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**Volume 9, Number 3 June 2007**

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Editorial Attitude

**“Researcher as disaster historian & practitioner as disaster janitor?”**

By Henry W. Fischer

*Unscheduled Events*, v. 26, no. 2, p. 11

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The old curmudgeon is still here giving you more *attitude!* What is on my mind today? I was sitting here thinking, “You know my three post-Katrina trips to the Gulf Coast last year really depressed me.” I haven’t been the same since. We had productive research, interviews, etc, but the totality of the event has shaken me to my core. Since my graduate school days I had believed, perhaps naively, if we just continue to do the research, publish the results, teach the findings, and so forth, we will turn the corner and make a difference.

I *want* to still believe. The problem is the lesson I learned in the field this time is not only do we relearn the same old “lessons” after every major disaster, we really don’t! I now fear research provides more historical record than change in applied outcomes and practitioners simply function as the janitors of disaster history—left to clean up afterwards as adequate resources and real authority (political power) to effect change eludes their grasp. The social structure guarantees this perpetual outcome.

The social construction of disaster outcomes derives from elitist domination, labeling and prioritization. For example, former first lady Barbara Bush blamed the victims in Katrina when she said of those evacuated to places like Houston “they’re getting a pretty good deal, they’re better off now than before.” Wow! And President George W. Bush, on his most recent trip to the Gulf Coast said, “we (federal government) write the checks, but it is the responsibility of state and local government to see that the money gets to the people who need it.” The President is not only blaming the victimized state and local governments, but is also providing an inaccurate portrayal of how the federal structure works. (Whether his inaccuracy is the result of being a misinformed President or a Machiavellian gambit, the socially constructed failed outcome is the same for the victims further down the socio-economic ladder). This is the same President who appointed a man as FEMA director who had absolutely no experience in emergency management. One would think that those in the USA might draw some inference from the President’s seriousness of purpose in so doing.

While large numbers of middle, working and lower class Katrina victims continue to be displaced, we observe examples of how the socially constructed post-Katrina recovery was able to be expedited for the more advantaged. Mississippi gambling casinos have returned bigger and better than before—perhaps Barbara Bush was partially correct, but had the wrong social class in the sights. Limited resources, builders, plumbers, electricians, etc, were diverted from rebuilding

*(continued on page 3)*

# *TsuInfo Alert*

is 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).

It is assembled by  
Lee Walkling, Librarian,  
and is published bi-monthly by the  
Washington Department of Natural Resources, Division of Geology and Earth Resources.

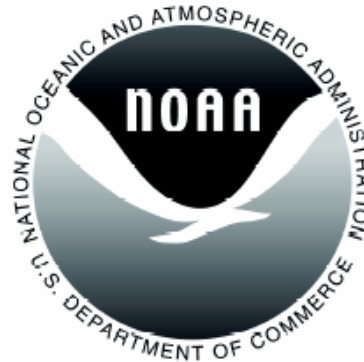
This publication is free upon request and is available in print (by surface mail),  
and at <http://www.dnr.wa.gov/geology/tsuinfo/index.html>.  
Participants in the TsuInfo program can request copies of reports listed in this issue from:

Washington Geology Library  
Washington Department of Natural Resources  
Division of Geology and Earth Resources  
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Olympia, WA 98504-7007  
360/902-1473  
fax: 360/902-1785  
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WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**  
Doug Sutherland - Commissioner of Public Lands



(continued from page 1)

housing for individual citizens and directed toward restoring such enterprises. The socially constructed recovery outcome was, somehow, able to function effectively for part of the socio-economic spectrum, but not the other. We observe everyday norms returning very quickly in the usual disproportionate manner conforming to how the social structure has been created. The Katrina recovery is certainly conforming to the normal power-elite's domination of limited wealth and power.

Meanwhile, many altruistic individuals and organizations continue to volunteer their time and resources in an attempt to fill the socially constructed void. Unfortunately, as noble and helpful as these efforts are, they are drops in the flooded waters that surged ashore or poured through the levees. No serious observer can claim that "putting the people first" is socially constructed into the post-Katrina recovery—or any disaster of even lower categories on the disaster scale.

A paradigm shift will be needed that results in the social reconstruction of disaster mitigation, planning, response and recovery. It is no accident that emergency management is only now in the 21<sup>st</sup> century attempting to become a profession. It had been socially constructed to be at the mercy of the power elite. It will be a very long time before it, if ever, becomes more than the janitorial service for the privileged. Perhaps disaster researchers can help foment the reconstruction and cease being mere disaster historians?

If you would like to respond this *Editorial Attitude*, send your comments to [hfscher@millersville.edu](mailto:hfscher@millersville.edu).  
[Editor's note: Send a cc to *TsuInfo Alert*, also]. ♦

See also: *Americans at Risk*, p. 7

### Was Bristol Channel hit by A tsunami?

*Science Daily, April 30, 2007* — On the occasion of the 400th anniversary of Britain's largest natural disaster, the author of *Tsunami: The Underrated Hazard*, reveals strong new evidence that the Bristol Channel was devastated by a tsunami on January 30, 1607. On that day, historical accounts describe a storm in the Bristol Channel, flooding more than 500 km<sup>2</sup> of lowland and killing 2,000 people.

"Despite the recent Indian Ocean tsunami of 2004, tsunamis along most coastlines are currently viewed as an underrated hazard," write Edward A. Bryant (University of Wollongong, New South Wales, Australia) and Simon K. Haslett (Bath Spa University, UK). "But an examination of the prehistoric record along many of these coasts gives conclusive evidence of depositional and erosional impact of tsunamis, in some cases of immense proportions."

They continue: "Our purpose here is only to present field evidence showing that Bristol Channel in the United Kingdom has been subject to tsunamis."

In a paper appearing in the May issue of *The Journal of Geology*, the researchers explore the area affected by the 1607 flood, extending from Barnstaple (Devon) and the Carmarthenshire coast to the head of the Severn Estuary at Gloucester. They use an established catalog of geomorphic features indicating the presence of tsunamis in coastal landscapes, such as sand layers, overlapping boulder deposits, cavitation, bedrock sculpturing, and landscape erosion.

Of these features, bedrock sculpturing and landscape erosion require the greatest water depth and are least subject to the contention that they may be the result of storm surges. Bedrock sculpturing by a tsunami requires a water depth of 10-60 meters (approximately 32-196 feet), while landscape erosion has been found only under the most extreme conditions.

The researchers found evidence in four locales of the sort of bedrock sculpturing linked elsewhere to tsunamis. In Infracombe on the northwest Exmoor coast, they found juxtaposed cliff-types -- cuestas and scarps -- and muschelbruche (scallop-shaped depressions) that reveal substantial unidirectional water flow from the west.

In Ogmere, in southeast Wales, the researchers found both rock and boulder "dumps" and shallow vortex pools with forms that indicate their formation was rapid, occurring in a matter of minutes. The researchers also found evidence of coastal erosion at Sully Island and Ball Rock, where the Bristol Channel decreases in width by 30 percent. According to the researchers, any tsunami traveling up the channel would have been constricted at this point and forced to increase in height dramatically.

"This article adds to recent evidence juxtaposing the geological and historic records," write Bryant and Haslett. "The fact that the signatures of tsunami are found in Bristol Channel up to the more sheltered Severn Estuary is surprising because the northwest European coast in general is not considered tsunami prone."

According to the authors, likely triggers for a tsunami in this region are an earthquake, an underwater landslide, or a combination of both. They point out that an active fault zone lies off the coast of Ireland and, indeed, second-hand reports mention a tremor felt on the morning of January 30, 1607.

Reference: Edward A. Bryant and Simon K. Haslett, "Catastrophic Wave Erosion, Bristol Channel, United Kingdom: Impact of Tsunami?" *The Journal of Geology*: 115, p. 253-269.

*Note: This story has been adapted from a news release issued by University of Chicago Press Journals.*

From:  
<http://www.sciencedaily.com/releases/2007/04/070430102012.htm>

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([www.sciencedaily.com](http://www.sciencedaily.com)) ♦

## NEWS

### **Aberdeen, WA is now TsunamiReady**

In mid-May, Aberdeen, Washington, became the 40<sup>th</sup> TsunamiReady site in the U.S. The National Weather Service presented the city council with "Tsunami Ready" and "Storm Ready" road signs.

Reacting to the catastrophic Indian Ocean tsunami, Aberdeen began a program of disaster preparedness, including hazard stickers on the Chehalis River Bridge and yellow stickers to mark evacuation routes.

Aberdeen joins Washington's other TsunamiReady sites: Clallam County, Pacific County, Quinault Indian Nation, Ocean Shores, and Long Beach.

For a full list of all TsunamiReady sites:  
[www.tsunamiready.noaa.gov/ts-communities.htm](http://www.tsunamiready.noaa.gov/ts-communities.htm)

### **Tsunami detector anchored in the Pacific**

A deep ocean tsunami detection buoy has been successfully anchored in the Pacific more than 1,000 kilometres south-east of Australia's island state of Tasmania.

The buoy is part of a multi-million dollar tsunami early warning system which is expected to be in operation by 2009.

Two buoys will ultimately be anchored near the Puysegur shelf, a quake-prone region near New Zealand.

Australian Bureau of Meteorology spokesman Ray Canterford says the buoy's satellite has begun transmitting valuable information.

"The data is now being fed into the National Oceanic and Atmospheric Administration in the US, and we're starting to see some of the first data come out so this is great news for us," Mr Canterford said.

From:

<http://www.radioaustralia.net.au/news/stories/s1903804.htm>  
(accessed 4-23-2007)

### **NZ's tsunami warning system 'inconsistent'**

By Angela Gregory

The New Zealand Herald, April 19, 2007

Reprinted with permission

Warning systems about possible tsunami heading to New Zealand are not consistent among the country's coastal communities, a natural disasters conference heard yesterday. Mike O'Leary, operations manager for the Ministry of Civil Defence and Emergency Management, told the conference that getting warning information down to community level was patchy.

Mr. O'Leary was specifically referring to the civil defence emergency management groups which were responsible for disseminating national warnings to local communities.

"That is our greatest vulnerability in New Zealand. There is a very patchy capability to do that across the country and in some cases it's not even identified." Mr.

O'Leary said there were few proven and operating public alert systems such as sirens.

But he was personally not a great fan of the use of sirens in warning systems as their efficacy was debatable, there were problems with their maintenance and they could create a false impression of safety and security.

John Hamilton, the ministry's director, agreed systems were patchy and said a national working group had been set up to get some standardisation. Mr. Hamilton added, however, that while standardisation was ideal, there were some limits to that given variations in coastal sites, such as areas which had no cellphone transmission. He said at present if New Zealanders contacted their local councils to find out what the warnings were for their areas they would probably be greeted by a "stunned silence" because systems were not properly developed.

Mr. Hamilton hoped a national system would be sorted out so someone lying on a beach at Mission Bay, in Auckland, or at Evans Bay in Wellington, would immediately recognise a tsunami warning and take action.

Mr. O'Leary also told the conference that tsunami warnings currently provided arrival times but did not detail the expected impact.

Limitations of the Pacific tsunami warning system included simplistic modeling and the failure to take into account the effect of land masses like Australia, which could be in the path of a tsunami heading here.

Mr. O'Leary said New Zealand could become a regional warning center for the southwest Pacific.

Rana Solomon, emergency response co-ordinator Chatham Islands, said the risk of a tsunami was the number one environmental hazard in the Chathams, located 850km east of New Zealand. A major tsunami could have a devastating effect because the main settlement was located on a low-lying main island with a large lagoon in the middle. Miss Solomon said the island had its own systems but the population of 700 was often bolstered by tourists who might not recognise or respond to the local warning system.

In 1868, a six-metre tsunami triggered by a magnitude 9 earthquake offshore from the Peru-Chile border washed into the huts of a Maori village on the northwest coast of the main island. People rushed to higher ground before a second and bigger wave arrived 10 minutes later, destroying the village and drowning one person.

In 1924, six-metre waves from Chile pounded the Chatham Islands and in 1960 a tsunami from another huge earthquake in Chile drove in a 3-4m wave.

Seismologists told the conference that more research and information was needed on defining tsunami risks, including where land would be inundated, the preparation of evacuation maps, and modeling of credible volcano and landslide sources.

Dr. Warwick Smith said not a lot was known about how large the tsunami-triggering earthquakes would be, their frequency, how big the waves generated would be,

when they would hit land or the likely damage that would be caused.

Dr. Smith said distant source tsunami generated from South America would probably hit New Zealand if they emanated from northern Peru, while those from the southern part of South America would head in the direction of Hawaii.

Tsunami had the potential for a far greater number of fatalities than earthquakes, he said.

From:

[http://www.nzherald.co.nz/category/story.cfm?c\\_id=32&objectid=10434918](http://www.nzherald.co.nz/category/story.cfm?c_id=32&objectid=10434918)

### **Poll: Majority of Americans want FEMA out of DHS**

United Press International (UPI)/Zogby poll of nearly 6,000 Americans found that 71 percent believe the Federal Emergency Management Agency (FEMA) should be taken out of the Department of Homeland Security (DHS) and restored to an independent agency.

The survey respondents overwhelmingly agreed that placing FEMA in DHS has "hurt the government's ability to respond to natural disasters and emergencies by shifting the focus from disaster and emergency preparedness and placing more emphasis on counter-terrorism."

FEMA spokesperson told UPI that FEMA is actually stronger within DHS.

To read more about the poll, visit [www.upi.com/Zogby/UPI\\_Polls/](http://www.upi.com/Zogby/UPI_Polls/).

From: Disaster Research 478, May 17, 2007; Natural Hazards Center, University of Colorado

### **Poll: Federal government not ready for next disaster**

Most Americans don't believe the federal government is prepared to respond to a disaster, according to a USA Today/Gallup poll conducted in April and reported by the Associated Press.

Though two-thirds of respondents said their families and their local emergency response agencies were ready for a natural disaster, only 30 percent said they thought the federal government could adequately take action. Experts attribute this lack of confidence to the slow response to Hurricane Katrina in 2005.

From: Disaster Research 478, May 17, 2007; Natural Hazards Center, University of Colorado

### **U.S. tsunami warning and education act passed**

On December 20, 2006, President Bush signed into law H.R. 1674, the "Tsunami Warning and Education Act," designed to strengthen tsunami detection, forecasting, warning, and mitigation in the United States and abroad. The Act authorizes the National Oceanic and Atmospheric Administration (NOAA), through the National Weather Service (NWS), to operate a tsunami detection, forecasting, and warning program for the Pacific and Arctic Ocean regions, as well as for the

Atlantic Ocean, Caribbean Sea, and Gulf of Mexico region.

It also directs the NOAA Administrator to maintain or establish a Pacific Tsunami Warning Center in Hawaii, a West Coast and Alaska Tsunami Warning Center in Alaska, and additional centers to be determined by the NWS. The centers' responsibilities will include data monitoring, earthquake evaluation, and data dissemination to researchers. Over five years, \$135 million will be allocated to increasing the number of deep-ocean buoys used to detect potentially devastating waves. The proposed Deep-Ocean Assessment and Report of Tsunami (DART) buoy system will have a final array of approximately 24 buoys in the Pacific Ocean, Atlantic Ocean, and Caribbean Sea by 2012.

The Act also provides for increased emphasis on tsunami education and outreach programs, a key recommendation of expert witnesses who testified at a January 26, 2005, Science Committee hearing. The witnesses urged a greater focus on educating the public on how to respond in the event that a tsunami warning is issued. For links to the full text of H.R. 1674, see <http://thomas.loc.gov>.

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### **Oman gets tsunami warning system**

Oman's Oceanographic Institute announced that a warning system developed by Lighthouse R&D Enterprises and an American company would be placed near the Makran trench, which runs between Oman's northeast coast and the southern coasts of Pakistan and Iran.

### **DHS awards \$194 million to states for emergency management**

The U.S. Department of Homeland Security (DHS) has released \$194 million to help states and local governments prepare and implement emergency management activities through the Emergency Management Performance Grant (EMPG) program. Emergency managers have been awarded more than \$750 million since fiscal year 2004 through the program.

State emergency management agencies use EMPG funds to enhance their emergency management capabilities in a range of areas that include planning, equipping and training; conducting exercises; and providing for all-hazards emergency management operations. In addition, EMPG funds are used to pay for personnel who write plans, conduct training and exercise programs, maintain emergency response programs, and educate the public on disaster readiness. For more information on the fiscal year 2007 EMPG, including a list of grant allocations by state, please visit <http://www.dhs.gov>.

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Observer, v. XXXI, no. 5, p. 9. Natural Hazards Center, University of Colorado. [www.colorado.edu/hazards/](http://www.colorado.edu/hazards/)

### **Philippine institute to install tsunami sensors**

May 1, 2007. The Philippine Institute of Volcanology and Seismology (PHIVOLCS) announced that they would be installing ten tsunami sensors to monitor the western and eastern coasts. The one sensor already in place is located at Lubang Island in Mindoro.

The sensors were developed by a PHIVOLCS scientist.

### **Indonesia agency creates tsunami detector**

According to an April 2007 report, the Agency for Assessment and Application of Technology (BPPT) has created a buoyant tsunami detector suitable to Indonesian waters.

Ridwan Djamaluddin, BPPT's tsunami detector program head, said, "Water conditions and situation varies from one place to another; we need to ascertain if our buoy is suitable for Indonesian waters."

The first locally made detector would be placed in the Sunda Straits. A German-made buoy and one donated by Malaysia are already in place.

A year-long project will install detectors every 200 km-radius in earthquake-prone zones, to develop a comprehensive tsunami early warning system by 2008.

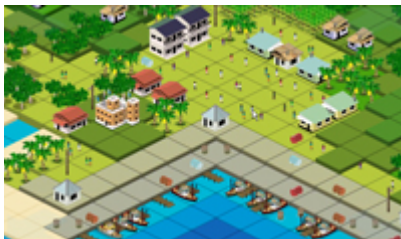
## **WEBSITES**

### **<http://www.unisdr.org/asiapacific/>**

Our mandate: The core mandate of the UN/ISDR Asia & Pacific includes awareness-raising activities in disaster risk reduction, including the promotion of the World Disaster Reduction Campaign and the annual UN Sasakawa Award for Disaster Reduction, advocacy through policy formulation, the dissemination of guidelines to assist in the implementation of the Hyogo Framework for Action (HFA), promote the establishment of national platforms for disaster risk reduction, enhance networking and partnership-building to contribute to an effective culture of safety and protection of all communities in the Asia and Pacific Islands region.

### **[www.stopdisastersgame.org](http://www.stopdisastersgame.org)**

An online game to teach children how to save lives and livelihoods.



The secretariat of the UN International Strategy for Disaster Reduction launches an online game aimed at teaching children how to build safer villages and cities against disasters. This initiative comes within the 2006-2007 World Disaster Reduction Campaign "Disaster Risk Reduction Begins at School".

### **<http://www.ibhs.org/publications/view.asp?id=302>**

Institute for Business and Home Safety annual summary of state land use planning laws.

### **<http://www.vulnerabilitynet.org/>**

The Vulnerability Network provides an online knowledge portal for different sectors and stresses, linking researchers and practitioners.

Find interesting and useful reading and reference material - the Document Hotel contains hundreds of journal papers, reports, briefing notes, etc. that can be searched and accessed in full, covering a range of topics including:

- Vulnerability
- Adaptation
- Climate change impacts
- Food security
- Water management
- Renewable energy
- Socio-environmental modeling ... and more!

See snippets of news that give a feel for what is going on in the field of vulnerability and sustainable development research, highlighting important activities and events. Sign up to one or a number of forums to communicate with people engaged in similar work, to use as a means of collaborating on projects - post messages and documents and be automatically notified by email when others do the same.

### **<http://homepage.mac.com/demark/tsunami/2.html>**

Amazing 'before' and 'after' satellite photos from Banda Aceh, Dec. 26, 2004 tsunami.

### **<http://oceania-iaem.com/>**

Welcome to IAEM Oceania. The International Association of Emergency Managers (IAEM) is a non-profit organisation dedicated to promoting the goals of saving lives and protecting property during emergencies and disasters.

The Oceania Region of the International Association of Emergency Managers is one of 15 Regions. The Oceania Region is a new Region of the IAEM and spans most of the Pacific nations.

The President of the Oceania Region is Tony Pearce (based in Australia) and the Vice President is Kristin Hoskin (based in New Zealand).

In February 2007 the members of the IAEM based in Oceania elected to form what is the fourth international region of the IAEM. We consist of emergency management professionals from around Oceania.

Our Vision: IAEM shall be recognized as a premier international organization of emergency management professionals.

Our Mission: The mission of IAEM is to serve its members by providing information, networking and professional opportunities, and to advance the emergency management profession.

## PUBLICATIONS

### ***Learn to protect yourself from a tsunami***

“A new brochure that Greater Victoria’s municipalities have jointly put together provides a wide range of information concerning how people can protect themselves from a tsunami should one ever strike the region. The *Learn to Protect Yourself from a Tsunami* brochure stresses that residents should be aware that there isn’t a huge chance that a tsunami will hit the region.

“The main point of the brochure really is to educate our residents of Greater Victoria that the risk of a tsunami in our area is relatively low so they don’t panic when they hear a tsunami warning on the radio,” said Brenda Warner, emergency coordinator for Esquimalt’s emergency program.”

From: EsquimaltNEWS, Town mapped for tsunami risk, Feb. 7, 2007 online Pdf file of brochure: [http://www.victoria.ca/cityhall/pdfs/departments\\_veptsn\\_brchr.pdf](http://www.victoria.ca/cityhall/pdfs/departments_veptsn_brchr.pdf)

City of Victoria tsunami information webpage, with links: [http://www.victoria.ca/cityhall/departments\\_veptsn.shtml](http://www.victoria.ca/cityhall/departments_veptsn.shtml)

### ***Americans at risk: Why we are not prepared for mega-disasters and what we can do now***

Irwin Redlener, 2006. ISBN 0-307-26526-9. 304 p. \$24.00 (hardcover) Alfred A. Knopf/Random House.

One of the leading experts on disaster preparedness offers a compelling narrative about America’s inability to properly plan for large-scale disasters. Five years after 9/11 and one year after Hurricane Katrina, it is painfully clear that the government’s emergency response capacity is plagued by incompetence and a paralyzing bureaucracy.

Redlener, founder and director of the National Center for Disaster Preparedness, brings his years of experience with disasters and health care crises, national and international, to an incisive analysis of why America’s approach to disaster readiness has left the nation vulnerable and virtually unable to respond effectively to catastrophic events. He describes five natural and human-induced disaster scenarios as a way to imagine what citizens might face, what the current systems would and would not prepare them for, and what would constitute optimal planning in each situation. To see what could be learned from others, he points out some of the more effective ways that

countries in Europe, Asia, and the Middle East have dealt with various disasters.

Redlener concludes with a nine-point proposal for how America can be better prepared and what citizens themselves can do. One of Redlener’s most compelling discussions is related to the serious problem of a disengaged and uninformed citizenry—one of the biggest obstacles to assuring optimal readiness for any major crisis.

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### ***Natural hazards and disasters***

Donald Hyndman and David Hyndman. 2006. ISBN 0-495-11210-0. 482 p. \$99.95 (paper). Thomson-Brooks/Cole.

Written by a son-father geologist team, this college-level textbook emphasizes earth and atmospheric hazards that appear suddenly or rapidly without significant warning. The text further discusses ways to prevent or mitigate the damage caused by natural hazards, providing students with the latest scientific research related to these topics. “Case in Point” boxes generate discussion of individual cases to natural hazard processes and principles. Readers will find a balanced coverage of North American natural hazards, including earthquakes, hurricanes, floods, and volcanic eruptions. The book includes color photos, diagrams, an appendix of minerals and rocks related to natural hazards, and a glossary of hazards-related earth science terms. This new updated edition also features a new chapter that covers the devastating 2005 hurricane season and provides an in-depth look at the causes and effects of Hurricane Katrina.

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### ***NFPA 1600: Standard on disaster/emergency management and business continuity programs***

2007. 46 p. FREE online. National Fire Protection Association. <http://www.nfpa.org/assets/files/PDF/CodesStandards/1600-2007.pdf> Print copies can be ordered at [www.nfpa.org/catalog/](http://www.nfpa.org/catalog/).

The standard establishes a common set of criteria that sets a foundation for disaster management, emergency management, and business continuity programs using a total program approach. This latest edition of NFPA 1600 incorporates changes to the 2004 edition and expands the conceptual framework of the earlier version. Aspects of mitigation, preparedness, response, and recovery have been updated, and prevention has been added as a fifth and distinct concept.

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## CLASSES / WORKSHOPS

### Master's degree in emergency management

Millersville University of Pennsylvania's Center for Disaster Research & Education invites applications for its totally online, interactive (virtual classroom interaction between professor and students), non-thesis, accredited, practitioner's degree in emergency management.

For details, visit:

<http://www.millersville.edu/~MSEM>

From: *Unscheduled Events*, v. 26, no. 1, p. 5

## CONFERENCES / SYMPOSIA

### May 30-June 1, 2007

You are invited to attend The World Disaster Response Summit, scheduled for May 30 - June 1, 2007 at the World Congress Center in Atlanta. Summit and registration details are at [www.disastersolutions.bz](http://www.disastersolutions.bz). REGISTRATION IS FREE. Additional background on the Summit organizer is at [www.globalsecurity.bz](http://www.globalsecurity.bz). The Summit is a major national and international event. We are bringing together a diverse group of leaders to facilitate solutions in all major areas of disaster preparedness and response. More than 2,000 government, business, and humanitarian leaders are expected.

Of special interest during the three days of the Summit will be major presentations by FEMA; the American Red Cross; U.S. Coast Guard; GSA; U.S. Small Business Administration; U.S. Department of Defense; USAID; State of Louisiana's Road Home Program; and experts in emergency communications, hurricane catastrophic planning, earthquake catastrophic planning, search and rescue, health preparedness, biodefense, disaster recovery, and hazardous materials response.

In addition to numerous state and local officials, emergency managers, and First Responders from around the country, plus the general public, some of the many confirmed participants include: FEMA; GSA; State of Louisiana's Road Home Program; U.S. Department of Homeland Security; U.S. Coast Guard; Centers for Disease Control (CDC); U.S. Department of Health & Human Services; NIAD/NIH; U.S. Department of Defense; U.S. Army; U.S. Air Force; U.S. Navy; U.S. Marine Corps; Defense Logistics Agency; U.S. Agency for International Development (USAID); American Red Cross; National Institute for Urban Search & Rescue; International Association of Emergency Managers; Habitat For Humanity; World Vision; World Hope International; Southern Baptist Disaster Relief; Florida Department of Emergency Management; Florida Department of Health; Illinois Medical Emergency Response Team; such major and influential corporations as James Lee Witt Associates, The Allbaugh Company, URS, Raytheon, CrowderGulf, ModSpace, AshBritt, Shaw Group,

Cingular, Microsoft, Northrop Grumman, IBM, Fluor, Parsons, JP Morgan Chase, DuPont, ICF International, PWC Logistics Services, and Blackwater USA; and diplomats from the UK, Japan, Canada, Australia, New Zealand, Czech Republic, Mexico, and Nigeria.

The Summit will feature major general sessions; disaster preparedness and response cooperation roundtables; numerous workshops; industry and organization presentations; networking; and will support non-profits and relief agencies. The Summit includes many exhibits from industry, government, and organizations. As a public service, there is no registration fee and we are contributing free exhibit space to relief agencies.

Summit topics include: Emergency Communications & Incident Command; Gulf Coast Reconstruction; FEMA, American Red Cross, and U.S. Coast Guard Disaster Preparedness and Response Programs; U.S. Department of Defense and National Guard Disaster Response Programs; Hurricane Catastrophic Planning; Earthquake Catastrophic Planning; Health Preparedness and BioDefense Response; Post-Disaster Housing & Space Solutions; Urban Search & Rescue; Coordinating Local Response to Disasters; State & National Disaster Insurance Solutions; Post-Disaster Business Continuity; and International Disaster Preparedness & Response Programs.

From: Disaster Resource GUIDE  
[[news@disaster-resource.com](mailto:news@disaster-resource.com)]

### July 2-13, 2007

XXIV General Assembly of the International Union of Geodesy and Geophysics will be held in Perugia, Italy.

This meeting will include sessions on tsunami generation and early warning systems. Part of the tsunami session will be carried out as a workshop on wave and water level data assessment and product development, with the goal of establishing standard procedures for data assessment and data archiving for event analysis.

<http://www.iugg2007perugia.it>

Reprinted with permission from the Natural Hazards Observer, v. 31, no. 5, p. 21, Natural Hazards Center, University of Colorado, [www.colorado.edu/hazards/](http://www.colorado.edu/hazards/).

### August 21-25, 2007

International Disaster Reduction Conference (IDRC 2007). Harbin, China.

The IDRC 2007 is a follow-up to the IDRC 2006 in Davos, Switzerland, which brought a growing consensus that to achieve risk-resilient, sustainable societies, the management of unexpected events such as natural hazards, disease, human-induced hazards, or terrorism, must take an integrated approach. IDRC Harbin 2007 will review the progress made since IDRC Davos 2006, provide a platform for in-depth, strategic discussions, and focus on understanding what is needed to implement integrated risk management. IDRC Harbin 2007 will also host an exhibition for international and national organizations and



for companies with product and services for emergency and rescue operations.

Reprinted with permission from the Natural Hazards Observer, v. 31, no. 5, p. 21-22, Natural Hazards Center, University of Colorado, [www.colorado.edu/hazards/](http://www.colorado.edu/hazards/).

#### **August 26-30, 2007**

IODP Workshop addressing geologic hazards through ocean drilling. Portland, Oregon.

The oceans are the sources of some of the most severe geologic hazards, including large tsunami-generating earthquakes, submarine landslides, and explosive volcanic eruptions. We seek to extract and read the geologic record of such events in marine sediments and to monitor material properties and associated physical processes. This workshop will bring together an interdisciplinary pool of scientists and engineers from research institutions, universities, and companies for an open and detailed exchange of results, ideas, and experiences to better characterize and understand the causes and consequences of oceanic geologic hazards.

Goals of the workshop are to (a) review the current state of community knowledge, (b) define outstanding research questions that can be addressed through scientific ocean drilling, (c) establish scientific priorities, (d) identify potential drilling targets, (e) evaluate existing technologies and scientific approaches, and (f) recommend the development of new instruments and new deployment strategies. This exchange will enhance international collaborations and stimulate teams of proponents to develop competitive IODP proposals addressing oceanic geologic hazards.

For more information:

<http://www.iodp.org/workshops/>. Contact Kelly Kryc ([kkryc@iodp.org](mailto:kkryc@iodp.org)).

From: Scientific Drilling, no. 4, (March 2007), p. 51.

#### **November 6-8, 2007**

4<sup>th</sup> Annual Canadian Risk and Hazards Network Symposium. Richmond, British Columbia. With the theme "Practitioners and Researchers—Forging Partnerships for Disaster Resilient Communities," this year's conference is dedicated to building disaster-resilient communities based on strong partnerships. Program highlights include resilience, protecting critical infrastructure, collaborating with communities, respecting culture and tradition in recovery, psychosocial effects on communities, assessing and mitigating risks, information and communication needs, clarifying the role of governments, sharing best practices, and preparing for public health emergencies. <http://www.jibc.ca/crhnet/>

Reprinted with permission from the Natural Hazards Observer, v. 31, no. 5, p. 22, Natural Hazards Center, University of Colorado, [www.colorado.edu/hazards/](http://www.colorado.edu/hazards/). ♦

**CORRECTION:** As Alan Ruffman pointed out to me, I used *Center* in the last issue of *TsuInfo Alert*, when referring to the International Tsunami Information Centre on page 18. I know better; I'm just a lousy typist. My apologies.

#### STATE EMERGENCY MANAGEMENT OFFICES *updated 3-31-2006*

Alaska Dept of Military & Veteran Affairs  
Division of Homeland Security & Emergency Mgmt.  
PO Box 5750  
Fort Richardson, AK 99505-5750  
(907) 428-7000; toll-free 800-478-2337  
Fax (907) 428-7009  
<http://www.ak-prepared.com/>

California Office of Emergency Services  
3650 Schriever Ave.  
Mather, CA 95655  
(916) 845-8510; Fax (916) 845-8910  
<http://www.oes.ca.gov/>

Hawaii State Civil Defense, Dept. of Defense  
3949 Diamond Head Road  
Honolulu, HI 96816-4495  
(808) 733-4300; Fax (808) 733-4287  
<http://www.scd.state.hi.us>

Oregon Division of Emergency Management  
PO Box 14370  
Salem, OR 97309-50620  
(503) 378-2911; Fax (503) 373-7833  
<http://www.oregon.gov/OOHS/OEM/>

Washington State Military Dept.  
Emergency Management Division  
Camp Murray, WA 98430-5122  
(253) 512-7067; Fax (253) 512-7207  
<http://emd.wa.gov>

Provincial Emergency Program  
455 Boleskin Road  
Victoria, BC V8Z 1E7 Canada  
(250) 952-4913; Fax (250) 952-4888  
<http://www.pep.bc.ca/>

## RESPONSIBILITY TO TOURISTS...AND RESIDENTS?

### **Are Tourists Prepared In Case A Tsunami Strikes?**

by: Paul Drewes April 26, 2007 01:40 PM PDT

(KHNL) - Those of us who live in Hawaii are reminded of potential hazards, like tsunami, every month with siren soundings. But for many of the visitors in Waikiki, they may not have thought of destructive waves during their time in paradise.

Thousands are prepared for the sun, sand and surf of our islands. But not all are prepared for the possibility of a tsunami.

"I never heard there was a tsunami in this area" says a visitor from Italy, Ruggero De Maria.

"Wasn't there an earthquake on Maui recently? So an earthquake flashed thru my mind but a tsunami, no." says California visitor, Jaycie Coburn.

Thousands of visitors are here each day, but some may have trouble figuring out where to go if a tsunami is on the way and the sirens sound.

"I would try to get as far inland as I could but I don't know how far is enough." says Jean Duran, a visitor from Chicago.

But rather than try to get everybody "out" of Waikiki. Evacuations under a tsunami warning would go vertical.

"We're going to have to get people out of Waikiki and the quickest way is to go up rather than go out." says Peter Harai, with the Department of Emergency Management.

People would be moved up three stories in buildings that have six floors and above. Most concrete reinforced buildings in Waikiki are expected to withstand a tsunami, something officials here in Hawaii witnessed in the deadly Southeast Asia tsunami.

"We saw that in the Southeast Asia tsunami, the guests that went up survived in these structured buildings." adds Hirai. The last time Waikiki needed to be vertically evacuated was during the tsunami warning in October of 1994.

From:

<http://www.khnl.com/Global/story.asp?S=6429050>

Reprinted with permission, KHNL News 8, Honolulu, Hawaii

### **Sooke, Canada, votes to remove tsunami signs**

"After complaints flooded in—punsters have also noted storms of protest and groundswells of dissent—Sooke council has voted 6-1 to retire the signs and perhaps replace them with something bearing a "calmer" message."

Full article at [canada.com](http://canada.com) Times Colonist, May 17, 2006

### **Sooke tsunami signs should have stayed**

Letter to the editor [excerpt]:

"I have just returned from a trip around Puget Sound in Washington... I was comforted that officials down there were taking the threat seriously and informing the public of the risk and what to do in the event of one.

The threats of tsunamis are real. This decision is not only scary but irresponsible.

Terry Eckstein, Victoria."

From: © Times Colonist (Victoria) 2007 May 25, 2007

Full letter:

<http://www.canada.com/victoriatimescolonist/news/letters/story.html?id=6ba16192-e833-4beb-b496-571739328b62>

### **Tofino tsunami sirens back on the table**

April 30, 2007

Used with the permission of CBC.ca

<http://www.cbc.ca/canada/british-columbia/story/2007/04/30/bc-siren.html>

It appears the federal government is now ready to talk with emergency officials in Tofino about helping to pay for tsunami warning sirens for the small Vancouver Island community.

Ottawa had rejected Tofino's funding request last year, and then again just a few weeks ago. But Natural Resources Minister Gary Lunn, the only Conservative cabinet minister from the Island, has now agreed to meet with Tofino officials.

"Especially for a coastal community, this is very, very important," said Lunn. "And so I say, let's have a look at it, let's work together and find a way to make it happen."

The lack of an emergency siren became an issue in the summer of 2005, when a brief tsunami warning was issued for the West Coast of Vancouver Island.

"The fire department went door to door and notified people," said Karl Hansen, who is in charge of emergency preparedness for Tofino, where the population swells from 1,700 to 20,000 in the summer.

Realizing how ill-prepared the community was, Hansen applied to Ottawa for help paying for five tsunami warning sirens for his sprawling community, at a cost of \$30,000 apiece.

Hansen said he was pleased that Lunn is ready to talk, and he plans to contact the minister as soon as possible.

<http://www.cbc.ca/canada/british-columbia/story/2007/04/30/bc-siren.html#skip300x250> ♦

July 22-26, 2007

Coastal Zone 2007. Portland, Oregon. The 15<sup>th</sup> biennial conference for federal, state, and local governments, academia, nonprofit organizations, and private industry will discuss issues facing the world's coasts and oceans, including natural hazards.

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

Material added to the NTHMP Library,  
May-June 2007

Note: These, and all our tsunami materials, are included in the online (searchable) catalog at <http://www.dnr.wa.gov/geology/washbib.htm>. 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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*INFREQUENTLY ASKED QUESTIONS*  
*COMPILED BY LEE WALKLING*

***DOES THE CARIBBEAN HAVE A HISTORY OF TSUNAMIS?***

The Caribbean has been hit by 37 verified tsunamis since 1498. Some were generated locally and others were the result of events far away, such as the earthquake near Portugal. The combined death toll from these Caribbean tsunamis is about 9,500.

From: <http://www.webwire.com/ViewPressRel.asp?ald=31194>

***WHERE IS THE HISTORICAL MARKER FOR THE 1700 CASCADIA EARTHQUAKE - TSUNAMI?***

It's located at the Schooner Creek Wayside on U.S. Highway 101 south of Lincoln City, Oregon, overlooking the portion of Siletz Bay where ancestors of the Confederated Tribes of Siletz Indians had a village that was destroyed by the disaster.

Working together, the Oregon Department of Geology and Mineral Industries, the Confederated Tribes of Siletz Indians and the Chinook Winds Casino Resort created this marker for the common goal of history and safety.

***WHICH ANIMAL IS CURRENTLY THOUGHT TO PREDICT EARTHQUAKES?***

Snakes may be able to predict earthquakes days before they occur, according to the Chinese scientists at the Nanning earthquake bureau. Scientists monitoring the reptiles in local snake farms say the snakes can sense a quake from 120 kilometers away up to five days before it occurs, and can start behaving erratically, leaving their nests in the cold and or even smashing into walls to escape.

From: *Geotimes*, v. 52, no. 4, p. 14.♦

**Request for help**

Since the National Tsunami Hazard Mitigation Program website is defunct, I have no way of updating the Steering Group list (p. 15) or the State Emergency Management Offices (p. 9) for *TsuInfo Alert* issues.

Is there an up-to-date (electronic) Steering Group contact list? And State Emergency Management Offices list?

There is a second problem that is increasing: mailings being returned. Most of these are stamped "Returned from Ex-Senator XXXXXX" or "Returned from Ex-Representative XXXXX." I do not have the time, being a staff of one at the Washington Geology Library, to go online and find all the coastal districts for each state with their current elected official. Can each State Emergency Management office provide the elected officials' names, contact information, and district numbers for the coastal areas of your state? I can then adjust my mailing list to reach the right people.

Thank you for your help.

Ms. Lee Walkling, editor

## 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](mailto: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.

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. ♦



## NATIONAL TSUNAMI HAZARD MITIGATION PROGRAM STEERING GROUP

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From: <http://www.pmel.noaa.gov/tsunami-hazard/tsuhaz.htm>

Updated Mar. 31, 2006 ♦

## **WSSPC Members' Tsunami Publications and Web Pages**

### **ALASKA**

Alaska Division of Emergency Services Tsunami Mitigation Web Page

"TSUNAMI! THE GREAT WAVES IN ALASKA" Brochure.

### **BRITISH COLUMBIA**

British Columbia Emergency Program Tsunami Preparedness Web Page

"BRITISH COLUMBIA TSUNAMI WARNING AND ALERTING PLAN (2001)" This document explains (from a state/province perspective), the protocols and procedures in place for Pacific-wide tsunami warning and alerting; advises areas at risk; and assigns responsibilities. Adobe Acrobat file.

"PREPARE FOR TSUNAMIS IN COASTAL BRITISH COLUMBIA" Public awareness document for citizens of coastal British Columbia communities. Also available in Adobe Acrobat file.

"EFFECTS OF THE TSUNAMI IN THE ALBERNI INLET CAUSED BY THE 1964 ALASKA EARTHQUAKE" All pictures from the British Columbia Provincial Emergency Program (PEP).

### **CALIFORNIA**

California Seismic Safety Commission - Tsunami Web Page

"LOCAL PLANNING GUIDANCE ON TSUNAMI RESPONSE" Publication from the California Governor's Office of Emergency Services

"TSUNAMI! HOW TO SURVIVE THE HAZARD ON CALIFORNIA'S COAST" Brochure from the State of California

"LIVING ON SHAKY GROUND: HOW TO SURVIVE EARTHQUAKES AND TSUNAMIS ON THE NORTH COAST" An earthquake awareness publication for the Northern California coast, and which includes a tsunami awareness section; from Humboldt State University.

### **GUAM**

GUAM HOMELAND SECURITY, OFFICE OF CIVIL DEFENSE

<http://www.guamhs.org/main/>

### **HAWAII**

"TSUNAMI: THE GREAT WAVES" A well-

illustrated document to increase awareness and knowledge of tsunamis. Produced with the cooperation of the IOC, NOAA and ITIC.

"TSUNAMI: THE GREAT WAVES" (newer version) Much as above. Available in Adobe Acrobat file.

"TSUNAMI WARNING" A publication designed to inform young persons about tsunamis and the dangers which they present, and what should be done to save lives and property, with the generous support of the Intergovernmental Oceanographic Commission of UNESCO. Adobe Acrobat file. (Part 1) (Part 2) (Part 3) (All Parts)

"TSUNAMI WARNING SYSTEM IN THE PACIFIC" A short brochure.

"Hawaii Tsunami 1946" - Survivors' perspectives and observations, by Jeanne Branch Johnston and Dr. David Wright Branch. Power Point file.

### **OREGON**

DOGAMI Tsunami Mitigation Web Page

"TSUNAMI WARNING SYSTEMS AND PROCEDURES - GUIDANCE FOR LOCAL OFFICIALS" Document from Oregon Emergency Management and the Oregon Department of Geology and Mineral Industries. Adobe Acrobat format.

"TSUNAMI! HOW TO SURVIVE THIS HAZARD ON THE OREGON COAST" Brochure from the State of Oregon.

### **WASHINGTON**

Washington EMD Tsunami Preparedness Program Web Page

Tsunami Publications and Resources on the Washington State Department of Natural Resources, Division of Geology & Earth Resources Tsunamis Page

Washington State Tsunami Emergency Information

"HOW THE SMART FAMILY SURVIVED A TSUNAMI" For the Kindergarten to Grade 6 crowd. (2002) (9mb approx. pdf file)

"*TsuInfo Alert*" A bi-monthly newsletter by the Washington State Department of Natural Resources, Division of Geology and Earth Resources on behalf of the National Tsunami Hazard Mitigation Program

From: <http://www.wsspc.org/TsunamiCenter/tsunamipubs.html> (updated April 2007) ♦