

CA 5th Climate Change Assessment Sierra Nevada Regional Report

Kick Off Workshop
October 30, 2024



Agenda

- Context – Why have a climate change assessment?
- 4th Assessment, Sierra Nevada Regional Report - Review & Discuss
- Next Steps
- How to Stay Involved





Why have a regional climate assessment?

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Sierra Nevada Region Report



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Table of Contents

Executive Summary	5
Table of Contents	9
1: Introduction	10
2: Sierra Nevada Climate and Climate Projections	14
2.1 Historical Climate.....	14
2.2 Temperature & Precipitation Change	16
2.3 Snowpack Loss	21
2.4 Regional Drying and Runoff Changes	22
3: Major Vulnerabilities and Adaptations	26
3.1 Terrestrial Ecosystems and Biodiversity	27
3.2 Water Resources	43
3.3 Communities.....	53
3.4 Some Additional Vulnerabilities.....	69
4: Regional Knowledge & Resource Gaps	72
Climate	72
Wildfire.....	72
Water.....	73
Communities	73
Hazards, Health and Emergency Management.....	74
5: Conclusions	76
Ecosystems and Biodiversity	77
Water Resources	77
Community Adaptation Capacity	77
6: References	78

Chapter 1: Introduction

4th Assessment

- Sierra Nevada information
 - Provision of ecosystem services to CA
 - Climate
 - Topography
 - Vegetative communities
 - Economy
 - Land use
- *Includes call out box for wildfire.
Does this need its own section?

5th Assessment

- Regional boundary has changed between 4th and 5th Assessments to remove southern desert regions

Chapter 1: Introduction



5th Assessment

- Regional boundary has changed between 4th and 5th Assessments to remove southern desert regions

Chapter 2: Sierra Nevada Climate and Climate Projections

4th Assessment

- Historical Climate
- Expected Temp and precip change
- Snowpack loss
- Regional drying and runoff changes

Note: content primarily focused on change in, not on impact of change

5th Assessment

- Update to how projections are measured
 - No more RCP, using SSP
- Include wildfire?

Chapter 3.1: Terrestrial Ecosystems and Biodiversity

4th Assessment

- Climate Effects, Trends, and projections in ecosystems
 - Focal ecosystems (forests, oak woodlands, meadows)
 - Trends and projections
 - Wildfire
 - Extreme events and climate variability
 - Carbon storage
 - Biogeographic shifts

5th Assessment

- Updates or changes

Chapter 3.2: Water Resources

4th Assessment

- Climate Effects, Trends, and projections
 - Floods
 - Surface Water
- Vulnerabilities
 - Surface-water supplies
 - Groundwater
 - Drought
 - Water Quality
 - Demand

5th Assessment

- Updates or changes

Chapter 3.3: Communities

4th Assessment

- Regional DAC definitions
- Demographics
- Types of rural, natural resource-based communities
- Water-related vulnerability
- Forest/Wildfire vulnerability
- Forest restoration
- Health vulnerability
- Adaptation strategies

5th Assessment

- Updates or changes

Chapter 3.4: Some Additional Vulnerabilities

4th Assessment

- Increased heat and precipitation extremes
- Hydroelectric generation impacts and electricity demands
- Impacts to emergency management capacities

5th Assessment

- Updates or changes

Chapter 4: Regional Knowledge and Resource Gaps

4th Assessment

- Climate
- Wildfire
- Water
- Communities
- Hazards, health, and emergency management

5th Assessment

- Updates or changes

Reportwide: Call Out Boxes

4th Assessment

- Wildfire in the Sierra Nevada Region
- French Meadows Forest Resilience Project
- Lake Tahoe Basin Adaptation Efforts
- Sierra Nevada Watershed Improvement Program
- Examples of meadows restoration efforts
- Tribes and climate change
- Local Perspective: Dinkey Landscape
- Local Perspective: Upper Feather River Watershed
- Fire MOU Partnership
- Climate smart land trusts
- Climate smart land development

5th Assessment

- Updates or changes



Next Steps

1. Author team analyze climate trend and projection data
2. Authors draft report outlines
3. Authors draft report chapters
4. Community engagement with subject matter experts, tribes, decision makers, & communities
5. Authors embed feedback
6. LCI (OPR) Expert Review
7. Final report formatting

Thank you.

Stay Involved:
Join our [mailing list](#).

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