

CZMA CLIMATE CHANGE AND COASTAL HAZARDS E-NEWS UPDATE #11

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 UPDATES

DOC Proposes Establishment of NOAA Climate Service

http://www.noaaneews.noaa.gov/stories2010/20100208_climate.html

On February 8, the U.S. Department of Commerce announced the intent to create a NOAA Climate Service line office dedicated to bringing together the agency's strong climate science and service delivery capabilities. Unifying NOAA's climate capabilities under a single office will integrate the agency's climate science and services and make them more accessible to NOAA partners and other users. The climate research, observations, modeling, predictions, and assessments generated by NOAA's top scientists will continue to provide the scientific foundation for extensive on-the-ground climate services that respond to millions of requests annually.

NOAA Launches Landmark Climate.gov Portal

http://www.noaaneews.noaa.gov/stories2010/20100208_climategov.html

<http://www.climate.gov/>

NOAA has unveiled a new website that serves as a single point-of-entry for its extensive climate information, data, products, and services. The Climate Portal addresses the needs of five broadly defined user groups: decision makers and policy leaders, scientists and applications-oriented data users, educators, business users, and the public. Highlights of the portal include an interactive "climate dashboard" that shows a range of constantly updating climate datasets (e.g., temperature, carbon dioxide concentration, and sea level) over adjustable time scales; the new climate science magazine ClimateWatch, featuring videos and articles of scientists discussing recent climate research and findings; and an array of data products and educational resources.

National Hurricane Center to Provide Greater Lead Time in Watches and Warnings

http://www.noaaneews.noaa.gov/stories2010/20100105_nhc.html

Starting with the 2010 hurricane season, NOAA's National Hurricane Center (NHC) will issue watches and warnings for tropical storms and hurricanes along threatened coastal areas 12 hours earlier than in previous years. According to NHC experts, advancements in track forecasts make it possible to provide greater lead time. Tropical storm watches will be issued when tropical storm conditions are possible along the coast within 48 hours. Tropical storm warnings will be issued when those conditions are expected within 36 hours. Similar increases in lead time will apply to hurricane watches and warnings.

Tsunami Response Exercises Scheduled for March

<http://wcatwc.arh.noaa.gov/>

NOAA and the National Tsunami Hazards Mitigation Program are providing the framework for tsunami response exercises in the Pacific and Atlantic Oceans on March 24, 2010. The exercises provide an opportunity for emergency management organizations along the U.S. and Canadian Pacific and East Coasts, the Gulf of Mexico Coast, and in Puerto Rico and the Virgin Islands to exercise operational lines of communications, review tsunami response procedures, and promote tsunami preparedness. The Pacific exercise will simulate a magnitude 9.0 earthquake and tsunami generated south of the Alaska Peninsula. The Atlantic exercise will simulate a magnitude 7.5 earthquake off the New England coast with an induced continental slope slump that generates a major tsunami. Participant handbooks for both exercises are available online.

NOAA's Sea Grant Awards Eight Climate Engagement Mini-Grants

http://www.noaanews.noaa.gov/stories2010/20100203_seagrant.html

NOAA's National Sea Grant Program has awarded eight \$25,000 mini-grants to support projects focused on preparing for climate change. The goal of the program is to leverage NOAA and Sea Grant resources to help coastal communities adapt to climate change. Projects will be led by principal investigators from local Sea Grant programs and NOAA Regional Collaboration Teams in eight regions. Regional projects include a video, training, workshops, climate extension networks, and an educator's guide.

Presentations from National Tsunami Hazard Mitigation Program Meeting Available Online

<http://nthmp.tsunami.gov/jan2010meeting/index.html>

The National Tsunami Hazard Mitigation Program held its annual meeting in January. Presentations are available online and include state-specific briefings, subcommittee briefings, and a briefing on the plan to improve the TsunamiReady program.

Findings of NOAA Researchers Supports Likelihood of More-Intense Hurricanes

<http://www.sciencemag.org/> (subscription required)

In "Modeled Impact of Anthropogenic Warming on the Frequency of Intense Atlantic Hurricanes" ("Science" 327 (5964), 5 pp.) researchers explored the influence of future global warming on Atlantic hurricanes with a downscaling strategy by using an operational hurricane-prediction model that produces a realistic distribution of intense hurricane activity for present-day conditions. The model projects nearly a doubling of the frequency of category 4 and 5 storms by the end of the twenty-first century, despite a decrease in the overall frequency of tropical cyclones.

OTHER FEDERAL UPDATES

FEMA Releases Draft National Disaster Recovery Framework

<http://www.fema.gov/recoveryframework/>

The Federal Emergency Management Agency (FEMA), in coordination with the interagency Long Term Disaster Recovery Working Group (which NOAA is a part of), has released a draft of the "National Disaster Recovery Framework" (59 pp.), which is focused on engaging state, local, and tribal governments; nonprofit partners; the private sector; and the public to enhance the nation's ability to recover from disasters. It provides a model to collectively identify and address challenges that arise during disaster recovery and is designed to help the broad emergency management community work better together to support individuals, households, and communities as they rebuild and restore their ways of life following a disaster. Comments can be submitted through February 26, 2010, at <http://www.regulations.gov/> (Docket FEMA-2010-0004).

New Publication Summarizes Findings of Coastal Hazards Colloquium

http://hazardscenter.unc.edu/diem/documents/UniversitiesProceedings_CoastalHazards_FINAL_12-10-09-1.pdf

The final report (40 pp.) of the Coastal Hazards Colloquium convened by the U.S. Department of Homeland Security's Center of Excellence for Natural Disasters Coastal Infrastructure and Emergency Management summarizes the findings of 29 experts in tropical meteorology, coastal engineering, hydrology, marine science, emergency management, and public policy who met to discuss the state of the knowledge in coastal hazards phenomenology in December 2008. Priority topics identified for future research include the role of vegetation and land use characteristics in tropical cyclone hazards, hydrologic-coastal surge model coupling in

low-relief coastal terrain, quantitative prediction of coastal erosion, and climate change and future hazards posed by tropical cyclones.

New Corps Website Tells Tales of the Coast

<http://www.iwr.usace.army.mil/coasts/>

The U.S. Army Corps of Engineers has launched a new “Tales of the Coast Website.” The site describes the coasts of the United States and the varied ways that people interact with and affect coastlines. These discussions provide an understanding of the dynamic nature of coasts and their importance to the social and economic fabric of the nation.

Corps Program Website Addresses Climate Change Impacts to Mission Areas

<http://www.iwr.usace.army.mil/inside/products/climatechange/index.cfm>

The U.S. Army Corps of Engineer’s Institute for Water Resources Responses to Climate Change Program develops and implements practical, nationally consistent, and cost-effective approaches and policies to reduce potential vulnerabilities to the nation’s water infrastructure resulting from climate change and variability. The program’s website has information on news concerning the program, interagency activities, Corps guidance, and links to other agencies and organizations.

Climate Ready Estuaries Publishes Its First Progress Report

<http://www.epa.gov/cre/downloads/2009-CRE-Progress-Report.pdf>

The U.S. Environmental Protection Agency has released “Climate Ready Estuaries: 2009 Progress Report” (24 pp.), which describes program accomplishments to date, including activities being managed by partners, lessons learned in the adaptation planning process, challenges encountered, and next steps.

New EPA Report Reviews Literature on Tribal Climate Change Adaptation Options

[http://yosemite.epa.gov/R10/TRIBAL.NSF/programs/tribalairprojects/\\$FILE/tribal_climate_change_adaptation_report_010610.pdf](http://yosemite.epa.gov/R10/TRIBAL.NSF/programs/tribalairprojects/$FILE/tribal_climate_change_adaptation_report_010610.pdf)

“Tribal Climate Change Adaptation Options: A Review of the Scientific Literature” (86 pp.) from the U.S. Environmental Protection Agency (EPA) summarizes information in published scientific literature that identifies physical changes in the climate; identifies vulnerabilities of tribal resources to climate change; and identifies adaptation options that tribes in EPA Region 10 could implement to minimize the possible adverse impacts to their lifestyle and well-being. The report will be updated and revised in response to the needs of the tribes and to incorporate new scientific findings.

ADDITIONAL UPDATES

North Carolina Hosts Forum on Sea Level Rise

<http://www.nccoastalmanagement.net/slr.html>

In January, a public Sea Level Rise Science Forum in North Carolina brought together experts and over 250 stakeholders from the public, academic and policy institutions, and local, state, and federal agencies to discuss sea level rise in the state. The North Carolina Coastal Resources Commission (CRC) released a preliminary report on the current and projected sea level rise through 2100, which is likely to be up to 1.4 meters (4.59 feet). The report recommends that the CRC adopt one meter of rise by 2100 for planning purposes and review the planning rate at least every five years. The CRC and the Department of Environment and Natural Resources will use these recommendations for education efforts, policy development, and adaptation planning.

Delaware Reports on Sea Level Rise Projects in Compendium Document

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

As part of Delaware Coastal Programs' Sea Level Rise Initiative, the program has produced "Sea Level Rise Initiative Project Compendium" (62 pp.), an at-a-glance inventory and timeline of projects currently underway. Projects are listed under four categories: Scientific and Technical Support, Implementation Actions, Policy Development, and Communication, Training, and Public Involvement.

Newly Updated Tsunami Inundation Maps Released for California

http://www.consrv.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/Pages/Index.aspx

In December, the California Tsunami Program, a collaborative group of state, local, and federal government officials, released 130 new or updated tsunami inundation maps for vulnerable areas along the California coast, including, for the first time, the entire San Francisco Bay area. Funded through the National Tsunami Hazard Mitigation Program, the state program worked with local emergency managers to help incorporate these maps into their emergency response plans. A new two-page informational document that explains tsunamis, the warning signs, and the tsunami threat in California is also available.

Model Bylaw Addresses Coastal Floodplain Management

<http://nsgl.gso.uri.edu/hawau/hawaut09001.pdf>

"Model Bylaw for Effectively Managing Coastal Floodplain Development" (47 pp.) is a cooperative effort of the Woods Hole and University of Hawaii Sea Grants, Cape Cod Commission, and Cape Cod Cooperative Extension. The purpose of the project was to develop a scientifically sound coastal floodplain regulation to advance the protection of the natural and beneficial functions of the shoreline and coastal floodplain while facilitating appropriate uses of public and private property. The resulting document consists of the model bylaw and a technical report, which discusses life expectancy of buildings, higher standards, erosion setbacks, sea level rise, and more.

CASES Adaptation Case Study Database Released

<http://cases.washington.edu/cig/cases>

The Climate Adaptation Case Studies (CASES) database was developed by the Climate Impacts Group at the University of Washington to support climate change adaptation efforts at the state, regional, and local level. CASES is a user-driven, searchable database that provides basic information on state and local level adaptation planning efforts, in Washington and elsewhere. The number of case studies in the database is expected to grow over time as more case studies are entered and as more communities engage in adaptation planning. Case study submissions are encouraged. The CASES Adaptation Library provides more general information on planning for climate change, including links to reports, studies, and other resources.

Swinomish Indian Tribal Community Releases Climate Change Technical Assessment

http://www.swinomish-nsn.gov/departments/planning/climate_change/climate_main.html

The Swinomish Indian Tribal Community, in north Puget Sound in Washington, released a technical assessment (141 pp.) of climate change impacts on the tribal community and reservation lands. The report represents completion of the first phase of a two-year program that will result in development of a climate change adaptation plan for the community. In addition to addressing impacts identified in the assessment, the adaptation plan (due September 2010) will consider overlapping interests of neighboring jurisdictions and outline the potential for collaboration. It will also summarize the capacity and possible funding options for implementation and serve as a model for other tribes developing climate change adaptation plans.

Punta Gorda, Florida, Makes Plans for Climate Change

<http://www.chnep.org/projects/climate/PuntaGordaAdaptationPlan.pdf>

In November, the City of Punta Gorda's City Council voted unanimously to accept the "City of Punta Gorda Adaptation Plan" (409 pp.), which was developed as part of the Charlotte Harbor National Estuary Program's participation in the U.S. Environmental Protection Agency's Climate Ready Estuaries Program and in cooperation with the Southwest Florida Regional Planning Council. During public workshops, Punta Gorda citizens identified 54 vulnerabilities that were combined into eight major areas of climate change vulnerability. To address these vulnerabilities, they identified and prioritized 104 adaptation options. The plan describes the process and its outcomes.

Publication Envisions Sea Level Rise Response for Cities along UK Coast

http://www.buildingfutures.org.uk/assets/downloads/Facing_Up_To_Rising_Sea_Levels.pdf

"Facing up to Rising Sea Levels" (15 pp.), a joint venture between the Institution of Civil Engineers and the Royal Institute of British Architects, is a think piece designed to provoke longer-term thinking about sea level rise in the United Kingdom (UK). The publication focuses on three scenarios (retreat, defend, and attack) for two coastal two cities deemed among the most at-risk areas along the UK coast.

CONFERENCES, TRAININGS, EVENTS

Severe Weather Awareness Week

Date varies by state (typically February/March)

<http://www.nws.noaa.gov/om/severeweather/severewxcal.shtml>

National Flood Safety Awareness Week

March 15-19, 2010

<http://www.floodsafety.noaa.gov/>

National Hurricane Conference

Orlando, Florida

March 29-April 2, 2010

<http://www.hurricanemeeting.com/>

Challenges of Natural Resource Economics and Policy: 3rd National Forum on Socioeconomic Research in Coastal Systems

New Orleans, Louisiana

May 26-28, 2010

Abstracts due February 19, 2010

<http://www.cnrep.lsu.edu/>

Resilient Cities 2010: 1st World Congress on Cities and Adaptation to Climate Change

Bonn, Germany

May 28-30, 2010

<http://resilient-cities.iclei.org/bonn2010/>

February 12, 2010