

### July 21, 2016

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.

#### **EPA News**

- Climate Ready Estuaries Program Adds Sea Level Rise Resources to Website
- Webcast on EPA Hydrologic and Water Quality System (HAWQS) Beta August 16

#### **Federal News**

- U.S. Global Climate Research Program Seeks Public Comment on Annotated Outline for Fourth
   National Climate Assessment Deadline: July 29
- White House Announces Champions of Change for Climate Equity
- NOAA Develops Guide for Considering Climate Change in Coastal Conservation
- U.S. Experienced At Least 8 Billion-Dollar in Disasters So Far this Year
- NOAA Announces \$4.5M in Funding for New Observing Technologies for ENSO Research and Predictions
- New Studies Show Climate Change is Affecting North American Fish

#### **Other News**

- Report Released on Managing Water in California and Australia During Drought
- Part 3 in Series on National Park Service and Climate Change: "Sea-Level Rise Could Wash Away Our Natural and Cultural History"
- Journal Article: Ocean Acidity to Blame for Thinning Mussel Shells

## **EPA News**

### Climate Ready Estuaries Program Adds Sea Level Rise Resources to Website

The Climate Ready Estuaries program (CRE) works with the National Estuary Programs and the coastal management community to assess climate change vulnerabilities, develop and implement adaptation strategies, and engage and educate stakeholders. Recently added resources to the CRE website address how much the sea has risen, how much it might rise, and what the impacts might be. Resources for overall climate change adaptation planning, including resources for adaptation options, planning frameworks and more, can be found on the <a href="Coastal Adaptation Toolkit">Coastal Adaptation Toolkit</a> page on the website. <a href="Check Out the New Page">Check Out the New Page</a>.

## Webcast on EPA Hydrologic and Water Quality System (HAWQS) Beta – August 16

EPA recently released the Hydrologic and Water Quality System (HAWQS) Beta and will demonstrate its key features in a webcast. The webcast will provide an overview of HAWQS and a demonstration of a specific watershed modeling use case. HAWQS is a web-based interactive water quantity and quality modeling system that expands EPA's repertoire of decision support tools. It simulates the effectiveness of management and policy options on hydrology and various water quality parameters, based on user-defined scenarios incorporating types of crops, soils, vegetation, land uses, and climate change. HAWQS provides users with interactive web interfaces and maps; pre-loaded input data; and outputs that include tables, charts, graphs, and raw output data. Webcast will be on August 16, 2016, 2:00 – 4:00 pm eastern. Register for the Webcast.

## **Federal News**

# U.S. Global Climate Research Program Seeks Public Comment on Annotated Outline for Fourth National Climate Assessment – Deadline: July 29

The U.S. Global Change Research Program (USGCRP) is seeking public comments on the proposed content and scope of the Fourth National Climate Assessment (NCA4). The National Climate Assessment summarizes the impacts of climate change on the United States, now and in the future, and is produced by a team of more than 300 experts guided by a 60-member Federal Advisory Committee. A draft of the NCA4 will be released for public comment prior to its final release. Comment period closes July 29, 2016. Learn More and Access the Draft Outline.

## White House Announces Champions of Change for Climate Equity

The White House has recognized a group of ten Americans who are working to empower and inspire their communities, including enabling low-income and underserved communities to prepare for, adapt to, and thrive in the face of climate change. These leaders have initiated changes to ensure that those most vulnerable to the impacts of climate change have the resources they need to thrive and build resilient communities.

Learn More about the Champions.

#### NOAA Develops Guide for Considering Climate Change in Coastal Conservation

This guide from NOAA's Office for Coastal Management provides a step-by-step approach for incorporating climate change information into new or existing conservation plans. The six steps draw from existing strategic conservation planning frameworks but focus on climate considerations and key resources specifically relevant to the coastal environment, including coastal watersheds. View the Guide.

#### U.S. Experienced At Least 8 Billion-Dollar in Disasters So Far this Year

Only halfway through 2016, and the U.S. has already seen eight weather and climate-related disasters that have each met or exceeded \$1 billion in damages. These eight disasters resulted in the loss of 30 lives, and caused at least \$13.1 billion, according to an analysis by NOAA's National Centers for Environmental Information

Learn More.

# NOAA Announces \$4.5M in Funding for New Observing Technologies for ENSO Research and Predictions

NOAA is investing \$4.5 million over the next four years in four projects testing technology to enhance Tropical Pacific Ocean observing, which improves understanding of the El Niño-Southern Oscillation (ENSO), its prediction, and how it affects the Earth's weather.

<u>Learn More.</u>

#### **New Studies Show Climate Change is Affecting North American Fish**

Climate change is already affecting inland fish across North America, including some fish that are popular with anglers. Scientists are seeing a variety of changes in how inland fish reproduce, grow, and where they can live. Major findings show that climate change may be altering abundance and growth of some North American inland fishes and causing earlier migration timing and allowing species that never occurred together previously to hybridize.

Learn More.

## **Other News**

### Report Released on Managing Water in California and Australia During Drought

The Public Policy Institute of California's Water Policy Center has published "Managing Water for the Environment During Drought: Lessons from Victoria, Australia." Both California and Victoria, Australia, experience similar challenges in managing freshwater-dependent ecosystems and native species during drought. While California's environment and native species has been negatively affected by the current drought, Victoria's water policies helped prevent serious biological losses during an even longer period of drought.

View the Press Release. Read the Full Report.

# Part 3 in Series on National Park Service and Climate Change: "Sea-Level Rise Could Wash Away Our Natural and Cultural History"

Waters in New York Harbor, where the Statue of Liberty stands, have risen a foot since the start of the Industrial Revolution and are projected to be more than 3 feet higher by 2100. Here and elsewhere, the National Park Service is faced with tough decisions about how to best protect America's historical and cultural landmarks from sea-level rise from climate change. This is the third story in a series by Climate Central.

Read the Full Report.
View Other Parts in the Series.

#### Journal Article: Ocean Acidity to Blame for Thinning Mussel Shells

Increasing ocean acidity from climate change is one cause of thinning California mussel shells, according to a new study in the journal "Proceedings of the Royal Society B." University of Chicago biologists compared the thickness of modern mussel shells with those collected in the past, some thousands of years ago by Native Americans, and found that modern shells are thinner overall, thinner per age category, and thinner per unit length. Thus, the largest individuals of this species are calcifying less now than in the past.

Read the 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 <a href="mailto:water\_climate\_change@epa.gov">water\_climate\_change@epa.gov</a>.

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