

CZMA CLIMATE CHANGE AND COASTAL HAZARDS E-NEWS UPDATE #26

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/climatenewsletter.html>.

In this Issue:**NOAA UPDATES**

- OCRM Releases Report on Protecting the Public Interest through Shorefront No-Build Areas
- May 27–June 2 is Hurricane Preparedness Week
- NOAA Updates Extreme Weather Information Sheets for 2012
- NWS Releases Weather-Ready Nation Roadmap for Comment
- Independent Study Illustrates Economic Benefits of Coastal Mapping Program
- NOS Publication Guides Development of Sea Level Change Scenarios
- CSC Expands Coverage of Sea Level Rise and Coastal Flooding Impacts Viewer to Georgia

OTHER FEDERAL UPDATES

- EPA Calls for Comments on National Water/Climate Change Strategy and Launches New Website
- FEMA Releases National Preparedness Report
- New FEMA Guide Aims to Improve Risk Identification and Assessment
- FEMA Releases Long-Term Community Recovery Toolbox
- FEMA Updates Levee Webpages
- Regional Websites Communicate about FEMA's Coastal Flood Studies
- 2012 Our Changing Planet Report Submitted to Congress

ADDITIONAL UPDATES

- New Online Portal and Apps Provide Information on Tsunami Zones in the Northwest
- Washington State Releases Climate Change Response Strategy
- PBS Program Highlights Norfolk's Struggle against Sea Level Rise
- Paper Aims to Advance Climate Change Adaptation Planning and Implementation
- NRDC Examines State-Level Preparedness for Water-Related Impacts of Climate Change
- Report and Website Examine Vulnerability of U.S. to Impacts of Sea Level Rise
- CSU Researchers Predict Below-Average Hurricane Season for Atlantic Basin in 2012
- IPCC Releases Full Report on Extreme Events and Disasters
- Report Shows Value of Coastal Wetland Restoration in Addressing Climate Change
- Report Examines Synergies between Green Building and Resiliency to Climate Change Impacts

CONFERENCES, TRAININGS, EVENTS

- Webinar: Framing Climate Change: Recent Research Trends on Communication Strategies and Public Opinion
- Hurricanes: Science and Society Webinars
- Digital Coast Webinar: Roadmap for Adapting to Coastal Risk
- The Coastal Society's 23rd International Conference
- Fourth International Conference on Climate Change: Impacts and Responses

NOAA UPDATES

OCRM Releases Report on Protecting the Public Interest through Shorefront No-Build Areas

<http://coastalmanagement.noaa.gov/resources/docs/nobuildareas.pdf>

NOAA's Office of Ocean and Coastal Resource Management (OCRM) has released a report that summarizes where coastal states and territories employ shorefront no-build areas (e.g., through setbacks, rolling easements, or zoning) along ocean and Great Lake shorefronts to protect the public interest. The information was compiled by OCRM with input from state and territorial partners to help OCRM better understand and communicate how state and territorial coastal management programs manage ocean and Great Lake shorefront development. The report, "Protecting the Public Interest through the National Coastal Zone Management Program: How Coastal States and Territories Use No-Build Areas along Ocean and Great Lake Shorefronts" (59 pp.), is also meant to be a resource for states and territories that are considering revising their shorefront development laws and regulations or adopting new ones.

May 27–June 2 is Hurricane Preparedness Week

<http://www.nhc.noaa.gov/prepare/>

<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 2012

<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 website information that residents can use during potentially life-threatening weather emergencies. Each year, the center verifies contact and website information and monitors and updates it throughout the hurricane season.

NWS Releases Weather-Ready Nation Roadmap for Comment

<http://go.usa.gov/yZo>

NOAA's National Weather Service (NWS) has released a draft "Weather-Ready Nation Roadmap," (77 pp.) to help meet the goals of the NWS Strategic Plan. The Weather-Ready Nation initiative is about building community resilience in the face of increasing vulnerability to extreme weather and water events. It envisions that, ultimately, emergency managers, first responders, government officials, businesses, and the public will be empowered to make faster, smarter decisions to save lives and protect livelihoods. The roadmap lays the foundation for future NWS services. Visit <https://apps.weather.gov/wrn/comments.php> by July 18, 2012, to comment.

Independent Study Illustrates Economic Benefits of Coastal Mapping Program

http://geodesy.noaa.gov/PUBS_LIB/CMP_Socio-Economic_Scoping_Study_Final.pdf

According to "Socio-Economic Study: Scoping the Value of NOAA's Coastal Mapping Program" (96 pp.), for every dollar taxpayers spend on NOAA's Coastal Mapping Program, part of the National Geodetic Survey, they receive more than \$35 in benefits. Direct economic benefits of the program alone were estimated at \$100 million, 15 times program costs. The study estimated that the program further supports 1,500 jobs outside of the program. The program provides critical baseline data for accurately mapping the nation's official shoreline and provides geographical reference data needed to manage, develop, conserve, and protect coastal resources.

NOS Publication Guides Development of Sea Level Change Scenarios

<http://csc.noaa.gov/digitalcoast/publications/slscenarios>

“Incorporating Sea Level Change Scenarios at the Local Level” (20 pp.) is a collaborative effort from a number of National Ocean Service (NOS) offices and is a “low-tech” companion document to a previously released NOAA technical publication. It outlines eight steps a community can take to develop site-appropriate sea level change scenarios to aid in community planning initiatives.

CSC Expands Coverage of Sea Level Rise and Coastal Flooding Impacts Viewer to Georgia

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

NOAA’s Coastal Services Center (CSC) has added six coastal counties in Georgia to its Sea Level Rise and Coastal Flooding Impacts Viewer. This expands the viewer’s coverage to six states, with new coastal states being added quarterly. The tool features coastal flooding scenarios with visualizations of local landmarks, uncertainty maps, flood frequency information, and social and economic vulnerability information. Also new is a “Frequently Asked Questions” section that explains the tool’s data, modeling approach, and functionality.

OTHER FEDERAL UPDATES

EPA Calls for Comments on National Water/Climate Change Strategy and Launches New Website

<http://water.epa.gov/scitech/climatechange/index.cfm>

EPA has released and is accepting public comments on the draft “National Water Program 2012 Strategy: Response to Climate Change” (112 pp.), which describes how EPA’s water-related programs plan to address the impacts of climate change and provides long-term visions, goals, and strategic actions for the management of sustainable water resources for future generations. The strategy focuses on five key areas: infrastructure, watersheds and wetlands, coastal and ocean waters, water quality, and working with tribes. It also describes geographically based strategic issues and actions. Comments are due by May 17, 2012. In addition, the agency has launched a new “Climate Change and Water” website.

FEMA Releases National Preparedness Report

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=5902>

As required by Presidential Policy Directive 8: National Preparedness, FEMA has released the “National Preparedness Report” (75 pp.) to summarize the progress made toward building, sustaining, and delivering the 31 core capabilities described in the National Preparedness Goal. Overall, the report found that the nation has increased its collective preparedness and identifies several significant areas of national strength. It also identified opportunities for national improvement, notably in long-term recovery.

New FEMA Guide Aims to Improve Risk Identification and Assessment

<http://www.fema.gov/library/viewRecord.do?id=5823>

<http://www.fema.gov/library/viewRecord.do?id=5825>

“Threat and Hazard Identification and Risk Assessment Guide: Comprehensive Preparedness Guide (CPG) 201” (22 pp.) from FEMA provides a comprehensive approach for identifying and assessing risks and associated impacts so communities can make informed decisions about how to manage them and develop needed capabilities. It describes a common way to assess risks so we, as a nation, can more fully understand the risks that communities face and identify necessary actions and resources to increase our security and resilience. A supplement to the guide (26 pp.) provides resources and information, data sources, and templates.

FEMA Releases Long-Term Community Recovery Toolbox

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=5888>

FEMA's "Long-Term Community Recovery Toolbox" (92 pp.) was created to help communities coordinate projects, activities, and issues of residents and local governments associated with disaster recovery. It is intended for use by community members, local leaders, and state and federal agencies involved in long-term community recovery. The tools aid with communication, decision making, identification and development of projects, and the creation of funding strategies critical to community long-term recovery.

FEMA Updates Levee Web pages

http://www.fema.gov/plan/prevent/fhm/lv_intro.shtm

FEMA has updated its levee web pages to better educate communities, the public, and other stakeholders about the risks levees pose and to help dispel myths about the ability of levees to always protect communities. The "Living with Levees" homepage serves as the portal to all of FEMA's online levee-related information.

Regional Websites Communicate about FEMA's Coastal Flood Studies

FEMA Region II: <http://www.region2coastal.com/>

FEMA Region III: <http://www.r3coastal.com/>

FEMA Region IV: <http://www.southeastcoastalmaps.com/>

FEMA Region V: <http://www.greatlakescoast.org/>

FEMA Region VI: <http://www.riskmap6.com/> (not coastal specific), <http://www.txchart.com/> (Texas)

FEMA Region IX: <http://www.bakeraecom.com/index.php/region-ix/coastal-studies/> (California)

Regional websites about FEMA's coastal flood studies provide stakeholders with information about the projects and coastal flood risk in their region.

2012 Our Changing Planet Report Submitted to Congress

<http://www.globalchange.gov/publications/our-changing-planet-ocp>

As required by the Global Change Research Act of 1990, the U.S. Global Change Research Program (USGCRP) has submitted its 2012 annual report to Congress. "Our Changing Planet: The U.S. Global Change Research Program for Fiscal Year 2012" (53 pp.) describes the activities and plans of the program, which coordinates and integrates scientific research on climate and global change and is supported by 13 federal departments and agencies. In FY 2012, the USGCRP plans to place greater emphasis on advancing the scientific knowledge of the integrated human and Earth system; providing the scientific basis to inform and enable timely decisions on adaptation and mitigation; building sustained assessment capacity; and increasing public understanding of global change.

ADDITIONAL UPDATES

New Online Portal and Apps Provide Information on Tsunami Zones in the Northwest

<http://nvs.nanoos.org/tsunami>

A new online portal and free smartphone apps (iPhone and Android—search TsunamiEvac-NW) provide information about tsunami hazard zones along the coasts of Oregon and Washington. The Northwest Association of Networked Ocean Observing System developed the tool and launched it in partnership with the Oregon Department of Geology and Mineral Industries and Washington State Department of Natural Resources, the agencies responsible for the original development of the evacuation zones. NOAA's National Tsunami Hazard Mitigation Program provided funding for the tsunami inundation models used to map the evacuation zones displayed in the app.

Washington State Releases Climate Change Response Strategy

http://www.ecy.wa.gov/climatechange/ipa_responsestrategy.htm

“Preparing for a Changing Climate: Washington State’s Integrated Climate Response Strategy” (207 pp.) offers recommendations on how state and local agencies, public and private businesses, nongovernmental organizations, and individuals can prepare for, address, and adapt to the impacts of climate change. The report, which was prepared by the Washington Department of Ecology in collaboration with other state departments and based on the expertise of a broad range of stakeholders, identifies and addresses seven high-priority, overarching response strategies, including “reduce risks to ocean and coastlines.” It also outlines recommendations to advance research and monitoring, raise awareness, engage the public, and build support for meaningful action.

PBS Program Highlights Norfolk’s Struggle against Sea Level Rise

<http://www.pbs.org/wnet/need-to-know/environment/rising-tide-in-norfolk-va/13739/>

“Rising Tide” (13:02) is a video from a new PBS TV and web newsmagazine, “Need to Know,” that looks at how Norfolk, Virginia, is already grappling with massive flooding caused by sea level rise.

Paper Aims to Advance Climate Change Adaptation Planning and Implementation

<http://headwaterseconomics.org/land/reports/climate-adaptation-lessons-learned/>

“Implementing Climate Change Adaptation: Lessons Learned from Ten Examples” (49 pp.) from Headwaters Economics presents 10 examples of cities and counties around the country that have begun to prepare for climate change and the key lessons learned in the process of moving from adaptation planning to implementation. For each community, it examines the policy on climate change adaptation, the process whereby it was institutionalized, who made it happen, how it was funded, and the effects of its institutionalization. The purpose of the paper is to inform and inspire other communities in their efforts to advance climate change adaptation.

NRDC Examines State-Level Preparedness for Water-Related Impacts of Climate Change

<http://www.nrdc.org/water/readiness/water-readiness-report.asp>

<http://www.nrdc.org/water/readiness>

“Ready or Not: An Evaluation of State Climate and Water Preparedness Planning” (321 pp.), a report from the Natural Resources Defense Council (NRDC), focuses on how U.S. state governments are planning and preparing for the water-related impacts of climate change. These impacts include more severe and frequent storms, intense rainfall, sea level rise, warmer water temperatures, and drought events. The report ranks all 50 states on their climate preparedness planning and is accompanied by an interactive online map that shows the threats each state faces from climate change.

Report and Website Examine Vulnerability of U.S. to Impacts of Sea Level Rise

<http://sealevel.climatecentral.org/research/reports/surging-seas/>

“Surging Seas” (13 pp.) from Climate Central examines how sea level rise is compounding the risk from storm surge along the U.S. coast (contiguous states); estimates land, housing, and population in vulnerable low-lying areas; and associates this information with flood risk timelines. The Surging Seas website includes an interactive map, state-level summaries, downloadable data, web widgets, and links to the original peer-reviewed studies: “Tidally Adjusted Estimates of Topographic Vulnerability to Sea Level Rise and Flooding for the Contiguous United States” (13 pp.) and “Modeling Sea Level Rise Impacts on Storm Surges along U.S. Coasts” (12 pp.), which both appeared in “Environmental Research Letters.”

CSU Researchers Predict Below-Average Hurricane Season for Atlantic Basin in 2012

<http://hurricane.atmos.colostate.edu/Forecasts/2012/apr2012/apr2012.pdf>

In early April, researchers at Colorado State University's Tropical Meteorology Project issued their "Extended Range Forecast of Atlantic Seasonal Hurricane Activity and Landfall Strike Probability for 2012" (42 pp.). They anticipate that the 2012 Atlantic hurricane season will have less activity than the median 1981-2010 season and a below-average probability for major hurricanes making landfall along the United States coastline and in the Caribbean. They estimate that 2012 will have about 10 named storms, 4 of which could become hurricanes, including 2 major hurricanes (Category 3, 4, or 5).

IPCC Releases Full Report on Extreme Events and Disasters

<http://ipcc-wg2.gov/SREX/>

In March, the Intergovernmental Panel on Climate Change (IPCC) released its full special report "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation" (594 pp.). The report is an assessment of the scientific literature on issues such as the relationship between climate change and extreme weather and climate events and the implications of these events for society and sustainable development. It discusses the interaction of climatic, environmental, and human factors that can lead to impacts and disasters, options for managing risk, and the important role that nonclimatic factors play in determining impacts.

Report Shows Value of Coastal Wetland Restoration in Addressing Climate Change

<http://www.estuaries.org/reports/>

"Restore-Adapt-Mitigate: Responding to Climate Change through Coastal Habitat Restoration" (63 pp.), a new study from Restore America's Estuaries, links ecologically important coastal habitat restoration with adaptation and mitigation strategies as a way to reduce the impacts of ongoing global climate change. It examines the current state of U.S. coasts; likely effects of climate change on those coasts; coastal planning, design, and policymaking considerations; why coastal habitat restoration is essential to climate change adaptation and mitigation; and new findings that indicate that coastal tidal wetlands are efficient carbon sinks.

Report Examines Synergies between Green Building and Resiliency to Climate Change Impacts

<http://www.usgbc.org/ShowFile.aspx?DocumentID=18538>

A report from the University of Michigan's Taubman College of Architecture and Urban Planning and the U.S. Green Building Council summarizes the most recent research on the likely impacts of climate change at various scales (regional, neighborhood, and site or building) and links these impacts with strategies for addressing them. "Green Building and Climate Resilience: Understanding the Impacts of Preparing for Changing Conditions" (260 pp.) examines the implications of climate change for green building and identifies opportunities for resilience through the design, construction, and operation of buildings and communities and demonstrates how consideration of climate resilience in buildings can increase the likelihood of achieving performance goals throughout the lifetime of a project.

CONFERENCES, TRAININGS, EVENTS

Webinar: Framing Climate Change: Recent Research Trends on Communication Strategies and Public Opinion

<http://changingclimate.osu.edu/webinars/>

May 9, 2012

Hurricanes: Science and Society Webinars

<http://www.hurricanesociety.org/resources/webinar2012/>

Hurricane Hazards and Impacts: May 9, 2012

Hurricane Preparedness: May 22, 2012

Digital Coast Webinar: Roadmap for Adapting to Coastal Risk

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

May 15, 2012

The Coastal Society's 23rd International Conference

<http://thecoastalsociety.org/conference/tcs23/index.html>

June 3-6, 2012

Miami, Florida

Fourth International Conference on Climate Change: Impacts and Responses

<http://on-climate.com/conference-2012/>

July 12-13, 2012

Seattle, Washington

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 5, 2012