

June 25, 2015

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.

EPA News and Featured Tool

- EPA National Water Program Releases 2015 Workplan
- EPA Releases Report: "Climate Change in the United States: Benefits of Global Action"
- EPA and Federal Partners Announce Additional Resilient Lands and Waters Initiative Sites to Prepare
 Natural Resources for Climate Change
- EPA and Partners Announce Fifteen Project Funded through Green Streets, Green Towns, Green Jobs Grant Initiative
- <u>Featured Tool</u>: National Stormwater Calculator

Other Federal News

- NOAA Study Shows Rapid Acidification of Arctic Ocean
- NOAA Offers Map of U.S. Resilience Initiatives
- U.S. Army Corps of Engineers Releases Report Comparing 2014 Federal Adaptation Plans
- <u>USDA Announces Expanded Investment in Water Conservation and Resilience throughout Drought Affected</u>
 Areas

Other News

- Restore America's Estuaries Releases National Report: "Living Shorelines: From Barriers to Opportunities"
- Board on Atmospheric Sciences and Climate Announces National Academies Study and Seeks Nominations for Committee Members
- Arizona State University Study: "Impacts of Climate Change on Electric Power Supply in the Western United States"

EPA News and Featured Tool

EPA National Water Program Releases 2015 Workplan

The Workplan lays out the actions that the EPA National Water Program plans to take in 2015 to implement the "EPA National Water Program 2012 Strategy: Response to Climate Change" (2012 Strategy). The 2012 Strategy describes long-term goals for the management of sustainable water resources in light of climate change. It is intended to be a roadmap to guide program planning and inform decision-makers during the Agency's planning and budgeting process. The 2015 Workplan builds on work conducted in 2012-2014 and is structured around five long-term programmatic areas: water infrastructure; watersheds and wetlands; coastal and ocean waters; water quality; and working with Tribes.

Click here to access this and other reports from the EPA National Water Program.

Click here to download the PDF.

EPA Releases Report: "Climate Change in the United States: Benefits of Global Action"

The EPA report estimates the physical and monetary benefits to the U.S. of reducing global greenhouse gas emissions. The report summarizes results from the Climate Change Impacts and Risk Analysis (CIRA) project, a peer-reviewed study comparing impacts in a future with significant global action on climate change to a future in which current greenhouse gas emissions continue to rise. The report shows that global action on climate change will significantly benefit Americans by saving lives and avoiding costly damages across the U.S. economy.

Click here to visit the site, download the report, and view the video.

EPA and Federal Partners Announce Additional Resilient Lands and Waters Initiative Sites to Prepare Natural Resources for Climate Change

EPA, Department of the Interior (DOI), U.S. Department of Agriculture (USDA), National Oceanic and Atmospheric Administration (NOAA), and the U.S. Army Corps of Engineers (USACE) are recognizing three new collaborative landscape partnerships located in California and Montana/British Columbia. Federal agencies will focus on efforts with partners in these areas to conserve and restore important lands and waters and make them more resilient to a changing climate. The areas include the California Headwaters, California's North-Central Coast and Russian River Watershed, and Crown of the Continent. The selected lands and waters face a wide range of climate impacts and other ecological stressors related to climate change, including drought, wildfire, sea level rise, species migration, and invasive species. At each location, federal agencies will work closely with state, tribal, and local partners to prepare for and prevent these and other threats and ensure long-term conservation efforts take climate change into account.

Click here to read the press release.

EPA and Partners Announce Fifteen Project Funded through Green Streets, Green Towns, Green Jobs Grant Initiative

EPA and the Chesapeake Bay Trust, in partnership with the Maryland Department of Natural Resources, have announced grants to be awarded to fifteen organizations through the Green Streets, Green Towns, Green Jobs Grant Initiative. This program was created in 2011 to encourage local jurisdictions to use "green" techniques when pursuing necessary "gray" infrastructure projects, accomplishing two goals within one project.

Click here to read the full press release.

Featured Tool: National Stormwater Calculator

EPA's National Stormwater Calculator is an application that estimates the annual amount of rainwater and runoff from a specific site anywhere in the United States. Estimates are based on local soil conditions, land cover, and historic rainfall records. It is designed to be used by anyone interested in reducing runoff from a property, including: site developers, landscape architects, urban planners, and

Click here to learn more and access the tool.

Other Federal News

NOAA Study Shows Rapid Acidification of Arctic Ocean

Research by NOAA and partners in the journal *Oceanography* shows that surface waters of the Chukchi and Beaufort seas could reach levels of acidity that threaten the ability of animals to build and maintain their shells by 2030, with the Bering Sea reaching this level of acidity by 2044. A team of scientists from the University of Alaska Fairbanks collected observations on water temperature, salinity, and dissolved carbon during two month-long expeditions. These data were used to validate a predictive model for the region that calculates the change over time in the amount of calcium and carbonate ions dissolved in seawater, an important indicator of ocean acidification.

Click here to see the press release. Click here to access the journal article.

NOAA Offers Map of U.S. Resilience Initiatives

This web-based mapping application highlights the participation of U.S. municipalities within selected national-level resilience initiatives and programs. Users can select any of the features on the map to activate an associated pop-up window containing additional information on each location. The map shows both federal resilience initiatives as well as those completed through other initiatives.

Click here to view the map.

Click here to learn more about the data sources underlying the map.

U.S. Army Corps of Engineers Releases Report Comparing 2014 Federal Adaptation Plans

The U.S. Army Corps of Engineers (USACE) has released a Comparison of 2014 Adaptation Plans report. This report compares the thirty-eight Adaptation Plans submitted to the Council on Environmental Quality and the Office of Management and Budget in 2014, per the release of the President's Climate Action Plan in June 2013, and Executive Order 13653, "Preparing the United States for the Impacts of Climate Change," in November 2013. This comparison of 2014 Adaptation Plans was undertaken to provide USACE staff with information about other agency climate preparedness and resilience actions to facilitate partnering and information sharing, identify actions taken by agencies with aligned missions and operations that could be useful to USACE, and support a gap analysis to guide future actions.

Click here to read the press release. Click here to download the report.

USDA Announces Expanded Investment in Water Conservation and Resilience throughout Drought Affected Areas

The U.S. Department of Agriculture (USDA) has announced that the Natural Resources Conservation Service will invest approximately \$21 million in additional Farm Bill dollars to help farmers and ranchers apply science-based solutions to mitigate the short and long term effects of drought. These investments will focus financial and technical assistance in the most severely drought-stricken areas in eight states (parts of California, Kansas, Idaho, Nevada, Oklahoma, Oregon, Texas, and Utah) to help crop and livestock producers apply conservation practices that increase irrigation efficiency, improve soil health and productivity, and ensure reliable water sources for livestock operations. Click here to read the press release.

Other News

Restore America's Estuaries Releases National Report: "Living Shorelines: From Barriers to Opportunities"

Restore America's Estuaries has released a report which provides a national assessment of institutional barriers that are preventing broader use of living shorelines and provides clear recommendations and strategies to move forward. Living shorelines are a suite of techniques that offer property owners the opportunity to protect and restore their shoreline using more naturally occurring systems like salt marsh and oyster reefs while also providing benefits to bays and estuaries. Each strategy outlined in the report identifies a number of specific and actionable recommendations for decision and policy makers. Click https://example.com/here-to-download-the-press-release-and-report.

Board on Atmospheric Sciences and Climate Announces National Academies Study and Seeks Nominations for Committee Members

The Board on Atmospheric Sciences and Climate (BASC) has announced a National Academies fast-track study to examine the science of attribution of specific extreme weather events to human-caused climate change and natural variability. The Board is also seeking nominations for committee members who will actively engage the community of scientists who are developing new approaches in event attribution, including by convening a workshop and conducting additional information gathering via publicly available virtual briefings. It will assess current scientific understanding and capabilities, provide guidance about the robustness of different approaches, and identify future research priorities. Members of the planning committee should have expertise on topics including, but not limited to: climate attribution, extreme weather events, climate variability and change, statistics, and science communication. The deadline for nominations is June 29, 2015.

Click here to learn more and submit a nomination.

Arizona State University Study: "Impacts of Climate Change on Electric Power Supply in the Western United States"

An Arizona State University study recently published in *Nature Climate* discusses how climate change may constrain future electricity generation capacity by increasing the incidence of extreme heat and drought events. Researchers estimate reductions to generating capacity in the Western United States based on long-term changes in streamflow, air temperature, water temperature, humidity, and air density. Researchers simulate these key parameters over the next half-century by joining downscaled climate forcings with a hydrologic modelling system. For vulnerable power stations, climate change may reduce average summertime generating capacity by 1.1–3.0%, with reductions of up to 7.2–8.8% under a tenyear drought. At present, not all power providers account for climate impacts in their development plans. Click here to access the article.

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.