ABOUT SCAG

SCAG is the nation’s largest metropolitan planning organization (MPO), representing six counties, 191 cities and more than 19 million residents. SCAG undertakes a variety of planning and policy initiatives to encourage a more sustainable Southern California now and in the future.

VISION

Southern California’s Catalyst for a Brighter Future

MISSION

To foster innovative regional solutions that improve the lives of Southern Californians through inclusive collaboration, visionary planning, regional advocacy, information sharing, and promoting best practices.

visit us at scag.ca.gov
1.1 | Introduction
Local governments, communities, and individuals across Southern California are already feeling and will continue to experience the impacts of sea-level rise, extreme heat, increasingly frequent and damaging wildfires, abrupt and severe rain events, and other climate-related issues. These impacts are often having acute and disproportionate negative impacts on communities already disadvantaged. As climate change continues to affect communities throughout the SCAG region, local governments need to integrate climate adaptation and resilience into local planning to prepare for and cope with the unavoidable consequences of a changing climate.

Beginning in February 2019, the Southern California Association of Governments (SCAG) initiated the Southern California Climate Adaptation Framework (SoCal CAF) - a suite of efforts to provide local jurisdictions and stakeholders with regionally-relevant resources and tools to help the region plan for climate change impacts - supported by funding from a Caltrans’ SB 1 Adaptation Planning Grant. The SoCal CAF materials are published and publicly available on the SoCal CAF project website available through SCAG’s webpage.

Local governments play a critical role in adaptation planning and building climate resilience in their communities. In October 2015, Senate Bill 379 (SB 379) was signed into law, amending Government Code Section 65302(g), to require all cities and counties in California to incorporate climate adaptation and resilience into the general plan safety element or by reference to other planning documents (e.g., climate action/adaptation plan, local hazard mitigation plan, or other similar plans).

1.2 | Purpose of this Guidebook
SB 379 requires local governments to address climate change adaptation and resilience in the safety elements of their general plan updates, but there has been limited guidance at the regional or local level on integrating climate adaptation and resilience strategies into safety elements. The purpose of this guidebook is to provide a SB 379 “compliance curriculum” for local jurisdictions that links existing SCAG resources and tools to support local safety element updates, which will ultimately enhance both local and regional climate resilience. Surveys conducted by the Governor’s Office of Planning and Research (OPR) indicate that a majority of local jurisdictions intend to comply with SB 379 by updating the safety element of the general plan.¹ This document is meant to help jurisdictions primarily address this requirement utilizing the SoCal CAF and additional regional resources to update safety elements pursuant to SB 379. Additionally, the curriculum can be similarly applied to updating other plans (e.g., climate action/adaptation plan or local hazard mitigation plan) to comply with SB 379.

1.3 | Overview of SB 379 Statutory Requirements

SB 379 is an important implementation component of the State’s overall climate adaptation strategy intended to ensure that local governments are planning for climate change. SB 379 requires city and county safety elements of general plans to be reviewed and updated to include climate adaptation and resilience strategies. Specifically, the review and update must include three main components:

- A **VULNERABILITY ASSESSMENT** that identifies the risks that climate change poses to the local jurisdiction and the geographic areas at risk from climate change impacts.
- A **SET OF ADAPTATION AND RESILIENCE GOALS, POLICIES, AND OBJECTIVES** based on the information in the VULNERABILITY ASSESSMENT for the protection of the community.
- A **SET OF FEASIBLE IMPLEMENTATION MEASURES** designed to carry out the identified goals, policies, and objectives.

These three components are a high-level summary of the SB 379 statutory requirements. You can reference the statute for what is specifically required under each of these three main components. Please see Section 3 for further guidance on those specific requirements under Step 2.2 and Step 4.1. Local governments across the State are at different stages of adaptation planning, whether they are just beginning or have existing climate change analyses and policies in place. SB 379 allows for cities and counties to comply with the law by either (i) updating the safety element of their general plan OR (ii) using an existing local hazard mitigation plan (LHMP), climate action or adaptation plan (CAAP or CAP) or similar plan that adequately addresses the regulatory requirements of SB 379. If your jurisdiction plans to use a standalone or separate plan, it must satisfy the three main components of the law above and be incorporated by reference into the safety element including a summary that explains how each requirement of the law has been met. See Section 5 for case studies of jurisdictions achieving SB 379 compliance through both methods.

There are two timelines for compliance depending on whether your jurisdiction has a current LHMP. Local jurisdictions that already have an adopted LHMP as of January 1, 2017 will need to update safety element of the general plan pursuant to SB 379 upon the next revision of the LHMP. Local jurisdictions who do not have an adopted LHMP will need to update safety element of the general plan pursuant to SB 379 by January 1, 2022.

The full text of the law can be found online at [leginfo.legislature.ca.gov](http://leginfo.legislature.ca.gov).
1.4 | Other Regulatory Drivers of Adaptation Planning

**Assembly Bill 162 (2007)** requires that, upon the next revision of the housing element on or after January 1, 2009, cities and counties address flood hazards and safety in the land use, conservation, safety, and housing elements of their general plans.

**Senate Bill 1241 (2012)** revised the safety element requirements to require all cities and counties whose planning area is within the state responsibility area (SRA) or very high fire hazard severity zones (VHFHSZs), as defined by CAL FIRE, to address and incorporate specific information regarding wildfire hazards and risk, and policies and programs to address and reduce unreasonable risks associated with wildfire. Upon the next revision of the housing element on or after January 1, 2014, the bill requires those cities and counties to review and update the safety element to consider the advice in the Office of Planning and Research’s most recent publication of “Fire Hazard Planning, General Plan Technical Advice Series” as well as: information regarding fire hazards, a set of goals, policies, and objectives based on identified fire hazards, and a set of feasible implementation measures designed to carry out those goals, policies, and objectives.

**Senate Bill 1000 (2016)** stipulates that cities and counties with Disadvantaged Communities, as defined by SB 1000 in Government Code Section 65302(h), incorporate environmental justice policies in their general plans through either a stand-alone element, or by integrating relevant goals, policies, and objectives throughout other elements. The bill requires cities and counties to identify Disadvantaged Communities (as defined in SB 1000), include policies and objectives to reduce unique or compounded health risks in Disadvantaged Communities, promote civic engagement in the public decision-making process, and address the needs of Disadvantaged Communities. Compliance with SB 1000 is triggered when two or more elements in a general plan are revised after January 1, 2018. For example, an update to the safety and housing elements would trigger the need to comply with SB 1000 if the city or county has Disadvantaged Communities. See Section 4: Planning for Equitable Climate Adaptation for information on the connection between SB 379 and SB 1000 compliance.

**Senate Bill 1035 (2018)** requires regular updates to the safety element chapter of the general plan. New information regarding flood and fire hazards must be included and climate change adaptation and resilience must be addressed as part of the update. After 2022, safety elements must be updated upon each revision of the housing element or local hazard mitigation plan, but no less often than once every 8 years. Housing element revisions are typically on 4-8 year cycles and LHMP revisions are on 5-year cycles.

**Senate Bill 99 (2019)** requires that, upon the next revision of the housing element on or after January 1, 2020, the safety element must be updated to include information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes (i.e., points of ingress and egress).

**Senate Bill 747 (2019)** requires that, upon the next revision of a LHMP on or after January 1, 2022, or beginning on or before January 1, 2022, if a local jurisdiction has not adopted a LHMP, the safety element must be reviewed and updated as necessary to identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. If a LHMP, emergency operations plan, or other document that fulfills commensurate goals and objectives, a local agency may use that information in the safety element to comply with this requirement by summarizing and incorporating by reference such a plan or other document into the safety element.

The full text of these laws may be found online [leginfo.legislature.ca.gov](http://leginfo.legislature.ca.gov).
SECTION 2
SUMMARY OF SCAG’S ADAPTATION PLANNING RESOURCES

2.1 | Southern California Adaptation Planning Framework

The Southern California Adaptation Planning Framework (SoCal CAF) provides planning and mapping tools, resources, studies and scientific data to SCAG’s local and regional jurisdictions to help plan for and manage the negative impacts of climate change. These tools and resources are available on the SCAG website, where a series of reference guides are included to quickly orient the user of the Framework to the range of available materials. Section 3 of this guidebook will walk you through how to use these materials to comply with SB 379. Available materials include:

- Public engagement workshop templates and materials (Phase 0)
- General Plan gap analysis of SCAG member agencies regarding the inclusion of adaptation goals, objectives and policies (Step 1.2)
- Gap analysis of county-level climate change vulnerability analyses in the SCAG region (Step 2.1)
- Interactive online map identifying climate change hazards in the SCAG region (Step 2.2)
- Scenario modeling of transportation and population displacement impacts due to extreme events related to climate change hazards in the SCAG region (Step 2.2)
- Public engagement best practices based on a literature review and interviews with community-based organizations (Step 2.4)
- Results of jurisdictional interviews on local adaptation planning and regional coordination needs (Step 2.4)
- Climate adaptation tracking metrics for cities and counties (Step 3.2)
- Climate change indicators and tracking metrics for metropolitan planning agencies (Step 3.3)
- Matrix of adaptation strategies and actions for a variety of climate change hazards (Step 3.3)
- Model adaptation policy language for inclusion in general plans and local coastal programs (Step 3.3)
- Strategies for funding and financing climate-safe infrastructure (Phase 4)
- Climate adaptation project prioritization tool (Step 4.1)
- Climate change adaptation project tracking tool (Step 4.1)
- Project checklist form for incorporating resilience features into the design and siting of new or existing development and infrastructure (Step 4.1)

2.2 | Southern California Adaptation Planning Guide

The Southern California Adaptation Planning Guide (SoCal APG) was developed as part of the SoCal CAF to help local governments in SCAG’s 6-county region work together to plan and prepare for the impacts of climate change. The SoCal APG describes the range of climate change hazards the SCAG region is likely to face in the coming decades, describes adaptation principles geared to the region, and outlines a general process of adaptation planning that can be applied by any agency, no matter where they fall across the spectrums of funding, available resources, knowledge of vulnerabilities, and planning complexity. It provides member agencies, including towns, cities, counties and subregional organizations with a compendium of tools, resources, and best practices to efficiently advance their adaptation planning using the best resources available. The SoCal APG aligns with and leverages the extensive foundation of guidelines developed through other state climate programs. In particular, it aligns closely with the California Adaptation Planning Guide (California APG) developed by the Cal OES in much of its guidance, nomenclature, and its recommended 4-phase process for adaptation planning. The SoCal APG differs from the California APG in that it focuses on the local communities of Southern California by identifying case studies and best practice examples from SCAG member jurisdictions to illustrate each phase in the adaptation planning process. It also references and provides guidance on the use of data and tools that have been specifically developed for adaptation planning in the SCAG region.
2.3 | Housing Element Parcel Tool

The Housing Element Parcel Tool (HELP) is a web-mapping tool developed by SCAG to help local jurisdictions and stakeholders understand local land use, site opportunities, and environmental sensitivities for aligning housing planning with the state Department of Housing and Community Development’s (HCD) 6th cycle housing element requirements, as well as state laws requiring the update of safety elements upon the next revision of a housing element. The tool is principally based on updated, curated versions of parcel-level land use data and other datasets which have been available through SCAG’s open data portal. This tool can be utilized to incorporate climate hazard considerations in housing element planning, consistent with requirements under SB 379 and SB 1035. It also allows for downloads of tabular and spatial parcel data for external use. Additionally, the tool provides visualizations of parcels impacted by wildfire risks, 1 and 2 meters of sea level rise, 100-year flood plains, earthquake fault zones, liquefaction susceptibility zones, landslide hazard zones, California protected areas, wildlife habitat areas, active river and wetland areas, locations of rare plants and animals, and Natural Community Conservation Plans/Habitat Conservation Plans reserve areas. Access to the HELP tool is available on SCAG’s website. Documentation on datasets utilized and application functionality is available within the tool.

2.4 | Green Region Initiative

The Green Region Initiative (GRI) serves as a tool for jurisdictions within the SCAG region to measure and track sustainability progress in the region across 12 categories and 29 sustainability indicators. The map aims to foster collaboration through the sharing of best practices across the 191 cities and six counties in the SCAG region. SCAG regularly monitors and reports on plans and programs related to regional resilience, including climate adaptation, through the GRI. Please refer to the GRI on SCAG’s website for information on local sustainability policies and practices across the region.
The following Compliance Curriculum has been developed to assist local governments with meeting the requirements of SB 379 to comprehensively plan for climate adaptation at the local level. The Compliance Curriculum is designed to follow the SoCal APG four-phase adaptation planning process. This section will walk you through the four-phase adaptation planning process step-by-step, providing SoCal CAF tools and resources to support your jurisdictions with satisfying the statutory requirements of SB 379. This curriculum has been designed to help local governments utilize SCAG’s suite of climate planning tools and resources to comply with SB 379, no matter how far along your jurisdiction is in the adaptation planning process.

Phase 0: Outreach & Engagement

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<td>Public Outreach Plan</td>
<td>SoCal APG</td>
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<td>Public Outreach Materials</td>
<td>SoCal CAF Outreach Toolkit: Community Capacity Building Workshop Templates</td>
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<td>Communication Materials on SB 379</td>
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Successful adaptation planning and compliance with SB 379 requires engagement with your jurisdictional community members and stakeholders. Engaging all voices of the community is key to ensuring long-term success and achieving a more prepared and resilient community.

When first preparing for public engagement with your community, we suggest reviewing the International Association for Public Participation (IAPS2) Spectrum of Public Participation as a model for the public’s role in any public participation process. Used internationally, the Spectrum is found in public participation plans around the world. Recognizing that jurisdictions have varying capacities for public participation and engagement, SCAG recommends aiming for Collaborate along the Spectrum to build continued trust and support before, during, and after achieving SB 379 compliance. Public participation at the Collaborate level aligns with the degree of collaboration suggested throughout the SoCal APG. More information on the IAP2 Spectrum and its use in climate adaptation outreach and engagement can be found on page 34 of the SoCal APG.

To help attune planning staff to the voices of the community, the SoCal CAF Outreach Toolkit: Community Capacity Building Workshop Templates (Outreach Toolkit) provides local jurisdictions with suite of templates, worksheets, and discussion materials to initiate and hold ongoing conversations with community members to better understand your jurisdiction’s climate-related challenges. Because it can be difficult to engage constituents in a dialogue about climate change due to differing viewpoints and experiences, the Outreach Toolkit approaches climate change conversations on a personal level, beginning with conversations about how climate change has affected you directly and expanding conversations to potential climate strategies your community would like to pursue. The Outreach Toolkit resources are rooted in best practice research relating to climate change communication and includes conversational questions, such as:

- What words and values resonate with your community?
- What effects of climate change have you felt?
- What communication strategies encourage you to take climate action?

Through interactive community workshops, planning staff can better understand and effectively engage with stakeholders to plan for climate change. The Outreach Toolkit features templates for local convenings, including meeting flyers, workshop materials, activities related to climate change, and guidance on tailoring climate change messaging and strategies to reach different audiences.

The full collection of the Outreach Toolkit resources can be found on SCAG’s Regional Climate Adaptation Framework website.
Phase 1: Explore, Define, and Initiate

Climate adaptation planning compliance begins with a scoping phase that includes understanding your jurisdiction's SB 379 compliance status, the necessary resources to achieve compliance, and gaining a preliminary understanding of climate change effects on your jurisdiction and community.

STEP 1.1: DETERMINE MOTIVATION AND SCOPE

**Things to Prepare**
- Identify Existing Documents for SB 379 Compliance
- Identify Intra- and Interdepartmental Stakeholders
- Timeline to Meet SB 379 Requirements

**Resources**
- SCAG GRI
- SoCal CAF General Plan and Vulnerability Assessment Gap Analyses
- Local General Plan, Local Hazard Mitigation Plan (LHMP), Climate Action or Adaptation Plan (CAP/CAAP) if available
- Governor's Office of Planning and Research Adaptation Clearinghouse

The first step towards compliance of SB 379 begins with an audit of existing sustainability, adaptation, and resilience efforts by your local government. Local governments have two options to comply with SB 379:

- Updating the general plan safety element to include climate adaptation and resilience strategies if an LHMP has not been adopted; OR
- If an existing LHMP or CAP/CAAP contains climate adaptation and resilience strategies that comply with the requirements of SB 379, the safety element can be updated by summarizing and referencing the adaptation information already incorporated in the LHMP, CAP/CAAP, or similar plan.

Under option (1) of SB 379 compliance, the safety element of the general plan must be updated to address climate adaptation and resilience strategies if your city or county has not adopted an LHMP. If your jurisdiction has not adopted an LHMP, continue to Step 1.2.

Under option (2), a summary of an existing LHMP, CAP/CAAP, or similar plan may already satisfy the SB 379 regulatory requirements. Begin by reviewing your existing General Plan, LHMP, or CAP/CAAP, if applicable, to see if your existing plans address and contain climate adaptation and resilience strategies.

To help with the review of existing adaptation documents across the region, SCAG conducted a gap analysis of cities, counties, and tribal governments within the SCAG region that have adopted, or are in the process of adopting, climate adaptation policies as part of their general plans, local hazard mitigation plans, or CAP/CAAPs.

OUTREACH & ENGAGEMENT CONSIDERATIONS

The scoping phase presents an opportunity to shape and define how public engagement will be implemented for the remainder of the process. Meaningful engagement – which will likely require time, and resources as well as targeted and accessible outreach – with members from the most impacted communities early on in the planning process is essential to building a coalition of stakeholders who can be consulted throughout the planning process. Please reference pages 71-72 of the SoCal APG for best practices, tools, and resources that can assist in creating an equitable engagement strategy for Phase 1 that is inclusive, effective, and enduring.
mitigation plans, or stand-alone plans (e.g., climate action plans). The gap analysis findings can be found under Appendix C of the SoCal APG, “Gap Analysis of Climate Adaptation Policies in the SCAG Region.” Data from the gap analysis are presented in the “Adaptation Indicator” tab of SCAG’s Green Region Initiative (GRI), which can be found on SCAG’s Green Region Initiative website.

You can begin an audit of your SB 379 compliance by searching for your jurisdiction under the GRI Adaptation Indicator for insight into your jurisdiction’s status of climate adaptation planning and the degree to which the policies addressed various climate change risks.

If your existing planning documents already include a vulnerability assessment, adaptation and resilience goals, policies, objectives, AND feasible implementation measures, you may jump to Phase 4, Step 4.3.

STEP 1.2: ASSEMBLE PROJECT TEAM(S) & RESOURCES

Once you have determined which of the two SB 379 compliance options is appropriate for your jurisdiction, you may begin identifying intra- and interdepartmental project team members and resources and developing a timeline for achieving SB 379 compliance by January 1, 2022.

Although development of a SB 379 compliance project team is not a requirement of achieving SB 379, we strongly recommend including review of project team members and resources prior to initiating development of an SB 379-compliant document. As the purpose of this guidebook is to focus on explicit requirement of SB 379, details on assembling an SB 379 compliance project team have been excluded. More information on Step 1.2 can be found in the SoCal APG on the SCAG Regional Climate Adaptation Framework website.

STEP 1.3: IDENTIFY COMMUNITY CLIMATE HAZARDS AND CRITICAL ASSETS AT RISK

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With an understanding of which option your jurisdiction will take to achieve SB 379 compliance and an understanding of your jurisdiction’s resources to assemble a project team, the next step is to compile existing plans, policies, and technical documents containing climate adaptation, resilience, and sustainability goals and strategies for your jurisdictions. As a preliminary exercise to Phase 2, identify the climate-related hazards expected to impact your jurisdiction and community, as well as the types of community assets potentially at risk from those hazards.
Phase 2: Assess Vulnerability

With a baseline understanding of your jurisdiction’s needs, the next step is to assess the existing vulnerabilities that impact your jurisdiction by conducting a **Vulnerability Assessment**. For SB 379 compliance, an assessment of your jurisdiction’s vulnerabilities must include identifying the risks climate change poses to your jurisdiction and the surrounding geographic area.

**STEP 2.1: IDENTIFY CLIMATE HAZARD EXPOSURE**

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Understanding the risks of climate change to your jurisdiction involves studying the impacts of climate hazards to your surrounding geographic area as climate hazards often cross jurisdictional boundaries.

To help jurisdictions understand the current status of climate change vulnerability assessments across the Southern California region, SCAG conducted a county-wide gap analysis of vulnerability assessments. The gap analysis highlights regional progress made in assessing climate vulnerabilities and gaps that may need to be addressed either regionally or by the cities within each county jurisdiction. For the purposes of this gap analysis, the following climate hazards and asset types were assessed:

- **Climate Hazards:** Drought; Severe Storms/Wind; Extreme Heat; Inland Flooding; Landslides; Sea Level Rise/Coastal Flooding; Wildfire; Air Quality, Human Health and Ecological Hazards
- **Assets:** Natural and Managed Resources; Land Use and Community Development; Infrastructure; Public Health, Socioeconomics and Equity

The “Gap Analysis of Existing Countywide Climate Change Vulnerability Assessments in the SCAG Region” report can be found under Appendix C of the SoCal APG on the SCAG Regional Climate Adaptation Framework website. Findings from the report reflect data as of January 2020. The findings from this report can help provide an overview of the primary climate change vulnerabilities impacting your jurisdiction, as well as secondary impacts requiring further assessment and a unique set of policies, objectives, and strategies to address overlapping impacts.

**OUTREACH & ENGAGEMENT CONSIDERATIONS**

Community input during the vulnerability assessment phase is critical to develop an on-the-ground understanding of climate vulnerabilities and to ensure that community needs and priorities are centered. A vulnerability assessment is required as part of SB 379, and your communities are your best experts. Please reference page 102 of the SoCal APG for best practices for Phase 2 of the planning process.
STEP 2.2: CHARACTERIZE SENSITIVITIES & POTENTIAL IMPACTS

Things to Prepare

- Identify Community Populations and Assets Sensitive to Climate Change Hazards
- List of Historic and Potential Future Climate Impacts
- List of Climate Impacts of Greatest Concern

Resources

- Local General Plan, Local Hazard Mitigation Plan (LHMP), Climate Action or Adaptation Plan (CAAP) if available
- SoCal CAF General Plan and Vulnerability Assessment Gap Analyses
- Housing Element Parcel Tool (HELPR)
- Governor’s Office of Planning and Research Defining Vulnerable Communities Guide
- Governor’s Office of Planning and Research Adaptation Clearinghouse

Building off Step 2.1, your jurisdiction’s vulnerability assessment will need to include studying historical and potential impacts of climate change to your jurisdiction and surrounding geographic area.

In the vulnerability assessment, you will need to address specific requirements outlined in the text of the statute under Government Code Section 65302(g)(4)(A) regarding flooding (see Government Code Section 65302(g)(2)) and wildland and urban fires (see Government Code Section 65302(g)(3)). The statute also specifies the following information from federal, state, regional, and local agencies that should be referenced to assist in developing both the vulnerability assessment and the adaptation and resilience goals, policies, and objectives:

- Information from the Internet-based Cal-Adapt tool.
- Information from the most recent version of the California Adaptation Planning Guide.
- Information from local agencies on the types of assets, resources, and populations that will be sensitive to various climate change exposures.
- Information from local agencies on their current ability to deal with the impacts of climate change.
- Historical data on natural events and hazards, including locally prepared maps of areas subject to previous risk, areas that are vulnerable, and sites that have been repeatedly damaged.
- Existing and planned development in identified at-risk areas, including structures, roads, utilities, and essential public facilities.
- Federal, state, regional, and local agencies with responsibility for the protection of public health and safety and the environment, including special districts and local offices of emergency services.

After reviewing the status of climate vulnerability assessment at the county-level, planning staff at the local and regional level can turn to the “managed retreat” strategies developed through the SoCal CAF. “Managed retreat” strategies include analyses on transportation zones with limited ingress and egress routes. As part of the SoCal CAF, SCAG mapped climate hazards and studied the impacts of climate change on regional transportation networks - including looking at evacuation patterns from cell phone location data before and after major wildfires recently occurring in California. Additionally, SCAG developed and modeled regional

Housing Element Parcel (HEPR) Tool
Southern California Association of Governments SB379 Compliance Curriculum

Adaptive capacity refers to the ability of community populations and assets to adjust to climate change stressors and cope with the consequences. Adaptive capacity can be provided through physical design (e.g., back-up generator), or it can take the form of policies, plans, programs, governance, or institutions.

An adaptive capacity analysis examines the viability of plans to maintain system performance in the face of climate hazards. If the asset is damaged or destroyed, how quickly can it be repaired or brought back online, or how quickly can functions be restored? Is there system redundancy? For example, if a major highway is shut down, are there other routes that can receive the traffic to avoid a back-up? If a substation goes down, are there other substations on the electricity grid that can pick up the load?

Continue to make use of the recommended Resources under Step 2.2 to determine the existence of policies, programs, and strategies that can help manage the climate impacts unique to your jurisdiction. As noted in Step 2.1, potential climate hazards and assets that can be evaluated for adaptive capacity can include:

- **Climate Hazards**: Drought; Severe Storms/Wind; Extreme Heat; Inland Flooding; Landslides; Sea Level Rise/Coastal Flooding; Wildfire; Air Quality, Human Health and Ecological Hazards
- **Assets**: Natural and Managed Resources; Land Use and Community Development; Infrastructure; Public Health, Socioeconomics and Equity

Please reach out to SCAG for downloadable files of the climate risk and managed retreat data layer analyses.

Lastly, your SB 379 compliance project team can turn to SCAG’s Housing Element Parcel Tool (HELP) to identify community populations sensitive to climate change hazards. HELP is a web-mapping tool developed by SCAG to help local jurisdictions and stakeholders understand local land use, site opportunities, and environmental sensitivities for aligning housing planning with the state Department of Housing and Community Development’s (HCD) 6th cycle housing element requirements. HELP includes visualizations of parcels impacted by wildfire risks, 1 and 2 meters of sea level rise, 100-year flood plains, earthquake fault zones, liquefaction susceptibility zones, landslide hazard zones, California protected areas, wildlife habitat areas, active river and wetland areas, locations of rare plants and animals, and Natural Community Conservation Plans/Habitat Conservation Plans reserve areas. Select your jurisdiction through the HELP tool and review the highlighted community populations and assets identified as sensitive to climate change hazards. HELP will help identify primary and secondary climate hazard risks relevant to your jurisdiction, providing a baseline of adaptation and resilience objectives your jurisdiction will need to address for SB 379 compliance. See below for an image of the climate hazard filters included within HELP.

Access HELP by visiting SCAG’s website. Documentation on datasets utilized and application functionality is available within the tool, as well as the option to download tabular and spatial parcel data for external use.

### STEP 2.3: CHARACTERIZE ADAPTIVE CAPACITY

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With information on your jurisdiction’s existing policies and/or plans that include climate adaptation and resilience strategies (Step 2.1) and information on climate change sensitive populations and assets (Step 2.2), you can now move onto assessing the adaptive capacity of your jurisdiction. Understanding the factors that impact adaptive capacity of your jurisdiction will influence the set of adaptation and resilience goals, policies, objectives, and implementation measures to ensure your planning document includes climate adaptation and resilience strategies that are SB 379 compliant.

Adaptive capacity refers to the ability of community populations and assets to adjust to climate change stressors and cope with the consequences. Adaptive capacity can be provided through physical design (e.g., back-up generator), or it can take the form of policies, plans, programs, governance, or institutions.

An adaptive capacity analysis examines the viability of plans to maintain system performance in the face of climate hazards. If the asset is damaged or destroyed, how quickly can it be repaired or brought back online, or how quickly can functions be restored? Is there system redundancy? For example, if a major highway is shut down, are there other routes that can receive the traffic to avoid a back-up? If a substation goes down, are there other substations on the electricity grid that can pick up the load?

Continue to make use of the recommended Resources under Step 2.2 to determine the existence of policies, programs, and strategies that can help manage the climate impacts unique to your jurisdiction. As noted in Step 2.1, potential climate hazards and assets that can be evaluated for adaptive capacity can include:

- **Climate Hazards**: Drought; Severe Storms/Wind; Extreme Heat; Inland Flooding; Landslides; Sea Level Rise/Coastal Flooding; Wildfire; Air Quality, Human Health and Ecological Hazards
- **Assets**: Natural and Managed Resources; Land Use and Community Development; Infrastructure; Public Health, Socioeconomics and Equity
Details on conducting an adaptive capacity analysis can be found under Phase 2, Step 2.3 of the SoCal APG.

**STEP 2.4: PRIORITIZE CLIMATE CHANGE VULNERABILITIES**

<table>
<thead>
<tr>
<th>Things to Prepare</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ List of Existing Policies and/or Plans that include Climate Adaptation Goals,</td>
<td>☑ Local General Plan, Local Hazard Mitigation Plan (LHMP), Climate Action</td>
</tr>
<tr>
<td>Strategies, Policies, etc.</td>
<td>or Adaptation Plan (CAP/CAAP) if available</td>
</tr>
<tr>
<td>☑ Table Summarizing Vulnerabilities and Consequence</td>
<td>☑ SoCal CAF General Plan and Vulnerability Assessment Gap Analyses</td>
</tr>
<tr>
<td></td>
<td>☑ SoCal CAF Outreach Toolkit: Outreach Strategy</td>
</tr>
<tr>
<td></td>
<td>☑ SoCal CAF Outreach Toolkit: Regional Coordination Strategy</td>
</tr>
<tr>
<td></td>
<td>☑ Governor’s Office of Planning and Research Defining Vulnerable Communities Guide</td>
</tr>
<tr>
<td></td>
<td>☑ Governor’s Office of Planning and Research Adaptation Clearinghouse</td>
</tr>
</tbody>
</table>

Building off Step 2.3 and your matrix of assets that can be evaluated for adaptive capacity, your next step is to prioritize climate change vulnerabilities based on a systematic method of scoring that considers potential impacts and adaptive capacity. Vulnerability scoring helps clarify which climate change impacts pose the greatest threats and should be prioritized when conducting a vulnerability assessment for your jurisdiction and when determining which adaptation and resilience strategies to incorporate into your general plan safety element for SB 379 compliance. Shown below is the recommended scoring rubric for adaptive capacity as developed under the California Adaptation Planning Guide. Further details on prioritizing climate change vulnerabilities and conducting a vulnerability scoring rubric can be found under Phase 2, Step 2.4 of the SoCal APG. See Section 5 for a case study on climate hazard identification and prioritization from the City of Hermosa Beach.

<table>
<thead>
<tr>
<th>Score</th>
<th>Potential Impact</th>
<th>Adaptive Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Impact is unlikely based on projected exposure; would result in minor consequences to public health, safety, and/or other metrics of concern.</td>
<td>The population or asset lacks capacity to manage climate impact; major changes would be required.</td>
</tr>
<tr>
<td>Medium</td>
<td>Impact is somewhat likely based on projected exposure; would result in some consequences to public health, safety, and/or other metrics of concern.</td>
<td>The population or asset has some capacity to manage climate impact; some changes would be required.</td>
</tr>
<tr>
<td>High</td>
<td>Impact is highly likely based on projected exposure; would result in substantial consequences to public health, safety, and/or other metrics of concern.</td>
<td>The population or asset has high capacity to manage climate impact; minimal to no changes are required.</td>
</tr>
</tbody>
</table>

**OUTREACH & ENGAGEMENT CONSIDERATIONS**

While there are many potential approaches to scoring vulnerability, the best approach should be informed by community priorities. Expanding on the climate conversation resources and templates of the Outreach Toolkit, consider developing an on-the-ground understanding of climate vulnerabilities through collaboration with community members both internal and external to your organization. Expanded outreach and engagement efforts include:

- Target stakeholder interviews or focus groups
- Storytelling timelines of historic climate disasters and SB 379 compliance
- Asset mapping for greater community understanding of climate vulnerability data
- Community-based participatory research with non-profit organizations, universities, etc.

In addition to the community capacity building workshop templates and materials, the Outreach Toolkit also includes SCAG’s outreach strategy for developing the SoCal CAF. While the CAF: Regional Coordination Strategy may not directly align with developing and evaluating your community assets for adaptive capacity, this report can serve as best practice examples on how to engage with communities on-the-ground:

The CAF: Regional Coordination Strategy summarizes the outreach and engagement strategies and activities carried throughout development of the SoCal CAF. Outreach and engagement activities included three distinct types of outreach that occurred during different phases of the Project with distinct purposes. These activities included: (1) public outreach, (2) jurisdictional outreach, and (3) regional/subregional outreach.

The CAF: Regional Coordination Strategy can be found in the Communication & Outreach Toolkit posted on the SCAG Climate Adaptation Framework website.
Once you have completed a vulnerability assessment that identifies the risks that climate change poses to your jurisdiction, the next step in fulfilling the SB 379 requirements is to articulate a **SET OF ADAPTATION AND RESILIENCE GOALS, POLICIES, AND OBJECTIVES** based off the findings of the vulnerability assessment. Determining adaptation goals, policies, and objectives is not only a requirement of SB 379, but an important part of developing a community vision for adaptation and resilience in the face of climate change. A set of initial goals, policies, and objectives can be built upon existing local plans and should reflect what is important to your community.

**STEP 3.1: SUMMARIZE VULNERABILITY**

While Step 3.1 is not a requirement of SB 379 compliance, more information on summarizing your jurisdiction’s vulnerabilities can be found in the SoCal APG. It may be helpful to follow the SoCal APG guidance on summarizing vulnerability to incorporate as part of the narrative of your vulnerability assessment when updating the safety element pursuant to SB 379.

**STEP 3.2: CONFIRM VISION AND GOALS**

<table>
<thead>
<tr>
<th>Things to Prepare</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Vision, Goals, and Objectives Statements</td>
<td>✓ SoCal CAF Outreach Toolkit</td>
</tr>
<tr>
<td>✓ A Set of Adaptation and Resilience Goals and Objectives</td>
<td>✓ SoCal APG</td>
</tr>
<tr>
<td>✓ Principles and Metrics for SCAG Jurisdictions</td>
<td>✓ Governor’s Office of Planning and Research Adaptation Clearinghouse</td>
</tr>
</tbody>
</table>

SCAG has developed a host of planning resources and tools to help planning staff address vulnerabilities by developing and prioritizing adaptation strategies. Beginning with the SoCal APG, you can consult the list of sample goals and objectives described in Phase 1, as well as a matrix of adaptation strategies and actions mentioned in Phase 3 as a starting point. Goals, objectives, and strategies should ultimately be refined to address the specific needs and priorities identified in Phase 0, as well as vulnerabilities identified in Phase 2. The SoCal APG offers four sample adaptation goals for the SCAG region:

- Resilient Communities
- Resilient Natural Environment
- Resilient Infrastructure and Built Environment
- Resilient Processes

**OUTREACH & ENGAGEMENT CONSIDERATIONS**

Continued engagement is key to developing adaptation strategies so that the community can choose the direction to take towards resilience. To comply with SB 379, a set of adaptation and resilience goals, policies, and objectives must be articulated. Stakeholder and community input will aid in “ground-truthing” the appropriate adaptation strategies as well as the feasibility of those strategies. Additionally, input from the community and stakeholders will be critical while prioritizing strategies to meet the greatest vulnerabilities or needs of the community. Please reference page 27 of the SoCal APG for best practices, tools, and resources for Phase 3 of the planning process.
These four goals can be a useful organizing framework to address climate adaptation and resilience in safety element updates and/or other planning documents. You can also find a list of objectives for each of these four goals outlined in the SoCal APG on pages 50-52 and in greater detail in the Principles and Metrics for SCAG Jurisdictions. This document also provides a menu of sample climate adaptation objectives associated with each goal and a suite of metrics for each of the goals. The Principles and Metrics for SCAG Jurisdictions can be found under Appendix F of the SoCal APG. These goals and objectives should be tailored to reflect your community’s unique conditions, needs, priorities, and vision.

**STEP 3.3: PREPARE ADAPTATION STRATEGIES**

**Things to Prepare**

- ☑️ A List of Adaptation Strategies that Address the Vulnerability Assessment

**Resources**

- ☑️ SoCal APG
- □ Matrix of Adaptation Strategies and Actions
- □ Library of Model Policies (General Plans, Local Coastal Programs)
- ☑️ Governor’s Office of Planning and Research Adaptation Clearinghouse

An adaptation strategy can be a policy, program, project, or action (for actions, see Phase 4) that increases resilience to climate change hazards. Climate adaptation strategies should be crafted in a manner that fits within the framework appropriate to the plan or program being developed (e.g., the general plan safety element, climate action or adaptation plan). Typically, for general plans, the framework includes goal statements with multiple objectives and/or policies associated with each goal. Following this framework is one option to comply with SB 379.

While each jurisdiction will have unique community-driven needs and vulnerabilities, you can identify climate adaptation strategies and actions that are applicable to your context and community by referencing the Matrix of Adaptation Strategies and Actions, found under Appendix B of the SoCal APG. This matrix provides over 275 climate adaptation strategies and actions organized and which can be filtered by climate hazards (e.g., multiple hazards, inland flood, extreme heat, etc.) and assets (e.g., agriculture, energy infrastructure, public transit, vulnerable populations, etc.). As many strategies and actions are cross-cutting and can apply to multiple hazards or multiple assets, it is recommended to filter by “multiple hazards” first.

Another tool that can help you develop a set of adaptation and resilience goals, policies, and objectives pursuant to SB 379 is SCAG’s Library of Model Policies, found under Appendix F of the SoCal APG. The library consists of a summary document and spreadsheet compiling a large selection of model policies that address various aspects of climate adaptation. The matrix can be used as an additional starting point to update safety elements pursuant to SB 379 and assist with integrating climate adaptation into other general plan elements. Most of the policies address multiple climate hazards, but there are also model policies for specific climate hazards related to extreme heat, air quality and vector borne disease, drought, severe storm/wind, inland flood, landslide, and wildfire. The general plan model policies are meant to be used as a starting point and should be refined to suit the unique context of your local community. SCAG has also developed a suite of model policies for coastal communities that are vulnerable to sea level rise, also found under Appendix F of the SoCal APG. This resource can assist coastal communities with
incorporating policies into their local coastal programs (LCPs), as well as the safety element, to mitigate and adapt to sea level rise and flooding risks.

**STEP 3.4: PRIORITIZE ADAPTATION STRATEGIES**

**Things to Prepare**

- Stakeholder and community input on greatest vulnerabilities/needs
- A prioritized list of adaptation strategies

**Resources**

- SoCal APG
- Financing Climate-safe Infrastructure report and resources
- Governor’s Office of Planning and Research Adaptation Clearinghouse

Phase 3 of the SoCal APG outlines several criteria on pages 125-126 that can assist you with prioritizing adaptation strategies for updating your safety element, LHMP, CAP/CAAP, or other plan in compliance with SB 379. Continual engagement with members of the community and stakeholders should be conducted (you can reference the resources outlined in Phase 0) to prioritize strategies and meet the needs of your community.

When developing and prioritizing adaptation strategies, it is also important to consider funding options and availability. SCAG prepared a report titled *Funding and Financing Climate-safe Infrastructure* that serves as a guide for local agencies on climate adaptation funding and financing, with a focus on infrastructure. The report is available in *Appendix E of the SoCal APG*. The report characterizes the climate adaptation infrastructure funding gap, provides over-arching strategies and policy guidance based on recent state publications, and summarizes challenges that local agencies face. In addition to grant opportunities, local matching funds, tax increment/benefit districts, and special tax measures, the materials also outline impacts from the insurance and bond markets to municipal budgets. It provides an adaptation finance toolkit to assist you prepare (see Step 3.3) and prioritize (see Step 3.4) your adaptation strategies. Consider consulting this report when developing adaptation strategies to increase the likelihood of obtaining funding to carry out the last requirement of SB 379, which is to create a set of feasible implementation measures (see Phase 4).

Recognizing the public health and economic crises presented by COVID-19, SCAG also prepared a report titled *COVID-19 Economic Recovery Strategies for Climate Adaptation*. The report includes recommendations on incorporating climate adaptation into a local agency’s long term capital improvement plan, as well as information and trends of potential public funding sources, strategies, and planning opportunities to tie adaptation and resilience into economic recovery efforts. The report is available under *Appendix E of the SoCal APG*. See *Section 5* for a case study on a vulnerability assessment.
Phase 4: Implement, Monitor, Evaluate, and Adjust

Once you have articulated a set of adaptation and resilience goals, policies, and objectives, the next step in complying with SB 379 is to apply a SET OF FEASIBLE IMPLEMENTATION MEASURES meant to carry out the identified goals, policies, and objectives. How you organize these implementation measures may depend on whether you are complying with SB 379 through a safety element, LHMP, or CAAP/CAP. For example, implementing actions can be incorporated into the general plan implementation matrix if you are working on a safety element update.

**STEP 4.1: IMPLEMENT**

**Things to Prepare**
- A set of feasible implementation measures
- Considerations of implementation measures for populations and Disadvantaged Communities impacted by climate hazards

**Resources**
- SoCal APG
- Matrix of Adaptation Strategies and Actions
- Project Checklists for Climate Adaptation
- Adaptation Infrastructure Impacts and Resilience Project Tracker
- Decision Tree Toolkit for Local Governments
- Financing Climate-safe Infrastructure report and resources
- Governor’s Office of Planning and Research Adaptation Clearinghouse

Phase 4 of the SoCal APG provides step-by-step guidance on establishing feasible implementation actions to support the goals, policies, and objectives developed through Phase 3. To assist with implementation of climate adaptation, you can reference the SoCal APG for additional resources, toolkits, and examples as well as the Climate Adaptation Strategy Matrix mentioned above in Step 3.3 to select implementing actions for the goals, policies, and objectives chosen in Phase 3.

In addition, SCAG prepared a set of Project Checklists for Climate Adaptation that offer a template for incorporating climate adaptation elements into local project approval processes, such as residential and commercial development and infrastructure projects, and identify appropriate adaptation measures that may be needed to make new development resilient to climate-change. The checklists address several climate hazards (drought, extreme heat, inland flooding, landslide, sea level rise/coastal flooding, and wildfire) and are intended to help project proponents and city planning staff consider climate change hazards and vulnerabilities during the permit review and approval process, and incorporate elements or design changes to ensure projects are resilient to the anticipated impacts of climate change. Specifically, you can use the checklists to screen thresholds for

**OUTREACH & ENGAGEMENT CONSIDERATIONS**

Implementing all the work done throughout Phases 1-3 is critical to building climate resilience in your community. Similarly, it is critical to maintain partnerships and engagement with community members and stakeholders as you implement, monitor, and improve adaptation action. SB 379 requires applying a set of feasible implementation measures to your adaptation planning. This will require outreach and engagement during the implementation phase to bolster community support and understanding for climate adaptation. Please reference pages 147-148 of the SoCal APG for ideas, best practices, and an example for continuing your outreach and engagement during the culminating phase of the adaptation planning process.
the covered climate hazards, reference the detailed checklists for each hazard, assess a project’s vulnerability, assess potential consequences of a project based on several factors, and assess a project’s adaptive capacity based on the adaptation measures incorporated into its design. While the checklists were developed to be used on a project-scale, they can also offer ideas for developing feasible implementation measures to minimize the effects of and be resilient to climate change as your community changes and grows. For example, an implementation measure could be “develop project checklists for climate hazards” for the objective “incorporate climate change into local project approval processes”.

Along with the project checklists, an Adaptation Infrastructure Impacts and Resilience Project Tracker Tool can help you quickly ascertain the extent of risks in your jurisdiction, including populations impacted by hazards and Disadvantaged Communities impacted by hazards. The spreadsheet tracking tool allows you to track where vulnerabilities exist, suggested or planned mitigation efforts and implementation status, as well as a list of planned projects that should undertake a vulnerability assessment. The tool includes fields for relevant data and information important for project tracking and prioritization (e.g., risk category, impacted community category, severity of risk, proposed mitigation strategy, cost of mitigation, impacted population, among others). This tool can assist you with selecting potential projects and offer ideas for implementation measures. You can find the checklists along with the project tracker under Appendix H of the SoCal APG.

To help choose and prioritize feasible implementation measures, you can use the Decision Tree Toolkit for Local Governments to perform a high-level benefit-cost analysis that is based on generalized inputs, but can also be substituted with locally-relevant inputs, for project categories and land use types. The toolkit is a spreadsheet that first assesses the severity of risk and urgency of timely mitigation to provide an early prioritization score of projects. If a benefit-cost analysis is warranted, you would be required to enter minimal additional project-specific information and local data, if available. The benefit-cost analysis tool will provide a more robust analysis with better local data. The tool includes a step for identifying potential funding mechanisms for

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**Snapshot of Project Checklists for Climate Adaptation**

<table>
<thead>
<tr>
<th>Climate Hazard</th>
<th>Screening Threshold Questions</th>
<th>Links or Sources of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drought</td>
<td>• Would project consume water resources in its construction or operation and if so, are the water sources supplying the project at risk from drought?</td>
<td>Urban Water Management Plan applicable to the project’s location</td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>• Is the area where your project is located expected to experience more than 30 heat health days per year over the project lifetime?</td>
<td>Maps based on California Heat Assessment Tool (CHAT):  <a href="https://www.ca-heat.org/">https://www.ca-heat.org/</a></td>
</tr>
<tr>
<td>Inland Flooding</td>
<td>• Is the project located in the 100-year or larger FEMA floodplain, otherwise known as the 1% annual chance flood?</td>
<td>FEMA Flood Maps: <a href="https://msc.fema.gov/portal/home">https://msc.fema.gov/portal/home</a></td>
</tr>
<tr>
<td>Landslides</td>
<td>• Is the project located in an area of moderate or high susceptibility to landside hazards?</td>
<td>USGS landslide susceptibility map: <a href="https://maps.conervation.ca.gov/landslide/sln/">https://maps.conervation.ca.gov/landslide/sln/</a></td>
</tr>
<tr>
<td>Sea Level Rise/Coastal Flooding</td>
<td>• Is the project in a SLR vulnerability zone, or will any infrastructure or resources that the project relies upon be affected by SLR (e.g., beach, groundwater)?</td>
<td>Use detailed local SLR maps, if available. Alternatively, use Our Coast Our Future tool: <a href="http://data.portblue.org/apps/local/cms/index.php?page=coastal-map/">http://data.portblue.org/apps/local/cms/index.php?page=coastal-map/</a></td>
</tr>
<tr>
<td>Wildfire</td>
<td>• Is the project located in a high or very high fire hazard zone?</td>
<td>CalFIRE Maps - <a href="https://ostm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-zones/fire-hazard-severity-zones-map/">https://ostm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-zones/fire-hazard-severity-zones-map/</a></td>
</tr>
</tbody>
</table>

Projects answering ‘Yes’ to any one of questions in Table 1 must complete the checklist for that hazard. If the answer to any question in Table 1 is ‘No’, the checklist for that climate hazard does not need to be completed. However, it is recommended that the project manager or department reviewing the project retain this document in their project records.
the project. A key aspect of this tool allows you to identify co-benefits, where a given mitigation measure may be able to address multiple risk categories and may be eligible for more funding sources than a mitigation without co-benefits. This tool relies on the data input for each project or risk in the Adaptation Infrastructure Impacts and Resilience Project Tracker Tool, which contains information about the risk category, mitigation, cost, funding potential, and other factors. The Decision Tree Toolkit can be found in Appendix D of the SoCal APG.

SCAG’s Funding and Financing Climate-safe Infrastructure report, mentioned above in Step 3.4 and found in Appendix E of the SoCal APG, provides a detailed list of funding sources for funding climate adaptation infrastructure. The report can be used to identify feasible implementation measures, as required by SB 379, through the lens of available and likely adaptation funding sources.

The implementation actions you choose should be suited to your local circumstances, but you must specifically address the following in your implementation measures to comply with SB 379.

### Required by SB379

<table>
<thead>
<tr>
<th>Action Description</th>
<th>SCAG Resources</th>
</tr>
</thead>
</table>
| Feasible methods to avoid or minimize climate change impacts associated with new uses of land. | ☑ Matrix of Adaptation Strategies and Actions  
                                      | ☑ Project Checklists for Climate Adaptation  
                                      | ☑ HELPR                                                                 |
| The location, when feasible, of new essential public facilities outside of at-risk areas, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, or identifying construction methods or other methods to minimize damage if these facilities are located in at-risk areas. | ☑ Project Checklists for Climate Adaptation  
                                      | ☑ Adaptation Infrastructure Impacts and Resilience Project Tracker  
                                      | ☑ Decision Tree Toolkit for Local Governments  
                                      | ☑ HELPR                                                                 |
| The designation of adequate and feasible infrastructure located in an at-risk area. | ☑ Library of Model Policies (General Plans, Local Coastal Programs)  
                                      | ☑ Matrix of Adaptation Strategies and Actions  
                                      | ☑ Project Checklists for Climate Adaptation                                                                 |
| Guidelines for working cooperatively with relevant local, regional, state, and federal agencies. | ☑ SoCal APG  
                                      | ☑ SoCal CAF Outreach toolkit                                                                 |
| The identification of natural infrastructure that may be used in adaptation projects. Where feasible, the plan shall use existing natural features and ecosystem processes, or the restoration of natural features and ecosystem processes, when developing alternatives for consideration. | ☑ Library of Model Policies (General Plans, Local Coastal Programs)  
                                      | ☑ Matrix of Adaptation Strategies and Actions  
                                      | ☑ Principles and Metrics for SCAG Jurisdictions                                                                 |

### STEP 4.2: MONITOR

You can find more information on this step in the SoCal APG, but this step is not explicitly required as part of SB 379. It is important to monitor changing conditions and track the effectiveness of adaptation strategies to ensure that they adequately and effectively address community vulnerability. You can reference this step of the SoCal APG, the Principles and Metrics for Local Jurisdictions, as well as the Adaptation Infrastructure Impacts and Resilience Project Tracker when updating the safety element pursuant to SB 379.

### STEP 4.3: EVALUATE

You can find more information on this step in the SoCal APG, but this step is not explicitly required as part of SB 379. Climate science, conditions, best practices, and communities are constantly evolving. As the adaptation planning process is

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**BEST PRACTICES TO CONSIDER WHEN PREPARING IMPLEMENTATION MEASURES**

- Foster local political buy in
- Seek sustained commitment
- Focus actions where the money is
- Piggyback on successful local projects
- Use existing processes, groups, or sources of funding
- Consider your jurisdiction’s partners
- Do not be afraid to build something new
cyclical, adjustments may be needed to the vulnerability assessment (Phase 2) and strategies you have identified and prioritized (Phase 3). You can reference this step of the SoCal APG when making future updates to your safety element, even if you have already achieved SB 379 compliance.

STEP 4.4: ADJUST

<table>
<thead>
<tr>
<th>Things to Prepare</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ SB 379-Compliant Document</td>
<td>☑ SoCal APG</td>
</tr>
<tr>
<td></td>
<td>☑ Local General Plan, Local Hazard Mitigation Plan (LHMP), Climate Action or Adaption Plan (CAP/CAAP) if available</td>
</tr>
</tbody>
</table>

If an existing LHMP, CAP/CAAP, or similar planning document contains climate adaptation and resilience strategies that comply with the requirements of SB 379, the safety element can be amended and updated by summarizing and referencing the adaptation information already incorporated in the LHMP, CAP/CAAP, or similar plan.

To ensure your existing LHMP, CAP/CAAP, or other adaptation document complies with the requirements of SB 379, evaluate your selected adaptation document for the following:

- The strategies were successfully implemented and new priorities are needed.
- Implementation is not achieving the results expected.
- The strategy has an unintended consequence.
- Funding has changed.
- Political and/or public priorities have changed.
- New climate science data is available.
- Other significant changes in the environment or circumstances.
PHASE 1
Explore, Define & Initiate

- SB 379 REGULATORY REQUIREMENTS
- N/A

- Local General Plan, LHMP, or CAP/CAAP if available
- Governor’s Office of Planning and Research Adaptation Clearinghouse

STEP 1.1 Motivation & Scope

STEP 1.2 Teams & Resources

STEP 1.3 Climate Effects & Community Elements

OUTREACH & ENGAGEMENT PHASE 0

- SCAG GRI
- SoCal CAF General Plan and Vulnerability Assessment Gap Analyses
- Local General Plan, Local Hazard Mitigation Plan (LHMP), Climate Action or Adaptation Plan (CAP/CAAP) if available

STEP 2.1 Exposure

STEP 2.2 Sensitivities & Potential Impacts

STEP 2.3 Adaptive Capacity

STEP 2.4 Vulnerability Scoring

PHASE 2
Assess Vulnerability

- Governor’s Office of Planning and Research Adaptation Clearinghouse

PHASE 3
Define Adaptation Framework & Strategies

- SoCal CAF Outreach Toolkit: Regional Coordination Strategy
- Governor’s Office of Planning and Research Adaptation Clearinghouse

STEP 3.1 Summarize Vulnerability

STEP 3.2 Confirm Vision & Goals

STEP 3.3 Prepare Adaptation Strategies

STEP 3.4 Prioritize Strategies

SB 379 REGULATORY REQUIREMENTS
A SET OF ADAPTATION AND RESILIENCE GOALS, POLICIES, AND OBJECTIVES based on the information in the vulnerability assessment for the protection of the community.

PHASE 4
Implement, Monitor, Evaluate, and Adjust

- SoCal APG
- Library of Model Policies (General Plans, Local Coastal Programs)

STEP 4.1 Implement

STEP 4.2 Monitor

STEP 4.3 Evaluate

STEP 4.4 Adjust

SB 379 REGULATORY REQUIREMENTS
A SET OF FEASIBLE IMPLEMENTATION MEASURES designed to carry out the identified goals, policies, and objectives.

- Local General Plan, LHMP, or CAP/CAAP if available
- Governor’s Office of Planning and Research Adaptation Clearinghouse

STEP 4.4 Adjust

- Local General Plan, LHMP, or CAP/CAAP if available
- Governor’s Office of Planning and Research Adaptation Clearinghouse

- SoCal APG
- Library of Model Policies (General Plans, Local Coastal Programs)

- SoCal CAF General Plan and Vulnerability Assessment Gap Analyses

- Governor’s Office of Planning and Research Adaptation Clearinghouse

- SoCal CAF General Plan and Vulnerability Assessment Gap Analyses
SECTION 4
PLANNING FOR EQUITABLE CLIMATE ADAPTATION

4.1 | The Importance of Environmental Justice in Climate Adaptation Planning

Environmental Justice (EJ) is about equal and fair access to a healthy environment, with the goal of protecting underrepresented and vulnerable communities from incurring disproportionate environmental impacts. Climate change is not only an issue of the environment, but also an issue of environmental justice and human rights. Disruptions from climate change, whether individual events or worsening cumulative effects, will impact the region’s public health, vulnerable populations, economy, natural resources, built environment, transportation system, housing and water supplies, utility infrastructure and emergency services to varying degrees. With the impacts of climate change already being felt, vulnerable communities continue to bear disproportionate burdens and experience the adverse impacts of climate change, even if many contribute little to the underlying causes. The ability to adapt to climate change is critical to prevent further heightened disparities in health outcomes across populations.

4.2 | Overview of SB 1000 Statutory Requirements

SB 1000 aims to encourage local jurisdictions and community stakeholders throughout California to proactively plan for and address environmental justice concerns at the outset when developing all components of a general plan, including the safety element. As mentioned in Section 1.4, the law requires a local jurisdiction with Disadvantaged Communities to prepare an EJ element or integrate EJ policies into other elements when two or more elements in a general plan are revised after January 1, 2018. Local jurisdictions with Disadvantaged Communities can comply with SB 1000 by incorporating EJ policies in their general plans through either a stand-alone element, or by integrating relevant goals, policies, and objectives throughout other elements. As you prepare your updated safety element to include climate adaptation and resilience strategies, we recommend including EJ policies as part of our SB 379-compliant safety element for efficient use of your jurisdiction’s resources.

SB 379’s statutes relate closely to SB 1000 in that both involve assessing vulnerabilities of local communities and developing general plan goals, policies, and objectives to address those vulnerabilities. Similar to SB 379 (see Section 1.3), there are three major statutory components of SB 1000:

- Identify **objectives and policies to reduce the unique or compounded health risks in disadvantaged communities** by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.
- Identify **objectives and policies to promote civic engagement** in the public decision-making process.
- Identify objectives and policies that **prioritize improvements and programs that address the needs** of disadvantaged communities.

4.3 | Summary of SB 1000 Resources

**CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE’S SB 1000 IMPLEMENTATION TOOLKIT**

The California Environmental Justice Alliance (CEJA) is a statewide, community-led alliance working to advance environmental, health, and social justice and co-sponsored the SB 1000 bill. In October 2017, CEJA prepared a SB 1000 Implementation Toolkit that provides guidance on implementing SB 1000. The toolkit describes the EJ planning process, identifying Disadvantaged Communities, strategies for community engagement, considerations for developing goals, objectives, and policies, sample case studies, and potential funding sources.

Section 5 of the toolkit describes the SB 1000 requirement to develop the eight EJ-related goals and objectives (these are listed out in the toolkit as well as #1 in Section 4.2 above).
Specifically, the toolkit recommends integrating climate-related policies between general plan elements, including the safety element pursuant to SB 379 and possible EJ stand-alone element. Although addressing climate change impacts in Disadvantaged Communities is not explicitly required as one of the eight goals under SB 1000, reducing climate vulnerabilities can help to reduce community health risks and promote EJ, consistent with the intent of SB 1000. The toolkit offers ideas of objectives and policies related to the EJ and climate adaptation goal to “reduce impacts of climate change” in Section 5.9. These objectives and policies can be used and tailored to your local community to comply with aspects of SB 1000 and SB 379.

You can find the toolkit through CEJA’s website.

GOVERNOR’S OFFICE OF PLANNING AND RESEARCH’S GENERAL PLAN GUIDELINES, CHAPTER 4, SECTION 8

In June 2020, the Governor’s Office of Planning and Research (OPR) released an updated Environmental Justice Element (EJ) of the General Plan Guidelines. The guidelines serve as a “how to” resource for drafting general plan elements in compliance with SB 1000. Specifically, the updated Section 8 of Chapter 4 guidelines include:

- A brief history of EJ in California
- A summary of SB 1000, and the regulatory and policy context related to EJ
- Guidance for determining whether an EJ element or equivalent is required in your local jurisdiction, including identifying the location of Disadvantaged Communities
- Guidance for community engagement when addressing EJ and Disadvantaged Communities
- Guidance for developing EJ goals, policies, and programs pursuant to SB 1000

You can find the EJ element guidelines, as well as general plan guidelines for all elements, on OPR’s website.
As outlined in this guidebook, local governments have several methods of achieving SB 379 compliance:

- Updating the general plan safety element to include climate adaptation and resilience strategies if an LHMP has not been adopted; OR
- If an existing LHMP or CAP/CAAP contains (i) a VULNERABILITY ASSESSMENT, (ii) a SET OF ADAPTATION AND RESILIENCE GOALS, POLICIES, AND OBJECTIVES, and (iii) SET OF FEASIBLE IMPLEMENTATION MEASURES that comply with the requirements of SB 379, the safety element can be updated by summarizing and referencing the adaptation information already incorporated in the LHMP, CAP/CAAP, or similar plan.

This section consists of case studies of jurisdictions achieving SB 379 compliance through the following methods:

- General Plan Safety Element Update
- Local Hazard Mitigation Plan
- Climate Action/Adaptation Plan
- Other approaches
- Vulnerability Assessment
- SB 1000 Environmental Justice Element
5.1 General Plan Safety Element: City of South Gate, General Plan 2035 (March 2018)

In July 2015, the City of South Gate kicked off the development of a Local Hazard Mitigation Plan (LHMP) and an update to the General Plan Safety Element. Together, the two documents provide the City’s framework to mitigate local risks to natural hazards and plan for a resilient future.

In March 2018, the South Gate City Council adopted an updated Safety Element which addresses geologic, seismic, flood, and fire hazards, as well as hazards created by human activity such as hazardous materials and incidents that call for emergency protection. The Local Hazard Mitigation Plan prepared in support of their Safety Element complies with SB 379, requiring the Safety Element to address climate adaptation and resiliency strategies applicable to the City. The City achieved SB 379 compliance under Option 1.

Shown to the right is a sample of the LHMP mitigation measures included within the updated Safety Element.

Visit the City of South Gate: Safety Element website to view the approved General Plan Safety Element and Local Hazard Mitigation Plan.

Climate Adaptation Goals, Objectives, and Policies

**Goal 5:** Educated and empowered community members prepare for, mitigate, respond to, and recover from hazards that affect their family and property.

**Objective 5.1:** Foster a high level of public understanding of local hazards.

**Policy**

5.1.1 Provide access to information on natural hazards to all cultural and language groups in the City.
5.1.2 Provide coordinated public information on disaster and emergency preparedness.
5.1.3 Consult with Los Angeles County and utility providers to disseminate up-to-date information on natural disaster preparedness.
5.1.4 Require new developers of industrial uses or hazardous material-related facilities to provide adequate community notice and processes for community notifications and complaints.
5.1.5 Maintain and disseminate up-to-date resources on hazards information, including areas within FEMA flood hazard zones.
5.1.6 Collaborate with responsible agencies to disseminate information on flood hazards to building owners and residents in dam inundation areas, or areas in areas of other localized flooding risk.
5.1.7 Consult with Los Angeles County to improve emergency flood alert systems.
5.1.8 Coordinate with the South Coast Air Quality Management District and local service providers to provide coordinated community messaging and notification of extreme heat days or days with poor air quality.

**Objective 5.2:** Empower the community to access hazard mitigation resources and support optimal levels of safety.

**Policy**

5.2.1 Continue participation in the National Flood Insurance Protection Program.
5.2.2 Publicize the availability of flood insurance to South Gate residents and business owners.
5.2.3 Require developments in the 100- and 500-year floodplain and other high-risk inundation areas to disclose flood risks and identify appropriate flood mitigation actions, for incorporation into project design.
5.2.4 Promote neighborhood disaster preparedness through Community Emergency Response Team (CERT) training, in conjunction with Los Angeles County.
5.2.5 Address the needs of individuals with limited mobility or limited access to transportation for access to safe and comfortable shelter during extreme heat events or other severe weather events.
In March 2018, the City of Hermosa Beach adopted the updated Local Hazard Mitigation Plan (LHMP). The LHMP represents the City’s commitment to creating a more resilient community and taking actions to reduce risk and lessen the effects of climate hazards on the people and property of the City. Development of the LHMP included formation of a hazard mitigation planning team (Step 1.2), outreach to neighboring jurisdictions (Step 2.4), and conducting a vulnerability assessment (Phase 2).

The City achieved SB 379 compliance under Option 2 by including LHMP implementation plans, background studies, and references of the LHMP throughout PLAN Hermosa, the City’s 2017 Integrate General Plan and Coastal Land Use Plan.

Shown to the right are the summary tables of climate hazards identified and prioritized by the City during development of the LHMP (Step 2.4). Prioritization of climate hazards helped to inform and develop the City’s hazard mitigation goals and actions.

Visit the City of Hermosa Beach: Hazard Mitigation Plan website to view the approved 2017 City of Hermosa Beach Local Hazard Mitigation Plan. The City’s list of mitigation strategies and goals can be found under Chapter 7 of the LHMP.
5.3: Climate Action/Adaptation Plan: City of Long Beach, Proposed Climate Action and Adaptation Plan (November 2020)

The City of Long Beach proposed Climate Action and Adaptation Plan (CAAP) includes an assessment of the City’s climate vulnerabilities and objectives and strategies, titled “actions,” to reduce city-wide GHG emissions and adapt and increase resilience to climate risks, such as sea level rise, flooding, extreme heat, poor air quality, and drought. Each climate action and adaptation “action” description includes a list of implementation actions, co-benefits, and an equity strategy.

These components comply with SB 379 under Option 2, which requires an existing CAP/CAAP to include (i) a vulnerability assessment, (ii) a set of adaptation and resilience goals, policies, and objectives, and (iii) set of feasible implementation measures. The City Council confirmed the plan in January 2021 and it is anticipated to be adopted by Fall 2021.

Shown to the right is a sample of Sea Level Rise and Flooding adaptation objectives and actions from the “Adaptation Actions” chapter of the proposed CAAP.

Visit the City of Long Beach: Climate Action And Adaptation Plan (CAAP) website to view the complete proposed CAAP.
5.4: Other Approaches: San Bernardino County Transportation Authority/Western Riverside Council of Governments, Resilient IE (February 2020)

Shown to the right are samples of adaptation and resilience strategies from the *San Bernardino County Resilience Strategy (2019)* and *Western Riverside Adaptation and Resiliency Strategy (2019)* – two resources part of the joint San Bernardino County Transportation Authority (SBCTA)/Western Riverside Council of Governments (WRCOG) Resilient IE project.

Resilient IE works to support regional and local efforts to prepare for and mitigate risks associated with climate adaptation on the region’s transportation infrastructure. While the adaptation and resilience strategies within Resilient IE were developed following vulnerability assessments and findings unique to SBCTA and WRCOG jurisdictions, the strategies and policies can provide a template for climate adaptation, resiliency, and hazard planning strategies for SB 379 compliance.

Visit the Western Riverside Council of Governments Resilient IE website to access the Resilient IE Toolkit containing adaptation and resilience strategies and analyses that cities can use to meet SB 379 requirements.
5.5: Vulnerability Assessment: City of Rancho Palos Verdes, Vulnerability Assessment (September 2019)

In September 2019, the South Bay Cities Council of Governments on behalf of the City of Rancho Palos Verdes completed a vulnerability assessment on the potential impacts of climate change on critical facilities and residents’ well-being.

The vulnerability assessment followed state guidelines from OPR and the California APG framework to develop climate projects for the City based on the Cal-Adapt tool, obtain information on the types of structures and populations exposed/sensitive to climate hazards, and consult maps identifying areas with high risks. Part 1 of the vulnerability assessment outlines the climate projections for the City, broken out by climate hazard. Part 2 offers a risk assessment for both physical vulnerabilities (e.g., flood and sea level rise) as well as social vulnerabilities (e.g., people with disabilities and children).

Shown to the right are examples of maps from the City’s risk assessment, showing the exposure of critical facilities to flood risk (top) and the percentage of people with disabilities – who are disproportionately affected by climate hazards – by census tract in the City.

The vulnerability assessment is just one piece of complying with SB 379 but will lay the foundation for developing the required strategies and implementing actions.

Visit the City of Rancho Palos Verdes’ website to access their vulnerability assessment as well as updated safety element.
5.6: Vulnerability Assessment: County of Ventura, Vulnerability Assessment (December 2018)

In December 2018, the County of Ventura published the Ventura County (VC) Resilient Coastal Adaptation Vulnerability Assessment report to evaluate the variety of resources and infrastructure in the unincorporated coastal areas of the county and associated risks of future damage due to coastal hazards.

The vulnerability assessment consisted of both a spatial analysis on the intersection of various coastal hazard types, as well as a social vulnerability assessment to study the economic impacts to populations, infrastructure, and ecological goods and services along the County coast. The findings from the economic analysis shows the estimated value of damage to property, key infrastructure, and the potential losses of spending and tax revenue due to impacts to the County’s beaches and beach parks.

Shown to the right is the map analysis of coastal erosion along the Ventura County coast, one of the coastal hazards reviewed, as well as the results of the economic analysis.

Visit the County of Ventura website for more information on the County’s Vulnerability Assessment and 2040 Ventura County General Plan which incorporates findings from the assessment.

5.7: SB 1000 Environmental Justice Element: City of Port Hueneme, Proposed 2045 General Plan Social Equity Chapter (April 2021)
5.7: SB 1000 Environmental Justice Element: City of Port Hueneme, Proposed 2045 General Plan Social Equity Chapter (April 2021)

In April 2021, the City of Port Hueneme released a Notice of Preparation for a comprehensive update of all elements of the existing Port Hueneme General Plan, as well the inclusion of a Social Equity and Climate Action Plan (CAP) as new elements under the General Plan. The Social Equity component of the plan will meet SB 1000 requirements such as identification of disadvantaged communities within the City and engagement with communities to promote equitable access to environmental benefits.

In conjunction with the General Plan update, the CAP will include development of a community-wide greenhouse gas (GHG) inventory, GHG reduction targets, and GHG mitigation strategies to also achieve SB 379 compliance.

The City of Port Hueneme provides one example of SB 1000 compliance triggered by updates to two or more general plan elements, as noted under Section 4.2.

Shown to the right are findings from the Port Hueneme General Plan Background Report: Social Equity which include data on the City’s CalEnviroScreen environmental indicator scores and preparation schedule for the General Plan update.

Visit the City of Port Hueneme website for more information on the City’s General Plan update.
SOUTHERN CALIFORNIA
CLIMATE ADAPTATION FRAMEWORK
SB 379 COMPLIANCE CURRICULUM
FOR LOCAL JURISDICTIONS
JUNE 2021