



The NHWC Transmission

December 2016

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A Brief Look at Social Media in Emergency Management

Francisco Sánchez, Jr., Harris County, Texas

This article addresses the changing climate in which information is disseminated, and the role social media now plays in emergency management. Adapting to these new innovations in communication is essential to remain relevant and effective in an environment that is constantly becoming more inclusive and more reliant on social media. Our unwillingness for the world around us to change is not sufficient enough to keep it from doing so. Emergency managers who dismiss the public demand for information, or who do not approach it strategically, will face negative outcomes. We have graduated from one to one, and one to many communications, to many to many communications. We are now faced with infinite sources of information operating in real time and allowing individuals and groups to communicate with new ease. Phones are now the printing presses and the broadcast towers free and available to all. One to many communication is gone. It has been surpassed in this new digital age.

The March of Technology

Technology is advancing faster than we can adapt. 56% of American adults have a smart phone. 55% use their cell phone to go online. 35% of Americans over 16 own a tablet. The internet and its breath of information now lives at the end of our fingertips. We are more connected than ever and it is changing the way we interact. Texting is the new email. Phone calls are considered rude. We have to change with the times to get our message out. If this is our ecosystem, then this is also our mission space. We need to utilize a mix of traditional and contemporary methods as communication evolves with technology, the marketplace, and competition for market share.



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The Environment

The public has access to wider range of information sources than ever before. Traditional media is in a persistent state of flux, and social media is emerging as a primary tip source for all media. The public is not only an audience, but also a media player and contributor now. In this day and age, news breaks everywhere besides the newsroom. Similarly, we may be the "official" source of information, but we may not be the most trusted as news breaks in real time elsewhere. Because of how government operates, we

are in a poor position to meet this challenge if we do not adapt to our audience and utilize social media. In fact, social media can be a great tool in emergency management for distributing emergency notifications and preparedness information, monitoring audiences, and providing a platform to appeal for help, rally support, build communities, cross promote and market, and brand mission approach. It allows us to continually inform and engage with our community. Twitter and Facebook are the platforms most commonly used. On these platforms, the audience expects a continued sustained output of information that is current. It has become more important than ever to have a dynamic website linked to multiple social media platforms like these.

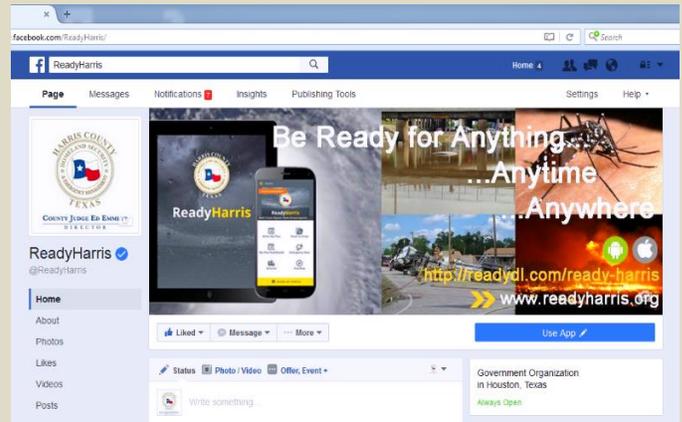
Flood Response

Our goal is to be the timeliest and most accurate source of information during a crisis. We have worked to achieve this by establishing a Joint Information Center (JIC). We work closely



with partner agencies and media to distribute critical information to the public, and provide communications support to emergency management partners during an event. The JIC minimizes the time needed to gather resources, enabling a quicker response. Staffed with qualified communications personnel from county

departments and external agencies, and equipped with technology to monitor media, communicate internally, and produce messages for the media and the public, the JIC allows for a coordinated interagency response before, during, and after a crisis. During the Tax day Flood and the May/June Floods, the JIC handled 324 media calls, 281 interviews, 1,257 social media posts, 95 HC alerts, and 48 Partner updates. In a JIC survey the information received was considered to be highly valuable, timely, and accurate. Communication between the JIC and other agencies proved to be extremely helpful, and our website (www.readyharris.org) was recognized as an effective source for information.



Our social media policy allows flexibility to adopt new technologies as they emerge, and as organizational objectives and goals require. It is important to ensure social media policies are proactive, responsive, and adaptable. Endeavor to write policies that are prescriptive, rather than restrictive for agency users. Provide good information for what to do instead of focusing on what should not be done to allow your agency users to rise to meet changing demands. Social media platforms should also be integrated with other alerting technologies. When emergencies arise, we want to be able to utilize as many effective means of reaching the public as possible.

WHAT HAPPENS IF THERE ISN'T TIME TO WARN YOU?

The Importance of an All Hazard Weather Radio

Charles T Wallace, Grays Harbor County (Washington) Emergency Management

One of the greatest fears of any emergency manager is not being able to warn the public about an event that is imminent – such as a tornado. The severe storm on Friday almost brought that fear to reality for me.

At 4:26 am Friday morning October 14, 2016, the National Weather Service in Portland, sent the first of four Tornado Warning Messages for Pacific County, Washington and the first of 10 Tornado Warning Messages for Southern Washington

and parts of Oregon.

This particular message was for areas around Ilwaco, but I began to think how many people didn't receive the message because they were asleep and had no All Hazard Weather Radio to alert them of a possible impending disaster event?

The second message at 6:37 am Friday really frightened me. The Tornado Warning included Tokeland, WA which is just a short distance from our county line, close to the City of Westport and the community of Grayland. The warning provided a 20-minute parameter when a potential funnel cloud could impact the area.

How would we warn the public if the next message included our jurisdictions? We do not have tornado sirens and if we activated the All Hazard Alert Broadcast Sirens (AHAB's) along the coast, it could prompt citizens to begin moving toward higher ground, (to escape a suspected Tsunami), exposing them to the wrath of the tornado without any protection from the winds and debris. Besides, the AHAB's are for outdoor notification only. We have a robust notification system to call, text and e-mail citizens of an approaching hazard, but if they were sleeping, I

doubt many would receive the text message or the e-mail message. Depending on which jurisdictions were chosen to receive the warning message via phone call, there might not be time to complete the calls prior to a tornado reaches the area.

According to a 2013 Survey conducted by Grays Harbor County Emergency Management, only 40% of our residents volunteered to sign up for the Grays Harbor County Emergency Notification System. The All Hazard Weather Radio, probably the fastest and most efficient notification device to warn of imminent danger, is only owned by 38% of our citizens. How do we alert the other 62% of our population of an approaching disaster?

An All Hazard Weather Radio is the fastest and most efficient way to receive imminent emergency and disaster messages. Every government office, school, local business and home should have one to alert all of the possibility of an impending disaster event such as tornado, flash flood, distant tsunami, severe winds and weather. They can be purchased at local hardware stores, Walmart or on-line for between \$20.00 - \$50.00 – a small price to protect your family, friends and pets. 📞

12th National Hydrologic Warning Council Training Conference & Exposition

June 5-8, 2017, Squaw Creek, Olympic Valley, California



Call for Abstracts Deadline Extended to January 9, 2017

The conference is the largest of its kind in the United States, devoted specifically to real-time hydrologic warning systems and how these systems and associated technologies assist local officials with hydrologic hazard preparedness, emergency response, recovery, and mitigation. The conference provides a multi-disciplinary hydrologic warning training experience for field personnel, engineers, hydrologists, forecasters, water resource managers, emergency management officials, and others. The program will include a wide range of keynote presentations and more detailed technical sessions responsive to the needs of those just getting started and those with more advanced needs.

Become part of the conference by sharing your experiences and the advances you have been working on. This Call for Presentation Abstracts provides a unique opportunity to be considered for the conference program.

Click [here](#) to see the conference web page. 📄

Membership Renewal

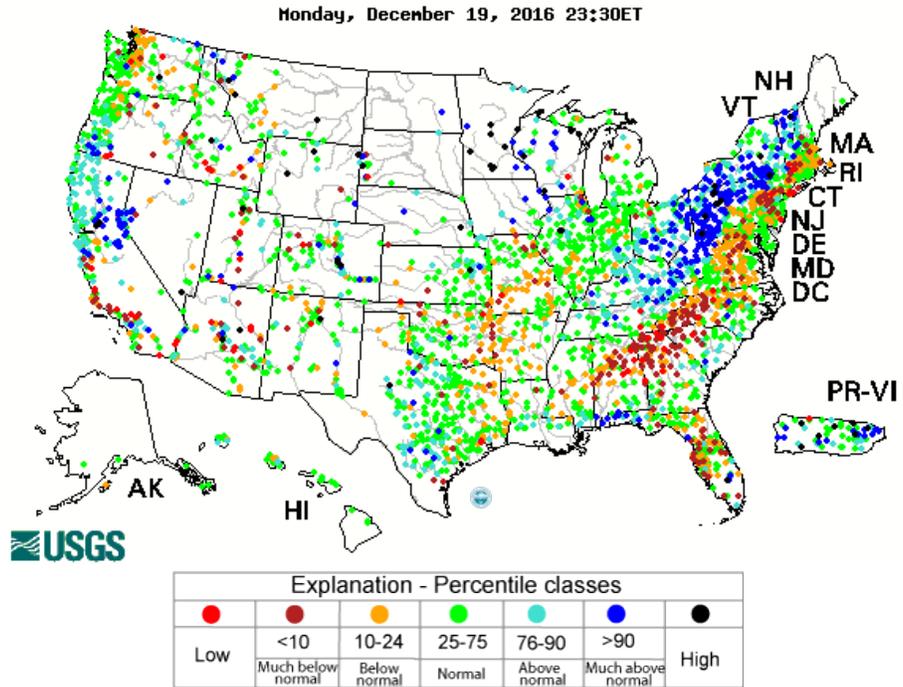
It's time to renew your annual NHWC Membership. New members are welcome. Click [here](#) to join/renew your membership.

Obama Signs Major Water Bill

On December 16, President Obama signed a major new law, the "Water Infrastructure Improvements for the Nation (WIIN) Act," passed by Congress six days earlier. The bill contains provisions for improvements to the rivers and harbors of the United States, to provide for the conservation and development of water and related resources, and for other purposes. The bill includes broad support for water infrastructure coast to coast. A high hazard dam rehabilitation program was created by the bill which authorized important infrastructure programs, including 30 new projects for the U.S. Army Corps of Engineers. Drought relief, prioritization of flood risk management projects, and stream restoration projects are also included.

The full text of the WIIN Act can be found [here](#).

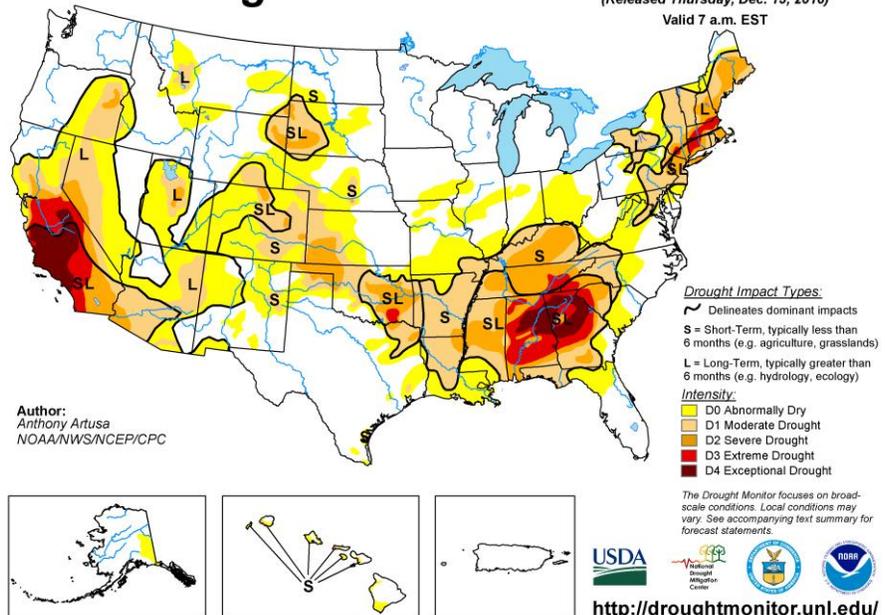
Hydrologic Conditions in the United States Through December 13, 2016



Latest stream flow conditions in the United States. (courtesy USGS)

U.S. Drought Monitor

December 13, 2016
(Released Thursday, Dec. 15, 2016)
Valid 7 a.m. EST



Latest drought conditions in the United States. (courtesy National Drought Mitigation Center)

January Newsletter Articles Focus:

Modeling & Analysis

The NHWC is requesting articles that focus on practices, technologies and tools used to model, predict and analyze hydro-meteorological events and to support decision making for emergency response and floodplain management.

Submit your article to:

editor@hydrologicwarning.org

January 6th is the deadline for inclusion in the January issue.

Future Newsletter Articles Focus

To give you more time to prepare articles, below is the article focus schedule for the next four months:

Jan - Modeling/Analysis
Feb - Data Collection
Mar - Hydrology
Apr - Hazard Communication & Public Awareness

NHWC Calendar

June 5-8, 2017 - [NHWC 2017 Training Conference & Exposition](#), Squaw Valley, California [Abstracts Due January 9th, 2017]

General Interest Calendar

January 10-12, 2017 - [City of Los Angeles, Bureau of Engineering, 2D HEC RAS Modeling Course](#), Los Angeles, California

April 30 – May 5, 2017 - [ASFPM 41st Annual National Conference](#), Kansas City, Missouri

May 21-25, 2017 - [American Society of Civil Engineers, EWRI World Environmental & Water Resource Congress 2017](#), Sacramento, California

November 5-9, 2017 - [AWRA Annual Conference](#), Portland Oregon

(See the [event calendar](#) on the NHWC website for more information.)

Parting Shot

December 13, 2016

Chevelon Canyon Dam



This remote dam, owned and operated by the Arizona Game and Fish Department, had inoperable principal outlet valves and no way to control the actuator remotely. Without a way to monitor lake level and control the principal outlet valves remotely, it was necessary for Department employees to travel several hours to the dam to assess hydrologic conditions and manually actuate the valves.

The Department has now installed sensors on the dam to monitor precipitation, lake level and outflow, and rebuilt hydraulic rams with a new actuator which can be remotely controlled via satellite.

This month's parting shot shows engineers from JE Fuller installing the telemetry system.

Photo by **Tyler Azeltine**, JE Fuller/Hydrology & Geomorphology, Inc.

National Hydrologic Warning Council

Providing Timely, Quality Hydrologic Information to Protect Lives, Property, and the Environment

<http://www.hydrologicwarning.org>