WestFAST News

September 2017

Natural Disasters Continue to Impact the West
(WestFAST 9/30/17)

August and September were marked with unprecedented natural disasters. There were 333 incidences of major fires, mostly wildfires (few prescribed burns), 186 of which are still active. National Interagency Fire Center. There were 4 major hurricanes, 3 of which directly impacted the United States with devastating wind and flood damages.

Virtually all of the WestFAST agencies were impacted by these natural disasters and continue to be in the clean-up, or still actively working on the disaster event.

The U.S. Army Corps of Engineers (USACE) and Department of Defense (DOD) prepared nationally in advance for response to hurricane season. Many districts continue to support flood fighting or clean-up efforts across the country.

As Hurricane Harvey and then Irma and Maria moved toward the United States, the U.S. Geological Survey (USGS) experts on storm-related hazards took action, along with other federal agencies to help minimize impacts and to measure the intensity of the flood events and storm surge. Many new flood height records were set in early September in South Texas (Texas Flood Watch) and although outside of “the West” the USGS deployed people from multiple locations to help with measurements.

The National Aeronautics and Space Administration (NASA) was critical with providing imagery, analysis, ground based sensing systems, and use of experimental satellite systems to better observe the storms as they evolved. NASA continues to work with partners as the assessment continues. NASA Disaster Response

The National Oceanic and Atmospheric Administration (NOAA) was ahead of the hurricanes with forecasters engaged providing information. Incident Meteorologists (IMET) were also deployed to multiple fires. On September 15, there were 35 IMET’s at Incident Command Centers for fires throughout the west.

Data for Hurricane Harvey continued coming through the month of September. The National Weather Service confirmed that a record 64.58 inches of rain fell in Nederland near Beaumont during the five-day storm.

U.S. Forest Service (USFS) at the lead with multiple other Federal and State Agencies have been fighting fires. At the peak of the fire events in early September thousands of firefighters were on the fire lines with millions of dollars in equipment. 2017 has experienced over 50 thousand fire events with over 8.4 million acres burned.

The Natural Resources Conservation Service (NRCS) has prepared to provide community, as well as farmer and rancher assistance to individuals and small businesses affected by severe storms and flooding. See NRCS.

These major hazards also had the U.S. Environmental Protection Agency (EPA) active before the storms and fires with guidance on how to more quickly recover from these emergency conditions putting their people on the ground and providing information, in-
including the waiving of some regulations to improve the delivery of supplies such as gas. The smoke from all the fires is a major issue and EPA provided this guidance for those impacted. [EPA’s Top Tips for Breathing Easier in Hot, Smoky Conditions]

Areal survey data is now being released by NOAA and others. Click [here].

**Drought in the Northern Plains Continues**  
(NOAA/USDA 09/28/17 Drought Monitor)

Below is the latest Seasonal Outlook (September 21, 2017) for the west. Some improvement can be expected in part of the drought region of the Pacific Northwest/Rockies with persistence in the Plains.

**Extends to Northern Rockies and Pacific Northwest**  
(NOAA/USDA 09/28/17 Drought Monitor)

[http://go.usa.gov/3eZ73](http://go.usa.gov/3eZ73)
Increases in Wildfire-Caused Erosion Could Impact Water in the West - Water Supply & Quality (USGS 09/07/17)

A growing number of wildfire-burned areas throughout the western United States are expected to increase soil erosion rates within watersheds, causing more sediment to be present in downstream rivers and reservoirs, according to a new study by the U.S. Geological Survey (USGS).

As a number of previous peer-reviewed studies have shown, the area burned annually by wildfires has increased in recent decades and is expected to continue to increase this century. Many growing cities and towns rely on water from rivers and reservoirs that originates in watersheds where wildfire and sedimentation are projected to increase. Increased sedimentation could negatively impact water supply and quality for some communities.

USGS scientists analyzed a collection of climate, fire and erosion models for 471 large watersheds throughout the western United States. They found that by 2050, the amount of sediment in more than one-third of watersheds could at least double. In nearly nine-tenths of the watersheds, sedimentation is projected to increase by more than 10 percent.

“This is the first forward-looking study of the relationship between climate change, future wildfires and soil erosion, and their effects on ecosystems and watersheds throughout the West,” said Joel Sankey, USGS scientist and lead author of the study. “Findings could be used by communities to identify whether their water resources are especially at risk, and whether they have a suitable watershed management and protection plan in place.”

Increased sedimentation may impact water supply by reducing reservoir storage, increasing the need and cost for reservoir maintenance, or increasing costs to treat and deliver water. Water quality may be negatively impacted by increased sediment or increased nutrients and pollutants adsorbed, or attached, to sediment. Potential impacts to aquatic ecosystems range from negative effects on fish habitat to alterations of how a stream moves and flows.

“At least 65 percent of the water supply in the West originates in watersheds with fire-prone vegetation,” said Sankey. “So, understanding how changing fire frequency, extent and location will affect watersheds, reservoirs and communities is of great societal importance.”

Wildfires can burn away ground cover and vegetation across the landscape, leaving soils exposed and easily erodible by precipitation. In other cases, fires can cause soil surfaces to harden. Instead of the rain soaking into the soil, rainwater and melted snow can rush across these hardened surfaces, gaining enough power to erode loose sediments.

This study was done in cooperation with Northern Arizona University, Michigan Tech Research Institute, the USFS, Boise State University and the Department of the Interior’s Northwest Climate Science Center.

WSWC Upcoming Meetings

A Federal Non-Tribal Water Claims Workshop will be held on October 18, in conjunction with the WSWC Fall Meetings in Albuquerque, New Mexico on October 18-20.

WSWC Spring Meeting will be held in the Washington, DC area March 13-15, 2018. WestFAST will also hold a WestFAST Principals Meeting in conjunction with this meeting on March 16.

For further information, please see: http://www.westernstateswater.org/upcoming-meetings/.
Federal News (Control click to articles)

8/29: U.S. Geological Survey field crews are measuring record flooding in parts of south-central Texas following intense rainfall from Tropical Storm Harvey.
9/1: JPSS-1 has new target launch date
9/1: Reclamation announces $1.5 million in Water Use Efficiency grants

Fish and Wildlife News

9/5: Reclamation Awards Nine Projects $2.1 Million for Planning Activities in the Development of WaterSMART Water Marketing Strategies
9/6: Wildfire and Invasive Species Drives Increasing Size and Cost of Public Land Restoration Efforts
9/7: Low-Flying Airplane Mapping Parts of Northeastern California
9/7: EPA's Top Tips for Breathing Easier in Hot, Smoky Conditions
9/7: EPA to hold five public meetings in Idaho focusing on IDEQ seeking water quality permitting program
9/7: New 5-Year Report Shows 101.6 Million Americans Participated in Hunting, Fishing & Wildlife Activities
9/7: Reclamation Launches Prize Competition Seeking Ways to Improve Data Visualization for Colorado River Basin
9/8: River Levels Set Records in Texas: USGS Continues to Monitor Rivers in the State Due to Flooding
9/8: Reclamation proposes two-year pilot study on CVP water for Sutter National Wildlife Refuge
9/8: USDA Stands Ready to Assist Texas Farmers and Ranchers Recover From Hurricane Harvey
9/9: NASA/UCI Find Evidence of Sea Level 'Fingerprints'
9/11: Military Conservationists and Rancher Join Forces for Economy and Wildlife
9/12: Reclamation releases environmental documents for Horserly Irrigation District’s WaterSMART grant project
9/13: Using NASA Satellite Data to Predict Malaria Outbreaks
9/14: Greenland Ice Sheet’s 2017 weigh-in suggests a small increase in ice mass
9/14: North Dakota NRCS Announces Application Deadline for the Environmental Quality Incentives Program

9/17: Reclamation Awards $20,000 for Ideas to Solve Issues About Detecting Soil Movement within Earthen Dams, Canals and Levees
9/18: EPA awards $18 million to state of Alaska for critical water projects
9/18: USGS to Conduct Dye Tracer and Aerial Mapping Surveys on Kootenai River
9/18: Bureau of Reclamation Announces Public Scoping Meetings for the Platte River Recovery Implementation Program
9/18: Globe sees 2nd warmest year to date, 3rd warmest August on record
9/18: National Academies to Study Future Water Resource Needs for the Nation—USGS Supported
9/19: A deadly amphibian disease called severe Perkinsea infections, or SPI, is the cause of many large-scale frog die-offs in the United States
9/19: Environmental documents completed on two-year pilot study of CVP water for Sutter National Wildlife Refuge
9/19: Reclamation Awards $20,000 for Ideas to Limit Rodents from Burrowing into Canals, Levees and Earthen Dam Embankments
9/19: End-of-Summer Arctic Sea Ice Extent Is Eighth Lowest on Record
9/19: Wind, Warm Water Revved Up Melting Antarctic
9/19: NOAA Awards $17 Million for Harmful Algal Bloom Research
9/21: 2017 Arctic sea ice minimum comes in at eighth smallest on record

September:

Habitat Hero Mike Fenn
September: Growing Organic – NRCS Assistance for Organic Farmers
9/22: NRCS Seeks Input on 2018 Conservation Priorities for California
9/22: Nebraska Ag, Natural Resource Groups and Private Industry Create Wetland Conservation Partnership Opportunity for Landowners
9/22: Forest Service invites Americans to celebrate National Hunting and Fishing Day
9/28: Kansas NRCS Announces Deadline for EQIP Funding is November 17, 2017
9/28: U.S. Marine Corps to Bring Camp Pendleton Water Systems into Compliance
9/28: EPA awards Nevada $19.5 million for drinking water and wastewater projects
9/28: USGS Partners with Four Cities to Improve Urban Waterways
9/29: NATIONAL PUBLIC LANDS DAY
10/04: Celebrate the Myriad Benefits of National Wildlife Refuges During Refuge Week October 8-14!

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