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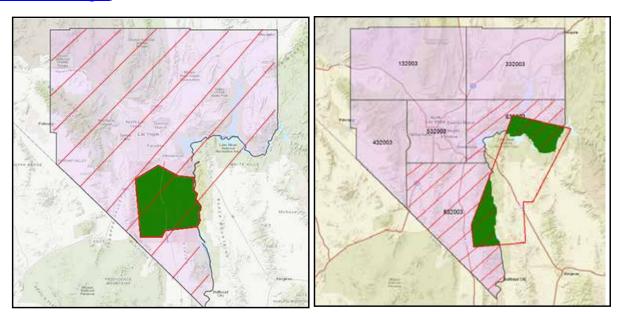
Proposal to Transform Public Warning Notifications via NWR and EAS

By <u>Tim Schott</u>, NWS Dissemination Services Meteorologist, Silver Spring, MD

The NWS, Federal Emergency Management Agency and Federal Communications Commission have an under used capability to send warnings via NOAA Weather Radio and the Emergency Alert System to specific areas of a county, rather than for an entire county. This capability is known as Partial County Alerting (PCA). NWS is reviving this option to better target alerts. Counties only will be considered for partitioning after extensive conversations with emergency managers, state and local government officials, State Emergency Communications Committees and broadcasters.

The NWS issued a Public Information Statement on a proposal to implement PCA for Clark County, NV, which includes Las Vegas, on July 15. With more than 8,000 square miles, Clark County is larger than each of six eastern states: Rhode Island, Delaware, Connecticut, New Jersey, Vermont, and New Hampshire.

Details on the proposal are online at the <u>Partial County Alerting Website</u>. Feedback on the proposal to implement PCA for Clark County is welcomed through August 17, 2020. Please send any comments or questions on PCA, specific to Clark County, to NWS Las Vegas Warning Coordination Meteorologist (WCM) <u>Dan.Berc@noaa.gov</u>, or 702-263-9744 x223.



The left map shows and EAS alert sent via NWR to all of Clark County, NV, even though it was forecast to impact only the area in green. The right map shows the proposed six partitions and what a more targeted warning might look like.

NWS is considering the future implementation of PCA for other counties with unique alerting challenges, such as geographically-large or uniquely-configured counties such as islands. For additional information on the national PCA initiative, please contact timothy.Schott@noaa.gov or call 301-427-9336.

Satellite Hot Spot Detection and Early Warning Notification of Wildfires

By Alex Tardy, WCM, NWS San Diego, CA

In 2017, with the availability of an operational satellite, NWS San Diego, CA, began experimenting with wildfire detection. Initially, the testing revealed the ability to detect wildfires as small as 10 to 20 acres. Forecasters used internal alarms to alert forecaster of potential wildfires and to evaluate the location.

If determined to be a possible wildfire, NWS meteorologists would compose a message in a graphical

interface and notify fire personnel of the location via standard SMS text message. By late fall 2017, following an active wildfire season, NWS partners determined this method not only worked but offered a much needed service.

In 2019, NWS staff received access to GOES-17 data. NWS and partners tested the use of this data during the Southern California multi-agency live fire training last year. The early detection program was able to identify wildfires as small as three acres. The system also can notify key personnel of new wildfire starts during dark hours under extreme fire weather conditions such as Santa Ana winds and Red Flag Warnings. Early this year, the



NWS San Diego WCM Alex Tardy conducts numerous technology media interviews.

system detected about 100 wildfires and notified partners; about 95 percent of these notifications verified as live wildfires.

During the testing and evaluation of the satellite early warning detection, the Orange County Fire Authority (OCFA) expanded the High-Performance Wireless Research and Education Network (HPWREN) and Alert Wildfire high resolution camera detection network, which also supported satellite detection of wildfires.

To get the word out to media partners, the OCFA highlighted the new technology during a media day. The additional partner collaboration further supported the validation of an effective early detection of wildfires. In 2019, the WIFIRE Lab at University of California, San Diego, began using the NWS text message notification of wildfires to initiate high resolution fire simulations on initial attack. Last fall, this system was tested as part of the Fire Integrated Real Time Intelligence System pilot program in Southern California.

NWS Alaska Partners to Protect Against Glacial Lake Outburst Flooding

By Audrey Rubel, Physical Scientist, Alaska Region Headquarters, Anchorage, AK

Aaron Jacobs, Senior Service Hydrologist and meteorologist at NWS Juneau, AK, and hydrologists from the Alaska-Pacific River Forecast Center are collaborating with partners to protect lives and property from the dangers of glacial lake outburst floods (GLOF) in Juneau.

Mendenhall Glacier dams <u>Suicide Basin</u> above Juneau. Since 2011, Suicide Basin has released GLOFs that cause inundation along the Mendenhall Lake and River. To keep the public informed, NWS Juneau provides

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the latest outburst flooding information on a Suicide Basin webpage. The page shows near real-time updates of the water level in the basin and at lake and river.

The structure and behavior of the ice in Suicide Basin can be complicated and may change drastically from year to year. Factors such as the ice thickness in the dam, the properties of the channel in which the water flows, and the amount of water in the basin





Left: Aaron Jacobs standing by a side channel that was formed when the water in Suicide Basin overtopped the ice dam before the drainage went sub-glacier. Right: Aaron at the same location, showing the ice erosion from the overtopping drainage.

determine if and how flooding will happen as well as its potential severity. "If we get an outburst flood that coincides with higher than normal streamflows on the lake and river, we would see flooding in places we haven't seen flooding before," said Aaron.

Scientists and city managers gain information about volume and potential drainage scenarios by tracking changes in the basin. Joint monitoring increases understanding of the processes that control the basin's filling and drainage, and allows for early warning.

Aaron took part in a <u>multi-agency study of the basin</u> that may help improve forecasting capabilities at other outburst flood areas around the state. "If it wasn't for all these agencies coming together and working as one, it would have been a lot more difficult to put together this monitoring program and information database that we've gathered throughout these past 10 years," said Aaron.

First Facebook Live SKYWARN Class in Spanish

By Maria Torres, Meteorologist, NWS Miami, FL

On May 21, NWS Shreveport joined forces with members of the NWS Multimedia Assistance in Spanish (MAS) Team to deliver the agency's first joint Facebook Live SKYWARN Spotter training session in Spanish. In the months of planning leading up to this session, NWS MAS and Shreveport Meteorologist Chris Nutall and WCM Charlie Woodrum worked closely with local media partners to develop a training class focused on the Arkansas, Louisiana, Texas (ArkLaTex) region.

The presentation's goal was to introduce the SKYWARN Spotter Program to the Spanish speaking community of the region, focusing on hazardous weather spotting techniques as well as safety and preparedness. Meteorologist Maria Torres conducted key collaborations to promote this event on social media platforms, including live interviews to spark public interest.

"It took a true team effort to make this project a reality, but by combining the local knowledge from the Shreveport NWS



Meteorologist Anthony Reynes conducted Facebook Live SKYWARN spotter class directly from NWS Miami's multimedia room while broadcasting through the NWS Shreveport Facebook page.

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staff, the technical resources from NWS Miami and support from National Hurricane Center, we were able to reach the ever-growing Spanish-speaking community in the ArkLaTex region," said Meteorologist Anthony Reynes, who conducted the 2-hour class. The presentation hit the Facebook Live audience using a combination of Live broadcasting and green screen effects. Torres continuously answered questions in Spanish in the comments section of NWS Shreveport's Facebook page.

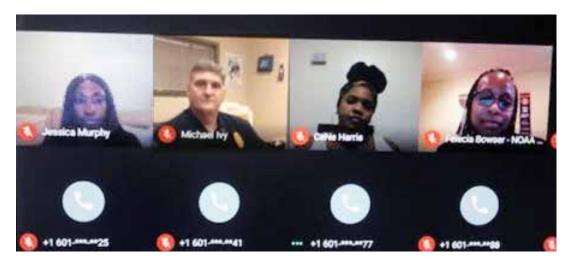
This project embodies the NWS spirit of bringing awareness and sparking interest, especially in those most vulnerable communities, about weather hazards and how to contribute to the agency's mission of protecting life and property. With the great success this event had, MAS and NWS Shreveport plan to expand efforts like this nationwide and make SKYWARN Spotter Training on Facebook Live available everywhere for the U.S. Hispanic community.

NWS and Academia Team Up for Community Resilience Virtual Town Hall

By Felecia Bowser, WCM, NWS Jackson, MS

NWS Jackson, MS, teamed up with Jackson State University (JSU) for the Community Resilience Project Virtual Town Hall. The Community Resilience Project was developed to take a multi-disciplinary approach to better prepare Mississippi's under served communities for natural disasters by minimizing loss of life and building resilient communities. The team, led by JSU Professor of Technology Dr. Jessica Murphy, combined the expertise of professionals in social science, psychology, technology, public safety and meteorology.

The virtual town hall was the team's first step toward increasing public awareness, expanding preparedness training and providing tools for effective response planning to natural disasters. Tackling this in the midst of COVID-19 added to the challenge. The group has held two virtual public events thus far. NWS Jackson meteorologists who took part in the virtual town hall included Meteorologist-in-Charge Bill Parker, WCM Felecia Bowser and Observing Program Leader Latrice Maxie.



Virtual Town Hall Conference included professors and public safety officials from Jackson State University, as well as Meteorologist-in-Charge Bill Parker, Warning Coordination Meteorologist Felecia Bowser and Observation Program Leader Latrice Maxie.

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