

Summary of Public Comments and Revisions

State of California Sea Level Rise Guidance: 2024 Science and Policy Update

This document provides a high-level summary of feedback received on the Draft State of California Sea Level Rise Guidance: 2024 Science and Policy Update (Guidance) during the 45-day public comment period. It also provides a summary of changes incorporated in the <u>draft Final Guidance</u>, which is being recommended for adoption at the <u>June 4 Ocean Protection Council (OPC) meeting</u>. This is not a comprehensive list but rather serves to provide an overview of the general themes of input received, and how they were addressed.

Public Comment and Outreach Process

The Draft Guidance was released on January 19, 2024 for a 45-day public comment period. During this time, OPC staff conducted a public webinar (which was recorded and posted on OPC's website) and four virtual regional public workshops covering the North Coast, Central Coast, South Coast, and San Francisco Bay Area, providing an overview of the Guidance and an opportunity to ask questions and provide feedback. OPC staff also presented at public meetings of the Coastal Commission, State Lands Commission, and San Francisco Bay Conservation and Development Commission and convened the State Sea Level Rise Collaborative to receive direct feedback and expertise from partner agencies.

In total, OPC received 42 public comments from non-profit organizations, state agencies, cities and counties, academia, and the private sector. All comment letters submitted are on record with OPC staff and available to the public upon request.

Major Themes

Overall Flow: Commenters shared that the document would benefit from improved organization by putting the science chapters together before the policy chapter.

• **How it was addressed:** Chapters were re-ordered to group the science components first (Chapters 2 and 3), followed by the policy chapter (Chapter 4).

Geographic Scope of the Guidance: Commenters requested additional information on the geographic scope of the Guidance, particularly the appropriate use for the Sacramento-San Joaquin Delta and upstream river locations.

• **How it was addressed:** Additional information on the geographic scope was added in Section 1.2 and Box 3.

H++ Scenario: Commenters requested additional information on why the H++ scenario was not included in the updated science and how to interpret the High Scenario.

• How it was addressed: Additional information on H++ and how it relates to the High Scenario was added to Chapter 2.0. The key takeaway was also adjusted for clarity: "The pathway associated with the extreme sea level rise scenario (i.e. H++) from Rising Seas 2017 is higher than the best available science now supports. The key lines of evidence that resulted in the extreme sea level rise scenario (i.e. H++) from Rising Seas 2017 have been updated and are now reflected in the Intermediate-High and High Scenarios."

Storm Conditions: Commenters requested clarification on how to assess potential impacts from coastal storms.

• **How it was addressed:** Box 15 was added to provide more detail on how coastal storms impact water levels along the coast. Step 3 in Chapter was edited to improve clarity on the recommendations to analyze storm conditions.

Tide Gauge Selection: Commenters requested further clarification how to select the appropriate tide gauge in Step 1 in Chapter 4.

How it was addressed: Step 1 was revised to clarify when it is appropriate to use the nearest
tide gauge versus the average between two nearly equidistant tide gauges. Appendix 3 was
also added to provide guidance on how to combine site-specific vertical land motion
information with statewide average sea level scenarios. This can be particularly useful for sitespecific projects that are experiencing localized tectonic uplift or subsidence.

Flooding Projections: Although high-tide flooding is discussed in Chapter 3, commenters requested additional discussion of high-tide flooding day projections in the stepwise process in Chapter 4.

• How it was addressed: The Flooding Analysis Tool provides observed and projected analysis of high-tide flooding days for 14 tide gauge locations in California. While helpful in understanding projected increased flood frequency at specific tide gauge locations, these projections cannot be extrapolated beyond those areas. Because flooding and associated impacts are hyper localized, the flooding projections from specific tide gauges have limited use in planning and project application. Although evaluation of projected high-tide flooding days is not included as part of the stepwise process in Chapter 4, the Guidance does recognize that it may be important to include flooding in vulnerability assessments on a case-by-case basis, particularly for locations that have previously been impacted by high-tide flooding.

Step 3 of the stepwise process recommends analyzing storm conditions as part of the vulnerability assessment. This will provide the site-specific information needs to evaluate flooding impacts at different water levels. Additional resolution and information on the frequency of flooding events might be necessary but should be evaluated on a project specific basis. Additionally, the adaptation pathways approach should include monitoring of flooding events for areas that are vulnerable to high-tide flooding.

Adaption Pathways: Commenters requested an increased emphasis on adaptation pathways, including additional information on how to implement adaptation pathways, including examples.

• **How it was addressed:** Adaptation pathways were further emphasized as the recommended approach for sea level rise adaptation planning (Box 14). Additional information on when it can be appropriate to use adaptation pathways, as well as a conceptual figure for understanding how planning can be phased with different amounts of sea level rise (Figure 4.2), was added.

Step-by-step instructions, considerations, and examples for adaptation pathway planning were not included as they were beyond the scope of this Guidance. However, OPC staff is considering development of a future companion document that focuses on applying adaptation pathways in different planning and project efforts at the local and regional levels.

Furthermore, the Guidance also recognizes that adaptation projects and related actions are occurring now, and it is not always realistic or feasible to take an adaptation pathways approach for near-term urgent actions. As such, the Guidance cannot exclusively focus on adaptation pathways because it must also be useable for projects being planned and implemented now.

Groundwater Analysis: Commenters requested additional information on how to assess groundwater rise, specifically as it related to inland flooding, infrastructure vulnerability, and mobilization of toxic contaminants.

How it was addressed: Additional information was added to Step 4 that addresses how
groundwater rise can be screened and analyzed in a vulnerability assessment.

Policy recommendations related to the Intermediate-High and High Scenarios: Commenters raised concerns about the recommendations to analyze and select the Intermediate-High and High Scenarios and stated that inclusion of the High Scenario could limit adaptation planning and actions due to the cost and feasibility.

• **How it was addressed:** Information on the exceedance probabilities (Table 2.2) was added to Steps 3 and 6 in Chapter 4 to provide context for the recommendations. The policy recommendations to analyze up to the High Scenario and select the High Scenario for extreme

risk averse applications is still retained in the Guidance, however, additional language was added to recognize that these recommendations will not be feasible or necessary in all situations. For instance, for near-term actions the Intermediate Scenario is recommended for analysis and selection in Step 6, regardless of risk aversion category. Additionally, further recognition of the need for local flexibility and ability to make decisions on a case-by-case was highlighted.

Flexibility related to local considerations: Commenters requested a greater recognition of the role of local government in planning, design, and implementation of sea level rise strategies and needed flexibility to apply the Guidance in a way that addresses local priorities.

How it was addressed: Language was added to further clarify that the Guidance was
deliberately structured to be both precautionary and flexible to accommodate local and
regional priorities and the broad array of decision-making contexts in which planning for sea
level rise is relevant.

Risk Aversion: Commenters requested additional information and examples for risk evaluation: Box 18.

• **How it was addressed:** Box 18 was revised to provide improved examples of the types of development that would fall under low, medium-high and extreme risk aversion categories.