High-Level Policy Recommendations for Safeguarding California

California is leading the way on greenhouse gas emissions reductions to avoid the worst consequences of climate change, but no matter how quickly we reduce our polluting emissions, climate impacts will still occur. Many impacts – increased fires, floods, severe storms and heat waves – are occurring already and will only become more frequent and more dangerous. But there are many things we can do to protect against climate impacts. Taking steps now to adapt to climate change will protect public health and safety, our economy and our future.

This document sets forth high-level policy recommendations for how California will continue to safeguard its people, natural resources, and built environment from ongoing and inevitable impacts of climate change. While a full discussion draft of the updated Safeguarding California Plan will be released on February 28, 2017, this outline is meant to provide an early look at the State's revised framework for climate adaptation action.

Ultimately, this framework will be part of a state adaptation strategy that:

- sets clear policy direction for state government generally and by sector
- succinctly lists all state-related resources, activities, programs, and policies that assist adaptation to climate change
- enumerates next steps and commitments from state agencies to transparently and accountably address needs in climate adaptation
- presents metrics that communicate key climate impacts and state government responses to climate impacts
- provides a durable framework for incorporating aspects that focus on coordination and collaboration across sectors and within regions into the strategy
- enables transparent progress tracking for stated next steps and acknowledged gaps in a systematic and sustained way by internal and external agents
- communicates a commitment to environmental justice and the state's most vulnerable communities throughout each element

We look forward to engaging the public and stakeholders to ensure that the State has a plan for making California more resilient to the effects of climate change.

Recommendations to Safeguard California's People

Emergency Management

- 1. Enhance the focus and incorporation of climate change in all local, state, federal, and tribal planning efforts.
- 2. Enhance coordination activities with state partners.

Land Use and Community Development

- 1. Model new innovative governance structures and public engagement strategies to partner with communities to enhance resilience, focusing on building equity and addressing vulnerable populations
- 2. Provide technical support and capacity building to implement climate adaptation initiatives for local and regional governments and communities
- 3. Develop and coordinate land use and planning guidance that fosters stronger communities and reduces hazard exposure in ways that leverage state capacity to incentivize best practices
- 4. Integrate economic development initiatives with programs designed to bolster resilience
- 5. Make resilience a key element of state housing policies and programs
- 6. Ensure a coordinated and robust strategy is implemented across state and local governments to address environmental justice issues and the state's most vulnerable populations
- 7. Link development of adequate and affordable housing stock, strong and empowered communities, and anti-displacement strategies to bolster grassroots resilience

Public Health

- 1. Promote community resilience and health equity to reduce vulnerability to climate change through improving underlying economic, environmental and social conditions
- 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
- 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
- 4. Establish, improve, and maintain mechanisms for robust rapid surveillance of environmental conditions, climate-related illness, vulnerabilities, protective factors and adaptive capacities
- 5. Improve public health preparedness and emergency response
- Collaborate and partner with multiple agencies and organizations (e.g., Environmental, Agricultural, Transportation, and Education at Local, State and Federal levels, as well as Business, Labor, Schools, Health Equity, Healthcare, Tribal, Environmental Justice, and Community-based Organizations)
- 7. Conduct research to enable enhanced promotion and protection of human health and equity in light of climate change. Promote accessibility to the best available data.
- 8. Implement policy changes at local, regional and national levels.
- 9. Identify, develop and maintain adequate funding for implementation of public health climate adaptation strategies.

Recommendations to Safeguard California's Natural Resources

Biodiversity

- 1. Strengthen the climate adaptation component of conservation planning efforts at multiple scales
- 2. Enhance habitat connectivity and protect climate refugia through strategic acquisition and protection activities
- 3. Increase restoration and enhancement activities to increase climate resiliency of the natural landscape
- 4. Increase biodiversity monitoring efforts to better understand baseline conditions and make possible the early detection of climate impacts
- 5. Continue incorporating climate considerations into state investment decision processes related to fish and wildlife conservation
- 6. Educate the public and state agency staff on climate impacts and adaptation options for ecosystems, fish, wildlife, and plants

Forestry

- 1. Enhance forest health and resilience by improving forest management on private and public lands
- 2. Increase protection of forested lands, reduce conversion to non-forest uses, and facilitate reforestation opportunities to result in a more stable forested land base
- 3. Continue investing in urban forestry, enhancing the health of current urban forests and expanding urban tree canopy statewide
- 4. Pursue innovations in biomass utilization and markets that result in productive use of both commercial and non-commercial harvested material in a manner that reduces or offsets GHG emissions, promotes land stewardship, and strengthens rural economies and communities.
- 5. Implement forest management for the overall health and protection of watersheds
- 6. Implement priority research agenda
- 7. Implement forest health monitoring in an adaptive management context

Oceans

- 1. Improve management practices and implement policies to prepare for the impacts of climate change and build more resilient communities and infrastructure.
- 2. Develop actionable science that reflects the latest and evolving trends over a range of time and spatial scales
- 3. Assess community and ecosystem vulnerability through the use of tools and data.
- 4. Widely communicate ocean and coastal issues and adaptation strategies, further outreach and education efforts, and provide pathways for meaningful participation
- 5. Coordinate across agencies and with external partners to ensure efficient problem solving to address climate change impacts

Recommendations to Safeguard California's Built Environment

Agriculture

- 1. Expand incentive programs that result in increased climate change resiliency
- 2. Increase farmland conservation

Energy

- 1. Continue to support climate research for the energy sector to better inform climate adaptation and mitigation strategies
- 2. Use a common set of climate scenarios in all energy research and planning
- 3. Continue incorporating implications of climate change into all energy sector planning and decision-making
- 4. Coordinate energy sector adaptation activities via the Adaptation Working Group.
- 5. Support local adaptation planning efforts and increase outreach about available analytical tools
- 6. Investigate means to provide long-term support for Cal-Adapt advancement, maintenance, and expansion.
- 7. Increase climate resiliency in low-income and disadvantaged communities

Transportation

- 1. Understand climate trends that impact transportation
- Upon completion of vulnerability assessments, prepare adaptation plans to address identified vulnerabilities
- 3. Inform the transportation decision making processes
- 4. Improve transportation system resiliency
- 5. Maintain and enhance information sharing and education

Water

- 1. Vigorously prepare California for flooding
- 2. Support regional groundwater management for drought resiliency
- 3. Diversify local supplies and increase water use efficiency
- 4. Reduce Sacramento-San Joaquin River Delta climate change vulnerability
- 5. Prepare California for hotter and drier conditions and improve water storage capacity
- 6. Address water-related impacts of climate change on vulnerable and disadvantaged populations and cultural resources
- 7. Continue to mainstream climate considerations into water management
- 8. Utilize low-impact development and other methods in State and regional stormwater permits to restore the natural hydrograph
- 9. Require closer collaboration and coordination of land use and water planning activities to ensure that each reinforces sustainable development that is resilient to climate changes
- 10. Protect and restore water resources for important ecosystems
- 11. Better understand climate risks to California water and develop tools to support efforts to prepare for climate risks