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**Volume 12, Number 6 December 2010**

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**REPORT FROM ALASKA**

Emergency managers, fire chiefs, law enforcement officers, community leaders, emergency shelter personnel, and other community members from tsunami-threatened communities in Kodiak, the Aleutians, and the Lake and Peninsula Borough attended a tsunami operations workshop November 2-4, 2010 in Unalaska. The State of Alaska Division of Homeland Security and Emergency Management (DHS&EM) sponsored workshop brought together 35 key personnel from 14 tsunami-threatened communities who strengthened their understanding of specific actions required during a tsunami warning/event, and the immediate response and recovery effort following a tsunami.

“We targeted community members who will be answering the phone at 3 am when an entire community needs to be awakened and directed to higher ground,” said Mark Roberts, DHS&EM Hazard Mitigation Officer. “The focus of this workshop was to support each community with their own specific consideration of local tsunami alert, warning, evacuation, and sheltering.”

Workshop participants live and work in remote sea-side communities in the Kodiak, the Aleutians and Bering Sea Islands, with communities ranging from fewer than 100 full-time residents to several thousands. Many of these residents earn their living from the sea and build their business and homes in close proximity to the water. However, the nearby Aleutian Megathrust, one of the most active faults in the world, has the potential to generate distant and local tsunamis. Severe weather can make travel between communities, and to large population centers, dangerous and/or impossible for days and weeks. The remoteness, high tsunami risk, limited resources, and environmental challenges make it essential these communities are as prepared as possible for tsunami hazards.

The three-day workshop used local, state, and federal experts to cover community-level tsunami operations. The team included Unalaska’s Emergency Manager, DHS&EM planning, mitigation, and disaster assistance staff, the West Coast/Alaska Tsunami Warning Center (WC/ATWC), and the National Weather Service (NWS). Participants engaged in tsunami preparedness, including understanding tsunami hazards and the use of siren warning systems to distribute tsunami warnings, emergency sheltering, tsunami inundation emergency response, and restoring communities after a disaster.

“We have been working with the communities and our federal partners to update the tsunami warning equipment in all of Alaska’s tsunami vulnerable communities,” said John Madden, Director, DHS&EM. “This workshop helps these communities to go beyond a community-wide tsunami warning and begin to develop the plans and procedures that will be used when tsunami evacuation and emergency sheltering operation becomes necessary.”

To begin the workshop, tsunami science, emergency preparedness and tsunami warning systems were explained by a mix of scientific experts and emergency managers. A meteorologist, geologist, hydrologist, and volcanologist were on hand to answer specific questions. Participants were able to review community maps of their communities and get answers to their tsunami behavior questions from the scientific and emergency management experts. The day concluded with an exercise asking

*(continued on page 3)*

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participants to discuss how a tsunami warning is received and transmitted in their community.

“Having community members at tables with the tsunami evacuation maps, scientific experts, and emergency managers proved to be very valuable. It enabled the community members to develop a realistic scenario of a tsunami impact on each individual community,” said Mike O’Hare, Deputy Director, DHS&EM. “At the end of the day, each participant had identified improvements that will make distribution of tsunami warnings and evacuation of low-lying areas more efficient.”

The theme of the second day was tsunami evacuation, sheltering, and response operations. Discussion focused on establishing clearly marked evacuation routes, issuing evacuation orders, locating temporary shelters while a tsunami warning is active, and what to do when a major tsunami wave hits. Participants evaluated their community’s ability to provide shelter outside of the inundated area, supply essential needs, conduct search and rescue operations and restore critical facilities. The day concluded with Unalaska Emergency Manager Jamie Sunderland leading a tour of the Unalaska tsunami warning system and tsunami response facilities.

Mr. Sunderland explained having detailed community maps helped identify locations that would be unaffected by a tsunami which helped Unalaska establish evacuation routes, as well as how the placement and number of tsunami evacuation route signs was determined. A tour of Unalaska’s emergency communication center helped participants understand how a tsunami warning message was received and rebroadcast throughout the community. Finally, the group visited a tsunami warning siren to see how Unalaska keeps its equipment ready to broadcast at any time.

“Jamie is a great partner, a great leader in the community. His tour of Unalaska’s tsunami warning infrastructure showed the participants how scientific research, emergency plans, and warning equipment were combined by a community to create a comprehensive tsunami warning system that meets the community’s needs,” said Mike O’Hare.

The final day of the workshop focused on community recovery after a tsunami or other declared disaster event. DHS&EM Disaster Assistance Officer Kari Wiederkehr detailed state and federal funding programs which could be accessed to restore a community to pre-disaster conditions. Ms. Wiederkehr stressed steps to be taken immediately after a disaster, highlighted best practices, and encouraged communities to be proactive during the disaster recovery process.

“This workshop accomplished what it set out to do: help communities prepare for, respond to, and recover from a tsunami. The participants came from some of the most remote tsunami-threatened communities in the entire nation. The major responsibility of preparing these

communities for a tsunami, activating the tsunami system, and leading the response lies in the hands of these individuals. Attendees left the workshop with specific training that applies to where they live and which they can share with their community,” said Mark Roberts.

An identical tsunami workshop is planned for Southeast Alaska in the spring of 2011.

Evacuation Map Inspection – A group of workshop participants, emergency managers and scientific experts inspect a tsunami inundation map.



Dutch Nov 10 – Unalaska’s Emergency Manager Jamie Sutherland leads a tsunami preparedness group discussion.



**Kodiak library's collection is museum-caliber**

by Sam Friedman / Kodiak Daily Mirror

Jul 03, 2010

[http://www.newsminer.com/view/full\\_story/8142287/article-Kodiak-library-s-collection-is-museum-caliber](http://www.newsminer.com/view/full_story/8142287/article-Kodiak-library-s-collection-is-museum-caliber)

Reprinted with permission

KODIAK, Alaska - Tucked behind the circulation desk at the A. Holmes Johnson Memorial Library, the Alaska Reference Room is not the most visible historical landmark in Kodiak, but it is a local museum in its own right.

Library director Joe D'Elia and assistant supervisor Lisa Booch took the Kodiak Daily Mirror on a tour of the collection recently. The Alaska Reference Room holds 2,945 titles in a small room of bookcases surrounding a conference table. It is not hard to believe the room used to be a car park for the library until it was remodeled in 1993.

Heavy wooden blinds block sunlight, which D'Elia called the worst enemy of books. He hopes a new library will have an Alaska Reference Room with controlled humidity.

"It's too bad, books are so sensitive," he said. "You want to keep them forever, but they're very delicate." Some of the books in the collection go back at least as far as the 1830s. Most of the books are in good condition, but a few damaged titles sit on the bookshelves in book-sized cardboard boxes.

The room is the only source of information for many books about Kodiak. The collection grows every year as the library tries to buy two copies of any new book published about Kodiak. The newest additions to the room are bear guide Harry Dodge's "Kodiak Tales," fisherman poet Dave Densmore's "A Fisherman's Soul Passing Through," and a biography of Alexander Baranov by Elton Engstrom. The library collects every book of local interest.

"In other parts of our collection, we can make room by putting books in our book sale," D'Elia said. "We can't do that here."

Several shelves of 1964 tsunami-related materials are one of the most popular sections with library visitors, Booch said. Alongside a seven-volume scientific account of the disaster, the collection has a bound copy of 29 daily dispatches distributed to the Kodiak community following the tsunami. A visual companion to the dispatches is a volume of photographs of Kodiak shortly after the disaster called "Kodiak Earthquake Seismic Wave Pictorial." Another book of photography called "Ash and Water" combines photographs of the 1911 Mount Katmai eruption and the tsunami.

As a cataloger, one of Booch's duties is to reassess the value of the titles in the Alaska Reference Room. A dollar value on the cover of a publication is seldom an indication of its value.

"It's not a static thing that makes a rare book," she said. "You can have a flimsy paperback book, and lo and behold, it's worth a couple of hundred dollars." An old, important-looking book with sturdy binding is not necessarily worth anything.

Most of the books in the Alaska Reference Room are nonfiction. Popular subjects are Kodiak bears, commercial fishing and Russian and Alutiiq history.

Spiral notebooks of published Exxon Valdez oil spill research are so voluminous, they have their own section of the library outside the Alaska Reference Room.

The Alaska Reference Room hosts its share of visitors who come to Kodiak for research. Novelist William McCloskey, author of the commercial fishing novel "Highliners," has worked in the Alaska Reference Room and once surprised Booch.

"He came in to do research and I gave him a lengthy recommendation of one of his books," she said. "He smiled and nodded and smiled and nodded and said, 'I wrote that book, but I'm glad you liked it.'"

Lydia Black, a University of Alaska Fairbanks historian who wrote extensively about Kodiak's Russian history, also spent time at the conference table in the Alaska Reference Room.

The Alaska Reference Room also sees some gold-mining hopefuls who want to see the collection's original U.S. geological surveys of Alaska.

The Alaska Reference Room is open to the public during library hours. To protect the books, visitors must sign in and may not take books out of the room. ♦

## AUSTRALIA

**Meeting with James Goff and Walter Dudley** at University of New South Wales, Australian Tsunami Research Centre and Natural Hazards Research Laboratory, Biological Sciences Building, November 22, 2010  
by Lee Walkling

While enjoying my Sydney, Australia, vacation, I met with Professor James Goff, co-Director of the Australian Tsunami Research Centre at the University of New South Wales and Walter Dudley, Emeritus Professor at the University of Hawaii at Hilo.

James Goff has been at the Australian Tsunami Research Centre for two years. The Centre was started in 2009. Its mission is to combine tsunami research with hazards' impacts on society and individuals, as well as perceptions the public has about hazard and risk. The Centre studies tsunamis, past and present, but with a particular strength in studying connections between how tsunamis affect humans... the social aspect, education needs, building codes, and the value/limitations of current risk assessment methods.

Dr. Goff said that while the Centre has a largely Asia-Pacific focus, they are particularly concerned about Pacific Ocean tsunamis. Though 85% of the world's tsunamis have been in the Pacific, most of the money being spent on research is in the Indian Ocean. He added that tsunami risk assessment in the Pacific (and around the World) has its limitations. Before 2004, most of the talk was about tidal waves, which covered storm surges, tsunamis, tidal waves, and floods, without distinction, and as we look back in time

it is often difficult to get a comprehensive inventory of worldwide tsunamis because historic records can be ambiguous.

Additionally, there are only really about 200 years of historic records about tsunamis in the Pacific. Currently scientists tend to rely heavily on modelling to try to fill the knowledge gaps, without taking into consideration the geological record and indigenous knowledge of a specific area. Therefore a realistic assessment of tsunami hazard and risk is poorly developed. In the Pacific, most of the islands have a volcanic origin, and many have been affected by volcanic-related tsunamis in their past, but since so few of the islands have been studied in detail through geological and indigenous knowledge research, the realistic tsunami hazard and risk cannot be known.

For Dr. Goff's bio, visit <http://www.nhrl.unsw.edu.au/team/personal/jamesgoff.html>

Walter Dudley is on a Fulbright Senior Specialist trip through Dec. 15, and is working from the Centre's offices. Although recently retired from the University of Hawaii at Hilo, Walter is Chair of the Pacific Tsunami Museum's Scientific Advisory Council and continues to videotape interviews of tsunami survivors and to create hazard outreach materials, including public service announcements for tsunami education, with the help of his daughter Malika Dudley (Miss Hawaii 2005), weather anchor for HawaiiNewsNow, the CBS and NBC news affiliate in Hawaii. Dr. Dudley is also starting work on an online training course for the media about Hawaii's natural hazards, filmed at illustrative sites, not in a classroom.

Dr. Dudley has created a marine safety video for in-house use by the Fairmont Corporation's Green Committee. It addresses the natural marine resources of the area (Hawaii) and how to enjoy them in a safe way. The next video will deal with natural hazards, including tsunamis, both on and off the Fairmont properties. Without mentioning hazards, this first video addresses safety...a positive way to avoid alarm, at the same time protecting the visitors.

For Dr. Dudley's bio, visit <http://www.tsunami.org/dudley.html>.

"All of us are tourists at one time or another," reminded Dr. Goff. Hazard education must be taught to local people, and must also be there for tourists. Tourists come from a wide variety of locations, each with their own variety of hazards. The visitor may know how to deal with a hurricane in South Carolina, but do not know what to do in the case of a tsunami, just as Hawaiians might not have an idea of how to react to a hurricane warning if they visit South Carolina, or a cyclone in Australia.....

Education must be local and constantly provided. First-time visitors arrive daily. There is no reason for hazards information to frighten visitors; it is provided to allow them to have a safe time and to warn them of situations that might be dangerous. Just as the Chamber of Commerce is happy to provide advice on where to eat and where to stay, it should also deem it wise to take the best care of their visitors as possible and provide them with information they might not have thought of, not being familiar with the area in which they are vacationing.

For clear, in-depth discussions by James and Walter about their tsunami work and the importance of collecting survivor interviews, see these video interviews: <http://sciencestage.com/v/31642/tsunami-myths-save-lives.html>  
<http://www.youtube.com/watch?v=uazs3eWGYBg> ♦

## CARIBBEAN

### Interview with Jeremy Collymore

Posted in Issue 114 - October 2010, *Disasters Preparedness and Mitigation in the Americas*

Jeremy Collymore, Executive director of the Caribbean Disaster Emergency Management Agency (CDEMA), responds to questions about the agency's new strategic approach, the Caribbean response to the Haiti's earthquake, the role of international cooperation regarding risk management and the actions that should be taken to increase cooperation between CDEMA and the health sector among other issues.



Full text of the interview is available at [http://new.paho.org/disasters/newsletter/index.php?option=com\\_content&view=article&id=445%3Athe-interview&catid=202%3Aissue-114-october-2010-the-interview&Itemid=267&lang=en](http://new.paho.org/disasters/newsletter/index.php?option=com_content&view=article&id=445%3Athe-interview&catid=202%3Aissue-114-october-2010-the-interview&Itemid=267&lang=en)

### Note from Christa von Hillebrandt-Andrade:

Important for CTWP and the Caribbean is the new website: <http://www.srh.noaa.gov/srh/ctwp/>.

This page has an interactive map so that the jurisdictions in the Caribbean can link up to the corresponding NOAA NWS Tsunami Warning Center that is currently providing them tsunami warning guidance, as well as information and links to the seismic and sea level stations contributing to the Caribbean Tsunami Warning System,

Tsunami Awareness and Education, Tsunami Exercises, Presentations, Communication Systems and the contact information for the CTWP.

UNESCO/IOC also has updated its tsunami website: <http://www.ioc-tsunami.org/>

### **NOAA NWS Caribbean Tsunami Warning Program participates in 2010 Earth Science Week open house**

On October 22, 2010, the NOAA NWS Caribbean Tsunami Warning Program (CTWP) joined the celebration of the Earth Science Week of the "American Geological Institute," (AGI) by participating in the open house: "¡Exploremos la energia" (Exploring energy!). This educational activity was organized by the Puerto Rico Seismic Network and the Geology Department of the University of Puerto Rico at Mayaguez. Over 1000 high school student came eager to learn with their teachers and parents.

The CTWP carried out several activities. It distributed educational materials to the participants and presented tsunami animations and videos. All the students were especially excited to receive the NOAA Tsunami Sources Icosahedron Globe.

Nevertheless, the biggest highlight was the CTWP tsunami wave tank that was constructed for this event. This model consisted of a wooden box filled with water and sand, an acrylic window, an incline plane, and doll houses and cars. It was used to visually explain tsunami concepts such as wave formation, propagation and coastal flooding.

In addition to the CTWP, over 50 other exhibitors participated in the activity, including the Puerto Rico Seismic Network, the NOAA *TsunamiReady* Program, the Geology Department at UPRM, the National Weather Service Weather Forecast Office of San Juan, the U.S. Geological Survey, the Caribbean Coastal Ocean Observing System (Cari-COOS), Campus Verde, and UPRM student organizations.



Students from the Inmaculada Concepcion at Mayaguez at the wave tank.♦

## INDONESIA MENTAWAI TSUNAMI EYEWITNESS ACCOUNTS

### **TSUNAMI survivor Jimmy Black has been robbed a day after returning to the Gold Coast [Australia].**

Jessica Johnston | November 1st, 2010 | Gold Coast Bulletin

[http://www.goldcoast.com.au/article/2010/11/01/267491\\_gold-coast-news.html](http://www.goldcoast.com.au/article/2010/11/01/267491_gold-coast-news.html)

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Callous thieves took cash and stock from his West Burleigh adventure shop Wild Earth but the 32-year-old has taken the ordeal in his stride, saying his brush with death in Sumatra had changed his perspective on life.

"Things could be a lot worse, I could be dead," Mr Black said. "To stare death in the face, while I was up that tree waiting for surges to hit, I rated my chance of survival as less than 10 per cent.

"I committed to the fact I would most likely die. Without a doubt it changes your perspective ... the little things aren't worth stressing about."

Mr Black arrived in Brisbane with Gold Coast mates Rob Marino, James Finucan, Jethro Jones, Kevin Fitzpatrick, Guy Margin, Daniel Scanlan, Gergory Gotlieb and Richard Hope on Saturday, five days after a 7.5 magnitude earthquake caused a 3m tsunami which ripped through Sumatra's Mentawai Islands. The men were on board the surf expedition vessel Midas, which collided with the nearby Freedom III.

Relaxing with wife Shannon yesterday, Mr Black revealed he had saved an Indonesian cook, who could not swim, during a three-hour battle for survival.

"I was asleep in my cabin and opened the door and just saw black smoke and flames," Mr Black said.

"Another boat had hit ours, causing a fuel fire. I dived into the ocean and thought that was the end of it, then another bloke screamed out tsunami, and knew I was really in trouble."

As forceful swell pushed him shoreward, Mr Black managed to climb into a tinny that surged past. The boat pounded through the jungle before it hit a tree and capsized. Mr Black grabbed at nine separate trees as he was sucked back out, before catching the last one on the shoreline.

"I saw the chef getting washed back out, so I grabbed him and tried to swing him up in the tree. The branches kept breaking so he grabbed on to my waist. He couldn't swim and was terrified. It's an image I won't forget, looking in his eyes, seeing that terror. But it helped calm me. I was responsible for us both."

The tree was just 10m from the burning boat. "Gas bottles kept exploding, shooting flames and debris and smouldering ash on to our skin. The tree was cracking

and starting to lean and the surges kept coming. I could see the exposed roots and knew it was going to fall."

Mr Black grabbed the chef and rode an incoming wave inland, where he clutched another tree, and began calling out to his mates. Thoughts of his wife, parents and dog gave him the will to survive throughout the three hour ordeal.

"It brings back a lot of emotion... to see them brings the whole scene back. It was my family I was picturing when this was happening." Despite his ordeal, Mr Black said he wanted to return to the Mentawai Islands.

"I want to go back, I've been touched by the people there. I would like to go back there and face my fears, see the scene again. I will never forget the smell of the burning boat, to move on completely I will have to go back and have another look."

Several of the survivors are undergoing medical treatment on the Gold Coast for burns and injuries suffered during their ordeal. Mr Black has splinters through his body, a burn behind his ear, bruises and scrapes on his legs.

Rob's mother Di Marino said her son had an infected foot and would undergo surgery on a toe this week. She said her son would not return to the volatile west Sumatran region. Kevin's father Richard Fitzpatrick said he would need medical attention for a burnt arm before returning to work.

Richard said tears had flowed as the families were finally reunited, but the boys were in good spirits.

"We were quite relieved to see them all back, there were a few tears from some of the wives. The boys were a bit more relaxed, the shock had worn off and they were in very good spirits - just relieved and very happy to see home."

### **Mentawai tsunami: solar powered radios and satellite phones could protect lives**

Press release by Gilles Bordessoule, Siloinak Mentawai Surf Resort, November 12, 2010

<http://www.openpr.com/news/151527/Mentawai-tsunami-solar-powered-radios-and-satellite-phones-could-keep-safe-lives.html>

It is feasible to found an effective and yet budget tsunami warning technique by using existing structures and involving the coastal populations in its perpetuation.

The October 25 tsunami took approximately 500 souls in the Mentawai Archipelago.

There have been rumors on the Internet that the Indonesian tsunami alarm procedure had not been functional and failed to keep safe the dwellers. This does not seem factual, even if it is true that more than fifty percent of the buoys are right now not working.

An alert has been broadcast by the national TV stations in due time after the tremor. But it was mean-

ingless for the dwellers residing there, as they do not have ac, TV, or cell-phone coverage. How to transmit tsunami warnings to them?

In spite of a warning issued on the Indonesian national TV stations 10 minutes after the tremor reached off the littoral of Sumatra, most of the Mentawai coastal villages did not receive it. They do not have satellite receiver.

The best means to send out a tsunami warning to these populations would be to use the Mentawai-language radio frequency broadcasted from Padang that they give attention to daily, using simple battery powered radios. The next measure will be to supply each village-head with a solar-powered radio that can stay for all time on and be used as a tsunami alert tool.

Siloinak Surf Resort is approaching this local radio station to propose aid to establish a constant guaranteed communication channel with the Indonesian tsunami warning authorities. This will allow them to broadcast a tsunami warning 5 minutes merely after the tremor.

Ideally, each village should also be donated a solar-powered Indonesian-made satellite phone PASTI, the fee of which are affordable even to poor fishermen. They would be administered by the village grocery-store, church or village head, and could be used as an advanced warning system controlled by the population themselves.

Siloinak Surf Resort is trying to raise money to obtain and give away these radios and phones to the villages.

### **Surfers survived Indonesian tsunami by rushing to third floor of beach resort**

By Kay Johnson (AP)

<http://news.therecord.com/article/803015>

October 30, 2010

JAKARTA, Indonesia — Sebastian Carvalho was showing surfing videos to fellow guests on his last night at an island resort off western Indonesia when the powerful earthquake struck. When he heard a distant roar two minutes later, he knew instantly that he had to run.

The Chilean surfer grabbed his computer and his camera, rounded up the other guests and rushed to the highest spot they could find: the third floor of the thatched-roofed beach resort.

From that vantage point overlooking the lagoon, Carvalho and the others had a terrifying front-row seat Monday night as three towering waves of a tsunami struck, shaking the building so violently they thought it would collapse. It was there they huddled together and rode out the waves that killed at least 400 people in the Mentawai island chain about 80 miles (130 kilometres) off Sumatra.

Full article is available on the website above.

### **Tsunami victim returns home to San Antonio**

by Nadia Ramdass / KENS 5

Posted on October 31, 2010 at 11:22 PM

<http://www.kens5.com/news/Tsunami-victim-returns-home-106425393.html>

"I'm so glad to be here," Long said. Family and friends embraced the surfer, who thought this day would never come.

"We didn't think any of us would make it, none of us. We pretty much assumed this was it," Long said.

Long was starting his three-week trip at a surfer resort off the western coast of Indonesia when an earthquake and tsunami hit the area. Long and other resort guests went to higher ground moments before the tsunami hit shore, destroying everything in its path.

"Then the wave came through and we watched it take out the bungalows. I mean they were exploding and the roofs were getting blown off," Long said.

Nearly 400 people died and thousands were displaced as a result of this natural disaster.

The full article is available at the website given above.

### **Life on the Mentawai Islands: displaced, robbed and washed away**

By Cain Nunns, Guardian Weekly

Nov. 16, 2010

<http://www.guardian.co.uk/world/2010/nov/16/mentawai-islands-indonesia-tsunami>

"Jasmen Samaloisa heard the panicked screams of his fellow villagers, but not for long. A five-metre high tsunami washed them away as it inundated Muntei Baru Baru, his remote community on the south-west coast of the Mentawai Islands.

"It sounded like a jet engine on take off."

See link above for the complete report.

### **Killer wave: Tsunami warning system 'broken'**

By Adam Arnold, Sky News Online

Oct. 29, 2010

<http://news.sky.com/skynews/Home/World-News/Tsunami-In-Indonesia-Warning-System-Was-Broken-When-Killer-Wave-Struck-Says-Official/Article/201010415781208>

"Indonesia's version [warning system] has since fallen into such disrepair that it effectively stopped working about a month ago, according to the head of the Meteorology and Geophysics Agency. The system, which uses buoys to electronically detect sudden changes in water level, worked when it was completed in 2008 - but by 2009 were showing problems, said agency chief Fauzi. By last month, he claimed, the entire system was broken because of inexperienced operators.

"We do not have the expertise to monitor the buoys to function as intended," he said. As a result, he said, not a single siren sounded after Monday's quake."

Full report at website given above.

### **Twitter enables DIY disaster relief in Indonesia**

By David Zax, Nov. 22, 2010

<http://www.fastcompany.com/1704521/twitter-enables-diy-disaster-relief-in-indonesia>

"Indonesia is a country composed of 17,000 islands, and organizing aid relief efforts has proved a challenge, particularly in regions where infrastructure was destroyed, reports Reuters. So enterprising and tech-savvy citizens are taking measure into their own hands, coordinating relief through Twitter. Twitter is extremely popular among Internet-using Indonesians, 21% of whom use the site (compare that to 12% for the U.S.).

See the website above for the full story.♦

## WASHINGTON

### **Bridge to be part of tsunami escape route**

By Journal Staff; Seattle Daily Journal of Commerce

November 26, 2010

OCEAN SHORES, Grays Harbor County — The city of Ocean Shores wants to build a new Tonquin Avenue Bridge along the existing bridge's alignment. Bids for a contractor will be opened on Dec. 9. The new 148-foot-long bridge will have a single-span of six precast, pre-stressed and pre-cambered concrete girders with a cast-in-place concrete deck. It will have no intermediate piers, and will be supported on spread footings.

From: <http://www.djc.com/news/co/12023938.html>

### **Washington Library Association's partnership with DisasterAssistance.gov**

DisasterAssistance.gov would like to the Washington Library Association for your contribution to our outreach to disaster survivors. Over the past year, the Library Outreach Program successfully recruited 47 state library associations to educate their members about the Disaster Assistance.gov and distribute informational materials for survivors through their networks of libraries.

We have recently updated the disaster survivor fact sheets to include information on new forms of assistance that are now available and additional resources that may be useful to residents in your local communities:

[http://www.disasterassistance.gov/daip\\_en.portal](http://www.disasterassistance.gov/daip_en.portal)

Please let me know if you have any questions or if I can assist in any way. Again, our thanks for your help and support.



Best Regards,  
Alicia Gilligham (McConnell) (Contractor)  
Disaster Assistance Improvement Program (DAIP)  
Federal Emergency Management Agency (FEMA)  
US Department of Homeland Security (DHS)  
Desk Phone: 540-722-8482  
Ali.McConnell@fema.gov ♦

## SAMOA

Samoan Lani Wendt Young has compiled a book, *GALU AFI – WAVE OF FIRE*, of the stories of 180 tsunami survivors from the 2009 Samoa, American Samoa and Tonga tsunami.

According to website <http://samoacoconutqueen.blogspot.com/>, all the proceeds from the sale of the book will be donated to ongoing tsunami relief/rebuilding in the affected areas.

An interview with the author can be found at [http://www.samoobserver.ws/index.php?view=article&id=26759%3Aa-beast&option=com\\_content&Itemid=82](http://www.samoobserver.ws/index.php?view=article&id=26759%3Aa-beast&option=com_content&Itemid=82) ♦

## OPINION

### **Sometimes, recovery is the real disaster**

Disaster Research 550, July 22, 2010

Many insular communities—whether they be tribal, extremely rural, or otherwise on the periphery of mainstream society—suffer from the application of one-size-fits-all disaster response frameworks. Although the assistance those regimes offer might be necessary in the short term, their long-term homogenizing effect can reach far beyond the initial response to threaten a way of life.

“Any damn fool can get power restored or get a Wal-Mart reopened,” Mervyn Tano, president of the International Institute for Indigenous Resource Management, told an audience gathered at a Natural Hazards Workshop session on rural and tribal vulnerability. “The hard part is reinvigorating traditional tribal practices.”

Often, overarching plans fail to understand that a concept as simple as a housing—shelter from the elements—can be very different from one group to another. For instance, Native families are configured differently than suburban families, and disaster plans need to take that into account, Tano said. A structure’s use and what it means to people should be considered along-side its more basic functions. Tano pointed to the [Cold Climate Housing Research Center](#) in Alaska as an example of how community identity can be incorpor-

ated when working with traditional communities. The group understands that a house is more than a dwelling, he said; it is part of an identity.

Understanding that identity can be difficult for planners that aren’t part of the community—often a culture can’t be defined from the outside looking in. Rosina Philippe, a spokesperson for Grand Bayou Families United, commented on the way Native people are seen by broader society. According to Philippe, her people understand themselves in context of their history and attachment to place, not by the vulnerabilities attached to them since Hurricane Katrina.

A strong sense of place—another concept cherished by traditional societies, but dismissed by modern ones—can help make a society resistant to disaster. One of the biggest problems facing indigenous people today is being relocated from traditional lands, said Juan Pablo Sarmiento of Florida International University.

The Latin American communities Sarmiento works with have strong ties to environment and good mechanisms to cope with local weather conditions. This has allowed them to exist naturally where they are, but encroaching ideas of mainstream society can threaten that.

“Many minority rural populations are losing cultural and historical disaster management knowledge because they are adopting knowledge of the majority,” he said.

As Sarmiento sees it, one contributor to vulnerability is people who have been moved from their ancestral land and relocated to areas that are less productive. People have been marginalized and labeled as a minority. In the short term, this status may also provide opportunities, but in the long term can cause a uniform mentality that degrades a group’s customs, values, and attitudes.

To overcome this, disaster planners and others that aid indigenous people must work with groups beforehand to create plans that fit the needs and beliefs of members. As a community planner for the Federal Emergency Management Agency, Diana Coho works directly with U.S. tribes to create [multi-hazard mitigation plans](#). In her experience, she said, there is no one approach to planning that works for all groups. Instead, each group’s cultural and societal needs must be considered.

“You have to be committed to respecting cultures,” she said, adding that it makes for a much more time-consuming and labor-intensive process. Unfortunately, there is still a tendency to view various cultures with a Western lens. Once a group’s identity and knowledge have been altered, it’s often too late for even tribal members to see things any other way.

“It’s very much like the French trying to fend off Hollywood,” Tano said. “The pervasiveness of Western culture is difficult to overcome.” ♦

The *TsuInfo Alert* WikiLeaks story, brought to you by *Disaster Research* 559 (December 16, 2010):

### **WikiLeaks cables reveal a deluge of disinterest in disaster**

The latest batch of WikiLeaks government cables has uncovered a flood of previously unknown information—including a lack of political interest in disasters, even those occurring on embassy doorsteps.

If the leaked cables are any indicator, U.S. embassies around the world pay little attention to natural hazards and disasters in the nations where they are based. Despite the potential for disasters to seriously disrupt international relations (*Natural Hazards Observer, March 2009*), the cables don't reveal much State Department fretting about catastrophic events, preparedness, or response.

The Natural Hazards Center's Dan Whipple pored through most of the cables released before December 12 and found a curious silence on hazards, even when countries were experiencing disasters. China, for instance, suffered an earthquake in May 2008 in which 50,000 people were killed, but the available Beijing cables don't mention the shaking. In fact, the first cable to come from the Chinese capital after the quake was an August 10 update on security and diplomacy during the 2008 Beijing Summer Olympics.

The embassy in Brazil did prepare a lengthy assessment of a November 2009 blackout in that nation. "Brazil experienced a blackout that plunged 18 of Brazil's 27 states into darkness for periods ranging from 20 minutes to 6 hours," the cable states. Although there were early fears of sabotage, the incident was eventually attributed to equipment and human failures. While the cable indicated that this was an opportunity for the U.S. government to be communicative with Brazil, it was in terms of generating electricity, not responding to massive infrastructure deficiencies. U.S. Forest Service work on Brazilian forest management and wildfires, however, is one of the few cases in which a natural hazard is directly addressed in the cables.

There is one area of interest to hazard professionals and the State Department that gets discussed a lot—nuclear weapons proliferation and potential acquisition by terrorists. This concern is expressed in cables from nations where these issues are very high on the list—Russia, South Korea, Iraq—but also a few places that aren't so infamous.

Caracas, for instance. A cable from there assesses the likelihood that Venezuelan President Hugo Chavez will develop nuclear energy, although the title—*Venezuelan Scientists Say Nuclear Energy Program Political Hot Air*—seems to discount the idea.

For most hazards professionals with an interest in international affairs, the cables hold little outside of nuclear concerns. But if WikiLeaks releases the text of

all 251,000 cables listed in the database, Dan's going to have a lot more reading to do.

[Note: *Disaster Research* will go on holiday break until January 13, 2011. Back issues can be found on <http://www.colorado.edu/hazards/dr/> ♦

### **Planning for coastal hazards—Overcoming the barriers**

By Donna McCaskill

From: *Coastal Services*, v. 13, no. 5, p. 1.

Reprinted with permission

One of the best ways to implement hazard mitigation planning is through the local planning office.

For this reason, the NOAA Coastal Services Center has renewed its commitment to serve this important community. To get more information about this group, the Center recently commissioned a study to determine how land use planners view hazard mitigation planning.

Fortunately, community planners are very enthusiastic about this topic, but there are many barriers that stand in the way. *Hazard and Resiliency Planning: Perceived Benefits and Barriers among Land Use Planners* investigates those barriers and offers actions that coastal programs can take to remedy the situation.

#### **Barriers**

♦Disconnect with local emergency planning—hazard plans are general developed by emergency planners, without strategic input from land use planners. This results in few hazard plans actually being implemented.

♦Lack of available local, actionable data—effective hazard planning requires specific local data. Data for some communities do not exist, while other planners may have challenges locating, using, and interpreting available data.

♦Lack of public support and political will—elected officials and community members who favor growth in at-risk coastal areas can influence the planning process.

♦Existing development and property rights—imposing new regulations on at-risk areas where development already exists can be controversial and costly.

♦Competing workplace priorities—longer-range, strategic tasks like hazard planning are often superseded by more urgent, day-to-day activities.

♦Limited budgets—lack of public support and political will results in funds not being available for the comprehensive planning needed to address coastal hazards.

#### **Fostering behavior change**

Social scientists say the best way to change behavior is to decrease barriers and increase benefits. The report recommended many actions, including these listed below.

◆Help local planners and community leaders identify specific hazard-related data and information needs. Focus on data that could motivate communities to take action, or data that would inform the work of those committed to hazard planning. Offer assistance when needed.

◆Consolidate existing resources relevant to local hazard planning to provide an easier way for planners to locate and use the resources. Publicize these resources to the broader planning community.

◆Prepare detailed case studies and helpful outreach materials that demonstrate the economic, environmental, and social benefits of hazard and resilience planning.

◆Provide guidance to community planners on implementing hazard mitigation policies in the immediate aftermath of a disaster, when elected officials and the public are more receptive to planning for these events.

◆Encourage local planners to use the development or renewal of community master plans as an opportunity to incorporate risk and resilience planning principles.

◆Facilitate communication between emergency planners and land use planners.

#### *Hazard and Resiliency Planning: Perceived Benefits and Barriers among Land Use Planners*

To view this report, go to the social science section of the NOAA Coastal Services Center's website at [www.csc.noaa.gov/publications/](http://www.csc.noaa.gov/publications/)◆

## NEWS

### **Emergency Management Specialist named as one of top 50 jobs**

In the next few years, both public and private spending on emergency management will continue to increase, due in part to concerns stemming from terrorist threats and 9/11.

This fact, bolstered by data from the Bureau of Labor Statistics, leads U.S. News & World Report to name emergency management specialist as one of its top jobs for 2011.

Appearing alongside social service jobs such as firefighter and social worker, emergency management specialist requires a moderate daily activity level and plenty of upward mobility but also carries a moderate to high stress level, according to the article.

“For a career that puts you under the gun, the ability to manage stress is key. Communication and collaboration skills are also essential in dealing with complex bureaucracies and ensuring that the public is informed through the right media channels,” the magazine article says.

It lists the median annual earnings for emergency management specialists in 2009 at about \$53,000.

To read the full article, click here:

<http://money.usnews.com/money/careers/articles/2010/12/>

### [06/best-jobs-2011-emergency-management-specialist.html](#)

From: Continuity e-Guide—A Wednesday Update to Disaster Resource GUIDE, December 8, 2010  
Subscribe freely at [www.disaster-resource.com/freeguide](http://www.disaster-resource.com/freeguide)

### **FEMA disaster preparedness challenge**

The gauntlet has been thrown—the Federal Emergency Management Agency wants to know how you can better prepare your community for disaster, and how FEMA can help make that happen. Using the New Challenge.gov format, FEMA will be collecting ideas and monitoring discussions until January 3, when it will pick an idea to hold up as the most enlightened.

<http://challenge.gov/FEMA/87-preparing-our-communities-before-a-disaster-strikes>

From: Disaster Research 556, November 4, 2010

### **National Tsunami Hazard Mitigation Program 2009 – 2013 strategic plan**

June 21, 2010; updated 12-07-2010. Available at: [nthmp.tsunami.gov/documents/NTHMPStrategicPlanvf-062110.doc](http://nthmp.tsunami.gov/documents/NTHMPStrategicPlanvf-062110.doc)

### **Hacker sends hoax tsunami warning**

The Twitter account of a disaster management adviser to the Indonesian president was hacked and used to send tweets warning of a tsunami. A series of fake tweets were sent from Andi Arief's account including one reading “Besok Jakarta tsunami”, which means “Jakarta tsunami tomorrow.”

For full report, see

<http://www.wired.co.uk/news/archive/2010-11/26/indonesia-tweet-tsunami>

### **Tsunami uncovers centuries-old sunken ship off Indonesian islands**

Published Date: 17 December 2010

By IRWAN FIRDAUS

“A sunken ship containing ceramics that may be centuries old has been found off remote Indonesian islands hit by a tsunami.

Fishermen who found the vessel believe the 26 October wave off the Mentawai islands - which killed more than 500 people - lifted the 20ft-long ship from the ocean floor and pushed it closer to shore, said a spokesman for West Sumatra's Maritime and Fishery Department.

Wooden ships laden with ceramic pots, golden necklaces and valuable spices for centuries navigated Indonesian waters, a key trade route linking Asia with Europe and the Middle East. Hundreds are said to litter the sea bed off West Sumatra province.”

From: <http://news.scotsman.com/news/Tsunami-uncovers-centuriesold-sunken-ship.6663391.jp>

### **The blimp is back—China checks out airships for disaster aid**

Airships are attracting attention in China for their potential use in natural disasters, according to an unclassified U.S. military report.

“Interest in the utility of airships was heightened after the 2008 Wenchuan earthquake and the problems faced by relief workers,” says a report from the National Air and Space Intelligence Center based at Wright-Patterson air Force Base in Ohio.

“There were serious bottlenecks in delivering the equipment and supplies needed by relief workers. The disaster area’s terrain was precipitous. Highways were heavily damaged or blocked by landslides,” the report *Current and Potential Applications of Chinese Aero-stats* (Airships), says.

“Press reports indicated a need for a ‘new’ transportation vehicle, one that could fly over geographical barriers, carry large payloads, function safely and economically, and have an increased degree-of-freedom movement. The solution suggested was a new helium airship.”

Airships can serve several functions better than traditional aircraft in disasters, according to the report. In cloudy weather, airships can cruise for long periods under the cloud layer and acquire clear remote sensing images. Properly equipped, they could provide 24-hour, all-weather monitoring of disaster areas.

There’s no indication that the Chinese—or anyone else—have actually used airships in disaster relief, but China has used them on at least one construction project, demonstrating their feasibility in difficult conditions.” In May 2009 an airship was used to assist in the installation of electric power lines in the area around the mountain peak of Taishan, located near Yingxiu. Taishan is an unstable area covered in scree. It is unsuitable for the use of explosives and is an unsafe area for construction crews. By using an airship, power cables, ropes and drop lines were installed the length of the national highway that spans the mountain,” the report says.

From: *Natural Hazards Observer*, v. 34, no. 6, p. 5.

### **UNESCO and CTBTO sign agreement**

Irina Bokova, Director-General of UNESCO, signed an agreement on 3 February [2010] with Tibor Tóth, Executive Secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), to enhance cooperation between the two organizations, notably for the benefit of tsunami early warning systems and capacity-building in developing countries.

The verification regime of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) uses cutting-edge technologies and scientific methods to monitor the planet for nuclear explosions. The resulting data offer

a wide range of civil and scientific applications. The CTBTO also organizes workshops, seminars and other training activities around the world.

At the signing ceremony, Ms Bokova noted that “The agreement will lead to greater synergy between UNESCO and the CTBTO, especially for training and capacity-building in developing countries.

Besides their importance in disaster mitigation, the data received by the CTBTO from its global network of monitoring stations can advance research on ocean processes and marine life and contribute to sustainable development.”

“Our cooperation with UNESCO in the areas of tsunami early warning and the coordination of capacity-building activities is of particular importance,” stressed Tibor Tóth.

Following the devastating tsunami on 26 December 2004, UNESCO’s Intergovernmental Oceanographic Commission (IOC), and the CTBTO agreed to explore the potential of using data from the CTBT’s International Monitoring System (IMS) for tsunami warning purposes. CTBTO is currently sending data to tsunami warning centres in Australia, Indonesia, Japan, the Philippines, Thailand, and the United States, increasing their ability to issue more rapid warnings.

The IOC was founded in 1960 to promote international cooperation in researching and protecting the ocean. It is instrumental in monitoring the ocean and developing tsunami warning systems in vulnerable regions. The CTBT’s verification regime will comprise 337 facilities worldwide when complete. Monitoring data have a number of other possible uses including research on the Earth’s core, monitoring of earthquakes and volcanoes, climate change research, atmospheric monitoring and biological research.

From: [http://www.ioc-unesco.org/index.php?option=com\\_content&task=view&id=204&Itemid=76](http://www.ioc-unesco.org/index.php?option=com_content&task=view&id=204&Itemid=76)

### **Secretary Napolitano announces key milestone toward implementing DHS’ small business preparedness plan**

Department of Homeland Security (DHS) Secretary Janet Napolitano announced a key milestone in the Department’s efforts to develop a robust small business preparedness plan - soliciting public comment on a private sector readiness certification program specifically tailored to the needs of small businesses.

“Ensuring America’s small businesses have the critical information and training they need to better respond to disasters will strengthen the entire nation’s preparedness and resilience,” said Secretary Napolitano.

DHS published a notice in the Federal Register today seeking public comment on its proposed plan for implementing separate classifications and methods of certification for small businesses under PS-Prep. This first-of-its-kind program will tailor voluntary private sector preparedness certification standards to specifically meet the needs and capabilities of America's small businesses.

The small business preparedness plan is part of the Private Sector Preparedness Accreditation and Certification Program (PS-Prep) - a 9/11 Commission-recommended voluntary partnership between DHS and the private sector to improve businesses' preparedness and resilience for disasters and emergencies. PS-Prep enables private sector entities to receive emergency preparedness certification from a DHS program created in coordination with the private sector. See the Federal Register notice here:

<http://edocket.access.gpo.gov/2010/2010-24673.htm>

Comments may be submitted to

<http://www.regulations.gov> or Comments may be submitted to <http://www.regulations.gov> or [FEMA-POLICY@dhs.gov](mailto:FEMA-POLICY@dhs.gov), in Docket ID FEMA-2008-0017.

For more information, visit

<http://www.fema.gov/privatesectorpreparedness>.  
From: [fema@service.govdelivery.com](mailto:fema@service.govdelivery.com).

## PUBLICATIONS

### **Tsunami eyewitness-survivor stories**

*Tsunami survivors tell their tales—Learning from the neighbors*, by Walter Dudley, Jeanne Johnston, and Cindi Preller is available online:

<http://www.colorado.edu/hazards/o/archives/2010/may/observerweb.pdf> in the May 2010 issue of *Natural Hazards Observer*, pages 1, 10-12. It's a great article and I apologize for missing it earlier.

### **Coastal Connections**

*Coastal Connections* is going green. It will be merged with the quarterly *Products and Services Bulletin* which will only be available in an electronic format.

If you are a hard-copy subscriber of *Coastal Connections*, please provide your contact information so you will receive *Coastal Connections* when it debuts in Spring 2011.

For more information, contact

[Kitty.Fahey@noaa.gov](mailto:Kitty.Fahey@noaa.gov)

### **The hazards data distribution system is updated**

The USGS Fact Sheet 2010-3053 (July 2010) is available online at <http://pubs.usgs.gov/fs/2010/3053/>. To go directly to the HDD: <http://hdds.usgs.gov/hdds2/>.

“After a major disaster, a satellite image or a collection of aerial photographs of the event is frequently the most effective way to determine its scope and severity.”

### ***Self-reliance during natural disasters and civil unrest—How to handle fires, search and rescue, and other emergency response situations on your own***

Written by George R. Bradford in 2007 (ISBN: 978-1-58160-628-7, 175 p., \$26 (softcover), Paladin Press).

This is the tough guy's and gal's guide to handling disaster. Bradford, a retired firefighter, wants to put the “I” back in self-reliance.

“The government has screwed itself into the ground by convincing citizens that they are not qualified to perform simple emergency response tasks. Yet when a disaster occurs, government agencies quickly become overburdened with requests to handle simple emergencies, emergencies that every one of us should be able to handle as they occur.”

Bradford urges preparedness first, then action. He deals with fighting small fires, controlling utilities, dealing with wildland fires, and providing first aid. There's even a handy illustrated lesson on knots in the back of the book.

From: *Natural Hazards Observer*, v. 34, no. 5, p. 16.

### ***Crisis management in the tourism industry: Beating the odds?***

Editors: Christof Pforr and Peter Hosie, 2009. ISBN: 978-0-7546-7380-4. 249 p., \$114.95 (hardcover), Ashgate Publishing, Ltd., [www.ashgate.com](http://www.ashgate.com).

The tourism industry is as vulnerable as any to natural hazards—perhaps more so, since so much recreation occurs in areas like sea shores or mountains which can be hit hard when disaster occurs. But the industry has been seen as reactive rather than proactive in dealing with these issues.

This collection of papers may begin to change that approach. The authors in the compendium look at preparation and recovery, including postdisaster marketing plans, terrorism, sustainability, and other disaster planning and management areas familiar to hazards professionals, but which here are placed in a tourism context.

From: *Natural Hazards Observer*, v. 34, no. 5, p. 16.

### ***Training veterinarians in all-hazard response* (an invited comment)**

The article in the March 2010 issue of *Natural Hazards Observer* (p. 15-19) was written by Dianne Dunning, assistant deal for college relations at North Carolina State University's College of Veterinary Medicine. It argues that vets should be included in the emergency management planning process and that disaster planning should be taught in U.S. veterinary colleges.

***Collaboration between emergency management and wildlife conservation*** (an invited comment)

Space prevents printing this thought-provoking article by David Salvesen, Rebecca Kihlslinger, Peter Zambito, Ryan Winterberg-Lipp, and Tessa Lee. It is highly recommended. Find it in the September 2010 issue of *Natural Hazards Observer*, pages 7-11; [http://www.colorado.edu/hazards/o/archives/2010/sep\\_0bserverweb.pdf](http://www.colorado.edu/hazards/o/archives/2010/sep_0bserverweb.pdf).

“The connection between environmental protection and hazards is real, but not always clear. Emergency managers and wildlife conservationists typically operate in separate universes, yet there are reasons why they should collaborate. A recent study conducted by the University of North Carolina and the Environmental Law Institute identified opportunities for wildlife conservation in areas where people and property are at risk from natural hazards.

The study considered places where priority habitats—as identified in state wildlife action plans (SWAps)—overlap with natural hazard zones and highlighted potential points of collaboration among land use planners, hazard mitigation planners, and wildlife habitat managers.”

***The emergency survival guide***

The Los Angeles County Office of Emergency Management published a comprehensive guide to emergency preparedness intended to help its residents better prepare for, respond to and recover from disasters.

The *Emergency Survival Guide* contains 100 pages of helpful tips and information for residents to prepare for various emergencies that could affect the county.

The guide also includes space to record household emergency plans including out-of-state contacts and family evacuation gathering points. The survival guide is available online in English and Spanish at <http://lacounty.gov>.

From : *Emergency Management*, Sept/Oct 2010, p. 82.





***Disasters Preparedness and Mitigation in the Americas***

Sign up for new issues at [disaster@paho.org](mailto:disaster@paho.org). The current issue is Issue 114, October 2010 and was emailed to subscribers on November 12. It features a Table of Contents which links to each article.

***Red Cross tsunami five-year progress report 2004-2009***

Over the past five years, the International Federation of Red Cross and Red Crescent Societies (IFRC) has channelled public donations into recovery programmes that have supported almost 5 million people across the four worst-affected countries--Indonesia, the Maldives, Sri Lanka and Thailand. The enormous scale and scope of the operation has meant that thousands of people are

now living in stronger homes supported by a more sustainable economic and social foundation.

- [Tsunami five-year progress report](#)  (English)
- [Cinq ans après le tsunami - rapport](#)  (French)
- [A cinco años del tsunami - Informe](#)  (Spanish)
- [Tsunami five-year progress report](#)  (Arabic)

From:

<http://www.ifrc.org/what/disasters/response/tsunamis/docs/reports/IFRC-Tsunami-5Yrs-Report-Final-Web.pdf>

***Natural Hazards Observer***

The latest edition of the *Natural Hazards Observer* is now available online. Featured articles from the November 2010 *Observer* include:

The Memories Remain: Chernobyl 24 Years Later  
Heat and Death in France

Helping the "Naturally Risk Averse" Avoid Risk

The Insurance Industry Grapples with Climate Risk

Visit the Natural Hazards Center Web site to read the November and past *Observers*:

<http://www.colorado.edu/hazards/o/index.html>

From: Disaster Research 557, Nov. 18, 2010

***Symposium on enhancing tsunami warning along North America's northwest coast: Reaching the last mile***

A one-day symposium, “Enhancing Tsunami Warning Along North America’s Northwest Coast: Reaching the Last Mile,” was organized and held on June 8, 2010 at the Institute of Ocean Sciences near Sidney, British Columbia. The Symposium was designed to encourage discussion between experts and stakeholders about emergency communication systems, to identify strengths and weaknesses of current systems, and to improve applications of these systems.

A final report is now available online--  
[TsunamiSymposiumReport](http://www.sfu.ca/tsunami/). More information can also be found at <http://www.sfu.ca/tsunami/>.

This final summary report was prepared by Peter S. Anderson, Associate Professor, School of Communication, Simon Fraser.

**WEBSITES**

<http://www.cdph.state.co.us/epr/calculator/index.html>  
Emergency preparedness calculator

Whether you need to know how many beans it will take to get your family through 72 hours or are thinking of setting up your own prep calculator, the Colorado Department of Public Health and Environment has an excellent example of how residents can easily individualize their preparedness kits. Site visitors simply enter the number of family members by age range and the calculator tells them how much food and water to store—and gives them a check list of other needs as a bonus.

From: Disaster Research 557, Nov. 18, 2010

<http://www.disabilityprepared.ku.edu/>

Disability prepared

All talk and no action is sometimes as bad as no talk and all action—that's why a new site launched by the University of Kansas' Research and Training Center for Independent Living aims to get people talking about best practices to help people with disabilities weather disasters. Center staff have collected the resources they found most helpful and paired them with a variety of tools—Facebook, Twitter, a forum, and a blog—meant to let others weigh in. Those with tips and tales of disability preparedness gone right should head on over—site organizers want to hear from you.

From: Disaster Research 559, December 16, 2010

<http://blog.fema.gov/2010/12/welcome-to-first-ever-fema-blog.html>

FEMA, the blog

It was only a matter of time, and now the time has come—the Federal Emergency Management Agency has joined the blog rolls. So what can a reader expect from the “first-ever FEMA blog?” A lot, according to social-media-savvy Administrator Craig Fugate, especially two-way communication. “This won't be another way to put out our press releases—this is a way to communicate directly with you,” he writes in the first entry. The blog will soon highlight emergency management insights and innovations from FEMA and beyond, Fugate says. Guest bloggers are already volunteering.

From: Disaster Research 559, December 16, 2010

<http://stuffexpataidworkerslike.com/>

Stuff ex-pat aid workers like

We thought Stuff Ex-Pat Aid Workers Like might be a handy gift guide for filling the stocking of your favorite Red Cross volunteer, but instead we found a quirky, often tongue-in-cheek look at the experiences of those who pitch in during disasters and humanitarian emergencies around the world. From the scatological perversity of parasite infections to a poignant treatise on the solace of having a driver, this blog offers insights into the real life of aid workers.

From: Disaster Research 559, December 16, 2010

<http://csc-s-maps-q.csc.noaa.gov/CountySnapshots/>

Coastal county snapshots

This National Oceanic and Atmospheric Administration tool breaks building in flood zones down to a simple equations, such as “People+Floodplains=Not Good.” And while that might seem like a no brainer, the snapshots show how U.S. coastal counties' realities add up or don't. (About 99 percent of the people in Cameron Parish, Louisiana, for instance, live in a floodplain along with 89 percent of the critical facilities and 95 percent of the roadways.) Data on vulnerable populations,

infrastructure, environment, and demographics is all available at a glance.

From: Disaster Research 559, December 16, 2010

<http://nwsstratplan.ideascale.com/>

National Weather Service: A Weather Ready Nation

The National Weather Service is among the latest agencies to give the public a voice in strategic planning using the new federal IdeaScale format. The format allows users to submit thoughts and suggestions, comment on and discuss ideas, and—hopefully, in the long run—give NWS a wealth of fodder to craft its 2020 strategic goals.

From: Disaster Research 552, Sept. 9, 2010

<http://www.mapaction.org/>

MapAction

An oldie but goodie, MapAction has been creating situation maps of humanitarian crises since 2004. These constantly shifting maps might detail damage, give information on population, give updates on health and sanitation, or provide a number of other details useful to international responders. MapAction offers a free catalogue for crisis relief organizations and also provides crisis mapping training.

From: Disaster Research 555, Oct. 21, 2010

<http://www.crew.org/wordpress/wp-content/uploads/TsunamiSymposiumReport1.pdf>

*Symposium on enhanced tsunami warning along North America's coast—Reaching the last mile*, by Peter S. Anderson is available online.

<http://shoreline.noaa.gov/>

NOAA Shoreline

The NOAA Shoreline website is a comprehensive guide to national shoreline data and terms. The site provides information about and access to seven vector shorelines that are generated by NOAA and other federal agencies. Supporting context is available in the Frequently Asked Questions, common uses of shoreline data, shoreline terms, and references sections.

From: NOAA Coastal Services Center Products & Services Catalog, v. 1, p. 7.

<http://www.csc.noaa.gov/digitalcoast/>

Digital Coast

It started with a vision. Wouldn't it be great if coastal data were accessible from one website? And the site could also include the training and tools needed to turn these data into useful information. And examples—the site should provide examples so others could learn. And since we're dreaming—couldn't we come a bit closer to changing the world if the site were used not only by the federal government, but also the private sector and non-profits, county governments, state programs, and anyone else interested in the wise

management of coastal resources? What would happen if these groups started working together?

The Digital Coast was developed in response to this vision. Users can download data and easily access the associated training, tools, and application examples needed to turn the data into relevant information. Visit the site to see this new reality.

From: NOAA Coastal Services Center Products & Services Catalog, v. 1, p. 7.

<http://disasterinfo.nlm.nih.gov>

Disaster Information Management Research Center

The National Library of Medicine has a new look and lots of new perks at its Disaster Information Management Research Center Web site. Visitors will find easy access to the center's collection of emergency preparedness, response, and recovery resources, as well as timely features—such as on the Haitian cholera epidemic. Links to articles and tools in PubMed, the Resource Guide for Public Health Preparedness, and a variety of other systems will help responders and caregivers easily find the information they need on the go.

From: Disaster Research 556, November 4, 2010

[http://www.unisdr.org/english/campaigns/campaign\\_2010-2011/](http://www.unisdr.org/english/campaigns/campaign_2010-2011/)

UNISDR Making Cities Resilient Initiative

Is your city ready for a disaster? If not, you'll want to check out this United Nations International Strategy for Disaster Reduction site devoted to building local preparedness and risk awareness. Community groups, businesses, and local governments are invited to tap UNISDR resources such as workshops, media and outreach tools, and policy making experiences as they work toward making their hometown less vulnerable to disaster. The initiative is designed to be useful to every level of an organization, so get your group on board today.

From: Disaster Research 556, November 4, 2010

<http://www.iema.illinois.gov/iema/EarthquakeGame/Welcome.html>

The Day the Earth Shook game

In this new disaster preparedness game, where your avatar wears a virtual reality headset (provided by helpful space aliens who prophesize an impending earthquake), kids walk around looking for items to stock their disaster kit and practice what to do once the shaking begins. The Illinois Emergency Management Agency, Illinois Terrorism Task Force, and University of Illinois created the game "to demonstrate a new educational approach for children to learn effective disaster preparedness and response strategies." Despite the strange premise, 1980s keyboard navigation, and a *Max-and-Ruby*-esque lack of parents, the game is mesmerizing. But there is no word on the Web site about how that translates into changing children's

behavior, so you'll have to download the game and decide for yourself.

From: Disaster Research 558, Dec. 2, 2010

<http://www.nga.org/portal/site/nga/menuitem.9123e83a1f6786440ddcbeeb501010a0/?vgnnextoid=58b4aee432d41110VgnVCM1000001a01010aRCRD>

*A Governor's Guide to Homeland Security 2010*

Just three years after it published the first edition, the National Governors Association Center for Best Practices has updated its *Governors Guide to Homeland Security*. The revised guide has five additional chapters and has been reorganized into major sections addressing preparedness, prevention, response, and—new in this edition—recovery. The guide continues to be noteworthy for its concise explanation of federalism and disaster response authority from a state governor's perspective. A 75-page PDF version can be downloaded from the Web site linked above.

From: Disaster Research 558, Dec. 2, 2010

## CONFERENCES

### January 19-21, 2011

"Our Changing Oceans" will be the theme at the 11<sup>th</sup> National Conference on Science, Policy, and the Environment in Washington, DC in January. More than 1,000 scientists, ocean professionals, policy makers, academics and informed citizens are expected to attend. The conference will address the crisis facing our oceans and highlight new tools and strategies to confront this challenge. Policy and governance issues will also be addressed. To learn more, view

<http://ncseonline.org/conference/Oceans/>.

From: Coastal Connections, v. 8, issue 5, p. 3-4.

### February 9-12, 2011

EERI annual meeting: Earthquakes Without Borders, Earthquake Engineering Research Institute, La Jolla, California. Cost and Registration: Not listed, open until filled.

This meeting will address issues that arise when earthquake and tsunami disasters span national borders. A panel discussion of the recent El Mayor-Cucapah earthquake, the San Diego wildfires, and border challenges since the events of September 11, 2001, will kick off the meeting. Session topics include regional earthquake response planning and policy, mitigating tsunami risk, and structural engineering innovations.

<http://eeri.org/site/2011-annual-meeting>

From: Disaster Research 557, Nov. 18, 2010



### March 2-3, 2011

*Engineering News-Record*, American Society of Civil Engineers, and others, Washington, D.C. Cost and Registration: \$350 before February 11, open until filled.

This conference will discuss ways to limit risks posed by the built environment during disasters, to raise awareness of the need for disaster mitigation, and to create more resilient infrastructure. Session topics include creating standard risk assessment methods, incentives for incorporating mitigation measures, and insurers' role in mitigation planning.

For more information:

<http://construction.com/events/2011/mitigatingdisaster/default.asp>

From: Disaster Research 558, Dec. 2, 2010

### March 21-24, 2011

Coastal GeoTools 2011, National Oceanic and Atmospheric Administration, Myrtle Beach, South Carolina. Cost and Registration: \$350 before January 31, closes February 22.

This conference will further the creation of "Digital Coast," a web platform that will provide geospatial data, tools, and training for coastal resource managers. Among topics to be addressed are GIS mapping of sea level rise, creating usable Web sites and toolkits for marine resources, sharing geospatial information via the Web, and using Google tools to display data.

From: <http://geotools.csc.noaa.gov/default.aspx>

### March 23, 2011

The 2011 annual Pacific tsunami exercise will be held March 23, 2011, and will be based on a major Cascadia tsunami.

That is the same date as the 2011 Atlantic exercise which is based on an event similar to the 1867 tsunami. LANTEX11/CARIBEWAVE11 exercise handbook is available for download at the WCATWC web site - [wcatwc.arh.noaa.gov](http://wcatwc.arh.noaa.gov). The PACIFEX11 exercise will be available within a couple weeks.

From: Paul Whitmore, October 27, 2010; November 30, 2010

### March 29, 2010

Disaster information outreach symposium  
National Library of Medicine, Bethesda, Maryland.

This symposium will provide tools that help librarians, public information officers, and other communicators better educate the public about disasters and health emergencies. Topics include how to meet the information needs of emergency managers and responders, using libraries to support response and recovery, and the Medical Library Association's new disaster information specialization.

<http://disaster.nlm.nih.gov/dimrc/symposium2011.html>

From: Disaster Research 558, Dec. 2, 2010

## CLASSES /TRAINING

New from COMET: Tsunami Warning Systems module  
Fri, 15 Oct 2010 15:24:09 -0600

The COMET Program is pleased to announce the publication of Tsunami Warning Systems. This module, which can be completed in approximately 1 hour and 15 minutes, describes the processes involved in anticipating, detecting, and warning for a tsunami by summarizing data collection, modeling, analysis, and alert procedures used at NOAA's Tsunami Warning Centers. A simulated event and past tsunami occurrences are used to highlight warning system processes for determining the tsunami threat based on seismic and sea level data and tsunami forecast models. Message communication and local response, which are essential final components of any warning system, are also addressed.

This fully narrated module contains numerous graphical data products and photographs, as well as a companion print version. The intended audience includes Weather Forecast Office staff and emergency managers who require a better understanding of the technical aspects of tsunami warning delivery. The content is also appropriate for anyone wanting to learn more about the components of tsunami warning systems. To access this training:  
<http://www.meted.ucar.edu/tsunami/warningsystem/>

The module requires a web browser with Flash Player version 10 (or higher). For technical support, please visit the MetEd Support page  
([http://www.meted.ucar.edu/about\\_support.htm#C](http://www.meted.ucar.edu/about_support.htm#C)).

NOTE TO NWS and other NOAA EMPLOYEES:  
This module is available in the NWS Learning Center (<https://doc.learn.com/noaa/nws>). Please access it through that system in order to receive credit.

We welcome any comments or questions you may have regarding the content, instructional approach, or use of this module. Please e-mail your comments or questions to Amy Stevermer ([stevermer@comet.ucar.edu](mailto:stevermer@comet.ucar.edu)) or Pat Parrish ([pparrish@ucar.edu](mailto:pparrish@ucar.edu)).

For Technical Support for this module please e-mail [support@comet.ucar.edu](mailto:support@comet.ucar.edu).

From: Wendy Abshire, Sr. Project Manager/The COMET Program, University Corporation for Atmospheric Research

Sun, 24 Oct 2010

E-mail from Paul Whitmore

NOAA sponsors development of Tsunami Warning System Course: The COMET® (Cooperative Program for Operational Meteorology, Education and Training) program announced the completion of the first of four tsunami

Training modules they are developing entitled Tsunami Warning Systems. The training module describes the workings of the Tsunami Warning System with em-

phasis on actions taken at the Tsunami Warning Centers, and is freely accessible. To take the 90-minute session, go to <http://www.meted.ucar.edu/tsunami/warningsystem/>. Registration is required. NOAA employees should gain access via the NOAA Learning Center at <https://doc.learn.com/noaa>.

The intended audience includes emergency managers, Weather Forecast Office staff, and anyone who needs a solid understanding of the technical aspects of tsunami warning delivery. Tsunami Warning Systems describes the processes involved in anticipating, detecting, and warning for a tsunami by summarizing data collection, modeling, analysis, and alert procedures used at NOAA's Tsunami Warning Centers. A simulated event and past tsunami occurrences are used to highlight warning system processes for determining the tsunami threat based on seismic and sea level data, and tsunami forecast models. Message communication and local response are also addressed. The COMET program is currently producing other tsunami training modules: Tsunami Science, Tsunami Community Preparedness (funded by the National Tsunami Hazard Mitigation Program), and TsunamiStrike—a tsunami training module aimed at Middle School audiences.

Tues, 30 Nov 2010

E-mail from Paul Whitmore

The COMET program completed the second online tsunami training module. In addition to the Tsunami Warning System module, a module entitled Tsunamis is now available. This module delves into the science behind tsunami generation, propagation, and inundation. It takes about 1-2 hours to complete and is free to anyone (though a login is required).

The module can be accessed at the following link: <http://www.meted.ucar.edu/tsunami/tsunamis/>. COMET continues work on the TsunamiStrike module (aimed at Middle Schoolers), and the Tsunami Community Preparedness module funded by the NTHMP.

## BOOK REVIEWS

**Ethics for Disaster**, by Naomi Zack  
2009. ISBN: 978-0-7425-6494-7. 143 p., Rowman & Littlefield. [www.rowmanlittlefield.com](http://www.rowmanlittlefield.com)

It's not often you can call a book of ethics a "wild ride"—the phrase doesn't pop to mind reading Aristotle, for instance—but Naomi Zack has managed to produce a book about disaster ethics that combines scholarly rigor with all the adventure and unexpectedness of real-world hazards.

To illuminate her points, Zack explicates the tried-and-true ethical dilemmas of "lifeboat ethics." But she doesn't stop there. She also draws examples from the movie *Snakes on a Plane*, from Cormac McCarthy's

brilliant literary novel *The Road*, the graphic novels of Art Spiegelman, and the thrillers of Vince Flynn with stops along the way at Bob Dylan, Emmanuel Kant, and many other suspects, both the usual and the unusual.

Zack explores a real-life case of lifeboat ethics that occurred at Lifecare Hospitals in New Orleans. Patients at that hospital who couldn't be evacuated in face of Hurricane Katrina were left behind and then euthanized by a doctor. The presumption was that the doctor had killed the patients to prevent even worse suffering. A grand jury refused to indict. The charges against the doctor were expunged, and the state of Louisiana agreed to pay the physician's legal fees.

The question of how to make ethical decisions in a disaster is a complex one. Zack turns it around on all its sides. In the end, she admits that nothing is "proved," but offers a "code of ethics for disaster" that includes a moral obligation to plan for, as well as respond to disasters. She also calls for individual responsibility, fairness, and actions that are moral-based on the principal of "fairly saving all who can be saved with best preparation."

From: *Natural Hazards Observer*, v. 34, no. 6, p. 16.

**Hospital Emergency Response Teams**, by Jan Glarum, Don Birou, and Edward Cetaruk. 2010. ISBN: 978-1-85617-701-6. 242 p. Butterworth-Heinemann. Elsevierdirect.com

It's hard to say how much influence a book is going to have when it says on page two that "the person filling the command position should not necessarily be the chief executive officer" for a hospital facing an emergency response event. This is a harsh truth that the CEO may not be happy to hear. But the assertion is just the opening frame of this no-nonsense textbook for hospital emergency response planning. The three authors prescribe meticulous planning in an all-hazards framework for getting a hospital to be nimble enough to react appropriately.

The book is clear and direct in its prescriptions with plenty of checklists and questionnaires for planners. Of particular interest is the second chapter, "Assessment of likely mass casualty events," which lists the kinds of problems hospitals are likely to face in a wide-ranging disaster, and what preparations must be made to deal with them.

From: *Natural Hazards Observers*, v. 34, no. 6, p. 16♦

**Numerical simulation and first-order hazard analysis of large co-seismic tsunamis generated in the Puerto Rico trench: near-field impact on the North shore of Puerto Rico and far-field impact on the US East Coast [abstract]**

By S.T. Grilli, S. Dubosq, N. Pophet, Y. Pérignon, J.T. Kirby, and F. Shi

We perform numerical simulations of the coastal impact of large co-seismic tsunamis, initiated in the

Puerto Rican trench, both in far-field areas along the upper US East coast (and other Caribbean islands), and in more detail in the near-field, along the Puerto Rico North Shore (PRNS). We first model a magnitude 9.1 extreme co-seismic source and then a smaller 8.7 magnitude source, which approximately correspond to 600 and 200 year return periods, respectively. In both cases, tsunami generation and propagation (both near- and far-field) are first performed in a coarse 2' basin scale grid, with ETOPO2 bathymetry, using a fully nonlinear and dispersive long wave tsunami model (FUNWAVE).

Coastal runup and inundation are then simulated for 2 selected areas, using finer coastal nested grids. Thus, a 15" (450 m) grid is used to calculate detailed far-field impact along the US East Coast, from New Jersey to Maine, and a 3" (90 m) grid (for the finest resolution), encompassing the entire PRNS, is used to compute de-tailed near-field impact along the PRNS (runup and inundation).

To perform coastal simulations in nested grids, accurate bathymetry/topography databases are constructed by combining ETOPO2 2' data (in deep water) and USGS' or NOAA's 15" or 3" (in shallow water) data. In the far-field, runup caused by the extreme 9.1 source would be severe (over 10 m) for some nearby Caribbean islands, but would only reach up to 3 m along the selected section of the East coast.

A sensitivity analysis to the bathymetric resolution (for a constant 3" model grid) of runup along the PRNS, confirms the convergence of runup results for a topographic resolution 24" or better, and thus stresses the importance of using sufficiently resolved bathymetric data, in order to accurately predict extreme runup values, particularly when bathymetric focusing is significant. Runup (10–22 m) and inundation are found to be very large at most locations for the extreme 9.1 source. Both simulated spatial inundation snapshots and time series indicate, the inundation would be particularly severe near and around low-lying San Juan city.

For the 8.7 source, runup along the PRNS would be much less severe (3–6 m), but still significant, while inundation would only be significant near and around San Juan. This first-order tsunami hazard analysis stresses the importance of conducting more detailed and comprehensive studies, particularly of tsunami hazard along the PRNS, for a more complete and realistic selection of sources; such work is ongoing as part of a US funded (NTHMP) tsunami inundation mapping effort in Puerto Rico.

Nat. Hazards Earth Syst. Sci., 10, 2109-2125,  
doi:10.5194/nhess-10-2109-2010.  
<http://www.nat-hazards-earth-syst-sci.net/10/2109/2010/nhess-10-2109-2010.html>

Submitted by Christa von Hillebrandt-Andrade ♦

## Material added to the NTHMP Library

November - December 2010

Note: These, and all our tsunami materials, are included in the online (searchable) catalog at <http://www.dnr.wa.gov/ResearchScience/Topics/GeologyPublicationsLibrary/Pages/washbib.aspx>. Click on SEARCH DATABASE, then type 'tsunamis' in the Subject field to get a full listing of all the tsunami reports and maps in the collection.

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## VIDEO-CD-DVD RESERVATIONS

To reserve tsunami videos, CDs or DVDs, contact *TsuInfo Alert* Video Reservations, Lee Walkling, Division of Geology and Earth Resources Library, 1111 Washington St. SE, MS 47007, Olympia, WA 98504-7007; or e-mail lee.walkling@dnr.wa.gov

Adventures of Disaster Dudes (14 min.). Preparedness for preteens. American Red Cross.

The Alaska Earthquake, 1964 (20 min.) Includes data on the tsunamis generated by that event.

Business Survival Kit for Earthquakes & Other Disasters; What every business should know before disaster strikes (27 min.). Global Net Productions for the Cascadia Regional Earthquake Workgroup, 2003. With CD disaster planning toolkit & other data.

Cannon Beach Fire District Community Warning System (COWS) (21 min.) Explains why Cannon Beach chose their particular warning system.

Cascadia: The Hidden Fire—An Earthquake Survival Guide (10 min.). Global Net Productions, 2001. A promo for a documentary about the Cascadia subduction zone and the preparedness its existence demands of Alaska, Oregon and Washington states. Includes mention of tsunamis.

Disasters are Preventable (22 min.) Ways to reduce losses from various kinds of disasters through preparedness and prevention.

Disaster Mitigation Campaign (15 min.). American Red Cross; 2000 TV spots. Hurricanes, high winds, floods, earthquakes.

Earthquake...Drop, Cover & Hold (5 min.). Washington Emergency Management Division. 1998.

Forum: Earthquakes & Tsunamis (2 hrs.). CVTV-23, Vancouver, WA (January 24, 2000). 2 lectures: Brian Atwater describes the detective work and sources of information about the Jan. 1700 Cascadia earthquake and tsunami; Walter C. Dudley talks about Hawaiian tsunamis and warning systems.

International Tsunami Information Centre, 2004, Tsunami warning evacuation news clips and video footage, UNESCO/IOC International Tsunami Information Centre, 1 **DVD**, 12 min.

Killer Wave: Power of the Tsunami (60 min.). National Geographic video.

Mitigation: Making Families and Communities Safer (13 min.) American Red Cross.

Not Business as Usual: Emergency Planning for Small Businesses, sponsored by CREW (Cascadia Regional Earthquake Workgroup) (10 min.), 2001. Discusses disaster preparedness and business continuity. Although it was made for Utah, the multi-hazard issues remain valid for everyone. Websites are included at the end of the video for further information and for the source of a manual for emergency preparedness for businesses.

Numerical Model Aonae Tsunami—7-12-93 (animation by Dr. Vasily Titov) and Tsunami Early Warning by Glenn Farley, KING 5 News (The Glenn Farley portion cannot be rebroadcast.)

Ocean Fury—Tsunamis in Alaska (25 min.) VHS and **DVD**. Produced by Moving Images for NOAA Sea Grant College Program, 2004.

The Prediction Problem (58 min.) Episode 3 of the PBS series "Fire on the Rim." Explores earthquakes and tsunamis around the Pacific Rim

Protecting Our Kids from Disasters (15 min.) Gives good instructions to help parents and volunteers make effective but low-cost, non-structural changes to child care facilities, in preparation for natural disasters. Accompanying booklet. Does NOT address problems specifically caused by tsunamis.

The Quake Hunters (45 min.) A good mystery story, explaining how a 300-year old Cascadia earthquake was finally dated by finding records in Japan about a rogue tsunami in January 1700

Raging Planet; Tidal Wave (50 min.) Produced for the Discovery Channel in 1997, this video shows a Japanese city

that builds walls against tsunamis, talks with scientists about tsunami prediction, and has incredible survival stories.

Raging Sea: KGMB-TV Tsunami Special. (23.5 min.) Aired 4-17-99, tsunami preparedness in Hawaii.

The Restless Planet (60 min.) An episode of "Savage Earth" series. About earthquakes, with examples from Japan, Mexico, and the 1989 Loma Prieta earthquake.

Run to High Ground (14 min.). Produced by Global Net Productions for Washington Emergency Management Division and Provincial Emergency Program of British Columbia, 2004.

Features storyteller Viola Riebe, Hoh Tribe. For K-6 grade levels. Have video and **DVD** versions.

Tsunami and Earthquake Video (60 min.). "Tsunami: How Occur, How Protect," "Learning from Earthquakes," "Computer modeling of alternative source scenarios."

Tsunami: Killer Wave, Born of Fire (10 min.). NOAA/ PMEL. Features tsunami destruction and fires on Okushiri Island, Japan; good graphics, explanations, and safety information. Narrated by Dr. Eddie Bernard, (with Japanese subtitles).

Tsunami: Surviving the Killer Waves (13 min.). 2 versions, one with breaks inserted for discussion time.

Tsunami Chasers (52 min.). Costas Synolakis leads a research team to Papua New Guinea to study submarine landslide-induced tsunamis. Beyond Productions for the Discovery Channel.

Tsunami Evacuation PSA (30 sec.). DIS Interactive Technologies for WA Emergency Management Division. 2000.

**NEW** Tsunami preparedness in Washington; version 1.0. 32-min. DVD.

TsunamiReady Education CD, 2005, American Geological Institute Earth Science Week kit.

Understanding Volcanic Hazards (25 min.). Includes information about volcano-induced tsunamis and landslides.

UNESCO/IOC International Tsunami Information Centre, 2005, U.S. National Tsunami Hazard Mitigation Program public information products—B-roll footage, tsunami science, warnings, and preparedness: UNESCO/IOC International Tsunami Information Centre, 1 **DVD**, 57 min.

The Wave: a Japanese Folktale (9 min.) Animated film to start discussions of tsunami preparedness for children.

Waves of Destruction (60 min.) An episode of the "Savage Earth" series. Tsunamis around the Pacific Rim.

Who Wants to be Disaster Smart? (9 min.). Washington Military Department/Emergency Management Division. 2000. A game show format, along the lines of *Who Wants to be a Millionaire?*, for teens. Questions cover a range of different hazards.

The Wild Sea: Enjoy It...Safely (7 min.) Produced by the Ocean Shores Wash. Interpretive Center, this video deals with beach safety, including tsunamis. ♦



## INFREQUENTLY ASKED QUESTIONS

### Who is Marcie Roth, and what is her job?

The Federal Emergency Management Agency's senior disability advisor has been appointed to a new commission that will focus on improving emergency response capabilities for people with disabilities. Earlier this week, Marcie Roth, the Director of FEMA's Office on Disability Integration and Coordination, was appointed by the Federal Communications Commission to serve on its recently-announced Emergency Access Advisory Committee. The committee will evaluate the most effective and efficient technologies and methods by which to enable next-generation 911 access for people with disabilities.

Roth's appointment to this commission is another way that FEMA is working with all members of the nation's emergency management team, including our federal, state and local partners, to ensure that the needs of people with disabilities and all member of a community are factored into every step of preparing for, responding to, recovering from, and mitigating against all hazards.

Roth was appointed by President Obama in June 2009 to serve as the Senior Advisor on Disability Issues for FEMA. She has since developed the Office of Disability Integration and Coordination, where she oversees the Agency's commitment to meet the access and functional needs of children and adults with disabilities before, during and after disasters.

From: [http://mmrs.fema.gov/media/2010/fcc\\_disability\\_expert.shtm](http://mmrs.fema.gov/media/2010/fcc_disability_expert.shtm)



### According to FEMA Administrator Craig Fugate's blog, what changes are being made in each FEMA Regional Office?

Today [Dec. 16, 2010], President Obama convened the White House Tribal Nations Summit, inviting the leaders of all 565 federally recognized tribes to Washington DC to meet with him and his Administration's top officials. I was honored to hear the President speak this morning and then to participate in a conversation with tribal leaders from all over the country.

FEMA is committed to working with American Indians and Alaska Natives and looks to their sovereign leadership for guidance on how we can best support them in building more resilient and better prepared communities. In order to better support them before, during and after disaster strikes, FEMA is placing a tribal liaison in each of our Regional Offices. This will allow us to more closely coordinate with tribes, and make sure they have the support they need while responding to and recovering from disasters.

Today's conference shows how serious this Administration is about building stronger relationships with tribal nations. Tribal leadership is an essential part of the emergency management team in planning for the whole of community. We're grateful to all of those who traveled to Washington today to represent their communities.

From: <http://blog.fema.gov/2010/12/expanding-team.html>

### What challenge has FEMA issued?

At website <http://challenge.gov/fema/87> you can get the full details for the Preparing Our Communities Before a Disaster Strikes challenge.

The challenge: To come up with ideas on how we can all help prepare our communities before disaster strikes and how the government can support community-based activities to help everyone be more prepared.

The sky is the limit. We want ideas from across the spectrum, from within whichever field you work, for whatever community in which you live. If you're a doctor, what role can the medical community play? If you're an artist, how can you use your medium to contribute?

This could be a new project or means of engaging the public to prepare for disasters on the individual or family level; a public service announcement about business preparedness to play on local radio or TV stations; or a new device, technology, application or piece of equipment to mitigate the effects of disaster.

Submissions will be judged based on originality, level of community engagement, and ease of implementation. ♦

HAPPY HOLIDAYS!

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