

**Federal Hazard Mitigation Partners in the Pacific Islands (FHMPPI)
ACTIVITY REPORT – October 2003**



E lauhoe mai na wa`a, pae aku i ka`aina.
If everyone paddles the canoe, the shore is reached.



“MARK YOUR CALENDARS”

2004 ROUNDTABLE OF FEDERAL HAZARD MITIGATION PARTNERS IN THE PACIFIC ISLANDS

Convening a follow-up to the 2003 FHMPPI meeting within the next year was at the top of the list of items identified in the embryonic action plan. In this regard, we are happy to announce that a 2004 FHMPPI meeting has been scheduled for March 16 to 18 in Honolulu, Hawai`i.

Like last year’s meeting, the 2004 FHMPPI roundtable will take the form of a series of presentations and roundtable discussions. An organizing committee has been formed and it is anticipated that a draft agenda will be available next quarter. Please note that, in response to requests following the 2003 FHMPPI meeting, the 2004 FHMPPI roundtable will be held over a three-day period. The meeting will be held at the Sheraton Waikiki Hotel, 2255 Kalakaua Avenue. A small block of rooms has been set aside at a rate of \$112.00 per night. Rooms can be reserved by calling (808) 921-4610.

HUI O HANA

A central element of the embryonic action plan is the concept of a regional coordinating council and *hui o hana*, or working groups (Figure 1). The *hui o hana* represent clusters of ongoing or proposed activities identified at the 2003 FHMPPI meeting.

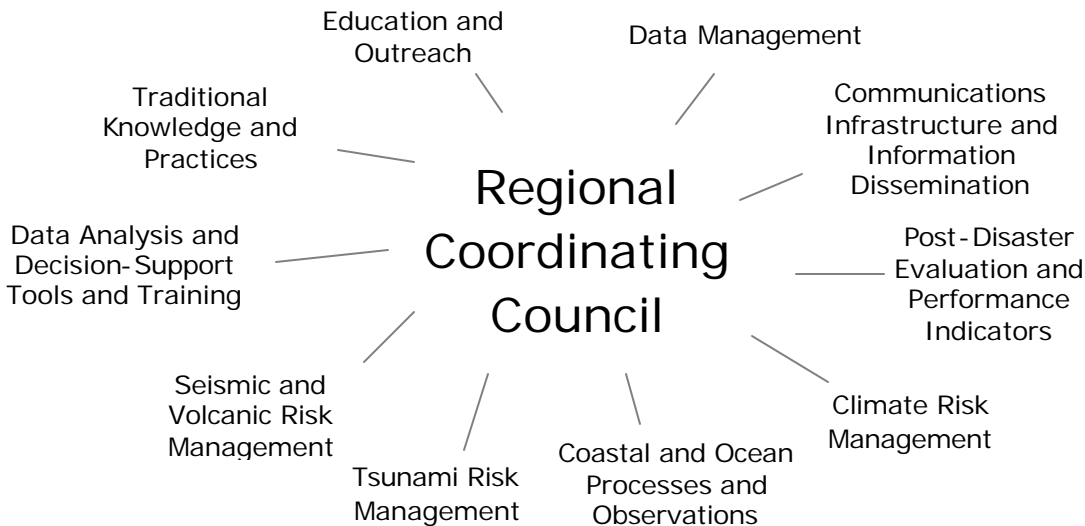


Figure 1. Conceptual Framework for Regional Communication, Coordination, and Collaboration among Federal Hazard Mitigation Partners in the Pacific Islands. A regional coordinating council composed of individuals from within the federal *ohana*, among others, will play the lead role in supporting dialogue between the users and providers of information. Members of the council will be drawn from several working groups, or *hui o hana*. These working groups will provide guidance to the council in its efforts to evaluate and prioritize regional needs for hazards-related products and services.

Hazard mitigation-related projects and activities that have been recently completed or are about to get under way in the Pacific Islands are summarized in the context of the *hui o hana* topic areas.

- **Climate Risk Management**
- **Coastal and Ocean Processes and Observations**
- **Communications Infrastructure and Information Dissemination**
- **Data Analysis and Decision-Support Tools and Training**
- **Data Management**
- **Education and Outreach**
- **Post-Disaster Evaluation and Performance Indicators**
- **Seismic and Volcanic Risk Management**
- **Traditional Knowledge and Practices**
- **Tsunami Risk Management**

You can find more information about the *hui o hana* and how you and your agency, institution, or organization can join a *hui o hana*. If you have information about projects or activities in any of the areas identified above that you would like to see in next quarter's activity report, please contact John.Marra@noaa.gov.

THE PROJECT AND ACTIVITY SPOTLIGHT

“Hazards Mitigation: Hawaii Takes On Mother Nature”

– article from *Coastal Services*; Volume 6, Issue 5; September/October 2003: the NOAA Coastal Services Center's trade journal for coastal managers.

THE MARCH 2003 FEDERAL HAZARD MITIGATION PARTNERS IN THE PACIFIC ISLANDS MEETING

The proceedings of the March 2003 Roundtable of Federal Hazard Mitigation Partners in the Pacific Islands, including the PowerPoint presentations, summaries of panel discussions and roundtable deliberations, the projects and activities database, and other information, are now available on CD-ROM. If you would like to obtain a copy of the CD-ROM version of the March 2003 FHMPPI Proceedings please contact John.Marra@noaa.gov. A version of the 2003 FHMPPI proceedings that does not include the presentations is available on-line.

CONTACT US

If you have any items of interest you would like to include in the next activity report or if you have any questions or comments, please do not hesitate to contact John Marra, the PSC coastal hazards specialist, by e-mail at John.Marra@noaa.gov or by phone at (808) 532-3206.

[About the FHMPPI](#)

[About the NOAA Pacific Services Center](#)

Climate Risk Management

- The Pacific Islands Regional Integrated Science and Assessment (Pacific RISA) program is a project to support emerging regional efforts to pursue an integrated program of climate risk management in and for the Pacific Islands. As a follow-on to the East-West Center's 2001 Pacific Assessment, Pacific RISA continues an ongoing commitment to the emergence of a Pacific climate information system that supports the development and use of climate information to support decision making. As such, the Pacific RISA program will continue to represent a sustained program of research and dialogue designed to engage scientists, governments, businesses, and community leaders throughout the region in a process of shared learning and joint problem solving. The Pacific RISA program is being carried out by a Pacific regional climate partnership composed of a number of institutions, including the East-West Center, the University of Hawai'i, the Pacific El Niño–Southern Oscillation (ENSO) Applications Center, the Pacific Disaster Center, the National Center for Atmospheric Research, Prescott College, and several NOAA programs and offices, including the U.S. National Weather Service Pacific Region and the NOAA Coastal Services Center.
- The Pacific Island Training Institute on Climate and Extreme Events in the Pacific is an education and capacity-building program that will be undertaken by a partnership of the East-West Center, the University of the South Pacific, the New Zealand National Institute of Water and Atmospheric Research, the Australian Bureau of Meteorology, the Pacific ENSO Application Center, and the National Weather Service Pacific Region, among others. The overarching goal of this project is to enhance the regional network of scientists, forecasters, disaster management officials, and resource managers skilled in the development and use of climate information to enhance the resilience of Pacific Island nations in the face of climate-related extreme events.

For more information about these projects contact Eileen Shea, climate project coordinator for the East-West Center, at sheae@eastwestcenter.org.

View the 2001 report of the Pacific Islands regional assessment, *Preparing for a Changing Climate: The Potential Consequences of Climate Variability and Change*, at www2.eastwestcenter.org/climate/assessment/report.htm.

Coastal and Ocean Processes and Observations

- The National Summit of Regional Ocean Observing Systems was held in Washington, D.C., on March 31 and April 1, 2003. Summit participants resolved to create a national federation of regional coastal ocean observing systems and also endorsed the suggestion that there should be about 10 regions in the national system with a single regional association responsible for each region. Given their unique coastal characteristics, unique relation to deep-ocean processes, and unique political structures, Hawai'i and the Pacific Islands comprise an obvious region. Efforts are under way to engage and organize various individuals and entities that have an interest in the development of a Hawai'i/Pacific Islands coastal and ocean observing system.

For more information about the March/April 2003 summit and the National Office for Integrated and Sustained Ocean Observations (Ocean.US), go to www.ocean.us.

A University of Hawai'i Web site for the Hawai'i-Pacific Ocean Information System, which contains elements from the poster presented at the regional summit in Washington last March, can be found at kela.soest.hawaii.edu/HI-POIS/.

- The Hawai'i Ocean Time-series program, established in 1988, will receive an additional five years of funding. For further information, visit www.soest.hawaii.edu/HOT_WOCE/. Also, development of an autonomous ocean observatory at Station ALOHA, a major oceanographic research site 100 km north of Oahu, will be accelerated by National Science Foundation funding of a cabled moored profiling system. The proposal and other observatory information can be viewed at kela.soest.hawaii.edu/ALOHA/.

For more information about these projects, contact Roger Lukas, Professor, University of Hawai'i Department of Oceanography, at rlukas@soest.hawaii.edu.

- Shoreline imagery for the Hawaiian Islands is now available via a database created by the University of Hawai'i School of Ocean and Earth Science and Technology's Coastal Geology Group. The Hawai'i Imagery Database can be accessed on-line at www.soest.hawaii.edu/coasts/Islandimagery.html.

Communications Infrastructure and Information Dissemination

- An Exploratory Workshop on Pacific Collection and Dissemination of Environmental and Related Information for Development of Remote Communities was held in Honolulu, Hawai'i, on July 8 to 10, 2003. This workshop, sponsored by the National Weather Service Pacific Region Headquarters, brought together representatives from a broad range of agencies, institutions, and organizations involved in the collection and dissemination of information within the Pacific Basin. These organizations included the NOAA National Weather Service; the NOAA National Ocean Service; the NOAA National Environmental Satellite, Data, and Information Service; the NOAA Office of Global Programs; the New Zealand, Fijian, Cook Islands, Kiribati, Niue, and Vanuatu National Meteorological Services; the Australian National Climate Centre; the South Pacific Regional Environment Programme (SPREP); the South Pacific Applied Geoscience Commission; Pacific Resources for Education and Learning; University of Hawai'i Pan-Pacific Education and Communication Experiments by Satellite; and the Schools of the Pacific Rainfall Climate Experiment.

Following two days of presentations and deliberations, the participants endorsed a series of recommendations, including the formation of a working group to oversee the implementation of a series of immediate, short-term, and long-term action items in the areas of technology and content. In addition to a briefing presented to the SPREP 9th Regional Meteorological Services Directors meeting, held August 19 to 25, 2003, in Vava'u, Tonga, accomplishments that have occurred since the meeting include the following: commitment and funding for two-way ISCS satellite communication systems at six island locations; RANET (Radio and Internet for the Communication of Hydro-Meteorological and Climate Related Information) funding and support for three FM communications systems for installation in remote communities; commitment and funding by the United Nations Development Program, Small Island Developing States Network, and NOAA for an "end-to-end" demonstration project; and RANET funding and support for multiple demonstration projects (10 digital satellite RANET receivers).

A meeting summary, along with copies of the presentations made at the workshop and a collection of photographs from the meeting, can be downloaded from the communications folder on the anonymous FTP site, <ftp://140.90.201.149/>.

For more information about the workshop and recommended action items, contact Ed Young, deputy director, NWS Pacific Region Headquarters, at Edward.Young@noaa.gov.

Data Analysis and Decision-Support Tools and Training

- The State of Hawai'i Department of Civil Defense (HCD) and the Hawai'i Coastal Zone Management Program (HCZMP) jointly sponsored hazard mitigation workshops in Honolulu, Hawai'i on July 23 to 25, entitled "Mitigation for Emergency Managers" and "Planning for Disaster: Can Your Business Afford Not to Be Prepared." There were more than 60 participants, including two to three coastal managers and/or emergency managers each from American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and Hawai'i, as well as approximately 30 representatives from business and industry.

Data Management

- The Hawai'i Geographic Information Coordinating Council (HIGICC) recently completed the *Hawai'i I-Plan* (Implementation Plan). The Implementation Team (I-Team) Geospatial Information Initiative is the next phase of efforts to build a National Spatial Data Infrastructure (NSDI). The HIGICC provides the regional component to the national initiative. HIGICC has endorsed the I-Team concept, the process championed by the Office of Management and Budget, the Federal Geographic Data Committee (FGDC), and other strategic partners for assessing the status of FGDC's seven framework data themes. Geographic information professionals throughout the State of Hawai'i have identified nine additional data themes as important to the I-Team effort. The *I-Plan* identifies the organizational structure of the I-Team for Hawai'i, defines a process for prioritizing data themes that will contribute to building the NSDI, and summarizes 16 data themes that will be included in the prioritization process. The goal is to devise a plan for the development, distribution, and long-term maintenance of each theme. A copy of the *I-Plan* and more information about the HIGICC can be found at www.higicc.org.
- The American Samoa GIS (geographic information system) Users Group was first convened in February 2001 as an informal grassroots effort among both public and private entities that have an interest in GIS development in the territory. The primary tenet for the group's formation was the establishment of a forum for disseminating GIS information to improve opportunities for collaboration and funding while, at the same time, decreasing data duplication. Furthermore, the group recognized that, in order to make GIS development sustainable in American Samoa, local institutional capacity would need to be strengthened through training and education in geographic information science. Currently, many organizations on island are integrating geographically referenced information into their work. With the increased dependency on spatial data, the GIS group identified an urgent need for a document that promotes, and helps to establish guidelines for data sharing and access, data cataloging and organization, and avenues of communication. The American Samoa Spatial Data Infrastructure is intended to meet that need by defining the mission of the American Samoa GIS Users Group and by specifying the technical framework that

the group will strive to cooperatively operate within. More information on the American Samoa GIS Users Group and its work can be found at www.americansamoagis.com/sdi.htm.

- The 30th International Symposium on Remote Sensing of Environment (ISRSE) will be held in Honolulu, Hawai'i, on November 10 to 14, 2003. The symposium will bring together the knowledge and experience of experts from around the world in remote sensing of the environment. Specific themes that will be featured in the technical program are hazards and disasters, global change, natural resources, and technology and infrastructure. More information on the 30th ISRSE can be found at isrse.pdc.org.

Post-Disaster Evaluation and Performance Indicators

- In cooperation with NOAA, the Heinz Center conducted an 18-month study to identify shared national and state coastal resource goals, based on the objectives of the Coastal Zone Management Act, and to develop a framework for the effective measurement of outcomes using performance indicators. The results of this work are reflected in the May 2003 report *The Coastal Zone Management Act: Developing a Framework for Identifying Performance Indicators*. The report identifies six focus areas—coastal ecosystems and populations, coastal water quality, public access, coastal hazards, coastal community development, and coastal-dependent uses—and offers three or four “dimensions” that identify the types of indicators that should be measured. For coastal hazards, for example, the dimensions are hazard identification; vulnerability; mitigation; and land use, infrastructure, and transportation planning. Together, these focus areas and dimensions constitute the framework for performance indicators that the panel set out to create. To download a PDF file of the Heinz Center’s performance indicators report go to www.heinzctr.org/publications.htm.

Seismic and Volcanic Risk Management

- Cities on Volcanoes 3 was held in Hilo, Hawai'i, on July 14 to 18, 2003. This international meeting presented an opportunity for emergency managers, volcanologists, educators, economists, and planners to evaluate volcanic crisis preparedness and management for communities located on or near active volcanoes. Visit the conference Web site at www.uhh.hawaii.edu/~cov3/.

Traditional Knowledge and Practices

- A panel discussion entitled “Renewing Traditional Approaches to Resource Management” was presented at the Coastal Zone 2003 conference in Baltimore, Maryland, on July 16, 2003. Bill Thomas, director of the NOAA Pacific Services Center, moderated. Chris Chung, manager of Hawai'i CZM, presented on “Ahupua`a Integrated Resource Management in Hawai'i: Combining Traditional and Western Natural Resource Management Styles”; Ulalia Woodside, Kamehameha Schools, spoke on “‘Aina Ulu—An Integrated Model Incorporating Environmental, Cultural, and Economic Aspects in Hawai'i”; and Dr. Patrick Christie, University of Washington School of Marine Affairs, presented on “Local, But Not Traditional, Knowledge: Understandings and Management Practices in Post-Colonial Contexts.”
- Kris McElwee, NOAA Pacific Services Center, presented a talk entitled “Incorporating Traditional and Local Knowledge into Crosscutting Coastal Management” at the All Islands Coastal Zone Managers’ Meeting in American Samoa on August 6, 2003.

Tsunami Risk Management

- The National Tsunami Hazard Mitigation Program received a \$2 million increase in its fiscal year 2003 budget, bringing the total to \$4.3 million. A meeting discussing funding of activities was held in Seattle on May 28 and 29, 2003. A summary of the meeting and meeting minutes can be found at www.pmel.noaa.gov/tsunami-hazard/May03Budget_Meeting_Summary.htm.

THE PROJECT AND ACTIVITY SPOTLIGHT

“Hazards Mitigation: Hawaii Takes On Mother Nature”

– article from Coastal Services; Volume 6, Issue 5; September/October 2003: the NOAA Coastal Services Center’s trade journal for coastal managers.

Preparing communities to identify and minimize the potential impacts of hurricanes, earthquakes, or other natural disasters has gone from being just a good idea to being a federal requirement. Even before hazard mitigation planning became the rule, Hawaii had a coordinated effort under way to help residents and communities prepare for the forces of Mother Nature.

Because of the islands’ vulnerability to a variety of natural disasters, the Hawaii Hazard Mitigation Forum was formed in 1998 to raise public awareness, coordinate and prioritize state mitigation activities, and advise the director and vice director of Hawaii’s Civil Defense.

Since its creation, the group’s diverse membership has launched a \$500,000 public education campaign, and is helping the counties and state draft disaster mitigation plans and perform risk assessments.

The forum’s efforts are being used as a model in the region and around the country.

In the Beginning

The list of hazards to which Hawaii is vulnerable is lengthy. Hurricanes, tsunamis, floods, earthquakes, volcanic eruptions, wildfires, drought, and landslides have all impacted the islands at one time or another.

“We always say it’s not a matter of if, it’s a matter of when” the state will face one of these hazards, says Larry Kanda, hazard mitigation officer for Hawaii’s Civil Defense Division.

While the forum’s work will hopefully save property, and even lives, when the next disaster does strike, Kanda says he had a “selfish reason” for helping to create it.

“I was the only designated mitigation planner in Civil Defense when I was hired in 1992,” he says. “There were a lot of activities going on at the time and they were not well coordinated. My basic thought was to get a group together to figure out what was happening in the state so we could better utilize our resources and do smart mitigation projects.”

He says the idea took root after discussions he had in 1996 with Mike Hamnett, director of the Social Science Research Institute at the University of Hawaii. “We toyed with the idea of how to establish the forum. We didn’t want an ad hoc group or a formal group that was established by law because that would get in the political realm.”

Instead, the Civil Defense Division sent letters to everyone in the state who was involved in mitigation activities, including Hawaii’s Coastal Zone Management Program, and asked them to participate. The group’s bylaws were written by its 17 members, who represent county, state, and federal government, academia, and private industry.

Forum committees tackle projects, such as conducting a risk and vulnerability analysis, as well as addressing specific hazards to ensure all mitigation and planning possibilities are recognized. Forum committees can be made up of nonmembers, which eliminates any knowledge or technical gaps that might exist.

"It brings to the table a whole host of people that have experience in mitigation and have helped us come up with a complete strategy on how to deal with natural hazards," Kanda says.

The forum meets formally four times a year, but committees typically meet every two weeks.

The Big Match

The forum's first project was to develop a comprehensive public education and awareness campaign.

While some funding for the campaign was provided by the Coastal Zone Management Program, the Federal Emergency Management Agency (FEMA), the Civil Defense Division, and others, the majority of the estimated \$500,000 project was donated services and resources.

An advertising executive donated his time and provided the campaign theme of Mother Nature and her professional-wrestling sons Hurricane, Flash Flood, Earthquake, and Tsunami. The lieutenant governor served as the campaign spokesperson and was able to generate much of the private support that enabled the forum to produce and air radio and television public service announcements featuring professional actors, and to print and distribute brochures, posters, newspaper inserts, and counter cards. University graduate students created a Web site for people to turn to for more information.

While the number of people logging on to the Web site was lower than the forum members expected, a follow-up survey of residents showed that 74 percent could name something they could do to reduce the risk of their house being damaged by a natural disaster.

Preparing for the Worst

Another of the forum's primary missions has been developing mitigation plans for the state and its four counties. This was fortuitous because in 2000, the U.S. Congress instructed FEMA to issue new planning requirements that states and communities have to meet in order to qualify for mitigation grant money and certain types of disaster assistance.

"From the very beginning, before FEMA came out with its requirements, I knew we had to complete a state strategy and help the counties do the same," Kanda says. "The forum's planning committee took on the responsibility."

FEMA's deadline for the completion of state and local mitigation plans is November 1, 2004, for post-disaster assistance. In the Pre-Disaster Mitigation Program, county mitigation plans will be required as a condition for "brick and mortar" project grants after November 1, 2003.

The forum has funneled funding, technical assistance, and training and workshops to local governments and businesses to help the counties develop their mitigation plans.

Kanda says drafts of the county plans were to be complete by July 15. The state's mitigation plan is being "written around the county plans," and a draft is expected to be complete by September 15.

In addition to prioritizing the mitigation projects for the state, the forum is conducting a risk and vulnerability analysis using a geographic information system (GIS).

Expecting the Best

One of the best and most unexpected results of the forum, says Chris Chung, manager for the Hawaii Coastal Zone Management Program, is the "bridging of the gap between science, and resource and emergency managers."

“Collaboration, coordination, outreach—that’s success. The forum is a great tool to have in accomplishing all of those things,” Chung says.

The forum’s success has caught the attention of other states and territories as well. Members of the forum are helping other islands in the region prepare mitigation plans, and states across the country have requested information and assistance.

While proud of the group’s progress, Kanda still considers it “a project in the making.”

“We formed this for the partnerships and to develop a smart approach to address our [hazards] issues and problems,” he says. “We’re continuing to learn things and want to expand. . . Partnering never ends.”

For more information on Hawaii’s Hazard Mitigation Forum, point your browser to www.mothernature-hawaii.com. You may also contact Larry Kanda at (808) 733-4301, ext. 550, or lkanda@scd.state.hi.us; Mike Hamnett at (808) 956-7459 or hamnett@hawaii.edu; or Chris Chung at (808) 587-2820 or cchung@dbedt.hawaii.gov. For more information on FEMA’s hazard mitigation requirements, go to www.fema.gov.