TIP 40: Non-Weather Emergency Messages over NOAA Weather Radio

Effective Summer 2021, the connection between FEMA’s Integrated Public Alert and Warning System (IPAWS) and NOAA Weather Radio (NWR) is online! After extensive development and testing to replace the HazCollect application, you can now send alerts through the National Weather Service gateway for dissemination to consumer NWR receivers and over other National Weather Service systems.

When the National Weather Service (NWS) receives the Common Alerting Protocol (CAP) formatted message produced by your alert origination software, NWS automatically converts the alert into a text-formed product that is distributed by NOAA alert redistributors to the public via a variety of NWS dissemination systems including NOAA Weather Radio.

However, the local NWS Weather Forecast Office (WFO) may edit the alert message prior to NWR broadcast in the local WFO’s area of responsibility.

This editing ensures that the audio message is clear and unambiguous when the NWR text-to-speech engine converts the alert text to the synthesized voice that is broadcast over NWR and received by the public. Therefore, distribution of alerts via NWR may not be immediate because the WFO will review and may edit alerts before broadcast.

See https://www.weather.gov/NonWeatherAlerts for more information and important contacts at your local NWS WFO.

NWEM Alerting Permissions

If your current IPAWS Public Alerting Authority form does not include Non-Weather Emergency Message (NWEM) permissions, you will need to update the form and get it signed by your state approver before using this new feature.

Contact IPAWS Customer Support (IPAWS@fema.dhs.gov) for guidance on updating your Public Alerting Authority permissions.

NWEM Event Codes

The following event codes may be used for NWEMs, as seen in the IPAWS Fact Sheet Event Code Descriptions for Use with IPAWS:

ADR Administrative Message
AVA Avalanche Watch
AVW  Avalanche Warning
BLU  Blue Alert
CAE  Child Abduction Emergency (approved state agencies only)
CDW  Civil Danger Warning
CEM  Civil Emergency Message
DMO  Practice/Demo Warning
EQW  Earthquake Warning
EVI  Evacuation Immediate
FRW  Fire Warning
HMW  Hazardous Materials Warning
LAE  Local Area Emergency
LEW  Law Enforcement Warning
NUW  Nuclear Power Plant Warning
RHW  Radiological Hazard Warning
SPW  Shelter in Place Warning
TOE  Telephone Outage Emergency
VOW  Volcano Warning

**Duplicate Alerts**

Many broadcast and cable operators monitor multiple sources, including NWR and IPAWS, for Emergency Alert System (EAS) activation. There may be instances where an alert with multiple FIPS (location) codes could result in the same alert message being broadcast more than once on local radio or television stations as an EAS message.

For example, NWR is designed to only include the location codes relevant to each NWR transmitter’s broadcast footprint. So, an alert addressed to an area larger than one NWR transmitter’s footprint will be divided into separate messages broadcast from adjacent NWR transmitters, with each message including only the location codes appropriate for the broadcast footprint of each transmitter.

As a result, broadcaster EAS equipment monitoring both local NWR transmitters and IPAWS may not identify the messages broadcast by each NWR transmitter as the same alert delivered through IPAWS. This can result in more than one EAS activation for the same alert.

Local broadcasters may not welcome duplicate EAS activations. Alerting Authorities should discuss this issue with the local WFO and address it in state or local EAS plans.

**NWEM Targeting**

Like EAS, NWR uses county and state location codes, not polygons. Therefore, NWEMs broadcast over NWR result in alerts targeted to the county or state level.
More Resources

Please coordinate with your local WFO regarding NWS distribution of NWEMs. Find your local NWS Warning Coordination Meteorologist at this link: https://www.weather.gov/stormready/contact.

Please watch the IPAWS webinar with the NWS to answer your questions about NOAA Weather Radio and how to incorporate this alerting channel into your alert, warning, and notification operations.

Find more IPAWS Tips on the FEMA website. Share your ideas for future Tips with the IPAWS office at fema-ipaws-stakeholder-engagement@fema.dhs.gov.

The Integrated Public Alert & Warning System (IPAWS) is FEMA’s national system for local alerting that provides critical safety information through mobile phones using Wireless Emergency Alerts (WEA), to radio and TV via the Emergency Alert System (EAS), NOAA Weather Radio via Non-Weather Emergency Messages (NWEM), and on digital media via the IPAWS All-Hazards Information Feed.