



PRiMO

Pacific Risk Management 'Ohana Ka Mana O Na Hui

Summary of Event

PRiMO 2006 Annual Meeting "A Vision for Hazard Resilient Communities"

Courtyard by Marriott Kauai at Waipouli Beach, Kauai, Hawaii
March 14 - 16, 2006

A Note from the Chair

Eileen Shea

September 4, 2006

Aloha all,

My apologies for not having completed this task sooner. As I sat down to write this, I wondered why I hadn't been able to put fingers to keyboard to wrap tie a ribbon around our March 2006 gathering before now. I couldn't find a valid reason but the excuses that coursed through my brain provided some insights into both the challenge and the opportunity that is PRiMO and I thought I would share them with you by way of both introducing the March 2006 meeting summary and helping us to chart our course for the coming years. I hope that you'll find this personal indulgence of at least a bit of interest as the Navigators and Steersmen prepare to meet on September 7 and 8, 2006.

First, like all the members of our 'ohana, I found myself immediately swept up in other elements of my "day job" and kept telling myself that the rush of activity would soon slow and I'd be able to draft a summary of the March PRiMO meeting quickly as soon as things were less chaotic. Needless to say, things never seemed to slow and suddenly it's September! It's not like we weren't all living our PRiMO commitment -- promoting the emergence of disaster-resilient communities -- but somehow the task of nurturing our nuclear 'ohana took a backseat to the demands of our extended 'ohana that includes our home offices, our agencies, departments and institutions, our own user communities and our own professional communities. I realized this morning, how like an 'ohana this is -- tending to external problems and responsibilities while taking our nuclear family for granted because we know that they are always there, always supportive and equally committed to our shared dreams. It is, of course, the strength of our family bond that make it possible for all of us to take the PRiMO message out into that greater world but I believe that we must fortify our family bond and I hope that this will be a principal focus of both our September 2006 gathering and the year ahead.

Secondly, I have to admit that I sometimes find it less exciting to summarize what we've shared together than to move forward to capitalize on new opportunities. Partly, this reflects my long-held philosophy that the *process* of intellectual, spiritual and emotional exchange during a meeting that is at least as important as any written *product* that might emerge from those deliberations. Several years ago, several of us in the climate community forced a colleague from Harvard University to stand at a blackboard and write "It's the process, stupid!" multiple times to hammer home the message that engagement and shared learning is the real key to a successful climate environmental assessment. I still believe this to be true but, unfortunately, I



also realize that it tends to short-change the members of our 'ohana who are not able to join us at any one of our family reunions. So, I offer my apology to those who were not with us in March 2006 and promise, in the future, to do a better job of remembering that, in fact, it is both process and product that matter. From the beginning PRiMO has reflected a commitment to both process and products and I promise to renew my personal commitment as well.

Finally, I have to admit to a nagging fear that a third-party summary all too often loses the passion with which an individual message is given and received. This fear can sometimes cause my fingers to falter on the keyboard as I try, unsuccessfully, to capture both sometimes so I set the task aside for a while in hopes that inspiration will help at a future time. Unfortunately, as we all know, that future time can often be a moving target slipping towards an ever-more-distant horizon and suddenly one, three or six months have gone by. What I came to realize as I put fingers to the keyboard this morning is that, in fact, the passion will always be there – regardless of how poorly – or how well – any of us might capture our discussions on paper, the energy and commitment with which we share our ideas always remains as sparkling energy around our 'ohana. We feel it every time we come together and I believe that it will always revitalize and bind us as we move toward our shared vision.

So, mahalo nui loa to all for the patience and understanding that is the keystone of any 'ohana and, with this *mea culpa* now offered, let's look at what emerged from our discussions on Kauai in March 2006!

Eileen

Executive Summary

Eileen Shea, Chair PRiMO Navigators Council

Key Themes – Renewing our Commitment

In thinking about the March meeting, reviewing meeting notes and talking with other members of our 'ohana, I believe that we left Kauai with a renewed commitment to some key themes:

- **Sharing information and individual perspectives is essential to our success.** This sharing takes many, equally-important forms including: formal presentations at meetings; panel discussions; written activity reports; sharing documents; identifying opportunities; individual and group conversations; and hui and Navigators Council deliberations and activities between annual meetings and we must renew our commitment to supporting all of these aspects of our family's continuing dialogue.
- **Supporting the work of our hui 'ohana is crucial but, currently, not consistent.** Individual members of the Navigators Council renewed our commitment to adopting a hui to ensure that they receive the human and fiscal resources required but it's clear that further work needs to be done to transform that commitment into reality.
- **Leadership is vital and we have wonderful examples within the PRiMO family.** The hui reports and panel presentations on the benefits of PRiMO products during the March meeting highlighted the benefits of strong and vital leadership within huis, the Navigators Council and among member agencies and institutions. Unfortunately, some of those same sessions also reminded us that we need to re-double our effort to find and engage current and future leaders for our work.
- **There are a number of exciting, near-term opportunities for PRiMO to pursue.** We heard, for example, about: opportunities in tsunami preparedness; FEMA flood map modernization and local disaster mitigation plan updates; understanding and managing coastal inundation and erosion risks; critical data integration and product development opportunities such as wave and water level; shared data and information management tools such as APHNIN; expanding the application of successful communications technologies and decision-support tools developed through the work of PRiMO agencies and institutions; expanding disaster management education opportunities such as the emerging new University of Hawaii program and technical training within PRiMO agencies; and the importance of investing in a broader



program of public education and outreach to strengthen community awareness and preparedness.

- **Telling the PRiMO story should be a shared, near-term commitment.** The presentations of the products and services of PRiMO agencies and activities make it clear that we have a wonderful and compelling story to tell both within our individual agencies and institutions and with the broader Pacific community. Articulating and sharing that story should be a high priority for all of us.
- **Remembering the "human face" of disasters and resilience should remain our foundation.** We couldn't have had a better demonstration of this than spending our time on Kauai during the March 2006 rains and flooding events. Our understanding of the magnitude and scope of this one event grew with each passing day and JoAnne Yukimura's opening comments about Hurricane Iniki helped us recognize that the human face of disaster – and preparedness – remains regardless of the nature of any individual event. Building and sustaining a comprehensive, multi-hazards approach to building individual and community resilience is an overarching goal that we should always remember.
- **Building and sustaining hazard-resilient Pacific communities provides a valuable unifying theme for PRiMO.** As Jeff Payne noted in his insightful closing remarks (included in the Concluding Remarks section of this meeting summary), our tentative exploration of this theme during the March meeting evolved into a recognition that, individually and collectively, we already have adopted this shared vision. The March meeting also highlighted the benefits that could accrue from developing a more focused, joint approach and enhancing support for collaborative programs and activities.

Our challenge now is to develop and support a shared, *PRiMO program* in hazard-resilient communities. This is also, our opportunity to demonstrate to ourselves and others the value of the PRiMO vision. As we spend the coming months developing and implementing this programmatic framework for PRiMO, I'd like to encourage us to develop a shared understanding of the characteristics of a hazard-resilient community to help guide our activities. I offered one possible set of those characteristics during the March meeting and I offer them again here to help us think about how the hui, Navigators and PRiMO agencies/institutions might contribute to a joint program in hazard-resilient communities.

From my own perspective, a hazard-resilient community would have the following characteristics:

- a community that is **aware** of the hazards and risks they face;
- a community that is **informed** not only about the nature of those risks but also the opportunities to enhance their resilience;
- a community in which individuals, businesses, governments and public interest organizations are **engaged and empowered** in efforts to assess, communicate and manage risks;
- a community that is **responsive** to information about pending and future hazards;
- a community that is **prepared** in terms of disaster mitigation, response and recovery efforts;
- a community that is **pro-active** in their efforts to understand and manage risks and build resilient communities;

My hope is that we with a shared vision of resilient communities, we can begin to develop a shared understanding of how individual PRiMO members, agencies, institutions, hui and Navigators can each contribute and how the collective whole can be even greater than the sum of those individual parts.

With the thanks of the Chair to Mapping Change for their critical contributions to our March meeting and their draft report-out; to Russell Jackson, Adam Stein, and the rest of the PRiMO support staff at NOAA's Pacific Services Center; the hui steersmen; my fellow Navigators; and, most of all, the PRiMO members and institutions who participated, we offer the following short summary of some of the highlights of the March 2006 PRiMO meeting.



Narrative Agenda

The following information is the summary of outcomes resulting from the 2006 PRiMO Annual Meeting. Notes from the discussion are placed here in the document chronologically just as the conversation unfolded. They are presented in this way to allow the reader to understand the general flow of the two days and the nature of the discussion.

TUESDAY, MARCH 14, 2006
(1:00 PM – 5:30 PM)

Navigators' Breakfast (8:00 AM, Chart Room)

Quick update on progress made since Navigator's Meeting

Highlight plans to move on the up-reach issue and video capture of the event.

Comments shared are captured below:

Alan Mikuni– I got Kimo here to the meeting☺

Ed Young– Disaster Communications Workshop was a success – made contact with Karl Staple and others; generated interest from private telecommunications center; attended a meeting by the Center for Disabilities Studies – seeing links and connections with this population who have special needs (i.e., level two facilities) not being addressed; US Forest Service effort to look at warning systems/ process for getting the word out to communities

Cheryl Anderson– Presently she is in Costa Rica talking on Gender and Disaster Management

Russell Jackson– Indian Ocean activity on helping communities become more Tsunami resilient and eventually the activity will address more types of Hazards; looking for NGO partners and info on best practices in the various countries we are working in – looking at three different types of communities- this group wants to learn from PRiMO about cross-agency efforts; Other growing interest in resiliency re: hurricanes; There is a need to investigate other models for Storm Surge/Tsunami forecasting.

David Kennard– FEMA effort looking to revive state and local planning efforts and are looking at PRiMO as a possible model; UH Effort to build performance based building codes in Tsumani-risk areas

Eddie Bernard– Technology standards in hazards assessment and monitoring are a growing need and interest; best practices; criteria for establishing quantitative measures;



inter-agency coordination is a huge issue that needs to be worked through; Gave presentation to Region X that we did in flood management, probability analysis – this effort shows the needs for inter-agency coordination of standards; Conference is coming to Hawaii that needs local participation FAPAC and could use Pacific Islander presence.

Sally Zolkowski– The SF commemoration of the Earthquake will be in one month; lots of opportunities will be available there for PRiMO visibility; Region nine has been hit hard from elected leaders to respond to Qs re: how CA will respond in an emergency – this could be a good thing; National Flood Insurance Program held a meeting in January in Charleston wants more stable representation from NOAA; map modernization effort underway

Review of 2006 Meeting Agenda

Major points to be made of each individual panel. Offer guidance/support to the Moderators; Raise the issues of the Hui member participation and its impact on meeting goals

Navigators' Group Consensus on 2006 Desired Meeting Outcomes

Tangibles and Intangibles

- To link the essential purpose of PRiMO with the Hazard Resilient Communities (HRC) theme
- Concur or not on the chosen theme of HRC
- Drive home the message of the need for agency integration
- Plan for how to better integrate the work of hui's and identify the resources they can bring to the table
- "The Pass-off" should happen here where PRiMO is understood to be a stand-alone, integrated effort not owned or operated by any particular agency.
- Identify emerging opportunities for shared effort and resources to support shared effort
- To make more concrete the possibility of powerful cross-agency effort using a particular hazard (Eddie's slide as a prompt)
- Refine the focus and efforts of the Huis'
- Move forward on our invitation to the international/regional groups to join PRiMO



Navigators' Agree on Agenda for Joint Meeting with Steersmen

- Navigators offer their desired outcomes for this meeting – tangibles and intangibles
- Navigators explain the rationale behind the hazard resilient communities theme
- Getting steersmens' feedback and buy-in re: hui dialogue sessions
- Summary of shared understandings

2006 PRiMO Meeting Kick-Off (1:00 PM)

Welcome & Overview –Desired Meeting Outcomes

Bill Thomas, NOAA PSC, Russell Jackson, PRiMO

Why Kauai?

Eileen Shea, PRiMO

Keynote Address: The Kauai Story – Hurricane Iniki (2:00)

JoAnne Yukimura, former Mayor of Kauai during Hurricane Iniki

Review of Meeting Agenda (2:30)

Panel 1: Disaster Response and Recovery: What has happened to improve things since Hurricane Iniki? (3:00)

Moderator: David Kennard, FEMA

Panelists: Ken Brown, FEMA

Doug Haigh, Kauai County Public Works

Walter Dudley, UH at Hilo

See Power Point

Future Direction for PRiMO (4:00)

Hui Assistance in Addressing Community Resilience

Eileen Shea, PRiMO

See Power Point

Huis Meet to Discuss Community Resilience Focus for PRiMO (Happy Hour)

- "How can PRiMO benefit the community with this focus on resiliency?"
- "How could this resilient community focus benefit PRiMO?"
- "How could it benefit your hui?"



WEDNESDAY, MARCH 15, 2006
(8:30 AM – 6:00 PM, Chart Room)

Emerging Opportunities (8:30)

Community Resilience Index
Jeff Payne, NOAA CSC

See Power Point

December 2005 PRiMO Navigators Meeting Overview (9:00)

Hui Report Out and Discussion (9:30 AM)

Moderator: Sally Ziolkowski, FEMA

Observations & Data Management

Eric Wong, NOAA IDEA Center

See PowerPoint

One of the keys needed to support PRiMO's vision for hazard resilient communities in the Pacific is the development of the underlying data and information management framework. PRiMO's Observations and Data Management (ODM) Hui has undertaken the task of initiating regional hazards data framework development activities:

- In November 2004, the ODM Hui convened a workshop for Hazard and Risk Data Providers and Brokers that defined significant risk management data framework development initiatives and established tasks to be undertaken.
- At the March 2005 PRiMO Annual meeting, a draft regional risk management data structure and natural hazards theme categorization was presented for review and was subsequently endorsed by PRiMO.
- In July 2005, the ODM Hui was awarded an NSDI CAP Grant in support of its data framework development activities.
- In December 2005, the ODM Hui convened a workshop to engage subject matter experts to develop the Wave and Water Level (WWL) data type, the initial focus area of the hazards framework. A WWL File Structure, Data Dictionary and Data/Product Typology were created.
- In the next year, the ODM Hui plans to: 1) Engage subject matter experts to further develop the WWL component and to initiate development of the weather/climate and seismic/volcanic components of the hazard framework; 2) Engage the Data Analysis & Decision Support Tools Hui in establishing linkages between data and products/models; and 3) Implement the PRiMO hazards data



framework as an Asia Pacific Natural Hazards Information Network (APNHIN) search mechanism and populate APNHIN with PRiMO partner data and metadata.

Data Analysis & Decision Support Tools

Adam Stein, NOAA PSC

The Tools Hui is NOAA, USGS, UH Seagrant, Martin and Chock Inc, PDC, USACOE, and Prescott College faculty. We exist to support the region by improving the quality of decisions by:

- Identifying available data analysis and decision support tools
- Improving awareness of the se tools
- Reviewing the applicability of these tools
- Identifying customer needs
- Coordinating efforts to fill gaps
- Collaborating on delivery of multi-agency all-hazard tools in a culturally and geographically sensitive way.

2005 Tasks

- Convey to Navigators a need for PRiMO-wide needs assessment to engage customers/audience. Completed March 17, 2005.
- Post a downloadable version of the current tools inventory to the PRiMO website (within 2 months). Completed October 2005.
- Expand scope of the tools inventory by adding hui participants from USGS, FEMA, USACoE, EPA. To be completed by March 2006. Added members from usgs and usacoe.
- Develop a web-distributed, searchable, uploadable version of the tools inventory. To be completed within 18 months. Prototype developed and final format approved yesterday morning. Separate inventory efforts are contributing to this inventory, including the PRiMO Inventory, PDC Catalog of Natural and Human-Induced Impact Assessment Models, USGS Model Inventory. Over 200 tools and/or models documented.
- Highlight tools inventory as a PRiMO product for outreach and upreach. To be completed in conjunction with completion of inventory.
- Expand and improve the tools gap analysis. No movement.

The Tools hui has been able to move forward on identifying available tools and improving awareness through our collaborative inventory effort. We still lack participation from some federal agencies but participation in general improved.



Although we are on our third steersperson this year we are hopeful we have the right individual in Caoline Hermans. We did not have as many conference calls as we would have liked but the calls we did have were valuable and effective. At this point the hui has not attempted to collaborate on delivery of a multi-agency/organization all-hazard tool, which is one of the reasons we exist, but hopefully we can identify an opportunity through dialogue with other hui.

Risk Reduction & Post-Disaster Evaluation

Nathan Wood, USGS

See PowerPoint

Overview: Our Hui is one currently based on coordination but not collaboration. Hui members are beginning to identify opportunities on what and how to collaborate. Unfortunately, our Hui does not have members who are specifically tasked to do work related to PRiMO. So, for the Hui to advance, specific projects related to PRiMO must identified and funded.

Hui vision: to build a disaster-resilient region by understanding, documenting and communicating pre-event vulnerability and post-disaster impacts

Hui challenges:

1. Need to expand membership. We need to include first responders, county civil defense, U.S. Army Corps of Engineers, U.S. Coast Guard, American Red Cross and voluntary agency liaison at FEMA. Expanding Hui membership can happen by word-of-mouth (ex. at conferences) and by dissemination of a 1-page concept paper for the Hui.
2. Need to develop Hui-related projects. Possible mechanisms include state Pre-Disaster Mitigation grant program, NSF-funded projects (with university principal investigators), bringing in local graduate students (ex. University of Hawaii) to help on projects, and learning from PDC "Asia-Pacific Natural Hazard Information Network"

Potential Hui products: All products come under a larger product called the "Pacific Island Vulnerability and Disaster Experience Database." Elements within this database include:

1. Processes, framework, protocols for pre-event and post-event action plan. These products would need be to scalable, in terms of available technology and of agent conducting the work (ex. a federal agency versus small village)



2. Database to include (a) imagery, ranging from someone taking a picture standing on a hill up to satellite imagery, (b) pre-event vulnerability analysis or case studies – bringing in aspects of VAT methods, (c) post-event impact assessments of physical, social, economic and cultural system and (d) oral narratives
3. "How-to" guides on pre-event vulnerability and post-event impact analyses
4. Documentation and archive of current efforts related to pre- and post-event assessments

PRiMO and a Hazard Resilience Community Theme:

- How can PRiMO benefit communities with a focus on resilience? PRiMO could provide processes and protocols, regional analysis and increased awareness of the vulnerability and resilience of communities to natural hazards
- How could the resilience focus benefit PRiMO? The theme provides focus to PRiMO and ensures relevance to practitioners and participating organizations. In short, it gives the navigators and steersman a destination with our canoes.
- How could the resilience focus benefit our Hui? This theme champions our Hui.
- What challenges might the resilience focus present to our Hui? It may bring in mainland bias as participating mainland groups define "resilience." It may raise expectations from local groups for PRiMO to perform all work and increase their local resilience. Finally, efforts to increase resilience require integration with community members, which is difficult and time-consuming. Agency timelines often can not accommodate these longer time-frames.

Communications, Education, & Outreach

Edward Young, NWS

Overview: The Education and Outreach Huis were combined with the Communications Hui at the March, 2005 PRiMO Workshop. The merger didn't work as well for the education and outreach portion of hui activity, as some of the hui members previously involved in education and outreach, were already committed to other hui activities. It was also recognized that Outreach and Upreach had a larger focus that crossed all hui activities. Therefore, the hui recommended that the Education and Outreach Hui would become a separate Hui again, and Lynn Nakgawa, Education Outreach Specialist at the NOAA IDEACenter agreed to become its Chairperson. Ideas for the development of an Education and Outreach Strategy were discussed and noted elsewhere in the PRiMO 2006 Annual Meeting.

Communications, Education, and Outreach Hui

Vision - to assist those who provide hazard and warning information to local diverse communities with an effective two-way delivery mechanism that is tailored to meet local needs, is consistent and integrated with local knowledge and practices, in appropriate formats and templates that builds local capacity, and promotes two-way transfer of knowledge and practices for outreach and education efforts within local island communities that enhances their resiliency.

Mission: The Communications Hui and the Education and Outreach Hui are committed to:

- a) Improving the communications infrastructure that supports the two way delivery of environmental and hazards information in multiple and adaptive formats that builds capacity and resiliency for local communities to respond to known hazards and vulnerabilities (Communications)
- b) Supports the survey of existing outreach and education curriculum on natural hazards, develop templates for brochures, presentations, books, and other materials, that can be easily adapted for use in diverse Pacific Island communities (Education and Outreach)
- c) Improving response to hazard information, using a family/extended family/community approach to preparedness planning which strengthens the resiliency and recovery of island communities through coordinated education and outreach efforts utilizing all vehicles of effective communication (Communications, Education and Outreach)

Recognized Hui Challenges and Opportunities

1. Need to coordinate emerging opportunities for obtaining resources to support the work of this hui, and supporting the work of the other hui.
2. Need to consolidate and increase membership and activity within the Education and Outreach hui.
2. Building and sustaining a viable infrastructure that serves a widely dispersed population base with extremely limited resources.
3. Adapting outreach and education, and hazard warning information so that it can be adapted for local communities with multiple languages, i.e. the need to communicate in languages that are fully understood by the end user.
4. Embracing sustainable and appropriate technologies to deliver environmental information to the end user in a timely and consistent manner.
- 4) Planned Priorities/Intended Hui Accomplishments for the next 6-18 months
 1. Continue to deploy and implement community based village-based information delivery networks, and seeking funding opportunities for expansion.
 2. Expand education and outreach programs and opportunities based on available local

resources.

3. Continue to monitor the effectiveness of existing demonstration projects, and document lessons learned. Activities continued and lessons learned have been shared among hui members, including finding interested vendors willing to be sources for inexpensive, but sustainable communications equipment to be deployed
4. Continue to explore the availability of additional communications channels to support our hui's mission to reach out the last mile/kilometer.

Traditional Knowledge & Practices

NOAAPSC

Training

NOAAPSC

The principal challenges to the training hui have been a lack of connection to the rest of PRiMO and a lack of time on the part of hui members. Each member has a full-time job, and with one exception, they are not trainers. One co-chair, who is a trainer, has not yet been able to attend a PRiMO meeting, so it has been difficult to get him up to speed on the PRiMO concept and have him get to know the hui members. The other co-chair has changed job responsibilities several times since the inception of PRiMO and is having a hard time committing the time the hui may require. The remaining hui membership is probably in a similar position. One way out of this may be a closer connection with other PRiMO activities. For instance, if a tool is created or a specific training need identified through another hui's activities, it would be more likely that the training hui could be mobilized to coordinate the training. It would be useful to discuss, both with the navigators and steersmen as well as with the greater PRiMO membership, the current need for a training hui and the overall group's needs and expectations for a training hui.

Panel 2: Existing Tools for Building Resilience - Kauai (11:00)

Moderator, Russell Jackson, NOAAPSC

Kauai Online Hazard Assessment Tool

(Adam Stein, NOAAPSC and Doug Haigh, Kauai County Public Works)

HAZUSMH

Ann Ogata-Deal, CZM Hawaii

See PowerPoint



HI-RISC/APNHIN
Chris Chiesa, PDC

See PowerPoint

Vulnerability and Risk Assessments
Nate Wood, USGS

See PowerPoint

Lunch (12:00)

Emerging Opportunities (1:30)
Moderator: Bill Thomas, NOAA/PSC

Tsunamis
Eddie Bernard, NOAA/PMEL
Walt Dudley, UH/Hilo

See PowerPoint

Disaster Management & Humanitarian Assistance Program
Karl Kim, UH-DURP

See PowerPoint

Indian Ocean Tsunami Warning System
Russell Jackson, NOAA/PSC

See PowerPoint

Fellowships & Internships
Kristina Kekuwa, PSC

See PowerPoint

Pre-disaster Mitigation Fund
David Kennard, FEMA

See PowerPoint

Hui Steersman Dialogue: Implications of a Hazard Resilient Communities Theme (3:30)

Focus Topics of Small Group Discussion~

- Identify possible JOINT projects
- Identify funding strategies for projects and personnel
- How can we support the hui leadership and greater member participation?

Networking and Celebration Reception (Evening)



THURSDAY, MARCH 16, 2006
(8:30 AM – 4:00 PM, Chart Room)

Dialogue on Hazard-Resilient Communities Theme and Joint Projects (8:30)

Following the series of presentations and panel discussions on recent and on-going PRiMO activities and programs, participants were asked to participate in three, concurrent working group discussions designed to explore the implications of adopting a "Hazard-Resilient Communities" for PRiMO. The complete summaries and detailed recommendations from these three working group discussions are included as Attachments A, B and C to this summary report. What follows is a summary of some of the key elements of these highly-interactive discussions.

Some Common Themes

- Building and sustaining hazard-resilient **does** provide a viable, unifying theme for PRiMO activities;
- Adopting this theme will require the engagement of new PRiMO partners and a renewed commitment from existing PRiMO agencies and institutions;
- The hazard-resilient community theme could provide a valuable opportunity to strengthen existing commitments and secure new resources (human and fiscal);
- Early and continued PRiMO success stories will be important to securing and sustaining those resources and continuous self-evaluation of PRiMO programs will be essential;
- Visibility and credit for PRiMO success stories will likely draw new partners and strengthen the standing of existing PRiMO partners within their home agencies/institutions;
- Achieving the vision of hazard-resilient communities requires effective leadership – within PRiMO, within PRiMO agencies/institutions and within Pacific Island communities – and finding and nurturing that leadership is essential;
- The Navigators Council should further develop the nature of their commitments to "adopt" (i.e., sustain and support) the work of individual hui – we need a clearer funding strategy for securing the necessary resources;
- Cross-hui, joint projects could help advance a PRiMO program focused on hazard-resilient communities.

Criteria for Joint Projects

- Clear funding source
- Community driven
- Needed by community; Useful product
- Clear roles
- Efficient process; Focused to provide project-grief
- Committed passionate partners
- Supports individual partner goals
- Projects that lead to capacity building
- Projects that have sustainability and longevity
- Transferability
- Has a role for all hui
- Get all the way to the end user
- End user sees a need for it
- Those "in-charge can resonate with it
- Benefits can be demonstrated
- Are we likely to get resources to support it
- Is there clear leadership
- Cross hui
- Visibility for PRiMO
- Clear documentation; Clear outcomes and good performance indicators

Joint Project Possibilities

As can be seen in the full working group summaries included as Attachments to this report, the three working groups had a rich discussion of possible PRiMO-wide, joint projects that could advance the theme of hazard-resilient communities. The Chair and meeting participants offered the following synthesis of some common ideas that appeared to be shared among all three groups:

- Education and outreach efforts involving formal and informal education;
- Supporting the development of disaster plans at a number of levels from family/household to communities, governments and region-wide endeavors;
- Enhanced technical training for practitioners;
- Documentation of the "Pacific Hazard Experience" – including histories and assessments of hazards/risks and their impacts as well as documenting experience in mitigation and enhancing resilience at the local/island level in the region;
- Enhancing efforts to document and integrate local and traditional knowledge and experience;
- Adoption of a service-oriented technology architecture for information dissemination;
- Supporting the development of community resilience indices appropriate for use in the Pacific with particular attention to addressing critical facilities and infrastructure; and
- Developing an assessment and decision support toolkit that works for all hazards/vulnerabilities.

Subsequent group discussion of these ideas and others shared during plenary resulted in the following possible list of early joint projects:

1. Documentation of the Pacific hazard experience (oral and written)
2. Education and outreach
3. Development of a pilot community resilience-building methodology (vulnerability/resilience assessment/indices and guidelines)
4. Providing the technical infrastructure and data/information sharing technology to support PRiMO activities and community resilience efforts in the Pacific
5. Supporting the development of community resilience indices appropriate for use in the Pacific with particular attention to addressing critical facilities and infrastructure and
6. Training for practitioners to be culturally responsive and responsible.

Group 1	Group 2	Group 3
Traditional knowledge and practices workshop as a first step to bringing practitioner community together	Expand the wave and water level work	The development of an education and outreach strategy (education is on the hazards, outreach on resiliency and maybe PRiMO itself)
Oral history of disasters	Increase the resilience of critical facilities	Catalogue existing awareness materials
Family disaster plan book	Resilient port harbor initiative	A clearinghouse system to link grad students to projects
Community resiliency index concept identified/applied to help inform and focus resources most efficiently	Disaster experience data base	Multi-language, culturally sensitive and local in flavor distributed over internet and by hand
Cost-benefit success stories	Recovery planning initiative at the family level (exercises, processes, simulations)	Eye-ball to eye-ball exercises
Training for practitioners on how to deliver information to culture and values	Organizing the oral narratives and plan for their use in the community and schools	Need partners that can help achieve a multiplier effect
An evaluation of PRiMO products	Resilience awareness campaign for tourist industry	Materials should focus on climate change and tsunami's
Improving technical infrastructure (with help of new partners)	Tourist disaster kit – don't leave home without it	
Demonstrate of a distributing network	PRiMO profile – resiliency index/rating for communities	
	Neighborhood based narrative using GIS	
	Minimal guidelines for "all hazard" resilience	

Some Additional Considerations

- Pilot process to refine methodology is important
- self eval of PRiMO is important
- The data supports for these projects will be important
- Practical
- Scalable
- Dissemination mechanism that makes sense in local context
- High needs
- Political climate
- Causes PRiMO to listen with a ear that that can distinguish traditional for local voices
- Should lead us toward standards and compatibility
- Be clear about the value that PRiMO adds to any effort
- Customer relations documentation
- Customer request for services – a pull strategy
- Educate our supervisors about what is needed and how to support us
- We can follow a diagnosis treatment process thte allows us to whap all of this together
- Need a quick success/ accomplishment; do something; pilot
- Data storage of oral histories
- Develop a tool kit that works for all hazards/ vulnerabilities
- Assess risks by island
- A comparative need to capability assessment
- Discovery of hazard experiences found in chants, prayers, dances, etc.

Lunch (12:30)

Recap and Priority Actions (1:30 PM)

Jeff Payne, NOAA Coastal Services Center

The power of experience and applying lessons learned. I was captivated by Joanne's talk and its sheer relevance to a partnership such as PRiMO. Resiliency was displayed by the island folks - they were not really ready for a storm like Iniki, but they survived and they prospered. The human spirit refused to buckle, and so the system did not fall into a qualitatively different state governed by different processes. Sure, it changed, and lessons were learned, but the Iniki experience demonstrated the principles of community resiliency. It also begins and ends with communication, and on this stage, the importance was driven home by Joanne's minder that communications both needed to happen, and failed, on 4 levels (general; public officer/face of the event; lack of a communications plan;



and people feeling abandoned if communications is not constant and meaningful).

- **Sharing information and views.** The panels were very helpful. The panelists covered a lot of ground, and common themes emerged including: connections made and to be made; best practices shared; unmet needs identified; and funding opportunities identified, especially in the cadre of relatively cheap but eager folks coming out of school. A prime area for exploration is the idea of a cooperative partnership with the university to broker a sustained research to applications capacity..
- **Steersmen and Hui support.** I think a number of people benefitted most from the Hui report outs and steersman dialogues. Clearly, some are robust, and others are sucking wind. Achieving balance is a clear need, and proper support that is dialed into the stated objectives and timeline for achievement is needed. The passion is there, but better organization, steersmen direct support, and continued navigator encouragement is needed to sustain and grow the effectiveness and credibility of the Huis. This needs to be satisfying to the participants, and not purely a task. Sufficient attention to other islands beyond the main eight is also a concern. And...moving, especially in the context of the Huis and cross-Hui interactions, from communication and good will to collaboration.
- **Resilient communities as a unifying theme.** On the hazard resilient communities theme, we started a dialogue, and surprisingly got more sophisticated than I expected we would during the course of the meeting. It impressed me that there is lots of information and experience in this field, and as such it has the power to take off quickly and still be a comprehensive, message-oriented, integrative, and unifying framework for PRiMO. Stakeholders can identify with it, and it provides a solid basis for some otherwise independent contributing efforts such as IOOS and to some extent ecosystem approaches to management. PRiMO can serve to lead the dialogue and the practice of realizing hazard resilient communities, and the envisioned community-level resilience index can be piloted and tested through PRiMO served communities in the Pacific basin. The integration requirements and challenges of the resiliency theme works well with the concept of a PRiMO pilot because PRiMO is already an interagency, multidisciplinary effort. The right players are largely at the table.
- **PRiMO outreach and Up-reach.** This continues to be a high priority, and the interviews conducted during the meeting as a backdrop were a positive tone and should have value. The navigators and steersmen should look soon at this information resource.
- **Follow-through on previous commitments to work.** In re-reading the existing action plan (e.g. Tab 6), I was struck by the amount of previous thinking and identification of actionable items. At the same time, the Hui report-outs generated a number of new ideas and new connections to be made. PRiMO would do well to ensure that a balance is struck among the herd of previous intentions and the priorities/desires for new work.

Process and financing for projects and selection. A big concern. PRiMO should capitalize on the value of networking to build support, and should focus on identifying the right projects and then ensuring that they are properly financed. Coastal America is an interesting and in many respects successful model of networking leading to constructive partnerships. What makes it successful is passionate leadership, interagency commitment, champions in each agency, and a clear focus (habitat restoration). Creative financing (and a creative financing tool kit) seems also to be a must for PRiMO.

Where do we go from here: Facilitator Reflections on the PRiMO Initiative (3:00)

Marina Piscalish from Mapping Change, provided valuable feedback from her perspective as a facilitator and that feedback is included in its entirety as Attachment D to this meeting summary. As always, Marina, Kalani Souza and all our Mapping Change colleagues have helped us to stay focused on the most important aspects of our own shared journey as PRiMO.

From the Chair's perspective, some of the most important of recommendations from Marina include:

- A consistent commitment to working in the "Pacific Way"
- Continuously learning about working with end users
- Doing as much as possible every time we get together and remembering that is likely more than we think can be done
- Consistent and continuous feedback from PRiMO members, meeting participants and users;
- Solidify the functioning of leadership at all levels/tiers of PRiMO activities;
- Move forward on the selection and pursuit of some initial joint projects;
- Identify and address the needs of PRiMO as a functioning organization and support PRiMO capacity-building in critical areas; and
- Ensure that PRiMO members have a shared set of expectations and a common set of guidelines for PRiMO programs and activities.

Finally, Marina encouraged us to "Celebrate, celebrate, celebrate" – our coming together, our early successes, our shared commitment and our common journey. Something we should always keep in mind!

Evaluation of Meeting (4:00)

Adjourn



ATTACHMENT A

Nate Wood's Notes from Small Group Discussion re: Hui

Criteria for evaluating joint projects-

- Truly end to end in that it engages all of the hui
- Truly end to end in that it results in a product that gets down to the community/village level
- Truly end to end in that there is a receptive audience in the tops of the trees- at the upper-reaches of agencies, institutions, organizations, as well as those among the blades of brass – at the community/village and family/individual level.
- The likelihood of getting the resources (\$/people) needed to complete the work.
- The availability of leadership necessary to complete the work
- The replicability/transferability of the results.

Potential joint projects-

(with sum lumping that resulted via subsequent group discussion)

- Identify community resilience indices and apply them. Specific elements of application that get down to the community/village and family/individual level might include a “family disaster resiliency plan book” (modeled after the fire safety model), training of practitioners on how to deliver technical information to communities/villages in a manner sensitive to “local” values, customs, needs, etc., and an evaluation of this process with respect to project effectiveness (see criteria), the roles and functions of the hui, etc. – this would form the basis for establishing an iterative “learning” process.
- Convene and conduct a traditional knowledge and practices workshop focused around community resiliency, and as a precursor to the collection of video histories of hazard experiences (modeled after FEMA, Tsunami museum, and PREL projects)
- Develop/Market “success stories” that include clearly defined cost/benefits, input/output metrics.
- Develop a demonstration of distributed networking as a mechanism for the collection and sharing of theme-related information. This may include application of a more formal “service-oriented architecture” (SOA) approach.
- Enhance technical infrastructure (i.e., a submarine fiber-optic cable and state of the art satellite system).

Potential resources (financial and personnel) for conducting joint projects-

- Mini-grants
- Leveraging via piggy-backing onto existing projects, be opportunistic
- Developing enhanced local capacity
- Encourage volunteer involvement

- Take advantage of opportunities that might arise as a result of disasters
- Seek out partnerships/sponsorship with both public and private sector organizations with similar interests – e.g., SPREP, SOPAC, Packard Foundation, Gates Foundation, etc.

Note the need to secure support at upper-reaches was discussed and the importance of showing that a demand existed at the local level, and the results of the work were effective was stressed.

Mechanisms to engage and retain Hui leaders -

- Provide seed money or staff support
- Performance bonuses - the steersperson who paddled the hardest last year
- Recognition in performance evaluations
- Formal recognition in work plans (e.g., percentage of FTE)
- Establish well-defined roles, responsibilities, project definitions, term limits, frequency and timing of meetings...
- Improve mechanisms to facilitate within and between hui communication

Note the need the need for the navigators, particularly those that have adopted a hui to “walk the walk” was discussed and the importance of showing that they see PRiMO activities and the benefits of mutual effort as important, for example, by lobbying both up-line and across the line to other hui navigators.

One last point pertained to having a tight message that explains what it was about PRiMO that was different, what is it that is unique about PRiMO?

ATTACHMENT B

John Marra's Notes from Small Group Discussion re: Huis

What are the characteristics of a good joint PRiMO project?

- Visibility for PRiMO
- Clear outcomes with performance indicators
- Clear funding source(s)
- Community-driven and/or need
- Useful product
- Clear roles for researchers and practitioners
- Efficient process with a timeline
- Realistic timelines
- Committed, passionate partners
- Supports partners' goals (both practitioners and organizations)
- Defined process for coordination and collaboration
- Focused project plan to avoid project creep but flexible enough to be community-driven
- Cross-hui
- Capacity-building for the local community
- Ability to sustain project and/or process once PRiMO project officially ends
- Transferability
- Clear documentation so that other communities can learn about process and implement it on their own

What is missing to make communities more resilient to natural hazards?

- Lack of understanding about hazard and vulnerability
- Lack of communication and coordination within communities
- Citizen-involvement that is culturally-appropriate
- Lack of historical record
- Lack of access to information about hazards and societal vulnerability
- Lack of training, outreach, education support
- Lack of funding for basic infrastructure/mitigation
- Lack of leadership
- Lack of respect of oral histories
- Non-hazard community inequalities – ex. certain populations below the poverty line
- Socioeconomic differences
- Understanding of holistic community fabric
- Political uncertainties and instabilities
- Lack of community
- Rapidly changing communities and fabric

- Lack of long-term vision, ex. sustainable communities
- Ignoring invisible populations – ex. migrant workers

Potential PRiMO projects:

- Expand the wave/water level work
 - This project is already in place
 - Would involve collaboration with the Data, Decision, and Traditional Practice Huis in PRiMO, as well as the NOAA IDEA and NOAA PSC groups
- Increase the resilience of critical facilities
 - Help communities to assess, identify and prioritize vulnerable infrastructure
- Focus on increasing the resilience of port and harbor facilities
 - Engage the port communities, Department of Transportation and shipping companies
- Develop the Pacific Island Disaster Experience Database
- Develop recovery plans, exercises, and processes
 - Learn from experiences with Cascadia Region Earthquake Workgroup (CREW), Public Entity Risk Institute (PERI) and Institute for Business and Home Safety (IBHS)
- Organize narratives of past and present resilience (ex. the narratives collected by Dr. Dudley)
 - In addition, develop educational material
- Develop hazard/resilience awareness brochures for tourist industry
 - Maybe develop concepts of tourist disaster kits
 - Work with State Civil Defense
- Develop place-based information about hazards and vulnerability – “PRiMO Profiles”
- Develop profiles to support the individual home-owners with GIS, narratives
- Develop minimal guidelines for all-hazard resilience
 - Focus on communities, tourist industry
 - Do a pilot project to look at community resilience

For our group, the two potential projects with most support are underlined above

ATTACHMENT C: Adam Stein's Notes from Small Group Discussion re: Hui

What are some specific joint cross-hui projects?

Development of an Education and Outreach Strategy

Covers the process of educating the public about the hazards themselves and outreach aspects include information for communities about resiliency and PRiMO itself. This strategy could include:

- Catalog of existing public awareness materials (see FEMA list of pubs)
- Clearinghouse mechanism to align graduate students with topics, projects, and internships (website? flyers?).
- Materials that are multi-language culturally sensitive and local that can be distributed over the internet.
- Eyeball to eyeball exercises (Dudleyesque) to convey the message. Has to be on the ground (last kilometer) and relate local historical experiences.
- We need local partners that can provide a multiplicative effect.
- Possible initial focus on climate change and tsunamis.

What are real possibilities for funding and other resources (human)?

NOAA Mini Education Grant, Philanthropic foundations (Bill and Melinda Gates Foundation), US Department of Education, FEMA Hazard Mitigation Grant Funding (although post-event it can last for years), Faith based groups, graduate and college student interns, Peace Corps, FEMA disaster reservists, NASA geospatial extension agents, volunteer organizations (HR), FEMA HMG in Hawaii and FEMA HMG in American Samoa are currently open (to the state or territory) for 5 more months, BWET Hawaii

What can we do about retaining and solid leadership of steersman?

Recognition through success. Agencies including PRiMO in project planning and allocation of or request for funds.

For Guidance:

What do communities need to be more resilient to natural hazards?

Something to value – the land or the house – that will give a reason for resilience. (In addition to loss of life). Communities need to learn to do things themselves resulting from years of working with the federal government. Warning information and response to that information in remote islands. Requires recognition of difference in low vs high islands.

Communities are the neighborhoods and villages where we live. Communities share culture, religion, socio-economic status, and political institutions. We recognize the difference in scale: rural island communities, urban communities, and tourist communities. Also need to recognize communities have very different levels of sophistication.

- PRiMO could use individual to write grants and search for funds.
- Communicate PRiMO functions in relation to new National Response Plan.
- PRiMO could apply for large grants together as a multi-agency
- Recognize difference between local and traditional.
- Materials and map products require standardized look and feel
- Demonstrate the need for education.

OTHER Ideas ?

Family Level Handbook

Put indexes in to play

Use a DVAT methodology to target communities by indicators

Distributed network on a particular theme (clearinghouse on landslides for example).

Education on history of events.

Train the trainers exercises

Larger issues such as poverty causing vulnerability

Potential lack of community – do not rely on your governments

Increase resiliency of critical facilities (assess and prioritize)

Resilient harbors initiative (maritime community has \$\$)

Disaster experience database

Creating recovery networks

Resilience awareness brochure

Linking narrative

Guidelines for all hazard resilience

Iterative loop indicator by indicator so the process becomes refined.

Hazard mitigation forums in other pacific islands.

For next year we need to set up VTC with other islands. SOPAC and SPREP.

ATTACHMENT D

Marina's Facilitator Feedback on the PRiMO Initiative

You have made great progress and much has been accomplished. You have begun to gel a culture in this group that should be nurtured and sustained. It seems a natural time to reflect upon your accomplishments and plan for your resiliency and sustainability as a group.

My assumption on which I build my recommendations to you is:

- Meetings are for dialogue and decision-making. One-way information sharing is best done in other, non-meeting formats. If information sharing is essential to the group, develop mechanisms for efficient share such as poster sessions, pre-meeting info-sharing sessions, or guidelines to meetings that clearly prioritize dialogue and decision making over information sharing. Presentations should not be the majority of the agenda.
- Every meeting is a powerful vehicle for: 1) advancing tasks, 2) nurturing relationships, and 3) building capacity/skill/knowledge. All three matter and they can and should be consciously pursued in tandem.

Based upon my knowledge of this group, my priority recommendations:

1. **Work in a Pacific way, consistently**, even if there is no "Native" to bring this feeling into the room for you. Adopt routines and rituals that cement your commitment to a Pacific Way of working. (i.e., begin each event and day by connecting with spirit or a deeper sense of purpose/inspiration, THEN attend to connecting people, nurturing relationship building and THEN move onto the work/task at hand. This is the local way. Make it your way too. Just do it, consistently. Make the Pacific Way "The PRiMO Way"

2. **Learn continuously about working with end users.**

- Use meetings to achieve training needs for the group. Incorporate practical processes into your meetings that give you a first hand experience with how to work effectively with end users. This would allow every meeting to be an experience in applied training for practitioners. It would also make your meetings more interesting, alive and effective.
- Dedicate some portion of every meeting to learning from, listening to and connecting with end-users, especially those most in need to support.

3. **Get as much done as possible, which is probably more than you think can be done.** Raise the bar on what you expect of yourselves. Be more consistent, clear and accountable for high impact meetings and high involvement experiences. Commit to getting more bang for the buck that is typical of such gatherings. Break out of mental models about how much to expect from a meeting. Make effective use

of all previous work using your meeting documentation as a valued resource. Treat documentation as your collective memory and that for which you are accountable. You can do more than you think, get further than you usually do and feel really good while doing it – with solid design and facilitation of the meetings.

4. **Evaluate and gather feedback from meeting participants, consistently.** Allow people to reflect upon and inform all about the extent to which the meetings accomplish their objectives for productivity, culture and capacity-building of the group. Be accountable for that feedback and make changes as appropriate. Be transparent about the feedback and the plans for remediation so that all can pull toward the goal of refining your collective performance.
5. **Solidify the effective functioning of the leadership at all level/tiers,** both navigators and steersmen. Provide guidance, training, coaching, support and follow-through for accountability on agreed upon expectations.
6. **Select a set of joint projects and move intentionally toward their accomplishment.** Make this planning and implementation a priority.
7. **Select a set of key organizational needs** that must be addressed for PRiMO to be fully functional and sustainable, (i.e., process for agenda development and meeting design, processes for seeking funds for joint projects, issues of credit and visibility, governance issues, membership issues, leadership transition, internal communications, up-reach and outreach efforts, etc.) Pursue them in earnest.
8. **Support capacity building for meeting/event design and facilitation** needs through the use of out-sourced expert facilitation or perhaps through shadow consulting and executive coaching for the key leaders of this effort such as the chair of the navigators, the executive director and the chair of the steersmen. Plan an exit strategy for out-sources support to motivate you to become self-sufficient without a loss of meeting quality or group accomplishment.
9. **Negotiate a set of shared expectations as a group, or "Rules for Higher Ground" or "The PRiMO way or working"** that clarifies and documents the values, beliefs and behavioral expectations by which you work. Evaluate your performance on a routine basis against those shared expectations.
10. **Celebrate. Celebrate. Celebrate.** Recognize and document accomplishment.