

Technical Advisory Council

Item 8: CA Fifth Assessment Reports

March 7, 2025

Introduction

Public Resources <u>Code 71340</u> (Senate Bill 1320, Stern, 2020) calls on the State, through the Integrated Climate Adaptation and Resiliency Program (ICARP), to advance actionbased science by developing California Climate Change Assessments at least every five years. The Governor's Office of Land Use and Climate Innovation (LCI) is leading implementation of <u>California's Fifth Climate Change Assessment</u> (Fifth Assessment) in partnership with the California Energy Commission, California Natural Resources Agency, and California Strategic Growth Council.

The Climate Assessment's nine Regional Synthesis Reports compile the best available science on climate change and other informational resources at a regional and local scale to help communities understand and develop informed responses to the impacts of climate change in their region.

Additionally, Topical Reports will address statewide climate change issues, summarizing the best available information on specific subjects. These areas were based on the foundation set in the Fourth Assessment and refined through community engagement and direction from the Climate Assessment's statute (SB 1320, Stern 2020). The focus areas include, but are not limited to the following:

- 1. Racial Equity & Climate Justice: The effects of current and projected climate change impacts on racial equity and climate justice in California.
- 2. Climate-Induced Human Displacement & Migration: The effects of current and projected climate change impacts on human displacement and migration in California.
- 3. Climate Impacts to the Economy: The fiscal and economic impacts of current and projected climate change events and trends in California.

State agencies will also be contributing key reports to the Fifth Assessment, including one by the California Department of Insurance on climate finance and insurance.

The Fifth Assessment suite of reports, resources, and tools are due to roll out in mid-2026.

Recognizing the impacts communities in the Los Angeles Region are facing due to the recent wildfire events, Fifth Assessment Authors present opportunities to uplift lessons

learned and support adaptive capacity to related extremes. Authors of the Los Angeles Regional Report, Racial Equity and Climate Justice Report, Climate-Induced Human Displacement and Migration Report, Climate Impacts to the Economy Report, and Climate Finance and Insurance Report will discuss how their final reports will advance our understanding of the impacts of wildfire events across regions and the state with a focus on communities facing displacement, undue burdens exacerbated by sociodemographic factors, economic impacts, and insurance and financing considerations.

Los Angeles Regional Report

Jesse Norris, the Coordinating Lead Author of the Los Angeles Regional Report, is also one of the authors of the article <u>Climate Change A Factor In Unprecedented LA Fires</u>. The key takeaways include:

- "Climate change may be linked to roughly a quarter of the extreme fuel moisture deficit when the fires began.
- The fires would still have been extreme without climate change, but probably somewhat smaller and less intense.
- Given the inevitability of continued climate change, wildfire mitigation should be oriented around (1) aggressive suppression of human ignitions when extreme fire weather is predicted, (2) home hardening strategies, and (3) urban development in low wildfire risk zones."

The presentation will include a discussion of these takeaways, how the Los Angeles region wildfires are informing the regional report, and how the regional report can inform future responses to wildfires.

Racial Equity and Climate Justice Report

The Racial Equity & Climate Justice Report is being led by Coordinating Lead Authors Margaretta Lin and Charisma Acey (UC Berkeley). It may consider, but not be limited to, the following priority topics:

- The research or information gaps that exist for understanding the impacts of climate change on vulnerable and historically underserved or underrepresented communities in California, including Black, Indigenous, and people of color (BIPOC); individuals with disabilities; children; unhoused; youth and young adults; seniors; low-income individuals; linguistically isolated individuals; renters or people experiencing housing burdens; individuals lacking access to education; women; and Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, Intersexual and Asexual (LGBTQIA+) individuals.
- The limitations of climate adaptation policy, investment, and planning at the state, local, and regional level in fostering equitable climate resilience and the opportunities to address these limitations.
- The considerations for evaluating the impact of climate investments on equity outcomes.

• The opportunities and barriers to uplifting community knowledge in climate research, planning and investments at state, local and regional levels.

The presentation will discuss how the Los Angeles region wildfires are informing this report and how the report can inform future responses to wildfires.

Climate-Induced Human Displacement & Migration Report

The Climate-Induced Human Displacement & Migration Report is being led by Coordinating Lead Authors Betsy Popken and Hossein Ayazi (UC Berkeley). It may consider, but not be limited to, the following priority topics:

- The research or information gaps for understanding the impacts of climate change on human displacement and migration in California, including distinctions between short- and long-term displacement due to climate related events and trends. This may include but need not be limited to, impacts on the economy; financial capacity including insurance; natural resources; infrastructure; emergency systems; housing; public health; community identity; unique cultural, spiritual and subsistence tribal connections to ancestral lands and species; etc.
- The impacts of climate-induced displacement/migration on disaster-affected areas (e.g., impacts to local economies, transportation systems, emergency capacity, telecommunications, natural systems, cultural resources, social systems, etc.).
- The impacts of climate-induced displacement/migration on the region surrounding the disaster affected area (e.g., impacts to local economies, transportation systems, emergency capacity, telecommunications, natural systems, cultural resources, social systems, etc.).
- The effects of cascading impacts (e.g., issues resulting from climate change impacts such as when electricity assets or other critical infrastructure are affected) and compounding hazards (e.g., the combination of climatic events such as floods after wildfire) on displacement/migration in California.

The presentation will discuss how the Los Angeles region wildfires are informing this report and how the report can inform future responses to wildfires.

Climate Impacts to the Economy Report

The Climate Impacts to the Economy Report is being led by Coordinating Lead Authors Gordon McCord and Teevrat Garg, and Project Manager McKenna Maxwell (UC San Diego). It may consider, but not be limited to, the following priority topics:

- The considerations for evaluating the costs of inaction on climate change impacts.
- The effects to the economy of cascading impacts and compounding hazards.
- The costs and benefits of potential climate adaptation responses to build a climate resilient economy.
- The data, research, or information gaps that might limit our understanding of the economic impacts of climate change in California.

- The data or information gaps that might limit our understanding of how climate change is impacting California's workforce.
- The potential fiscal and economic impacts of climate change in California that should be prioritized in future analyses or research.

The presentation will discuss how the Los Angeles region wildfires are informing this report and how the report can inform future responses to wildfires.

Climate Adaptation Finance and Insurance

The Climate Adaptation Finance and Insurance report is a state agency-volunteered report led by the California Department of Insurance. It will examine California's adaptation finance past and present, and case studies for novel disaster risk and climate finance mechanisms.

The presentation will discuss how the Los Angeles region wildfires are informing this report and how the report can inform future responses to wildfires.

Discussion Questions

• What priorities and questions should these authors consider in their research that would help advance California's understanding about the impacts of climate change and respond to extreme events with actions that improve adaptive capacity?