

# NHWC 2017 CONFERENCE

OLYMPIC VALLEY, CALIFORNIA



## Taking Hydrologic Warning to Olympic Heights

The 12th National Hydrologic Warning Council  
Training Conference and Exposition

June 6 - 8, 2017 | Squaw Creek, Olympic Valley, California

### CONFERENCE PROGRAM

[www.hydrologicwarning.org](http://www.hydrologicwarning.org)



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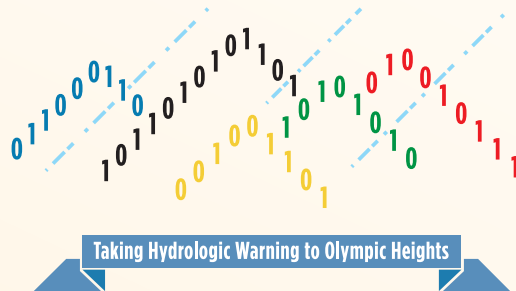
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# NHWC 2017 CONFERENCE

OLYMPIC VALLEY, CALIFORNIA



Welcome to the National Hydrologic Warning Council (NHWC) 2017 Training Conference and Exposition. We have a superb lineup of training workshops, plenary and lunch speakers, and technical presentations to keep you abreast of emerging hydrologic warning science and technology as well as “best practices” to help keep your hydrologic warning systems running smoothly.

Our host, the Resort at Squaw Creek with its dedicated staff, has worked hard to create a relaxing and awesome environment for the conference. It's fitting the record snow and extended ski season occurred this year just for us. Many thanks to Andy Rooke, Jean Vieux, Chris Crompton, Dave Curtis, Brad Heilwagen, Tom Ogden, April Krieg and many other planning committee members whose tireless efforts were essential in creating a memorable conference experience for you.

Exhibitors and sponsors are key components of the conference. Their service to our industry and participation in the conference is deeply appreciated. When you see them on the conference grounds and in the exhibit area, give them a hearty thank you. Stop by the exhibits and learn about all the innovative new products and services they've prepared for you.

Networking opportunities are a highlight of our conferences. Take advantage of our session breaks, lunches, dinners, the hospitality suite, and the awards banquet to renew acquaintances and make new friends. We are an eclectic flood warning family with folks from federal, state, regional, and local agencies as well as consultants and contractors, so don't be shy. On Tuesday evening we are especially excited

to host a dinner and networking event at High Camp up the mountain. Don't miss a great chance to experience the beautiful winter scenery, good food and music, and thin air (elevation 8,300').

It seems appropriate that we are having this conference at the location of the 1960 Winter Olympics. To create and operate a successful hydrologic warning system is similar to being a successful Olympic athlete. It takes planning, preparation, practice, performance, accurate measurements, data, documentation, money, a support team, learning from failures, team work, camaraderie, and passion. We work hard to advance the state-of-the art in hydrologic warnings and are deeply gratified by lives and property saved through our collective efforts.

The NHWC is the largest professional organization exclusively serving the hydrologic warning community. Our members represent the most active elements of flood risk mitigation through hydrologic warning. Jump in and experience this year's conference and training opportunities to the fullest. Share what you know with others, learn from the best, and put new ideas to work when you get back home!



**Steve Fitzgerald**  
President  
NHWC

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## 2017 CONFERENCE PLANNING COMMITTEE

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# NHWC 2017 CONFERENCE

OLYMPIC VALLEY, CALIFORNIA



## QUICK VIEW AGENDA – Monday June 5, 2017

12:00p–7:00p	REGISTRATION
4:00p–7:00p	EXHIBITOR SETUP
	LUNCH ON YOUR OWN
1:00p–4:30p	GOLF BEST BALL SCRAMBLE – the Golf Club at Gray's Crossing, Truckee – additional fee applies (meet at Squaw Creek Lobby at 12:00)
	DINNER ON YOUR OWN
5:00p–8:00p	ALERT2 TECHNICAL WORK GROUP – Castle Peak
6:00p–8:00p	NHWC BOARD OF DIRECTORS MEETING – Emigrant Peak
8:00p–11:00p	HOSPITALITY SUITE – Room 501/502

## Tuesday June 6, 2017

7:00a–5:00p	REGISTRATION		
8:00a–12:00p	EXHIBITOR SETUP – Grand Sierra C&D		
12:00p–5:30p	EXHIBIT HALL OPEN – Grand Sierra C&D		
8:30a–12:00p	TAHOE DAM TOUR		
1:30p–5:00p	SIERRA SNOW LAB TOUR – Advance registration required for field tours – no charge		
	<b>EMIGRANT PEAK TRAINING WORKSHOP</b>	<b>CASTLE PEAK TRAINING WORKSHOP</b>	<b>MONUMENT PEAK TRAINING WORKSHOP</b>
8:30a–10:00a	Implementing HEC-RTS Flood Forecast Systems <i>George Chan Modini and William J. Charley : Hydrologic Engineering Center</i>	Prioritization of Stream Gage Locations for Flood Warning Systems <i>Baxter Vieux : Vieux &amp; Associates</i>	NovaStar Base Station and Software Training <i>TriLynx Systems</i>
10:00a–10:30a	BREAK in Foyer		
10:30a–12:00p	(continued) Implementing HEC-RTS Flood Forecast Systems	Leveraging Silver Jackets to Get from Data to Outreach <i>Jennifer Dunn, Rachael Orellana, and Brian Rast : US Army Corps of Engineers; Bunny Bishop : Nevada DWR; Maria Lorenzo-Lee : California DWR</i>	Tips and Tricks to Simplify Your Flood Warning System Upgrade to the ALERT2 Protocol <i>David Leader : HydroLynx</i>
12:00p–1:30p	LUNCH in Grand Sierra A&B		
1:30p–3:00p	- Designing the Data Collection System - Designing a Data Collection System with Maintenance as a Focus <i>Dave Gunderson : Bureau of Reclamation</i>	Getting Familiar with the USGS Flood-Data Toolbox <i>Marie C. Peppler : US Geological Survey</i>	New Products and Innovations <i>Tom Ogden : High Sierra Electronics</i>
3:00p–3:30p	BREAK in Grand Sierra C&D		
3:30p–5:00p	- Working with Smart Instruments - Problems You See with Telemetry - Site Grounding and Power <i>Dave Gunderson : Bureau of Reclamation</i>	Bulletin 17C: Updated Federal Guidelines for Flood Frequency Analysis <i>Andrea G. Veilleux : US Geological Survey Beth A. Faber : US Army Corps of Engineers</i>	Expanding Capabilities through Advanced Configurations of Contrail <i>Charles Yost : OneRain</i>
5:00p–5:30	EXHIBITOR FOCUS		
5:30p–10:00p	DINNER AND NETWORKING EVENT at High Camp (at 8,300 feet via gondola from Squaw Valley) – included with full registration		
10:00p–11:00p	HOSPITALITY SUITE – Room 501/502		

Agenda is subject to change

## Professional Networking Opportunities

The conference offers many chances for professional networking, including a golf scramble on Monday June 5 (green fees extra) at 1:00 p.m. at the Golf Club at Gray's Crossing in Truckee, evening social events, including a Tuesday night not to be missed at High Camp at 8,300 feet, and the awards banquet on the last night. Attendee guests are welcome to register for these events—contact the registration desk for tickets.

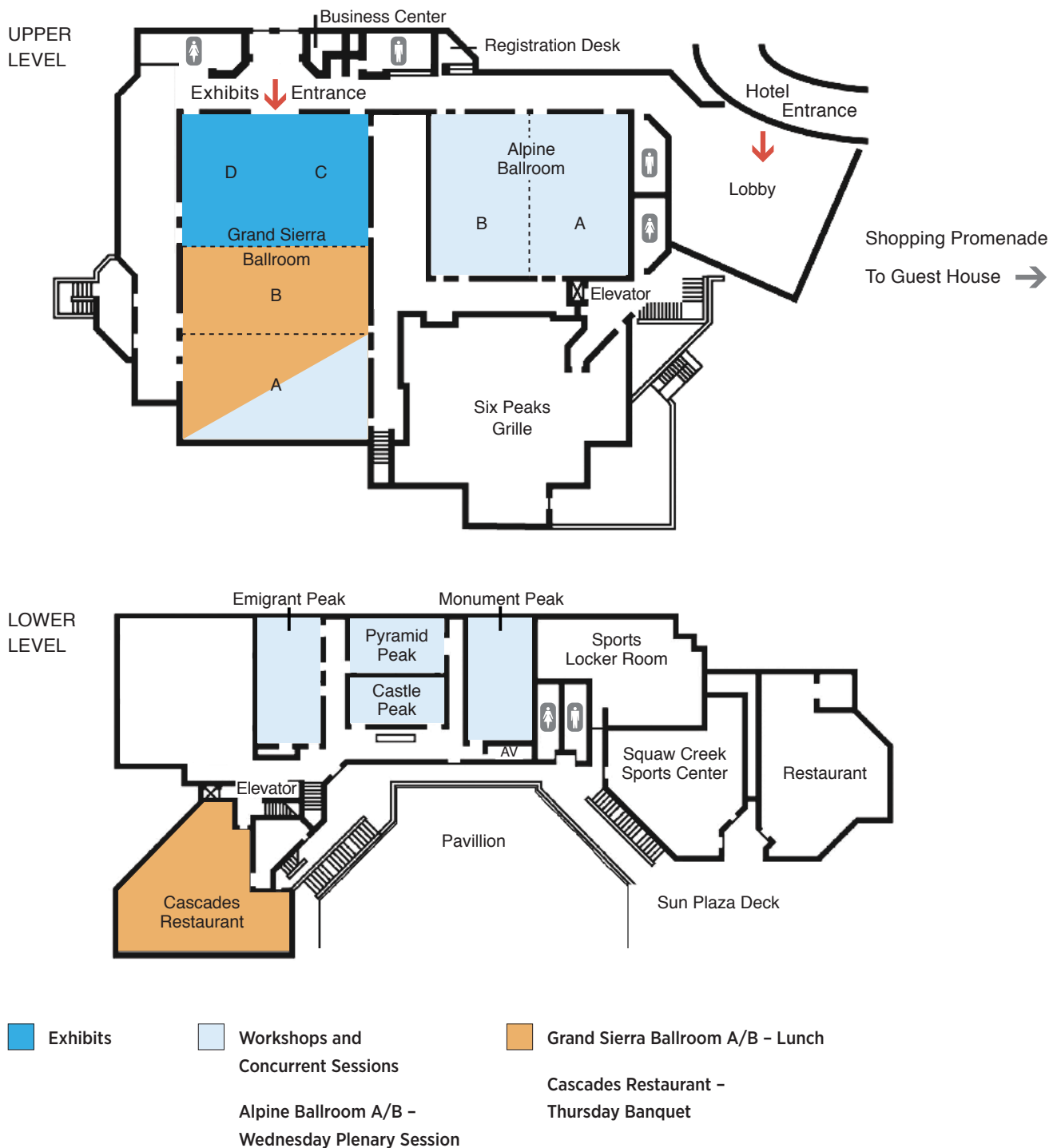


Golf Club at Gray's Crossing (left) and the tram to High Camp

Courtesy Gray's Crossing (left); Resort at Squaw Creek (right)



## CONFERENCE FLOORPLAN – Resort at Squaw Creek



### Continuing Education Credits

Attendees can earn Certified Floodplain Manager (CFM) core continuing education credits for attending the conference.

### Follow the NHWC Conference on Social Media



## Wednesday June 7, 2017

7:00a–4:30p	REGISTRATION		
8:00a–7:00p 8:00a–8:30a	EXHIBITS HALL OPEN – Grand Sierra C&D REFRESHMENTS		
8:30a–10:00a	PLENARY SESSION in Alpine A&B   NHWC Welcome – <i>Steve Fitzgerald : NHWC President</i> <i>Dr. Tom Graziano : Director, Office of Water Prediction, National Weather Service; Dr. Don Cline : Associate Director for Water, US Geological Survey</i>		
10:00a–10:30a	BREAK in Grand Sierra C&D		
	ALPINE A GENERAL SESSION	ALPINE B GENERAL SESSION	
MODERATOR	Steve Fitzgerald : Harris County Flood Control District	Andrew Rooke : AMR Consults, LLC	
10:30a–12:00p	US National Water Model <i>Brian Cosgrove : National Weather Service</i>	FEMA Preparedness – Risk Communication and Coordination During California and Nevada Winter Storms <i>Jeffrey Lusk : Federal Emergency Management Agency</i>	
	A Physically Based Global Flood Hazard Model <i>Jeff McCollum and Michael Scheffler : FM Global</i>	Hurricane Matthew – Putting NC FIMAN to the Test <i>David Herlong : North Carolina Division of Emergency Management</i>	
	Threat to Weather and Flood Forecasts: GOES Downlink Frequency <i>Steve Fitzgerald : Harris County Flood Control District</i> <i>David Lubar : The Aerospace Corporation</i> <i>Richard Pardee : US Geological Survey</i>	Hydrologic Effects of Hurricane Matthew in Florida, October 2016 <i>Richard L. Kane : US Geological Survey</i> <i>Mark Dickman : US Geological Survey</i>	
12:00p–1:30p	LUNCH in Grand Sierra A&B – included with registration		
	ALPINE A RAISING THE BAR: BEST PRACTICES	ALPINE B BIGGER, BETTER, FASTER: PERFORMANCE AND INNOVATION	GRAND SIERRA A THE SPRINTS: WARNING AND RESPONSE
MODERATOR	Kevin Grimsley : U.S. Geological Survey	Om Prakash : WEST Consultants	David Curtis : WEST Consultants
1:30p–2:00p	Strategies for Achieving Flood Warning System Excellence <i>Ilse Gayl, James Logan, and Mike Zucosky : OneRain</i>	USGS International Partnership to Enhance the Water Resources Monitoring in Brazil <i>Brian McCallum : US Geological Survey</i>	Hydrologic Ensemble Forecast Use in Water Management Decision Support Tools <i>Alan Haynes : National Weather Service</i>
2:00p–2:30p	Raising the Bar to Olympic Heights in Cloud-Based Flood Information Systems <i>Baxter Vieux : Vieux &amp; Associates</i> <i>Kevin Shunk : City of Austin, Texas</i>	CWMS Model Development and Integration for the ACT Basin <i>Scott Fant : Southern Company</i>	Evolving Hydrologic Warnings for Southeast South Carolina and Southeast Georgia <i>Blair S. Holloway : National Weather Service</i>
2:30p–3:00p	New Satellite and Airborne Remote Sensing Tools for Hydrologic Observation in Alaska <i>Jessica Cherry : National Weather Service</i>	Using a Remote Gauging Network to Build Regional and Local Partnerships <i>David Murdoch : Lower Colorado River Authority</i>	Two Approaches to Communicate Snoqualmie River Flood Warning Information: The King County Flood Warning Program and the Snoqualmie Valley Preservation Alliance Citizen Flood Monitoring Project <i>Ken Zweig : King County, Washington</i>
3:00p–3:30p	BREAK in Grand Sierra C&D		
	ALPINE A RAISING THE BAR: BEST PRACTICES	ALPINE B BIGGER, BETTER, FASTER: PERFORMANCE AND INNOVATION	GRAND SIERRA A THE MARATHON: CLIMATE CHANGE
MODERATOR	Jeff Harris : WEST Consultants	Rita Anderson : Freese and Nichols, Inc.	David Curtis : WEST Consultants
3:30p–4:00p	Rapid, Dynamic, and Real-Time Inundation Mapping Using Pre-Computed Floodplain Characterization <i>James Halgren : Riverside Technology</i>	Dam Safety During Precipitation Events <i>Charles Yost : OneRain</i>	Panel on Climate Change Impacts on Hydrologic Forecast and Warning <i>David C. Curtis : WEST Consultants</i> <i>Bryan Baker : US Army Corps of Engineers</i> <i>Mike Anderson : California Department of Water Resources</i> <i>Kevin Stewart : Urban Drainage and Flood Control District</i> <i>Brian McCallum : US Geological Survey</i>
4:00p–4:30p	Real-Time Flood Inundation Mapping Forecasting using HEC-RTS 3.0 <i>William Charley : US Army Corps of Engineers</i>	Multi-Radar/Multi-Sensor (MRMS) Hydro Experiment Conducted July 2015 at the Hydrometeorological Testbed <i>Jeremy Wesely : National Weather Service</i>	
4:30p–5:00p	North Carolina's Next Generation Real Time Flood Inundation Mapping <i>David Key : ESP Associates</i>	Cloud Computing for Near Real-Time Precipitation Analytics <i>Katie Laro : MetStat, Inc.</i>	
5:00p–7:00p	EXHIBITOR RECEPTION – Grand Sierra C&D – included with registration		
	DINNER ON YOUR OWN		
9:00p–11:00p	HOSPITALITY SUITE – Room 501/502		

## INTRODUCING OUR KEYNOTE SPEAKERS

### Plenary Session

Wednesday, June 7, 8:30 to 10:00 a.m.



**Tom Graziano**  
National Weather Service

Dr. Thomas Graziano is the Director of the Office of Water Prediction (OWP), a geographically distributed organization that includes elements in Maryland, Minnesota and Alabama. The OWP collaboratively researches, develops and delivers state-of-the-science national hydrologic analyses, forecast information, data, decision-support services and guidance to support and inform essential emergency services and water management decisions. Tom has held numerous leadership roles over 30 years of Federal service, most recently serving as the Chief of Staff for the National Weather Service, from November 2013 to January 2016.



**Don Cline**  
Associate Director for Water  
US Geological Survey

In the fall of 2016, Don Cline joined the USGS as the Associate Director for Water responsible for USGS research, monitoring, and assessment of the Nation's water resources. He worked previously for 20 years with NOAA's National Weather Service (NWS), most recently, as the Director for the National Water Center (NWC), the first facility in the world designed specifically to address major societal challenges in water resources. As a NHCW keynote speaker in Indianapolis in 2015, Don shared the purpose of the Center, objectives, and accomplishments to date. In this role he established an innovative federal inter-agency collaboration with four water sector agencies to improve interoperability of data and information systems, leverage resources towards the development of comprehensive water modeling and prediction capabilities, and establish a common operating picture among federal water agencies. Prior to becoming Director for the NWC, he was Chief for the Office of Hydrologic Development, and Director for the National Operational Hydrologic Remote Sensing Center.

### Awards Banquet

Thursday, June 8, 6:00 to 9:00 p.m.



**Robert Hartman**  
National Weather Service (retired)  
Robert K. Hartman Consulting Services

For 35 years, Rob Hartman served federal flood and water supply forecasting operations, including all aspects of production, development, management, and leadership in positions at three National Weather Service (NWS) River Forecast Centers, the USDA/Soil Conservation Service, and the NWS Office of Hydrologic Development. Highlights of his two decade tenure at the California Nevada River Forecast Center include: Expansion of interaction with customers and partners especially in the domain of flood control operations of reservoir systems, development of a world-class precipitation forecasting unit, operational transition from periodic/limited river forecasts associated only with floods to daily hydrograph forecasts at four times the number of locations, and replaced monthly statistical water supply forecasting methodology with state-of-the-art daily ensemble-based predictions that leverage the best of NOAA's expertise.

## Thursday June 8, 2017

7:00a-12:00p	REGISTRATION			
8:00a-1:30p 8:00a-8:30a	EXHIBITS HALL OPEN Grand Sierra C&D REFRESHMENTS			
	<b>EMIGRANT PEAK</b> <b>RAISING THE BAR:</b> <b>BEST PRACTICES</b>	<b>PYRAMID PEAK</b> <b>THE DASH: SOCIAL MEDIA</b>	<b>CASTLE PEAK</b> <b>THE SPRINTS:</b> <b>WARNING AND RESPONSE</b>	<b>MONUMENT PEAK</b> <b>BIGGER, BETTER, FASTER:</b> <b>PERFORMANCE AND INNOVATION</b>
MODERATOR	Ilse Gayle : OneRain	Ranjan Muttiah : City of Fort Worth	Michael Scheffler : FM Global	Rita Anderson : Freese and Nichols, Inc.
8:30a-9:00a	Tropical Storm Response Rapid Prediction Using Surrogate Modeling Techniques <i>Jeffrey Melby : US Army Corps of Engineers</i>	Integrating Social Media with Early-Warning Systems: Old Challenges and New Opportunities <i>Jim Moffitt : Twitter</i>	Hydrologic Warning : An Australian Experience <i>James Stuart : SunWater</i>	Low Water Crossing Solution Using ALERT2 <i>David C. Leader : HydroLynx</i>
9:00a-9:30a	Improving the Science and Communication of Heavy Rainfall Forecasts <i>Dmitry Smirnov : Dewberry</i> <i>Kevin Stewart : Urban Drainage and Flood Control District</i>	Crowdsourced Storm Impact Data Collection Using Story Maps <i>Jayne L. Laber : National Weather Service</i>	Contributing to Understanding Extremes <i>Kevin Stewart : Urban Drainage and Flood Control District</i>	Utilizing ALERT2 in Two-way Control Applications for Flood Warning <i>Carrie Lery : High Sierra Electronics</i> <i>Dan Hurley : City of Overland Park</i>
9:30a-10:00a	Real-Time Urban Flood Forecasting and Inundation Mapping Under Rapid Urbanization <i>Yangbo Chen : Sun Yat-sen University, China</i>	Leveraging Open Source Software to Establish an Extreme Storm Database <i>Alyssa Hendricks : MetStat, Inc.</i>	Advanced Hydrometeorological Monitoring in California <i>Michael Anderson : California Department of Water Resources</i>	Transitioning to ALERT2 in Harris County, Texas <i>Ken Conner : Campbell Scientific Inc.</i>
10:00a-10:30a	BREAK in Grand Sierra C&D			
	<b>EMIGRANT PEAK</b> <b>HITTING THE WALL: DROUGHT</b>	<b>PYRAMID PEAK</b> <b>OLYMPIC LORE:</b> <b>EXTREME EVENTS</b>	<b>CASTLE PEAK</b> <b>THE SPRINTS:</b> <b>WARNING AND RESPONSE</b>	<b>MONUMENT PEAK</b> <b>BIGGER, BETTER, FASTER:</b> <b>PERFORMANCE AND INNOVATION</b>
MODERATOR	Dmitry Smirnov : Dewberry	Ilse Gayle : OneRain	Kevin Grimsley : U.S. Geological Survey	Lex Kamstra : Dewberry
10:30a-11:00a	Drought Management Strategies: Crisis Response and Preparedness at Global Scale <i>Om Prakash : WEST Consultants</i>	Flood Wave Analysis of the Trinity River During and Following Hurricane Bill <i>Ranjan S. Muttiah : Stormwater, Transportation &amp; Public Works, Fort Worth, TX</i>	A Flood Threat Management System Using ALERT Data <i>Esteban Oscar Velez : INA-CIRSA, Argentina</i>	Local Flood Warning Systems <i>Jeff Harris : WEST Consultants</i>
11:00a-11:30a	Planning for Climate Change Impacts on Hydropower in the Far North <i>Jessica Cherry : National Weather Service</i>	U.S. Geological Survey Flood Documentation in Direct Support of Flood Response and Recovery <i>Kara M. Watson : US Geological Survey</i> <i>Marie C. Ceppler : USGS Office of Surface Water</i>	USGS Texas Water Dashboard: Leveraging Innovative Web Mapping Solutions and Twitter to Distribute Real-time Water Information for the State of Texas <i>Daniel K. Pearson : US Geological Survey; Jim Moffitt : Twitter</i>	Floodplain Mapping Using a LIDAR UAV Solution <i>Vitad "V" Pradith : HYPACK</i> <i>Diego Davis : SonTek</i>
11:30a-12:00p	The Challenges of Managing a Hydrologic Monitoring Network During a Prolonged Drought: A USGS California Water Science Center Perspective <i>Dianna Crilley : US Geological Survey</i>	Use of Rapid Deployment Gages by the USGS for Monitoring Runoff from Wildfire Burn Areas in California <i>Al Caldwell : US Geological Survey</i>	The ALERT Interactive Data Display: Merging Data with Response <i>Daniel Henz : Flood Control District of Maricopa County</i>	Forecast Tools and Terminology for Extreme Rainfall Events <i>Charles Yost : OneRain</i>
12:00p-1:15p	LUNCH in Grand Sierra A&B – included with registration SPEAKER – Oroville Dam Spillway Failure <i>David Gutierrez : GEI Consultants</i>			

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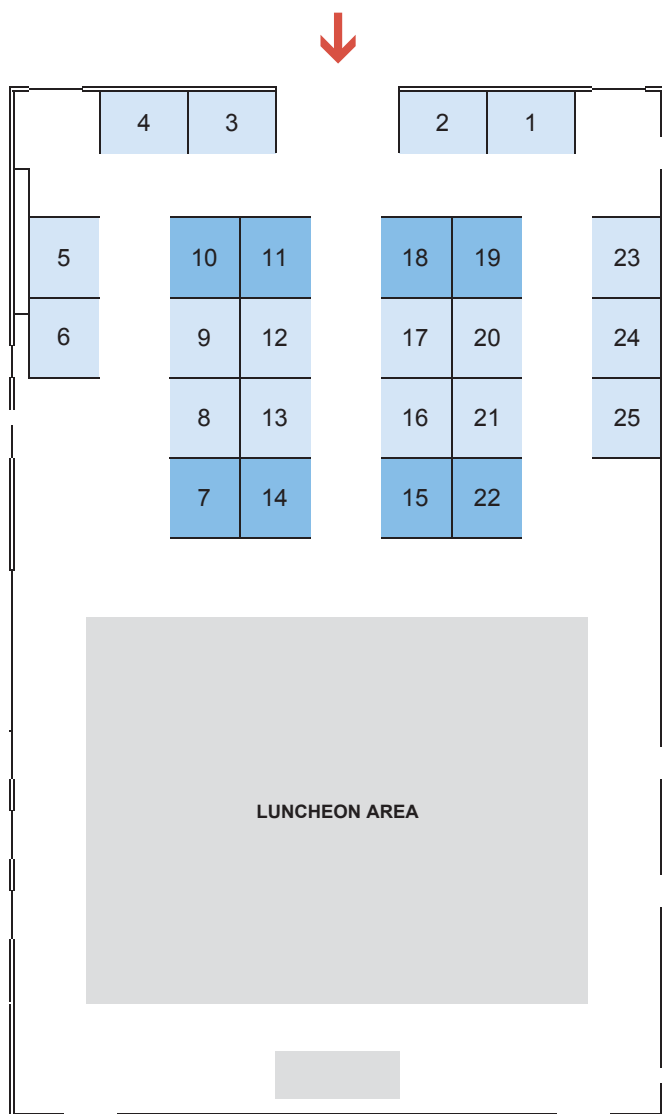
## Thursday June 8, 2017 (continued)

1:15p-1:30p	NHCW EXHIBITOR LAST BLAST! in Grand Sierra C&D			
	EMIGRANT PEAK <b>RAISING THE BAR: BEST PRACTICES</b>	PYRAMID PEAK <b>OLYMPIC LORE: EXTREME EVENTS</b>	CASTLE PEAK <b>THE SPRINTS: WARNING AND RESPONSE</b>	MONUMENT PEAK <b>BIGGER, BETTER, FASTER: PERFORMANCE AND INNOVATION</b>
MODERATOR	Om Prakash : WEST Consultants	Chris Crompton : Orange County Public Works	Diana Crilley : U.S. Geological Survey	Sam Utley : Campbell Scientific, Inc.
1:30p-2:00p	Adding the National Water Model to Existing Decision Support System Displays <i>Scott Holder and Bruce Rindahl : Ventura County Watershed Protection District</i>	Experiencing the Sponge City in China <i>Chris Crompton : Orange County Public Works</i>	What if the Worst-Case Storm Event Happened in Your Watershed? <i>Baxter E. Vieux : Vieux &amp; Associates</i> <i>Kevin Stewart : Urban Drainage and Flood Control District</i>	Monitoring the Effects of Storms on Streamflow and Surface Water Quality at USGS Monitoring Stations in the Mojave River Basin <i>Robert A. Blanchard : US Geological Survey</i>
2:00p-2:30p	Transitioning to the New World of ALERT2 <i>Ron Marotto : County of Ventura Watershed Protection District</i>	Magnitude, Frequency, and Trends of Floods in Washington State <i>Mark Mastin : US Geological Survey</i>	Replaying the 2013 Colorado Front Range Flood to Assess the Potential of the NOAA National Water Model for Flash Flood Warning and Associated Decision Support <i>Graeme Aggett : Lynker Technologies; Aubrey Duggar : NCAR; Jim Nelson : BYU</i>	Assessment of Gridded Hydrological Modeling for NWS Flash Flood Operations <i>James Halgren : Riverside Technology</i>
2:30p-3:00p	Modernization of the BIA Early Warning System <i>Lee Mauney : Bureau of Indian Affairs</i> <i>Lex Kamstra : Bureau of Reclamation</i>	The West Virginia/Virginia Historic and Devastating Floods of 23 June 2016: Summary of Impacts and National Weather Service Decision Support Services <i>Peter Corrigan and Stephen J. Keighton : National Weather Service</i>	A Question of Scale <i>Andrew Rooke : AMR Consults</i>	Integration of Advanced Flood Warning Technologies <i>Peter Acton : JE Fuller</i>
3:00p-3:30p	BREAK in Foyer			
	EMIGRANT PEAK <b>RAISING THE BAR: BEST PRACTICES</b>	PYRAMID PEAK <b>THE DASH: SOCIAL MEDIA</b>	CASTLE PEAK <b>THE SPRINTS: WARNING AND RESPONSE</b>	MONUMENT PEAK <b>BIGGER, BETTER, FASTER: PERFORMANCE AND INNOVATION</b>
MODERATOR	Ben Pratt : Susquehanna River Basin Commission	Jim Moffitt : Twitter	Kevin Stewart : Urban Drainage and Flood Control District	Steve Fitzgerald : Harris County Flood Control
3:30p-4:00p	Proactive Maintenance-Troubleshooting Gauges with Data Analytics <i>Scott Bores and Mike Zucosky : OneRain</i> <i>Laura Wilson : ESP Associates</i>	<b>90-minute Presentation</b> Integrating Twitter for Flood Notifications: Data Stories, Real-time Demos, and Code Examples <i>Jim Moffitt : Twitter</i>	Starting from Scratch <i>Reed Blochberger : JE Fuller</i>	Panel on Strengths, Weaknesses, Opportunities, and Threats for ALERT2 <i>Steve Fitzgerald : Harris County Flood Control</i> <i>David Leader : HydroLynx</i> <i>Andy Morin : National Weather Service</i> <i>Sam Utley : Campbell Scientific</i> <i>Scott Holder : ALERT2 Technical Working Group</i> <i>James Logan : High Sierra Electronics</i>
4:00p-4:30p	Web Visualization Platform Comparison (Google Maps and ArcGIS) <i>Nate Vaughan : JE Fuller</i>		Providing Decision Support Services to a Community Below a Recent Burned Area: Cedar Creek Arizona <i>Michael Schaffner and Andrew Taylor : National Weather Service</i>	
4:30p-5:00p	Emergency Management Flood Warning and Response Linkages to the FEMA CRS Program <i>Al W. Goodman : AWG Consulting</i>		Implementing a Siren Warning System in Texas' Flash Flood Alley <i>Mike Dussere : WORD of Comal County</i> <i>Tom Ogden : High Sierra Electronics</i>	
5:00p-5:30p	NHCW ANNUAL BUSINESS MEETING – Emigrant Peak			
6:00p-9:00p	NHCW AWARDS BANQUET, AWARDS, AND DOOR PRIZES in the Cascades Restaurant – included with registration PRESENTATION – Two Decades of River Forecast Advances <i>Rob Hartman : National Weather Service (retired)</i>			
9:00p-11:00p	HOSPITALITY SUITE – Room 501/502			

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- Premium Exhibitor
- Regular Exhibitor

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Water resources consulting firm, with a niche expertise in flood warning planning, emergency preparedness, monitoring, forecasting

#### 7 Aquatic Informatics, Inc.

Jason Myers | Phone 604-637-4601  
 angela.lingam@aquaticinformatics.com  
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Provides a leading software suite for acquiring, processing, modeling, and publishing water data

#### 17 Campbell Scientific

Ken Conner | [lruiz@campbellsci.com](mailto:lruiz@campbellsci.com)  
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#### 5 DataWise Environmental Monitoring, Inc.

Donald E. Colton | Phone 530-277-4476  
[hello@datawise.software](mailto:hello@datawise.software)  
 12061 Westwood Drive, Auburn, CA 95603  
<https://datawise.software/>

Environmental data software solutions

#### 22 Davis Instruments

Kevin McCarthy | Phone 510-940-1836  
[kimd@davisnet.com](mailto:kimd@davisnet.com)  
 3465 Diablo Ave., Hayward, CA 94545  
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#### 19 FTS, Inc.

Brad Schaefermeyer | Phone 800 548-4264  
[sales@ftsinc.com](mailto:sales@ftsinc.com)  
 1065 Henry Eng Place, Victoria, BC, Canada V9B 6B2  
[www.ftsinc.com](http://www.ftsinc.com)

Remote monitoring equipment

## Exhibitor Directory (continued)

BOOTH	COMPANY PROFILE	BOOTH	COMPANY PROFILE
9	<b>Geonor, Inc.</b> James Brylawsky   Phone 570-296-4884 geonor@geonor.com 51 US HWY 206, Augusta, NJ 07822 http://geonor.com/live/  Manufacturers and distributes a wide array of geophysical instrumentation for applications in meteorological, geotechnical and vibration monitoring	1	<b>OTT Hydromet / Sutron</b> Christel Valentine   Phone 970-663-1377 x2655 sales@otthydromet.com 5600 Lindbergh Dr., Loveland, CO 80539 www.ott.com  Environmental monitoring equipment and software
12,13,14	<b>High Sierra Electronics, Inc.</b> Tom Ogden, Business Development Manager Phone 530-273-2080 / 800-275-2080 sales@highsierraelectronics.com 155 Spring Hill Drive, Suite 106, Grass Valley, CA 95945 www.highsierraelectronics.com  Systems help identify threats posed by the weather, including dangerous road conditions and vulnerable dams and levees, and include a full range ALERT and ALERT2 capable products	25	<b>Stevens Water Monitoring Systems, Inc.</b> Fred Holloway   Phone 503-445-8000 fholloway@stevenswater.com 12067 NE Glenn Winding Drive #106, Portland, OR 97220 http://www.stevenswater.com/  Manufacturer and marketer of integrated hydrological, meteorological and oceanographic monitoring instrumentation, accessories and information systems
	<b>OneRain Incorporated</b> James Logan   Phone 303-774-2033 sales@onerain.com 1531 Skyway Drive, Unit D, Longmont, CO 80504-6220 www.onerain.com  Provides Contrail®, StormData, GARR, StormProperties, Analysis, StormLink, real-time satellite and IP telemetry, hydrologic network design, OneRainTech, field services, best practices consulting, and professional services	20	<b>US Geological Survey</b> Laurel Rogers   Phone 619-225-6150 larogers@usgs.gov 4165 Spruance Drive, San Diego, CA 92101 https://www.usgs.gov/  Federal agency providing science about the natural hazards that threaten lives and livelihoods, water, energy, minerals, and other natural resources
18	<b>HydroLynx Systems, Inc.</b> Kimberly Blair & David Leader   Phone 916-374-1800 kblair@hydrolynx.com 950 Riverside Parkway, Suite 10, West Sacramento, CA 95605 www.hydrolynx.com  Provides complete ALERT and ALERT2 Flood Warning Systems and low water crossing flashing roadway systems	2	<b>Vieux &amp; Associates, Inc.</b> Jean Vieux   Phone 405-325-1818 jean.vieux@vieuxinc.com 301 David L. Boren Blvd, Suite 3050, Norman, OK 73072 http://www.vieuxinc.com/  Specializes in rainfall/runoff software, products, and services
4	<b>KISTERS North America</b> Max Parisi   Phone 916-723-1441 massimiliano.parisi@kisters.net 7777 Greenback Lane, Suite 209, Citrus Heights, CA 95610 https://www.kisters.net/NA/  Software solutions and technology firm dedicated to highly effective long-term management of water, energy, air quality, and manufacturing industries	15	<b>WEST Consultants, Inc.</b> David C. Curtis, Ph.D.   Phone 916-932-7402 dcurtis@westconsultants.com 101 Parkshore Drive, Folsom, CA 95630 www.westconsultants.com  Provides engineering and environmental services including flood forecast and warning systems, applied research, numerical modeling, field investigations, monitoring, technology transfer, and expert witness testimony
23	<b>Microcom Design, Inc.</b> Perry West & Brett Betsill   pwest@microcomdesign.com 10948 Beaver Dam Rd., Hunt Valley, MD 21030-2237 www.microcomdesign.com  Satellite telemetry transmit/receive equipment and technology and environmental monitoring systems and sensors	11	<b>Xylem</b> Diego Davis   Phone 937-767-7241 amber.botkin@xyleminc.com 1725 Brannum Lane, Yellow Springs, OH 45387 https://www.xylem.com/en-US/  A leading water technology company committed to “solving water” by creating innovative and smart technology solutions to meet the world’s water needs
6	<b>NOAA/National Weather Service</b> Daniel Roman   Phone 301-427-9345 daniel.roman@noaa.gov 1325 East West Highway, Silver Spring, MD 20910 www.weather.gov  Provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy		





The ALERT Users Group training conference and exposition is heading back to Ventura California after twenty two years.



## The ALERT Users Group Training Conference & Exposition April 17<sup>th</sup>-20<sup>th</sup>, 2018 at the Ventura Beach Marriott

**SAVE THE DATE**

The ALERT Users Group announces their 27th Flood Warning Systems Training Conference. This nationally known and respected training conference will be held in Ventura, CA, from April 17th through April 20th, 2018. This event has been held since 1982, providing valuable opportunities for training and discussions concerning effective operation, maintenance and management of real time flood warning systems. Additional Conference details can be found on the ALERT Users Group web site.



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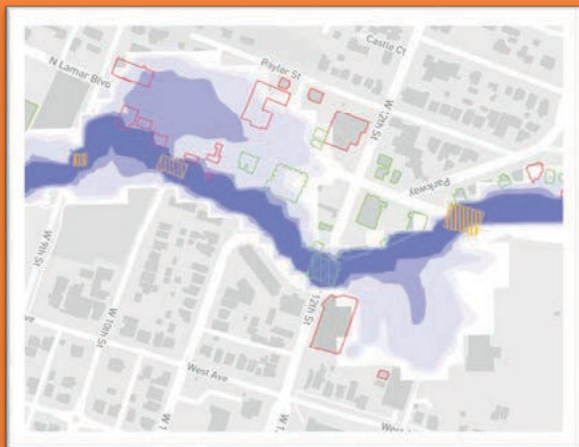
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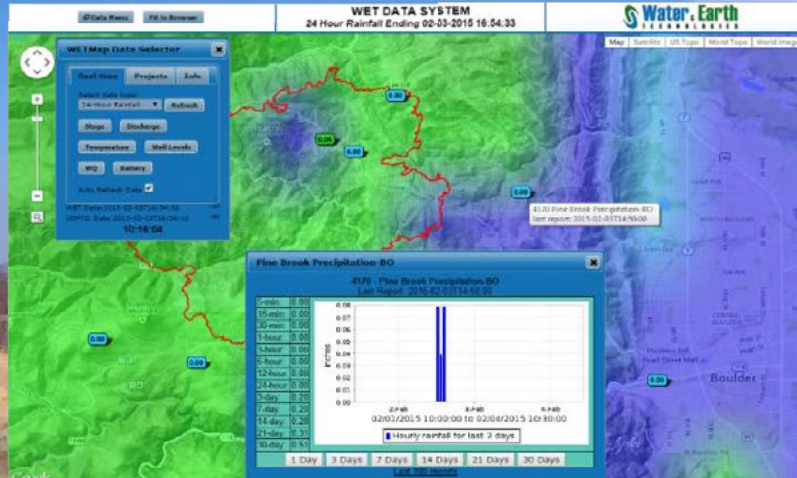
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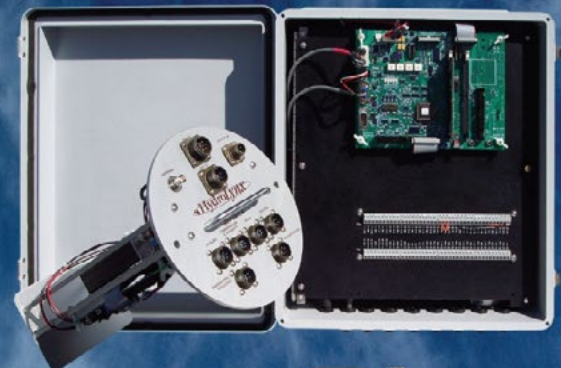
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## Mark Your Calendars for November 8-9, 2017



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**Join us** This 2-day interactive workshop will focus on flood warning system performance, flood forecasts and warnings, flood impacts, public communication, reservoir operations, post flood activities, radio frequency encroachment, NOAA Atlas 14, ALERT2 rollout, and other related topics.

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Agenda, registration, hotel, and other information available at:  
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