

# IMPACT-BASED Flash Flood Warnings



# **Impact-Based Warnings (IBWs) are designed to improve communication**

Each Flash Flood Warning (FFW) will contain a bulleted format of easily readable information describing the flash flood, the source of the information (e.g., radar, gauge, trained spotter, Emergency Manager), and a brief description of the impact of the flash flood. It will also include machine-readable tags to characterize the flash flood damage threat, source information, and causative event.



## **Implementation Timeline**

The National Weather Service (NWS) will begin to implement the reformatting of FFWs into IBW format on or after September 16, 2019. All NWS Weather Forecast Offices will transition to issuing FFWs in IBW format by late November 2019.



# Only high-level flooding will trigger Wireless Emergency Alerts (WEAs)

Once IBW format is fully implemented, WEAs will be limited to only those FFWs with the damage threat tags of "Considerable" or "Catastrophic", and third party vendors will be able to identify and extract the "emergency" language in the FFWs.

The NWS issues more than 4,000 FFWs each year with a range of impacts on lives and livelihoods.

Currently, all FFWs trigger WEAs, which are free notifications delivered to your mobile device.

Public perception is that the NWS over-alerts FFWs, and the Federal Emergency Management Agency (FEMA) has noted a large number of complaints about overnight WEAs for FFWs with perceived little impact.



With this change to impact-based FFWs, the NWS is aiming to improve the public response to Flash Flood Warnings by providing easily readable information and issuing WEA alerts only for flash flood events that require immediate life-saving action.



Impact-based warnings contain hazard, source, and impact information, and additional damage threat tags. On the right is a sample impact-based warning.

## **Hazard. Source. and Impact Information**

Each Flash Flood Warning (FFW) will contain individual lines that clearly state hazard, source, and impact information.



#### **Tags**

Tags will appear at the bottom of FFWs and in Flash Flood Statements (FFSs), which provide supplemental information on active FFWs.



...FLASH FLOOD EMERGENCY FOR LIFE-THREATENING CATASTROPHIC FLOODING...

The National Weather Service in League City has issued a

- \* Flash Flood Warning for... Northeastern Austin County in southeastern Texas...
- \* Until 715 PM CDT
- \* At 119 PM CDT, Doppler radar indicated continued bands of rain and thunderstorms across the area. Emergency management reported ongoing water rescues. Rainfall rates of 2 to 3 inches per hour will persist across the warned area.

This is a FLASH FLOOD EMERGENCY FOR LIFE-THREATENING CATASTROPHIC FLOODING. This is a PARTICULARLY DANGEROUS SITUATION. SEEK HIGHER GROUND NOW!

HAZARD...Life-threatening flash flooding caused by thunderstorms.

SOURCE...Emergency management.

IMPACT...Widespread, life-threatening flooding will continue and perhaps worsen at some locations. Historic flooding is expected to continue in the Houston metropolitan area through the foreseeable future.

\* Some locations that will experience flooding include... Pasadena, Pearland, League City, and Humble.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Move to higher ground now. This is an extremely dangerous and life-threatening situation. Do not attempt to travel unless you are fleeing an area subject to flooding or under an evacuation order.

8.8

LAT...LON 2904 9515 2905 9527 2932 9536 2916 9543

FLASH FLOOD...OBSERVED FLASH FLOOD DAMAGE THREAT...CATASTROPHIC EXPECTED RAINFALL...2-3 INCHES PER HOUR

- \* Category utilized for a Wireless Emergency Alert (WEA).
- + Catastrophic equates to a headline and additional language for a "Flash Flood Emergency".