

CZMA CLIMATE CHANGE AND COASTAL HAZARDS E-NEWS UPDATE #19

The Coastal Programs Division of NOAA's Office of Ocean and Coastal Resource Management distributes the CZMA Climate Change and Coastal Hazards E-News Update to keep state and territory coastal program managers and climate change/coastal hazards staff informed about climate change (as it pertains to coastal hazards) and coastal hazards activities. If you would like to receive the Climate Change and Coastal Hazards E-News Update, please e-mail christa.rabenold@noaa.gov. For previous issues, see the E-News Update archive at <http://coastalmanagement.noaa.gov/news/climateneewsletter.html>.

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NOAA/DOC UPDATES

May 22–28 is Hurricane Preparedness Week

<http://www.nhc.noaa.gov/HAW2/english/intro.shtml>

<http://www.fema.gov/hazard/hurricane/>

Each year prior to the onset of hurricane season, NOAA's National Hurricane Center and FEMA sponsor Hurricane Preparedness Week to inform the public about hurricane hazards and provide knowledge that can be used to take action to reduce the effects of a hurricane. The information is useful throughout the storm season and can be used to tailor more targeted preparedness programs.

NOAA Updates Extreme Weather Information Sheets for 2011

<http://www.ncddc.noaa.gov/activities/noaa-extreme-weather-information-sheet-newis>

NOAA's National Coastal Data Development Center produces the NOAA Extreme Weather Information Sheets each year for hurricane season. These documents contain critical phone numbers and web site information that residents can use during potentially life-threatening weather emergencies. Each year, the center verifies contact and web site information and monitors and updates it throughout the hurricane season. New in 2011 is a sheet for Hawaii.

Storm Surge and Coastal Floods Are Now on NOAA Watch

http://www.noaawatch.gov/themes/coastal_inundation.php

NOAA has added a new theme to its NOAA Watch web portal: Storm Surge and Coastal Floods. The new page offers information about the hazards and associated forecasting, modeling, planning, and actions. Links to other related NOAA sites are also provided.

NOAA and FEMA Partner on Comprehensive Elevation Inventory for United States

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

The Topographic and Bathymetric Data Inventory is a compilation of information collected by the NOAA Coastal Services Center and FEMA that includes topographic and bathymetric data for all 50 states and Puerto Rico. The inventory can be used to locate data for elevation models and to identify data gaps.

NOS Guides Use of Geospatial Data in Mapping and Assessing Sea Level Change

http://www.tidesandcurrents.noaa.gov/publications/tech_rpt_57.pdf

NOAA's National Ocean Service has published "Technical Considerations for Use of Geospatial Data in Sea Level Change Mapping and Assessment" (142 pp.) to help coastal decision makers navigate and use geospatial data in sea level change efforts. This resource can help users assess the utility of existing data and guide them in acquiring new data. It also provides links to NOAA standards for bathymetry, topography, and vertical control.

OCRM Staff Member Becomes Certified Floodplain Manager

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

Christa Rabenold, a Coastal Management and Hazards Specialist with NOAA's Office of Ocean and Coastal Resource Management's Coastal Programs Division, has successfully completed the process and examination to become an Association of State Floodplain Managers (ASFPM) Certified Floodplain Manager (CFM). Certification is based on a person's knowledge of community responsibilities under the National Flood Insurance Program as well as related activities and efforts to reduce flood losses and human suffering and to protect the natural and beneficial values and functions of floodplains.

CRS Report Examines U.S. Tsunami Programs

<http://www.fas.org/sgp/crs/misc/R41686.pdf>

“U.S. Tsunami Programs: A Brief Overview” (11 pp.) from the Congressional Research Service (CRS) provides an introduction to the U.S. system for tsunami detection and warning. It discusses the tsunami warning centers, the DART buoy network, funding for the tsunami program, and more.

NIST Surveys Literature on Disaster Resilience

http://www.nist.gov/manuscript-publication-search.cfm?pub_id=906887

“Disaster Resilience: A Guide to the Literature” (125 pp.), a special publication from the National Institute of Standards and Technology (NIST), was produced to serve as a central source of data and tools for developing methodologies for defining and measuring the disaster resilience of structures as well as communities. It is intended as a ready reference for researchers, public and private sector decision makers, and practitioners (owners and managers of constructed facilities).

OTHER FEDERAL UPDATES

President Issues Preparedness Policy Directive

http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm

On March 30, the President issued “Presidential Policy Directive/PPD-8: National Preparedness” to strengthen the security and resilience of the United States through systematic preparation for the threats that pose the greatest risk to national security (terrorism, cyber attacks, pandemics, catastrophic natural disasters). Broadly, the directive calls for an interagency effort to develop 1) a national preparedness goal that identifies core capabilities necessary for preparedness and 2) a national preparedness system to guide the efforts of all levels of government, the private and nonprofit sectors, and the public in achieving the goal.

New Fact Sheet Summarizes FEMA’s Hazard Mitigation Assistance Programs

<http://www.fema.gov/library/viewRecord.do?id=3648>

FEMA’s five Hazard Mitigation Assistance programs all share the common goal of reducing the risk of loss of life and property due to natural hazards. These programs are the Hazard Mitigation Grant Program, Pre-Disaster Mitigation, Flood Mitigation Assistance, Repetitive Flood Claims, and Severe Repetitive Loss. This fact sheet (4 pp.) describes each of the programs and highlights their differences in regard to cost share, applicant/subapplicant eligibility, and eligible activities.

FEMA Reports to Congress on Risk MAP Activities

<http://www.fema.gov/library/viewRecord.do?id=4656>

“FEMA’s Risk Mapping, Assessment, and Planning (Risk MAP) Fiscal Year 2011 Report to Congress” (25 pp.) provides an update on FEMA’s strategic approach, program budget and measures, and implementation for Risk MAP. In FY 2009 and 2010, FEMA addressed critical coastal and levee engineering and mapping needs and defined Risk MAP products and processes. In FY 2011, FEMA will develop fully integrated Risk MAP projects for selected watersheds, continue to address coastal and levee engineering data needs, and acquire needed topographic data. The report includes maps that illustrate Risk MAP project funding for FY 2009-2011.

FEMA Paper Discusses the Japan Earthquake and Tsunami and What They Mean for the United States

<http://www.fema.gov/library/viewRecord.do?id=4620>

In the wake of the recent catastrophe in Japan, FEMA released a paper (5 pp.) that explains what happened in Japan and what we can do in the United States to increase individual and community resilience from a similar

event. It notes that all U.S. coastlines can be impacted by tsunamis, but some are at much greater risk. It also notes that it is impossible to reasonably build residential structures that can withstand tsunami loads and that the only way to protect people is to train them to evacuate to high ground when a warning is given.

USGS Video Promotes Tsunami Preparedness along West Coast

<http://pubs.usgs.gov/gip/105/>

A new video (10 minutes) from the USGS about tsunami preparedness along the West Coast distinguishes between local and distant tsunamis and focuses on the specific needs of each region. It offers guidelines for tsunami response and community preparedness from local emergency managers, first-responders, and leading experts on tsunami hazards and warnings, who have been working on ways to make tsunami affected regions safer. State-specific versions are also available (See General Information Products 91 (CA), 96 (OR), and 97 (WA) at <http://pubs.er.usgs.gov/>. For kids, also see <http://www.youtube.com/watch?v=UzR0Rt3i4kc> from the San Diego County of Emergency Services.)

CRS Looks at Federal Disaster Recovery Programs

<http://www.fas.org/sgp/crs/misc/RL31734.pdf>

Prepared for members of Congress and their staff, “Federal Disaster Recovery Programs: Brief Summaries” (17 pp.) from the Congressional Research Service (CRS) summarizes programs that provide assistance (grants, loans, loan guarantees, temporary housing, counseling) to individual victims; state, territorial, and local governments; and nongovernmental entities following a disaster. It includes programs for disaster situations as well as general assistance programs that may be used in disaster situations.

ADDITIONAL UPDATES

National Academies Seeks Input on Community Resiliency

<http://www.surveygizmo.com/s3/463575/How-resilient-is-your-community-to-disasters>

A National Academies committee is conducting a study on increasing national resilience to hazards and disasters. The goal of the study is to provide actionable recommendations and guidance on the best approaches to reduce adverse impacts from hazards and disasters. The committee is seeking input regarding community resiliency. Submissions received by May 15, 2011, will be considered at the committee’s final public meeting. However, input is welcome through July 1, 2011.

Rhode Island Joins StormSmart Coasts Network

<http://ri.stormsmart.org/>

StormSmart Coasts is a web resource designed for local officials whose towns face risks from storms, flooding, and sea level rise. Rhode Island is the seventh state and only the second in New England to launch a state-specific site. The StormSmart Coasts Network of state and local sites gives coastal decision makers a place to find and share resilience-related resources and provides tools for collaboration.

Climate Change Fact Sheet Aims to Educate and Engage Stakeholders in Rhode Island

http://seagrant.gso.uri.edu/z_downloads/coast_climate_factsheet.pdf

<http://seagrant.gso.uri.edu/coast/collaborative.html>

As part of a larger project to educate and engage stakeholders in climate change adaptation, the University of Rhode Island’s Climate Change Collaborative has published “Climate Change in Rhode Island: What’s Happening Now & What You Can Do” (4 pp.). The fact sheet describes the need for both mitigation and adaptation while setting the context with current trends and what they mean and projections for 2100. It goes into more detail on some of the key implications of climate change to various aspects of Rhode Island’s

culture, economy, and environment and explains what individuals and communities can do to prepare and reduce the impacts.

Massachusetts Shares Details of StormSmart Coasts Pilot Projects

http://www.mass.gov/czm/stormsmart/pilots/pilots_home.htm

The Massachusetts Office of Coastal Zone Management (CZM) has added information to its website to highlight its StormSmart Coasts pilot projects. New pages provide details about the program's first competitively selected pilots: Coastal Inundation Mapping and Regulatory Review (Boston), Freeboard Incentive and Storm Surge Visualization (Hull), Coastal Hazards Awareness (Duxbury, Kingston, and Plymouth), Natural Hazards Planning (Falmouth), and Coastal Floodplain Zoning Bylaw and Regulations (Oak Bluffs).

New Regulations Call for Freeboard in Dorchester County, Maryland

<http://ecode360.com/documents/DO0950/source/396086.pdf>

<http://www.climatewatch.noaa.gov/2011/articles/before-the-next-flood>

In March, the County Council of Dorchester County, Maryland, with assistance from the Maryland Chesapeake and Coastal Program, adopted new floodplain management regulations that incorporate two feet of freeboard into the flood protection elevation. Freeboard is a factor of safety added to elevation requirements that compensates for uncertainty in factors that could contribute to flood heights greater than the mapped base flood elevation. The county's new regulations recognize climate change as one of these factors.

New Jersey Project Involves Stakeholders in Design of Sea Level Rise Tools

<http://marine.rutgers.edu/pt/education/coastaltraining/climatechange.html>

The Jacques Cousteau National Estuarine Research Reserve and Rutgers Center for Remote Sensing and Spatial Analysis are partners on an effort to develop an interactive website that will display New Jersey's vulnerability to sea level rise. Reports on their efforts to gather input from local stakeholders are available and may be useful to others interested in pursuing similar projects. The reports are "Web-based Sea Level Rise Mapping Usability Testing" (28 pp.) and "An Analysis of End User Preferences for Climate Change Related Information and Data" (28 pp.)

California Tsunami Inundation Maps Guide Evacuation

http://www.quake.ca.gov/gmaps/tsunami/tsunami_maps.htm

The California Geological Survey, California Emergency Management Agency, and the Tsunami Research Center at the University of Southern California have produced statewide tsunami inundation maps for California. The maps show, in a worst-case scenario, how far inland tsunami waters would travel and are used by coastal communities to coordinate emergency evacuation plans. These maps have been placed on a Google Maps interface, which allows residents to type in a street address to access a map impacting their area.

State-By-State Assessment Highlights the Costs of Climate Change

<http://www.secureamericanfuture.org/pay-now-pay-later/>

The American Security Project has released a series of 50 reports that analyze and project possible economic losses—or in some cases, gains—on a state-by-state basis as a result of unmitigated climate change. The project, "Pay Now, Pay Later," draws attention to the costs of inaction for each state if greenhouse gas emissions continue unchecked.

New Journal Showcases Research and Development on Building to Mitigate Risk

<http://www.wbdg.org/references/jhaz.php>

The National Institute of Building Sciences Multihazard Mitigation Council has launched a new biannual journal that focuses on decreasing the nation's losses from disasters while also promoting community preparedness, sustainability, and resilience. Articles in the debut issue of the "Journal of Hazard Mitigation and Risk Assessment" include: "Green Building Practices for Residential Construction and Natural Hazard Resistance: How Are They Linked?" and "Motivating Public Mitigation and Preparedness for Earthquakes and Other Hazards." Access and subscriptions are free.

Coastal Erosion Primer Available Free Online

<http://www.coastalscience.com/?p=321>

"Coastal Erosion and Solutions: A Primer" (40 pp.) from Coastal Science & Engineering describes the physical processes and primary causes of coastal erosion and presents some commonly applied erosion defenses. An update to a 2003 version, the 2011 release expands the discussion on sea level rise, hurricane impacts and recovery, measurement of erosion, soft-engineering solutions, and more. It is being used as a supplementary text for courses in coastal processes and shore protection and is intended to be accessible and understandable to coastal property owners and decision makers.

CONFERENCES, TRAININGS, EVENTS

Webinar: The State of Flood Risk Reduction in the United States: Are We Reducing Risk or Incentivizing It?

<http://thehorinkogroup.org/?q=content/state-flood-risk-reduction-united-states>

May 4, 2011

Webinar: Road Map for Adapting to Coastal Risk

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

May 11, 2011

Climate Information for Managing Risks: Local to Regional Adaptation and Mitigation Strategies

<http://www.conference.ifas.ufl.edu/CIMR/>

Orlando, Florida

May 24-27, 2011

CoastGIS 2011

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

Oostende, Belgium

September 5-8, 2011

American Shore & Beach Preservation Association 2011 National Coastal Conference

http://www.asbpa.org/conferences/conf_fall_11.htm

New Orleans, Louisiana

October 19-21 2011

Abstracts are due May 13, 2011

In Case You Missed It: Recorded Webinars

Preparing States for a Changing Climate: Low-Cost Strategies for State Climate Change Adaptation Planning Webinar

<http://www.americanrivers.org/newsroom/blog/preparing-states-for-changing-climate-2-4-2011.html>

Presentation on the Coastal Adaptation to Sea Level Rise Tool

<http://www.ebmtools.org/coastal-adaptation-sea-level-rise-tool-coast.html>

Response and Recovery of National Seashores to Hurricanes and Tropical Storms: Implications for Sea Level Rise

<http://www.nature.nps.gov/geology/coastal/news.cfm> (minor audio issue from minutes 2:00-4:00)

Share Your Thoughts

If you have news that you would like to include in future updates or suggestions about the type of information you would like to see here, please e-mail christa.rabenold@noaa.gov.

May 3, 2011