



## MEMORANDUM

TO: Ocean Protection Council

FROM: Abe Doherty, Project Specialist

DATE: November 29, 2010

RE: Draft Resolution of the Ocean Protection Council on Sea-Level Rise

ATTACHMENTS: Proposed [Resolution](#)  
Sea Level Rise Task Force [Interim Guidance Document](#)  
SLR Interim Guidance FINAL-[Appendix A \(SAT responses\)](#)

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## BACKGROUND:

The Ocean Protection Council (OPC) is releasing the attached draft resolution on sea-level rise (SLR) to provide an opportunity for the public and Council members to comment on the resolution prior to it being considered for adoption at a future OPC meeting. Governor's Executive Order S-13-08 directed state agencies to consider a range of SLR scenarios for the years 2050 and 2100 in order to assess project vulnerability and reduce expected risks, and increase resiliency to sea-level rise. Executive Order S-13-08 also called for the OPC to work with other state agencies to support an expert panel through the National Academy of Sciences (NAS) to develop recommendations for what ranges of SLR to use for vulnerability assessments. Because the NAS final report is unlikely to be released until 2012 and the state is making decisions now which would benefit from guidance on SLR, OPC staff led an effort to coordinate state agencies in developing a Sea-Level Rise Interim Guidance Document ("guidance document"). The guidance document was developed to assist state agencies in developing approaches to incorporate SLR into planning decisions prior to the release of the NAS report.

The draft resolution is based upon the recommendations made by the Sea-Level Rise Task Force (SLR Task Force) of the Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT), led by the Ocean Protection Council (OPC). The SLR Task Force includes staff from the following state entities, which reached agreement on the recommendations in the guidance document:

1. Business, Transportation and Housing Agency,
2. Coastal Commission,
3. Department of Fish and Game,
4. Department of Parks and Recreation,
5. Department of Public Health,
6. Department of Toxic Substances Control,
7. Department of Transportation,

8. Department of Water Resources,
9. Environmental Protection Agency,
10. Governor’s Office of Planning and Research,
11. Natural Resources Agency,
12. Ocean Protection Council,
13. San Francisco Bay Conservation and Development Commission,
14. State Coastal Conservancy, and
15. State Water Resources Control Board.

The California Ocean Science Trust and the OPC’s Science Advisory Team provided scientific input to inform the SLR Task Force’s policy recommendations.

The draft resolution would advise state agencies to use the SLR values presented in the December 2009 *Proceedings of National Academies of Science* publication by Vermeer and Rahmstorf<sup>1</sup> and shown below as a starting place and select SLR values based on agency and context-specific considerations of risk tolerance and adaptive capacity.

**Table 1. Sea-Level Rise Projections<sup>2</sup> using 2000 as the Baseline**

Year		Average of Models	Range of Models
<b>2030</b>		7 in (18 cm)	5-8 in (13-21 cm)
<b>2050</b>		14 in (36 cm)	10-17 in (26-43 cm)
<b>2070</b>	<b>Low</b> (B1 Emission Scenario)	23 in (59 cm)	17-27 in (43-70 cm)
	<b>Medium</b> (A2 Emission Scenario)	24 in (62 cm)	18-29 in (46-74 cm)
	<b>High</b> (A1FI Emission Scenario)	27 in (69 cm)	20-32 in (51-81 cm)
<b>2100</b>	<b>Low</b> (B1 Emission Scenario)	40 in (101 cm)	31-50 in (78-128 cm)
	<b>Medium</b> (A2 Emission Scenario)	47 in (121 cm)	37-60 in (95-152 cm)
	<b>High</b> (A1FI Emission Scenario)	55 in (140 cm)	43-69 in (110-176 cm)

**CONSISTENCY WITH THE CALIFORNIA OCEAN PROTECTION ACT:**

The proposed resolution is consistent with the Ocean Protection Act (Division 26.5 of the Public Resources Code). Public Resources Code Section 35615(a)(1) specifically directs the OPC to coordinate activities of state agencies to improve the effectiveness of state efforts to protect ocean resources. The proposed resolution is the direct result of OPC having coordinated with fifteen state agencies to improve the effectiveness of state efforts to protect ocean resources through the development of recommendations on the assessment of SLR.

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<sup>1</sup> Martin Vermeer and Stefan Rahmstorf, “Global sea level linked to global temperature”, *Proceedings of the National Academy of Sciences*, published online before print December 7, 2009; doi: 10.1073/pnas.0907765106.

<sup>2</sup> For dates after 2050, Table 1 includes three different values for SLR - based on low, medium and high greenhouse gas emission scenarios. These values are based on the Intergovernmental Panel on Climate Change emission scenarios as follows: B1 for the low projections, A2 for the medium projections and A1FI for the high projections.

**CONSISTENCY WITH THE OPC'S STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

The proposed resolution is consistent with OPC's Strategic Plan Goal D, Objective 3, which is to "Support state efforts to detect the impacts of climate change and to develop strategies to respond to them". The resolution presents strategies for assessing SLR, which is one of the most significant impacts from climate change on ocean and coastal resources. Through coordinating the SLR Task Force and the Climate Action Team's Coastal and Ocean Working Group to reach agreement on approaches to evaluating SLR, OPC implemented the action for Objective 3, which is to "work with the Climate Action Team to investigate the long-term impacts of sea level rise and develop statewide adaptive management policies that will help agencies to deal with these impacts."