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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 Releases New Fact Sheets on Climate Change

EPA released a series of fact sheets, "What Climate Change Means for Your State," which focus on the impacts of climate change in each of the 50 states and the territories of Guam and Puerto Rico. These 52 fact sheets compile information from previously published synthesis and assessment reports to provide a handy reference for state and local policymakers, businesses, and individuals who are looking to communicate impacts of climate change in a given state.

Check Out the New Fact Sheets.

Hazard Mitigation for Natural Disasters

Water and wastewater utilities are vulnerable to a variety of hazards including earthquakes, flooding, drought, tornadoes, and wildfires. Use EPA's new Hazard Mitigation Guide to identify cost-effective

projects that will increase your utility's resilience to natural disasters. Learn More.

Federal News

U.S. Tribes Work with Scientists to Adapt to Climate Change

Tribal water managers in Oklahoma have had it tough over the last five years with little precipitation from 2011-2015, high heat in 2011, and torrents of rain and flooding in the summer of 2015. These challenges will likely persist into the future due to climate change. The South Central Climate Science Center is working with tribes to identify their unique vulnerabilities, help them cope with emergencies, and develop long-term adaptation strategies.

Learn More.

NOAA Launches America's First National Water Forecast Model

NOAA and partners have developed a new forecasting tool to simulate how water moves throughout the nation's rivers and streams, paving the way for the biggest improvement in flood forecasting the country has ever seen.

Learn More.

August 2016: Extreme Rain and Floods Along the Gulf Coast

A combination of an incredibly moist air mass and a slow moving storm system resulted in feet of rain for southern Louisiana. The epic rains caused devastating flooding, which led to the evacuation of tens of thousands, killed at least thirteen people, and paralyzed the region. Learn More.

Check Out the Damage Assessment Imagery.

Considering Climate Change for Coastal Adaptation

Coastal ecosystems are particularly vulnerable to climate change, which makes it an important component of long-term conservation planning. This interactive guide from NOAA provides a step-by-step approach for incorporating climate change information into new or existing coastal conservation plans. Learn More.

Check Out the Interactive Companion Resource.

Other News

Forests, Droughts, & Water: Challenges for the Future

The effects of drought on forest productivity and health have long been a concern for natural resource managers. An article in 'Western Forester', a publication of the American Society of Foresters, describes results of the Northwest Climate Science Center's funded research to understand the effects of forest cover on mountain snowpack, and directs readers to a set of online tools and resources for managers. Learn More.

\$7 Million National Science Foundation Grant

The Environmental Sustainability (ES) program supports research that takes a systems approach to green engineering for infrastructure. Improvements in distribution and collection systems that will advance smart growth strategies and ameliorate effects of growth are research areas that are supported by ES. Innovations in management of storm water, recycling and reuse of drinking water, and green engineering techniques to support sustainability are also fruitful areas for research. Application Due: October 20, 2016.

Learn More and Apply.

Developing a Snow Monitoring Network in a Forested Mountain Watershed

Current snow monitoring networks may not be representative of basin-scale distributions of snow water equivalent (SWE), especially in areas where forests and snowpacks are changing. To address this issue, researchers conducted a study to determine the key physiographic drivers of SWE; classify the landscape based on those physiographic drivers; and use that classification to identify a parsimonious set of monitoring sites in a forested watershed in the western Oregon Cascades mountain range. Read the Full Report.

Headwater Streams May Export More Carbon Than Previously Thought

New research sheds light on the streams that carry carbon away from peatlands with the hope that the data will better inform climate models.

Learn More. Read the Full Report.

Snowmelt Rate Dictates Streamflow

A report published in *Geophysical Research Letters* presents a possible mechanism linking snowmelt rate to streamflow generation. The results of the study indicate that there is a strong correlation between snowmelt rate and baseflow efficiency, which supports the idea that greater snowmelt rates increases subsurface flow. As temperatures continue to increase this may lead to earlier, slower snowmelt, decreasing streamflow production. 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 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: <u>http://www2.epa.gov/climate-change-water-sector</u>