

The NHWC Transmission

June/July 2019

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Kevin Stewart (Trustee) Urban Drainage and FCD



The 13th Biennial Conference of the National Hydrologic Warning Council: A Review

Benjamin A. Pratt, PE, CFM, NHWC Treasurer, 2019 Conference Committee Member, Susquehanna River Basin Commission

Andrew Motte's 1729 translation of Sir Isaac Newton's "Philosophiae Naturalis Principia Mathematica" states the 2nd Law of Motion as "*the alteration of motion is ever proportional to the motive force impressed; and is made in the direction of the right line in which that force is impressed.*"

As our recent week together in Louisville progressed, I recognized a surge of energy into our organization that is sure to be the motive force to place the National Hydrologic Warning Council on a positive trajectory for the coming years. This surge was evident in the jam-packed technical agenda, the networking opportunities around the technical sessions, the numerous sidebar conversations in the hallway, the dedicated commitment from our sponsors and all the vendors, and the general enthusiasm of all attendees (despite the construction noise). Our conference, which convened June 16-20, 2019 at the Galt House Hotel, in Louisville Kentucky, while not without its challenges, provided all attendees ample opportunity to learn and grow as professionals and will be remembered for the "right line" on which we've been placed.

As Louisville is home to the Kentucky Derby, our conference theme "Observe, Disseminate, Respond: The Triple Crown" describes the foundation on which all of our values as a profession are built. Having sat through as many of the technical sessions at the conference as time would permit, the single word I find to capture the theme of the week is "innovation". During the plenary sessions we heard loud clear the innovative approaches Jose Luis Valenzuela is bringing to FEMA's recovery process in Puerto Rico following Hurricane Maria, as well as from Chad Wagner about the next generation of observation systems being deployed by the United States Geological Survey.



José Luis Valenzuela, State Hazard Mitigation Officer for the Commonwealth of Puerto Rico addresses conference attendees during the plenary session.

During the technical sessions I heard of development of low-cost sensors to detect flooding, new radio communication protocol allowing for

transmission of complicated data streams, techniques to improve forecasting through data correction, issues and opportunities provided through the internet of things, and finally, a presentation on what the leaders of our industry are reading, so that we too can aspire to new heights. I'm only scratching the surface here, as I'm one person and there were up to four tracks, but you can review all the presentations at our website in the coming weeks.



Robert Jarret presents on his evaluation of NOAA Atlas 14 and extreme precipitation events.

The technical sessions however, merely provided a propaedeutic pathway to the green pastures of networking opportunities the 13th Biennial NHWC conference provided. Kicking things off Monday at the golf outing, formed a wolf pack of sorts that motored through the week's slate together. NHWC has a strange knack of attracting relatively extreme hydrologic events at conference time, and once again the Tuesday evening social fell victim to heavy rainfall and high flows (recall 2013 in Ponte Vedra). Wisely, I believe, our Belle of Louisville Captain decided to keep us in port versus challenging the mighty Ohio River. No problem though for a bunch of hardened flood hazard professionals, who simply



Tuesday evening social event on the Belle of Louisville

reveled in the fact the event was someone else's problem this time, and proceeded to dive into the Barbecue, Kentucky Mules, and great comradery the Middle and Upper Deck of the Belle offered.

Wednesday evening's vendor recognition is always a great way to get hands-on with a variety of equipment and software our community provides and perhaps grab some swag to carry away. Bringing it all home at the Banquet Thursday evening, we recognized the outstanding commitment and effort provided by our outgoing President Steve Fitzgerald, Vice-President Josh McSwain, and board members Andy Rooke and Kevin Stewart. Other award winners can be found in the side bar on page 4. There were also some outstanding door prizes handed out, including a Yeti cooler, Bose wireless speaker, and a variety of gift baskets including one from Dan the Sausage Man.



David Curtis presents Outstanding Service Awards to (left to right) Kevin Stewart, Andy Rooke, Steve Fitzgerald, and Josh McSwain.

To summarize here, the 13th Biennial National Hydrologic Warning Council, convened in Louisville Kentucky from June 16-20th, has surely set us on a right line toward our 14th Biennial, date and location TBD, but certainly in 2021 in the May-June timeframe. None of this would have been possible without the hard work of the conference planning committee and the steadfast confident leadership of our Conference Chair. Brad has agreed to Chair the 14th Biennial in 2021 and is already hard at work finding the perfect location for us to convene! If you're still reading this article, then you may have what it takes to get involved and be a part of the great team Brad will assemble to make the magic happen. Feel free to reach out to Brad or any Board member to express any interest you may have in helping. I hope your experience at the 13th Biennial conference was informative and met your expectations, and I look forward to seeing you at future NHWC events! S

The ALERT Users Group Training Conference & Exposition MAY 5-8, 2020 VENTURA BEACH MARRIOTT Ventura Beach, California

The ALERT Users Group is proud to announce the return to the refurbished Ventura Beach Marriott for their 28TH FLOOD WARNING SYSTEMS TRAINING CONFERENCE & EXPOSITION

The 2020 conference theme is 'Expanding the Possibilities of Early Warning Systems.' This nationally known and respected training conference will be held in Ventura, CA, from May 5th through May 8th, 2020 which is only a few blocks from the beach. This event has been held since 1982, provides valuable opportunities for training and discussion concerning effective operation, maintenance and management of real time flood warning systems. The ALERT Users Group is aware of the challenges plaguing local governments, agencies, corporations and private individuals. The ALERT Users Group is planning to address a number of these topics and concerns along with providing critical training and workshop opportunities. The conference will also provide an opportunity to examine the latest in flood warning equipment, products, software and services, and to meet with trained sales staff who can answer technical and purchasing questions. We look forward to seeing you at the 2020 ALERT Users Group's Flood Warning Systems Training Conference & Exposition!



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NHWC 2019 Awards

During the June 20th NHWC Awards Banquet, the following individuals and organizations were recognized for their contributions to the NHWC and the advancement of the science and technologies associated with hydrologic warning:

Outstanding Service

Kevin Stewart, NHWC Trustee, Urban Drainage and Flood Control District

Andy Rooke, Director At-Large, AMR Consults, LLC

Steve Fitzgerald, NHWC President, Harris County Flood Control District (retired)

Josh McSwain, NHWC Vice President, Charlotte-Mecklenburg Stormwater Services

David Maidment, Ph.D University of Texas at Austin (retired)

Operational Excellence

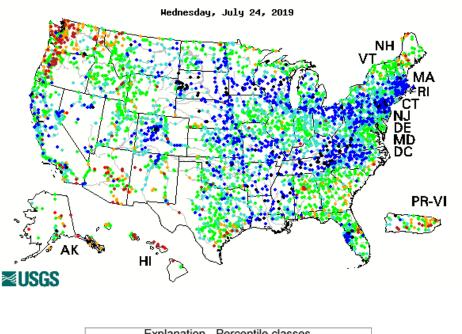
Flood Control District of Maricopa County, Arizona

Hydrologic Warning Innovation

Iowa Flood Center

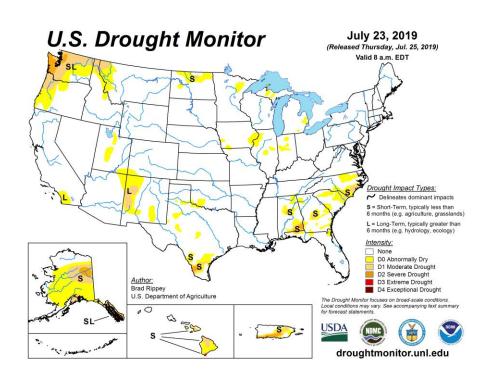


Hydrologic Conditions in the United States Through July 23, 2019



Explanation - Percentile classes							
	•	•			•		
<10	10-24	25-75	76-90	>90	High		
Much below normal	Below	Normal	Above normal	Much above normal			
	<10 Much below	10 10-24 Much below Below.	<10 10-24 25-75 Much below Below Normal	<10	<10		

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



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

Call for Newsletter Articles:

The NHWC is requesting articles that focus on the following topics:

Data Collection

practices, technologies and tools used to gather and disseminate real-time hydrometeorological data

Hazard Communication and Public Awareness

practices, technologies and tools used to get the right real-time data and information to the right people for the right response

Hydrology

new methods, research, or discoveries in hydrology or a recent significant hydrologic event that helps us understand the science behind the floods

Modeling & Analysis

practices, technologies and tools used to model, predict and analyze hydrometeorological events and to support decision making for emergency response and floodplain management

Submit your article to:

editor@hydrologicwarning.org

August 16th is the deadline for inclusion in the August issue.

NHWC Calendar

November 5-6, 2019 - NHWC Texas Training Workshop, San Marcos, Texas

General Interest Calendar

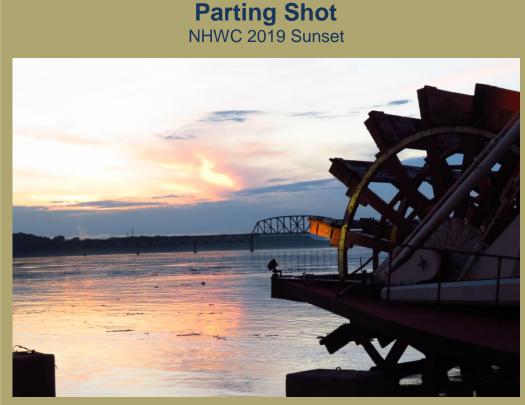
September 3-6, 2019 – <u>Floodplain Managers Association Annual Conference</u>, San Diego, California

September 8-12, 2019 - ASDSO Dam Safety 2019, Orlando, Florida

December 9-13, 2019 – <u>American Geophysical Union Fall Meeting 2019</u>, San Francisco, California Inote: This will include sessions on flood hydrology.]

May 5-8, 2020 – <u>ALERT Users Group Training Conference and Exposition</u>, Ventura, California

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



This is a view of the Ohio River next to the Galt House Hotel in Louisville, Kentucky – location of NHWC 2019.

Photo by Chris Crompton, Orange County Public Works

National Hydrologic Warning Council

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

http://www.hydrologicwarning.org