



Piko Assessments Sat Jan 19 12:34:54 HST 2019

Printing 35 of total 35 records.

#1) Name	A Water-Budget Model and Assessment of Groundwater Recharge for the Island of Hawaii
Lead Agencies	USGS/Pacific Islands Water Science Center
Contacts	John A. Engott, jaengott@usgs.gov
Partnering Agencies	State of Hawaii Commission on Water Resource Management
Types	- Needs And Capabilities - Capacity
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	- Central North Pacific - State Of Hawaii
Status	- Completed
Description	Concern surrounding increasing demand for groundwater on the Island of Hawaii, caused by a growing population and an increasing reliance on groundwater as a source for municipal and private water systems, has prompted a study of groundwater recharge on the island using the most current data and accepted methods. For this study, a daily water-budget model for the entire Island of Hawaii was developed and used to estimate mean recharge for various land-cover and rainfall conditions, and a submodel for the Kona area was developed and used to estimate historical groundwater recharge in the Kona area during the period 1984–2008.
Url	<a href="http://pubs.usgs.gov/sir/2011/5078/">http://pubs.usgs.gov/sir/2011/5078/</a>

#2) Name	APDRC Products
Lead Agencies	UH SOEST/IPRC/APDRC
Contacts	Jim Potemra, jimp@hawaii.edu
Partnering Agencies	JAMSTEC, NASA and NOAA; some individual grants from NSF
Types	- Needs And Capabilities - Capabilities
Area of Applicability	- International and National - National and Regional

Focus Area	<ul style="list-style-type: none"> <li>- Fresh Water Resources and Drought</li> <li>- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience</li> <li>- Marine and Terrestrial Ecosystems</li> </ul>
Regions	<ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- Western North Pacific</li> <li>- South Pacific</li> <li>- Pacific Basin</li> </ul>
Status	- Ongoing
Description	The Asia-Pacific Data-Research Center (APDRC) works closely with both PI-GOOS and PacIOOS (all three running data services) to provide data and data products to the Pacific.
Url	<a href="http://apdrc.soest.hawaii.edu">http://apdrc.soest.hawaii.edu</a>

<b>#3) Name</b>	Central Oahu Watershed Decision-Maker Assessment
Lead Agencies	Pacific RISA
Contacts	Melissa Finucane, <a href="mailto:FinucanM@EastWestCenter.org">FinucanM@EastWestCenter.org</a>
Partnering Agencies	UH ICAP, UH SSRI, UH IPRC, UH WRRC, USGS, PICCC
Types	<ul style="list-style-type: none"> <li>- Needs And Capabilities</li> <li>- Needs</li> <li>- Capacity</li> <li>- Risk and Vulnerability or Problem-focused</li> </ul>
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	<ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- State Of Hawaii</li> </ul>
Status	- Completed
Description	This project is conducted in support of the National Climate Assessment and aims to identify stakeholders, their climate-sensitive decisions, and climate information needs and usage related to fresh water management in the Central Oahu Watershed.
Url	<a href="http://www.pacificrisa.org/cms/index.php?option=com_content&amp;view=article&amp;id=253&amp;Itemid=171">http://www.pacificrisa.org/cms/index.php?option=com_content&amp;view=article&amp;id=253&amp;Itemid=171</a>

<b>#4) Name</b>	Climate Change and Health Vulnerability Assessment and Adaptation Planning Carried Out in 11 Pacific Island Countries
Lead Agencies	World Health Organization, Division of Pacific Technical Support - South Pacific Office
Contacts	Dr. Lachlan McIver, Climate Change & Health Officer, <a href="mailto:mciverl@wpro.who.int">mciverl@wpro.who.int</a>

Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- National and Regional
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience
Regions	- Western North Pacific - FSM - Palau - RMI - South Pacific - Fiji - Samoa - Tonga - Other South Pacific
Status	- Completed
Description	Mixed-methods assessments of health impacts of climate change, based on quantitative analyses of available data on historical climate and climate-sensitive disease patterns, as well as wide-ranging stakeholder consultations to determine health-related vulnerabilities to climate variability and change. This project was carried out in 11 Pacific island countries between 2010 and 2012.

#5) Name	Climate Change Assessment in Small Pacific Island States (CCASP)
Lead Agencies	Pacific SIDS CLIPAC Task Force
Contacts	Penehuro Lefale, pene.lefale@metSERVICE.com Antonio Narrava, narrava@bo.ingv.it
Partnering Agencies	NZ MetService, Centro Euro-Mediterraneo per Cambiamenti Climatici
Types	- Needs And Capabilities - Capacity
Area of Applicability	- National and Regional
Focus Area	- Fresh Water Resources and Drought - Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience - Marine and Terrestrial Ecosystems

Regions	<ul style="list-style-type: none"> <li>- Western North Pacific</li> <li>- FSM</li> <li>- Palau</li> <li>- RMI</li> <li>- South Pacific</li> <li>- American Samoa</li> <li>- Fiji</li> <li>- Kiribati</li> <li>- PNG</li> <li>- Samoa</li> <li>- Solomon Islands</li> <li>- Tonga</li> <li>- Tuvalu</li> <li>- Vanuatu</li> <li>- Other South Pacific</li> </ul>
Status	- Planned
Description	<p>Small Island Developing States (SIDS) are recognized under the United Nations Framework for Climate Change as being the most vulnerable parties to the adverse impacts of climate change. The key outcomes of this project are to enhance scientific, economic and human adaptive capacity of Pacific SIDS to climate change and related hazards risks, with specific focus on CCA to tropical cyclones, sea level rise and storm surges, vulnerability and impact assessments of climate sensitive sectors (tourism, fisheries and agriculture) through the application of participatory approaches, economic analysis of the implication of global climate change policies and measures on Pacific SIDS, in terms of their potential participation in the international carbon market and transfer and diffusion of clean technologies and to improve links between climate change science and policy communities.</p>

#6) Name	Climate Change Vulnerability Assessments for the Islands of Saipan, Tinian and Rota
Lead Agencies	CNMI Coastal Resources Management Office (CRMO)
Contacts	Robbie Greene, robertgreene.crm@gmail.com Rebecca Skeelee, Rebecca.skeelee.crm@gmail.com
Partnering Agencies	Ongoing collaboration and support from the member agencies of the CNMI Climate Change Working Group. Additional technical support and capacity-building provided by PICCC, PIMPAC, and NOAA Coastal Services Center.
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience
Regions	<ul style="list-style-type: none"> <li>- Western North Pacific</li> <li>- CNMI</li> </ul>

Status	- Ongoing
Description	These assessments are part of a NOAA-funded project to conduct climate change vulnerability assessments for the islands of Saipan, Tinian and Rota in the CNMI. Assessments leverage the CNMI Climate Change Working Group to conduct stakeholder analyses, conduct community-mapping of vulnerable resources, map future sea level scenarios, and identify adaptation priorities for island communities and resource managers. The vulnerability assessments include final documents detailing the process, tools and results of each island's assessment. Spatial data related to vulnerable resources as well as potential flooding extents are developed and made available to local resource managers and interested agencies. A parallel education and outreach campaign is being planned to disseminate this information to a broader audience. The project aims to integrate climate change considerations and adaptation priorities into planned updates to local policies and management plans, as well as inform future climate adaptation planning by the CNMI Climate Change Working Group.
Url	<a href="http://www.climatecnmi.net">www.climatecnmi.net</a>

#7) Name	Climate Change Vulnerability Assessments on Known Archeological Sites at War in the Pacific NHP and American Memorial Park
Lead Agencies	UoG
Contacts	Stephen Acabado
Partnering Agencies	NPS, PICCC
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought - Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience - Marine and Terrestrial Ecosystems
Regions	- Western North Pacific - CNMI - Guam
Status	- Ongoing
Description	Complete climate change vulnerability assessments by drawing on available data from archeological sites and their vicinities and obtaining new data from a few key site areas. Products: student training; climate change vulnerability assessment forms; maps; final report; cataloged digital photos.

#8) Name	Community Led Risk Reduction Initiatives Across the Pacific
Lead Agencies	Red Cross Red Crescent Climate Centre

Contacts	Rebecca McNaught, Senior Climate Advisor, mcnaught@climatecentre.org
Partnering Agencies	Communities, Local Authorities, Humanitarian and Development Organizations
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience
Regions	- South Pacific - Fiji - Vanuatu
Status	- Ongoing
Description	The Red Cross Red Crescent Movement uses the participatory Vulnerability and Capacity Assessment (VCA) to work alongside communities to assess and address risks that are faced. In the northern division of Viti Levu, Fiji, the Fiji Red Cross has been using participatory tools such as focus group discussions, mapping and transect walks to help communities identify hazards and create community profiles. These profiles are then used to identify community led projects to reduce risk and increase the safety of community members. In Vanuatu, the Red Cross has been working in the most remote parts of the country. This has included distributing and setting up vital communications systems, water and sanitation projects, running simulation exercises with communities and creating action plans with communities to deal with extreme events and longer-term issues such as coastal erosion.
Url	<a href="http://www.ifrc.org/en/what-we-do/disaster-management/preparing-for-disaster/disaster-preparedness-tools/disaster-preparedness-tools/">http://www.ifrc.org/en/what-we-do/disaster-management/preparing-for-disaster/disaster-preparedness-tools/disaster-preparedness-tools/</a>

#9) Name	Effects of Groundwater Withdrawal, Injection, and Climate Change on Water Resources at Kaloko-Honokohau, Island of Hawaii, Hawaii
Lead Agencies	USGS Pacific Islands Water Science Center
Contacts	Delwyn Oki, dsoki@usgs.gov
Partnering Agencies	NPS
Types	- Climate Science - Needs And Capabilities - Needs - Capacity
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought - Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience - Marine and Terrestrial Ecosystems

Regions	- Central North Pacific - State Of Hawaii
Status	- Ongoing
Description	Kaloko-Honokohau National Historical Park supports a diversity of aquatic habitats. High-quality ground water is essential to maintain these habitats, which are immediately threatened by sudden and substantial urban development contiguously surrounding the Park. The objective of this study is to evaluate the effects of selected anthropogenic and natural factors on Park resources. These factors include (1) ground-water withdrawals from and reverse osmosis concentrate injection into the aquifer in the immediate vicinity of the Park, (2) reduced regional ground-water flow caused by upgradient withdrawals or climate change, and (3) long-term sea-level change.
Url	Project web page in development.

#10) Name	Groundwater Availability in Central Maui, Hawaii
Lead Agencies	USGS Pacific Islands Water Science Center
Contacts	Stephen Gingerich, sbginger@usgs.gov
Partnering Agencies	Maui County Department of Water Supply
Types	- Needs And Capabilities - Needs - Capacity
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	- Central North Pacific - State Of Hawaii
Status	- Completed
Description	The objectives of this study were to (1) obtain a better understanding of the regional groundwater flow system in the study area, (2) estimate groundwater recharge in the study area, and (3) estimate the effects of selected withdrawal scenarios, using a numerical groundwater flow and transport model, on water levels, the transition zone between freshwater and saltwater, and surface-water/groundwater interactions in the main area of interest.
Url	<a href="http://hi.water.usgs.gov/studies/groundwatermaui/">http://hi.water.usgs.gov/studies/groundwatermaui/</a>

#11) Name	Groundwater Availability in Guam
Lead Agencies	USGS Pacific Islands Water Science Center
Contacts	Stephen Gingerich, sbginger@usgs.gov
Partnering Agencies	U.S. Marine Corps

Types	- Needs And Capabilities - Needs - Capacity
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	- Western North Pacific - Guam
Status	- Ongoing
Description	The goals of this study are to (1) advance the understanding of regional groundwater dynamics in the Northern Guam Lens Aquifer, (2) provide a new estimate of groundwater recharge for the entire island, and (3) develop a numerical groundwater flow and transport model for northern Guam that will serve as a tool to assist water-resource managers in estimating the effects of selected groundwater-pumping and climate scenarios on the water supply. Although the main area of interest is the Northern Guam Lens Aquifer, the study will also provide a new water-budget estimate of recharge for southern Guam.
Url	<a href="http://hi.water.usgs.gov/studies/guam/">http://hi.water.usgs.gov/studies/guam/</a>

<b>#12) Name</b>	Groundwater Availability in the Lahaina District, Maui, Hawaii
Lead Agencies	USGS Pacific Islands Water Science Center
Contacts	Stephen Gingerich, <a href="mailto:sbginger@usgs.gov">sbginger@usgs.gov</a>
Partnering Agencies	Maui County Department of Water Supply
Types	- Needs And Capabilities - Needs - Capacity
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	- Central North Pacific - State Of Hawaii
Status	- Completed
Description	The objectives of this study are to estimate the effects of selected withdrawal scenarios within the Lahaina area, using a numerical groundwater flow and transport model, on water levels, the transition zone between freshwater and saltwater, and surface-water/groundwater interactions.
Url	<a href="http://hi.water.usgs.gov/studies/lahaina/">http://hi.water.usgs.gov/studies/lahaina/</a>

<b>#13) Name</b>	Groundwater Recharge and Availability in Eastern Molokai, Hawaii
Lead Agencies	USGS Pacific Islands Water Science Center



Contacts	Delwyn Oki, dsoki@usgs.gov
Partnering Agencies	Maui County Department of Water Supply, Hawaii State Office of Hawaiian Affairs, Hawaii State Department of Hawaiian Home Lands
Types	- Needs And Capabilities - Needs - Capacity
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	- Central North Pacific - State Of Hawaii
Status	- Ongoing
Description	The overall objective of this study is to estimate the hydrologic effects of additional groundwater-withdrawal scenarios on (1) salinity and water levels near existing wells and (2) coastal discharge.
Url	<a href="http://hi.water.usgs.gov/studies/molokai/">http://hi.water.usgs.gov/studies/molokai/</a>

<b>#14) Name</b>	Groundwater Recharge and Availability in the Pearl Harbor Aquifer, Oahu, Hawaii
Lead Agencies	USGS Pacific Islands Water Science Center
Contacts	Delwyn Oki, dsoki@usgs.gov
Partnering Agencies	Honolulu Board of Water Supply
Types	- Needs And Capabilities - Needs - Capacity
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	- Central North Pacific - State Of Hawaii
Status	- Ongoing
Description	The overall objective of this study is to develop a tool that can be used to (1) effectively manage ground-water pumping from the Pearl Harbor aquifer and (2) develop long-range plans for future development of resources in the Pearl Harbor aquifer as well as planning for alternate sources of fresh water. The tool will be in the form of a three-dimensional numerical ground-water model capable of simulating the distribution of salinity in the aquifer and the response of the freshwater lens to user-specified pumping conditions.
Url	Project web page in development.

<b>#15) Name</b>	Hawaii Volcanic-Rock Aquifer Study
------------------	------------------------------------

Lead Agencies	USGS Pacific Islands Water Science Center
Contacts	Scot Izuka, skizuka@usgs.gov
Types	- Needs And Capabilities - Capacity
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	- Central North Pacific - State Of Hawaii
Status	- Ongoing
Description	The volcanic-rock aquifers in Hawaii constitute one of the principal aquifers in the U.S. The Hawaii aquifers supply water to 1.36 million residents, diverse industries, and a large component of the U.S. military in the Pacific. The aquifers of individual Hawaiian Islands are isolated by sea water and have limited capacity. Fresh groundwater resources in Hawaii are therefore particularly vulnerable to impacts from human activity and climate change. As part of an effort to assess the Nation's groundwater resources, the USGS Groundwater Resources Program (GWRP) is conducting a four-year study (2012-16) of groundwater resources in Hawaii volcanic-rock aquifers. Objectives of this study are to: 1) Provide an updated assessment of groundwater availability in Hawaii; 2) Assess the current condition of Hawaii volcanic-rock aquifers and show how groundwater resources have changed as a result of natural and human stresses; 3) Provide a tool to assess responses to future stresses; and 4) Evaluate the adequacy of the current data network for assessing groundwater resources in the future.
Url	<a href="http://hi.water.usgs.gov/studies/GWRP/">http://hi.water.usgs.gov/studies/GWRP/</a>

<b>#16) Name</b>	HiOOS Climate Science
Lead Agencies	PacIOOS
Contacts	Jim Potemra, jimp@hawaii.edu
Partnering Agencies	NOAA, many State/local agencies and private companies
Types	- Climate Science
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought - Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience - Marine and Terrestrial Ecosystems
Regions	- Central North Pacific - State Of Hawaii
Status	- Ongoing

Description	Similar to PacIOOS, research activities in the sub-regional Hawaii Ocean Observing System (HiOOS) include all components of the marine environment, and extends to the terrestrial as it impacts the near-shore (e.g., precipitation and stream runoff). At present, HiOOS is primarily focused on Oahu.
Url	<a href="http://oos.soest.hawaii.edu/hioos/about">http://oos.soest.hawaii.edu/hioos/about</a>

#17) Name	Integrating Detailed Assessments of Climate Threats on Pacific Coral Reefs and Responses of Traditional Hawaiian Communities in to Management Planning
Lead Agencies	CRIOBE
Contacts	Jeffrey Maynard, maynardmarine@gmail.com
Partnering Agencies	PICCC, PI-CSC
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Marine and Terrestrial Ecosystems
Regions	<ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- State Of Hawaii</li> <li>- Western North Pacific</li> <li>- CNMI</li> <li>- FSM</li> <li>- Guam</li> <li>- Palau</li> <li>- RMI</li> <li>- South Pacific</li> <li>- American Samoa</li> </ul>
Status	- Ongoing
Description	Ensembles of corrected IPCC AR5 climate models will be used to project SST, pcO2, and salinity in the insular Pacific. Projections of coral bleaching risk and aragonite saturation state will be used to project years for all reef locations beyond which reefs are likely to rapidly degrade. A workshop/engagement process in Hawaii will describe appropriately sensitive vehicles for communicating about climate impacts on reefs to and with native Hawaiian communities. FY 12 start. 1 year timeline.

#18) Name	IPRC Climate Science
Lead Agencies	UH SOEST/IPRC
Contacts	Jim Potemra, jimp@hawaii.edu
Partnering Agencies	JAMSTEC, NASA and NOAA; some individual grants from NSF
Types	- Climate Science

Area of Applicability	- International and National
Focus Area	- Fresh Water Resources and Drought - Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience - Marine and Terrestrial Ecosystems
Regions	- Central North Pacific - Western North Pacific - South Pacific - Pacific Basin
Status	- Ongoing
Description	Research activities at the IPRC include a wide range of climate studies for the region. These include climate model assessment/analysis, regional modeling, and analysis of observations.
Url	<a href="http://iprc.soest.hawaii.edu">http://iprc.soest.hawaii.edu</a>

<b>#19) Name</b>	Kauai Online Hazard Assessment Tool (KOHA)
Lead Agencies	NOAA/CSC and PSC, County of Kauai
Contacts	NOAA/CSC, <a href="http://csc.noaa.gov/contact/contactForm.htm">http://csc.noaa.gov/contact/contactForm.htm</a>
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience - Marine and Terrestrial Ecosystems
Regions	- Central North Pacific - State Of Hawaii
Status	- Completed

Description	<p>In partnership with the County of Kauai, the NOAA Coastal Services Center (CSC) and Pacific Services Center (PSC) created the Kauai Online Hazard Assessment Tool (KOHA) to support the County of Kauai's natural hazard related planning, permitting, and outreach activities. KOHA is an intranet based GIS tool for identifying the hazard risks for any user defined location on Kauai. Although designed to address all hazards, the initial focus of KOHA is coastal and riverine flooding. The County of Kauai is dedicated to mitigating the effects of all natural hazards. The county's Department of Public Works is responsible for reviewing building permits to minimize public and private losses from flooding. The Department utilizes the recently released Digital Flood Insurance Rate Maps (DFIRMs) published in September of 2005 by FEMA for determining if proposed building sites are within flood prone areas. Subsequently, the Division of Engineering within the Department is responsible for reviewing building permits and requires property owners to build structures in accordance with the County of Kauai Floodplain Management Ordinance (No. 630/696). The current version of KOHA is available from any desktop computer at the County of Kauai with an internet browser. By going to the KOHA web page county staff can rapidly and accurately identify the FEMA designated flood zone(s) for any parcel or proposed building site within the county. KOHA will also determine if the parcel or proposed building site intersects the Special Management Area (SMA) and the Tsunami Evacuation Zone. Once these three flood hazard risks have been determined, KOHA generates a report containing the specific risk information along with a detailed map including a satellite image of the area. The information provided by KOHA is not meant to replace or be used without expert interpretation. Rather, KOHA is intended to save time by improving access to and retrieval of hazard related information that is needed to support decision making.</p>
Url	<a href="http://csc.noaa.gov/contact/contactForm.htm">http://csc.noaa.gov/contact/contactForm.htm</a>

#20) Name	Kona Area Integrated Ecosystems Assessment (IEA)
Lead Agencies	NOAA/NMFS/Pacific Islands Fisheries Science Center
Contacts	Evan Howell, <a href="mailto:evan.howell@noaa.gov">evan.howell@noaa.gov</a> Jeffrey Polovina, <a href="mailto:jeffrey.polovina@noaa.gov">jeffrey.polovina@noaa.gov</a>
Partnering Agencies	USGS, NPS, State of Hawaii, University of Hawaii, Oregon State University, IPRC, WPRFMSC, The Kohala Center
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Marine and Terrestrial Ecosystems
Regions	- Central North Pacific - State Of Hawaii
Status	- Ongoing

Description	The purpose of an IEA is to perform a formal synthesis and quantitative analysis of information on relevant natural and socio-economic factors, specifically in relation to identified ecosystem management goals for a region. The Kona region was a natural choice for this pilot IEA project based on its dynamic ecology and the vast history of research done in this area. The first stage of the Kona IEA aims to complete the first important steps of the IEA process. These include a scoping process to understand what is known about the system and to identify key management issues and potential data sources. Major goals for this initial phase of this pilot IEA aim to deliver a completed interactive data portal on the web as well as begin one and multi-year IEA projects. The data portal would serve as a central repository for currently available information for the region, as well as provide an interactive platform to view relevant information. To date work has begun on two ecosystem modeling projects as well as support given for building of ecosystem indicators and biological surveying of coral reef fish in the Kona region. The initial phase of the IEA should be completed within one year with the hope that this program will receive support to continue through additional years.
Url	<a href="http://www.pifsc.noaa.gov/kona_ia/">http://www.pifsc.noaa.gov/kona_ia/</a>

#21) Name	Natural Resources Management Needs for Coastal and Littoral Marine Ecosystems of the U.S. Affiliated Pacific Islands
Lead Agencies	Hawaii Cooperative Studies Unit/Pacific Aquaculture and Coastal Resources Center/University of Hawaii at Hilo
Contacts	Maria Haws, Editor, haws@aol.com
Partnering Agencies	University of Hawaii Sea Grant College Program, U.S. Geological Survey Pacific Island Ecosystems Research Center
Types	<ul style="list-style-type: none"> <li>- Needs And Capabilities</li> <li>- Needs</li> <li>- Capacity</li> <li>- Capabilities</li> <li>- Risk and Vulnerability or Problem-focused</li> </ul>
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	<ul style="list-style-type: none"> <li>- Fresh Water Resources and Drought</li> <li>- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience</li> <li>- Marine and Terrestrial Ecosystems</li> </ul>

Regions	<ul style="list-style-type: none"> <li>- Western North Pacific</li> <li>- CNMI</li> <li>- FSM</li> <li>- Guam</li> <li>- Palau</li> <li>- RMI</li> <li>- South Pacific</li> <li>- American Samoa</li> </ul>
Status	- Completed
Description	<p>This report (Technical Report HCSU-002, November 2006) presents a summary of the research and management needs for natural resources of the U.S. Affiliated Pacific Islands. Each chapter addresses the history, current status, trends, uses and threats of major coastal resources including terrestrial, freshwater, marine and near-shore habitats. Species of concern are also identified including those of particular economic importance. Abiotic aspects of each island group are also characterized. Major resource management issues are identified and discussed, as well as key aspects of knowledge management and governance issues. Research and capacity building areas needing attention are clearly identified.</p>
Url	<a href="http://hilo.hawaii.edu/hcsu/documents/TRHCSU-002Haws-NaturalRes.MgmtNeedsPacific.pdf">http://hilo.hawaii.edu/hcsu/documents/TRHCSU-002Haws-NaturalRes.MgmtNeedsPacific.pdf</a>

#22) Name	NDPTC Needs Assessment
Lead Agencies	University of Hawaii, FEMA
Contacts	Karl Kim, karl@hawaii.edu
Partnering Agencies	Pacific Risk Management Ohana
Types	<ul style="list-style-type: none"> <li>- Needs And Capabilities</li> <li>- Needs</li> <li>- Capacity</li> <li>- Capabilities</li> <li>- Risk and Vulnerability or Problem-focused</li> </ul>
Area of Applicability	<ul style="list-style-type: none"> <li>- International and National</li> <li>- National and Regional</li> <li>- Regional/Local or Problem-focused</li> </ul>
Focus Area	<ul style="list-style-type: none"> <li>- Fresh Water Resources and Drought</li> <li>- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience</li> </ul>

Regions	<ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- State Of Hawaii</li> <li>- Western North Pacific</li> <li>- CNMI</li> <li>- FSM</li> <li>- Guam</li> <li>- RMI</li> <li>- South Pacific</li> <li>- American Samoa</li> </ul>
Status	- Completed
Description	<p>In Fall 2009 the National Disaster Preparedness Training Center (NDPTC), in partnership with the Department of Urban and Regional Planning at the UH Manoa, conducted a training needs assessment in the development of its programs and services. With an initial focus on natural disasters (including climate impacts) and coastal and island communities, the needs assessment targeted respondents in Hawaii Oregon, Washington, Guam, Commonwealth of the Northern Mariana Islands (CNMI), Republic of the Marshall Islands (RMI), Federated States of Micronesia (FSM) and American Samoa. One of the key findings was that there are significant unmet training needs in the area of natural disasters. The frequency and high profile of recent natural disasters have resulted in a growing concern about natural disaster preparedness, response and recovery among agencies, organizations and the public. A number of respondents noted that the first responders were in reality the citizens who were often ill equipped to deal with the disaster. The top three general unmet training needs were related to natural disaster response, recovery and protection and encompassed a broad spectrum, ranging from awareness, risk assessment, and mitigation to response and recovery. Many advocated the inclusion of non-governmental organizations and the general public in trainings, and to increase training for public communication and awareness of natural disasters.</p>
Url	<a href="http://www.durp.hawaii.edu/Disaster Management.html">http://www.durp.hawaii.edu/Disaster Management.html</a>

#23) Name	Pacific Island Inventory and Monitoring Network (PACN)
Lead Agencies	NPS
Contacts	Greg Kudray, Greg_Kudray@nps.gov
Partnering Agencies	Cooperative Agreements with the Univ. of Hawaii, Univ. of Maryland, NatureServe, Univ. of Washington and others as needed. USGS is primary inter-agency partner, also have an upcoming agreement with the USFWS. Contracting with Alta Vista for a vegetation mapping inventory.
Types	<ul style="list-style-type: none"> <li>- Climate Science</li> <li>- Risk and Vulnerability or Problem-focused</li> </ul>
Area of Applicability	- National and Regional
Focus Area	<ul style="list-style-type: none"> <li>- Fresh Water Resources and Drought</li> <li>- Marine and Terrestrial Ecosystems</li> </ul>



Regions	<ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- State Of Hawaii</li> <li>- Western North Pacific</li> <li>- CNMI</li> <li>- Guam</li> <li>- South Pacific</li> <li>- American Samoa</li> </ul>
Status	- Ongoing
Description	We operate within Pacific Islands National Parks primarily although we may support some activities outside the parks. Our program initially undertook an assessment of inventory and monitoring needs to identify baselines inventories necessary and also the ecological indicators (called Vital Signs) that we systematically measure long-term to evaluate trends in resource conditions. One of those inventories was weather/climate, which is guiding the planned establishment of 10 new weather stations. Other Vital Signs are biological or physical and integrated as well as possible. We and our data contribute to park condition assessments and other park planning/management activities.
Url	<a href="http://science.nature.nps.gov/im/units/pacn/index.cfm">http://science.nature.nps.gov/im/units/pacn/index.cfm</a>

#24 Name	Pacific Islands Regional Climate Assessment (PIRCA)
Lead Agencies	PaCIS, Pacific RISA, PICCC
Contacts	John Marra, NOAA/NCDC/PaCIS, john.marra@noaa.gov Melissa Finucane, EWC, Pacific RISA, finucanm@eastwestcenter.org Victoria Keener, EWC, Pacific RISA, keenerv@eastwestcenter.org Deanna Spooner, PICCC, deanna.spooner@piccc.net
Partnering Agencies	PRiMO, NOAA, USGS, USFWS, WRCC, University of Hawaii, University of Guam
Types	<ul style="list-style-type: none"> <li>- Needs And Capabilities</li> <li>- Needs</li> <li>- Capacity</li> <li>- Capabilities</li> </ul>
Area of Applicability	- National and Regional
Focus Area	<ul style="list-style-type: none"> <li>- Fresh Water Resources and Drought</li> <li>- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience</li> <li>- Marine and Terrestrial Ecosystems</li> </ul>

Regions	<ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- State Of Hawaii</li> <li>- Western North Pacific</li> <li>- CNMI</li> <li>- FSM</li> <li>- Guam</li> <li>- Palau</li> <li>- RMI</li> <li>- South Pacific</li> <li>- American Samoa</li> </ul>
Status	- Completed
Description	Climate Change and Pacific Islands: Indicators and Impacts is a report that was created under the auspices of the Pacific Islands Regional Climate Assessment (PIRCA), a collaborative endeavor involving nearly 100 independent experts. In support of the National Climate Assessment (NCA), the report assesses the state of climate knowledge, impacts, and adaptive capacity in three sub-regions: (1) the Western North Pacific (CNMI, Guam, Palau, FSM, RMI); (2) the Central North Pacific (Hawaii); and (3) the Central South Pacific (American Samoa). The framework for the assessment includes three focus areas: (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.
Url	<a href="http://www.eastwestcenter.org/PIRCA">http://www.eastwestcenter.org/PIRCA</a>

#25) Name	Pacific RISA Hazards and Climate Risk and Vulnerability Assessment
Lead Agencies	Pacific RISA
Contacts	Victoria Keener ,KeenerV@EastWestCenter.org, Lead Investigator
Partnering Agencies	UH SSRI, UH SLC, IPRC, NOAA PEAC, NOAA NWS, UOG, USGS, USDA NRCS
Types	<ul style="list-style-type: none"> <li>- Needs And Capabilities</li> <li>- Capacity</li> <li>- Capabilities</li> <li>- Risk and Vulnerability or Problem-focused</li> </ul>
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience

Regions	<ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- State Of Hawaii</li> <li>- Western North Pacific</li> <li>- CNMI</li> <li>- FSM</li> <li>- Guam</li> <li>- RMI</li> <li>- South Pacific</li> <li>- American Samoa</li> </ul>
Status	- Completed
Description	<p>This project will help communities to incorporate Climate Risk Assessments into Multi-Hazard Risk Assessments. Hazard risk and vulnerability assessments (RVA), specifically for climate related risks, have been established as an interdisciplinary methodology that underpins the development of disaster risk-reduction plans. The Pacific RISA will review existing disaster risk-reduction plans and assist island governments in updating these plans with the best available climate-related knowledge. Pursued simultaneously, a second component of the RVA involves identifying critical facilities, infrastructure and lifelines; economic infrastructure and employment characteristics; ecosystems that aid in protection; and characteristics of local populations. We will inventory adaptive capacities including: availability of resources, sustainable financing for projects, alternative livelihoods, ecosystem management, institutional frameworks, legal and regulatory instruments, governance, policy implementation, and sector-specific, local, and indigenous knowledge systems. Pacific RISA will develop scenario-planning methods to improve adaptation. Following the baseline characterization of community exposure and resilience, the information can be linked with different hazard risk scenarios that are based on different climate change projections.</p>
Url	<a href="http://www.pacificrisa.org/cms/index.php?option=com_content&amp;view=article&amp;id=256&amp;Itemid=174">http://www.pacificrisa.org/cms/index.php?option=com_content&amp;view=article&amp;id=256&amp;Itemid=174</a>

#26) Name	PacIOOS Climate Science
Lead Agencies	PacIOOS
Contacts	Jim Potemra, jimp@hawaii.edu
Partnering Agencies	NOAA, many State/regional agencies
Types	- Climate Science
Area of Applicability	- National and Regional
Focus Area	<ul style="list-style-type: none"> <li>- Fresh Water Resources and Drought</li> <li>- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience</li> <li>- Marine and Terrestrial Ecosystems</li> </ul>

Regions	<ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- State Of Hawaii</li> <li>- Western North Pacific</li> <li>- CNMI</li> <li>- FSM</li> <li>- Guam</li> <li>- Palau</li> <li>- RMI</li> <li>- South Pacific</li> <li>- American Samoa</li> </ul>
Status	- Ongoing
Description	Research activities in the regional Pacific Islands Ocean Observing System (PacIOOS) include all components of the marine environment, and extends to the terrestrial as it impacts the near-shore (e.g., precipitation and stream runoff).
Url	<a href="http://pacioos.org">http://pacioos.org</a>

#27) Name	Regional Decline of Coral Cover in the Indo-Pacific: Timing, Extent, and Subregional Comparisons
Lead Agencies	UNC-CH
Contacts	John Bruno, Professor of Biology, <a href="mailto:jbruno@unc.edu">jbruno@unc.edu</a>
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- National and Regional
Focus Area	- Marine and Terrestrial Ecosystems
Regions	- South Pacific
Status	- Completed
Description	A number of factors have recently caused mass coral mortality events in all of the world's tropical oceans. However, little is known about the timing, rate or spatial variability of the loss of reef-building corals, especially in the Indo-Pacific, which contains 75% of the world's coral reefs. This study provides the first regional scale and long-term analysis of coral cover in the Indo-Pacific. Our results indicate that the loss of coral cover began earlier than assumed and that coral cover is currently very similar across the Indo-Pacific, suggesting that coral decline is a general global phenomenon.
Url	<a href="http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.000071">http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.000071</a>

#28) Name	Saipan Aquifers Conservation
Lead Agencies	Commonwealth Utilities Corporation, CNMI
Contacts	Abe Malae, <a href="mailto:abe_malae@cucgov.net">abe_malae@cucgov.net</a>
Partnering Agencies	CNMI Government, USGS, NPS, UoG WERI

Types	- Needs And Capabilities - Needs
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	- Western North Pacific - CNMI
Status	- Ongoing
Description	Leak detection, repair and replacement of water utility replacement lines. CUC is the only utility on U.S. soil that cannot provide 24/7 water service to all customers. Quality of water is brackish for most customers. Reducing demand and leaks conserves aquifers and improves drinking water quality.

#29) Name	Spatial Distribution of Groundwater Recharge on the Island of Oahu, Hawaii
Lead Agencies	USGS/Pacific Islands Water Science Center
Contacts	John A. Engott, jaengott@usgs.gov
Partnering Agencies	Hawaii State Commission on Water Resource Management
Types	- Needs And Capabilities - Capacity
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Fresh Water Resources and Drought
Regions	- Central North Pacific - State Of Hawaii
Status	- Ongoing
Description	An updated, island-wide estimate of groundwater-recharge distribution is needed for the island of Oahu, Hawaii. A new water-budget model for Oahu also would take into account the substantial changes in urban and agricultural land use that have occurred during the last several decades, as well as project the effects of future land-use and climate changes. The results from this study are necessary to properly manage groundwater in the State of Hawaii. The study is consistent with the mission of the USGS Science Strategy (2007) to provide citizens, communities, natural-resource managers, and policymakers with a clearer knowledge of the status of their water resources. By providing estimates of current groundwater recharge and analyses of the effects of land-use and climate change on recharge to aquifers that provide public water supply and support fragile ecosystems, this study broadly supports three of the six science directions in the USGS Science Strategy (2007), including (1) a water census of the United States, (2) understanding ecosystems and predicting ecosystem change, and (3) climate variability and change.
Url	<a href="http://hi.water.usgs.gov/studies/oahurecharge/">http://hi.water.usgs.gov/studies/oahurecharge/</a>

<b>#30) Name</b>	Storm Prep Typhoon Alley
Lead Agencies	Commonwealth Utilities Corporation, CNMI
Contacts	Abe Malae, abe_malae@cucgov.net
Partnering Agencies	Guam Power Authority, Guam Water Works Authority, Emergency Management Office-CNMI, NOAA, PaCIS
Types	<ul style="list-style-type: none"> <li>- Climate Science</li> <li>- Needs And Capabilities</li> <li>- Needs</li> </ul>
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience
Regions	<ul style="list-style-type: none"> <li>- Western North Pacific</li> <li>- CNMI</li> <li>- Guam</li> </ul>
Status	- Ongoing
Description	Typhoon Alley (Guam-CNMI) boundaries appear to be shifting westward towards the Philippines. CUC would like to stay on top of typhoon forecasting in order to better prepare power, water, and waste water infrastructure.

<b>#31) Name</b>	The Resiliency Analysis and Coordination System (TRACS)
Lead Agencies	Center for Excellence DMHA
Contacts	Jessica Wambach, jessica.wambach@coe-dmha.org Pooja Sood-Payeur, pooja.payeur@coe-dmha.org
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience
Regions	<ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- Western North Pacific</li> <li>- South Pacific</li> <li>- Pacific Basin</li> </ul>
Status	- Ongoing
Description	The Center for Excellence in Disaster Management and Humanitarian Assistance is developing a system to conduct comprehensive front-end and operational assessments of the resiliency of communities/societies, and the sectors that comprise them, to natural and man-made disasters. The tool is being designed to support humanitarian assistance/disaster response decision-makers in selecting appropriate programs for given locales and monitoring their progress toward achieving goals.

Url	<a href="http://www.coe-dmha.org/">http://www.coe-dmha.org/</a>
-----	---

<b>#32) Name</b>	Transportation Asset Climate Change Risk Assessment Report
Lead Agencies	OahuMPO, SSFM International
Contacts	Brian Gibson, Brian.Gibson@oahumpo.org
Partnering Agencies	UHM/SOEST, NOAA, Plus all the partners listed in the document
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience
Regions	- Central North Pacific - State Of Hawaii
Status	- Completed
Description	FHWA awarded five grants nationwide, including the OahuMPO, to validate a conceptual model for determining the affects of climate change on transportation infrastructure. The model consists of three parts: Determining what are the likely climate stressors that will be faced by the local region and the probability of their occurrence in the future; Determining what the critical transportation infrastructure assets are for the local region and their relative priority; and Assessing the vulnerability of those priority assets to impacts from the climate stressors. Oahu is uniquely vulnerable given its location mid-Pacific and, based on the more current climate science, needs to begin planning for these weather-related events now. The report was delivered to Federal Highway Administration on December 2, 2011.
Url	<a href="http://www.oahumpo.org/wp-content/uploads/2013/02/OahuMPO-CC-Report-FINAL-Nov-2011.pdf">http://www.oahumpo.org/wp-content/uploads/2013/02/OahuMPO-CC-Report-FINAL-Nov-2011.pdf</a>

<b>#33) Name</b>	Understanding How Climate Change is Affecting Hawaii's High-elevation Ecosystems: An Assessment of the Long-term Viability of Haleakala Silverswords and Associated Biological Communities
Lead Agencies	U of Hawaii, USGS/PIERC
Contacts	Paul D. Krushelnycky, pauldk@hawaii.edu Lloyd Loope, lloope@usgs.gov
Partnering Agencies	PI-CSC
Types	- Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Marine and Terrestrial Ecosystems

Regions	- Central North Pacific - State Of Hawaii
Status	- Ongoing
Description	The Haleakala silversword plant forms the foundation of a diverse alpine community, and its behavior likely reflects wider ecological responses to climate. This species is already exhibiting patterns of mortality related to climate-driven movement towards higher altitudes. This project aims to understand patterns and causes of recent declines in the Haleakala silversword population that are associated with decreasing precipitation, increasing temperature, and related climate changes in Hawaii's high-elevation ecosystems. Building on extensive research and datasets, this study will collect the demographic and climate data needed to construct a robust population model for the silversword and make future population projections under various climate scenarios. In addition, the project will conduct a range of seedling drought tolerance experiments to clarify causes of recent widespread mortality in the species, and determine methods most likely to lead to restoration success.
Url	<a href="https://nccwsc.usgs.gov/display-project/4f8c650ae4b0546c0c397b48/5011925fe4b0d78fd4e59baa">https://nccwsc.usgs.gov/display-project/4f8c650ae4b0546c0c397b48/5011925fe4b0d78fd4e59baa</a>

#34) Name	University of Hawaii Sea Grant College Program (UHSGCP)
Lead Agencies	University of Hawaii Sea Grant College Program
Contacts	Darren Okimoto, okimotod@hawaii.edu
Partnering Agencies	College of the Marshall Islands, American Samoa Community College, State of Hawaii, City and County of Honolulu, County of Hawaii, County of Maui, County of Kauai, NOAA, EWC, International Resources Group, PacIOOS
Types	- Needs And Capabilities - Needs - Capacity - Capabilities - Risk and Vulnerability or Problem-focused
Area of Applicability	- National and Regional - Regional/Local or Problem-focused
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience
Regions	- Central North Pacific - State Of Hawaii - Western North Pacific - CNMI - Guam - RMI - South Pacific - American Samoa



Status	- Ongoing - Planned
Description	<p>UH Sea Grant carries out its mission through research, education and extension by focusing on five focus areas. These five interrelated focus areas emerged from the national, regional and local strategic planning process as areas of critical importance to the health and vitality of Hawaii's coastal resources and communities. They respond to issues of major importance to NOAA, are consistent with the work of the NOAA coastal program integration effort, and are topical areas in which Sea Grant has made substantial contributions in the past and is positioned to make significant contributions in the future.</p> <p>The UH Sea Grant focus areas from its 2009-2013 Strategic Plan include:</p> <ol style="list-style-type: none"> <li>1. Healthy Coastal Ecosystems</li> <li>2. Sustainable Coastal Development</li> <li>3. Hazard Resilience in Coastal Communities</li> <li>4. Safe and Sustainable Seafood Supply</li> <li>5. Sustainable Coastal Tourism</li> </ol>
Url	<a href="http://seagrant.soest.hawaii.edu">http://seagrant.soest.hawaii.edu</a>

#35) Name	USACE Assessment
Lead Agencies	U.S. Army Corps of Engineers
Contacts	Deborah Solis, Deborah.a.solis@usace.army.mil
Partnering Agencies	This assessment is focusing on USACE and how we can integrate our needs with the ongoing work of other agencies.
Types	- Needs And Capabilities - Needs - Risk and Vulnerability or Problem-focused
Area of Applicability	- Regional/Local or Problem-focused
Focus Area	- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience - Marine and Terrestrial Ecosystems
Regions	- Central North Pacific - State Of Hawaii - Western North Pacific - CNMI - FSM - Guam - South Pacific - American Samoa
Status	- Ongoing

Description	The purpose of the USACE assessment is to identify the information and data gaps that the Corps needs to determine the potential impacts of climate change on the vulnerability of Corps of Engineers' projects and mission areas. The Corps' mission areas that we are focusing on for this assessment include: Flood Control, Ecosystem Restoration, and Navigation all of which have potential impacts from sea level rise, changes in storminess, and the habitat of sea life and terrestrial life in their respective ecosystem. A preliminary assessment of climate change activities being undertaken by other agencies and how these relate to Corps' projects and missions will also be developed.
Url	Report not yet available