NCA5 Chapter 30: Hawai'i and US-Affiliated Pacific Islands

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Ch. 30 Region includes:

- •Hawaiʻi
- •American Sāmoa
- Commonwealth of the Northern Mariana Islands
- Federated States of Micronesia
- •Guam
- Pacific Remote Islands
- Republic of the Marshall Islands
- Republic of Palau



Ch. 30 Overview

- The Pacific Ocean connects diverse peoples across over 2,000 islands.
- Climate change in the Pacific Islands exacerbates inequities and threatens unique island ecosystems, cultural resources, human health, livelihoods, the built environment, and access to clean water & healthy food.
- Adaptation actions that center local and Indigenous Knowledge can improve resilience.



Ch. 30 Key Messages

- Climate Change Impairs Access to Healthy Food & Water
- 2. Climate Change Undermines **Human Health**, but Community Strength Boosts Resilience
- 3. Rising Sea Levels Threaten Infrastructure & Local Economies and Exacerbate Existing Inequities
- 4. Responses to Rising Threats May Help Safeguard Tropical **Ecosystems & Biodiversity**
- 5. Indigenous Knowledge Systems Strengthen Island Resilience



Wildfire Area Burned in the Pacific Islands Compared to the Western US



O'ahu Community Heat Assessment (August 31, 2019)

FIGURE 30.9. This community heat assessment map shows the afternoon heat index and "hotspots" for the island of O'ahu, Hawai'i. The inset is urban Honolulu. Data were collected by community volunteers and the City and County of Honolulu on August 31, 2019. On this day, the high temperature tied the hottest-ever recorded for Honolulu. Multiple neighborhoods on O'ahu experienced afternoon heat indices above 100°F (38°C), with a maximum recorded heat index of 107.3°F (42°C). Climate change is increasing the frequency, intensity, and duration of heat extremes, putting individuals and communities at risk.



Wildfire Area Burned in the Pacific Islands Compared to the Western US

FIGURE 30.13. The annual percentage of total land area burned for seven Pacific Islands is equivalent to or greater than the percent area burned for western US states. Years examined are noted for each location.



Percent of land burned annually

Ch. 30 Additional Highlights

• At higher global warming levels, we will experience more severe climate impacts.



Figure 30.14. Conservation efforts across the region help to restore ecosystem health & protect native species.

- The cascading impacts on people & ecosystem here ecosystems are disproportionate to the region's emissions.
- Recognition of shared challenges & data inequities with the US Caribbean. <u>Improved representation of non-CONUS areas</u> across NCA5; still room for improvement.
- <u>Actions are already underway</u>, but need to be scaled up. Opportunities exist for place-based adaptation & mitigation informed by Indigenous Knowledge systems.

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