members with expertise in science-policy interactions and public engagement. The Working Group will:

- Receive and deliberate a synthesis of recent scientific advances on ice melt/loss dynamics and consider the implications of this new scientific understanding for sea-level rise projections and potential ranges for California.
- Develop a brief 'state of the science' summary of the drivers of sea-level rise that incorporates the ice melt/loss scenarios, considers new knowledge since 2012 (when the previous version of the State's sea-level rise guidance was developed), and considers the implications of climate model selection, methodology for projecting sea-level rise and scientific uncertainty.
- Develop written responses to a collectively agreed set of questions from the state Policy Advisory Committee, formed to provide management and policy guidance on this issue.

Process and Timeline

The OPC-SAT Working Group will be convened from January - April 2017. Working Group members will conduct their work primarily via webinar/conference calls, with one in-person meeting planned for February 2017. The exact process and timeline will be confirmed in collaboration with the working group members, however the process is anticipated to include the following primary steps:

1. Launch Meeting, January 2017 –The Working Group will convene via webinar to understand the goals for the work, build a shared understanding of the responsibilities of the Working Group members, engage in final design of process by which they will conduct their work, and begin discussing background science information.
2. Ice melt synthesis review, February 2017: The Working Group will convene via webinar to discuss the ice melt synthesis and implications for sea-level rise projections, ranges, and uncertainties. This synthesis will both inform and be incorporated into the OPC-SAT Working Group science summary.
3. Response to Policy Advisory Committee questions, February - March 2017: Through an in-person meeting and subsequent conference calls as needed, the Working Group will receive and respond to

questions posed by the Policy Advisory Committee. These responses will be used as a basis for any updates to sea-level rise projections and associated policy guidance.

4. Science summary document, February – April 2017: The Working Group will convene via webinar to discuss and produce a science summary document. The summary document will reflect Working Group conversations, the ice melt/loss synthesis, and responses to Policy Advisory Committee questions.

Contacts

Ocean Science Trust – Liz Whiteman, Director of Science and Strategy, liz.whiteman@oceansciencetrust.org
OPC – Abe Doherty, Climate Change Policy Advisor, abe.doherty@resources.ca.gov

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