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EPA Climate Change and Water News is a bi-weekly newsletter from the U.S. Environmental Protection Agency (EPA) Office of Water that covers climate change and water-related news from EPA, other U.S. Federal agencies, and partners. To learn more about climate change impacts on water resources, visit our website at: http://www2.epa.gov/climate-change-water-sector.

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EPA News

EPA Launches New Guide for Long-Term Stormwater Planning

EPA launched a guide, toolkit, and technical assistance to promote comprehensive, community-wide planning approaches to manage stormwater. With long-term stormwater plans, communities can make strategic investments in their stormwater systems that yield strong environmental results. Along with EPA's continued commitment to support communities' water infrastructure investments, EPA will provide coordinated technical assistance to five communities to develop community-based integrated plans that will serve as national models. EPA will leverage the lessons learned from these efforts to help lower barriers to long-term stormwater planning, improve water quality, and decrease the costs of stormwater management.

View the Press Release. Learn More.

EPA to Host Webinar Series on Financing Disaster Recovery and Resilience Mitigation for Water and Wastewater Utilities

With the emerging challenges of stronger and more frequent storms, droughts, and floods, the costs to respond are rising. EPA's Water Infrastructure and Resiliency Finance Center and EPA's Water Security Division are hosting two free webinars to highlight the financing resources available to utilities and community decision makers for disaster recovery and resilience planning with mitigation. The first webinar will discuss disaster recovery financing and will be held on November 22, from 1 p.m. to 2:30 p.m. The second webinar will cover resilience mitigation financing and will be held on December 7, from 1 p.m. to 2:30 p.m.

Register for Webinar 1. Register for Webinar 2.

EPA Releases the Environmental Justice 2020 Action Agenda

EPA finalized the EJ 2020 Action Agenda to help cultivate strong partnerships and charting a path forward for achieving better environmental outcomes in the nation's most overburdened communities. EJ 2020 has three overarching goals: to deepen environmental justice practice in EPA's programs that improve the health and environment of overburdened communities; to work with federal, state, tribal, community, and industry partners to expand our impact across the country; and to measure the progress we're making on our most significant environmental justice challenges.

<u>View the Press Release.</u> <u>Read the Fact Sheet.</u> <u>Read the Blog Post.</u> Watch the Video by EJ Stakeholders.

EPA Awards \$3.9M to University of Texas for Water Infrastructure Modeling Research Center

The EPA awarded over \$3.9 million to the University of Texas at Austin, to develop a center for sustainable water infrastructure modeling research. The Center for Infrastructure Modeling and Management will use open source water infrastructure models while sharing green infrastructure tools and research with local communities and stakeholders. Water research provides the science and tools necessary to ensure water quality and availability while protecting human, ecosystem health and effects of climate change.

View the Press Release.

Federal News

White House Council on Climate Preparedness and Resilience Releases Report on Federal Resilience Opportunities

The White House Council on Climate Preparedness and Resilience released "Opportunities to Enhance the Nation's Resilience to Climate Change," a report that outlines opportunities for federal agencies to guide resilience action by supporting science and research on climate change impacts, ensuring federal operations and facilities are resilient to climate change, protecting critical infrastructure and other public goods, and facilitating community-based resilience efforts.

Read the Fact Sheet. Read the Full Report.

NOAA Funding Opportunity for Climate-Related Fisheries Research

NOAA has announced a FY 2017 Federal Funding Opportunity for research to increase understanding of climate-related impacts on fish stocks and fisheries to inform sustainable fisheries management. Proposals are being solicited through two competitions. Deadline to Apply: November 21, at 5 PM EST. Learn More.

New Publication on Climate Change and Indigenous Peoples

The U.S. Forest Service released a report that synthesizes the impacts of climate change on indigenous communities, the key frameworks that inform indigenous understandings of climate change, and the knowledge and strategies that indigenous communities are pursuing. The report is intended to serve as a resource for the 4th National Climate Assessment, future research, tribal and agency climate initiatives, and policy development.

Read the Full Report.

Ecological Drought in the South Central United States

Droughts in the South Central U.S. are expected to become more frequent and severe under climate change, and the South Central Climate Science Center is working to understand what this will mean for people and nature. A report is now available from a March 2016 workshop that convened climate and ecological experts to discuss drought and the challenges it poses for the region. Learn More.

Other News

Signatures of Extreme Precipitation Events in the Western U.S.

A recently published study examined the projected changes to the intensity and frequency of atmospheric rivers, or extreme precipitation events, in western North America. The study found that 90% of atmospheric river events reaching California occurred during the negative Arctic Oscillation. The wettest conditions occurred when the negative Arctic Oscillation, the negative Pacific/North America pattern, and the positive Southern Oscillation were in sync. The team concluded that the landfall location, intensity and isotopic composition of atmospheric river events depends upon the type of El Nino event. Read the Full Report.

Storm Wave Study Could Help Improve Design of Coastal Defenses

An international team of scientists used a scaled-down version of a seawall to record patterns of spray after impact from waves. They used their observations to make a statistical model to calculate patterns of spray that they hope will help inform the design of future defense strategies like seawalls and other barricades.

Read the Full Report.

Marine Carbon Sinking Rates Confirm Importance of Cold Water Oceans

A new study examined the sinking rates of marine carbon in various regions of the world's oceans. Using a data-constrained ocean circulation model as well as estimates of organic matter export from the sea surface, the authors were able to calculate the "transfer efficiency" of organic matter to the deep ocean. The study found that higher latitudes were the most efficient marine carbon sinks while subtropical gyres were the least efficient. These findings emphasize the significance of high-latitude, cold water oceans for marine carbon sequestration and predict a reduction in this natural carbon storage as temperatures warm.

Read the Full Report.

Upcoming Events

See a calendar of climate change and water-related training, conferences, and webinars.

This newsletter is produced by the U.S. Environmental Protection Agency, Office of Water (EPA). For questions related to the newsletter, or to submit an item, email the editor at <u>water_climate_change@epa.gov</u>.

For past issues of EPA Climate Change and Water News, as well as further information on climate change impacts on water resources, visit: <u>http://www2.epa.gov/climate-change-water-sector</u>