

CZMA CLIMATE CHANGE AND COASTAL HAZARDS E-NEWS UPDATE #6

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/climateneutral.html>.

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NOAA UPDATES

U.S. Global Climate Research Program Releases Assessment of National and Regional Impacts of Climate Change

<http://www.globalchange.gov/usimpacts>

Produced under NOAA's leadership, "Global Climate Change Impacts in the U.S." (196 pp.) is a product of the interagency U.S. Global Change Research Program. Written in plain language to better inform the public and policymakers, the report draws from a large body of scientific information, including the program's 21 synthesis and assessment reports. It summarizes the science and the impacts of climate change on the United States, now and in the future, focusing on impacts in different regions of the country and on various aspects of society and the economy. Brochures and regional factsheets are also available.

NOAA Issues Outlooks for 2009 Hurricane Season

http://www.noaaneews.noaa.gov/stories2009/20090521_atlantichurricane.html

http://www.noaaneews.noaa.gov/stories2009/20090521_easternhurricane.html

NOAA's National Weather Service Climate Prediction Center has issued its 2009 outlook for hurricane activity in the Atlantic and Eastern Pacific. For the Atlantic, forecasters are anticipating a near-normal hurricane season. There is a 70 percent chance of 9 to 14 named storms, of which 4 to 7 could become hurricanes, including 1 to 3 major hurricanes (Category 3, 4, or 5). For the Eastern Pacific, projected climate conditions suggest a normal or below normal season. Forecasters estimate a 70 percent chance of 13 to 18 named storms, which includes 6 to 10 hurricanes, of which 2 to 5 will become major hurricanes.

New NWS Web Site Depicts Potential Impacts from Tropical Cyclones

<http://www.weather.gov/ghls/>

The National Weather Service's (NWS) Tropical Cyclone Impacts Graphics Web site is a decision-support service that illustrates the potential impacts of high wind, coastal flooding, inland flooding, and tornadoes. During the 2009 tropical cyclone season, graphics will be generated and posted by respective weather forecast offices along the Atlantic and Gulf of Mexico coasts whenever tropical cyclone watches and/or warnings are in effect for their area. The graphics distill an abundance of complex information into easy to understand colorized maps for decision-making purposes. Comments on this experimental service will be accepted through November 30, 2009.

National Hurricane Center to Use Experimental Saffir-Simpson Hurricane Wind Scale in 2009

<http://www.nhc.noaa.gov/aboutsshsh.shtml>

On an experimental basis for the 2009 tropical cyclone season, NOAA's National Hurricane Center will be replacing the traditional "Saffir-Simpson Hurricane Scale" with a "Saffir Simpson Hurricane Wind Scale." This new scale excludes storm surge ranges and flooding references in the definition/effects for each category. Recent storms have illustrated that storm surge values for each category are frequently incorrect, and may elicit improper response from the general public. (For example, in 2008, Hurricane Ike made landfall with Category 2 winds, but the storm surge at Galveston was equivalent to that of a Category 4-5 storm.) More precise expected storm surge heights for individual storms are contained in other National Weather Service products. Comments on usage of the new scale will be accepted through November 30, 2009.

NOAA Activates Storm QuickLook for 2009 Hurricane Season

<http://tidesandcurrents.noaa.gov/quicklook.shtml>

In late May, NOAA's Center for Operational Oceanographic Products and Services activated the Storm QuickLook, NOAA's 24/7 operational tropical storm monitoring and analysis product, which provides a real-time view of a storm's impacts on coastal storm water levels, winds, and barometric levels. Storm QuickLook is used as a decision-support tool by emergency managers to assist evacuation and road closing decisions and to ground truth National Weather Service storm surge models. The general public and the media also use the product to monitor and respond to storm conditions. Post-storm data reports are used in assessments of coastal flooding, for calibrating inundation models, and for proper design of coastal structures requiring maximum water-level elevations.

Climate Change Adaptation Publication Highlights Actions and Needs

<http://www.csc.noaa.gov/publications.html>

Sponsored by the California Energy Commission and the NOAA Coastal Services Center, "Good Morning,

America! The Explosive U.S. Awakening to the Need for Adaptation” (42 pp.) provides an overview of the public, political, and scientific concern with climate change adaptation in the United States. It examines the call that the media and all levels of government are making for a comprehensive approach to managing the risks from climate change. The report also identifies barriers to adaptation planning and policy development and provides suggestions to enable effective adaptation while avoiding the dangers of insufficient preparation.

NOAA Watch Web Widget Tracks Storms

<http://www.noaawatch.gov/widgets/>

A Web widget from NOAA allows you to track active tropical systems on your Web site with content generated by NOAA. The widgets will automatically update as NOAA updates information.

OTHER FEDERAL UPDATES

FEMA Releases Guidance for 2010 Mitigation Grant Programs

<http://www.fema.gov/library/viewRecord.do?id=3649>

The Federal Emergency Management Agency’s (FEMA) “Unified Hazard Mitigation Assistance Program Guidance” (188 pp.) represents the unification of all five of the agency’s hazard mitigation grant programs into one guidance document. In addition to the annual Pre-Disaster Mitigation (which the President has proposed be shifted from competitive to risk-based, in addition to standard allocations), Severe Repetitive Loss, Flood Mitigation Assistance, and Repetitive Flood Claims (nondisaster programs), the FY2010 guidance incorporates the Hazard Mitigation Grant Program for the first time. Applications for the nondisaster grant programs are due to FEMA by December 4, 2009. (Check with your state’s emergency management agency for details on state deadlines and procedures).

FEMA Report on Damage from Hurricane Ike Provides Recommendations for Future

<http://www.fema.gov/library/viewRecord.do?id=3577>

In response to Hurricane Ike, the Federal Emergency Management Agency (FEMA) deployed a Mitigation Assessment Team to evaluate and assess damage from the hurricane and provide observations, conclusions, and recommendations on the performance of buildings and other structures impacted by wind and flood forces. “Hurricane Ike in Texas and Louisiana: Mitigation Assessment Team Report, Building Performance Observations, Recommendations, and Technical Guidance” (438 pp.) provides decision makers with information and technical guidance that can be used to reduce future hurricane damage. In particular, the report focuses on flood damage, wind damage, and critical facilities. Recommendations address freeboard, design, and construction and encourage siting away from eroding shorelines, employing coastal restoration to mitigate erosion effects, and acquiring erosion damaged properties.

Corps Proposes Plans to Protect Louisiana Coast

<http://lacpr.usace.army.mil/>

On June 9, the U.S. Army Corps of Engineers (Corps) released the “Louisiana Coastal Protection and Restoration Final Technical Report” (293 pp. + appendices) for review by national policy reviewers, other federal agencies, the State of Louisiana, nongovernmental organizations, and the public. Prepared in response to direction from Congress, the report presents an array of alternatives for further consideration and informs decision makers, stakeholders, and the public of the tradeoffs among these alternatives that should be considered in future decisions to maintain existing risk levels and/or reduce risk along the Louisiana coast. Comments are being accepted through July 24, 2009.

ADDITIONAL UPDATES

West Coast Governors Draft Climate Change Work Plan

<http://westcoastoceans.gov/teams/>

The Climate Change Action Coordination Team of the West Coast Governors' Agreement on Ocean Health have drafted a proposed work plan to organize and communicate key objectives and planned tasks. Specifically, the plan guides efforts to develop an assessment of shoreline changes and anticipated impacts to coastal areas and communities due to climate change over the next several decades along with recommended actions to mitigate and adapt to the impacts of climate change and related coastal hazards. Tasks include estimating sea level rise and future storms, assessing physical impacts to coastal environments and ecosystems, identifying potential adaptation strategies, and developing a coastal climate change adaptation guidebook. Other related work plan topics include sediment management and sustainable coastal communities. Comments are due by July 10, 2009.

New Study Provides Glimpse into Maine's Climate Future

<http://www.climatechange.umaine.edu/mainesclimatefuture/>

As directed by the state's governor in 2007, the University of Maine's Climate Change Institute conducted a wide-ranging analysis of the state's future in the context of a changing climate. Conducted without funding and based on existing knowledge and information, "Maine's Climate Future: An Initial Assessment" (74 pp.) looks at the state's climate, past, present, and future. It also examines what climate change might mean for the environment, the economy, and human health. The report is a preliminary step designed to frame future detailed analyses.

Delaware Releases Report on Sea Level Rise Workshop

<http://www.swc.dnrec.delaware.gov/coastal/Pages/SeaLevelRiseAdaptation.aspx>.

Delaware has released a summary report (165 pp.) of its recent workshop--Preparing for Sea Level Rise: Development of an Adaptation Strategy for Delaware. The summary synthesizes workshop results and specific outcomes from each of four break-out groups: Economy and Community, Habitat and Natural Resources, Human Health and Public Welfare, and Infrastructure.

Washington State Leaders Target Climate Change Adaptation

<http://www.ecy.wa.gov/climatechange/2009EO.htm>

<http://apps.leg.wa.gov/billinfo/summary.aspx?bill=5560&year=2009>

In May, the governor of Washington signed an executive order (95-05) on climate change that included a charge to state agencies to protect the state's vulnerable coastal areas. Specifically, it tasks the director of the Department of Ecology, in collaboration with the Washington State Association of Counties and the Association of Washington Cities, with evaluating the potential impacts of sea level rise on the state's shoreline and developing recommendations for addressing them.

A complementary new state law (SB 5560) directs the departments of ecology, agriculture, community, trade, and economic development, fish and wildlife, natural resources, and transportation (in consultation with other stakeholders as specified) to develop an integrated climate change response strategy. It calls for the Department of Ecology to compile the strategy, based on a range of scenarios, by December 1, 2011. The strategy will summarize climate change impacts to Washington, assess Washington's vulnerability to those impacts, prioritize solutions, and identify funding and technical resources to support implementation. In

addition, the law encourages state agencies to consider the strategy when planning and designing new policies and programs.

Florida's My Safe Florida Home Program Reduces Hurricane Risk

https://www.rms.com/Publications/RMS_MSFH_Report_May_2009.pdf

“Analyzing the Effects of the My Safe Florida Home Program on Florida Insurance Risk” (31 pp.) from Risk Management Solutions found that for every grant dollar provided by the My Safe Florida Home program for strengthening Florida homes, hurricane losses are expected to be reduced by as much as \$1.50. This equates to a drop of around \$140 million in total losses for the approximately 30,000 homes retrofitted under the program at the time of the analysis. The program was created to help Floridians identify and make improvements to strengthen their homes against hurricanes through free hurricane mitigation inspections and grant funds. Due to budget constraints, the program will expire at the end of June 2009. The program's most recent annual report is available at <http://mysafefloridahome.com/images/MSFHAR020109.pdf>.

USAID Guidebook Addresses Coastal Climate Change Adaptation Planning

http://www.usaid.gov/our_work/environment/climate/pub_outreach/index.html

“Adapting to Coastal Climate Change: A Guidebook for Development Planners” (164 pp.), prepared by the University of Rhode Island's Coastal Resources Center and International Resources Group for the U.S. Agency for International Development (USAID), provides a detailed treatment of climate concerns in coastal areas. It proposes an approach for assessing vulnerability to climate change and climate variability, developing and implementing adaptation options, and integrating options into programs, development plans, and projects at the national and local levels. Practitioner briefs highlight select coastal adaptation measures, discussing technical effectiveness, costs, benefits, and implementation considerations.

Study Shows How Galveston Bay Region May Be Adversely Impacted by Climate Change

http://www.edf.org/documents/9901_EDF_Sea_Level_Rise_Report.pdf

“The Socio-Economic Impact of Sea Level Rise in the Galveston Bay Region” (40 pp.), a study conducted for the Environmental Defense Fund, is part of a larger effort that seeks to illustrate the impact that climate change can have on communities. Researchers modeled two scenarios for sea level rise in the region over 100 years. For a sea level rise of 0.69 meters, the study suggests that more than 79,000 households would be displaced, approximately 60,000 buildings would be impacted, and there would be \$9.3 billion in building-related economic losses. For a sea level rise of 1.5 meters, almost 99,000 households would be displaced, approximately 75,000 buildings would be impacted, and there would be \$12.4 billion in building-related economic losses.