

Pacific Islands Regional Climate Assessment (PIRCA)

What is the Pacific Islands Regional Climate Assessment (PIRCA)?

The PIRCA is a collaborative effort aimed at assessing the state of climate knowledge, impacts, and adaptive capacity in Hawai'i and the US-Affiliated Pacific Islands. The PIRCA engages federal, state, and local government agencies, non-government organizations, businesses, and community groups to inform and prioritize their activities in the face of a changing climate. The PIRCA represents a 'network of networks' that relies on the regional culture of communication and collaboration to support a sustained climate assessment process and Climate Impacts Forum in the summer of 2012. The PIRCA focuses on three sub-regions: (1) the Western North Pacific, (2) the Central North Pacific, and (3) the Central South Pacific.

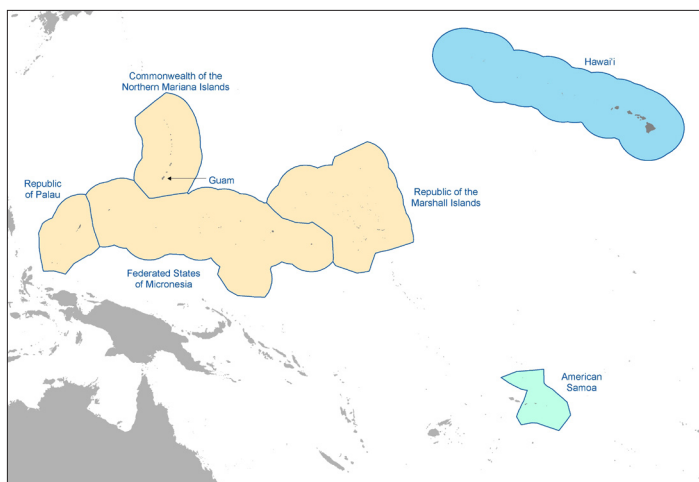


Figure 1: Map of PIRCA Region. Source: Miguel Castrence.

The PIRCA activities include dialogs, workshops, and a regional forum to facilitate sharing, analyzing, and reporting on scientific consensus, knowledge gaps, sectoral needs, and adaptive capacity for addressing the changing climate. Our most immediate focus is on bringing together scientific experts and practitioners to generate an integrated report that will provide a regional contribution to the National Climate Assessment (NCA) by March 2012.

What is the National Climate Assessment (NCA)?

The NCA aims to help the federal government provide knowledge that can be used by communities to create a more sustainable and environmentally sound plan for our future. Conducted under the auspices of the United States

Global Change Research Act of 1990, which requires a report to the US President and the Congress every four years, the NCA:

- Evaluates the effectiveness of climate mitigation and adaptation activities
- Identifies economic opportunities that arise as the climate changes
- Integrates scientific information from multiple sources
- Highlights key findings and gaps in our knowledge

What topics does the PIRCA focus on?

The pillars of the PIRCA framework are the three regional focus areas established at the March 2011 Pacific Climate Information System (PaCIS) Steering Committee meeting: (1) Preserving fresh water resources and minimizing the impacts of drought; (2) Fostering community resilience to the impacts of sea-level rise, coastal inundation, and extreme weather; and (3) Sustaining marine, freshwater, and terrestrial ecosystems.

The PIRCA will examine impacts and adaptive capacity of communities regarding climate change effects on the water-energy nexus; cultural resources and indigenous environmental knowledge; regional and community economies; adaptation policy; urbanization, transportation, and infrastructure vulnerabilities; ecosystem services; and ocean resource sustainability and coastal zone management. Specific topics of interest include:

- Climate variability and change science, including historical observations, trends and climatologies.
- Freshwater resource sustainability; flow trends; groundwater recharge; demographic stresses.
- Sea level rise and coastal inundation projections and scenarios; current and projected coastal hazards and impacts.
- Ecosystem assessments including climate effects on marine systems, sea level rise impacts on ocean and coastal habitats and species, and species / habitat responses to changes in precipitation and temperature.
- The adaptive capacity of different communities and institutions and related opportunities and limitations.

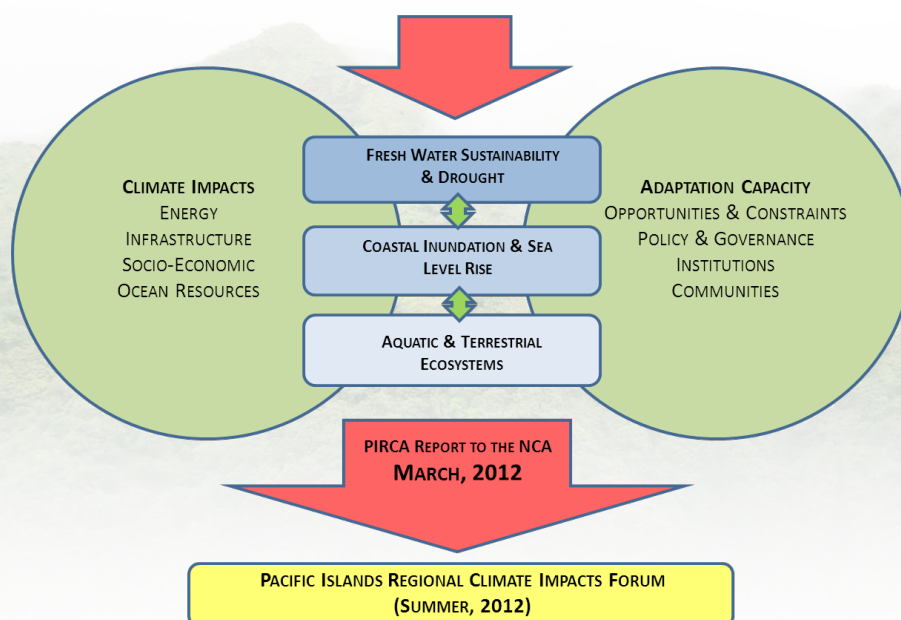


Figure 2: The PIRCA Process.

PIRCA Partners

Primary oversight of the PIRCA is being carried out jointly by representatives from the NOAA NESDIS National Climatic Data Center and PaCIS; the Pacific Regional Integrated Sciences & Assessments (RISA) program through the East-West Center; and the Pacific Islands Climate Change Cooperative (PICCC). Other key contributors include the NOAA National Ocean Service; NOAA Pacific Services Center; NOAA Pacific Islands Fisheries Science Center; NOAA Center for Operational Oceanographic Products and Services; NOAA Coastal Storms Program; NOAA Coastal Services Center; the Pacific Risk Management Ohana (PRiMO); National Marine Fisheries Service; United States Geological Survey Pacific Islands Water Science Center; United States Fish and Wildlife Service; University of Hawai'i School of Ocean and Earth Science and Technology department of Oceanography; UH International Pacific Research Center; UH Sea Level Center; UH Sea Grant and the Center for Island Climate Adaptation & Policy; Water and Environmental Research Institute, University of Guam; and the Western Regional Climate Center.

Want to contribute or get more information?

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For more on the PIRCA:

<http://www.eastwestcenter.org/PIRCA>

For more on the NCA:

<http://www.globalchange.gov/what-we-do/assessment>

