

PACIS

Pacific Climate Information System Building Integrated Partnerships for End-to-End Climate Services

The History of PaCIS

PaCIS roots back to the 1997-1998 El Niño season and initial discussions of Pacific climate services at a workshop held in conjunction with the 1999 Pacific Regional Environment Programme's (SPREP) meeting of the Pacific Regional Meteorological Services Directors. Between 1999 and 2004 dialogue ensued, and many climate-related programs and organizations started activities in the Pacific or became more focused on climate-related issues. This period culminated with the Pacific ENSO Applications Climate (PEAC) Center First Decade Review workshop held in June 2004 in Honolulu at which discussions among partners and users of PEAC resulted in the realization of a shared goal of a Pacific climate risk management information system. This led to formulation of a PaCIS Steering Committee. The PaCIS Action Plan was completed by this group in February 2008. A meeting of the PaCIS Steering Committee and three working groups was held in Honolulu in August 2008. Steering committee and working group members met in Honolulu for an Implementation Plan Workshop in August 2010 and a Steering Committee in March 2011.



A billboard on Pohnpei encourages water conservation in preparation for the 1997-98 El Niño. Photo courtesy of NOAA

The PaCIS Vision “Resilient and sustainable Pacific communities using climate information to manage risks and support practical decision-making in the context of climate variability and change.”

The Pacific Climate Information System (PaCIS) is made up of representatives of institutions and programs working in the fields of climate observations, science, assessment, education, outreach, users, and services in the Pacific as well as selected individuals with expertise in similar regional climate science and service programs in other regions. It provides a forum for sharing knowledge and experience needed to guide integrated program development and implementation.

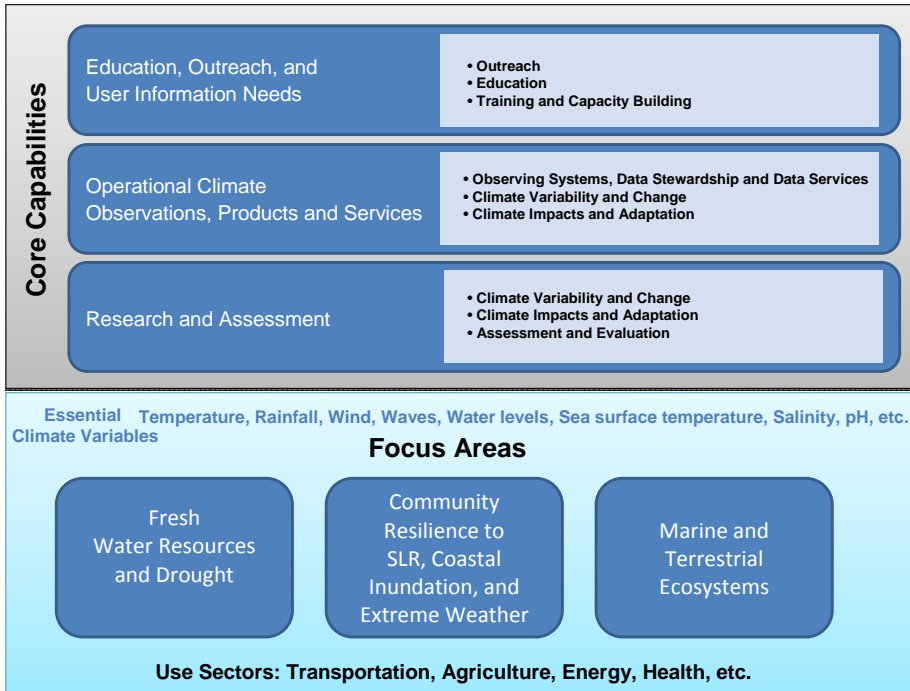


Adapted from the Secretariat of the Pacific Community's map designed by iWave Solutions for Pacific RISA

The PaCIS mission includes the following objectives:

- Clarify climate information needs to guide climate education, outreach, user information needs, observations, products, services, research and assessment;
- Provide access to critical data, research and new climate information products and services;
- Translate research and assessment results into useful and usable climate information;
- Interpret global and regional climate forecasts and projections for local applications;
- Enhance regional and local capabilities to manage risks and support sustainable development in the context of climate variability and change; and
- Enhance collaboration among national, regional and international institutions and programs involved in climate information services.

PaCIS provides a programmatic framework to integrate ongoing and future climate observations, operational forecasting services and climate projections, research, assessment, data management, outreach, and education to address the needs of American Flag and U.S.-Affiliated Pacific Islands (USAPI). In addition to meeting the specific needs of American Flag and USAPI, PaCIS provides a venue to discuss the role of U.S. contributions to other climate-related activities in the Pacific including observing system programs such as the Pacific Islands Global Climate Observing System (PI-GCOS).



The PaCIS Strategic Framework

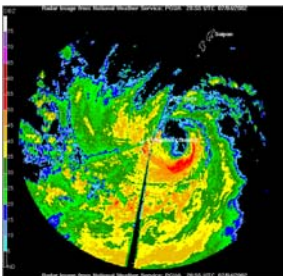
Four broad categories of actions represent the foundation upon which the development and delivery of climate services in the Pacific region are based.

Building a Network of Networks.

No one agency, institution, or organization can provide all of the climate services that the region needs. PaCIS is an amalgam of expertise, experience, and perspective that serves to nurture essential partnerships, align complementary interests and activities, and thereby grow a regional culture of communication, coordination and collaboration.

Conducting Integrated Assessments.

The assessment process exemplifies the synergy between science and service. An assessment process grounded in the iterative 'co-production of knowledge' at multiple levels is required to ensure that science and services are brought to bear on relevant problems and questions.



Super Typhoon Chataan making landfall over Guam, July 4, 2002
Courtesy of NOAA NWS

Assembling, Sustaining, and Advancing Core Capabilities.

Making available a collection of information centered on understanding and predicting climate variability and change is a fundamental element of climate services. It is part of a group of core capabilities that together constitute an 'end-to-end' system of products and services. PaCIS defines this set of core capabilities as:

- Outreach, Education, Training and Capacity Building
- Observing Systems, Data Stewardship, and Data Services
- Understanding and Predicting Climate Variability and Change
- Understanding Climate Impacts and Informing Adaptation
- Assessment and Evaluation

Developing Products and Services Focused on Regional Issues.

Climate services include the creation and distribution of information targeted at understanding climate impacts and informing adaptation at local and regional levels in a way that meets the needs of specific users. Targeting is accomplished through the establishment of focus areas associated with climate issues critical to the region. PaCIS recognizes regionally relevant focus areas to be:

- Preserving Fresh Water Resources and Minimizing the Impacts of Drought
- Fostering Community Resilience to the Impacts of Sea Level Rise, Coastal Inundation, and Extreme Weather
- Sustaining Marine and Terrestrial Ecosystems



Stream flooding in American Samoa
Photo courtesy American Samoa Coastal Management Program

Regional Climate Services in NOAA

In May 2009, Jane Lubchenco, Ph.D., Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator testified before the House Science and Technology Committee's Subcommittee on Energy and Environment about the concept for a national climate service. Noting the accelerating need of decision makers from the government and the private sector for science-based data, information and knowledge that are critical to adapt, plan for and respond to rapid changes in climate, the Department of Commerce and NOAA proposed establishing a NOAA Climate Service in an announcement on February 8, 2010. "Working closely with federal, regional, academic and other state and local government and private sector partners, the new NOAA Climate Service will build on our success transforming science into useable climate services," said Dr. Lubchenco. The formation of regional climate service directorates is central to this effort.



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