



CALIFORNIA  
**OCEAN  
PROTECTION  
COUNCIL**

# OPC SB 1 Grant Program SLR Adaptation Criteria

*Version: February 1, 2024*

# Table of Contents

Background .....	3
SLR Adaptation Criteria.....	4
Phase 1: Pre-planning (explore, define, and assess) .....	4
1. Community Visioning.....	4
2. Vulnerability Assessments.....	4
Phase 2: Data Collection.....	6
1. Data/Information Gathering.....	6
Phase 3: Planning (define adaptation frameworks and strategies).....	7
1. SLR Adaptation Plans.....	8
2. San Francisco Bay Shoreline Adaptation Plans.....	9
3. Sector Specific SLR Adaptation Plans .....	9
Phase 4: Projects (implement, innovate, assess, adjust) .....	11
1. Nature-based and Green-Grey Hybrid Adaptation Projects/Feasibility Studies/Designs..	11

# Background

This document serves as a comprehensive guide for sea-level rise (SLR) adaptation planning efforts, offering standardized minimum requirements throughout all phases of the SLR adaptation planning process. It presents applicants of the SB 1 Grant Program with a clear framework to seek funding and aligns with the key recommendation in *Planning for Sea Level Rise on California's Coast: Status, Trends, and Recommendations* ([Lester, 2023](#)) which emphasizes the importance of establishing best practices and minimum requirements for all SLR adaptation plans. The SLR Criteria, developed in collaboration with the California Sea-Level Rise State and Regional Support Collaborative (SLR Collaborative), aims to ensure consistent planning efforts along the coast. This uniformity not only ensures neighboring communities are planning for SLR at the same level and caliber but also enables California to make sound, well-informed investments when preparing for SLR.

This document lists the *minimum* criteria that projects must meet to be eligible for SB 1 Grant Program funding, and applicants are required to include each criterion in their proposal for consideration. If certain criteria do not apply to an applicant, whether due to a unique local condition or because it has already been accomplished by a previous planning effort, an explanation should be provided in the proposal. While adherence to the specified criteria is mandatory for funding eligibility, applicants are encouraged to exceed these standards by tailoring their proposals to address unique local conditions and specific needs, such as additional SLR vulnerability scenarios or detailed economic assessments. While SLR adaptation plans submitted through this program can be integrated into a jurisdiction's larger local hazard mitigation plan (LHMP), funds from this program must exclusively support SLR-related efforts. All SB 1 planning efforts should be consistent with the Coastal Act for outer coast, the McAtteer-Petris Act for the San Francisco Bay Shoreline, the Suisun Marsh Preservation Act for Suisun Marsh shoreline, and the Public Trust Doctrine. **This SLR Criteria is a living document and may be revised based on tribal consultation, further comments, or other updates.**

# SLR Adaptation Criteria

## Phase 1: Pre-planning (explore, define, and assess)

There are two different project types that are eligible for funding under the Pre-Planning phase: 1) *Community Visioning* and 2) *Vulnerability Assessments*. Community Visioning projects are those that build consensus on community priorities, set goals, and create a vision for resilience. Below contains the minimum criteria and prerequisites for each project type:

### 1. Community Visioning

- To root the visioning process in data, an initial study or assessment identifying points of vulnerability must be included, utilizing data no more than five years old.
- The project proposal must include the development of a community engagement plan.
- The visioning process must include outreach, education, and community engagement. Targeted engagement must include Environmental Justice (EJ)<sup>1</sup> communities and meaningful consultation with California Native American tribes.
- The project must have community-driven planning and goal setting.
- The project must include an evaluation of community demographics that may result in increased risk to SLR impacts, including age, non-English speakers, low income, disability, and crime incidence.

### 2. Vulnerability Assessments

- The assessment must follow the recommendations outlined in the [2024 State of California SLR Guidance](#) for determining the number of SLR scenarios to use.
- The assessment should use a time horizon to 2150, as feasible.

---

<sup>1</sup> Environmental Justice (EJ) communities are communities that are disproportionately impacted by environmental injustices and social inequities, that are environmentally and economically-stressed and experience environmental health inequities which contribute to persistent environmental health disparities, as is defined in the SB 1 Grant Program Solicitation.

- The assessment must consider the following physical impacts, as feasible:
  - Inundation, erosion, storms, wave run-up, groundwater, bluff collapse, and others as applicable.
- Vulnerability should be defined as ‘Exposure x Sensitivity x Adaptive Capacity’ in the project and within the assessment process.
- The project must include outreach, education, and community engagement. Targeted engagement must include EJ communities and meaningful consultation with California Native American tribes.
- Coordination with other state agencies must be conducted, as necessary.
- The assessment must include these core sectors, as applicable to each locality (based on the Coastal Commission’s [2018 Local Coastal Program Guidance](#) with some additions):
  - Coastal development and hazards
  - Public access and recreation (such as public facilities, trails, and parks)
  - Coastal habitats and species, Environmentally Sensitive Habitat Areas (ESHA), and wetlands
  - Agricultural resources
  - Water quality and supply
  - Tribal Cultural Resources
  - Archaeological and paleontological resources
  - Scenic and visual resources
  - Socioeconomic vulnerability, including the diverse populations of the community and those who access the coast, as defined by the applicant
  - Contaminated sites
  - Critical infrastructure (roads, rail, wastewater, water supply facilities, ports, harbors, airports, power plants, and others as applicable)

## Phase 2: Data Collection

There is one project type eligible for funding under the Data Collection phase: *Data/Information Gathering*. Example projects include updating a vulnerability assessment to 2150 or adding a core sector to a pre-existing vulnerability or planning effort. Below contains the minimum criteria and prerequisites for this phase:

### 1. Data/Information Gathering

- Relevant data/information gathering must support the completion of a community visioning or vulnerability assessment (Phase 1), or SLR planning effort (Phase 3).
- The project must include outreach, education, and community engagement. Targeted engagement must include EJ communities and meaningful consultation with California Native American tribes.

## Phase 3: Planning (define adaptation frameworks and strategies)

There are three different project types that are eligible for funding under the Planning phase: 1) *SLR Adaption Plans*, 2) *San Francisco Bay Shoreline Adaptation Plans*, and 3) *Sector Specific SLR Adaptation Plans*.

SLR Adaptation Plans and San Francisco Bay Shoreline Adaptation Plans are expected to be at the city, county, or regional level.

Sector Specific SLR Adaptation Plans are those that pertain to a specific core sector with significant vulnerability and adaptation needs, and thus should have a more localized approach, specifically at a scale smaller than the city. Core sectors are based on the 2018 Local Coastal Program Guidance with some additions:

- Coastal development and hazards
- Public access and recreation (such as public facilities, trails, and parks)
- Coastal habitats and species, Environmentally Sensitive Habitat Areas (ESHA), and wetlands
- Agricultural resources
- Water quality and supply
- Tribal Cultural Resources
- Archaeological and paleontological resources
- Scenic and visual resources
- Socioeconomic vulnerability, including the diverse populations of the community and those who access the coast, as defined by the applicant
- Contaminated sites
- Critical infrastructure (roads, rail, wastewater, water supply facilities, ports, harbors, airports, power plants, and others as applicable)

These plans may be necessary if the sector was omitted from a previously completed SLR adaptation plan, require a more detailed or complex adaptation planning process, and/or show recently intensified vulnerability to the impacts of SLR. Sector Specific SLR Adaptation Plans are

generally the step before feasibility/design and pertain to a wide range of potential project sites, which require further study.

Below contains the minimum criteria and prerequisites for each project type:

## 1. SLR Adaptation Plans

- As a pre-requisite, a vulnerability assessment (as described above in Phase 1) must be done for the location before a proposal can be submitted for a SLR adaptation plan for the same location.
- The project must include outreach, education, and community engagement. Targeted engagement must include EJ communities and meaningful consultation with California Native American tribes.
- The plan must include adaptation pathways, scenario planning, and/or triggers and thresholds, depending on what approaches to adaptation planning are most applicable.
- Implementation steps must include actionable pathways.
- Priority projects must be identified with community input and involvement.
- Cross jurisdictional impacts and tradeoffs must be considered.
- The plan must include development of a preliminary monitoring strategy that conceptualizes how to track progress and success and informs adaptation pathways/triggers and thresholds.
- The plan must be consistent with other local and regional plans and reflect pertinent statewide planning guidance and policy (such as the [Coastal Commission's Local Coastal Program Update Guide](#) and the [California Climate Adaptation Strategy](#)).
- The plan must align with the Coastal Act for outer coast, the McAteer-Petris Act for the Bay Shoreline, the Suisun Marsh Preservation Act for Suisun Marsh shoreline, and the Public Trust Doctrine, as applicable.
- The plan must include financing strategies for funding future adaptation costs. Coordination with other state agencies must be conducted, as necessary.



## 2. San Francisco Bay Shoreline Adaptation Plans<sup>2</sup>

- A complete vulnerability assessment (as described above) must be done for the location before a proposal can be submitted for a San Francisco Bay Shoreline Adaptation Plan for the same location.
- The project must include outreach, education, and community engagement. Targeted engagement must include EJ communities and meaningful consultation with California Native American tribes.
- The plan must include adaptation pathways, scenario planning, and/or triggers and thresholds, depending on what approaches to adaptation planning are most applicable.
- The plan must include implementation steps with actionable pathways.
- Priority projects must be identified with community input and involvement.
- Cross jurisdictional impacts and tradeoffs must be considered.
- The plan must include development of a preliminary monitoring strategy that conceptualized how to track progress and success.
- The plan must be consistent with other local and regional plans and reflect regional planning guidance and policy (Plan Bay Area 2050, Bay Adapt, Regional Shoreline Adaptation Plan, etc.).
- The plan must align with the McAteer-Petris Act for the Bay Shoreline and the Suisun Marsh Preservation Act for Suisun Marsh shoreline, as applicable.
- The plan must include financing strategies for funding future adaptation costs.
- Coordination with other state and regional agencies must be conducted, as necessary.

## 3. Sector Specific SLR Adaptation Plans

- A complete vulnerability assessment (as described above) must be done for the location before a proposal can be submitted for a Sector Specific SLR adaptation plan for the same location. Specific vulnerability to the impacts of SLR must be shown for the Sector.

---

<sup>2</sup> These criteria may be updated with new Bay Adapt Regional Shoreline Adaptation Plan Guidelines.

- A previously completed SLR Adaptation Plan (as described above) must be done for the location before a proposal can be submitted for a Sector Specific SLR Adaptation Plan for the same location.
- The sector-specific focus of the proposed plan must be included in the list of core sectors in Phase 1 and must include sound reasoning for a focused planning effort.
- The project must include outreach, education, and community engagement. Targeted engagement must include EJ communities and meaningful consultation with California Native American tribes.
- The plan must include adaptation pathways, scenario planning, and/or triggers and thresholds, depending on what approaches to adaptation planning are most applicable.
- The plan must include implementation steps with actionable pathways.
- Priority projects must be identified with community input and involvement.
- Cross jurisdictional impacts and tradeoffs must be considered.
- The plan must include development of a preliminary monitoring strategy that conceptualizes how to track progress and success and informs adaptation pathways/triggers and thresholds.
- The plan must be consistent with other local and regional plans and reflect statewide planning guidance and policy applicable to the sector's focus.
- The plan must align with the Coastal Act for outer coast, the McAteer-Petris Act for the Bay Shoreline, the Suisun Marsh Preservation Act for Suisun Marsh shoreline, and the Public Trust Doctrine, as applicable.
- The plan must include financing strategies for funding future adaptation costs.
- Coordination with other state agencies must be conducted, as necessary.

## Phase 4: Projects (implement, innovate, assess, adjust)

There is one project type eligible for funding under the Projects phase: *Nature-based and Green-Grey Hybrid Adaptation Projects/Feasibility Studies/Designs*. This funding Phase can include permitting and CEQA. Project examples include critical infrastructure adaptation, relocation projects, public access projects, etc. Below contains the minimum criteria and prerequisites for this phase:

### 1. Nature-based and Green-Grey Hybrid<sup>3</sup> Adaptation Projects/Feasibility Studies/Designs

- A completed Vulnerability Assessment and SLR Adaptation Plan identifying the proposed project must be completed beforehand.
- The project must include co-benefits.
- The project must be resilient to the project's maximum life expectancy.
- The project must be identified as a priority project in a SLR Adaptation Plan (as described in Phase 3), as feasible.
- The project must align with the Coastal Act for outer coast, the McAteer-Petris Act for the Bay Shoreline, the Suisun Marsh Preservation Act for Suisun Marsh shoreline, and the Public Trust Doctrine, as applicable.

---

<sup>3</sup> Green-Grey Hybrid SLR Adaptation Projects are those that incorporate natural coastal ecosystems with grey infrastructure to combine the values of wave attenuation and flood control of natural ecosystems with the benefits of engineered structures. The result is a mixed hybrid ecosystem in which the conservation and restoration of natural coastal ecosystems can extend the lifespan of gray infrastructure, while also supporting fisheries, regulating water quality, and sequestering carbon. These projects reduce climate risk, selectively integrate a conventional engineering approach, and offer social, environmental, and economic benefits. Green-grey hybrid projects can be beneficial alternatives to traditional grey infrastructure for protecting coastal-dependent development where nature-based projects are not feasible (i.e., at ports, marinas, harbors, and other urban and working waterfronts). For more information, refer to a [Practical Guide to Implementing Green-Grey Infrastructure](#).

- The project must include a cost-benefit analysis, including a non-market valuation of risk reduction benefits (to assets, local coastal economy, ecosystem services, etc.).
- The project must include outreach, education, and community engagement. Targeted engagement must include EJ communities and meaningful consultation with California Native American tribes.
- The final project must consider options for adapting the project to future impacts of SLR.
- Coordination with other state agencies must be conducted, as necessary.