

Western States Federal Agency Support Team (WestFAST) is a collaboration between 13 Federal agencies with water management responsibilities in the West. WestFAST was established to support the Western States Water Council (WSWC) and the Western Governors' Association (WGA) in coordinating Federal efforts regarding water issues.

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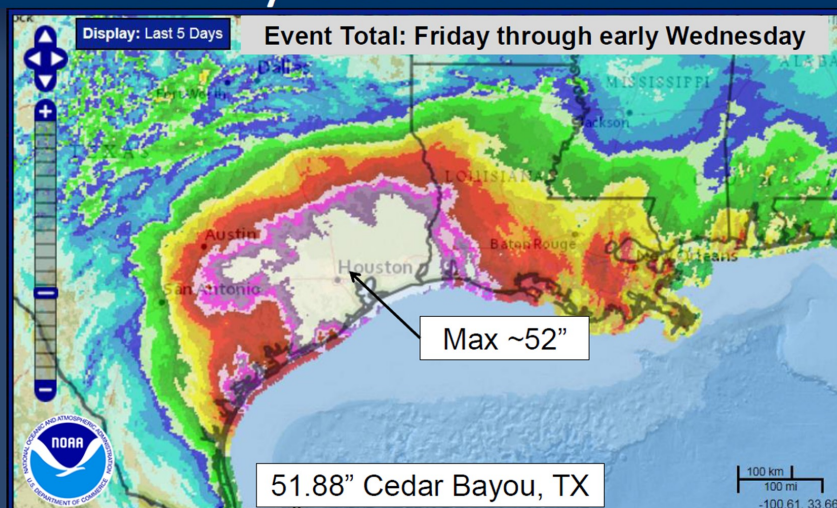
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WestFAST News

August 2017

Harvey Observed Rainfall



Hurricane Harvey

(WestFAST 8/31/17)

The above image says it all! Within 5 days, the total rainfall amount fell just short of the United States record. The record still stands from an event in Hawaii with just over 52 inches. However, the 51.88 inches of rainfall is a record for the lower United States.

Virtually all of the WestFAST agencies were impacted by this hurricane event. The National Oceanic and Atmospheric Administration (NOAA) was ahead of Hurricane Harvey watching as it crossed the Atlantic, and as it came into the Gulf of Mexico. Forecasts over 7 days in advance indicated the system could impact Texas and that rainfall was likely to be the most dangerous part of the system. 3 days in advance of the storm the 7 day forecast indicated the accumulated rainfall forecast was for 34 plus inches of rain — the first time such extreme rainfall totals had been forecasted.

As Hurricane Harvey moved toward the Texas coast, U.S. Geological Survey (USGS) experts on storm-related hazards took action, along with other federal agencies, to help minimize potential risks to lives and property. Multiple systems were de-

ployed ahead of the system to better measure the storms impact on Texas. The USGS set up a detailed Hurricane Harvey web page. For details click [here](#).

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



NASA image—Harvey Peak Intensity Category 4 hurricane

assessment of this system continues.

The Natural Resources Conservation Service (NRCS) was prepared to provide food, emergency housing, community, as well as farmer



and rancher assistance to individuals and small businesses affected by severe storms and flooding. NRCS continues to work with states affected by severe storms and flooding regarding requests for various assistance, waivers and flexibilities in administering federal nutrition assistance programs. See NRCS [Hurricane Harvey Resources](#).

The U.S. Army Corps of Engineers (USACE) prepared nationally in advance for response to Hurricane Harvey. Especially locally at the Galveston District. As the rainfall ramped up on Saturday August 26, USACE started reviewing water releases from Addicks and Barker dams because water levels in the reservoirs increased dramatically. By August 28-29th, "Residents adjacent to the reservoirs were urged to be vigilant because the water in the reservoirs is rising rapidly," said Col. Lars Zetterstrom, Galveston District commander. "Both reservoirs are rising more than half a foot per hour." By August 31, USACE was releasing around 800 cubic feet per second (cfs) from each reservoir with expected releases to ramp to 4,000 cfs. from both reservoirs, for a combined total of 8,000 cfs. Eventually, the inflow exceed the ability to pass water and both reservoirs backed up water onto lands outside of the USACE ownership and released through emergency spillways with record flooding.

The Department of Defense (DOD) and USACE continue to respond in multiple ways with staff from as far away as Seattle on the ground to help.

These record floods put not only residences, but commercial property and interests, including the petrochemical industry near Houston in harms way. This created a major hazard and although the Environmental Protection Agency (EPA) had been active before the storm, these emergency conditions put their people on the ground in alert to help better understand the hazards. See the EPA/TCEQ Statement on Water Quality of Flood-Impacted Areas from Hurricane Harvey and [Status of Superfund Sites in Areas Affected by Harvey](#).

Areal survey data is now being release by NOAA and others. Click [here](#).

Southwest Oklahoma Water Action Plan Team Holds Water Summit (SWAP Team/WestFAST, 8/23/17)

The two-day Southwest Oklahoma Water Summit, held August 21-22 at Western Oklahoma State College, with

many WestFAST agencies being represented, provided an opportunity for area leaders to brief members of the WestFAST and the National Drought Resilience Partnership (NDRP) on their considerable success in strengthening the region's resilience to drought.

The Summit is the first major step in establishing a regional demonstration/collaboration project to expand Southwest Oklahoma Water Action Plan (SWAP) implementation. The meeting provided a forum for comprehensive discussion of issues facing the region, and it allowed NDRP and WestFAST members an opportunity to view first-hand Altus water infrastructure as well as the Lugert-Altus Irrigation District. A full session was devoted to how state and federal resources—both technical and financial—might be applied to further enhance the implementation of key SWAP initiatives, including Altus water treatment plant improvements, municipal and agricultural water conservation, Altus City Lake renovation and development, groundwater supply expansion, resolution of water quality and quantity issues at Altus Air Force Base, and water supply augmentation at Tom Steed Reservoir.

A primary goal of WestFAST is to provide water utilities, districts, Tribes and others with the resources to



Tom Steed Reservoir—Exploring Oklahoma History Images

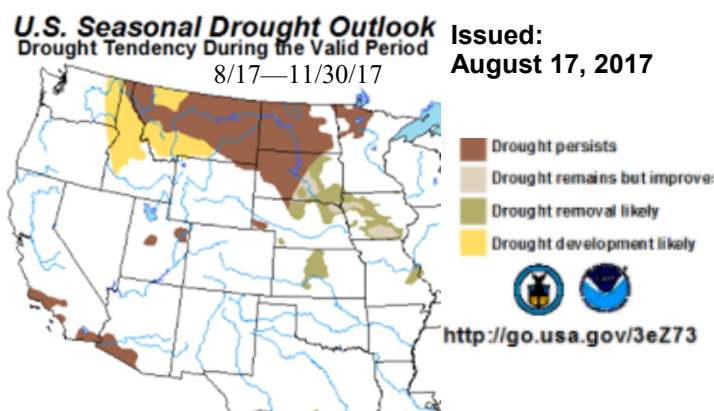
meet their daily water needs and to maximize the effectiveness of federal programs in mitigating and responding to drought episodes. Roger Gorke, Senior Policy Advisor at EPA and former chairman of WestFAST, believes the SWAP is a model for other regions and states in the west to use in mitigating their own drought and build long – term water supply resilience.



Drought in the Northern Plains Continues

(WestFAST/NOAA 09/01/17)

Below are the latest Seasonal Outlooks for the west. Some improvement can be expected in part of the drought region of the Northern Plains.

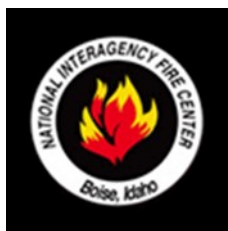


Fire Season is at it's Peak

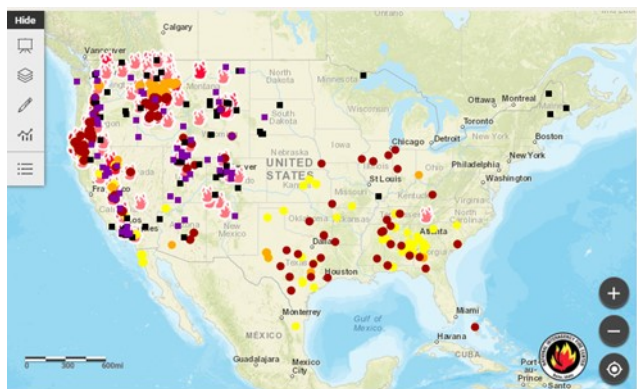
(WestFAST 09/01/17)

The National Interagency Fire Center (NIFC), located in Boise, Idaho, is the nation's support center for wildland firefighting. Eight different agencies and organizations are part of NIFC.

On September 1, NIFC reported that the National Preparedness Level was at 5 (Scale 1-5) For more information click [here](#).



The U.S. Forest Service (USFS) is a key component of the NIFC. They also provide a public webpage link as displayed below. For more information click [here](#).



Proof of Ownership for Water Rights Required for Nevadans by 2027

(Las Vegas Review Journal 8/25/17)

With the passage of Nevada Senate Bill 270, the state Division of Water Resources must get proof of ownership from Nevadans with water rights that predate state statutes. Failure to submit the required proof will result in the vested water rights being deemed abandoned, but there is plenty of time. Proof must be submitted to the State Engineer by December 31, 2027.

"In order to effectively manage water in Nevada, the driest state in the nation, it is critical we know exactly how much water is committed to and being used — either through the permitting process or through the adjudication of pre-statutory vested rights," Nevada State Engineer Jason King said. "To appropriately manage Nevada's precious water resources, we must accurately match water usage with estimated water availability so that our shared water resource is sustainable now and into the future." He further noted, by filing their valid claims of pre-statutory water use, and by using the best available technology to measure annual water recharge and monitor the health of the state's aquifers, the agency will be able to make good decisions on how to manage water.

Pre-statutory vested water rights are those that predate the law requiring a permit from the state for the use of water. The relevant dates are: prior to March 1, 1905, for surface water; prior to March 22, 1913, for artesian groundwater; and prior to March 25, 1939, for percolating groundwater.

Total Eclipse of the Sun

(WestFAST 09/01/17)

August 21, marked the first coast to coast total eclipse of the sun in over 100 years. All of the lower 48 contiguous United States were within view of at least a partial eclipse. It was a major science event and public interest opportunity complete with traffic jams and herculean efforts to obtain viewing glasses to observe the event. Those of us at the SWAP Water Summit (from page 2) in Oklahoma, took a break at the peak of the partial eclipse to view a just over a 75% partial eclipse.



WestFAST News

August 2017

Many WestFAST agencies participated with special eclipse events such as those listed below:

8/2: [USFWS Total Solar Eclipse and Wildlife: More than a Dozen Wildlife Refuges in the Path](#)
8/14: [Studying the Sun's Atmosphere with the Total Solar Eclipse of 2017 \(NASA\)](#)
8/17: [An Eclipse by Any Other Name: Doing Science with Transits and Occultations \(NASA\)](#)
8/18: [BLM Reminds Visitors to Plan for the Solar Eclipse](#)
8/23: [NASA Hinode Satellite Captures Powerful Aug. 21 Eclipse Images, Video](#)
8/25: [Record Numbers Visit Grand Tetons National Park for Total Solar Eclipse](#)
8/29: [NASA's Lunar Mission Captures Solar Eclipse as Seen from the Moon](#)

WSWC Upcoming Meetings

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:

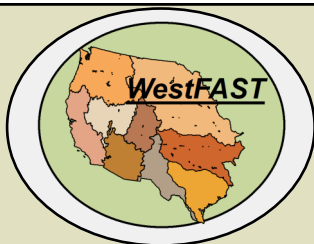
<http://www.westernstateswater.org/upcoming-meetings/>.

Federal News (*Control click to articles*)

9/01: [NASA Gets a Night-time and Under-the-Hood Look at Hurricane Irma](#)
8/31 [EPA/TCEQ Statement on Water Quality of Flood-Impacted Areas from Hurricane Harvey](#)
8/30 [Science to Weather the Storm](#)
8/30: [Bureau of Reclamation Launches New Basin Studies in New Mexico and Arizona](#)
8/30: [Reclamation Begins Animas-La Plata Project Repayment Negotiations with Ute Mountain Ute Indian Tribe](#)
8/30: ["Turn around, don't drown": What to do before, during and after a flood](#)
8/29: [USGS Crews Measure Record Flooding in South-Central Texas](#)
8/29: [Bureau of Reclamation Announces Nearly \\$21 Million to 43 Projects for Water Delivery Improvements Across Western](#)

United States

8/25: [Unsafe toxin detected in algae blooms on Rufus Woods Lake](#)
8/25: [Hurricane Survival Guide](#)
8/25: [NASA Analyzes Hurricane Harvey's Rainfall \(YouTube Video – multiple links\)](#)
8/25: [USGS Installs Storm-tide Sensors along Texas Coast prior to Harvey's Arrival](#)
8/22: [EPA funds Montana project to engage citizen scientists on Smith River algae issue](#)
8/18: [Horsefly Irrigation District aims to convert open canal with help of WaterSMART grant funds](#)
8/18: [U.S. Army Corps of Engineers Extends Comment Period on the Proposed Water Supply Rule](#)
8/17: [Reclamation seeks comment on recycled water purchase agreement for San Luis National Wildlife Refuge](#)
08/16: [EPA awards \\$1.1 million to Idaho to protect drinking water sources](#)
8/15: [EPA and Tribal Officials Tour Tar Creek Superfund Site](#)
8/14: [Off - stream storage project in Northern California takes critical step forward](#)
8/15: [Deputy Secretary Bernhardt Announces More Than \\$52 Million in Federal Funding To Bolster Tribal, State Wildlife Conservation Projects](#)
8/14: [Study Finds Drought Recoveries Taking Longer <https://www.nasa.gov/feature/jpl/study-finds-drought-recoveries-taking-longer>](#)
8/14 : [USDA and Arizona Tribe Sign Landmark Conservation Agreement](#)
8/14: [Ozone treaty taking a bite out of U.S. greenhouse gas emissions](#)
8/14: [Management Considerations For Drought Effectuated Livestock Producers \(North Dakota\)](#)
8/10: [25 Years of Global Sea Level Data, and Counting](#)
8/10: [Tribes work with MRRIC on committee's future role](#)
8/09: [EPA Awards Kansas \\$2.9 Million for Nonpoint Source Pollution Prevention Program](#)
8/09: [Planning for the future of America's forests and rangelands \(Update 2010 Resources Planning Act Assessment\)](#)
8/7: [Secretary of the Interior Ryan Zinke Statement on Sage Grouse Report](#)
8/7: [Wildfire Burns in Icy Greenland](#)
8/07: [U.S. EPA and California Approve Permit for Point Loma Wastewater Facility](#)
8/04: [EPA Region 7 Awards Environmental Education Grant Focusing on Groundwater Education, Protection in Nebraska](#)
8/04: [Administrator Pruitt Visits Gold King Mine on Anniversary of Spill](#)
8/01: [NRCS Offers Wildfire Recovery Assistance to Ag Producers in Montana](#)



WestFAST News is published monthly. To get an Agency Announcement published or to get added to the WestFAST News distribution list contact:

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