

Safeguarding California

California State Government
Climate Change Adaptation Policy

Outline

- Adaptation Overview
- 2017 Safeguarding California Plan Update
- Research and Resources for Climate Adaptation
- State Government Coordination with Local and Regional Adaptation Initiatives

Climate Change Policy

Adaptation

Adjustment in natural or human systems to a new or changing environment. Adaptation to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Mitigation

A human intervention to reduce the human impact on the climate system; it includes strategies to reduce greenhouse gas sources and emissions and enhancing greenhouse gas sinks.

Ongoing Impacts of Climate Change in California

- The past three years have been the hottest ever.
- 5 of the 10 warmest years on record occurred since 2003.
- Since 1975, we've seen a 4.6°F increase in average temperatures.
- Sea levels have risen 7-8 inches.
- Declining snowpack in the Sierra is accelerating; three of the past four years have had 50% below average snowpack in the Sierras (including one with 5% of snowpack).
- Increasing wildfire severity and frequency has resulted an 80% increase in area burned from 2010-2015 over the prior decade.

California's Climate Future

- Acceleration of warming by several degrees across the state
- Accelerating sea level rise
- More severe storms and extreme weather events
- More intense and frequent heat waves
- More intense and frequent drought
- Shrinking snowpack and less overall precipitation
- Greater inland flood flows
- More severe and frequent wildfires
- Ocean acidification, hypoxia, and warming

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Past State Adaptation Strategies

2009 California Adaptation Strategy

- Overview of climate science and statewide hazard-based climate assessment
- 4 comprehensive statewide adaptation strategies
- Vulnerability assessments and adaptation strategies for 7 sectors

2014 Safeguarding California: Reducing Climate Risk plan

- Updated information on climate science
- New information on vulnerabilities and activities for 9 sectors
- Updated general policy recommendations

2016 Safeguarding California Implementation Action Plans

- High-level vulnerability assessments and overview of recommendations from 2014 plan
- Explanation of all ongoing actions and next steps implementing the recommendations from the 2014 plan
- Addition of the “Land Use and Community Development” sector, which detailed ongoing and planned adaptation actions

2017 Update to the Safeguarding California Plan

- Updated comprehensive statewide adaptation strategies and relevant implementation actions
- New framework to initiate improved integration of sectors and link ongoing research to state adaptation action
- Updated high-level recommendations for all ten sectors that detail ongoing actions relevant to those recommendations and the next steps that state government will take to continue their implementation
- Outline of an annual reporting structure for all next steps and adaptation actions by state government
- Increased focus on vulnerable populations, environmental justice concerns, and equity throughout the plan
- Proposed conceptual metrics that could be used to track and measure climate impacts and the adaptation responses of state government over time

Comprehensive State Strategies

1. Consider climate change in all core functions of government
2. Protect California's most vulnerable populations by partnering with them to increase resilience through investments, planning, research, and education
3. Support continued climate research and data tools
4. Identify significant and sustainable funding sources for investments that reduce climate risks, human loss, and disaster spending
5. Prioritize natural infrastructure solutions, actions that both build climate preparedness and reduce greenhouse gas emissions, and projects that produce multiple benefits
6. Commit to communication, education, and outreach efforts about climate impacts
7. Promote collaborative adaptation processes with local and regional government partners

Organizing State Action

Social Systems and the Built Environment

- Emergency Management
- Energy
- Land Use and Community Development
- Public Health
- Transportation

Natural and Managed Resource Systems

- Agriculture
- Biodiversity and Habitat
- Forests
- Oceans and Coasts
- Water

Actions Across State Agencies

- Office of Emergency Services (OES)*
- California Energy Commission (CEC)*
- California Public Utilities Commission (CPUC)
- Department of General Services (DGS)
- Department of Housing and Community Development (HCD)*
- Office of Planning and Research (OPR)
- Strategic Growth Council (SGC)
- Department of Public Health (CDPH)*
- State Transportation Agency (CalSTA)*
- Department of Transportation (Caltrans)
- High-Speed Rail Authority (HSRA)
- Department of Food and Agriculture (CDFA)*
- Department of Conservation (DOC)
- Department of Fish and Wildlife (CDFW)*
- Department of Parks and Recreation (Parks)
- Department of Forestry and Fire Protection (CALFIRE)*
- Ocean Protection Council (OPC)*
- Ocean Science Trust (OST)
- State Coastal Conservancy (SCC)
- California Coastal Commission (CCC)
- Bay Conservation and Development Commission (BCDC)
- State Lands Commission (SLC)
- Department of Water Resources (DWR)*
- State Water Resources Control Board (State Water Board)

Tracking Progress

- New focus on annual reporting
 - Each relevant agency will report annually on the status of every next step
 - CNRA should evaluate all past adaptation recommendations from 2009 and 2014
- Move towards incorporating metrics to evaluate how State government is responding to growing impacts

Safeguarding California Timeline

- A public comment draft is targeted for release by the end of April
- Public comment will remain open until early June
- Public workshops will be held around the state, including one in Los Angeles in mid-May
- A final adaptation strategy is slated for release in July

State Policy and Program Legislation

- AB 1482 (Gordon)
 - Safeguarding California update every 3 years
 - CNRA as lead author
- AB 2800
 - “State agencies shall take into account the current and future impacts of climate change when planning, designing, building, operating, maintaining and investing in state infrastructure.”
 - Climate-Safe Infrastructure Working Group

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Cal-Adapt.org

- Access best available climate science for California to see how climate change will impact your community
- Utilize visualization tools, access and download data, and access other resources
- Updated climate projections and data can be found at beta.cal-adapt.org

California's Fourth Climate Change Assessment

- Over 50 projects in 3 portfolios
 - Energy Research
 - Resources Research
 - External Collaborator Projects
- Foundational scenarios and projections
- Regional Assessments

Sea-Level Rise Guidance Document Update

- Updated statewide guidance to reflect advances in sea-level rise science and projections, including ice loss dynamics
- Guidance will focus on the needs of state agencies and local governments
- An Ocean Protection Council Science Advisory Team Working Group report on the best available sea-level rise science released on April 12th on OPC's webpage (opc.ca.gov)
- Opportunities for stakeholder input include listening sessions, public workshops and a public comment period.
- Updated guidance document scheduled for adoption by the OPC in early 2018

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Integrated Climate Adaptation and Resilience Program

- Technical Advisory Council
 - Made up of climate and governance experts from around the state, including Darrin Chidsey, to help coordinate state initiatives with local and regional efforts
- Adaptation Clearinghouse
 - A developing one-stop shop for all climate adaptation resources in the State

Adaptation Planning Guide and General Plan Guidelines

- 2012 Adaptation Planning Guide is a 4-volume resource for local government planning officials
 - It will likely be updated in 1-2 years by the Governor's Office of Emergency Services to reflect new climate and planning information
- The General Plan Guidelines are reaching the end of a long update process by the Governor's Office of Planning and Research; the update includes guidance on incorporating climate impacts.

Legislation

- SB 246 (Wieckowski)
 - ICARP
 - APG update
- SB 379 (Jackson)
 - Every jurisdiction must incorporate climate change impacts and adaptation strategies in its general plan and local hazard mitigation plan in its next update or by 2022
- SB 1000 (Leyva)
 - Every jurisdiction must incorporate environmental justice in its general plan as a discrete or integrated element in its next update

"It's time for **courage**, it's time for **creativity** and it's time for **boldness** to tackle climate change . . .

The risk is real, the cost is huge and growing, and therefore taking a sequence of **realistic steps** just makes sense, and that's what we're going to do in **California.**"

– Jerry Brown, Governor of California



JR DeLaRosa

Assistant Secretary for Climate Change

California Natural Resources Agency

1416 Ninth Street, Suite 1311 | Sacramento, CA 95814

(916) 653-6333 | JR.DeLaRosa@resources.ca.gov

Joey Wall

Climate Policy Advisor

California Natural Resources Agency

1416 Ninth Street, Suite 1311 | Sacramento, CA 95814

(916) 651-0393 | joseph.wall@resources.ca.gov