TIP #47: Apple iOS Includes New WEA Capability

Besides the 90- and 360-character message fields in a Wireless Emergency Alert (WEA), it's possible to send an additional 600 characters to iPhones running on iOS 17 or later.



Emergency Alert

National Weather Service: A FLASH FLOOD WARNING is in effect for this area until 12:30 PM EDT. This is a dangerous and life-threatening situation. Do not attempt to travel unless you are fleeing an area subject to flooding or under an evacuation order.

Additional Details

Turn around, don't drown when encountering flooded roads. Most flood deaths occur in vehicles.

Move to higher ground now. Act quickly to protect your life.

Excessive runoff from heavy rainfall will cause flooding of urban areas, highways, streets and underpasses as well as other drainage areas and low lying spots.

Stay away or be swept away. River banks and culverts can become unstable and unsafe.

This feature is not a change to the WEA standards or regulations. Instead, it is an optional capability provided by Apple to its customers when receiving WEAs.

iOS 17 allows iPhone users who receive a WEA to tap on the alert and retrieve additional details, if provided by the Alert Originator.

The details are derived from the Instructions field of the Common Alerting Protocol (CAP) message used to generate the WEA.

Your Alert Origination Software Provider should advise whether its application has been updated to permit Alert Originators to populate the instructions field in the CAP message when sending a WEA.

In the example at left, a National Weather Service WEA includes additional details - visible only to the iPhone user - containing flood survival tips.

This additional data is captured by, and transmitted to iPhones from, Apple servers. Apple has represented to FEMA IPAWS that the company has enough server capacity to offer this service to iPhone customers.

Using the Instructions field:

- Accommodates 600 characters maximum
- Can contain Embedded References (web links)
- There should be a unique instruction element for each info block (one for English, one for Spanish)
- Do not select EAS when leveraging the instructions field for WEA; send a separate CAP message for EAS
- Only works for Apple devices on iOS 17 or later

