



TsuInfo Alert

prepared by the Washington State Department of Natural Resources on behalf of the
National Tsunami Hazard Mitigation Program
 a state/federal partnership funded through the National Oceanic and Atmospheric Administration (NOAA)

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REPORT FROM FLORIDA

Two communities in Florida have been declared TsunamiReady: Indian Harbour Beach and Naval Station Mayport.



National Weather Service Director David L. Johnson and Southern Region Director Bill Proenza present TsunamiReady signs to Indian Harbour Beach Mayor Jim H. Nolan, Sr. and City Manager Jackie Burns as Police Chief Bob Sullivan looks on.

(continued on page 3)

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(continued from page 1)

July 7, 2005 -- "Indian Harbour Beach, Fla. has been recognized as the first TsunamiReady community along the nation's East Coast. National Weather Service Director Brig. Gen. David L. Johnson, U. S. Air Force (Ret.); Southern Region Director Bill Proenza; and Melbourne Weather Forecast Office Meteorologist-in-Charge, Bart Hagemeyer did the honors in a special Tsunami-Ready recognition ceremony at the city's beachfront Millennium Park."

Full article:

<http://webcache.googleusercontent.com/search?q=cache:http://www.srh.noaa.gov/srh/srnews/stories/2005/indianharbour.htm>

November 27, 2007 -- By Mass Communication Specialist 2nd Class (SW) Daniel Gay, Fleet Public Affairs Center Detachment Southeast

MAYPORT, Fla. (NNS) -- Naval Station (NS) Mayport was recognized by the National Weather Service as the nation's first Navy base to achieve TsunamiReady® status. NS Mayport was awarded the honor during a ceremony on base Nov. 26.

"The advanced warning and notification features, now in place, will allow our harbor assets and naval vessels adequate time to prepare for the potential influx of millions of tons of tsunami water into our basin," said Capt. Aaron L. Bowman, NS Mayport's commanding officer.

Full article:

http://www.navy.mil/search/display.asp?story_id=33544 ♦

REGIONAL REPORTS

CANADA

Tsunami stories go online in Alberni (B.C.)

A group of students from Alberni District Secondary School will help create a video exhibit of the Port Alberni tsunami of 1964 for the Virtual Museum of Canada.

Full story at

<http://www.bclocalnews.com/news/132751748.html?mobile=true>

QUEENSLAND, AUSTRALIA

Yes, Virginia, there is a use for government social media in emergencies

Disaster Research 572, August 25, 2011

<http://www.colorado.edu/hazards/dr/currentdr.html>

Reprinted with permission

Social media—it's an emergency manager's ultimate foe or best friend. Pick a day, and see which way the pendulum swings.

Today, it might sway toward friend, thanks to a recent report from Queensland Police Services. *Disaster Management and Social Media—A Case Study* details the amazing results the QPS had using Twitter, YouTube, and Facebook for mass communication during Queensland's 2010-2011 flooding.

Many response agencies have made tentative forays into social media, and the QPS was no different. The agency created several social media accounts in May 2010 and let them slowly grow without fanfare, according to the report. By November, about 8,000 people were tracking the agency's [Facebook page](#) and it had about 1,000 [Twitter followers](#).

That all changed when a bout of extreme weather began in December 2010 and ran into January 2011. The QPS's need to continuously communicate about the disaster led it to "instinctively [gravitate] towards the social media channels because they were clearly the fastest and best way to distribute important public safety information," the report states.

During the emergency, the agency posted information updates to its Facebook and Twitter accounts, streamed media conferences on YouTube, and posted audio updates via several mediums. They also used the channels to coordinate resources and correct misinformation. These efforts were magnified by the mainstream media's use of the new information sources.

"Within days, not only were the media relying on the QPS social media accounts as their key source of information but they were actively referring the public to our social media channels. QPS tweets would appear in national TV networks news tickers and would be read out by radio station announcers within moments of the media team publishing them," the report states. "This almost instant crossover from 'new media' to 'old media' allowed information published by the team to be distributed at a speed and to a sheer number of people not previously possible."

Then, in just one day following a significant flash flood, the number of QPS Facebook users jumped from 17,000 to 100,000. It was soon clear that social media was the only way some people could access information, according to QPS Superintendent Greg Flint.

"In some areas where phone services were impeded or down ... a lot of people were still using Facebook as a means to keep up to date," Flint told [ZDNet](#). "I suspect if we didn't have that forum ... we would have been severely embarrassed in terms of our capacity to react."

The Queensland floods were the perfect environment for QPS social media to gain momentum, but the QPS' approach is what spurred things along. Social media streams rely on a consistent flow of useful information to retain their followers. Because the QPS allowed staff to update information streams without an elaborate chain of approval, they created a more sustainable use of the social media platforms.

“The QPS streamlined [established communication] processes during the disaster and the team organically turned to social media as the vehicle to reach the public and the media in the shortest time-frame,” the report states.

“Given the majority of the information the QPS released was factual and in the interests of public safety it could be released immediately and without a clearance process.”

Whether government-run social media is vaunted or vilified, a cavalier attitude toward releasing official information is often cited as a concern. And while there are guides for governments on creating social media policy, many focus on the cover-your-assets aspects of implementation, rather than how to craft a successful venture.

Even with the ideal guide, sometimes you need to punt when interacting with the public, QPS Digital Media Officer James Kliemt told Intermedium.

“There is no way known to write a policy that is going to be able to deal with all of the issues that come up on our Facebook page,” he said. Instead of trying, the report recommends building a strong social media presence *before* disaster strikes, trusting your staff to share information, and becoming involved in your online community.

There’s a tendency to devalue social media because it’s free, but an agency should think twice before squandering those resources, said Peter Alexander, a former Australian Government assistant finance secretary.

“The Queensland Police should be thinking, what would have happened if we didn’t have Facebook—if we had to build our own platform or even have people travelling around Queensland to get our information across?” Alexander told Intermedium. “How much would it have cost us?”

WASHINGTON

NOAA West Coast tsunami conference in Seattle

West Coast tsunami experts from federal and state agencies met in Seattle on October 21, 2011 for a daylong conference at the National Oceanic and Atmospheric Administration regional office.

Program:

<http://www.nws.noaa.gov/om/Tsunami/west/agenda.pdf>

More information:

<http://www.nws.noaa.gov/om/Tsunami/west/> ♦

DISASTER PLANNING FOR CHILDREN AND STUDENTS

Reaching younger audiences

Elaine Pittman

Emergency Management, January/February 2011, p. 10

Reprinted with permission

Creating the “culture of preparedness” that the emergency management community talks about can only truly be achieved by making disaster preparedness second nature to citizens. When I think about instilling lessons in people’s lives, that means starting when they are young and ingraining them with the necessary skills and knowledge.

However, reaching younger audiences can be difficult. Although many children are eager to learn about disasters—images of snowstorms, tornadoes, etc. can leave a lasting impression—the message on how they can prepare not only themselves but also their families is something that needs to be reiterated. But finding the best way to repeat that message in a fun yet informative way can be difficult, and that’s why the message should be taught through means that children enjoy and find engaging—like video games.

In November 2010, the Illinois Emergency Management Agency (IEMA) released *The Day the Earth Shook*, a video game that uses an earthquake scenario to demonstrate the need for a disaster supply kit as well as to identify safe locations in a building during an earthquake. To make it accessible to everyone in the state, IEMA posted the game on its Ready Illinois website,

www.ready.illinois.gov. *The Day the Earth Shook* targets middle schoolers, an age group for which the agency lacked a preparedness messaging program.

“We knew that we needed to do something that would be fun, but they’re too old for coloring books and activity books at that age,” said Patti Thompson, communications manager for IEMA. “So it just seemed like the video game route was something new to do, a new direction to go.”

Thompson said the agency was going to work with the Illinois State Board of Education to get notices sent to teachers to make them aware of the game, with the goal of teachers implementing it into their curriculum.

IEMA seeks to keep children’s interest through an online leader board that tracks players’ best times. “They play it through once, and it’s pretty much a learning experience the first time,” Thompson said. “Then they can play it over and over, and there’s a clock that times how long it takes them [to complete] each segment.”

Illinois isn’t the only agency hoping to spread preparedness messages through video games. The American College of Emergency Physicians is using a U.S. Department of Homeland Security grant to develop the video game *Disaster Hero*. The project is expected to be completed this year, and will focus on what to do before,

during and after a disaster. According to a statement, the game will target multiple audiences, including children, early teens, parents, caregivers and teachers.

By packaging the disaster preparedness message in a form that children already enjoy, IEMA and the American College of Emergency Physicians are on the right path to starting the culture of preparedness for younger generations.

Children's involvement in disaster planning calms fear

Release Date: May 12, 2011

Release Number: 1967-002

Honolulu--When family life is disrupted by a natural disaster, children often feel vulnerable or frightened. Well thought out plans that involve them in pre-disaster and post-disaster activities can help calm their fears.

The U.S. Department of Homeland Security's Federal Emergency Management Agency's (FEMA's) web site, FEMA for Kids is designed for children. It has fun stories, quizzes and games that can help families prepare for a disaster. The site also has a library link for ordering free posters, videos and other items for children. The toll free number to call is (800) 480-2520.

An important first step in helping children prepare for a disaster is to have them help stock a Disaster Supply Kit. The FEMA for Kids web site explains the kit's contents and provides information in a format children will enjoy while they are learning.

"Parents will be delighted at the non-threatening way disaster information is provided on the FEMA for Kids web site," says FEMA Federal Coordinating Officer Mike Karl. "We invite parents to check out the site with their children and use the materials that are offered."

Many things can be done with children to protect the home and family before a disaster strikes. Here are some suggestions:

- Listen together for weather updates and stay in touch with neighbors about ways to evacuate if the order is given.
- Practice evacuation drills.
- Discuss where the family will gather if separated during a disaster.
- Stock up on water and non-perishable foods.
- Practice with pets when doing evacuation drills; have children put identifying collars on pets.
- Teach children basic first aid steps, like applying bandages.

These are a few of the topics a family will find on <http://www.fema.gov/kids> and the Hawaii State Civil Defense web site: http://www.scd.hawaii.gov/dp_kit.html. Last Modified: Friday, 13-May-2011 11:47:24

From:

<http://www.fema.gov/news/newsrelease.fema?id=54990>

Managing Children in Disasters: Planning for their Unique Needs (Book review)

Authors: Jane A. Bullock, George Haddow, and Damon P. Coppola. 2011. ISBN 978-1-4398-3766-5. 394 p. \$79.95 (hardcover), CRC Press. www.crcpress.com

Since we (Natural Hazards Observer) published a long treatise on caring for children in disasters last issue (March 2010), we've kept a weather eye on material to flesh out those recommendations for emergency managers. And—what do you know?—here comes one across the desk. *Managing Children in Disasters* provides the detailed steps necessary to implement many of the recommendations made by the bipartisan National Commission on Children and Disasters.

Managing Children is a comprehensive compendium about dealing with children in disasters. It also explores how the management of children's needs impacts short- and long-term recovery. The authors cite, for instance, how important child care is in getting the economy running again: "After the hurricane, I understood how little I knew about how interconnected everything was, how everything could disappear overnight," they quote Steve Refroe of Chevron as saying.

"A disaster of the magnitude of Katrina has the power to stop the economy, but how do you restart it?" We used portable electric generators to generate the fuel we needed to restart the refineries. Child care is like that generator. It enables parents to go back to work—a key factor in getting the rest of the economy back up and running."

Over 12 million children under the age of six attend child care each week, which makes emergency planning crucial to ensuring a secure environment for children during and after disasters. But only 14 states currently have laws or regulations requiring child care providers to develop written disaster plans for addressing general evacuation processes, reunification efforts, and accommodation of children with special needs.

Managing Children in Disasters does not, however, go into the potentially useful step recommended by the children's commission for using existing computer and paper methods for keeping track of children to make it easier to reunite them with their families. The National Mass Evacuation Tracking System is a manual and computer-based system states may use to track "transportation-assisted evacuees, household pets, luggage [and] medical equipment." It can be adapted to keep tabs on separated children as well.

But the book otherwise provides useful insights into this complex and important issue in emergency management.

From: Natural Hazards Observer, v. 35, no. 5, p. 17.

ARC resource pack

14 modules in two groups, by Action for the Rights of Children, 2010. www.arc-online.org/using/index.html.

This is a comprehensive guide for emergency workers who will have to deal with children and their welfare. The goal of this international interagency cooperation is “to tackle the root causes of children’s vulnerabilities; to build effective child protection systems for use in emergencies and long-term development; [and] to ensure that no activities inadvertently compromise children’s rights or safety.”

ARC takes a rights-based approach to dealing with children in disasters. The first seven modules outline the legal background, the methodology, and the practical application of what those rights and methods mean. The experience of childhood is not the same for all children, and not all societies have the same values about children. The publications attempt to navigate these difficult waters.

The second set of modules deals with the specific issues that workers can expect to deal with in the field, from abuse to sexual issues to land mines. This material is carefully organized and clearly written. “All modules include: study material giving detailed information on the module’s subject and a list of further reading; slides giving a summary of the study material; [and] training material for participatory workshops that comprises exercises giving practical guidance for facilitators and handouts for participants.”

From: Natural Hazards Observer, v. 35, no. 3, p. 17.

Children and disasters—Breaking the cycle of neglect

From: Natural Hazards Observer, v. 35, no. 4, p. 1, 15-18.

Available at:

<http://www.colorado.edu/hazards/o/archives/2011/mar11/observerweb.pdf>

School Emergency and Disaster Preparedness:

Guidance Notes

By UNISDR One Million Safe Schools and Hospitals Campaign, 2010, 30 p. Free download at www.unisdr.org/europe/publications/v.php?id=15655.

This is an international guide to help schools prepare for emergencies and disasters from natural hazards. It takes administrators through creating an emergency committee, designing a disaster plan, knowing who can help and how, and conducting emergency drills. The guidance is clear, thorough, and on point. It also provides a list of references for further planning and first aid.

From: Natural Hazards Observer, v. 35, no. 2, p. 17.

School Disaster Response Drills: Models and Templates

By Risk RED for Earthquake Country Alliance, 2009, 40 p. Free download www.riskred.org/schools.html

This publication delivers what it promises: templates for schools to prepare for disasters. It offers checklists for staff expertise, emergency contacts, assessment and plan-

ning, response capacity and all the other details needed in a school during an emergency. It emphasizes earthquake drills, but offers guidance for other situations as well.

From: Natural Hazards Observer, v. 35, no. 2, p. 17.

FEMA offers free online booklet to help children cope with Irene

Release Date: October 20, 2011

Release Number: 4021-057

» [En Español](#)

NEPTUNE, N. J. — Natural disasters like Hurricane Irene can leave children feeling frightened, confused, and insecure. Whether a child has personally experienced trauma, has merely seen the event on television, or has heard it discussed by adults, it is important for parents and teachers to be informed and ready to help if reactions to stress begin to occur.

“*Helping Children Cope with Disaster*” is a free, 12-page publication available through the Federal Emergency Management Agency’s Web site, www.fema.gov. The booklet, developed jointly with the American Red Cross, is easily downloaded in PDF form and may be used without restriction.

The booklet offers parents, teachers, caregivers, and other adults suggestions on how to help children cope with the effects of disaster, as well as how to be prepared before a disaster strikes. Topics include:

- Identifying children at risk
- How disaster can create vulnerabilities in children
- How children react to disaster by age
- Meeting a child’s emotional need
- Reassuring children after a disaster
- Ways to monitor and limit your family’s exposure to the media

“*Helping Children Cope with Disaster*” can be downloaded at:

http://www.fema.gov/rebuild/recover/cope_child.shtm

and a copy is attached.

Mass notification layers fail to reach the classroom

The two to six hours college students spend inside classrooms creates a sizeable gap in mass notification system coverage for most colleges and universities. To target and penetrate the protected learning environment, it is time for schools to employ the power and accuracy of precision notification systems.

Full article:

<http://www.emergencymgmt.com/disaster/Mass-Notification-Layers-Fail-Reach-Classroom.html>

American Red Cross launches national Ready Rating™ Program to prepare businesses, organizations and schools for emergencies

WASHINGTON, Thursday, May 12, 2011 — The American Red Cross today launched a newly designed

website, ReadyRating.org, to help businesses, schools and other organizations better prepare for emergencies. The announcement was made at an event involving business, education and government leaders at Red Cross national headquarters in Washington DC.

Ready Rating™ is a free, self-paced, web-based membership program that helps a business or school measure how ready they are to deal with emergencies, and gives customized feedback on how they can improve their efforts.

Schools and businesses may face a number of emergencies that could disrupt their operations, ranging from natural disasters such as hurricanes and floods to outbreaks of illness such as the flu. The Ready Rating Program can help them feel more confident about the safety of their employees or students.

"Emergencies can strike without warning and unfortunately, we have many real-life examples from just the past few weeks that remind us of the importance of being prepared – whether it is flooding along the Mississippi River, or the record number of tornadoes that devastated Alabama and other communities throughout the South." said Gail McGovern, president & CEO of the Red Cross. "Studies show that between 15 percent to 40 percent of businesses fail following a natural or man-made disaster, so Ready Rating can help save lives as well as livelihoods when disaster strikes."

Ready Rating begins with a comprehensive assessment of whether a business or organization is prepared to handle a disaster. Members score themselves on how prepared they are and receive steps they can take to improve their readiness planning. The assessment covers items from hazard vulnerability to continuity of operations and employee readiness. Ready Rating is also consistent with Private Sector or PS-Prep Standards developed by the Department of Homeland Security.

The program began with a successful pilot in nine cities with a \$2.1 million grant from Anheuser-Busch. Sam's Club is now supporting Ready Rating™ by providing \$500,000 to help bring the program to additional cities. The program has been revised with an enhanced website that can be used across the country by schools, businesses and other organizations.

"Anheuser-Busch has a long history of partnering with the American Red Cross to support disaster relief," said Margarita Flores, vice president of Community Affairs at Anheuser-Busch. "We are proud to be the national founding sponsor of the Ready Rating Program and believe preparedness is key in keeping our communities safe by providing this important resource to schools and businesses."

"Sam's Club serves nearly 600,000 small business owners daily throughout the nation, and we see firsthand the devastating impact a natural disaster or other unplanned event can have on their operations," said Mike Turner, senior vice president, Membership. "We are

pleased to be able to support the Red Cross in their efforts to help small businesses better prepare so their families and customers can continue to rely on them in the event of a crisis."

Ready Rating also encourages businesses and schools to work with their employees, students and families to get prepared at home. A 2009 Red Cross survey showed that 51 percent of Americans have experienced at least one emergency situation where they lost utilities for at least three days, had to evacuate, could not return home or communicate with family members. Although 89 percent of those surveyed believe it is important to be prepared for emergencies, far fewer are actually taking the steps necessary to prepare.

Ready Rating is designed for those who are in the beginning stages of planning for emergencies as well as those who have already done so and want confirmation on their preparedness level. It will give these groups ideas of what they can do to better prepare themselves for the next emergency or disaster.

"Having prepared, trained responders is just one part of making sure a community is ready to handle an emergency," McGovern said. "Some disasters are so large that the government and the Red Cross can't do it all, and businesses, schools, houses of worship and citizens must be ready to take care of themselves and their neighbors."

More information about this new preparedness program for schools and businesses can be found at www.ReadyRating.org.

This research was conducted online within the United States by Harris Interactive on behalf of the American Red Cross between July 24 and August 7, 2009 among 1306 U.S. residents aged 18 or older, including an oversample of 487 mothers of children under 18 weighted appropriately into the general population sample. No estimates of theoretical sampling error can be calculated; a full methodology is available.

From:

<http://www.redcross.org/portal/site/en/menuitem.94aae335470e233f6cf911df43181aa0/?vgnextoid=88da7178560ef210VgnVCM10000089f0870aRCRD&vgnnextchannel=00a00628b1cde110VgnVCM10000089f0870aRCRD>
American Red Cross, National Headquarters, 2025 E Street, N.W., Washington, DC 20006
www.redcross.org ♦

DISASTER PLANNING FOR SENIORS

Seniors should plan ahead to be ready for disasters

Release Date: October 7, 2011

Release Number: 4020-077

[» En Español](#)

ALBANY, N.Y. -- Senior citizens, especially those with medical issues and limited mobility, can be vulner-

able in the event of a disaster. But even if you have physical limitations, you can still protect yourself by having a personal disaster plan in place.

Local, state and federal officials are urging all Americans, especially senior citizens, to review, update and rehearse their disaster plans. By looking ahead, seniors can be prepared for any disaster, natural or manmade. Senior citizens living in a group setting such as a nursing home or adult living facility should contact the administrator to learn about the specific disaster/evacuation plan for that facility.

But no matter where you are evacuating from, all seniors need to be aware of their own unique needs. By evaluating your own personal and medical needs and making an emergency plan, seniors can be better prepared for any situation no matter where they live.

There are three simple steps to disaster preparation: Make a kit, plan ahead and stay informed.

Make an emergency kit or 'Go Bag'

Your Disaster Emergency Kit should include the following supplies to last **at least** three days:

Water – at least one gallon per day per person for drinking and sanitation

- Food and utensils – foods that do not need to be cooked and will not spoil are ideal
- Blankets and extra clothing
- First Aid kit – include medical insurance and Medicaid cards
- Battery powered AM/FM radio and/or a NOAA weather radio receiver
- Flashlight and extra batteries
- Prescription medicines – these should be rotated frequently and kept up to date
- Medical supplies –an extra pair of glasses, hearing aid batteries, or other medical devices
- Emergency contact list – information about family, friends and emergency numbers
- Extra cash – access to banks may be limited for a time.

Make a disaster plan

- If you are a senior who lives alone, talk to your family or friends about preparing for emergencies, getting help in the event of an evacuation and dealing with the aftermath of a disaster. Create a network of neighbors, relatives, friends and co-workers who can help in an emergency. Discuss needs and make sure everyone knows how to operate necessary medical equipment.
- If you live in an assisted living facility or nursing home, you should contact the administrator to learn about the disaster plan for that facility.
- Be aware of the possibility that you may temporarily not have access to your doctor's office or a drug store.

- Arrange for electronic payments of federal benefits. A disaster can disrupt mail service for days or even weeks. Switching to electronic payments also eliminates the risk of stolen checks. The U.S. Department of the Treasury recommends two safer ways to get federal benefits:
- Direct deposit to a checking or savings account is the best option for people with bank accounts. Federal benefit recipients can sign up by calling (800) 333-1795 or at www.godirect.org/.
- The Direct Express® prepaid debit card is designed as a safe and easy alternative to paper checks for people who don't have a bank account. Sign up is easy – call toll-free at (877) 212-9991 or sign up online at www.usdirectexpress.com/edcfdtclient/index.html
- Disaster assistance grants are not considered taxable income and will not affect eligibility for Social Security, Medicaid, welfare assistance, food stamps, Supplemental Security Income (SSI) or Aid to Families with Dependent Children.

Stay informed

Learn about what kinds of disasters, both natural and man-made, are most likely to occur in your area and how you will be notified. Find out if your area will be served by emergency radio and TV broadcasts. Other emergency alert methods might include a special siren, a telephone call or a visit from emergency workers. In addition, learn about the emergency plans that have been established in your area by your state and local government.

From:

<http://www.fema.gov/news/newsrelease.fema?id=58621>

Disasters can severely impact the elderly

Release Date: July 13, 2011

Release Number: 1983-046

Seniors previously living on their own may find they have to depend on others for food, shelter and the necessities of daily living. Those used to assisted living may face upheaval in their normal routines or a change in their usual caregivers.

Add to that the stress of the disaster itself, and the elderly may be facing very difficult times.

"As we move forward from these devastating disasters, we need to be sensitive to the needs of our seniors," said Danny George, director for the Mississippi Department of Human Services, Division of Aging & Adult Services.

"The most important thing we can do to help the elderly is to let them know they are not alone and connect them with available services to help through these difficult times," said George.

Symptoms of stress unique to the elderly include:

- Reliving events in their lives when they were traumatized or suffered severe losses.
- Fear of losing their independence.
- Worry about limited financial resources and time to rebuild.
- Fear of being put in an institution.
- Fear of a decline in health and limitations on mobility and ability to rebuild.
- Withdrawal and isolation from family and friends.

When working with older adults after a disaster, it is important to:

- Provide consistent verbal reassurance.
- Assist them in recovering their physical possessions.
- Return them to familiar surroundings with friends and acquaintances as soon as possible.
- Make sure they have needed medical and financial assistance.
- Help them re-establish social networks.
- Monitor their nutritional and medication needs.

To learn more about local programs and services for seniors, call 1-800-948-3090. FEMA will assist anyone with a disability who needs help -- just ask. Call the FEMA Helpline at 800-621-FEMA (3362) or TTY 800-462-7585. ♦

FEMA—Lots of small change, no credit

It ain't easy being FEMA. The Federal Emergency Management Agency has had more than its share of the limelight lately, thanks to a rash of federally declared disasters converging with political posturing over budget cuts. Much less attention has been paid to the agency's recent headway in building a more disaster resilient nation.

Last month (September), FEMA announced two major accomplishments: the release of the first edition of the National Preparedness Goal and of the final National Disaster Recovery Framework. The two documents are first steps in fulfilling this March's Presidential Policy Directive 8, which is meant to identify a system that will strengthen national preparedness overall.

While the preparedness goal outlines "core capabilities" needed to prevent, respond to, and recover from disaster, the recovery framework defines processes by which federal actors and local governments and organizations can work together to rebuild communities after disaster strikes.

The long-awaited recovery framework addresses longstanding complaints that FEMA assistance doesn't consider local needs, doling out aid with a clumsy bureaucratic hand wrapped in red tape.

"If I add up all the phone calls and all the work I've had to do with all the agencies of government, FEMA has caused more problems than all the rest put together," said outspoken FEMA critic Rep. Ron Paul (R-Tx) recently on NPR. "And most of the time it's the fact that when FEMA

comes in and there's a disaster they interfere with the local people. The local people, the landowners can't do what they want."

The recovery framework will hopefully counter that perception by laying the groundwork for more collaboration. It's designed to unify various groups—from FEMA responders down to neighborhood churches—as they attempt to create jobs, reopen schools, restock businesses, and accomplish the many other tasks of starting over after a disaster.

At the heart of the recovery framework, which syncs with the National Response Framework, are nine core recovery principles: individual and family empowerment, local primacy, pre-disaster recovery planning, partnerships and inclusiveness, public information, unified efforts, timeliness and flexibility, resilience, and emotional and psychological recovery.

"The National Disaster Recovery Framework recognizes that local, state, tribal and territorial governments have primary responsibility for the recovery of their communities," writes Elizabeth Zimmerman, FEMA deputy associate administrator for response and recovery, on the White House Blog. "It identifies core principles to ensure all community members have equal opportunities to participate in recovery efforts in a meaningful way."

But for those still dissatisfied with the rate of progress—and presidential commitments —there's always Stafford Act reform.

Reform legislation was introduced by Senators Mary Landrieu (D-La.) and Thad Cochran (R-Miss.) on September 23—the same day the National Disaster Recovery Framework was released.

According to a Landrieu press release, the bill creates state and local incentives to adopt and enforce building codes, allows for pre-negotiated response contracts, streamlines regulations to start recovery projects more quickly, addresses children's disaster needs, encourages the use of local businesses in recovery, and establishes a credentialing requirement for FEMA employees.

"I have witnessed numerous systemic failures, misguided policies and squandered opportunities in the way we go about facilitating community recovery after a disaster," Landrieu stated. "This legislation would ensure the federal government has the right tools in its toolbox to help communities recover from disasters in a smarter and more efficient way."

Landrieu praised the recovery framework, according to the Times-Picayune, but sees the reform legislation as much further reaching. Some, however, stand by the agency and the president's path to reform.

"There needs to be changes in the system," Jack Har- rald, former chairman of the National Academies Disas- ters Roundtable, told the Shreveport Times in reference to the work being done under PPD-8. "Those changes are slowly being made."

From: Disaster Research 575, Oct. 6, 2011 ♦

RESEARCH TOOLS

Tsunami computational portal

<https://tsunamiportal.arsc.edu/>

The portal is a shared resource and discussion forum for members of the tsunami research community. It maintains community models of tsunami behavior, which draw input from a geospatial database describing coastal bathymetry and topography. An archive of model results and the companion visualization tool make it possible to compare the effects of different methods for modeling tsunami generation, propagation, and runup.

Web-based support for tsunami modeling

High-quality tsunami simulation and prediction models exist, but are hard to locate and understand. They are in the hands of individual researchers located at various institutions throughout the world. To obtain critical predictive information (e.g., wave height and propagation estimates, run up effects), each model must be run with particular input data (specific coastline and underwater geography, historical water levels, tidal patterns, etc.).

While much of the data is available online, it must be located and gathered from a variety of agencies, then converted to the appropriate formats for each model.

Further, the computing resources for executing the models are scattered, with computer architecture, system availability, and access varying from one location to another. Expert computing knowledge is required to install the models, expert geographic information knowledge is required to convert and properly align the input data, and expert tsunami knowledge is required to accurately interpret simulation results. The Tsunami Computational Portal (TCP) provides a collaborative forum where these areas of expertise come together in support of tsunami research and mitigation.

The TCP is being developed jointly by two institutions: University of Alaska Fairbanks: [Arctic Region Supercomputing Center](#) and [Geophysical Institute](#) Oregon State University: [Northwest Alliance for Computational Science and Engineering](#) and [Department of Civil, Construction & Environmental Engineering](#) with [contributions of models and geospatial data](#) from the greater community. Development of the TCP is funded by the Federal government through [NOAA](#).

More info on...

[The destructive force of tsunamis](#)

[How the Tsunami Computational Portal will help](#)

[How the Portal works](#)

[Development team](#)

Tsunami reconnaissance data repository

http://ioc3.unesco.org/itic/files/tsun_rec_archive.onepage.pdf

Tsunami reconnaissance data repository

This website has information collected by survey teams immediately after the Indian Ocean tsunami of Dec. 26, 2004. The official name is the George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES) Tsunami Reconnaissance Data Repository. ♦

NEWS

FEMA's app now available in iTunes Store

The FEMA app for preparing and recovering from hurricanes and other disasters is now available for your iPhone, iPad, and iPod touch...check it out in the iTunes store (<http://www.apple.com/itunes/whats-on>) today! A few of the available services through the app include the ability to:

- Receive text messages from FEMA
- View a map of shelters and disaster recovery centers across the U.S.
- Utilize an interactive emergency kit checklist
- Plan emergency meeting locations
- Plan for how to stay safe during and after a disaster

If you're an Android user, the app is available in the Android Market too (<https://market.android.com/?hl=en>). Download it today!

Congressional Research Service weighs in on social media

The Federal Emergency Management Agency's relationship with social media seems destined to be like your granny and Facebook—she might set up an account, but she's not going to use it right and all the while she'll be certain it's going to crash her computer and steal her identity.

That, at least, is the tentative and curmudgeonly gist of a recently released Congressional Research Service report titled *Social Media and Disasters: Current Uses, Future Options, and Policy Considerations* (<http://www.fas.org/sgp/crs/homesec/R41987.pdf>). The report was created in response to congressional curiosity about “whether FEMA can move beyond using social media for informational purposes and apply it to improving disaster response and recovery capabilities.” The answer is decidedly Magic 8 Ball-like: “Reply hazy, try again.”

The report examines two types of social media use by local and international emergency management agencies. It differentiates “passive” dissemination from a more “systematic” approach that might include issuing official communiqués and warnings, receiving requests for assistance, and monitoring the public's posts to enhance situational awareness.

“Many of these applications remain speculative, while others uses remain in their infancy,” author Bruce R. Lindsay writes. “Consequently, most emergency management organizations have confined their use of social media to the dissemination of information.”

Although the report points out a variety of promising ways FEMA might use social media (creating maps and damage estimates from user-submitted data, delivering targeted recovery assistance, and mobilizing first responders), it concludes with warnings about socially driven misinformation, use of media to mislead officials, and technological limits.

Add the uncertainty about the costs of administering the largely “free” technologies, and the report reaches this conclusion:

“It could be argued that the positive results of social media witnessed thus far have been largely anecdotal and that the use of social media is insufficiently developed to draw reliable conclusions on the matter. By this measure, it should therefore be further examined and researched before being adopted and used for emergencies and disasters.” In an area where not only advances, but also adoption, are lightning fast, the wait-and-see approach might be a tad behind the times.

For instance, the CRS report comes on the heels of a Red Cross survey (<http://www.redcross.org/www-files/Documents/pdf/SocialMediaInDisasters.pdf>) looking at how people used social media during disasters. Not only did the 2,057-person survey indicated that social media sources rank just below television and radio as an emergency information source, it also found that 80 percent of the people thought national emergency responders should monitor social media feeds and respond promptly.

“Social media is becoming an integral part of disaster response,” Wendy Harman, American Red Cross director of social strategy, stated in a press release. “During the record-breaking 2011 spring storm season, people across American alerted the Red Cross to their needs via Facebook. We also used Twitter to connect to thousands of people seeking comfort, and safety information to help get them through the darkest hours of storms.”

Queensland police took a similar tack during historic 2010-2011 flooding. Their take-home from the experience (which was reported on in DR 572 - <http://www.colorado.edu/hazards/dr/archives/dr572.html>) was emergency agencies should not only use social media vigorously, they shouldn't hobble its use with policy and protocols. (See also page 3, this issue).

The CRS report also comes at a time of unprecedented social media adoption by FEMA at the hands of Craig Fugate, who is known to practice what he tweets. His message, given at a May 5, 2011, Subcommittee on Disaster Recovery and Intergovernmental Affairs hearing (http://www.dhs.gov/ynews/testimony/testimony_130453264361.shtm), is that if you want to reach the people, you've got to speak their language.

“Social media is imperative to emergency management because the public uses these communication tools regularly,” he wrote. “Rather than trying to convince the public to adjust to the way we at FEMA communicate, we must adapt to the way the public communicates by leveraging the tools that people use on a daily basis. We must use social media tools to more fully engage the public as a critical partner in our efforts.”

From: Disaster Research 574, 9-22-11

Jim Mullen on the importance of funding for earthquake and tsunami hazard mitigation

In an article for the *Seattle Times*, Jim Mullen, Director of the Washington State Emergency Management Division and President of the National Emergency Management Association, stresses the importance of funding programs that will mitigate against and prepare citizens for future earthquake and tsunami events.

To read the full article:

http://seattletimes.nwsources.com/html/opinion/201453872_0_guest21mullen.html?prmid=op_ed

From: WSSPC E-Newsletter, Summer 2011, p. 7.

Spain has a high tsunami risk

Experts consider Spain to be at high risk of tsunami. There is however, no emergency protocol or tsunami warning system in place.

An international meeting of 80 representatives from over 40 countries held last week in Santander revealed that if an earthquake like the one that struck Cadiz in 1755 (of magnitude 9 and triggered a tsunami that killed 15,000 people) would occur again today, the death toll would be similar to that of the tsunami in Indonesia in 2004 (300,000 deaths and 1,500,000 homeless).

The Mediterranean areas most at risk include Malaga, Granada, Almeria, Murcia and the Balearic Islands. If a tsunami would form in the north of Algeria, it would take less than 30 minutes for most of the Costa del Sol to be affected by the waves.

Recent studies show that Almeria, Murcia and many localities in the Balearic Islands, would be flooded with a tsunami of only 3 meters.

From: <http://www.spanishnews.es/2011/11/28-spain-high-tsunami-risk/id=3684/> (Nov. 28, 2011)

Tsunami detection buoy installed 350 kilometers south of Bali

Following a breakdown in 2007 linked to equipment failure, *The Agency For The Assessment And Application Of Technology (BPPT)* in cooperation with the government of Australia, has re-launched a tsunami



detector in the seas south of Bali. In a ceremony held on board the *MV Baruna Jaya IV* at Bali's port of Benoa on Wednesday, November 23, 2011, the tsunami detector was rechristened before its eventual installation in the ocean some 350 kilometers south of the island.

From:

<http://www.balidiscovery.com/messages/message.asp?ID=7637> (11/27/2011)

Tsunami debris threatens Midway's unique sanctuary

Updated November 16, 2011 09:14:45

The debris from the Japanese tsunami continues its path across the northern Pacific towards Hawaii and the north American coast.

As it get closer preparations are being stepped up to try to mitigate any damage from debris that includes cars and trucks and building material.

For the last few days people have gathered at the School of Ocean and Earth Science and Technology at the University of Hawaii, Manoa to learn the latest about debris' movement and possible final destinations at a workshop.

From:

<http://www.radioaustralia.net.au/pacbeat/stories/201111/s3367652.htm>

A transcript as well as a link to an audio version are available at the URL above.

Australia prepares world-first tsunami warning system

Australian scientists are putting the finishing touches on a highly advanced tsunami warning system in a remote desert region north of Perth. Researchers say the array of sensors is the first in the world able to make predictions on where and when tsunamis may strike.

Full article:

<http://www.voanews.com/english/news/asia/Australia-Prepares-World-First-Tsunami-Warning-System-126654578.html>

The other disaster assistance - Public Assistance (FEMA)

Release Date: June 16, 2011

Release Number: 1973-061

» [En Español](#)

ATLANTA – When disaster strikes, the first reaction is to address personal and family safety issues, followed by a concern for material losses. There is a federal disaster program – Individual Assistance – that responds to the urgent needs of individuals and business owners. There is another equally important element of disaster recovery that is not so widely known – Public Assistance (PA).

The PA program, administered by the Federal Emergency Management Agency (FEMA), is a form of assistance that addresses an entire community but usually not

in the immediate and direct way that individual assistance programs do.

FEMA's PA benefits everyone—neighborhoods, cities and states. PA dollars clean up the community, repair bridges, put water systems and utilities back in order, rebuild libraries and replace damaged books, repair hospitals and emergency services, rebuild schools and universities, and restore damaged public parks so that families can enjoy them again.

“FEMA Public Assistance dollars come to the community through a partnership of cost-sharing between the state, local authorities and the federal government,” says FEMA's Federal Coordinating Officer Gracia Szczech. “FEMA picks up 75 % of the eligible cost of putting a community back on its feet, and in Georgia, the state funds 10 % and the applicant is responsible for the remaining 15 %.”

Types of entities that may be eligible for Public Assistance include:

- State government agencies;
- Local and county governments;
- Private nonprofit organizations that own or operate facilities that provide essential government-type services

PA grants are available to cover costs in seven work categories:

- Category A: debris removal
- Category B: emergency protective measures
- Category C: road systems and bridges
- Category D: water control facilities
- Category E: public buildings, contents and equipment
- Category F: utilities
- Category G: parks and recreational

From:

<http://www.fema.gov/news/newsrelease.fema?id=55959>

PUBLICATIONS

Natural Hazards Observer

The November 2011 issue is now available online: <http://www.colorado.edu/hazards/o/archives/2011/nov11/observerweb.pdf>. This issue includes an in-depth article on the Disaster Mitigation Act of 2000 and an article about tsunami risk reduction (“Small is beautiful”). Both are highly recommended.

Back issues can be found at <http://www.colorado.edu/hazards/o/>

Proceedings of the Third Session of the Global Platform for Disaster Risk Reduction

<http://www.preventionweb.net/globalplatform/2011/documents/GP2011-Proceedings.pdf>

The UN International Strategy for Disaster Reduction has released the proceedings of its most recent Global Platform meeting. While *Disaster Research* was able to give you a glimpse of what happened in May, the proceedings give a full account of the sessions, roundtables, and events of the platform, which is held every two years in Geneva, Switzerland. Charters, statements, and other ancillary materials are also included.

From: *Disaster Research* 575, Oct. 6, 2011

Managing spontaneous community volunteers in disasters: A field manual

By Lisa Orloff. 2011, 323 p., ISBN 978-1-4398-1833-6. CRC Press, \$80 hardcover.

It's a given that in most disasters the first responders are those already on the scene who have survived the initial onslaught. And it's also a given that people come out to volunteer spontaneously for a considerable time, not just immediately following the first shock. Isa Orloff writes, "After the 1995 earthquake in Kobe, Japan, when communication lines were down and backup facilities lost, massive spontaneous aid emerged in the form of an estimated 630,000 to 1.3 million volunteers."

But all this manpower is not of a uniform benefit. It has to be managed carefully. For instance, speaking at the 2011 Natural Hazards Workshop in July, Claude de Ville de Goyet of the World Health Organization said after the 2010 Haiti earthquake, some teams and field hospitals that arrived to assist were not meeting minimal professional or ethical standards. Small under-equipped and underfunded teams were a major burden for the coordination system. Foreign individuals who offered their medical services were a particular burden, de Ville said.

"You had everything from the highest quality to the charlatan," he said. "You have a lot of volunteers come in with nothing to offer but good will." People with few skills and no knowledge of the language were a major burden for the recovery. "They were useless," he said.

This book is a process-oriented manual for dealing with volunteers. Chapter six, for instance, discusses setting up a walk-in volunteer reception center to "incorporate all types of volunteers into disaster response initiatives." Orloff outlines it in detail, from the main entrance and the floor plan to the copy machine.

There's also the obligatory chapter on social media in disasters, and its use in organizing volunteers. Finally there are also several short case studies in a chapter toward the end of the book. In the case study on Haiti, Orloff also finds disappointments, although they are different from the ones de Ville found. "It became clear that the standards and expectations of local leaders by the international humanitarian sector did not take their needs and constraints into consideration," Orloff writes. "The agency in charge of the meeting only said a few words of warning about security and informed the group of community leaders that they would have to devise logistics

plans to distribute food in a safe and fair manner. Most local leaders left the meeting very discouraged, as little to no training was given, nor was there a blueprint for how to proceed, and they had no prior experience with mass food distribution before the earthquake."

From: *Natural Hazards Observer*, v. 36, no. 2, p. 18-19.

Community Emergency Response Team (CERT) Basic Training Course

The Community Emergency Response Team Program at FEMA is pleased to announce a Spanish-language version of the Community Emergency Response Team (CERT) Basic Training Course materials is now available for use. Designed to extend CERT's reach into our nation's Spanish-speaking population, these CERT publications will allow easier and more effective delivery of the basic training course.

Providing the same content as the English version, the Spanish-language Basic Training Course materials cover nine units highlighting topics such as Disaster Preparedness, Fire Safety, Terrorism and CERT, Disaster Medical Operations, and Light Search and Rescue Operations.

Available Spanish-language materials include the Instructor Guide, Participant Manual, and PowerPoint Slide Deck. For more information, please visit the national CERT website (<http://www.citizencorps.gov/cert/index.shtm>) or contact CERT via email (cert@dhs.gov) for any questions.

From: National CERT Program, FEMA Individual & Community Preparedness Division

WEBSITES

<http://myhazards.calema.ca.gov/>

My Hazards

Think California hazards and chances are you think earthquake. In actuality, there are plenty of more prevalent hazards to be had in the Golden State. Now residents will know just which ones lurk in their neighborhoods, thanks to the California Emergency Management Agency's My Hazards Web site. Californians can enter their address and instantly learn what risk they run of encountering flood, fire, tsunami, and yes, even earthquakes. Each report gives users a checklist with recommended disaster mitigation actions for the hazards they face.

From: *Disaster Research* 577, Nov. 3, 2011

<http://www.childrenoftsunami.info/>

Children of Tsunami

The Children of Tsunami website is a multimedia project that tracks Asia's recovery from the 2004 Indian Ocean tsunami disaster through the experiences of eight children and families in India, Indonesia, Sri Lanka, and

Thailand. It personalizes the tsunami threat and consequences in other parts of the world by providing at-risk populations the ability to watch real people recover from a tsunami disaster.

<http://www.ready.gov/america/getakit/indiancountry.html>

Ready Indian Country

There's even more ready going on, and this time it's targeted at tribally governed areas. Ready Indian Country is the latest addition to the Ready.gov family of preparedness tools. The new site offers information and resources for tribes throughout the country, including tribally-tailored emergency supply kits, family emergency plans, and emergency response plans.

From: Disaster Research 574, Sep. 22, 2011

<http://www.unisdr.org/2011/iddr/>

Step up for disaster risk reduction

Each year the United Nations International Strategy for Disaster Reduction sets aside a day to increase awareness about how we can reduce risk. This year, October 13 will be time for the world's kids to step up to the challenge of the International Day for Disaster Risk Reduction. The Step Up Web site gives lots of information on how you can involve kids, including the Children's Charter, multilingual downloads, and ideas for ramping up excitement before the event.

From: Disaster Research 574, Sep. 22, 2011

<http://www.google.org/crisisresponse/prepared.html>

Google crisis response

Busy crisis managers that want to jump on the technology train will welcome the Google Crisis Response Web site. Cobbled together in the wake of last month's East Coast earthquake-hurricane doubleheader, this site has a wealth of resources in one place. From document sharing to mapping to emergency plan templates, Google Crisis Response is your go-to place on the go.

From: Disaster Research 574, Sep. 22, 2011

<http://www.disasterbookstore.com/store/category/BOOKS-sponsored-by-PERI/1>

DisasterBookstore.com

If you're mourning the loss of all those great books that went away when the Public Entity Risk Institute reorganized, don't shed another tear.

DisasterBookstore.com just opened, so you may experience some hiccups, but be patient and you'll soon be ordering from PERI's wide-ranging collection of disaster risk tomes.

From: Disaster Research 575, Oct. 6, 2011

<http://www.ready.ga.gov/mobileapp>

Ready Georgia mobile app

You can have preparedness in your pocket with the Ready Georgia mobile app. Whether on iPhone or

Android, you can get real-time alerts, information on how to prepare for impending threats, and data on past disasters. Got some downtime in the disaster department? The app also lets you make a preparedness plan or create a supply checklist. Sure, this app is for Georgia, but check it out so you can beg your state to create one like it.

<http://www.fema.gov/library/viewRecord.do?id=4859>

Local mitigation plan review guide

An ounce of prevention may be worth a pound of cure, but not if executed poorly. That's why the Federal Emergency Management Agency has just issued this guide to help state and federal officials better assess local mitigation plans. The guide is designed to make sure plans are evaluated consistently and meet Stafford Act requirements. Principles and procedures for conducting reviews, a regulation checklist, and a review tool are included.

From: Disaster Research 576, Oct. 20, 2011

[http://alerts.skytruth.org/?utm_source=Reporters+Covering+Oil+Spill+\(From+Waterkeepers\)&utm_campaign=342e3bf239-Alerts_Press_Release10_12_2011&utm_medium=email](http://alerts.skytruth.org/?utm_source=Reporters+Covering+Oil+Spill+(From+Waterkeepers)&utm_campaign=342e3bf239-Alerts_Press_Release10_12_2011&utm_medium=email)

SkyTruth environmental incident alerts

When it comes to tracking the scores of environmental incidents taking place around the globe, SkyTruth aims to be your eye in the sky. From ammonia leaks to oil spills, the nonprofit environmental group sifts information from a number of sources (including their own investigations) and delivers the who, what, and where of each recent incident to you in map form. The newly launched site is limited to U.S. incidents, but promises to go global soon.

From: Disaster Research 576, Oct. 20, 2011

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

NOAA's Digital Coast

Coastal management is a lot less complicated thanks to this constantly evolving Web site offered by the National Oceanic and Atmospheric Administration's Coastal Services Center. With data, tools, and training contributed by a wide range of partners, Digital Coast packs a whole lot of coastal knowledge in a simple, easy-to-navigate Web site. Everybody from planners to neighborhood organizations should stop by and save their coast today.

From: Disaster Research 576, Oct. 20, 2011

<http://www.emforum.org/CEUs.htm>

EMForum.org Continuing Education Credit Program

If you're a fan of the excellent webinars hosted by the Emergency Management Forum, you'll be excited to learn you can now earn continuing education credit from Jacksonville State University just for tuning in. EMForum and the JSU Institute for Emergency Preparedness have partnered to offer the credit on a trial basis until September 30, 2012. Participants earn one Continuing Education Unit for every 10 hours of EMForum webinars attended.

Only webinars attended after you register count toward credit, so sign up today.

From: Disaster Research 578, Nov. 17, 2011

<http://www.fema.gov/thinktank/>
FEMA Think Tank

The Federal Emergency Management Agency wants to know what you're thinking—yes, you! FEMA has just created a platform where everyone from your granny to your governor can weigh in on ways to improve the emergency management system. Those with an opinion can discuss ideas on the Think Tank message board, or take it a step further by joining Deputy Administrator Richard Serino in a monthly conference call about message board topics.

From: Disaster Research 578, Nov. 17, 2011

<http://www.embrace-eu.org/>
emBRACE

This recently launched, four-year project will use five case studies to develop a conceptual and methodological approach to measuring disaster resilience. The Web site highlights the project case studies, methodology, and consortium aims—including collaboration with risk managers, emergency practitioners, and those affected by disaster. Go to the [mailing list](#) if you'd like to contribute.

From: Disaster Research 578, Nov. 17, 2011

<http://jurisprudenceofdisasters.org/>
The Jurisprudence of Disasters

Those interested in the intersection of law and disaster will find new connections at the Jurisprudence of Disasters, which networks scholars and professionals from different disciplines. Originating from a recent workshop on disasters and sociolegal studies, the group focuses on how law and legal institutions both contribute to and prevent disasters. Members can participate in discussions, help develop panels and course syllabi, and share information.

From: Disaster Research 578, Nov. 17, 2011

CONFERENCES/SYMPOSIA

October 19-21, 2011

Canadian Risk and Hazards Network Symposium
University of Ottawa, Ottawa, Canada

This conference will focus on community resilience in populated urban areas and First Nations communities. Topics include decision support for risk based planning, mobility in emergency evacuations, hazard vulnerability mapping, and public engagement strategies.

From: Disaster Research 574, Sep. 22, 2011

February 7-9, 2012

National Evacuation Conference
Stephenson Disaster Management Institute and the Gulf

Coast Research Center for Evacuation and Transportation Resiliency; New Orleans, Louisiana. Cost and Registration: \$375 before October 31, open until filled.

This conference focuses on strategies to improve evacuation planning. Participants will choose from sessions in the following six tracks: carless and vulnerable populations, evacuation modeling, communication and behavior, policy, animals, and nuclear power plants.

Topics include women, Latino, and immigrant populations, regional modeling, communicating risk, the federal role in evacuation, and the impact of animals on evacuation management.

CLASSES/EXHIBITS

December 7, 2011

Earthquake recovery and mitigation webinars

Cascadia Region Earthquake Workgroup (CREW) will host a webcast series on earthquake recovery and mitigation over the next year. Jay Wilson, Hazard Mitigation Coordinator for Clackamas County, Oregon, will kick off the series on December 7, 2011 from 10:00 to 11:00 AM PST with the following presentation: Magnitude 9.0 paradigm shift: Post-disaster reconnaissance of Tohoku, Japan.

This presentation will highlight the catastrophic impacts from a M 9.0 earthquake and tsunami to coastal areas of NE Japan. Discussion will address the loss of emergency and other government functions and observations from the perspective of a local emergency manager from Oregon.

Please register here:

<https://crewevents.webex.com/crewevents/onstage/g.php?d=663367971&t=a>

Once you are registered, an automated email providing web address and call-in information for the webcast will be sent to you. Presentation materials will be readily available during the presentation. The presentation is limited to 100 participants only. For questions or additional information regarding this webinar, please contact CREW Administrator, Heidi Kandathil, hkandathil@crew.org or 206.790.0923. ♦

State Offices and agencies of emergency management:

Gives mailing addresses, phone and fax numbers, websites. Does not give personnel names or job titles.

<http://www.fema.gov/about/contact/statedr.shtml>

Material added to the NTHMP Library

November - December 2011

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.

Breaker, L. C.; Murty, T. S.; Carroll, D.; Teague, W. J., 2011, The response of Monterey Bay to the great Tohoku earthquake of 2011: *Science of Tsunami Hazards*, v. 30, no. 3, p. 153-162.

Cecioni, C.; Romano, A.; Bellotti, G.; Risio, M.; de Girolamo, P., 2011, Real-time inversion of tsunamis generated by landslides: *Natural Hazards and Earth System Sciences*, v. 11, no. 8, p. 2511-2520.

Fernandez-Nieto, E.; Mangeney, A.; Singh, S. C.; Chauhan, A.; Bouchut, F.; Castro Diaz, M., 2010, Numerical modelling of potential submarine landslides and generated tsunami in Sumatra [abstract]: *Eos (American Geophysical Union Transactions)*, 2010 Fall Meeting, OS13E-1301, online.

Furumura, T.; Imai, K.; Maeda, T., 2010, Tsunami simulation for the great 1707 Hiei, Japan, earthquake [abstract]: *Eos (American Geophysical Union Transactions)*, 2010 Fall Meeting, S21C-2045, online.

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Griggs, Gary B., 2011, The first ocean floor evidence of great Cascadia earthquakes: *Eos (American Geophysical Union Transactions)*, v. 92, no 39, p. 325-326.

Hamlington, B. D.; Leben, R. R.; Godin, O. A.; Legeais, J. F.; Gica, E.; Titov, V. V., 2011, Detection of the 2010 Chilean tsunami using satellite altimetry: *Natural Hazards and Earth System Sciences*, v. 11, no. 8, p. 2391-2406.

Harbitz, C. B.; Sverdrup-Thygeson, K.; Kaiser, G.; Swamy, R.; Gruenburger, L.; Glimsdal, S.; Lovholt, F.; McAdoo, B. G.; Frauenfelder, R., 2010, Hindcast of the 2009 South Pacific tsunami--Validation of GIS methodologies for local vulnerability and risk assessment in American Samoa [abstract]: *Eos (American Geophysical Union Transactions)*, 2010 Fall Meeting, NH12A-08, online.

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Kaiser, G.; Scheele, L.; Kortenhaus, A.; Lovholt, F.; Romer, H.; Leschka, S., 2011, The influence of land cover roughness on the results of high resolution tsunami inundation modeling: *Natural Hazards and Earth System Sciences*, v. 11, no. 8, p. 2521-2540.

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National Tsunami Hazard Mitigation Program (NTHMP) Partners:

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National Oceanic and Atmospheric Administration
(NOAA)

The United States Geological Survey (USGS)
Department of Homeland Security/Federal Emergency

Management Agency (DHS/FEMA)

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5-20-2011 ♦

INFREQUENTLY ASKED QUESTIONS

What is a near-field and a far-field tsunami?

A tsunami generated close to the shoreline is known as a “near-field” tsunami; a tsunami generated by a source far from the point of impact is referred to as a “far-field” tsunami. In general, it takes a large earth-quake (magnitude >7.0) to generate a damaging tsunami in the near-field and it takes a great earth-quake (magnitude >8.0) to generate a damaging tsunami in the far-field. Near-field tsunamis pose a greater risk for coastal communities because the first waves can move on shore in minutes. Far-field tsunamis will not reach the coast for hours, and allow time to issue warning and evacuation notices. In some intermediate cases, a tsunami could hit the coast less than an hour after an event at a moderate distance from the coast. In this latter case, the earthquake may not be felt strongly, so warnings and evacuation notices will be essential for an effective response. The implications for detection and disaster warning and response are different for near-field and far-field tsunamis.

From: Tsunami warning and preparedness—An assessment of the U.S. tsunami program and the nation’s preparedness efforts, by the National Research Council, 201, p. 4.

http://www.nap.edu/openbook.php?record_id=12628&page=R1

What two U.S. congressional acts were passed due to the 2004 Indian Ocean tsunami?

The Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami Relief, 2005 (P.L. 109-13) included \$24 million to improve tsunami warnings by expanding tsunami detection and earthquake monitoring capabilities.

In 2006, the Tsunami Warning and Education Act (P.L.109-424) directed the National Oceanic and Atmospheric Administration (NOAA) to strengthen the nation’s tsunami warning system, work with federal and state partners toward the mitigation of tsunami hazards, establish and maintain a tsunami research program, and assist with efforts to provide tsunami warnings and tsunami education overseas.

From: Tsunami warning and preparedness—An assessment of the U.S. tsunami program and the nation’s preparedness efforts, by the National Research Council, 201, p. 24.

http://www.nap.edu/openbook.php?record_id=12628&page=R1 ♦

VIDEO-CD-DVD RESERVATIONS

To reserve tsunami videos, CDs or DVDs, contact 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.

These programs are available to all NTHMP participants, with a 3-week loan period.

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.

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

Tsunamis: Know What to Do! (8 min. DVD)

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. ♦



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