



Informational Item
February 23, 2022

Informational Item: State Agency Sea-level Rise Action Plan for California
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LOCATION: Statewide

STRATEGIC PLAN GOALS AND OBJECTIVES: Goal 1: Safeguard Coastal and Marine Ecosystems and Communities in the Face of Climate Change; Objective 1.1: Build Resilience to Sea-level Rise, Coastal Storms, Erosion, and Flooding

EXHIBIT A: State Agency Sea-Level Rise Action Plan for California

EXECUTIVE SUMMARY:

Sea-level rise (SLR) in California is already impacting public health and safety, critical infrastructure, habitat and biodiversity, and public access. With the pace, frequency and scale of impacts projected to increase through the end of the century and beyond, sea-level rise poses an urgent climate threat that requires action now. To catalyze immediate action, the State Sea-Level Rise Leadership Team, made up of 17 agencies and departments, collaboratively developed the State Agency Sea-Level Rise Action Plan (Action Plan). The Action Plan establishes a critical five-year roadmap of state agency actions to address and adapt to SLR and build coastal resilience across California.

The Action Plan builds on the previously endorsed [Sea-Level Rise Principles](#) with nearly 80 trackable actions that show agency responsibility, outcome, and year for completion. It will formalize and accelerate coordinated state agency efforts to prepare for the impacts of SLR; demonstrate state responsibility and leadership; increase transparency on state priorities; provide a foundation for further adaption action at the local and regional level; and identify opportunities to leverage financial resources to maximize implementation. The Action Plan is a living document that will be informed by public input at the February 23, 2022, OPC meeting and similar public meetings held by the State Sea-Level Rise Leadership Team agency members in coming months.

BACKGROUND OF STATE-LED SEA-LEVEL RISE ACTION AND GUIDANCE

California’s coast faces a likely probability of experiencing sea-level rise of up to 1.0 foot by 2050 and 3.5 feet by 2100, threatening our coastal communities, way of life, and sense of Californian identity. According to California’s Fourth Climate Change Assessment, 31 to 67 percent of Southern California beaches may completely erode by 2100 without intervention. The Fourth Climate Assessment also finds that statewide, \$17.9 billion worth of residential and commercial buildings could be inundated with just 1.7 feet of SLR, and that an estimated 3,750 miles of highway will be vulnerable to SLR and coastal storms by 2100.

Based on these projections and expected impacts, the California has demonstrated continual prioritization of coastal resilience through funding, legislation, and planning. In 2021, Governor Newsom signed a budget bill that included \$500 million to the State Coastal Conservancy, \$100 million to OPC, \$30 million to the Coastal Commission, \$22 million to various agencies to fund the Fifth Climate Assessment, and \$11.5 million to State Parks for SLR adaptation efforts. In 2021, [SB 1](#), the California Sea Level Rise Mitigation and Adaptation Act of 2021, was signed into law. This legislation supports SLR planning and agency collaboration. In 2021, Coastal Commission also released its [Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California’s Coastal Zone](#), and the San Francisco Bay Conservation and Development Commission released [Bay Adapt](#), a regional, multi-sector strategy for SLR to create a “One Bay” vision for shoreline adaptation. The Delta Stewardship Conservancy is also creating a regional vulnerability assessment and adaptation strategy for SLR and flooding, known as [Delta Adapts](#). State Parks’ [SLR Adaptation Strategy](#) outlines a path to adapt coastal state parks units, for which funding was provided in the 2021 budget bill, and State Lands Commission is implementing [AB 691](#), legislation to promote the proactive planning for SLR on Public Trust lands and resources, including ports. These current and ongoing efforts have led the state to a point where a coordinated roadmap is needed going forward. For this reason, OPC is leading the development and implementation of the SLR Action Plan.

OPC has been a leader in SLR science, guidance, and project implementation for the state of California. In 2018, OPC released the State of California Sea-Level Rise Adaptation Guidance (Guidance). This Guidance offered a set of localized and probabilistic sea-level projections to help local planners and decision makers adapt to SLR. This Guidance is widely considered California’s best available science for SLR projections.

Since its publication, OPC identified the need for unified principles for addressing SLR resilience for California’s coastal communities, ecosystems, and economies. With the collaboration of the California Natural Resources Agency, CalEPA and over 15 additional departments and agencies, the SLR Principles for Aligned State Action (Principles) were developed around seven themes:

1. Best Available Science
2. Partnerships
3. Alignment
4. Communications
5. Local Support
6. Coastal Resilience Projects
7. Equity

Though these Principles create a direction for how to align state actions and decision points around SLR, an actionable path was needed. The Ocean Protection Council (OPC) was charged

with working with agency partners to create a statewide, collaborative Action Plan that would carry out these Principles. The result is this document, the SLR Action Plan, a five-year roadmap to make advances toward coastal resilience through comprehensive, coordinated, and collaborative work. The actions in this plan address urgent needs by identifying projects that require further resources, as well as highlight ongoing work that will be leveraged upon in the next five years.

ROLE OF STATE SEA-LEVEL RISE LEADERSHIP TEAM

Past multi-agency work and partnerships has helped set the stage for the development of the Action Plan. The State SLR Leadership Team is made up of 17 California state agencies who work collectively to achieve coastal resilience for the entire coast of California. These agencies hold jurisdiction over the coastal region through authorities to regulate, fund, and develop and implement local, regional, and state policies. These state agencies include:

- California Coastal Commission (CCC)
- California State Coastal Conservancy (SCC)
- California Department of Insurance (CDI)
- California Department of Transportation (CalTrans)
- California Department of Fish and Wildlife (CDFW)
- California Office of Emergency Services (CalOES)
- California Department of Water Resources (DWR)
- California Department of Toxic Substances and Control (DTSC)
- California State Water Resources Control Board (SWRCB) in consultation with the Regional Water Quality Control Boards (RWQCB), collectively referred to as Water Boards
- California Office of Planning and Research (OPR)
- California Natural Resources Agency - Ocean Protection Council (OPC)
- California Energy Commission (CEC)
- California State Lands Commission (SLC)
- California Environmental Protection Agency (CalEPA)
- California Department of Parks and Recreation (State Parks)
- Bay Conservation and Development Commission (BCDC)
- Delta Stewardship Council (DSC)

The creation of the SLR Action Plan would not have been possible without the leadership of the Executive Committee from these agencies, and the input and participation of the Working Group staff from these agencies. OPC also held one-on-one meetings with most of these agencies to better understand their work and contribution to SLR resiliency.

Additionally, in September of 2021, Governor Newsom signed SB1 (Atkins, 2021) to address sea-level rise planning needs. This bill established the California SLR State and Regional Support Collaborative, tasked with educating the public, advising on priority SLR projects, and requiring the inclusion of SLR in coastal development, adaptation, and mitigation efforts. The State SLR Leadership Team will house this Collaborative, and OPC will advise the legislature on project and funding updates.

GOALS AND HIGHLIGHTS OF THE STATE AGENCY SEA-LEVEL RISE ACTION PLAN

The Action Plan’s vision is to make all of California, from its coastlines to its inland areas, bays, and estuaries, resilient to the impacts of SLR, such as flooding, erosion, and habitat degradation and loss. This will most successfully occur through thoughtful and coordinated planning and projects aimed to protect and conserve our unique biodiversity, public health and safety, infrastructure, outdoor access, and coastal economy. This must be done through an equitable process, inclusive of all Californians, with an emphasis on supporting communities entitled to environmental and climate justice.

This Action Plan captures much of the work and efforts put forth by agencies participating in the State SLR Leadership Team to achieve coastal resilience for the state of California. These goals are highly related to the SLR Principles, as they have been created through an iterative process based on the Principles and their priorities. High level goals of the action plan revolve around planning, nature-based solutions and habitat, and equity as follows:

- The entire coast of California should be prepared and planning for SLR.
- SLR adaptation plans should lead to project implementation.
- SLR adaptation planning should include pathways to resiliency to 3.5’ by 2050 and 6.0’ by 2100.
- Apply an equity lens to all SLR adaptation planning and projects.
- Nature-based solutions should be pursued when possible.
- Coastal habitats including wetlands, beaches, and dunes should be protected and conserved.

Together, every action within the SLR Action Plan reinforces the goals stated above, but individually, each action is accountable for its own success through the following standards. Each action is:

- Trackable – final product(s) demonstrate success.
- Centered on leadership – assigned lead agencies are responsible for tracking progress, while supporting agencies assist and collaborate.
- Coordinated – collaboration will happen across agencies that have a stake in the action or goal.
- Tied to target timelines – actions should have targets for completion or implementation. Actions and projects that are listed as “ongoing” have already begun or may not have a clearly defined end point. However, the pace of implementation will depend upon the feasibility and availability of resources and competing priorities.
- Forward thinking – actions represent efforts that are either ongoing or have been identified as a priority. In some cases, additional funding, capacity/staff, or legislation may be required to fully address a given priority. To indicate the critical importance of certain actions toward achieving coastal resilience, some actions, for which funding exists or has been allocated in the FY21/22 budget or previous budgets, have been denoted with a “C”.

As previously mentioned, the SLR Action Plan is modeled on the seven SLR Principles for Aligned State Action. Each Principle is followed by a handful of specific, outcome-oriented key actions. In

summary, the actions within each principle cover a wide array of topics, including, but not limited to:

SLR Principle 1: Best Available Science

- Best available science should inform all SLR related projects, policy, and decision-making
- Interdisciplinary partnerships (state and federal agencies, NGOs, tribal groups utilizing Traditional Ecological Knowledge (TEK) academic institutions) should fill existing knowledge gaps
- Collaborations should support necessary updates to SLR models and viewers by integrating new findings and improving the utility of these tools for relevant stakeholders
- Development of the updated 2023 State of California SLR Guidance using the best available science including the US National Climate Assessment and new scientific findings as they emerge

SLR Principle 2: Partnerships

- Regular coordination of the State SLR Leadership Team on long term planning efforts, legislation, and policy alignment.
- Foster partnerships between private groups, federal/state/regional/local agencies, community-based organizations, and Tribes

SLR Principle 3: Communications

- Represent SLR as a major climate issue to the public.
- State SLR Leadership Team to continue coordinated efforts on SLR strategy, direction, and legislation and engage with coastal and inland communities
- Utilize the Adaptation Clearinghouse as a centralized source of information and relevant resources

SLR Principle 4: Local Support

- Downscale SLR resiliency to the local level, based on local and regional conditions, needs, and past and current planning efforts.
- Share resources and best practices with local and regional leaders
- Connect local community-based organizations and consultants with pertinent projects
- State SLR Leadership Team will continue to engage with and support local entities

SLR Principle 5: Alignment

- State agencies, decision-makers, and project managers align on the basics of SLR adaptation, including SLR science, planning efforts, permitting, implementation, monitoring, and education and outreach
- Support cross-jurisdictional coordination especially where assets and hazards cross traditional boundaries
- Prioritize multidisciplinary teams and projects that offer multiple benefits should be prioritized

SLR Principle 6: Resilience Projects

- Realize adaptation plans with on-the-ground projects
- Apply planning targets to new and redevelopment
- Prioritize nature-based solutions and implement monitoring and evaluating programs.
- Pilot projects and demonstration efforts that are grounded in science and supported by research

- Support legislation, policies, and state mandates for funding, feasibility studies, permitting, and project development and implementation

SLR Principle 7: Equity and Social Justice

- Prioritize social justice, Tribal justice, and equity in all aspects of state actions focused on building SLR adaptation and resilience
- Fund SLR vulnerable communities entitled to environmental justice
- Utilize project criteria to prioritize communities entitled to environmental justice, including historically redlined communities, and communities next to or near contaminated sites
- Incorporate Traditional Ecological Knowledge (TEK) into climate work and SLR planning efforts
- Offer technical assistance to communities that need support for SLR related projects or funding requests

NEXT STEPS

OPC will accept public comment on the SLR Action Plan over the next few months. Public comment can be submitted to: SLRActionPlan@resources.ca.gov.

The Action Plan is a living document that will be informed by public input at this OPC meeting and similar public meetings held by State SLR Leadership Team agency members, including but not limited to, the California Coastal Commission, the San Francisco Bay Conservation and Development Commission, the State Coastal Conservancy, and the State Lands Commission. OPC staff will also initiate engagement and consultation with California Native American tribes. Feedback from tribal consultation and public comment will be considered and revisions made, as appropriate, by the SLR Leadership Team in spring/summer 2022.

The actions and goals outlined in the SLR Action Plan are not only subject to change, but also serve as advisory and do not supersede, nullify, or otherwise alter existing law and formal rulemaking processes.

OPC will use the State SLR Leadership Team to monitor and evaluate the progress of the actions within this Action Plan on an annual basis. Quarterly meetings of the State SLR Leadership Team will provide an opportunity for state agencies to highlight progress and milestones; share opportunities and barriers; and coordinate various efforts. Agency staff will also try to link work occurring on the ground with the goals of the Action Plan, particularly if there are case studies with broader applicability. OPC staff anticipates reporting progress annually to the Executive Team of the State SLR Leadership Team. Staff will also share annual reports at OPC meetings to keep the Council apprised of progress, successes, and changes.