

# Natural Resources Agency

## Comments on Sea-Level Rise Policy Guidance Document

### Significant Comments

**Governor’s Executive Order** The Governor’s Executive Order (S-13-08) is referenced elsewhere in the body of the document, but it’d be good to include it in the Executive Summary. We recommend adding that there was an Executive Order in 2008 directing state agencies to consider sea-level rise as part of planning projects and directing state agencies to support the preparation of the National Research Council project on sea-level rise.

**OPC Sea-level Rise Resolution** Although the current draft references the OPC Sea-level Rise Resolution elsewhere in the document, it is not in the Executive Summary. Consider adding it to the policy context and to various relevant sections in the guidance document, as described below (*e.g.* p. 23 comments). Here is a basic summary: the OPC adopted a Sea-level Rise Resolution in 2011 that calls on all state entities and non-state entities doing projects with state funds or on state lands, including those granted by the legislature, to use the latest version of the State of CA Sea-level Rise Guidance Document when making decisions, to avoid using sea-level rise values that would result in high risk, and to avoid making decisions based solely on sea-level rise values in the lower third of the state guidance document, but instead to assess risk over a range, including the upper end of the range.

**Importance of Storms and Extreme Events** Consider adding another principle under “Use Science to Guide Decisions” and in other sections of the document about the importance of considering storm events on top of sea-level rise and shoreline change and how it will be the extreme events that cause the most damage and will need to be addressed in planning and design. See the State Sea-level Rise Guidance Document (including appendix from the OPC Science Advisory Team) for suggested language on this topic. Consider referencing the USGS Arkstorm conclusions. See NY City recent report on sea-level rise, which uses the 500- year to guide future planning for essential and critical infrastructure<sup>1</sup>.

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[http://www.nyc.gov/html/planyc2030/downloads/pdf/npcc\\_climate\\_risk\\_information\\_2013\\_report.pdf](http://www.nyc.gov/html/planyc2030/downloads/pdf/npcc_climate_risk_information_2013_report.pdf)

“The 500-year flood is the flood that has a 0.2 percent chance of being equaled or exceeded in any given year...The 0.2 percent annual-chance flood maps and associated flood elevations are of special interest as a guide for essential and critical facilities such as utilities, transportation, and other infrastructure that supply services to the public, and on which business continuity depends.”

**Summary of Best Available Science** We recommend adding a disclaimer to the introduction to this section to address how the science is evolving and that this summary presents the best available science at the time of the Commission staff's writing of the document.

### **Other Comments**

p. 23 and p. 38 (step 1): Consider adding a summary of the OPC SLR Resolution: "The Ocean Protection Council's Sea-level Rise Resolution (2011) recommends that state agencies, as well as non-state entities implementing projects or programs funded by the state or on state property, including on lands granted by the Legislature, should not solely use SLR values within the lower third of the range in the latest State of California's Sea-level Rise Guidance Document, and instead should generally assess potential impacts and vulnerabilities over a range of SLR projections, including analysis of the highest SLR values presented in the latest State Sea-level Rise Guidance Document, and to avoid making decisions based on SLR values that would result in high risk."

p. 28 For the second paragraph under "best available science", consider using the National Research Council report to be consistent with the state guidance document, which is referenced in other sections of the Commission's draft guidance document, rather than the National Climate Assessment.

p. 29 Consider adding a summary of the National Research Council report - *Abrupt Impacts of Climate Change: Anticipating Surprises*  
[http://www.nap.edu/openbook.php?record\\_id=18373&page=6](http://www.nap.edu/openbook.php?record_id=18373&page=6)

p. 115, it states that the best available science is the National Climate Assessment. Consider using the National Research Council report to be consistent with the state guidance document, which is referenced in other sections of the Commission's draft guidance document, rather than the National Climate Assessment.

### **Minor Comments**

For all references to the state guidance document, please replace the link with this updated streamlined link: [www.opc.ca.gov/climate-change/](http://www.opc.ca.gov/climate-change/) Here are some places in the document where the link is located: pages 7, 9, 22, 29. (The older link directs to this new streamlined link.)

p. 7 for step 4, add language to account for areas where there isn't a certified LCP.

p. 11 For step 2, add sensitivity, exposure and risk considerations.

p. 11 for step 4, consider adding public access to the first bullet so that it states “ideally, locate the project in a site that avoids conflicts with natural resources, public access and sea-level rise impacts.”

p. 18 For the second and third sentences of the first paragraph under “Recent Efforts to Prepare for Sea-level Rise”, we recommend this revised version (see changes in bold): ... including developing a California Climate Adaptation Strategy (2009 and **an update available in 2014 – Safeguarding California Plan**), passing a State Sea-level Rise Resolution (**insert link to [http://www.opc.ca.gov/webmaster/ftp/pdf/docs/OPC\\_SeaLevelRise\\_Resolution\\_Adopted031111.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/docs/OPC_SeaLevelRise_Resolution_Adopted031111.pdf)**) establishing State Sea-level Rise Guidance (**2010 and updated in 2013**)...**through coordination with** the Coastal and Oceans **Working Group of the** Climate Action Team (CO-CAT)...(next paragraph)...This guidance is being coordinated closely with many of these other initiatives, including the **2014 update (“Safeguarding California Plan”)** to the 2009 California **Climate** Adaptation Strategy, **2014** Update to the General Plan Guidelines, ...State **Multi** Hazard Mitigation Plan...

p. 19 Caltrans’ Hot Spot project is completed. Acknowledge that Boating and Waterways is now within Department of Parks and Recreation.

p. 20 Funding for LCP Updates: recommend using this revised language for the last sentence of the first paragraph: “To address this issue, the Ocean Protection Council (OPC) is working in close partnership with the Coastal Commission and the Coastal Conservancy to administer a \$2.5 million grant program using OPC funds to support local governments to assess sea-level rise vulnerabilities and to update LCPs to address sea-level rise.” Consider adding the following detail: For the first round of the grant program, eighteen (18) applications were submitted, requesting a total of \$3.8 million. In November of 2013, the OPC approved the recommendation from the team of staff from the three coordinating agencies to provide a total of \$1,305,000 of funding for seven projects selected from the first round of the grant program. A second round of the grant program for the remaining funds will be announced in early 2014.”

p. 22 For the last sentence in #1, instead of “coastal resources”, would it help to be explicit about including public access, since some readers won’t think of it?

p. 29 Add the different ranges for north and south of Cape Mendocino.

p. 29 Suggest replacing “final Sea-level Rise Guidance” with “revised State of California Sea-level Rise Guidance Document (2013)”.

p. 29 Recommend defining what “AR 4 IPCC” means or making the description more generic

p. 34 For wetlands, consider adding a statement about the importance of maintaining sediment transport so that wetlands can have sediment supplies to help keep pace with sea-level rise.

p. 34 For the water quality section, consider adding something similar to this statement in the draft Safeguarding Plan: "Salt water draining into sewer lines as part of extreme weather flooding may poison the biological systems at treatment plants."

p. 34 For the water quality section, consider adding some of the references cited in the draft Safeguarding CA Plan about contaminated lands:

The presence of facilities or land containing hazardous materials in coastal areas susceptible to either flooding or permanent inundation presents toxic exposure risks for human communities and ecosystems. Hazardous materials can contaminate flood waters, drinking water supplies, buildings and property, and ocean-based food sources. For more information on public health risks from climate change, please see the Public Health section of this document. A 2009 CEC PIER funded study evaluated sites containing hazardous materials at risk from sea level rise in California. The study evaluated a range of sites monitored by the U.S. Environmental Protection Agency for hazardous materials including: "Superfund" sites and brownfields (regulated under the Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]), hazardous waste generators, facilities required to report emissions for the Toxic Release Inventory, facilities regulated under the National Pollutant Discharge Elimination System, and facilities with permits under Title V of the federal Clean Air Act for hazardous air pollutants. In 2009, 130 such sites were already located in high flood risk areas, but with a 55-inch sea level rise, the high risk flood area along the California coast will expand - and the number of sites at risk will increase 250% - with an estimated 330 hazardous waste facilities and sites at risk. A more recent 2013 report from the Adapting to Rising Tides ("ART"), a project led by the San Francisco Bay Conservation and Development Commission that worked collaboratively with local governments to "field test" planning to be resilient to sea level rise found that there were eight types of contaminated lands within the ART San Francisco Bay Area sea-level rise study area alone, primarily concentrated in Oakland and Emeryville; these lands include two Federal Superfund sites, 450 leaking underground storage tanks, 112 Departments.

p. 41 consider adding the upcoming Climate Central sea-level rise mapping tool to the list of resources (it is due to be released in April 2014)