The First Responders did an excellent job in difficult circumstances during the October 31 flood. These next two presentations are about giving our first responders improved tools for helping citizens.

We cannot stop rain or floods, but what we can do is give residents and public safety officials more warning about floods. These next slides show how that is possible.

This first slide was created by the KAXN weather team with data from the National Weather Service. It shows the rainfall in the central Texas area during the night of October 30 to 31. Most of Travis County received between 3 to 6 inches of rain. This is a lot of rain for one night, but this rainfall would not by itself produce the flooding experienced that day. The most rain fell in a band of Hays County centered on Wimberley.

The next three slides are taken from the United States Geographic Service website of water level gages. They show the timeline of the flood as it moved down Onion Creek. The first slide shows the Onion Creek water level gage at the 183 bridge, just downstream from the Dove Springs and Bluff Springs neighborhoods. This graph shows that the Onion Creek water level peaked at about 10 AM, but that the flood stage was reached at about 4 AM.

The next slide is the water level of Onion Creek at Twin Creeks Road, upstream from Dove Springs and just east of I-35. Here the peak occurred at about 7 AM, and the creek was 25 feet above normal at about 3 AM.

The third graph shows the water level of Onion Creek at Driftwood, near Dripping Springs. This is the important graph. Here the flood peaked at about 3 AM, but flood stage was reached somewhere between midnight and 2 AM. This is the first indication that flooding in Austin was inevitable. This pulse of water would take several hours to travel to Austin, combining with water flowing into Onion Creek from downstream tributaries to create an even higher peak. Unlike the first two gages, the Driftwood USGS stream level gage is not monitored by the Austin Flood Early Warning System.

The information for the Response Timeline slide comes from Statesman articles, the water level graphs, and the ANC meeting with public safety officials on December 20 2013. This timeline shows that if the Driftwood gage had been part of the Austin FEWS, and the Office of Emergency Management had been monitoring the flood gages earlier, Austin residents would have had several hours of advanced warning before the flood waters reached a critical level in the south Austin neighborhoods.

The Austin Neighborhoods Council has committed to educating neighborhoods on the need to register with the Reverse 911 Emergency Notification System. With a commitment from the City of Austin to expand the Flood Early Warning System beyond the city limits, advanced warning of floods can be achieved.

## OCTOBER 31 FLOOD



## Halloween Flood 2013 Rainfall Totals

- Rained from about 7:30 pm on October 30th, until about 5:00 am on the 31st.
- The color scale is the total number of inches recorded during the entire event.
- Almost 10 hours of Rainfall.



## **≥USGS**



5

## ≊USGS



## ≊USGS



# **RESPONSE TIMELINE**

- 10/30 11:30 PM 911 calls on flooding start
- 1:30 AM EOC partial activation
- 6:00 AM Full activation of EOC
- 9:30 AM Reverse 911 calls started
- 10:00 AM Onion Creek peaks at 40 feet

Education with 911 Reverse Calling Residents & Neighborhoods

 ANC – Austin Neighborhoods Council has committed by notifying the members and neighborhoods to sign up for 911 reverse calling.



### Link to HSEM Emergency Notification System

http://austintexas.gov/department/homeland-security-and-emergency-management

Registration - Receive reverse 911 alerts - Emergency notifications within flood prone areas - wildfire





Serving Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, and Williamson Counties

Welcome to the Registration Site for Capital Area Council of Governments (CAPCOG) Regional Notification System.

If English is not your primary language, select your language below:

Select Language \$

Powered by Google Translate

In 2006, CAPCOG used homeland security grant funds to implement a Regional Notification System (RNS). This system uses a "reverse dialing" telephone method to notify members of the public of critical emergency information in situations where property or human life is in danger and of events that affect them.

Originally, the system would contact only those persons with regular, land-line telephone service. With the rise in the popularity of cellular telephones, an increasing number of persons no longer maintain traditional telephone service. Instead, they rely exclusively on their cellular telephones as their residence telephone. In response, CAPCOG has added the ability to notify you on your cell phone if there is an emergency near your home, business or other location.

In addition, CAPCOG has upgraded the RNS to provide enhanced notification capabilities to both cellular and land-line telephones. The system can send automated messages for certain types of weather events, such as severe thunderstorms, tornadoes, and flash floods. You can register your cell phone—and your land-line telephone—to receive these warnings by checking the appropriate box on the registration form.

Persons may link their cellular telephone number to one or more locations within the 10-county CAPCOG region, including their homes, businesses and the homes of relatives. You must create

a separate record for each address, but you can use the same cell phone numbers for each record.

If a participating local government activates the system for an area that contains a location that has been registered to a particular cellular telephone number, the system will attempt to send the emergency message to that cellular telephone. **PLEASE NOTE: This notification system only works within the Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis and Williamson counties**.

Regional notification messages are initiated by local public safety agencies as one of several methods of relaying vital information to their citizens.

**Register:** Please click below to register your contact information into the CAPCOG's Regional Notification System, or call (866) 484-3264. Callers will be prompted for their contact information.

Register New Contact Information

Update Existing Contact Information

Forgot Password

### http://alertregistration.com/capcog/



Capital Area Council of Governments Serving Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, and Williamson Counties

	If English is not your primary language, select your language below:
	Select Language ÷
	Powared by Google Translate
First Name:	Last Name:
Address:	
City:	State: TX ÷ Zip:
Home Phone:	Secondary Phone:
Cell Phone:	Mobile Carrier: +
Cell Phone 2:	Mobile Carrier: +
Would	I you like to receive e-mail notifications?    This is a number to a device capable of receiving text messages.    I you like to receive text notifications?    Be aware, we do not charge for text messages but your standard rates apply.
Primary Email:	Secondary Email:
	If you do not have an email address please enter a username. A UserName usually consists of First Initial + Last Name ( ex. jsmith ).
User Name:	NOTE: User Name may only contain Alphanumeric characters. All special characters entered in will be removed.
	Confirm Password

#### Please check the appropriate box to receive these additional warnings:

- Flash Flood Warning
- Severe Thunderstorm Warning
- Tornado Warning

<u>Terms and Conditions</u>: By registering your telephone number on this system you are requesting that the participating local governments include you in any notification of an emergency that may affect the location you specify. You agree to hold harmless CAPCOG, the participating local governments, their employees, agents and successors, for any injury, death and/or property damage that you, or any person on the premises of your residence or business establishment, may suffer due to a failure of the RNS to provide notification to the registered cellular telephone numbers.

The CAPCOG Regional Notification System is operated as a public service by the Capital Area Council of Governments and participating local governments. The local governments may use this system as one method of notifying the public in specific areas of events—actual or anticipated—that may result in harm to persons or damage to property. Use of this system does not guarantee that every person in the area will receive notification, nor does it guarantee that the persons notified will not be harmed.

#### I Agree - (Agreement Disclaimer)

[by checking this box you consent that you have read and understand the information above] [THIS MUST BE CHECKED TO CONTINUE]

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