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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://www.epa.gov/water/climatechange.

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EPA News

EPA National Water Program Develops Handout Summarizing its Climate Change Adaptation Tools

EPA's National Water Program has developed a handout summarizing the tools developed by the agency for state, tribal, and local governments and others to adapt their clean water and drinking water programs to a changing climate. Tools include, among others, a Storm Surge Inundation and Hurricane Strike Frequency Map; a Workbook for Developing Risk-Based Adaptation Plans; a Flood Resilience Guide for Water and Wastewater Utilities; and a National Stormwater Calculator with Climate Scenarios.

Click here to download the handout.

Click here to access the handout and other climate change and water resources.

WaterSense Launches "When In Drought" Campaign

WaterSense, an EPA partnership program that offers people a simple way to use less water with water-efficient products, new homes and services, has launched its "When In Drought" campaign. This campaign will amplify drought messaging in western states and will create awareness that summer is the most critical time to save on watering. "When In Drought" campaign materials include an animated video that describes actions that everyone can take to save water. To coincide with this campaign, WaterSense is hosting a #WaterSavingYard Photo Challenge on Twitter, Facebook, and Instagram to showcase how beautiful drought-tolerant landscapes can be.

Click here to view the video.

Click here to learn more about the When in Drought Campaign.

Video Produced for EPA Water Utility Response On-The-Go Mobile Website

EPA has released a YouTube video highlighting features of the Water Utility Response On-The-Go mobile website. This website is an innovative tool that consolidates, and makes accessible from the field, information and tools that water utility operators and their response partners may need during an emergency. The site allows users to identify and contact emergency response partners, monitor local and national severe weather, review and complete incident-specific checklists, and populate, save, and email generic damage assessment forms and FEMA Incident Command System forms.

Click here to view the video.

Click here to access the Water Utility On-the-Go Mobile website. (Note: This site is best viewed on a mobile device)

EPA Releases Progress Report on Innovations in the Water Sector

In April 2014, the EPA Administrator issued "Promoting Technology Innovation for Clean and Safe Water: Water Technology Innovation Blueprint – Version 2" to demonstrate the extent of risks to water sustainability, the "market opportunities" for innovation, examples of innovation pioneers, and actions to promote technology innovation. EPA recently released "Promoting Innovation for a Sustainable Future – A Progress Report," highlighting additional examples of the growing momentum exhibited across the country to address traditional and emerging threats to the nation's water resources. Click here to access the reports.

Commission for Environmental Cooperation Issues Five-Year Climate Plan and Announces Roster of Experts in Traditional Ecological Knowledge

The EPA Administrator, along with counterparts from Canada and Mexico, recently announced a 2015-2020 Strategic Plan that focuses on climate change mitigation and adaptation, green growth, and sustainable communities and ecosystems The Strategic Plan represents a renewed commitment on the part of the three nations to conserve, protect, and enhance the North American environment by providing resources, expertise, and direction through the Commission for Environmental Cooperation (CEC). The CEC is an international organization that the U.S., Canada, and Mexico established in 1994 under the North American Agreement on Environmental Cooperation. CEC leaders have discussed the possibility of using the CEC as a vehicle for regional cooperation to address the nexus between climate change and

other issues such as water quality and quantity, energy efficiency, and oceans. In addition to the release of the Plan, CEC leaders have announced the selection of 15 individuals with traditional ecological knowledge who will serve as advisors to the CEC's Joint Public Advisory Committee.

Click here to view the Strategic Plan.

Click here to view the press release announcing the experts in traditional ecological knowledge.

Other Federal News

State of the Climate in 2014 Report Released

The American Meteorological Society has released the State of the Climate Report for 2014. The report, compiled by NOAA's Center for Weather and Climate at the National Centers for Environmental Information, is based on contributions from 413 scientists from 58 countries around the world. The report provides a detailed update on global climate indicators, notable weather events, and other data collected by environmental monitoring stations and instruments located on land, water, ice, and in space. In 2014, the most essential indicators of Earth's changing climate continued to reflect trends of a warming planet, with several markers such as rising land and ocean temperature, sea levels and greenhouse gases setting new records.

Click here to view the press release and for a link to the full report.

Click here to view the highlights.

NASA Releases Detailed Global Climate Change Projections

NASA has released data showing how temperature and rainfall patterns worldwide may change through the year 2100 because of growing concentrations of greenhouse gases in Earth's atmosphere. The new dataset shows projected changes worldwide on a regional level in response to different scenarios of increasing carbon dioxide. The high-resolution data, which can be viewed on a daily timescale at the scale of individual cities and towns, will help scientists and planners conduct climate risk assessments to better understand local and global effects of hazards, such as severe drought, floods, heat waves, and losses in agriculture productivity. The new dataset is from the NASA Earth Exchange (NEX), a big-data research platform within the NASA Advanced Supercomputing Center at the agency's Ames Research Center in Moffett Field, California. In 2013, NEX released similar climate projection data for the continental United States that is currently being used to quantify climate risks to the nation's agriculture, forests, rivers and cities.

Click here to learn more about the projections.

Guidebook on Using Beavers to Restore Streams, Wetlands, and Floodplains Updated and Released

The North Pacific Landscape Conservation Cooperative has partnered with the U.S. Fish and Wildlife Service, NOAA, Portland State University, and the U.S. Forest Service to develop a comprehensive guide on using beaver for stream restoration. The goal of this guidebook is to provide an accessible, useful resource for anyone involved in using beaver to restore streams, floodplains, wetlands, and riparian areas. It provides a practical synthesis of the best available science, an overview of management techniques, and case studies from throughout the western United States. Target audiences include landowners, biologists, engineers, scientists, foresters, farmers, ranchers, the regulatory and funding communities, and others interested in how beaver activity can be effectively used to restore riparian habitat and improve water quality. The information contained in the guide is meant to inform decisions on fish and wildlife habitat restoration and management, range land improvement, wetland management, mitigation, transportation system planning and maintenance, and water management.

Click here to view the Guidebook and learn about an upcoming related workshop.

Other News

Water Environment Federation Announces National Municipal Stormwater and Green Infrastructure Awards Program

The Water Environment Federation has announced a new national municipal stormwater and green infrastructure awards program. Developed through a cooperative agreement with EPA, the program aims to recognize high-performing regulated Municipal Separate Storm Sewer Systems (MS4s) and inspire them to exceed requirements through innovative and cost-effective approaches. All participants will receive a certificate indicating their position as either gold, silver or bronze level within the industry. The call for Applications for Phase II is now open and Phase I will follow shortly. Three winners for each Phase I and Phase I are August 19 and August 24 respectively. For questions, contact Water Environment Federation staff at MS4Awards@wef.org. Click here for details about the awards program.

Association of Climate Change Officers to Offer Regional Training Academies on Climate Fundamentals

The Association of Climate Change Officers (ACCO) is offering a series of two-day training academies to enable attendees to complete all required training CCO Training Bootcamps (including electives) for the Climate Governance Certificate. These academies will provide curriculum on topics including understanding climate science and variability, identifying climate hazards and conducting vulnerability assessments, basics of greenhouse gas accounting, the food-water-energy nexus, and fundamental governance and stakeholder engagement strategies. The Climate Fundamentals Academies bundle and build upon CCO Training Bootcamps and are oriented to decision-makers across professional roles and functions in companies, government, universities, nonprofit organizations, and professional service firms. The Climate Governance Certificate, established as the standard for demonstrating climate savvy leadership skills, demonstrates a fundamental understanding of climate science and risk assessment, footprint management and reduction strategies, climate initiative-related project finance and economic analysis, governance and engagement tactics, and enterprise strategy. The regional training academies will be held in Florida, Arizona, Massachusetts, Washington D.C, and California.

Click here to learn more about the training.

Click here for more information on the CCO Training Bootcamps and certifications.

Winners of the \$2 Million Wendy Schmidt Ocean Health XPRIZE Announced

The winners of the \$2M Wendy Schmidt Ocean Health XPRIZE, a global competition to incentivize breakthroughs in pH sensor technology to accurately and affordably measure the acidification of our oceans, have been announced. Sunburst Sensors, a Montana-based small business focused on the development of chemical sensors for marine and freshwater applications, took home both Grand Prizes. Both of Sunburst's winning sensors utilize an autonomous spectrophotometric process of drawing in a sample of ocean water, mixing it with purified dyes, and shining a laser on the water to determine the pH level. The Second Place Prize in Affordability was awarded to ANB Sensors from England, and the Second Place Prize in Accuracy was awarded to Team DuraFET from Minnesota and California. To reach this point, the five finalist teams put their sensors through a three-month test in controlled laboratory conditions at the Monterey Bay Aquarium Research Institute, followed by a month-long performance test in a coastal environment at the Seattle Aquarium. Most recently, each finalist team had a sensor that proceeded to a six-day deep-sea testing phase in which each was tested for accuracy and precision to 3,000 meters depth in the Pacific Ocean.

Click here to learn about the XPRIZE and the winners.

Upcoming Webinars, Conferences and Trainings

For a calendar of climate change and water-related trainings, conferences, and webinars, visit: http://water.epa.gov/scitech/climatechange/Calendar-of-Events.cfm.

This newsletter is produced by the U.S. Environmental Protection Agency, Office of Water (EPA). If you have questions related to the newsletter or want to submit an item, email the editor at water_climate_change@epa.gov. For past issues of EPA Climate Change and Water News, as well as further information on climate change impacts on water resources, visit www.epa.gov/water/climatechange. For more information on EPA's climate change activities, visit www.epa.gov/climatechange. To unsubscribe to this newsletter, send a blank email to Unsubscribe.