

Flood-After-Fire Resilience Plan Alignment Guide



The background of the entire page is a topographic map with contour lines in a light teal color against a darker teal background. The lines are irregular and wavy, representing terrain elevation. In the upper right corner, the text "California Governor's Office of Planning and Research" is displayed in a white, sans-serif font, arranged in two lines.

**California Governor's Office of
Planning and Research**

Acknowledgment

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This guide is part of the Climate Resilience Plan Alignment Toolkit on the Adaptation Clearinghouse, developed by the Integrated Climate Adaptation and Resiliency Program at the Governor's Office of Planning and Research (OPR).

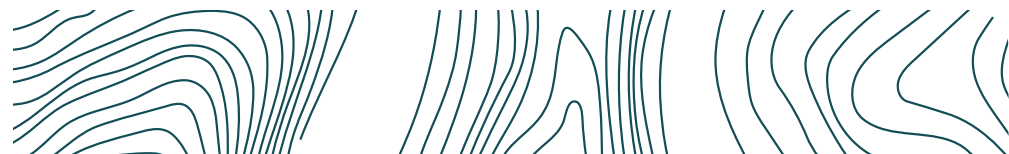
Learn more at ResilientCA.org/plan-alignment.

If viewing the printed version of this guide, visit ResilientCA.org/plan-alignment/guidelinks to reference the website links within.



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Intro

Climate change is here, and it's already impacting the communities, economies, and environments of California.

Unified, inclusive, and strategic planning builds resilience to climate impacts. Plan alignment and integration help protect communities from the threat of climate change such as wildfire, increasing temperatures and extreme heat, sea level rise, drought, and the compounding impacts of flood-after-fire events.

What is Plan Alignment?

The **process of plan alignment** leverages connections, information, and resources to build shared language, data foundations, and processes across multiple planning efforts at any scale. Plan alignment, in essence, is based on collaboration. The resulting **plan alignment products** are:

- *A suite of plans (with different scopes and purposes) that share the same data, similar underlying assumptions, aligned visions, and complementary goals, strategies, and actions.*
- *A shared understanding, process, and structure for multiple entities in a community or region to continue to collaborate and align efforts over the long term.*

Plan alignment helps communities integrate planning teams, data, and processes to achieve more holistic and effective solutions, and better outcomes for everyone.



How Can Plan Alignment Build Resilience to Flood-After-Fire Events?

Debris flows, landslides, and debris-laden floods are dangerous post-fire hazards. These incidents, also called “flood-after-fire” and “post-fire flood” events, often occur in areas left charred, dry, and less able to absorb water after a fire, and are most likely to occur in hilly and mountainous areas – with the area of a single event ranging from a few square yards to hundreds of acres. Increased risk of flood-after-fire events remain higher than normal until vegetation is restored – up to five years after a wildfire. These events can have devastating impacts on communities, including loss of infrastructure and life, impact the water quality of downstream rivers and streams, and damage habitat.

As fires become more severe and the wildfire season expands earlier in the summer and later in autumn and winter due to the impacts of climate change, there is an increased need to establish and align goals, policies, and actions across multiple planning documents to promote greater awareness of post-fire flooding risks, inform future land use and development decisions, and decrease the impacts of flood-after-fire events. These planning efforts should incorporate future climate scenarios to ensure that strategies and efforts build long-term resiliency to shifts in wildfire, drought, and precipitation patterns.

The preparation, implementation, and alignment of local plans to comprehensively address flood-after-fire risk is important in working towards resilience under a changing climate. For additional information on the characteristics of flood-after-fire events in California and state efforts to address wildfire and flood risk, see the [State Hazard Mitigation Plan](#), the [California Climate Adaptation Strategy](#), and the [Wildfire and Forest Resilience Action Plan](#).

Why Plan Alignment for Climate Resilience?

Climate change does not stop at jurisdictional boundaries and continues to impact all aspects of our communities, economies, and environment. **An adaptive response requires a fundamental change in the way that communities plan and evolve over time: a response that utilizes future climate scenarios to guide planning decisions and builds a shared vision of resilience for all through collaboration, equity, and alignment.** A comprehensive and cohesive planning approach can pay great dividends and enable communities to holistically integrate multiple climate change considerations and resilience strategies throughout government decision-making processes and other efforts throughout a community or region. Most importantly, the intended outcome of plan alignment is that communities and regions are in a better position to mitigate the impacts of climate change. Other benefits include reduced duplication of effort, lowered potential for policy conflicts, streamlined public outreach, and increased eligibility for implementation funding.



What is the Purpose of The Climate Resilience Plan Alignment Guide Series?

The *Flood-After-Fire Resilience Plan Alignment Guide* is part of a series of Climate Resilience Plan Alignment Guides. These guides are a suite of collaboration tools for local government staff and decision makers, tribes and tribal-serving organizations, community members and non-profits, regional entities, and others to coordinate and align local and regional planning efforts. The *Flood-After-Fire Resilience Plan Alignment Guide* focuses on aligning planning efforts for resilience to flooding, debris flow, and landslides in burn scars in the context of climate change.

The Guides provide guidance and resources to help planners and communities scope and align different local and regional planning efforts, with a focus on the key components of local plans and planning process critical for adapting to climate change and mitigating future risk. The Guides begin by offering introductory information on how to foster greater coordination across planning initiatives. This process is relevant and applicable across all geographies and their unique climate vulnerabilities. The introduction describes overarching principles of alignment, best practices, and tips for working through challenges that may arise during the process. From there, communities can explore and compare one or more types of plans based on their applicability to their community. Resource links are provided throughout the Guides to support plan alignment implementation. For additional collaboration resources, including examples and

case studies of plan alignment from communities across California and an interactive decision-support tool, please visit the online Climate Resilience Plan Alignment Toolkit at ResilientCa.org/plan-alignment.

Because communities throughout California are varied and have different needs, the recommendations in this guide are designed for a wide spectrum of uses and applications. This document is meant to be a resource for the public to use at their discretion; it does not alter or direct public agency discretion or decision making in preparing planning documents. This document should not be construed as legal advice, nor is the Governor's Office of Planning and Research enforcing or attempting to enforce any part of the recommendations contained herein (Gov. Code § 65035).

Plans Discussed in this Guide:

- *Local Hazard Mitigation Plans*
- *General Plans, with a specific focus on Safety and Housing Elements*
- *Climate Adaptation Plans*
- *Disaster Recovery Frameworks and Plans*

Big Ideas

Where do I begin? That's a reasonable question that will be answered differently for each community. The following “**Big Ideas**” are guiding principles that describe what it means to align planning efforts, outline implementation tips for making it happen, and emphasize strategies for integrating climate resilience throughout the process. These are designed to be universally applicable for any community or region, at any planning stage. Keeping these in mind as both a starting point and as a central consideration throughout the planning process will set communities up for success regardless of where they begin their plan alignment journey.

↩ *This is a tricky spot. These troubleshooting tips offer guidance and insights into managing challenges that may arise during the plan alignment process.*



Build & Leverage An Alignment Team

▶ **Local agency champions are needed—become a champion of integrated planning!**

Dedicate a plan alignment captain with strong facilitation skills to coordinate and become knowledgeable about all applicable plans, and to lead collaborations with other planning sectors and jurisdictions.

↪ *Each community's approach to defining local agency champions will be unique. For example, many larger cities have identified Chief Resilience Officers to lead efforts, and some moderate sized cities have broadened sustainability directors' responsibilities to incorporate these topics more fully. Smaller jurisdictions may choose to designate a planning and community development director or leverage other existing positions for this role. For cities with capacity, committing staff resources to an "alignment captain" could reduce effort and maintain staff capacity and knowledge in the long run. Additionally, an alignment captain with strong facilitation skills and experience coordinating with diverse entities, communities, and sectors can help ensure the success of alignment efforts.*

▶ **Develop a standing "alignment team" of diverse representatives from various planning efforts.** Meet regularly to maintain commitment, consistent coordination, and ongoing effort. This helps to build an understanding of each plan, overcome sector silos, gain buy-in from multiple agencies, and transfer knowledge.

↪ *"Alignment team" membership and size will be unique to each community and its goals. Consider incorporating the planning teams and lead departments responsible for the plans and processes ongoing in your community, and key community members or authorities that play a central role in community visioning, planning, and implementation. Objectives of this team include consolidating, aligning, and, when possible, standardizing planning requirements, metrics, funding, goals, and timelines.*

↪ *Consider developing a written formal agreement, such as a charter or Memorandum of Understanding (MoU), across the entities joining the team. This agreement will not only demonstrate commitment and clarify partner roles, but also ensure the support of departmental senior leadership and better allow team members to prioritize the work.*

↪ *Host discussions and set appropriate expectations about time commitment, including how often meetings will occur and how much work will occur between meetings. Adjust timelines to meet these expectations and capacity limitations.*

▶ **Make connections and build relationships with other local departments/divisions.**

Fostering this coordination early in the process allows departments to better identify opportunities for greater synthesis, such as co-designing projects, joining together to apply for funding, aligning budgets, and utilizing the same consultants.

↪ *Collaboration and engagement structures will look different for each community. Consider whether additional working groups or advisory groups may be useful to support multiple planning processes, such as a forming or leveraging a regional network, technical/science advisory committee or a community advisory committee. Each group may serve a unique purpose and operate at different timelines and scales in relation to each planning process.*

↪ *Maintaining alignment between departments, plans, and processes can be challenging when institutional knowledge and trusted relationships are lost to staffing changes over time. To address the challenges of staff turnover, consider developing staff continuity and transition strategies to maintain staff knowledge and capacity, such as requiring a transition memo from exiting staff to facilitate transition of knowledge to new staff and to maintain relationships between departments.*

Integrate & Align Public Engagement

▶ **Engage creatively and thoughtfully to identify consistent community goals and objectives.**

Think of new ways to engage diverse stakeholders, especially from underserved areas.

Consider developing a strategic community engagement plan during the early stages of the alignment process, with multiple engagement points throughout the planning process. Meet at places that are meaningful and accessible to those who live, work, and play in the community. If possible, compensate participants for their time and expertise, and provide accessibility, childcare, and translation services/materials. Always ask, “Who is missing? Who should be involved?” [Learn more about [Equitable Community Engagement](#)].

↪ *To obtain buy-in across all sectors of government and the community, tell unified stories about the community and climate change, tailor engagement to each unique audience, and invite the public to weigh in on how they can help develop and implement goals both early and throughout the process. Geographic context is important in determining stakeholders and identifying the right messaging. [Learn more about stakeholder mapping and engagement in Appendix A].*

↪ *Avoid underfunding the collaboration and facilitation pieces. Budget adequate resources and staff time, and if needed, adequate training for integrated facilitation, coordination, and community engagement activities early on – including adequate financial resources to support community members’ participation, such as stipends or consulting agreements.*

▶ **Leverage the engagement opportunities of other departments and planning efforts to streamline public input and priorities across numerous planning initiatives.** Attend other relevant planning-related events for cross-pollination and network building and develop a communications and engagement strategy that accounts for existing public input mechanisms.

↪ *Lack of communication and coordination between disparate planning efforts and stakeholder fatigue from too many outreach efforts can significantly bog down the process. Aligning and consolidating disparate community engagement efforts across departments can save resources, help mitigate stakeholder fatigue, and lead to better engagement outcomes over time.*

Prioritize & Advance Equity & Environmental Justice

▶ **Climate equity and environmental justice** should always be considered and reflected in the planning process. While some communities are better positioned to adapt to climate risks, others are disproportionately impacted by systemic socioeconomic and environmental inequities in addition to climate impacts. Key components of creating an equitable, climate-resilient community include identifying **vulnerable communities**, building **community adaptive capacity**, equitable **community engagement**, and prioritizing **procedural, distributional, and structural equity throughout** planning and implementation processes. [Learn more about [Climate Equity](#)].

↪ *Senate Bill (SB) 1000 (Gov. Code § 65302(h)) requires that all cities and counties with disadvantaged communities develop an environmental justice element or equivalent for their general plan. OPR’s guidance for the [Environmental Justice Element](#) in the General Plan Guidelines outlines guidance for developing goals, policies, and programs that address the unique and compounded health risks in disadvantaged communities and prioritize improvements and programs that meet the needs of disadvantaged communities. Local agencies can include environmental justice and equity-focused goals, policies, and programs in other plans to align with environmental justice elements in general plans. OPR also encourages communities to incorporate environmental justice and equity into their plans even when SB 1000 may not apply to a general plan in a specific community.*

▶ **Leverage the planning process and resources to build social and physical capacity across the community.** If outside expertise or technical assistance is needed to complete one or more plans, consider how to leverage this assistance to build long-term community capabilities to adapt, especially in disproportionately vulnerable communities.

Local Plans & State Regulations

Visual summary of relationships between common local resilience planning documents in California and key resilience planning regulations.

Note: this graphic reflects both plan relationships reflected in statute, such as relationships between Local Hazard Mitigation Plans and General Plan Safety Elements, as well as plan relationships that are topically relevant, but not legally related, such as relationships between Community Wildfire Protection Plans and General Plan Safety Elements. The Figure does not show all possible connections between plans, and is subject to change as new statutes come into effect.

For additional details and the most up-to-date information on local planning requirements, reference the following corresponding statutes:

AB 2140 (Hancock, 2006) - [Gov. Code §§ 65302.6 and 8685.9](#);

SB 379 (Jackson, 2015) - [Gov. Code § 65302\(g\)\(4\)](#);

SB 1035 (Jackson, 2018) - [Gov. Code § 65302\(g\)\(6\)](#);

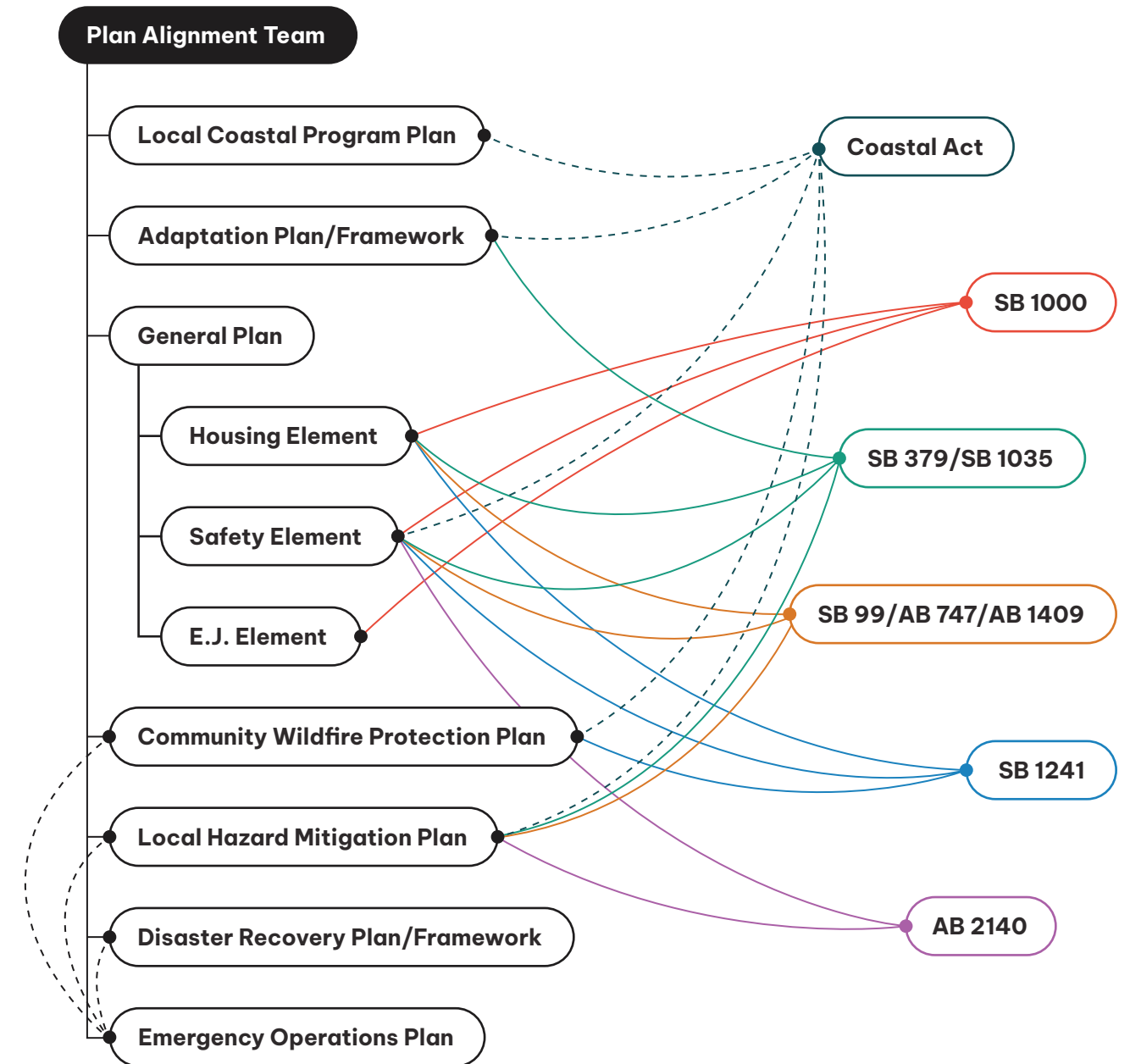
SB 1241 (Kehoe, 2012) - [Gov. Code §§ 65302 and 65302.5](#);

SB 1000 (Leyva, 2016) - [Gov. Code § 65302\(h\)](#);

SB 99 (Nielsen, 2019) - [Gov. Code § 65302\(g\)\(5\)](#);

AB 747 (Levine, 2019) and AB 1409 (Levine, 2021) - [Gov. Code § 65302.15](#); and,

California Coastal Act ([PRC § 30000 et seq.](#))



Build Relationships & Explore Opportunities to Support Alignment

- ▶ **Develop an overarching adaptation vision and a robust multi-hazard vulnerability and risk assessment to guide climate resilience plan alignment efforts.** A climate adaptation vision can exist as a standalone plan or series of agreed upon adaptation priorities, goals, and objectives, or be housed within another planning document. Both this vision and components used to develop it, such as cross-sector advisory groups, vulnerability assessments, and strategies or actions at multiple planning horizons, can be leveraged to support other plan updates.
 - ↪ *Interventions for one climate risk may exacerbate or interfere with responses to other climate risks. To avoid this pitfall, a comprehensive adaptation strategy or framework can help ensure specific interventions support the entire framework.*
- ▶ **Collaborate regionally and across jurisdictional boundaries.** Climate change impacts are not bound by jurisdictional lines and regional coordination helps identify climate change risks that may originate outside of a plan's jurisdictional coverage. Collaborative regional solutions, including shared resources and integrated management, can expedite comprehensive risk mitigation actions.

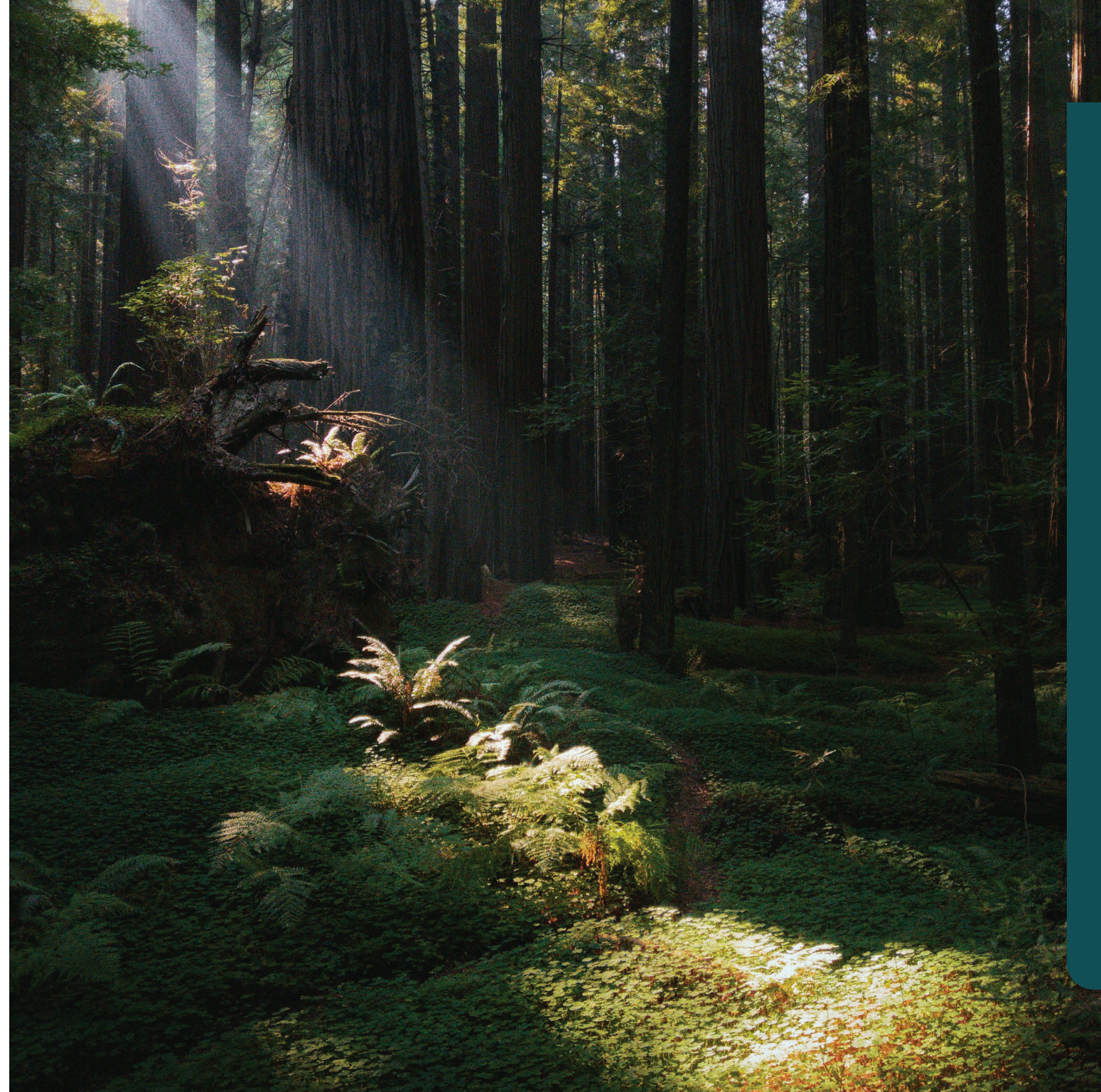
↪ *Leverage existing regional bodies and collaborative efforts like Metropolitan Planning Organizations, Councils of Governments, non-profit networks, multi-sector networks, or regional climate collaboratives.*

- ▶ **Identify funding sources** that support the alignment of multiple plans. For example, the California Governor's Office of Emergency Services (Cal OES) and Federal Emergency Management Agency (FEMA) hazard mitigation planning funds can support the development of a climate vulnerability assessment for a local hazard mitigation plan (LHMP), a related Safety Element update, disaster recovery and resilience planning, wildfire protection planning, and more. Long-term financing and funding opportunities will vary for each community. [Explore resources for [Investing in Adaptation](#)].
 - ↪ *Leverage philanthropic relationships early in the process to help secure grants for planning and fill gaps left by insurance and federal/state recovery resources.*

Best Practices

While plan alignment ideally begins during the scoping phase of a planning process and continues throughout all stages, alignment can begin at any phase. This section provides examples of “**Best Practices**” and tips for avoiding tricky spots for whichever part of the planning process your community is in. It is also aligned with the four-phase approach in the [California Adaptation Planning Guide](#) and [General Plan Guidelines](#) to break the content into manageable steps.

Every community will vary in the approach and sequencing of their planning process; as such, the following phased approach is not meant to be prescriptive, but rather offer a menu of ideas that agencies can select at their discretion for implementing and sequencing plan alignment concepts.



Phase 1: Explore, Define & Initiate

Participating in visioning and engagement activities, identifying goals and resources, and outlining a process builds a plan's foundation. Exploring, defining, and initiating one or more plans simultaneously can allow integration at the outset of each process, and the opportunity to streamline resources, staff, and efforts across involved departments and entities throughout the process.

For more on this phase:

- *General Plan Guidelines: [Vision & Engagement](#), [Formulate Goals](#)*
- *California Adaptation Planning Guide: [Phase 1: Explore, Define & Initiate](#)*
- ▶ **Develop a shared vision.** Engage stakeholders and the broader community to identify what people most value about their community and what they want their community to become. How will the community be similar or different in the future? All planning initiatives should center this same community vision, goals, and objectives for adaptation and resilience.
- ▶ **Become familiar with planning processes and plan requirements,** both internal to a department/organization and those of other agencies and/or departments. Coordination and mutual learning at the onset may yield bigger returns later.
 - ↪ *There are multiple state laws that require the integration of climate resilience in local planning documents, which are included in the Plans sections of this resource. Be sure to check relevant state and federal guidance documents and statutes early and often, as regulations often evolve over time.*
- ▶ **Treat the process as an outcome.** Developing thoughtful process goals to work towards plan alignment, equitable outcomes, and develop transparency can help jurisdictions focus not just on delivering plans, but also transform institutional norms that may be impeding community alignment, cooperation, equity, and resilience.



Summary of State Climate & Hazard Planning Regulations

Regulation	Purpose/Detail
SB 379 (Gov. Code § 65302(g)(4)) & SB 1035 (Gov. Code § 65302(g)(6))	Climate adaptation to be integrated into the safety element of the general plan.
SB 1241 (Gov. Code §§ 65302 and 65302.5)	Fire hazard risk to be addressed in the safety element of the general plan if in a state responsibility area and/or very high fire hazard severity zone.
SB 99 (Gov. Code § 65302(g)(5)), AB 747 (Gov. Code § 65302), and AB 1409 (Gov. Code § 65302.15)	Evacuation route planning to be included in the safety element of the general plan. Information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes to be identified in the safety element of the general plan. Update to be done upon the next revision of the housing element.
AB 2140 (Gov. Code §§ 65302.6 and 8685.9)	Incorporate the LHMP by reference into the safety element of the general plan to be eligible to apply for state funding to cover the local match of FEMA Public Assistance costs for disaster recovery activities.
SB 1000 (Gov. Code § 65302(h))	Environmental justice to be addressed in general plans as a standalone element or within an existing element if a community contains defined disadvantaged communities.

**Using or updating plans with an asterisk are not required by regulation but may be leveraged to meet the requirement if certain conditions are met (see Plans section of plan alignment guides).*

Plans Involved*	Guidance/Resources
LHMP, Safety Element, Housing Element, Climate Adaptation Plan*	California Adaptation Planning Guide (2020)
Safety Element, Community Wildfire Protection Plan*	OPR Fire Hazard Planning Technical Advisory
Safety Element, Housing Element, Emergency Operations Plan*, Local Hazard Mitigation Plan*, Disaster Recovery Plan/Framework*	OPR Evacuation Planning Technical Advisory
Local Hazard Mitigation Plan, Safety Element	General Plan Guidelines Chapter 4: Required Elements
2 or more general plan elements	OPR General Plan Guidelines

► **Create an adaptable 5, 10, or 15+ year strategy for updating multiple plans/elements** over time and identify ways that portions of different planning processes can be used sequentially to support each other. Consider aligning the update timelines of different plans by adjusting the frequency of subsequent updates.

↪ *Timing for each plan or element’s development, updates, and approvals may differ significantly. Be aware of timeframes so that funding and staff resources for one plan can assist elsewhere as needed.*

↪ *Communities may face time-sensitive required updates to certain plans, such as the Housing Element of the General Plan or the 5-year timing of the LHMP update and may need to sequence other plan updates around this update. As a community develops its 10-year strategy, it may be helpful to plan around the time-sensitive plans and align timing of other plans to follow the plans with strict time-sensitive deadlines. Consider leveraging the next required update to develop components that can inform multiple plan updates, such as community engagement efforts or a comprehensive vulnerability and risk assessment.*



Aligning Update Timelines

Plan	Update Timeline
Local Hazard Mitigation Plan	Update <u>every 5 years</u> to remain eligible for certain FEMA funding
General Plan	Varies – Many communities have adopted a <u>20-year time horizon</u>
General Plan Safety Element	No less frequently than every 8 years per <u>Gov. Code § 65302(g)(6)</u>
General Plan Housing Element	Every 4, 5, or 8 years* per <u>Gov. Code § 65588</u>
General Plan Environmental Justice Element	Varies – adopt or review upon next concurrent update of 2 or more general plan elements per <u>Gov. Code § 65302(h)(2)</u>
Climate Adaptation Plan	Varies – if used to meet climate adaptation planning requirements by reference in the Safety Element, no less frequently than every 8 years per <u>Gov. Code § 65302(g)(6)</u>
Community Wildfire Protection Plan	Varies – no update requirements
Disaster Recovery Plan	Varies – no update requirements

Phase 2: Assess Vulnerability

A vulnerability or risk assessment that incorporates climate change impacts is often based on the examination of current and historical conditions, emerging trends, and projections of future climate impacts. This process usually involves identifying populations and assets most vulnerable to hazards and associated impacts, evaluating the risks from each impact, and identifying priorities for effective strategy development. A comprehensive vulnerability assessment can serve as the foundation for aligning climate risk and vulnerability data across multiple plans.

For more on this phase:

- *General Plan Guidelines: [Collect & Analyze Data](#)*
- *California Adaptation Planning Guide: [Phase 2: Assess Vulnerability](#)*



- ▶ **Provide a foundation for developing strategies by conducting a comprehensive and detailed vulnerability or risk assessment that includes future climate projections, and which can be leveraged for multiple plans.**

↪ *Risk and vulnerability assessments vary in scope and level of detail. Determine which plan needs the most specificity and develop an assessment at that level so all plans can benefit. If this is not feasible, design the assessment so other components can be added as needed or as funding becomes available. Integrating vulnerability assessments is both good practice and cost-effective.*

- ▶ **Develop a comprehensive, locally relevant definition of vulnerable communities** with indicators applicable to the community from which all plans can draw from. [See the OPR guide [Defining Vulnerable Communities in the Context of Climate Adaptation](#)].
- ▶ **Consider using multiple information sources** from across the community and beyond (if available) for a robust assessment of local hazards, including both quantitative and qualitative sources, such as community member experiences and indigenous and Traditional ecological knowledge (TEK).

↪ *Apathy created by “disaster amnesia” or the perception that “nothing ever happens here” when time passes without a significant hazard event can stall public participation. Vulnerability assessment findings conveyed in an accessible and approachable manner can increase awareness and understanding of risk.*

- ▶ **Examine risks at a regional scale beyond jurisdictional boundaries.** Flooding and wildfire events in neighboring jurisdictions, for example, could lead to downstream impacts in a jurisdiction, such as evacuation pressures, debris flows, and wildfire smoke; and environmental pollution from neighboring jurisdictions may contribute to a community’s overall vulnerability. Check neighboring jurisdictions’ plans and assessments and promote regional consistency by coordinating on the use of similar data parameters and measures.

Phase 3: Define An Adaptation Framework & Strategies

The vulnerability assessment created in Phase 2 can be utilized to refine a vision and any goals developed earlier in the process and identify policies, strategies, and actions unique to a community's vulnerabilities, strengths, and objectives. While the terminology, level of detail, and purpose of different plans may differ, this planning phase involves the opportunity to align strategy/action frameworks across multiple plans.

For more on this phase:

- *General Plan Guidelines: [Refine Goals, Alternatives Analysis, Plan Adoption](#)*
- *California Adaptation Planning Guide: [Phase 3: Define Adaptation Framework & Strategies](#)*
- ▶ **Integrate the same actions and risk reduction strategies in multiple plans.** For example, adaptation strategies from the General Plan or a stand-alone climate adaptation plan can also be used as mitigation actions in an LHMP. At a minimum, cross-reference plans.
 - ↪ *Ensure consistency among planning efforts, and, conversely, that no strategy, policy, or action in one plan contradicts another plan. Comparing plan goals both at the outset of the planning process and periodically throughout helps identify potential conflicts.*
 - ↪ *Plan components can inform other plans, but plan sections and entire plans may not be interchangeable due to differing requirements by approval agencies. For example, while parts of an LHMP and a General Plan's Safety Element might overlap, federal requirements for an LHMP differ from state requirements for the Safety Element. At the same time, incorporating other plans by reference into the general plan is permissible by law, and doing so can help to avoid duplication of detailed information or more specific hazard mitigation and climate adaptation strategies contained in other plans. Thus, local agencies should consider what degree of integration and mechanisms for doing so are appropriate.*

- ▶ **Reach out to scientists and academic institutions.** They are often eager to provide insights on how climate information is effectively used. Leverage other existing agency collaborations with academia.
- ▶ **Align with State plans and priorities.** State plans, such as the California [Climate Adaptation Strategy](#), [State Hazard Mitigation Plan](#), [State Fire Plan](#), [State Emergency Plan](#), and [Wildfire and Forest Resilience Action Plan](#), can provide insights into State priorities for funding, local plan approvals, implementation, and coordination; illuminate specific climate risks resulting from hazards particular to different regions; and identify specific state programs, such as technical assistance or grant programs, that can be leveraged to support local planning. [Explore [Adaptation Clearinghouse Topic Pages](#) for featured state plans and other resources].

Phase 4: Implement, Monitor, Evaluate & Adjust

Implementation can leverage the benefits of plan alignment by identifying and prioritizing actions, monitoring programs, evaluation mechanisms, and funding sources that support the goals and strategies of multiple plans. Continued collaboration with stakeholders to identify implementation opportunities and resources can kick-start the process and ensure each strategy and action continues to be effective into the future.

For more on this phase:

- *General Plan Guidelines: [Implementation](#)*
- *California Adaptation Planning Guide: [Phase 4: Implement, Monitor, Evaluate & Adjust](#)*
- ▶ **Develop a timeframe for implementing each action aligned with existing and future funding opportunities.** Seek to identify which strategies can be implemented using existing operations and budgets, may require a specific-line-item request as part of the routine planning and budgeting cycle, may require more unique public financing methods

(e.g., special purpose assessments, impact fees, or tax increment financing), or can share funding sources with other local departments, neighboring jurisdictions, or regional entities. Developing a matrix or tracking mechanism that shows how actions and funding sources support multiple plans and goals can be a helpful tool to inform decision making, transparency, and outreach efforts.

↪ *Ensure that planning and implementation accounts for the useful life of critical infrastructure, not just design life.*

↪ *Funding cycles can affect when decision makers can begin funding and implementing an action. Capital improvement plans are an important tool for identifying both short and long-term financing opportunities for adaptation strategies identified in plans.*

▶ **Collaborate with stakeholders to identify implementation measures and funding sources,** including:

↪ *Other departments to identify funding sources that can be leveraged for multiple plan strategies and measures. For example, stormwater or floodplain management agencies may be able to fund green infrastructure projects, and transportation agencies may be able to support infrastructure projects.*

↪ *Public works departments to gain buy-in for ongoing/long-term operations and maintenance costs – without their support, capital projects may stall.*

↪ *The private sector, including local businesses and private landowners, are critical for achieving widespread implementation of community-wide measures – engage them early on to build relationships and support.*

↪ *Neighboring jurisdictions, including special districts and other agencies with overlapping political boundaries, to see if policy implementation can be coordinated and to avoid any issues arising from jurisdictional inconsistencies.*

↪ *The community to identify creative resources, solutions, and leadership.*

▶ **Develop community-driven, measurable outcomes across all plans to assess their effectiveness.** Develop a monitoring program to track progress, build community trust, and enhance transparency by identifying progress indicators and metrics for each action in partnership with the broader community. The program can identify when and why to monitor, why monitoring is being done, and who is responsible for the evaluation.

▶ **Adjust and modify.** Develop an adaptive process that allows for modification as opportunities to incorporate community knowledge, Indigenous and Traditional Ecological Knowledge, or scientific advancements arise.

↪ *Developing a review timeline for assessing progress can ensure accountability, create a vehicle for transparency, drive continued action, and allow for improvements based on lessons learned.*

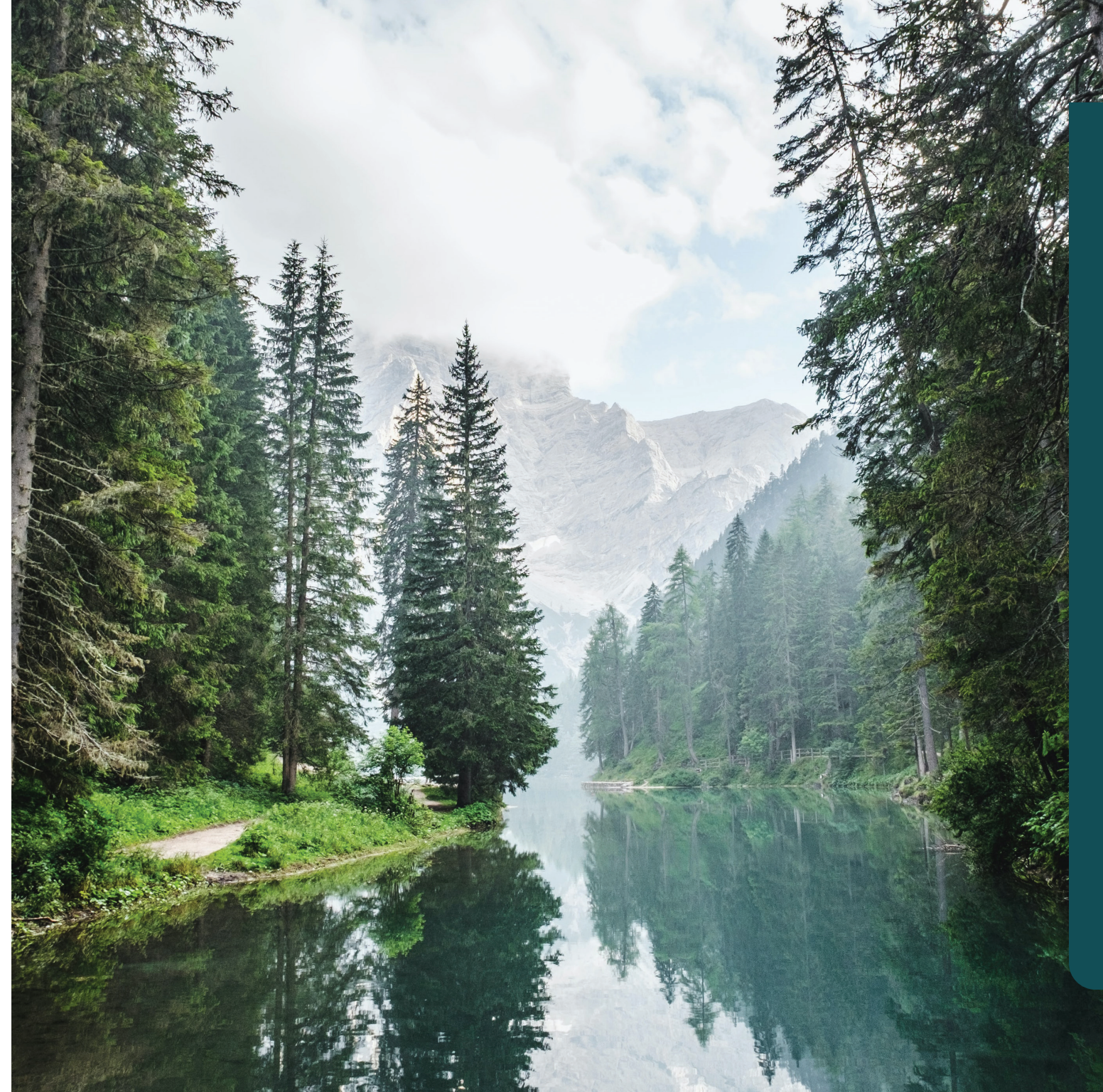
↪ *Develop strong messaging to drive implementation forward and dedicate adequate resources for outreach and building public support. Leverage plan alignment successes by showcasing how actions implement the strategies and goals of multiple planning documents and community priorities. Some actions may require greater effort to gain political backing or public support to implement, particularly those that require local financial and/or administrative commitments, or those that generate opposition from competing interests. It is helpful in these cases to make a convincing and long-lasting case for implementation. For each proposed action, explain clearly and succinctly how well the action can meet additional standards or “selling points.” [Learn more about [strong messaging](#) for stakeholders].*

↪ *Leverage existing and established venues for messaging, and when necessary, identify new venues to reach any audiences not engaged through established methods.*

The Plans

Sections in **“The Plans”** describe key information, requirements, guidance, and best practices for the most common plans used for wildfire and climate resilience planning. Each plan has a section that identifies alignment opportunities with other plans. Some plans are required for cities and counties in California, while others are optional but can be useful for driving climate resilience and hazard mitigation goals forward. These plans can also be useful for entities such as tribes, special districts, and others looking to comprehensively plan for present and future climate risks and can open pathways to funding and project opportunities that can serve multiple community needs.

F Look for this symbol as you go along to distinguish flood-after-fire resilience-specific information from information applicable to all hazards.



Local Hazard Mitigation Plans

Plan Overview

- This plan identifies potential risks that may arise from local natural hazards and vulnerabilities, and long-term strategies for protecting people, property, and the environment. Local hazard mitigation plans (LHMPs) are not required by the State or Federal government, but states, tribes, and local jurisdictions must have a Federal Emergency Management Agency (FEMA)-approved hazard mitigation plan to be eligible for certain non-disaster funding, including grant opportunities under FEMA's Hazard Mitigation Assistance (HMA) program. LHMPs can be conducted as multi-jurisdictional (usually countywide) plans (MJHMPs). MJHMPs must include both countywide and jurisdiction-specific information for each participating jurisdiction within the county, and must be adopted by each of the participating jurisdictions.

Lead

- ▶ **Varies:** typically involves city or county emergency services, fire department/district, or planning/community development department. May be led by any office/agency designated by the local jurisdiction.

Required Consultation, Review & Approval

- ▶ **Consultation:** N/A
- ▶ **Review:** Cal OES (Cities and Counties and special districts)
- ▶ **Approval:** FEMA

Applicable Statutes & Rules

- ▶ [Stafford Act: Robert T. Stafford Disaster Relief and Emergency Assistance Act \(42 U.S.C. §§ 5121–5208\)](#)
- ▶ [Code of Federal Regulations \(CFR\) Title 44, Sections 201.6 and 206](#)
- ▶ [Federal Disaster Mitigation Act of 2000 \(amended the Stafford Act\)](#)
- ▶ [Gov. Code, §§ 65302.6 and 8685.9](#)

Required Components

- ▶ The Stafford Act and FEMA Regulations at CFR Title 44, [Section 201.6](#) specify requirements for LHMPs (See the [Local Mitigation Planning Policy Guide](#) for FEMA’s interpretation of these statutes and minimum requirements).
- ▶ The LHMP must be updated every five years to continue FEMA funding eligibility, and communities must identify a schedule for reviewing the plan and incorporating updates in between five-year updates. (44 C.F.R. § [201.6 \(c\)\(4\)](#)).
- ▶ Required LHMP elements that offer alignment opportunities include:
 - *Documentation of the plan preparation and process*
 - *Natural hazard risk and vulnerability assessments*
 - *Mitigation strategies with prioritized projects*
 - *Community outreach and engagement*
 - *Incorporation of existing plans, studies, and reports*
 - *An assessment of the community’s existing mitigation capabilities*

- *A plan maintenance and updating process, and*
- *Revisions that reflect changes in development.*

Guidance

- ▶ [Local Mitigation Planning Policy Guide](#)
- ▶ [Local Mitigation Planning Handbook](#)
- ▶ [Local Hazard Mitigation Plans and CEQA Review Technical Advisory](#)



Best Practices

- ▶ Develop climate adaptation strategies that complement other hazard mitigation strategies when appropriate.
- ▶ Communicate with the State Hazard Mitigation Officer or Cal OES Hazard Mitigation Section early and often and stay up to date on State and Federal hazard mitigation resources. FEMA and Cal OES regularly provide funding, guidance, technical assistance, new resources, and training.
- ▶ Allow sufficient time for plan review by Cal OES and FEMA Region 9, and approval and adoption by your local government body. FEMA and Cal OES both recommend at least six months of lead-time to account for necessary review and approvals.
- ▶ Conduct community engagement throughout the entire process of developing, implementing, or updating an LHMP.
- ▶ The adoption of an LHMP could constitute a California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) project if the document's approval is determined to be a discretionary action that could result in a direct or reasonably foreseeable indirect physical change on the environment. Lead agencies may have to perform environmental review of subsequent revisions or updates to the LHMP as well. ([See the State's Technical Advisory on Local Hazard Mitigation Plans and CEQA Review](#)).



Tips & Requirements for the Vulnerability Assessment

- ▶ Review FEMA LHMP guidance to understand the risk assessment process. Risk assessments should include the following:
 1. Information on previous occurrences of hazard events and on the probability of future hazard events, and an overall summary of each hazard and its impact on the community.
 2. A review of FEMA National Flood Insurance Program insured structures that have been repetitively damaged by floods.
 3. The risk assessment section should assess each jurisdiction's risks where they vary from the risks facing the entire planning area, and include a description of the type, location and extent of all natural hazards that can affect each jurisdiction.
- ▶ Combine hazard mitigation capability assessments and climate change adaptive capacity assessments when appropriate. Both capability assessments and adaptive capacity assessments evaluate authorities, policies, programs, staff, funding, and other resources available to accomplish mitigation both within the lead agency and across the community.
- ▶ Address climate risk and resilience in each hazard profile and/or as a standalone section or appendix in the LHMP risk assessment. The LHMP risk assessment must include the probability of future events, including the effects of climate change and other future conditions on the type, location and range of anticipated intensities of identified hazards. Jurisdictions must also describe how climate change will affect impacts from hazards facing the community ([Local Mitigation Planning Policy Guide](#)).
- ▶ Assess post-fire effects of flooding, debris flows, and mud flows. Utilize risk assessment tools that consider current flood and debris flow hazards, as well as risk under modeled future climate conditions. Consider flood effects as a cascading or compounding hazard following wildfire, where previous occurrences may not be an accurate assessment of future risk.

F Incorporate geospatial data on critical infrastructure and drinking water supplies into risk assessments. This incorporation allows for strategies to address the possibility that burn scars occur within or upstream from water supplies.

Alignment Opportunities

- ▶ Incorporate the most recently updated LHMP into the Safety Element. Assembly Bill (AB) 2140 ([Gov. Code §§ 65302.6](#) and [8685.9](#)) allows jurisdictions to be eligible to apply for state funding to cover the local match (6.25%) of FEMA Public Assistance (PA) costs for recovery activities after hazard events, if the local jurisdiction incorporates their LHMP into the Safety Element of their General Plan.
 - ▶ Synchronize LHMP and Housing Element updates with Safety Element updates, when possible, to leverage the process and reduce redundancy across all three efforts, especially when communities have an LHMP update due proximal to their next Housing Element update. Recently updated LHMPs can be used as a resource for a subsequent Safety Element review or update.
- F** Utilize post-fire assessments by the California State Watershed Emergency Recovery Teams (WERTs) to identify types and locations of threats to life-safety and property, gauge burn intensity, and develop preliminary emergency protection measures. Identify opportunities where these strategies can be modified based on these assessments and recommendations.

Alignment Team & Stakeholder Engagement

- ▶ Meet FEMA eligibility requirements by identifying all jurisdictions and entities involved in the planning process. To meet minimum eligibility requirements, LHMPs must outline each jurisdiction's representative, and additional entities must include local and regional agencies involved in hazard mitigation, agencies that have the authority to regulate development, neighboring communities, representatives of business, academia, and other private organizations, and representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations, among others.
- ▶ Consider carefully whether your alignment (planning) team or advisory groups should include any of the entities from each of these stakeholder types, as applicable to your jurisdiction. Develop a plan to determine how and when to engage different stakeholders to achieve the most equitable and accurate results.

General Plans

Plan Overview

- All cities and counties in California are required by state law to adopt and periodically update a General Plan, which sets forth a long-term vision of a community's future. The format and content of General Plans can vary, and while certain topics ("elements") are mandatory, there is no mandatory structure or maximum number of elements that a General Plan can include. Mandatory elements required by law include: land use, circulation, housing, conservation, open space, noise, and safety ([Gov. Code § 65302](#)). Additional elements may also be required; for example, cities and counties that have identified disadvantaged communities are required to address environmental justice in their General Plans.

Lead

- ▶ **Overall General Plan:** County or City Planning Department
- ▶ **Safety Element:** County or City Planning Department
- ▶ **Housing Element:** County or City Planning Department, or Housing Department

Required Consultation, Review & Approval

General Plan

- ▶ **Consultation:** California Native American Tribes
- ▶ **Review:** N/A
- ▶ **Approval:** County board of supervisors or city council

Safety Element

- ▶ **Consultation:** Department of Conservation – California Geological Survey; Governor’s Office of Emergency Services; and, if located within the boundaries of the Sacramento and San Joaquin Drainage District, the Central Valley Flood Protection Board
- ▶ **Review:** California Board of Forestry and Fire Protection (if a jurisdiction contains a state fire responsibility area or a very high fire hazard severity zone)
- ▶ **Approval:** County board of supervisors or city council

Housing Element

- ▶ **Consultation:** Housing Accountability and Enforcement Unit at the Department of Housing and Community Development
- ▶ **Review:** Department of Housing and Community Development
- ▶ **Approval:** Department of Housing and Community Development; county board of supervisors or city council





Enabling Statutes

- ▶ General Plan: [Gov. Code §§ 65300 – 65303.4](#)
- ▶ Safety Element: [Gov. Code § 65302\(g\)](#)
- ▶ Housing Element: [Gov. Code §§ 65580 – 65589.11](#)

Required Components

- ▶ Adoption of new General Plans, plan updates, and plan amendments must adhere to environmental review requirements under CEQA.
- ▶ General Plans are required to be internally (“horizontally”) consistent (i.e., all general plan elements are required to be consistent with each other) and “vertically” consistent (i.e., the jurisdiction’s other plans, zoning ordinances, programs, and policies must be consistent with the general plan).
- ▶ State law requires that local planning agencies provide opportunities for community involvement when updating General Plans ([Gov. Code § 65351](#)).
- ▶ Local governments are required to consult with tribal governments prior to updating or amending their General Plan and to provide notice to and consult with tribes at identified points in the planning process, including adoption and amendment of both General Plans and specific plans. For more information about this consultation requirement, see OPR’s Supplement to the General Plan Guidelines, the [Tribal Consultation Guidelines](#).
- ▶ SB 1000 ([Gov. Code § 65302\(h\)](#)) requires that communities containing defined disadvantage communities address environmental justice (EJ) as a standalone element or as a topic that is integrated throughout the General Plan elements. For detailed information and guidance on EJ Elements, review the [General Plan Guidelines Chapter 4, Section 8](#).

This update is triggered when:

- a. *Two or more elements (often the Housing and Safety Elements) are updated concurrently on or after January 1, 2018, and*
- b. *A jurisdiction has disadvantaged communities as defined in the statute. OPR recommends that each jurisdiction complete its own disadvantaged community screening to make this determination. [Learn more about identifying disadvantaged communities in the General Plan Guidelines Chapter 4, Section 8].*

Within the EJ element, jurisdictions must identify objectives and policies to:

1. *Reduce the unique or compounded health risks in disadvantaged communities;*
2. *Promote civic engagement in the public decision-making process; and*
3. *Prioritize improvements and programs that address the needs of disadvantaged communities.*

Safety Element

- F** AB 162 (2007) ([Gov. Code § 65302\(g\)\(2\)](#)) Requires cities and counties to address flooding in their Safety Element by identifying information regarding flood hazards, such as coastal flooding, establishing a set of comprehensive goals, policies, and objectives for the protection of the community from the unreasonable risks of flooding, and establishing a set of feasible implementation measures designed to carry out the goals, policies, and objectives for flood protection. This update is triggered upon the next Housing Element update after 2009.
- ▶ SB 379 ([Gov. Code § 65302\(g\)\(4\)](#)) requires a Safety Element update to include a climate change vulnerability assessment (including flood and fire risk), adaptation strategies, and implementation measures to address climate vulnerabilities. This may be met by updating the LHMP, climate adaptation plan, or other similar plan and incorporating it into the Safety Element by reference. **This update is triggered by the next LHMP update on or after January 1, 2017, or if there is no LHMP, on or before January 1, 2022.**

- ▶ SB 1035 ([Gov. Code § 65302\(g\)\(6\)](#)) requires Safety Element review and, if necessary, updates to identify new information relating to flood and fire hazards and climate adaptation and resiliency strategies after the initial revisions pursuant to AB 162 ([Gov. Code § 65302\(g\)\(2\)](#)), SB 1241 ([Gov. Code §§ 65302 and 65302.5](#)), SB 379 ([Gov. Code § 65302\(g\)\(4\)](#)), and SB 99 ([Gov. Code § 65302\(g\)\(5\)](#)). **This update is triggered upon either the next LHMP update or next Housing Element update, at the jurisdiction's discretion, but not less frequently than every eight years.**
- ▶ SB 99 ([Gov. Code § 65302\(g\)\(5\)](#)) requires jurisdictions to review and update the Safety Element to include information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes. **This update is triggered upon the next revision to the Housing Element, on or after January 1, 2020.**
- ▶ AB 747 and AB 1409 ([Gov. Code § 65302.15](#)), require jurisdictions to review and update their Safety Element as necessary to identify evacuation routes and location and evaluate their capacity and safety under a range of emergency scenarios. These bills encourage plan integration by authorizing cities and counties to incorporate relevant information in an already adopted LHMP, Emergency Operations Plan, the Housing Element, or another document into the Safety Element. **This update is triggered upon the next revision of an LHMP on or after January 1, 2022, or if there is no LHMP, beginning on or before January 1, 2022.**
- ▶ Both [Gov. Code § 65302.5](#) and California Code of Regulations Title 14, Chapter 7, Article 6 ([14 CCR § 1265](#)) govern the Board of Forestry and Fire Protection's role and procedures in reviewing Safety Elements.

Housing Element

- ▶ State law requires jurisdictions make a diligent effort to include all economic groups when drafting, adopting, and implementing a Housing Element ([Gov. Code § 65583\(c\)\(9\)](#)).
- ▶ AB 686 (2018) requires public agencies to affirmatively further fair housing by taking meaningful actions, in addition to combating discrimination, that overcome patterns of

segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. (Gov. Code, § 8899.50).

Guidance

- ▶ OPR [General Plan Guidelines and 2020 Updated Environmental Justice Element](#)

Safety Element

- ▶ [California Adaptation Planning Guide \(2020\)](#)
- ▶ OPR [General Plan Guidelines Chapters 4 & 8](#)
- ▶ OPR [Fire Hazard Planning Technical Advisory](#)

Housing Element

- ▶ Housing and Community Development (HCD) [Building Blocks: A Comprehensive Housing-Element Guide](#)
- ▶ OPR [General Plan Guidelines Chapter 4](#)
- ▶ HCD [Affirmatively Furthering Fair Housing](#)

Best Practices

General Plan

- ▶ Follow the General Plan Guidelines and align elements where appropriate to minimize redundancies and enhance internal consistency.
- ▶ While some climate change impacts are already happening, others may gradually appear or only appear once certain ecosystem thresholds are met at uncertain time frames in the future. The typical General Plan 10 to 20-year planning horizon is not long enough to fully address the long-term impacts of climate change. As such, the General Plan should include a balance of both short-term and longer-term planning horizons – and leverage other plans with shorter term planning timelines, such as the LHMP, to fill in where appropriate.
- ▶ Other elements of the General Plan, particularly the Land Use, Conservation, and Open Space Elements, should work in coordination to guide conservation and development, balancing community needs with environmental preservation and the effects of climate change. Upon the next comprehensive General Plan update, consider integrating climate risk considerations and climate adaptation goals, policies, and measures consistent with the Safety Element, LHMP, and any other relevant plans into these elements. Communities can use:
 - *Land Use Element to more comprehensively address climate change and natural hazards in land use planning and decision making, particularly by directing development away from areas with high hazard exposure, and/or by identifying risk reduction strategies when directing development away from areas of high hazard exposure may not be possible. Land use policies should adequately incorporate adaptation priorities that ensure the provision of adequate infrastructure, services, and ecosystem services to the community.*
 - *Conservation Element to analyze the sustainability of local ecosystems and resource uses under changing climate conditions. For example, when evaluating the feasibility of possible land use patterns as part of a jurisdiction's analysis of water resources for this element, cities and counties should work with water agencies to consider projected available water*

resources under a changing climate, water conservation measures to ensure a sustainable water supply, and planning for the protection of impacted water bodies.

- *The Open Space Element to identify lands or waters useful to preserve for current and projected future climate adaptation benefits, hazard mitigation and public safety, tribal resources and other cultural resources, and other resource uses and ecosystem services.*

- ▮ Integrate the OPR’s [Fire Hazard Planning Technical Advisory’s](#) “Flood and Debris Flow Considerations” policies and the [General Plan Guidelines’](#) “Avoiding and Mitigating Natural Disasters” policies, programs, and actions across General Plan Elements.
- ▮ Incorporate applicable flood information and assessments of climate change impacts and management practices into the Land Use Element, which can reduce vulnerability through land use practices such as non-structural flood protection measures, low impact development, and improved stormwater management practices.
- ▮ Use land use regulations to implement General Plan flood hazard mitigation policies. Make changes to zoning and subdivision ordinances to align with floodplain management needs.
- ▮ Identify possible solutions to land use issues in post-wildfire scenarios and accompanying flood mitigation strategies in the Land Use Element.



Housing & Safety Element

- ▶ For jurisdictions updating their safety element or other plans for compliance with evacuation route planning requirements mandated by SB 99 ([Gov. Code § 65302\(g\)\(5\)](#)), AB 747 ([Gov. Code § 65302.15](#)), and AB 1409 ([Gov. Code § 65302.15](#)), agencies can consider potential constraints regarding evacuations when updating their Land Use or Housing elements
- ▶ When possible, update the Housing Element, Safety Element, and/or Local Hazard Mitigation Plan concurrently or sequentially to synchronize long-term integration and meet SB 1035 ([Gov. Code § 65302\(g\)\(6\)](#)) requirements. Updating both elements concurrently may trigger an SB 1000 ([Gov. Code § 65302\(h\)](#)) environmental justice element update. **See Appendix B/ Graphic for additional ideas on how to align multiple updates.**

Safety Element

- ▶ Review the [California Adaptation Planning Guide](#) and [OPR General Plan Guidelines](#), especially the Safety Element and Climate Change chapters, which include both mandates and best practices for incorporating climate change into the Safety Element.

Housing Element

- ▶ Jurisdictions can affirmatively further fair housing amidst growing climate and disaster risks by employing place-based strategies to encourage community conservation and revitalization. Climate disasters can be a significant cause of displacement, but strategies like home hardening in higher risk areas and preservation in lower risk areas can help protect affordable housing supply [Guidance for Affirmatively Furthering Fair Housing](#).
- ▶ Equitable hazard mitigation strategies, such as urban forestry and flood prevention measures in disadvantaged communities, can both reduce climate risk to property and improve environmental health. Jurisdictions can build community adaptive capacity to climate impacts

by improving infrastructure and services in areas of lower opportunity and concentrated poverty, such as parks, schools, public transportation, and other community amenities ([Guidance for Affirmatively Furthering Fair Housing](#)).

F For jurisdictions subject to SB 1241 ([Gov. Code §§ 65302 and 65302.5](#)), address post-fire hazards (e.g., flooding, debris flows, mudslides) that may be triggered by wildfire events. Such information can be addressed in the Safety Element and cross-referenced to the wildfire section where appropriate.

Tips & Requirements for the Vulnerability Assessment

- ▶ Use a variety of sources to inform General Plan updates and associated risk assessments, including the climate vulnerability assessment required by SB 379 ([Gov. Code § 65302\(g\)\(4\)](#)); the LHMP risk assessment; wildfire risk assessments; and any others available.
 - *To adequately understand how climate change may affect the location and type of future growth, land use planning (particularly in the Land Use, Conservation, and Open Space Elements) should be informed by the best available information on local hazards, climate vulnerabilities, and associated risks.*
 - *Communities can use climate projection data, climate vulnerability assessments, and risk assessments from other planning efforts to more accurately project future land uses; identify high-risk areas; inform climate-adaptive land use, conservation, and preservation policies; and make land use decisions that consider both avoidance and reducing future risk to the community.*
- F** Account for the potential for wildfires to increase or exacerbate flooding, debris flow, and landslide hazards. Consider post-fire effects of flooding, debris flows, mudflows, erosion, and sedimentation in the Conservation, Open Space, and other elements.

Safety Element

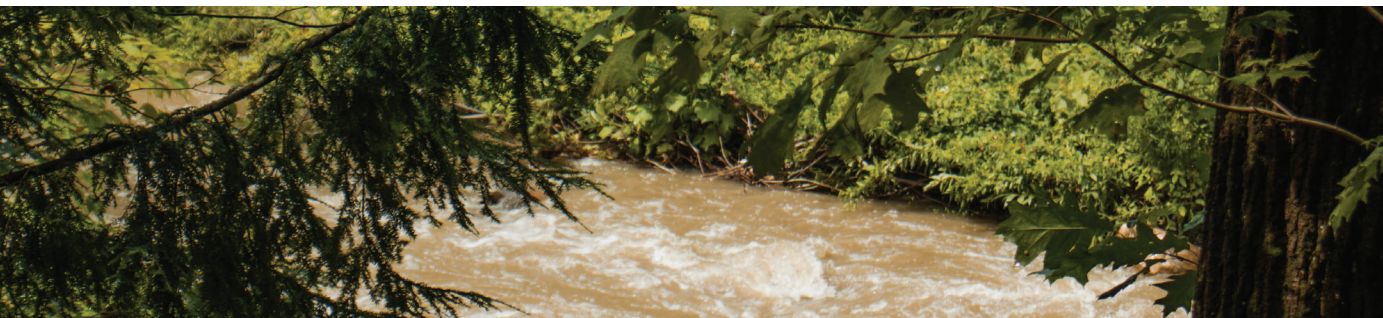
- ▶ Jurisdictions may incorporate a climate vulnerability assessment directly, or by reference to another document, such as an LHMP or adaptation plan. The specific vulnerability assessment requirements for SB 379 ([Gov. Code § 65302\(g\)\(4\)](#)) compliance include at minimum the following:
 - *An assessment of how climate change may affect flood and fire risks,*
 - *Information from [Cal-Adapt](#) and the [California Adaptation Planning Guide](#),*
 - *Local agency information on assets, resources, and populations sensitive to climate exposures, and the agencies' current ability to manage climate impacts,*
 - *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,*
 - *Information on existing and planned development in identified at-risk areas, including structures, roads, utilities, and essential public facilities, and*
 - *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.*
- F** Evaluate risk in flooding areas and landslide and debris-flow susceptibility within the Safety Element. Include information on risks associated with slope instability, as well as other areas prone to flooding, landslide, and debris flow.
- F** Include historical data on landslides and debris flow and identify areas that are landslide-prone by using landslide feature maps, seismic hazard zone maps, and geology maps produced by the California Department of Conservation.

F Include the following flood hazard risk assessment information to meet Safety Element flood risk planning requirements, where applicable:

- *FEMA Flood hazard zones, National Flood Insurance Program maps, and U.S. Army Corps of Engineers flood hazard information,*
- *Central Valley Flood Protection Board Designated floodway maps,*
- *Dam failure inundation maps from CalOES,*
- *DWR-approved Awareness Floodplain Mapping Program maps and 200-year flood plain maps,*
- *Levee protection zone maps,*
- *Areas subject to inundation in the event of the failure of project or non-project levees or floodwalls,*
- *Historical data on flooding, including locally prepared maps of areas that are subject to flooding, areas that are vulnerable to flooding after wildfires, and sites that have been repeatedly damaged by flooding,*
- *Existing and planned development in flood hazard zones, including structures, roads, utilities, and essential public facilities, and*
- *Local, state, and federal agencies with responsibility for flood protection, including special districts and local offices of emergency services.*

Housing Element

- ▶ A climate vulnerability assessment and other risk assessments can be used to determine future housing placement based on both current and future risk.
- ▶ California's recent history has shown that environmental disasters such as wildfires, earthquakes, and floods can be significant causes of displacement, and that climate change is accelerating the risk from such disaster events. Climate risks can put pressure on lower income communities who may not have the means to relocate to lower risk areas, while disasters can place significant upward pressure on housing costs in receiving communities that suddenly absorb new residents before additional housing can be built. The housing element must include an assessment of disproportionate housing needs, including displacement risk, on people with protected characteristics and households with low incomes (Gov. Code, § 65583, subd. (c) (10); Guidance for Affirmatively Furthering Fair Housing).
- ▶ Any analysis of disaster-driven displacement risk should call out how local environmental hazards may be accelerated by climate change, how they may impact low-income renters in the community, and any programs or resources in place meant to increase resiliency and address those hazard risks. Disaster risk is not a justification for the perpetuation of patterns of segregation. Jurisdictions should strategically use land use, hazard mitigation, and disaster recovery planning to coordinate strategies for addressing environmental hazard risk, climate change adaptation, fair housing, and housing affordability [See Guidance for Affirmatively Furthering Fair Housing].
- ▶ Jurisdictions should refer to their LHMP, Safety Element, EJ Element, Disaster Recovery Frameworks or Plans, and any recent locally available hazard data in detailing the types of environmental hazards present in the community, the location of high hazard risk areas in the community, and what type of populations live in those areas of heightened hazard risk. FEMA flood maps are a good starting point for assessing flood risk, but jurisdictions are encouraged to utilize any more recent local flood risk data available, as FEMA flood maps can oftentimes be outdated and fail to account for climate change. [See Guidance for Affirmatively Furthering Fair Housing].



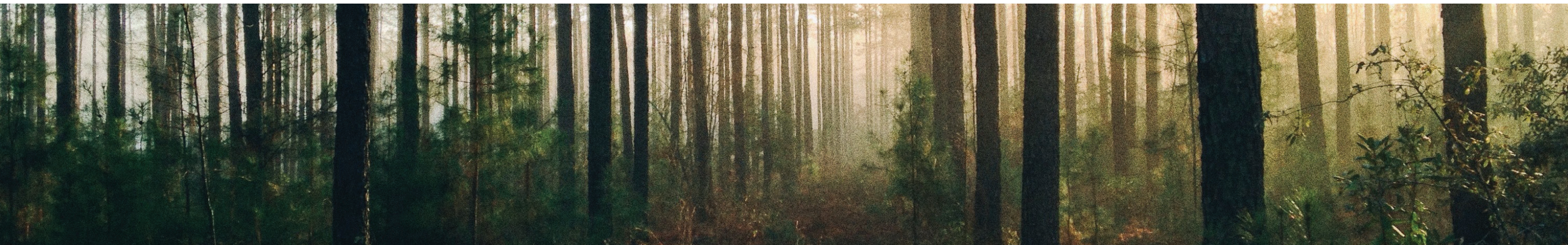
Alignment Opportunities

- ▶ Incorporate the LHMP into the Safety Element when updating the General Plan. AB 2140 ([Gov. Code §§ 8685.9 and 65302.6](#)) enables jurisdictions to be eligible for consideration for state funding to cover the local match (6.25%) of FEMA PA costs for recovery activities after hazard events. Incorporation of the LHMP is also one option of compliance for meeting SB 379 ([Gov. Code § 65302\(g\)\(4\)](#)) and SB 1035 ([Gov. Code § 65302\(g\)\(6\)](#)) adaptation requirements.
- ▶ Use the same climate projections and consistent parameters across all plans.
- ▶ Synchronize LHMP and Housing Element updates with Safety Element updates, when possible, to leverage the process and reduce redundancy across all three efforts, especially when communities have an LHMP update due proximal to their next Housing Element update. Recently updated LHMPs can be used as a resource for a subsequent Safety Element review or update.
- ▶ Inform the Disaster Recovery Plan with climate information (greenhouse gas mitigation, adaptation, and resiliency strategies and actions) included in the General Plan Safety Element or local Climate Adaptation Plan. The Safety Element also includes residential vulnerability and evacuation route information that should be evaluated during recovery planning. [See AB 747 and SB 99, or [Gov. Code §§ 65302 and 65302.15](#)].

- ▶ Use existing goals and projects in the General Plan Housing and Land Use Elements as the foundation for the recovery plan, including expanding housing access for residents of all income levels and targeting new development into the existing development footprint to protect natural and working lands, reduce the fiscal costs of sprawl, and limit future disaster vulnerability. This approach, also known as infill development, can help align recovery planning efforts with policies and building codes already in place, while helping to identify where changes might need to be made to support the building back of safer communities that are more resilient to future disasters.

Alignment Team & Stakeholder Engagement

- ▶ Consider carefully whether your alignment (planning) team or advisory groups should include any of the entities from each of the stakeholder types listed in Appendix A, as applicable to your jurisdiction, and how and when to engage different stakeholders to achieve the most equitable and accurate results.



Climate Adaptation Plans

Plan Overview

- Climate adaptation plans involve an evaluation and prioritization of actions or strategies to prepare for and respond to climate impacts. The State and Federal government do not require standalone adaptation plans, but cities and counties in California must address climate adaptation in local general plan safety elements per SB 379 (2015) ([Gov. Code, § 65302, subd. \(g\)\(4\)](#)). While not required for other jurisdiction types such as special districts, climate adaptation planning is encouraged for all communities to prepare for climate change risks, whether the result is an update to one or more existing plans, and/or a new unique plan. Some local or tribal jurisdictions may find it helpful or necessary to consolidate all climate adaptation-related information in a standalone document to be referenced and integrated with other local plans. Standalone plans can also allow for greater detail than other plans. Cities and counties should carefully review related statutory requirements when initiating an adaptation planning process.

Lead

- **Varies:** typically, a local, regional, or tribal planning department

Required Consultation, Review & Approval

- **Consultation:** N/A
- **Review:** N/A
- **Approval:** Varies – if local, the city council, county commissioners, or board of supervisors

Enabling Statutes

- ▶ SB 379 (2015) ([Gov. Code § 65302\(g\)\(4\)](#))
- ▶ SB 1035 (2018) ([Gov. Code § 65302\(g\)\(6\)](#))

Required Components

- ▶ SB 379 ([Gov. Code § 65302\(g\)\(4\)](#)) requires adaptation and resilience be incorporated in a city or county's general plan safety element, either directly or by incorporating other plans by reference into the general plan. Jurisdictions may choose to develop a climate adaptation plan as a standalone document, or appendix to another document to meet this requirement; in these cases, the climate adaptation plan must substantially comply with the requirements set forth in [Government Code section 65302, subdivision \(g\)\(4\)](#) including:
 - *A climate change vulnerability assessment (including flood and fire risk);*
 - *Adaptation goals, policies, and objectives to address identified vulnerabilities; and,*
 - *Feasible implementation measures.*
- ▶ SB 1035 requires cities and counties to update their Safety Elements with newly available climate science, flood, and fire information no less frequently than every eight years, upon the next update to either the Housing Element or LHMP. A local jurisdiction may choose to develop a Climate Adaptation Plan as a standalone document or appendix to another document to meet this requirement. **This update is triggered upon either the next LHMP update or next Housing Element update, at the jurisdiction's discretion, but not less frequently than every eight years.**
- ▶ Updates or changes to local zoning or other codes and ordinances developed through an adaptation planning process must be consistent with local General Plans.

- ▶ Jurisdictions should assess whether CEQA applies to any new or updated plans developed through the adaptation planning process.

Guidance

- ▶ [California 2020 Adaptation Planning Guide](#)
- ▶ OPR [General Plan Guidelines Chapters 4 & 8](#) (2017)

Best Practices

- ▶ Review the California Adaptation Planning Guide, and OPR General Plan Guidelines (especially the Required Elements and Climate Change chapters), which include both mandates for cities and counties, and best practices for any jurisdiction to consider when incorporating climate change into local planning documents.
- ▶ Jurisdictions in the Bay Area should also consider reviewing the [Adaptation Roadmap](#). Though the Roadmap provides Bay Area- specific guidance and resources, it also provides information relevant statewide.
- ▶ While some climate change impacts are already happening, others may gradually appear or only appear once certain ecosystem thresholds are met at an uncertain time frame in the future. As such, adaptation plans and planning processes should include a balance of both short-term and longer-term horizons.
- ▶ Consider whether the adoption of a standalone climate adaptation plan by a public agency would constitute a project subject to CEQA. Agencies should determine whether the adoption is a discretionary action that could result in a direct physical change or a reasonably foreseeable indirect change in the environment ([PRC § 21065](#)). For more information, consult OPR [[See OPR's CEQA page](#) for more].

Tips & Requirements for the Vulnerability Assessment

- ▶ A vulnerability assessment for an adaptation plan may be used to meet safety element requirements per SB 379 (2015). The specific vulnerability assessment review requirements (Gov. Code, § 65302, subd. (g)(4)) include at minimum the following:
 - *An assessment of how climate change may affect flood and fire risks,*
 - *Climate science and other relevant information from Cal-Adapt and the California Adaptation Planning Guide,*
 - *Local agency information on assets, resources, and populations sensitive to climate exposures, and the agencies' current ability to manage climate impacts,*
 - *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,*
 - *Information on existing and planned development in identified at-risk areas, including structures, roads, utilities, and essential public facilities, and*
 - *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.*

Alignment Opportunities

- ▶ Incorporate the LHMP into the Safety Element when conducting an adaptation planning process. Under AB 2140 (Gov. Code §§ 65302.6 and 8685.9), this enables jurisdictions to be eligible for consideration for state funding to cover the local match (6.25%) of FEMA PA costs for recovery activities after hazard events. Incorporation of the LHMP is also one option of compliance for meeting SB 379 (Gov. Code § 65302(g)(4)) and SB 1035 (Gov. Code § 65302(g)(6)) adaptation requirements.

- ▶ Use the same climate projections and consistent parameters across all plans.
- ▶ When possible, sync the Housing Element and Safety Element to meet SB 1035 requirements. Updating both elements concurrently may trigger an SB 1000 environmental justice element update.
- ▶ Inform the Disaster Recovery Plan with climate information (greenhouse gas mitigation, adaptation, and resiliency strategies and actions) included in the General Plan Safety Element or local Climate Adaptation Plan.
- ▶ The Safety Element also includes residential vulnerability and evacuation route information that should be utilized in recovery planning. [See AB 747 and SB 99, or Gov. Code §§ 65302 and 65302.15].

Alignment Team & Stakeholder Engagement

- ▶ Consider carefully whether your alignment (planning) team or advisory groups should include any of the entities from each of the stakeholder types listed in Appendix A as applicable to your jurisdiction, and how and when to engage different stakeholders to achieve the most equitable and accurate results.



Disaster Recovery Frameworks & Plans

Plan Overview

- Disaster Recovery Frameworks and Plans allow communities to determine their vision for recovery, identify obstacles and opportunities, map out funding sources, and measure their progress. A Disaster Recovery Framework (Framework) defines the local recovery organizational structure and priorities, and helps to identify any capacity gaps where state, federal, or private sector support might be needed. A Disaster Recovery Plan refines priorities outlined in the Framework, provides details for the planning process, and identifies specific recovery activities, projects, funding, and implementation and management plans.

State and federal governments highly encourage local, regional, and tribal agencies to develop a recovery framework and recovery plan pre- or post-disaster, as they can be more flexible to local needs and priorities and integrated into existing planning documents due to the lack of statutory/regulatory requirements.

Lead

- ▶ **Varies:** Typically involves city, county, or tribal planning departments, public works departments, and emergency services. May be led by an Interagency Recovery Team, Local Disaster Recovery Manager (LDRM), or other regional coordination bodies and special districts.

Required Consultation, Review, & Approval

- ▶ **Consultation:** N/A
- ▶ **Review:** N/A
- ▶ **Approval*:** Elected official/board – city council, county board of supervisors
*(Approval not required by state or federal statute).

Enabling Statutes

- ▶ N/A

Required Components

F Communities participating in the FEMA National Flood Insurance Program (NFIP) must describe their continued compliance with NFIP requirements, including relevant floodplain management programs (44 CFR § 201.6(c)(3)(ii)). [Learn more about the [National Flood Insurance Program](#)].

Guidance

- ▶ Georgetown Climate Center [Equitable Disaster Preparedness, Response, and Recovery](#)
- ▶ [American Planning Association Planning for Post-Disaster Recovery \(2014\)](#) and [Disaster Recovery Resources](#)
- ▶ FEMA [Pre-Disaster Recovery Planning Guides for Local, Tribal, and State Governments \(2017\)](#)
- ▶ FEMA [Long-Term Community Recovery Planning Process \(2005\)](#)
- ▶ FEMA [Community Recovery Management Toolkit \(2021\)](#)

Best Practices

- ▶ Align the recovery vision with existing community goals and plans and draw on the same data and funding opportunities, while offering greater specificity on hazard mitigation objectives and actions that reduce risks.
- ▶ Develop a pre-disaster recovery framework that can be updated and built upon in a post-disaster recovery plan. Developing a recovery framework pre-disaster identifies and bolsters public awareness of recovery protocols and capacity of local governments. Communities that participate in pre-disaster planning are more likely to rebuild faster and make rebuilding decisions that incorporate future climate and disaster risks.
- ▶ Consider developing a pre-approved disaster recovery emergency ordinance to complement a disaster recovery plan, so that it can be quickly updated or utilized for rapid rehousing, debris removal, etc. An emergency ordinance can support regulatory streamlining and temporary zoning exemptions while the community responds and recovers to a disaster.
- ▶ Partner with a regional coordinator to create an interjurisdictional disaster recovery strategy. Planning for disaster recovery inevitably requires regional housing, infrastructure, and economic development strategy coordination. Regional coordination can support smoother provision of response and relief resources and encourage regional rebuilding strategies.
- ▶ Include a disaster funding timeline and alignment roadmap to prepare a community for funding opportunities when they become available at different stages of the disaster cycle: mitigation, preparedness, response, and recovery. FEMA Hazard Mitigation Assistance (HMA) and PA, along with the U.S. Department of Housing and Urban Development (HUD) disaster recovery funds, represent a few options for federal disaster resilience and recovery funding. FEMA funds cost-effective mitigation measures under the PA program in conjunction with the repair of disaster-damaged public facilities. It is critical that a community is aware and involved in the development of potential eligible projects in close coordination with State and FEMA counterparts to help identify possible mitigation opportunities under the PA program. Through the Community Development Block Grant Disaster Recovery (CDBG-DR) Program, HUD funds

long-term recovery and risk reduction projects with an emphasis on low-and-moderate income populations. CDBG-DR, and its companion Community Development Block Grant Mitigation (CBDG-MIT) Program, can be used as local match for HMA and PA-funded projects.

- ▶ Utilize the California Disaster Recovery Framework (CDRF), which aligns with the Federal Disaster Recovery Framework, to align local priorities with state- and federal-level recovery priorities. The CDRF can also help local, tribal, and regional agencies create their own local recovery structure and outline how they will work with the support of state and federal recovery support functions to implement long-term recovery strategies and actions.

F Leverage existing community engagement mechanisms to communicate risks associated with wildfire and post-wildfire hazards such as flooding and debris flows, as well as associated resources, to the public. Gather input on effective forms of communication during a disaster, as well as the community’s perspective on vulnerabilities to existing infrastructure.

F Recovery policies outlined in recovery plans should consider both direct disaster impact and possible cascading impacts.

F Ensure strategies related to debris removal work in coordination with those outlined in applicable debris management plans. Review these plans to ensure that there is adequate capacity to deal with debris quickly after a fire.

Tips & Requirements for the Vulnerability Assessment

- ▶ Consider vulnerability to and impact of cascading disasters on built and natural systems during pre- and post-disaster recovery planning.
- ▶ Utilize the “Post-Disaster Window of Opportunity” to address previously under-recognized or entrenched vulnerabilities in the built environment, natural landscape, and community. The

recovery process should prioritize multi-benefit projects that work towards both greenhouse gas mitigation and climate adaptation goals.

- ▶ Consider leveraging any relevant risk assessment information in the LHMP or other updated local planning documents, including existing climate vulnerability assessments, to help inform disaster recovery planning. CWPPs also have risk assessment and mitigation project information specific to wildfires that would be useful for recovery planning.

- ▶ Utilize vulnerability assessments incorporating historical, current, and future-projected data to identify priorities for additional studies on specific hazards and regulatory matters that are of concern to a community.

F Utilize the *State Hazard Mitigation Plan* and FEMA’s flood insurance rate maps (FIRM) to identify the location and extent of flood and debris flow hazard. Assess future flood-after-fire risk under climate change scenarios by incorporating climate change projection data from Cal-Adapt and other sources on flooding frequency & intensity, and water table, precipitation, and seasonal water availability.

F Conduct a post-fire reassessment of hazard risk, including detailed erosion, sedimentation, and debris flow studies. This assessment will help determine where flood mitigation strategies identified during pre-disaster (“pre-fire”) planning are employed post-fire.

F Develop evacuation plans specifically for post-fire hazards such as flooding, debris flows, and mudflows.

F Consider risks to community wellbeing and health. The vulnerability assessment should answer questions such as, “Who would need help after a flood-after-fire event?”, “What does the community need to do to aid in recovery?”

Alignment Opportunities

- ▶ Align a Disaster Recovery Plan with an Emergency Operation Plan's or Emergency Action Plan's (EOPs/EAPs) recovery chapter or annex to facilitate a seamless transition from emergency response/short-term recovery to intermediate- and long-term recovery.
- ▶ Take stock of the plans that are linked to recovery, as disaster recovery planning may be most feasible and effective if integrated into existing planning documents and processes. Frameworks may be developed as standalone documents; incorporated as an appendix to an existing plan such as a General Plan, Climate Adaptation Plan, EOP/EAP, or LHMP; or integrated throughout one or more of these. In contrast, Disaster Recovery Plans, though integrated and aligned with other local plans, work best as standalone documents to convey the importance of long-term recovery actions, activities, and policies detailed in the plan.
- ▶ Inform the Disaster Recovery Plan with climate information (greenhouse gas mitigation, adaptation, and resiliency strategies and actions) included in the General Plan Safety Element or local Climate Adaptation Plan. The Safety Element also includes residential vulnerability and evacuation route information that should be utilized in recovery planning. [See AB 747 and SB 99, or [Gov. Code §§ 65302 and 65302.15](#)].
- ▶ Use existing goals and projects in the General Plan Housing and Land Use Elements as the foundation for the recovery plan, including expanding housing access for residents of all income levels and targeting new development into the existing development footprint in order to protect natural and working lands, reduce the fiscal costs of sprawl, and limit future disaster vulnerability. This approach, also known as infill development, will help align recovery planning efforts with policies and building codes already in place while helping to identify where changes might need to be made to support the building back of safer communities that are more resilient to future disasters.
- ▶ Include the LHMP's risk assessment and mitigation actions in community recovery and redevelopment efforts to support building back better and stronger. Once a recovery plan has been completed and a funding strategy has been identified, funding information can be

compared to mitigation actions in the LHMP to determine if applicable funding opportunities for mitigation projects have been identified during the recovery planning process.

- ▶ To fully leverage the FEMA PA Funds described above for implementing a Disaster Recovery Plan's mitigation measures post-disaster, incorporate the LHMP into the Safety Element when the next opportunity arises. Under AB 2140 ([Gov. Code §§ 65302.6 and 8685.9](#)) this enables jurisdictions to be eligible for consideration for state funding to cover the local match (6.25% of FEMA PA costs for recovery activities after hazard events).
- To help align a disaster recovery plan with Safety Element hazard risk assessments, the following data types are useful for assessing near-term flood-after-fire hazards:
 - *Post-fire fuel hazard ratings,*
 - *Fuel conditions relative to future flood control,*
 - *Areas prone to flooding, landslide, and debris flow, and*
 - *Post-fire air, water, and soil quality.*

Alignment Team & Stakeholder Engagement

- ▶ Consider carefully whether your alignment (planning) team or advisory groups should include any of the entities from each of the stakeholder types listed in Appendix A, as applicable to your jurisdiction, and how and when to engage different stakeholders to achieve the most equitable and accurate results.

Final Thoughts & Resources

■ **This resource was developed for sharing** with colleagues, community leaders, and other interested community members.

We hope the resources and ideas found here will help advance the journey to improved collaboration, integrated planning, and community resilience. For additional resources, guidance, questions, and technical assistance, contact staff at the Governor's Office of Planning and Research by emailing icarp@opr.ca.gov. All the resources listed here are available on ResilientCA.org/plan-alignment, along with examples from peers who are tackling the same challenges.

Appendix A: Community & Stakeholder Engagement

The planning process, as well as the consistent engagement and collaboration throughout the process, should be inclusive and multidisciplinary. All plans and alignment initiatives should center around the community’s vision, but community engagement should continue throughout these processes. Comprehensive engagement is essential for promoting alignment, adopting effective planning policies and strategies, identifying implementation opportunities, and can improve local conditions and enhance equity. Additionally, community engagement, collaboration, and partnership are often critical for effective plan implementation and maintaining ongoing support for actions identified in local plans. To learn more about the important role engagement plays in plan alignment, please refer to the **Big Ideas** and **Best Practices** sections.

The Plan Alignment Guides highlight two primary coordination and engagement mechanisms beyond a document’s core planning team:

- ▶ A broader **alignment team** that meets regularly to keep plan coordination consistent and ongoing, and to build the institutional practice of interdisciplinary planning. This team may consist of all planning teams within a jurisdiction and/or throughout the broader region, as well as key stakeholders that play a central role in community visioning, planning, and implementation.
- ▶ A **robust engagement process** that involves community, local agency, regional, tribal, state, federal, and private sector stakeholders. Each phase of the planning and alignment process should include engagement and the solicitation of input, support, and expertise.

↪ *State law requires that local planning agencies provide opportunities for the involvement of the community when updating General Plans (Gov. Code § 65351), and that jurisdictions make a diligent effort to include all economic groups when drafting, adopting, and implementing its Housing Element (Gov. Code § 65583(c)(8)).*

↪ *When adopting or amending a General Plan, local governments must contact, provide notice to refer plans to, and consult with California Native American Tribes that are identified with help from the Native American Heritage Commission (NAHC). These requirements apply to adoption and amendment of both General Plans and specific plans. For more information, refer to OPR’s “[Tribal Consultation Guidelines](#).”*

Each communities’ alignment team and engagement process will look different based on their unique capacity, needs, and landscape. The table below outlines examples of stakeholders within four sample groups but should not be interpreted as a complete list of relevant stakeholders or a prescriptive approach.

The alignment team should inform who will be involved and what their role will be in the planning and implementation processes. The answers to these questions will dictate how, when, and how often they should be engaged. Stakeholder mapping can be a useful tool for making these distinctions and building a comprehensive outreach plan.





Resources

- ▶ OPR [General Plan Guidelines Chapter 3 \(2017\)](#)
- ▶ State Adaptation Clearinghouse [Equitable Planning and Community Engagement](#) page
- ▶ California Adaptation Planning Guide [Phase 1, Step 1.4](#) page
- ▶ Additional community engagement guidance is integrated throughout the [California Adaptation Planning Guide](#)– explore the online version or download the full PDF version on the Adaptation Clearinghouse.
- ▶ EPA [Regional Resilience Toolkit Stakeholder Mapping Template](#)
- ▶ California Adaptation Planning Guide [Community Vision and Goals Template](#)
- ▶ State Adaptation Clearinghouse [Communications and Educational Materials](#)

Stakeholder Examples

Example stakeholders include, but are not limited to:

Community Stakeholders

- *Academic Institutions / Community Research Entities*
- *Community Based Organizations (CBO's)*
- *Non-profits and other non-governmental organizations (NGO's)*
- *Environmental Justice / Climate Equity Groups*
- *Representatives of / from Vulnerable Communities*
- *Faith-based groups*
- *Homeowner's Associations*
- *Environmental Organizations*
- *Fish and Wildlife Organizations*

Local Agency Stakeholders

- *City Manager*
- *County Accountability Office*
- *Communications Department / Public Information Office*
- *Housing Officials*
- *Finance Managers*
- *Natural Resource Managers*
- *City Council / Board of Supervisors*
- *Planning / Building Commissions*
- *Public Works / Utilities*
- *Building Department / Code Enforcement*
- *Parks and Recreation*
- *Special Districts*
- *School Districts*
- *Local Transit Agency / Authority*
- *Public Health Officials*
- *Police/Sheriff Departments*
- *Local Continuum of Care Providers*

Regional Stakeholders

- *Metropolitan Planning Organizations*
- *Councils / Associations of Government*
- *Regional Collaboratives*
- *Joint Powers Authorities*
- *Neighboring Jurisdictions*
- *Continuum of Care Entities*
- *Air Quality Management Districts*

Private Sector Stakeholders

- *Utility Representatives*
- *Chambers of Commerce*
- *Local Business Owners*
- *Downtown / Business / Merchants Associations*
- *Small Business Development Centers*
- *Climatologists*

Federal, Tribal, & State Stakeholders

- *Federal Emergency Management Agency (FEMA)*
- *National Oceanic and Atmospheric Administration (NOAA)*
- *United States Geological Survey (USGS)*
- *Relevant state agencies, departments, regional districts, and entities*
- *California Native American Tribes*
- *Tribal organizations*
- *Tribal agencies*
- *US Bureau of Indian Affairs (BIA)*
- *US Board of Land Management (BLM)*
- *USDA Forest Service*

F Flood-After-Fire Resilience Stakeholder Examples

Stakeholders particularly important to flood-after-fire resilience include, but are not limited to:

Community Stakeholders

- *Watershed stewardship groups*

Regional Stakeholders

- *Integrated Regional Water Management Groups*

Local Agency Stakeholders

- *Floodplain Administrators and Managers*
- *Stormwater Management Agencies*
- *Resource Conservation Districts / Natural Resource Managers*
- *Displacement Support Entities*

Private Sector Stakeholders

- *Climatologists*
- *GIS Specialists*
- *Geologists*
- *Soil Scientists*
- *Hydrologists*
- *Civil and Geotechnical Engineers*

Federal, Tribal, & State Stakeholders

- *US Army Corps of Engineers*
- *US Forest Service Burned Area Emergency Rehabilitation (BAER) Team*
- *CA Department of Water Resources*
- *CA Geological Survey*



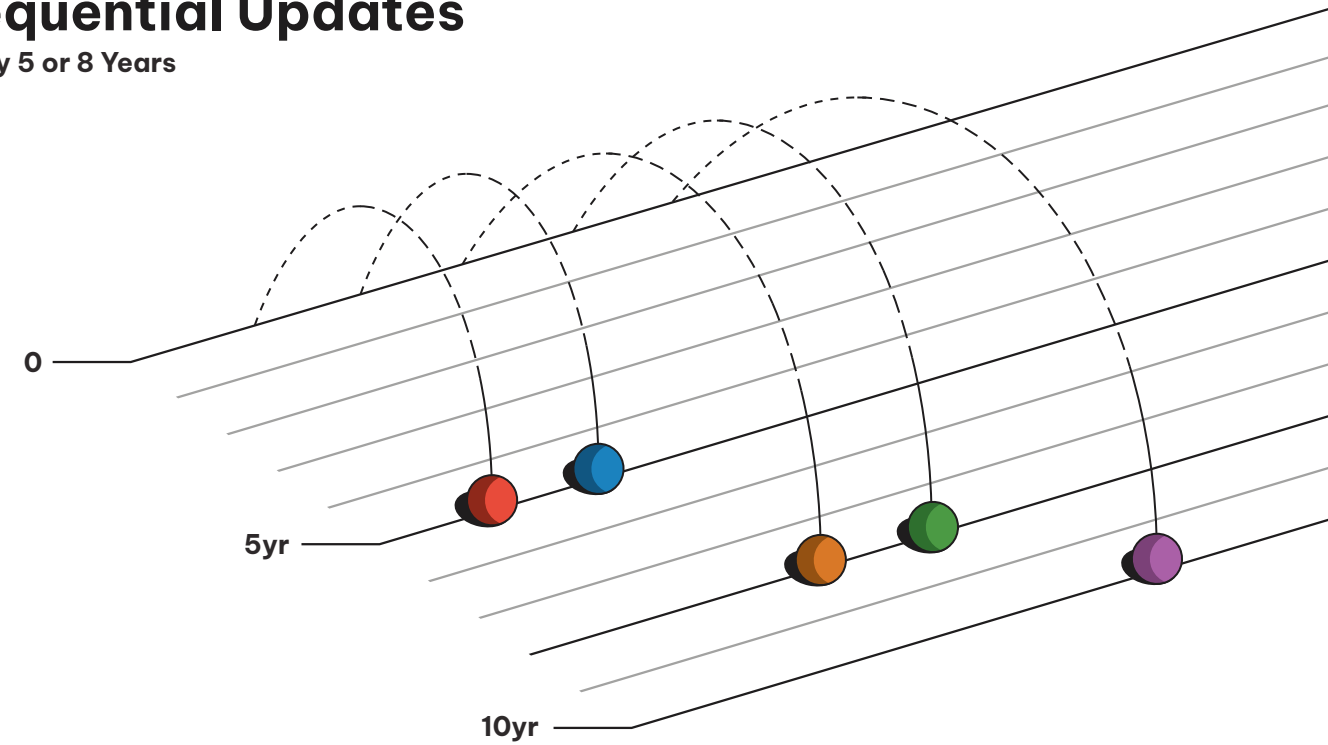
Appendix B:




Example Plan Update Pathways Over 10 Years

Plan Update Pathway A:

Sequential Updates

Every 5 or 8 Years

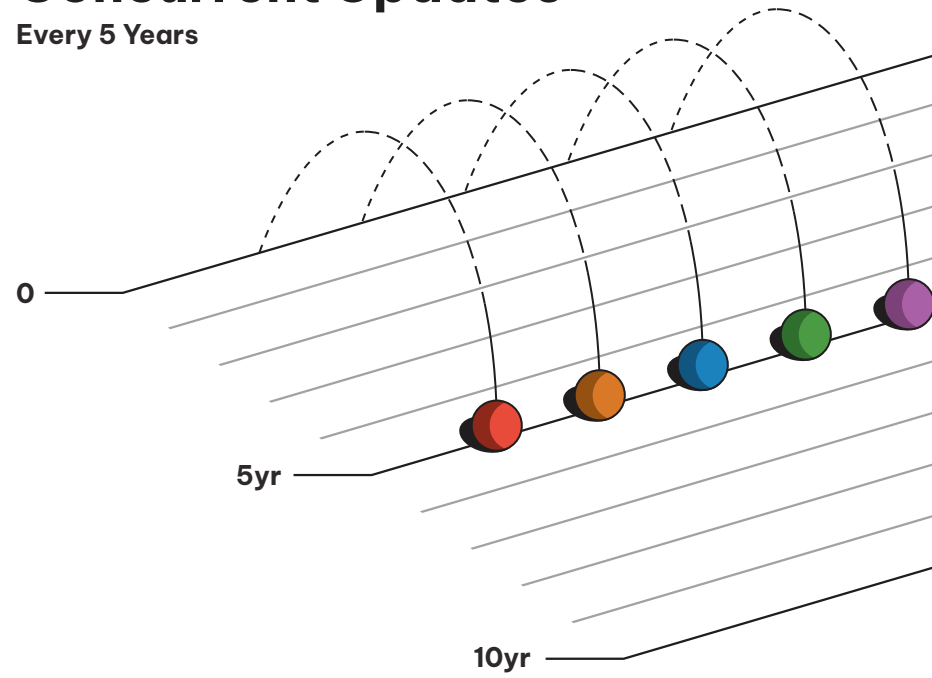






-  LHMP
-  Safety Element / Adaptation
-  Housing Element
-  EJ Element
-  Other General Plan Elements

Plan Update Pathway B:

Concurrent Updates

Every 5 Years

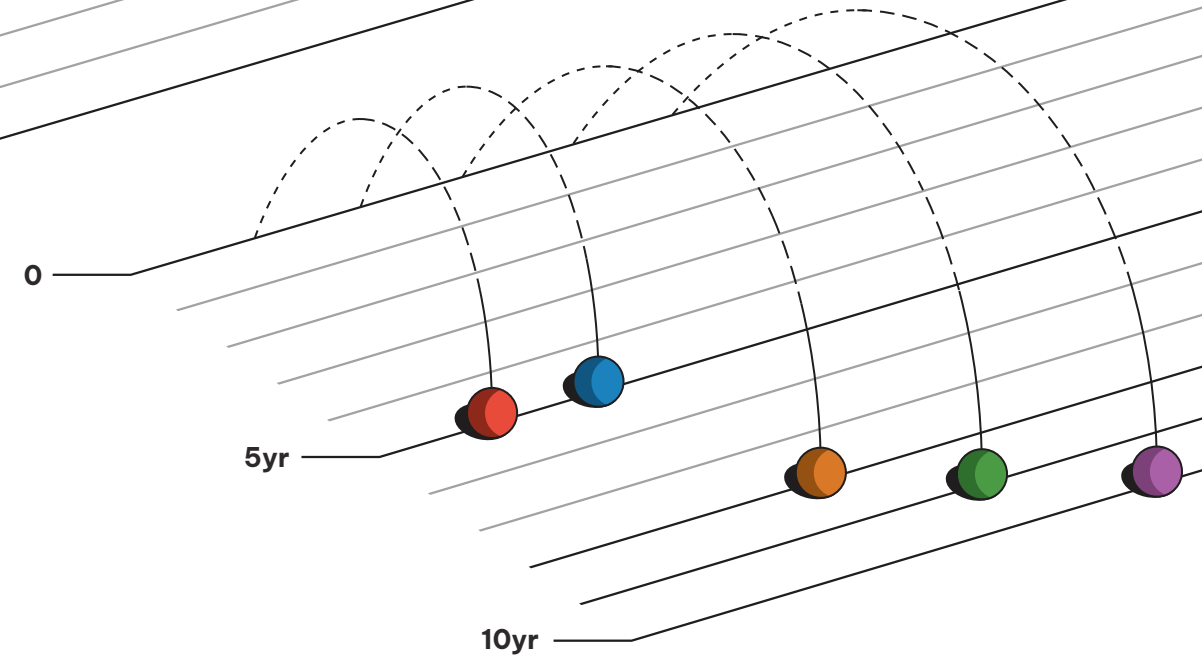


-  LHMP
-  Safety Element / Adaptation
-  Housing Element
-  EJ Element
-  Other General Plan Elements

Plan Update Pathway C:

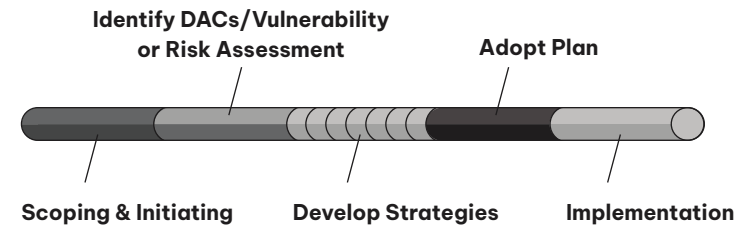
Hybrid Sequential & Concurrent Updates

Every 5 or 8 Years



Overlapping Tasks

- EJ Element
- LHMP
- Safety Element / Adaptation Plan
- Housing Element
- Other General Plan Elements



Sequential Updates

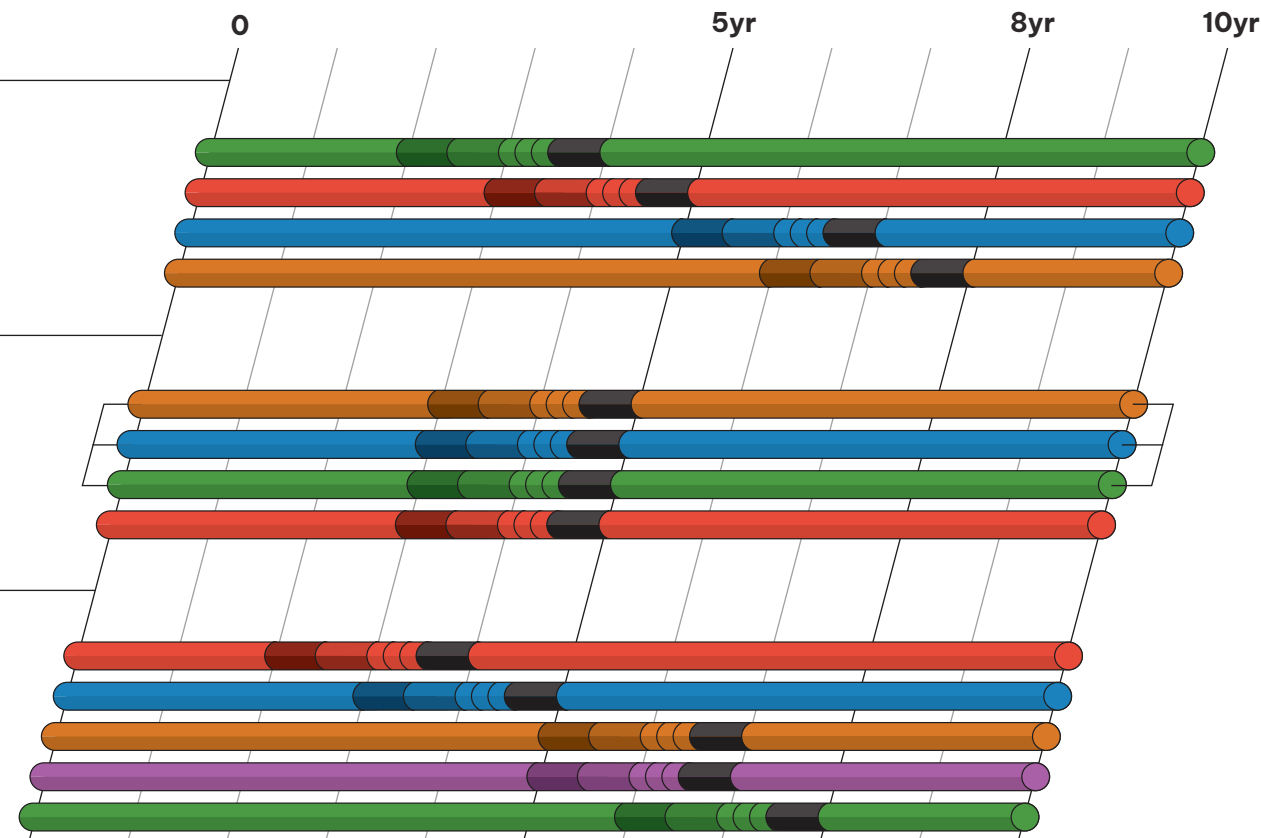
Voluntary EJ element update, & LHMP update, inform safety & housing element updates.

Concurrent Updates

Housing Element update triggers Safety element update; Concurrent Update of 2 elements triggers EJ element update.

Hybrid Sequential & Concurrent Updates

LHMP update informs safety element update; concurrent update of housing & one or more other general plan elements trigger EJ element update.





■ **Coordination & Integration Make a Community Stronger**

For more information and insight on the
Plan Alignment Guides visit ResilientCA.org/plan-alignment