



Mainstreaming Climate Adaptation: How to Integrate Climate Adaptation Into Current Planning Efforts

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As funding for stand-alone climate adaptation planning becomes more competitive, a more integrated approach is gaining traction. Mandated by legislation and supported by state investments in interactive tools and resources, this approach is increasingly effective for mainstreaming adaptation interventions within a variety of sector-specific capacities and planning efforts. Local Hazard Mitigation and Climate Action planning processes are uniquely positioned to pick up where stand-alone plans left off to keep climate adaptation considerations a priority.

Adaptation Planning without the Grants

Climate change requires a fundamental shift in the way our communities are built and function. The idea of mainstreaming adaptation is to systematically incorporate climate risk and resilience into all relevant planning and decision-making processes. While “stand-alone” climate adaptation plans have historically served as the main vehicle for outlining potential local impacts and developing risk-mitigating strategies, grants for this type of planning have become increasingly scarce and competitive.

With the exception of sea-level rise planning¹, there are very few planning grants specifically targeting municipal-level adaptation planning. Several California cities—including Berkeley, Oakland, and Los Angeles—funded their climate adaptation plans through the Rockefeller Foundation’s 100 Resilient Cities Initiative. As of July 2019, however, the Rockefeller Foundation announced plans to wind down financial support for this resilience program—one of the largest privately funded climate change initiatives in the world. The California Department of Transportation also discontinued their adaptation planning grant program in 2019.

With a lack of grant funds available for adaptation planning, the 2018 update to the state adaptation plan (Safeguarding California Plan) has called for the incorporation of climate adaptation into existing funding streams—delegated through well-established planning and operational routines. In short, cities need not wait or struggle to secure funding for adaptation plans before they take action. They can embed climate adaptation initiatives within municipal activities such as hazard mitigation or climate action planning. Not only does an

¹Coastal Commission, Coastal Conservancy, and the Ocean Protection Council, among other government agencies, continue to offer grant opportunities for coastal projects that address sea level rise



integrated planning approach enable immediate action, but it is also potentially the most efficient and effective way to respond to the cross-sectoral nature of addressing climate change.

Furthermore, the increased accessibility of climate data and information has reduced the need for each city in California to individually prepare a climate adaptation plan. The release of nine regional climate assessments provides summaries of relevant impacts, while interactive tools such as Cal-Adapt provide localized climate data and visualization tools. As the state increasingly funds the development of tools and resources that make it easier for cities to identify and quantify their climate risk, it is possible to immediately begin integrating climate change into established planning procedures and projects.

Utilizing Hazard Mitigation Planning Grants to Support Adaptation Planning

Different sectors are facing mandates to incorporate climate risk into planning efforts to support asset management and other decision-making practices. In April 2015, Governor Brown signed Executive Order B-30-15 that called for an adaptation implementation plan for each sector of the economy. In May 2018, the California

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Public Utilities Commission issued an Order Instituting Rulemaking to consider strategies to integrate climate change adaptation planning in relevant Commission proceedings and other activities. Phase 1 of this Rulemaking, currently underway, will broadly consider how best to integrate climate change adaptation into the larger investor-owned electric and gas utilities' planning and operations to ensure safety and reliability of utility service.

Similarly, the American Water Infrastructure Act (AWIA) of 2018 requires all potable water utilities to conduct a Risk and Resilience assessment that, among other things, assesses the risk of natural hazards and "hydrologic change" (climate change), as well as identify strategies and resources to improve system resilience. As new legislation requires consideration of climate impacts across sectors, an integrated planning framework becomes more effective for attaining a compliant status than the traditional stand-alone approach.

Local Hazard Mitigation Plans (LHMPs), in particular, offer a well-established process through which climate projections, risk, and adaptation strategies can be incorporated. Integration of climate risk and adaptation strategies are already encouraged in LHMPs. The Robert T. Stafford Disaster Relief and Emergency Assistance Act,

as amended by the Disaster Mitigation Act of 2000, is intended to “reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters.”

Under this legislation, state, tribal, and local governments must develop LHMPs as a condition for receiving certain types of non-emergency disaster assistance through the Hazard Mitigation Assistance Programs. While FEMA does not require localities to consider climate impacts in their LHMPs, the federal agency does provide guidance², [tools](#), and [funding](#) to support municipalities that wish to take this important extra step. Importantly, the California Office of Emergency Services, through FEMA disaster recovery funds, offers funding for local jurisdictions to develop their LHMP.

All cities and counties in California are required to prepare a general plan, which must include a safety element addressing various hazards and public safety issues. California’s AB 2140 (Section 65302.6) specifically provides that a community may adopt an LHMP into its safety element as long as it meets applicable state requirements. California’s Office of Emergency Services and the Governor’s Office of Planning and Research have determined that incorporating the LHMP by reference adequately satisfies Section 65302.6. Moreover, California’s AB 2140 (Section 8685.9) directly incentivizes the adoption of LHMPs into safety elements by allowing the state to cover more than 75% of the disaster relief funds paid out to local governments not covered by federal disaster relief efforts, so long as the jurisdiction has adopted a valid hazard mitigation plan consistent with the Disaster Mitigation Act of 2000 and has incorporated the LHMP into its general plan.

Because AB 2140 allows (and incentivizes) a jurisdiction’s LHMP to be adopted into the safety element, the LHMP can satisfy numerous safety element requirements—including those in SB 379. SB 379 requires that the safety element of a community’s general plan address the hazards created or exacerbated by climate change. The safety element must include a vulnerability assessment that identifies how climate change is expected to affect hazard conditions in the community, as well as a set of goals, policies, and measures to adapt to improve resilience for these anticipated changes.

AB 2140 and SB 379 together, therefore, provide for a direct and simplified manner of ensuring climate change is incorporated within a jurisdiction’s general plan. Integrating the LHMP into the safety element provides a means of implementing the “mitigation measures,” or adaptation strategies, identified in the LHMP. City councils and planning commissions use the general plan’s goals and policies as a basis upon which to make decisions, determine long-term objectives, generate and evaluate budgets, plan capital improvements, and prioritize tasks. Because consistency between elements of the general plan is required, all other elements of the general plan—as well as zoning, specific plans, and capital improvement programs—would incorporate and be aligned with climate adaptation strategies via the LHMP.

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From CAP to CAAP (Climate Action & Adaptation Plans)

If cities do not have an adopted LHMP, Climate Action Plans (CAP) provide another pathway for incorporating climate risk and adaptation strategies. Since the Legislature expressly recognized climate change as a

²The FEMA LHMP guidebook provides background on climate change and the ways in which a hazard mitigation planning team can integrate it into its plan.



consideration in CEQA in 2007, local governments have typically addressed climate change either in policies in the general plan itself or, more commonly, through adoption of a CAP to streamline permitting and environmental compliance for future projects.

By incorporating climate risk in CAPs, local jurisdictions can easily identify and prioritize strategies with co-benefits—those that reduce emissions while also building community resilience. The development of climate action and adaptation plans (CAAP) can also serve as a community education campaign that brings awareness to the issues and signals a city’s commitment to acting on climate change.³ Cities, however, are not required, nor are specific funds delegated, to develop CAPs.⁴

Conclusion

Integration of climate adaptation into current planning efforts is often the best way for agencies to incorporate these necessary strategies and have them stay current and impactful to their communities. Established or routine plans are more reliably updated. Jurisdictions update their LHMPs and re-submit them for FEMA approval every five years to maintain eligibility for pre- and post-disaster funding. The Risk and Resilience and Emergency Response Plans that water utilities must develop under AWIA must be reviewed and possibly updated every five years. Asset management and capital improvement plans are also updated on a recurring timeline. Climate action plans are often updated regularly as part of the greenhouse gas inventorying and benchmarking process conducted to comply with AB 32. Whether local jurisdictions address climate risk and adaptation strategies in a climate adaptation plan or local hazard mitigation plan, it’s important to remember that integration of climate adaptation strategies into a community’s general plan (as legislation mandates) will likely trigger CEQA.

As climate-driven natural disasters increase in frequency and intensity, it is imperative to transition from simply understanding climate risks to implementing risk-reduction and resilience measures. A plan integration approach to climate adaptation is most effective for ensuring the consideration of climate risk throughout all governing agencies and utility decision-making processes and investments. Large investments in interactive tools and resources make the immediate incorporation of climate data into relevant planning documents possible for nearly all stakeholders. Legislative mandates, funding streams, and update cycles support an integrated framework that seeks to develop a robust capacity for mainstreaming adaptation interventions within a variety of existing sector-specific capacities and planning efforts.

To Learn More

To learn more about climate adaptation, feel free to check out our webpage: www.WeAreHarris.com/Adaptation

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³ LHMPs also require a community engagement component.

⁴ Cap and trade proceeds support GHG reduction programs and projects.