



June 23, 2017

To Whom It May Concern:

The City and County of San Francisco applauds the State of California for its leadership in embracing climate change mitigation and adaptation as a core strategy of building stronger and safer communities. Overall, we are supportive of the *Safeguarding California Plan: 2017 Update* and the many recommendations and actions being undertaken.

The Plan also reveals areas where the State's leadership is needed in developing integrated policies, frameworks, programs and funding that will mitigate the risk to important existing and future statewide economic and cultural resources. These areas include, but are not limited to:

- Fostering collaboration and coordination between cities and counties through existing and new governance and framework structures;
- Developing statewide pooled resources, like green infrastructure or mitigation banks, that support and leverage limited local and federal funding sources;
- Providing detailed analysis, data and technical assistance at a granular enough level to help municipalities develop their local climate adaptation programs and projects; and
- Facilitating the sharing of best practices between local, regional, state, and international entities.

We thank the staff of the California Natural Resources Agency for their outstanding work on the Safeguarding California Plan and for offering us the opportunity to comment on this important document. The following comments reflect input from multiple San Francisco city departments, including S.F. Planning, S.F. Port, S.F. Airport, and S.F. Public Utilities Commission.

If you have questions about our comments, please feel free to e-mail me at [tyrone.jue@sfgov.org](mailto:tyrone.jue@sfgov.org).

Sincerely,

A handwritten signature in black ink, appearing to read "Tyrone Jue".

Tyrone Jue  
Senior Advisor on the Environment  
Office of San Francisco Mayor Edwin M. Lee

## General Observations and Comments

- 1) As with the Economic Development Actions, we believe the report should be clearer in mentioning the preservation of existing “critical” infrastructure, such as ports and airports, and incorporate strategies on how to adapt, move, and/or protect this infrastructure under the Resilience Actions.
- 2) Greater guidance and assistance from State agencies is needed to translate the policies and direction of this Plan to all of the stakeholders. For example, sea level rise policies and projections are oftentimes moving targets. This makes it difficult for local entities to plan for sea level rise and begin the permitting process with a clear understanding of the conditions for approval. In addition, other than agencies like the S.F. Bay Conservation and Development Commission and State Coastal Conservancy, there does not appear to be much active collaboration between the federal, state, and local stakeholders.
- 3) We believe that the economic importance and risk of inaction or failure is not highlighted enough. For example, although the Plan cites the number of airports and seaports among other important transportation infrastructure assets that need protection, it does not go on to describe the economic importance of these transportation centers and conveyances to the State. A failure at these locations would result in catastrophic economic loss for the surrounding region and State.
- 4) We believe the Plan should provide recognition that nature-based shoreline protection systems may not always be feasible and that some hard armoring may be necessary in certain circumstances. This is the situation for many airports, like SFO, and other critical shoreline located facilities. We would propose the permitting and project mitigation allow for in-lieu mitigation solutions such as mitigation banks and regional advanced mitigation plans (RAMPs) so that flooding and sea level rise is addressed on a region-wide basis.

## **Specific Comments:**

### **Page 32:**

**Recommendation E-5: Investigate means to provide long-term support for CalAdapt advancement, maintenance, and expansion.**

**Comment:** To date, Cal-Adapt has been sporadically funded through research grants for system upgrades and incorporation of new data. Cal-Adapt has been underutilized because of a lack of human support and services available to decision makers needing translation and assistance in utilizing the data. We believe that the State also consider develop and fund a climate services component of Cal-Adapt featuring permanent staff providing ongoing technical assistance to local entities in translating and utilizing the data provided in Cal-Adapt, other sources of projections, and diverse approaches useful at a local scale.

**Page 36:**

Recommendation L-1: Develop innovative governance models and public engagement strategies to engage residents, especially vulnerable communities, to be sustainable, equitable, and adaptable.

**Comment:** We suggest clarifying the language proposing to “engage residents to be equitable”; equity is also heavily noted in L-5.

**Page 40:**

Recommendation L-3: Coordinate state guidelines and policies to promote climate resilience and hazard avoidance through local government general plans, zoning ordinances, subdivision regulations, and development incentives.

**Comment:** We suggest adding that all new development should incorporate climate adaptation measures and/or adaptive management strategies over time, which not only protect themselves, but contribute to the adaptation needs of adjacent existing areas. Also, we suggest rewording “development incentives” to “development agreements” to be more inclusive.

**Page 48:**

Recommendation P-2: Educate, empower, and engage California residents, communities, organizations and businesses to take actions to reduce individual and community vulnerability to climate changes through mitigation and adaptation (Page 48)

**Comment:** We support outreach and education efforts to strengthen local understanding of climate impacts on public health, energy systems, and transportation, and empowering residents to become involved in the decision-making process. We encourage the State to conduct public opinion surveys as a next step and to share this information with jurisdictions regarding the effectiveness of already-existing and newly proposed outreach and educational programming to strengthen future outreach efforts.

**Page 49:**

Recommendation P-3: Identify, assess impacts, and promote mitigation and adaptation strategies with public health and equity co-benefits, and assure they do not have unintended consequences for health equity.

**Comment:** We strongly support the recommendation to provide mitigation for poor indoor air quality for new and existing buildings sited near major roadways. In 2014, San Francisco passed several amendments to the Building and Health Codes (Article 38) in order to establish an Air Pollutant and Exposure Zone (APEZ) and an enhanced ventilation requirement for all urban infill sensitive use developments within designated zones. APEZ areas exceed protective standards for cumulative PM 2.5 concentration and cumulative excess cancer risk. Projects within APEZ areas require special consideration for whether the project would expose sensitive receptors to substantial air pollutant concentrations or add emissions to areas already adversely affected by poor air quality.<sup>1</sup> We suggest that the State encourage local planning and health departments to implement similar ordinances as part of a community health risk reduction plan to protect public

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<sup>1</sup> City of San Francisco. *San Francisco Health Code Article 38: Enhanced Ventilation Required for Urban Infill Sensitive Use Developments*, December 2014.

health and welfare. In recommendation P-3, we also suggest including public transportation on the list of health co-benefits as a result of mitigation and adaptation policies and planning

**Page 55:**

Recommendation P-7: Conduct research and promote access to best available data to enable enhanced promotion and protection of human health and equity in light of climate change.

**Comment:** We support the recommendation to continue research on the urban heat island effect, specifically research on low-carbon or net-zero emissions strategies for keeping people cool in extreme heat events, as well as research on the health and climate change adaptation and mitigation co-benefits of energy efficiency policies and green building standards. We also believe that our work in San Francisco may be helpful. With rooftops comprising 30% of San Francisco's land area, the City recognizes that rooftops are valuable space and recently passed legislation mandating the installation of solar or living (green) roofs on most newly constructed buildings across the city.<sup>2</sup> These requirements facilitate the development of renewable energy facilities and/or living roofs, which can also lessen the effects of urban heat island in San Francisco. We suggest the State and other local agencies consider adopting similar ordinances.

**Page 61:**

Recommendation T-1: Understand climate trends that impact transportation.

**Comment:** We agree it is important to understand climate trends and the risk they pose for transportation infrastructure and assets. We believe in addition to transportation assets, it will be useful to determine how climate change may affect congestion management programs and emergency vehicle access on various routes.

**Page 63:**

**Recommendation T-3: Inform the transportation decision-making processes,** it states, "In some cases, existing design and construction practices do not sufficiently consider climate change impacts and may not be capable of protecting transportation infrastructure in the long term.

**Comment:** As an example, we would point out that the FEMA Flood Insurance Rate Maps (FIRM) requirements address mitigation differently and does not look at long term climate change and sea level rise in the same way. We believe the state could provide guidance and leadership in this area.

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<sup>2</sup> San Francisco Planning Department. *Zoning Administrator Bulletin No. 11: Better Roofs Ordinance*, April 2017.

**Page 66:**

Recommendation T-5: Maintain and enhance information sharing and education

**Comment:** We support outreach and education efforts to strengthen local understanding of climate impacts on public health, energy systems, and transportation, and empowering residents to become involved in the decision-making process. We encourage the State to conduct public opinion surveys as a next step and to share this information with jurisdictions regarding the effectiveness of already-existing and newly proposed outreach and educational programming to strengthen future outreach efforts.

**Page 75**

**Comment:** We suggest mentioning California's unique status as a global biodiversity hotspot, one of only 36 in the world – and the fact that climate change only makes the situation more severe. We recommend acknowledging the important role that climate-appropriate urban greening (streets, parks, rooftops, and smaller open spaces) can play in a region's larger ecosystem services and biodiversity.

This comment also supports the broadening of B-1, B-2, and B-3 (Page 80) to include urban areas, such as the use of habitat supportive plantings, green storm water infrastructure, and creek daylighting.

**Page 80:**

Recommendation B-3: Increase restoration and enhancement activities to increase climate resiliency of the natural landscape.

**Comment:** We recommend that the State provide guidance for how all projects (development, infrastructure, recreation, adaptation, etc.) can contribute co-benefits to the support and enhancement of biodiversity through thoughtful plant palette selection. We also suggest the State consider including language that directs its projects, as well as those it funds in county and local jurisdictions, commit to the exclusive use of native plants or non-native, non-invasive, climate appropriate, and habitat supportive plants in all landscaping.

**Page 108:**

**Comment:** Suggest adding language to: Secure funding for climate services entity to complement research efforts by providing science translation and technical assistance to local entities planning adaptation to climate change.

**Page 163:**

**Appendix B Measuring Climate Change Adaptation**

Number of Californians living in flood-prone areas

“As of 2013, one in five Californians were exposed to the hazards of flooding in California. This metric captures the number of 7 Californians living in the 500-year floodplain, and includes risks from tsunami flooding, engineered structure failure flooding, and coastal flooding.”

**Comment:** We believe that statement is unclear if it includes projected flood risk based on climate change (sea level rise and precipitation driven) or current flood risk.

**Page 167:**

New units approved in hazard areas

“This metric would help the State track whether existing land use and hazard avoidance guidance is effectively safeguarding Californians.”

Comment: Suggests this be modified to say, “New units approved in hazard areas without appropriate hazard mitigation measures for the life of the structure.” Otherwise, the category is counter to the metric about reducing rate of land consumed for development; i.e., smart, resilient infill in areas with mitigated hazards would be overall positive – especially considering the rate of hazard areas in existing cities.