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# W6d

November 13, 2024

TO: California Coastal Commissioners and Interested Public

FROM: Dr. Kate Huckelbridge, Executive Director  
Erin Prahler, Statewide Planning Manager  
Kelsey Ducklow, Statewide Coastal Resilience Coordinator

SUBJECT: Briefing and possible action on recommended updates to the California Coastal Commission Sea Level Rise Policy Guidance.

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## SUMMARY OF STAFF RECOMMENDATION

In [August 2015](#), the Coastal Commission unanimously adopted its Sea Level Rise Policy Guidance: Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits (Guidance). In [November 2018](#), following the March 2018 adoption of updated state sea level rise guidance by the Ocean Protection Council (OPC), the Commission unanimously adopted an update to its Guidance to reflect evolving best available science. Since that time, the state of sea level rise science and adaptation planning has continued to evolve. At this time, the Commission's Sea Level Rise Policy Guidance is being updated to address three main topics:

1. Best available science on sea level rise, reflecting recent updates to the [OPC State Sea Level Rise Guidance](#)
2. Senate Bill 272 ([Laird, 2023](#)), which requires local governments to incorporate sea level rise plans as part of new or updated LCPs
3. Integration of environmental justice (EJ) principles and planning considerations related to sea level rise

Updates to the 2018 adopted Guidance to address these topics are summarized in this staff report and are recommended to reflect the most up-to-date science, adaptation planning best practices, and statewide guidance. A draft of the Guidance update was released on July 19, 2024, followed by a 65-day public review period. 14 comment letters were received during this period, included as [Correspondence](#) for this item. A variety of edits were made to address these comments, as described in this staff report.

Additional responses to common questions, concerns, or other recommendations are also provided. The recommended final draft version of the 2024 Update to the Sea Level Rise Policy Guidance is attached as [Exhibit 1](#).

Staff is recommending **adoption** of the proposed 2024 Update to the CCC Sea Level Rise Policy Guidance.

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[Exhibit 1: Proposed Final Draft CCC Sea Level Rise Policy Guidance 2024 Update](#)

## II. MOTION AND RESOLUTION

### **Motion:**

I move that the Commission adopt the 2024 Update to the Sea Level Rise Policy Guidance pursuant to the staff recommendation.

### **Staff recommendation of approval:**

Staff recommends a YES vote. Passage of this motion will result in the Commission's adoption of the 2024 Update to the Sea Level Rise Policy Guidance as interpretive guidelines. The motion passes only by affirmative vote of a majority of the Commissioners present.

### **Resolution of approval:**

The Commission hereby adopts the 2024 Update to the Sea Level Rise Policy Guidance as interpretive guidelines pursuant to Public Resources Code section 30620.

## III. BACKGROUND

In [August 2015](#), the Coastal Commission unanimously adopted its Sea Level Rise Policy Guidance: Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits (Guidance). As interpretive guidelines, and pursuant to Public Resources Code section 30620, this document is intended to assist the Commission, local governments, and members of the public when evaluating how to respond to sea level rise, but it is not a regulatory document.

In general, the Guidance presents information and recommendations for how to incorporate sea level rise adaptation into various Coastal Act planning and permitting processes. It includes:

- Guiding Principles for addressing sea level rise in California's coastal zone
- A discussion of the best available science on sea level rise and its possible impacts
- Step-by-step guidance for addressing sea level rise in Local Coastal Programs (LCPs) and the Coastal Development Permit (CDP) process
- Descriptions of a variety of possible adaptation strategies
- A discussion of the legal context of sea level rise adaptation planning
- Detailed appendices with technical information and additional resources

In [November 2018](#), the Commission unanimously adopted an update to the Guidance to reflect evolving best available science. Updates were made to reflect the 2017 Rising

Seas in California report and the 2018 Ocean Protection Council (OPC) State Sea Level Rise Guidance which, together, updated what was considered best available science on sea level rise for the State of California at that time. Targeted updates were also made to resources described in the Guidance, including sea level rise mapping and modelling tools and various state agency sea level rise and climate resiliency planning materials.

Both the original 2015 Sea Level Rise Policy Guidance and the 2018 update were designed to fit into an active state effort to address sea level rise and climate change, and intended to incorporate, reflect, and complement various statewide guidance and recommendations. However, since 2018, the state of sea level rise science and adaptation planning has continued to evolve. At this time, the Commission's Sea Level Rise Policy Guidance is being updated to address three main topics, as described in more detail below:

1. Best available science on sea level rise, reflecting recent updates to the [OPC State Sea Level Rise Guidance](#)
2. Senate Bill 272 ([Laird, 2023](#)), which requires local governments to incorporate sea level rise plans as part of new or updated LCPs
3. Integration of environmental justice (EJ) principles and planning considerations related to sea level rise

Staff introduced the Draft Sea Level Rise Policy Guidance and provided a summary of the revisions related to evolving science and guidelines for local government compliance with the requirements of SB 272 at the August 2024 Commission meeting. A second informational presentation focused on the EJ updates was held at the September 2024 Commission meeting.

## **A. Best Available Science**

In June 2024, the California Ocean Protection Council adopted its most recent update to the [State of California Sea Level Rise Guidance](#). It incorporates the previous five years of scientific research on sea level rise projections, including the Intergovernmental Panel on Climate Change's (IPCC's) [Sixth Assessment Report](#) (2021) and NOAA's national report, [Global and National Sea Level Rise Scenarios for the United States](#) (Sweet et al., 2022).

The IPCC's Sixth Assessment report synthesizes the state of global research on sea level rise. It describes both a plausible range of potential future global mean sea level rise, as well as a narrower likely range. These ranges reflect the variety of conceivable global development, emissions, and warming futures as well as the many physical mechanisms driving sea level rise. It describes how some drivers of sea level rise are well researched and have a high degree of scientific consensus, while others are areas of developing research. Namely, the rate at which Antarctica and Greenland ice sheets may contribute to sea level rise is a topic of evolving research, particularly with regard to how it may drive a worst-case, rapid rate of sea level rise.

NOAA's national report, [Global and National Sea Level Rise Scenarios for the United States](#) (Sweet et al., 2022), built upon the IPCC's Sixth Assessment Report by defining five possible trajectories of global mean sea level rise – also called sea level rise scenarios – that span the plausible range of sea level rise identified by IPCC. NOAA then regionalized these scenarios to account for local and regional effects on the relative rate of sea level rise, including scenarios for several locations in California.

The Ocean Protection Council's 2024 update to the [State Sea Level Rise Guidance](#) (OPC 2024) provides the same five sea level rise scenarios as Sweet et al., 2022 with further downscaling to reflect regional and local influences on sea level rise in California. Scenarios are provided for California as a whole, reflecting statewide average vertical land motion, as well as for each of the 14 tide gauge locations in the state to reflect local vertical land motion.

These California-specific sea level rise scenarios have been incorporated into the Coastal Commission's 2024 Draft Sea Level Rise Policy Guidance update. They are slightly lower than the projections included in the 2018 version of the Sea Level Rise Policy Guidance, reflecting the updated body of research on global and regional sea level rise.

This draft update to the Guidance includes a number of other revisions related to the best available science on sea level rise, including:

- Updated background on sea level rise science as well as tables of sea level rise scenarios for California's 14 tide gauge locations (with most updates concentrated in Chapter 3, Appendix A, and Appendix F)
- Updated guidance on the use of sea level rise scenarios in analyses of anticipated future sea level rise impacts, projects, and adaptation planning (Chapter 3)
- Updated information on the consequences of sea level rise (Chapter 4)
- Updated guidance on using sea level rise scenarios in stepwise processes for addressing sea level rise in Local Coastal Programs and Coastal Development Permit applications (Chapters 5 and 6)
- Updated technical guidance on developing local hazard conditions based on regional or local sea level rise using best available science (Appendix B)

## **B. Senate Bill 272 (Laird, 2023)**

In October 2023, [Senate Bill \(SB\) 272](#) (Laird, 2023) added Division 20.6.9 (Section 30985 et seq.) to the California Public Resources Code. It requires local governments lying in whole or in part within the coastal zone to develop a sea level rise plan as part

of an LCP that is subject to approval by the Coastal Commission.<sup>1</sup> The legislation also requires the Coastal Commission (and the Bay Conservation and Development Commission, BCDC), in coordination with OPC and the California Sea Level Rise State and Regional Support Collaborative, to establish guidelines for the preparation of the required sea level rise plans by December 31, 2024. The updates to the Sea Level Rise Policy Guidance related to SB 272 are intended to fulfill this requirement.

More specifically, as summarized in the 2024 Draft Guidance Update, SB 272 specifies that the sea level rise plans must include, at a minimum, the following:

1. Use of best available science
2. A vulnerability assessment that includes efforts to ensure equity for at-risk communities
3. Sea level rise adaptation strategies and recommended projects
4. Identification of lead planning and implementation agencies
5. An economic impact analysis of, at a minimum, costs to critical public infrastructure<sup>2</sup>
6. A timeline for updates, as needed, based on sea level rise projections, local conditions, identified adaptation strategies/projects, and other locally relevant factors (as determined by a local government in coordination with the Coastal Commission)

These sea level rise LCP plans must be completed by January 1, 2034. Jurisdictions that obtain Coastal Commission certification for new or updated LCPs meeting these requirements will be prioritized for funding for the implementation of sea level rise adaptation strategies and recommended projects in the approved LCP sea level rise plan.

Many of these components were already broadly discussed or recommended as important aspects of sea level rise adaptation planning included in the Coastal Commission's adopted Sea Level Rise Policy Guidance. In particular, Chapter 5 of the Guidance (Addressing Sea Level Rise in LCPs) includes a stepwise process for incorporating sea level rise into new or updated LCPs that recommends developing a vulnerability assessment and adaptation strategies, incorporating relevant information

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<sup>1</sup> Note that SB 272 also includes a requirement for local jurisdictions within San Francisco Bay to develop plans that are subject to review by the Bay Conservation and Development Commission (BCDC). The basic requirements are the same for both agencies/plan types, and Commission and BCDC staff have coordinated to develop guidelines pursuant to the requirements of SB 272; however, some specific details and best practices will vary based on differences between relevant enacting legislation (the Coastal Act versus the McAtteer-Petris Act) and planning contexts. More information on BCDC's work to implement SB 272 can be found through the BCDC [Regional Shoreline Adaptation Plan](#).

<sup>2</sup> Critical public infrastructure is defined in SB 272 as including but not limited to "...transit, roads, airports, ports, water storage, and conveyance, wastewater treatment facilities, landfills, powerplants, and railroads."

into LCP policies, maps, and zoning, and repeating this process with further updates as conditions change. Thus, a framework already exists that complements (or in many ways, overlaps with) the new requirements of SB 272. However, a variety of updates were made to the Guidance, primarily to Chapter 5, to better reflect the specifics of SB 272 as well as to more closely align with how adaptation planning processes have been occurring in practice.

As an example, Step 5 (formerly Step 4) of the process for incorporating sea level rise into LCPs originally pertained to identifying adaptation strategies and LCP policies. However, in practice, many jurisdictions have developed standalone adaptation reports or plans (or incorporated adaptation planning considerations into vulnerability assessments) prior to moving directly into developing LCP policy language. As such, this step in the Guidance was reframed to more generally describe identifying and developing adaptation approaches as part of an independent planning stage, and then integrating these approaches into the LCP (now Step 6 in the Guidance). This change also allows for a discussion of identifying recommended adaptation projects and how a jurisdiction might consider and use information from an economic analysis, better reflecting two components of the sea level rise plan required by SB 272. Similarly, language in Step 7 (formerly Step 6) which highlighted the importance of periodic updates to LCPs to reflect changing conditions, was slightly updated to reference the timeline for updates required by SB 272.

Other updates are discussed in Section II below. Key among these are new boxes at the end of each step in Chapter 5 that summarize how the specific step relates to the requirements of SB 272, as well as a box at the end of Chapter 5 that summarizes the chapter as a whole and highlights minimum requirements for each of the six components required by SB 272 and what should be included in the LCP. As discussed in Chapter 5, SB 272 applies to both the *process* of developing or updating an LCP as well as to the *policy content* of an LCP. These planning process stages typically result in documents (e.g. vulnerability assessments, adaptation plans, economic analyses) that inform LCP development but are not, themselves, reviewed and certified by the Coastal Commission. While full consistency with SB 272 will require completion of these documents, the mechanism by which the Commission will determine consistency with SB 272 requirements will be certification of the LCP itself.

Importantly, the Commission has and will continue to allow for flexibility in completing adaptation planning processes and updating LCPs to address sea level rise, provided these efforts are consistent with the Coastal Act. Such flexibility is important to not only to reflect the different environments, coastal resources, and contexts along the coastline, but also to reflect the various planning capacities among different jurisdictions. Sea level rise adaptation planning can be a complex, resource-intensive, and time-consuming exercise, and the Commission has long emphasized the need to meet and support local governments wherever they are in the process. As such, the Commission will continue to support phased approaches to LCP updates and will support local governments seeking funding (both through the LCP Local Assistance Grant Program and other sources) to complete planning exercises and implement adaptation actions. The Commission also intends to work with local governments that

are in the midst of planning exercises or have completed various planning efforts to evaluate the extent to which existing vulnerability assessments, adaptation plans, economic analyses, and LCP policies already meet the requirements of SB 272 and/or where minor updates or additional work could do so. Similarly, the Commission will work with local governments to evaluate when, how often, and in what circumstances planning documents and LCPs will need to be updated to reflect changing conditions in line with the required timeline for updates.

### **C. Environmental Justice**

In 2019, the Coastal Commission unanimously adopted its [Environmental Justice Policy](#) to provide guidance for Commissioners, staff, and the public on how the Commission will implement its EJ authority under the Coastal Act. The EJ Policy incorporates a set of guiding principles, including one that describes how climate change and sea level rise hazards will have disproportionate impacts on communities with the least capacity to adapt and may exacerbate existing environmental injustices. The principle further states that the Commission will continue to recommend considering EJ when analyzing sea level rise impacts in planning and permitting decisions. This complements the 2018 Sea Level Rise Policy Guidance section on EJ and equity. However, neither the 2018 Sea Level Rise Policy Guidance nor the EJ Policy provided detailed guidance on how to integrate the principles of EJ into sea level rise adaptation efforts or into sea level rise related LCP policies.

Recognizing the need to improve the integration of EJ in sea level rise adaptation planning, the Coastal Commission received funding from the Coastal Zone Management Act (CZMA) Section 309 grant program to develop policy guidance that would inform regulatory and planning processes to address sea level rise through an EJ lens. Section 309 of the CZMA establishes a coastal zone enhancement grant program that encourages states with a Coastal Management Program to develop and apply for grant funding to support a variety of work. Funding through the grant program has supported a variety of Commission staff's work for the last 30 years and has allowed staff to pursue special projects to enhance the Commission's mission and work of protecting California's coast, including funding development of the Sea Level Rise Policy Guidance.

In this case, the 309 grant was used to develop a literature review on EJ and sea level rise, create an EJ stakeholder and community engagement plan, and draft guidance on how to integrate EJ into sea level rise planning processes. An important aspect of this grant was the creation of an advisory group consisting of EJ and sea level rise subject matter experts throughout California. Eight individuals were selected out of over 100 applicants to participate as project advisors and were paid a stipend to provide input on the development of the guidance, public engagement plan, and final update to the sea level rise policy guidance. The grant also allowed staff to contract with [Equilibrium Collaborative](#) to provide logistical support and facilitation services. The project advisors include:



- **Adam Canter** (he/him) is the Natural Resources Director for the Wiyot Tribe Natural Resources Department, located on the Wig (Humboldt Bay), where he has worked overseeing a variety of grant programs and projects since 2014. He currently also acts as the community Co-Chair for the Cal Poly Humboldt Sea Leve Rise Institute.
- **Allene Villa** (she/her) is a lifelong Océano resident of Latin origin. Currently working with Océano Beach Community Association, she has been advocating for EJ for 5 years. Her community is a coastal town that has endured decades of EJ issues due to off-roading on the beach and dunes.
- **Cameron Yee** (he/him) works at the Central Coast Alliance United for a Sustainable Economy (CAUSE), where he organizes and engages residents of working-class immigrant communities in Oxnard in support of coastal access and EJ.
- **Charming Evelyn** (she/her) has been working on water issues for the last 15 years through the Sierra Club as the Co-Chair of the CA Water Committee and Chair of the Angeles Chapter Water Committee (OC & LAC). Charming is also the Vice Chair of the Angeles Chapter Environmental & Social Justice Committee.
- **Delaney Alamillo** (she/ella) was raised in Los Angeles, is a transwomyn, second generation Mexican American, and parent of two kids. She is the Executive Director of Community Nature Connection, a non-profit that provides transformative outdoor experiences, leadership development, and community engagement to all Angeleno youth and families.
- **Lesly Gallegos** (she/her) is a first-generation graduate from San Diego State University with a B.S. in Environmental Science and Sustainability. She has been involved with the community-based organization, Casa Familiar for over 4 years as a volunteer, advocate, educator, and organizer specializing in EJ and air quality.
- **Naama Raz-Yaseef** (she/her) is the Community Engagement Manager at The Watershed Project, a Bay Area nonprofit that works to better connect disadvantaged communities with their watersheds. Using a participatory lens on large-scale planning projects, she supports the enhancement of climate resiliency, especially around sea level rise. Previously, Naama worked at the Lawrence Berkeley Lab & UC Berkeley as an Environmental Scientist/Ecohydrologist.
- **Orion Camero** (they/he/she) is an Oakland-based queer Filipinx multi-medium artist, coalition-builder and community advocate focused on nurturing the conditions for better worlds with a decade of experience. They believe the heart of collective liberation are the ingredients of inter-identity solidarity, cross-cultural connection, and exponential collaboration.

Over the course of nine months, staff met with the project advisors four times, including an initial, in-person session to learn about each other, build personal and professional connections, and introduce the goals of the project and discuss the scope of the advisors' involvement. The project advisors provided feedback on how to center EJ in sea level rise planning and adaptation efforts, including informing meaningful engagement parameters, distinguishing adaptation strategies that prioritize EJ communities both inside and outside of the coastal zone, and describing how LCP and CDP processes can be improved to identify, engage, and consider burdens and benefits to EJ communities.

The Sea Level Rise Policy Guidance has now been updated with EJ considerations woven throughout the document. A new principle was added that calls for evaluating and addressing any disproportionate environmental and public health burdens EJ communities may experience as a result of sea level rise impacts, including identifying potentially impacted EJ communities and conducting meaningful engagement with these communities throughout the planning process. Staff also incorporated a new section that further examines the importance of meaningful engagement with EJ communities, as well as a discussion on how to consider EJ communities when developing various adaptation strategies. Importantly, the Guidance was revised to include a new step in Chapters 5 and 6 that instructs local governments and project applicants to identify EJ communities in and around the local jurisdiction or project site (including EJ communities who live outside of a city or county boundary and outside of the coastal zone but may be affected by development or land use planning activities in the coastal zone), characterize their historic and current environmental burdens, and develop a meaningful engagement plan that will guide outreach with these communities throughout the LCP or CDP process. Additional updates to the Guidance regarding EJ considerations are summarized below.

## **IV. SUMMARY OF REVISIONS TO THE 2018 SLR POLICY GUIDANCE**

Updates to the 2018 CCC Sea Level Rise Policy Guidance have been developed to incorporate evolving science, address the requirements of SB 272, and provide additional context on addressing EJ issues related to sea level rise. New and updated language is highlighted in the Proposed Final Draft Update version of the Guidance ([Exhibit 1](#)) using the following color scheme:

- **Yellow:** Sea level rise science
- **Green:** SB 272
- **Blue:** Environmental justice
- **Gray:** Other targeted updates where possible (e.g., updated agency resources or additional context related to evolving adaptation planning concepts, such as the work of the Local Government Working Group)

## W6d (Proposed Final Draft Sea Level Rise Policy Guidance 2024 Update)

Where large portions of text have been added or updated, such as multi-page sections or whole appendices, the titles of those sections have been highlighted rather than the entirety of the content. The main updates are summarized below:

Throughout the entire document:

- Any reference to the 2018 OPC State Sea Level Rise Guidance as best available science has been updated to refer instead to the 2024 OPC State Sea Level Rise Guidance
- The tables in the document presenting the 2018 OPC projections have been updated to reflect the 2024 sea level rise scenarios
- Updates have been made to reflect new or updated versions of key statewide sea level rise planning resources (e.g., new agency resources and updates to resources like the California Climate Action Plan)
- Hyperlinks have been checked and updated

### Introduction

- Updates to relevant Commission and state agency sea level rise planning resources
- New summary of the Coastal Commission Local Government Working Group and its work on addressing sea level rise and LCP updates
- New summaries of federal, state, and Coastal Commission actions on EJ and sea level rise planning efforts

### Chapter 2: Principles for Addressing Sea Level Rise

- New principle referring to tribal consultation (reflecting the Coastal Commission's 2018 Tribal Consultation Policy)
- New principle emphasizing the importance of coordinating with local governments to advance SLR adaptation planning, and reflecting the work of the CCC and Local Government Working Group
- New principle related to prioritizing EJ considerations
- Minor additions to several principles to better integrate EJ concepts

### Chapter 3: Sea Level Rise Science

- Updated and rewritten information identifying the best available science on sea level rise
- New/expanded guidance on the application of best available science for activities subject to Coastal Act review, including a discussion of the distinction between selecting sea level rise scenarios to conduct higher-level analysis of potential impacts and selecting scenarios to inform on-the-ground siting and design

- Minor updates to clarify and refine the discussion of physical impacts of sea level rise

#### Chapter 4: Consequences of Sea Level Rise

- Expanded background on EJ
- New information on how sea level rise will increase disproportionate burdens on EJ communities
- New section on meaningful engagement with EJ communities
- New section on sea level rise consequences unique to tribal communities
- Minor updates to information on the consequences of sea level rise

#### Chapter 5: Addressing Sea Level Rise in LCPs

- Added a summary of SB 272 and its requirements to the introduction of Chapter 5
- Added a box at the end of each step for addressing sea level rise in LCPs summarizing how the step relates to SB 272 requirements and Commission recommendations for consistency with SB 272
- Added a new Step 1 related to initiating a sea level rise planning or LCP update exercise with recommendations regarding setting up a planning team, identifying EJ communities, histories, and issues, and developing a meaningful engagement strategy (this change is made to address both SB 272 and EJ update goals)
- Updates to Step 2 (Determine sea level rise scenarios) to reflect the 2024 OPC State Sea Level Rise Guidance
- Minor updates to Step 3 (Identify physical sea level rise impacts) to refine/clarify the language and to add groundwater changes as an important impact to consider
- Updates to Step 4 (Assess risks to coastal resources) to add EJ considerations; to clarify that this step is part of a vulnerability assessment (as required by SB 272); and to add a reference to considering costs associated with damage to critical infrastructure in line with the economic analysis component of SB 272.
- Reframed Step 5 (Identify equitable adaptation measures) to more broadly relate to developing an adaptation report/plan rather than focusing more narrowly on developing adaptation strategies to include in an LCP. This change reflects what has more often occurred in practice – completing an interim adaptation planning exercise prior to developing LCP policies – and allows for discussion that better reflects the language of SB 272. New language discusses adaptation planning as an iterative exercise whereby more detailed planning will result in identification of more specific adaptation approaches and projects; provides detail on phased and scaled adaptation approaches; and touches on economic considerations for critical infrastructure.

## W6d (Proposed Final Draft Sea Level Rise Policy Guidance 2024 Update)

- Moved some language from Step 5 to Step 6 (Draft updated/new LCP); added content related to baseline sea level rise policies (reflecting work from the Coastal Commission Local Government Working Group); added context related to incorporating LCP policies that reflect findings from a vulnerability assessment, adaptation plan, and a timeline for updates (reflecting SB 272).
- Added language in Step 7 (Implement LCP) to reflect the timeline for updates as required by SB 272.
- Added a box at the end of the Chapter that summarizes the minimum requirements for each of the six sea level rise plan components per SB 272 as well as recommendations and best practices that go beyond the minimum requirements.

### Chapter 6: Addressing Sea Level Rise in CDPs

- Added a new Step 1 related to initiating a CDP application with recommendations regarding project scoping and identifying EJ communities that may be impacted by a proposed project
- Updates to Step 2 (Establish projected sea level rise range) to reflect the 2024 OPC State Sea Level Rise Guidance
- Minor updates to Step 3 (Determine how sea level rise impacts may constrain site) to refine/clarify the language and to add groundwater changes as an important impact to consider
- Updates to Step 4 (Determine how sea level rise may impact coastal resources, including as related to EJ communities) to add EJ considerations
- Updates to Step 5 (Identify project alternatives that avoid or minimize impacts) to add EJ considerations
- Updates to Step 6 (Finalize project design and submit CDP application) to add EJ considerations

### Chapter 7: Adaptation Strategies

- Expanded information on phased and scaled adaptation approaches, particularly to reflect ongoing Local Government Working Group work efforts
- Expanded information on nature-based adaptation strategies
- Added additional recommendations that adaptation strategies should consider disproportionate impacts to EJ and tribal communities and how to minimize burdens when implementing adaptation strategies

### Chapter 8: Legal Context of Adaptation Planning

- Minor updates to add references to more recent LCP policies related to the definition of “existing structure,” to reference the Commission’s Public Trust Guiding Principles and Action Plan, and to reference a more recent Supreme Court case related to takings issues.

## Chapter 9: Next Steps

- The entirety of this chapter has been rewritten to be more up to date

## Glossary

- Several new terms have been added to the glossary
- The definition of Public Trust Lands includes a slightly expanded footnote that reflects additional context included in the Commission's Public Trust Guiding Principles

## Appendix A: Sea Level Rise Science and Scenarios of Future Change

- Much of this appendix was rewritten to reflect the 2024 OCP State Sea Level Rise Guidance and other recent changes to scientific information on sea level rise.

## Appendix B: Developing Local Hazard Conditions

- Much of this appendix was rewritten to refine, simplify, or otherwise improve readability of the content

## Appendix C: Resources for Addressing Sea Level Rise and EJ

- Updates to reflect more recent resources
- Additions related to EJ resources

[Former Appendix E: Funding Opportunities for LCP Planning and Implementation was removed in its entirety as it is difficult to keep this up to date. Reference to CCC, OPC, Coastal Conservancy and other state funding resources is included elsewhere in the Guidance.]

## Appendix E: Primary Coastal Act Policies Related to Sea Level Rise

- Section 30013 of the Coastal Act related to EJ was added
- Section 30270 of the Coastal Act related to sea level rise was added

## Appendix F: Sea Level Rise Scenarios

- Tables of sea level rise scenarios were updated to reflect the 2024 OPC State Sea Level Rise Guidance

## **V. PUBLIC COMMENT PERIOD AND RESPONSE TO COMMENTS**

A public review draft of the 2024 update to the Sea Level Rise Policy Guidance was released on July 19, 2024. The 65-day public comment period closed on September 23, 2024. During this time, Commission staff also sent letters and emails to all Tribes in the

Coastal Zone as identified by the Native American Heritage Commission, inviting tribal coordination on this update. Commission staff also introduced the Draft Update as an informational item at both the August Commission meeting (focusing on the sea level rise science and SB 272 updates) and the September Commission meeting (focusing on EJ updates). A total of 14 comment letters were received during the comment period. Several additional comments were received during the August and September hearings, including from Commissioners. No comments were received from Tribes in response to the tribal consultation letters or emails.

Comment letters are included as [Correspondence](#) for this item. Comments generally fell into the categories summarized below. Changes to the draft guidance related to these topics are discussed in the relevant sections, along with broader responses to the questions, concerns, or other recommendations raised in the comment letters. Although various edits were made to clarify, correct, add context, and emphasize certain portions of the document, the proposed final draft of the 2024 Update to the Sea Level Rise Policy Guidance does not fundamentally alter the content or recommendations of the prior draft that was released in July 2024.

### **Sea Level Rise Scenarios**

Commission staff received a number of comments related to the new sea level rise scenarios. One set of these comments expresses concerns with the inclusion of the High (or generally higher-end) scenario. Many of these comments suggest that it is inappropriate for the Commission to require LCP jurisdictions and CDP applicants to plan for a worst-case scenario given the lower likelihood of such a scenario occurring. Another set of comments suggest that the Commission should include a higher, 16.4ft sea level rise scenario (by 2150) that is addressed in the IPCC AR6 report. These comment letters include a variety of suggested text edits that reference the AR 6 report, other scientific studies, and suggestions that stakeholders adopt a higher precautionary standard for planning efforts.

In both instances, changes to the Guidance to reflect such suggestions would be out of alignment with the OPC State Sea Level Rise Guidance, which is considered the current best available science on sea level rise for the state of California. The OPC State Sea Level Rise Guidance reflects what OPC has determined (and Commission staff agree) to be a precautionary approach that reflects our current understanding of sea level rise localized for the California coastline.

Furthermore, while sea level rise values have changed with the latest updates, the overall framework for how to consider and use different scenarios in different contexts remains the same. However, as discussed above, Commission staff did take the opportunity with this 2024 update to provide some additional guidance on the distinction between selecting sea level rise scenarios to conduct higher-level *analysis* of potential impacts and selecting scenarios to inform on-the-ground *siting and design*, an area that has continued to cause confusion for some stakeholders.

Additional changes to the Guidance in response to these comments have generally not been made except for several minor wording changes and clarifications where earlier

language may have inadvertently suggested a higher level of certainty regarding future sea level rise than was intended. Additionally, one small edit was made to further emphasize that it is anticipated that sea level rise science will continue to evolve, and the Guidance will be updated in the future as necessary.

### **Tribal Considerations**

Commission staff also received comments from non-tribal entities related to addressing tribal concerns. These include comments about the need to give greater consideration to traditional tribal perspectives and the inherent rights of indigenous peoples to self-determination, as well as the need for more engagement and outreach with tribal communities. Some comments also state that there is a lack of parity in the Guidance document between acknowledging and addressing the concerns of non-tribal environmental justice communities and the concerns of tribes, and include a variety of suggested edits for where tribes and tribal concerns should be referenced throughout the Guidance.

One of the primary focus areas of this update was to incorporate environmental justice perspectives. Although the environmental justice movement is inclusive of tribal and indigenous communities due to their disproportionate exposure to environmental burdens, lack of access to environmental benefits, and systemic oppression, tribal communities face unique challenges that are related to but distinct from environmental justice communities. Addressing the vulnerabilities, adaptation strategies, and other planning topics specific to tribal communities in relation to sea level rise requires a more detailed and comprehensive approach, which was out of the scope of the NOAA 309-funded, broader EJ project.

Commission staff did go through the Guidance in response to comments to add some additional references to tribal concerns as suggested, and to further emphasize the above concept that there are both overlapping and unique challenges facing EJ and tribal communities. Staff also added additional references to the Commission's Tribal Consultation Policy as a resource for engagement with tribal communities. Staff believes that a more thorough discussion of tribal concerns related to sea level rise is warranted and will seek additional resources to better understand how sea level rise impacts tribal cultural resources in the coastal zone. Commission staff will also continue to coordinate with tribes through its formal consultation procedures and will work with and encourage local governments to incorporate tribal perspectives in sea level rise planning work.

### **SB 272 and Coordination with Local Governments**

Commission staff received one letter (from the League of California Cities) with comments pertaining to SB 272. One comment relates to the deadline for completion of the sea level rise plans required by SB 272. The previous draft of the Guidance update suggested that the plans must be developed *and certified* by January 2034. However, as the comment letter points out, the language of SB 272 only directly specifies that the plans must be *developed* by January 2034. Staff have updated the Guidance to clarify and correct this language. Importantly though, language was also added to explain that



while there is no specified deadline for when the LCP sea level rise plans must be certified, only a certified LCP sea level rise plan will enable a local jurisdiction to be prioritized for funding for adaptation approaches identified in the plan. Commission staff will coordinate with jurisdictions to develop and seek certification of plans in a prompt manner.

Another comment relates to Section 30985.6 of SB 272 which states that “the operation of this division is contingent upon an appropriation for its purposes by the Legislature in the annual Budget Act or another statute.” Specifically, the comment requests that the Guidance include a reference to this provision of the bill. Staff added the reference as suggested, along with the additional context that LCP Local Assistance and OPC SB 1 grant funds, both appropriated by the legislature in 2021, are available to support this planning work. Additionally, the Coastal Commission will continue to coordinate with state agencies, local governments, and the Local Government Working Group to support additional funding opportunities.

Lastly, the League of Cities letter also requests including an additional guiding principle related to the importance of and need to coordinate with local governments to support sea level rise adaptation planning. This reflects not only legislative findings and declarations of SB 272, but also the important past and ongoing work of the Local Government Working Group. This edit was generally made as suggested. Additionally, a paragraph at the end of Chapter 2 was added that describes alignment between the Guiding Principles in the Guidance and the principles in the Commission and Local Government Working Group Joint Statement on Adaptation Planning.

### **Toxics/Contaminated Sites**

Several comment letters include requests or suggestions for an expanded discussion on risks posed by toxic substances and contaminated sites given sea level rise. Many of these comments include requests for more detailed recommendations and more stringent standards related to clean-up of contaminated sites. In general, no changes were made based on these comments. The risks related to sea level rise, groundwater changes, and contaminated sites, as well as adaptation approaches related to these concerns, are already generally discussed in the Guidance, and more specific standards and recommendations are outside of the Coastal Commission’s purview. However, references to the need to coordinate with the Department of Toxic Substances Control, the State and Regional Water Boards, and other state and federal agencies with water quality management roles were added to these sections.

### **Legal Considerations**

Staff received several comments related to Chapter 8 (Legal Context of Adaptation Planning), primarily focusing on the discussion around the Commission interpretation of the definition of “existing structure” as it relates to Section 30235 of the Coastal Act. These comments generally suggest that, given the ongoing litigation that involves this interpretation (*Casa Mira Homeowners Association v California Coastal Commission*), it is inappropriate to include this discussion in the Guidance. Some comments suggest editing that section, deleting that section, or deleting the entirety of Chapter 8. At this

time, Commission staff have not made any additional edits based on these comments. Given the ongoing nature of the case, there is no way to know when, how, or even if the courts will finally rule on the issue. Thus, there is no need at this time to change how the Guidance discusses the Commission's longstanding position on this issue. Chapter 8 has been left in its originally adopted form (except for the minor changes noted in Section IV above). When the litigation is concluded, Commission staff will evaluate whether changes to Chapter 8 and other parts of the Guidance are needed.

### **Miscellaneous Comments**

A variety of additional miscellaneous comments were received that did not result in changes or resulted in only minor edits. In general, such comments raise issues that were already adequately addressed in the Guidance, are unrelated to the three main topics of the update, and/or are outside of the scope of the Guidance. Some such comments include the following. All comment letters can be reviewed in their entirety in the [Correspondence](#) for this item.

- Comments encouraging a greater emphasis on watershed scale planning. Minor edits were made in select places to mention the need for/utility of regional scale planning, including from a watershed- or littoral-scale framework.
- A comment suggesting edits around the discussion of public trust and clarity about certain lands that are not subject to the public trust. A minor edit was made to the definition of public trust lands in the glossary that slightly expands discussion on this topic and aligns with how public trust lands are described in the Commission's Public Trust Guiding Principles.
- Comments related to the need to coordinate with BCDC and other state agencies on SB 272 specifically, and sea level rise planning generally. No changes were made, but Commission staff have been meeting routinely over the past year with BCDC staff to discuss implementation of SB 272 and development of the respective CCC and BCDC guidelines. Commission staff also meet regularly with other state agencies through the OPC-led California Sea Level Rise State and Regional Support Collaborative.
- Comments related to specific adaptation options included in Chapter 7. In general, no changes were made. As described in Chapter 7, the adaptation strategies described are examples only and are not meant to be an exhaustive list of all possible strategies, nor a checklist of strategies/policies that would be required in all instances.
- Comments related to including references to permits granted to Southern California Edison and San Diego Gas and Electric that are unrelated to the update or broader sea level rise guidance.

## **VI. NEXT STEPS**

Staff is recommending **adoption** of the proposed 2024 Update to the CCC Sea Level Rise Policy Guidance. The Draft Update is available for review as [Exhibit 1](#). Following

## W6d (Proposed Final Draft Sea Level Rise Policy Guidance 2024 Update)

the November hearing, if the Draft Update is adopted, Commission staff will release a final adopted draft of the 2024 Guidance. This version will remove the highlights, update page 3 to reflect the adoption outcome, and update the headers to reflect that it is the final adopted version.