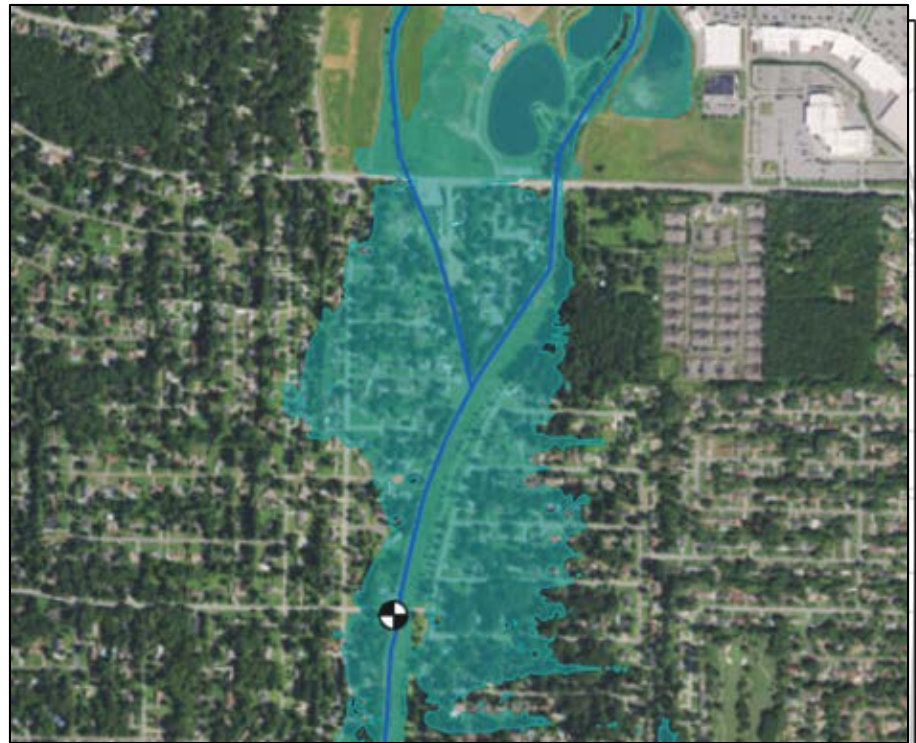


INNOVATIVE SOLUTIONS FOR REAL-TIME FLOOD FORECASTING ALDRIDGE CREEK WATERSHED

William Thomas, PE, CFM
September 9, 2016





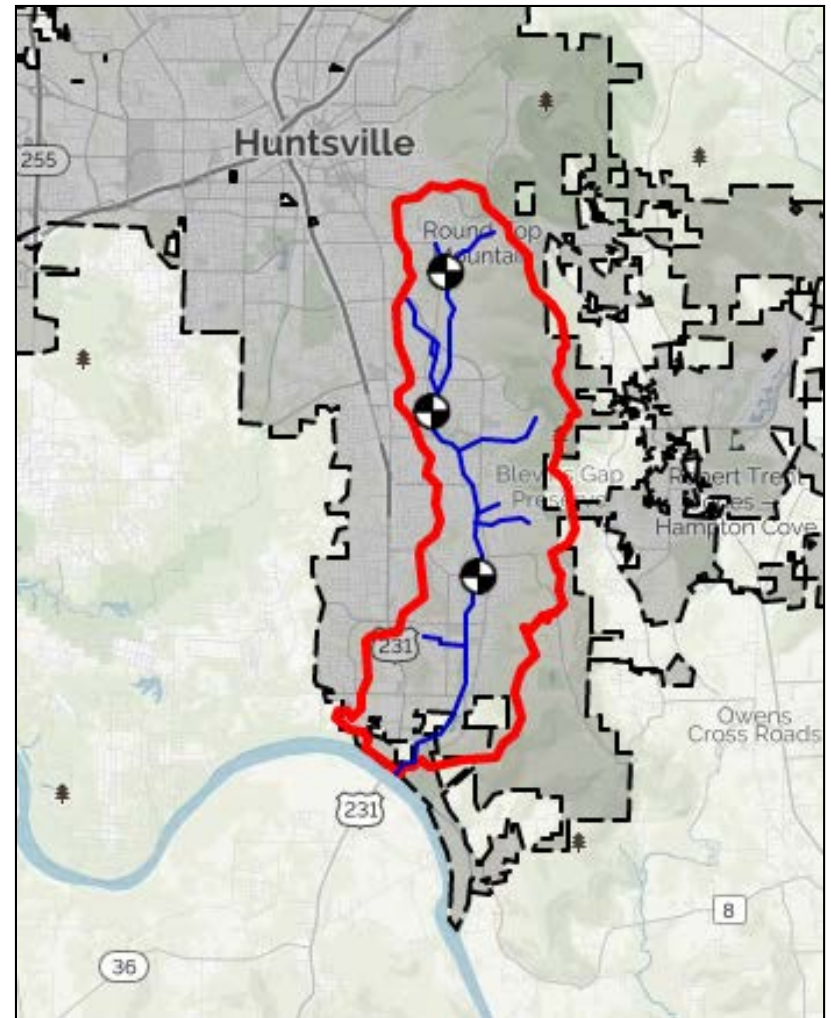
WHY FORECAST?

- Proactive instead of Reactive



ALDRIDGE CREEK

- Huntsville, AL
- 23 square miles
- Primarily Residential
- USGS gages at 3 sites



ALDRIDGE CREEK FLOODING

- June 28, 1999
 - 300 structures flooded
 - \$7 million in damage
 - 6+ inches

Residents along Aldridge Creek remember 1999 flood

By Pat Ammons | pammons@al.com
Email the author | Follow on Twitter
on August 30, 2010 at 6:07 AM

HUNTSVILLE, AL - The scene Saturday afternoon along the Aldridge Creek Greenway in south Huntsville was almost Norman Rockwellian. Children played tug-a-war and ring toss while dads cooked burgers on a big grill and people lined up for a large potluck dinner.

Only a few residents could know the scene was a place where homes were destroyed. A flash flood in June 1999 caused \$7 million in damage.

National Weather Service Weather Forecast Office
Huntsville, AL

Home Site Map News Organization Search for: NWS All NOAA

Local forecast by "City, St" or Zip Code
City, St: Go

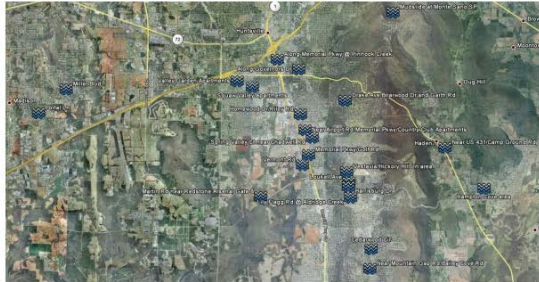
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Forecasts
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Current Weather
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The Huntsville Flash Flood of June 28, 1999

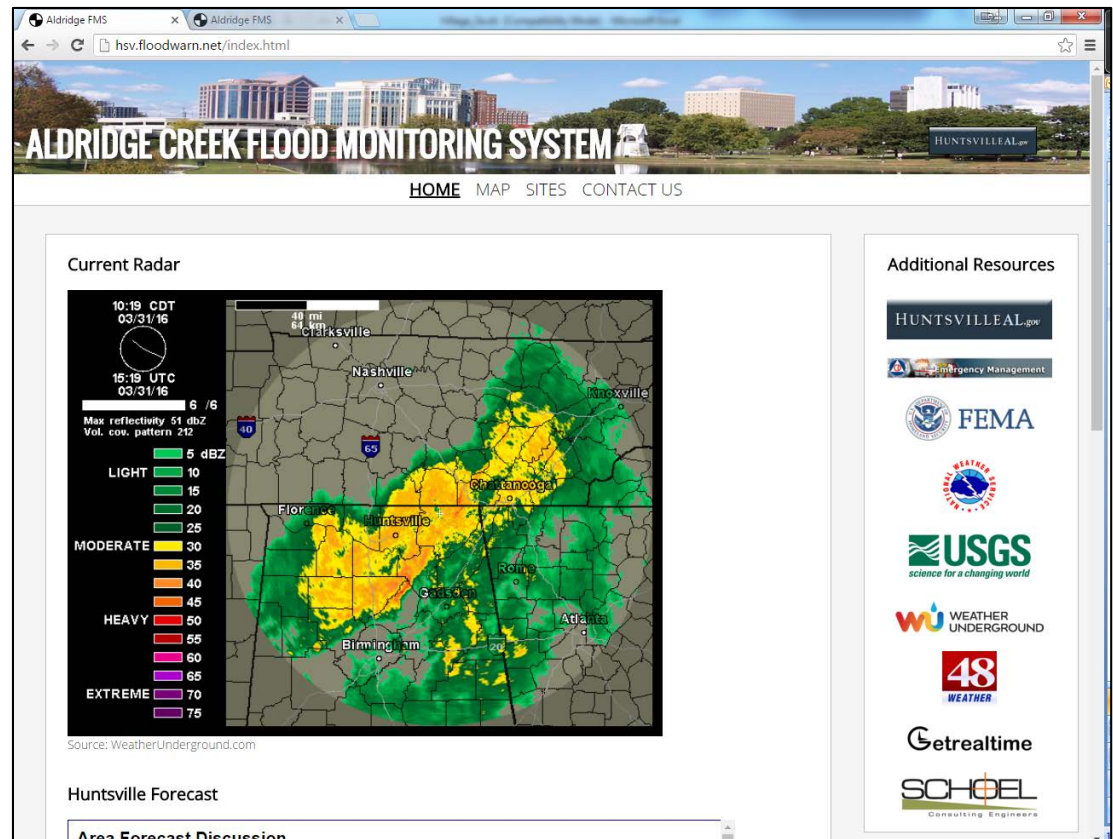


Map of locations where flooding or flash flooding was reported in Madison County on the morning of June 28, 1999. Click for higher resolution image.

The early morning hours of June 28, 1999 were very memorable for many residents of south Huntsville. Heavy rain began falling shortly after midnight, and continued for several hours as a line of thunderstorms trained over the same area. Flash flooding began as early as 1:20am, with water submerging cars across central and southern parts of the city. Some residents were trapped in or on their vehicles and had to be rescued. Eventually, water began to enter homes, forcing residents to evacuate. Flooding continued through the early morning hours until rainfall finally tapered off before daybreak. During the event, one person died and one other person was injured.

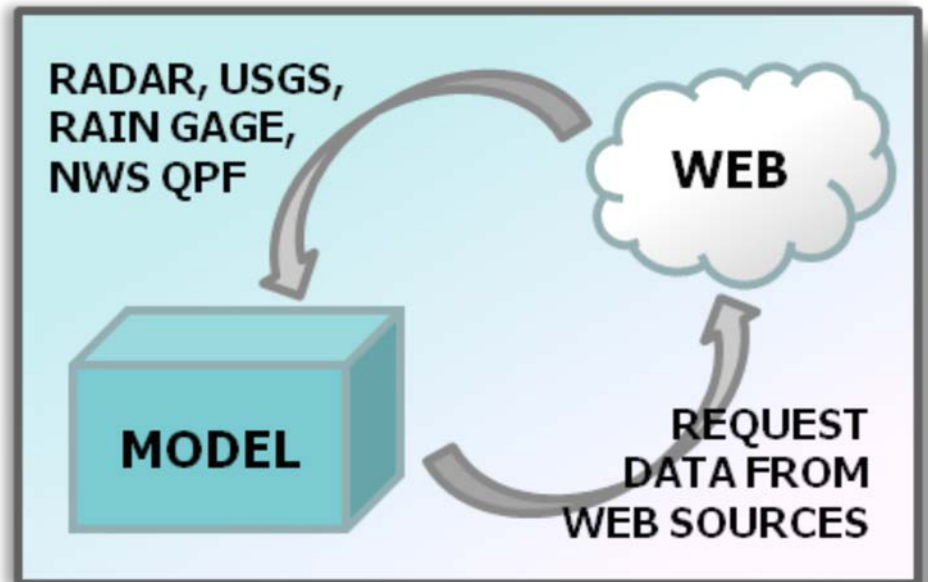
WHAT MAKES THIS INNOVATIVE?

- Real-time
- Usable
- Inundation Mapping
- Notifications



REAL-TIME

- Continuous Model
- Real-time Data Acquisition
- Current Output



USABLE

- Access from Any Device
- Presentation
- Tailored to the User

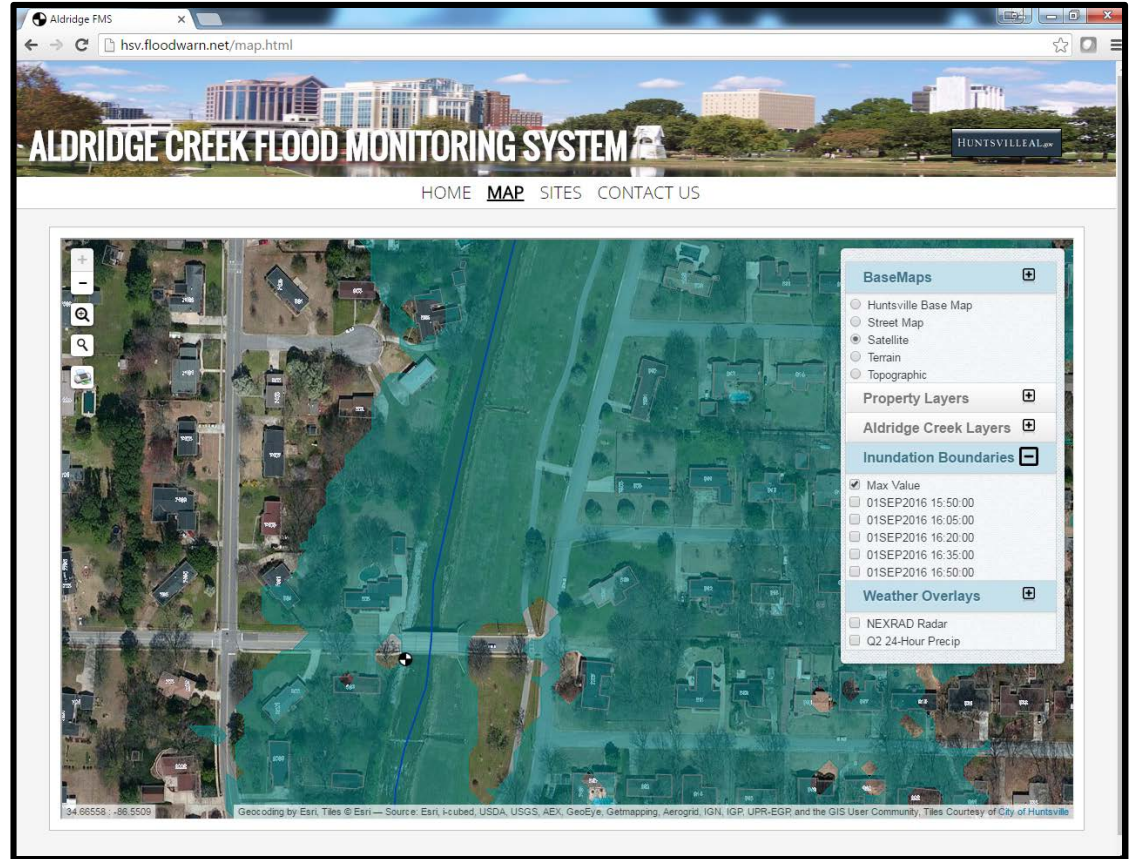




ALDRIDGE CREEK @ SHERWOOD DRIVE

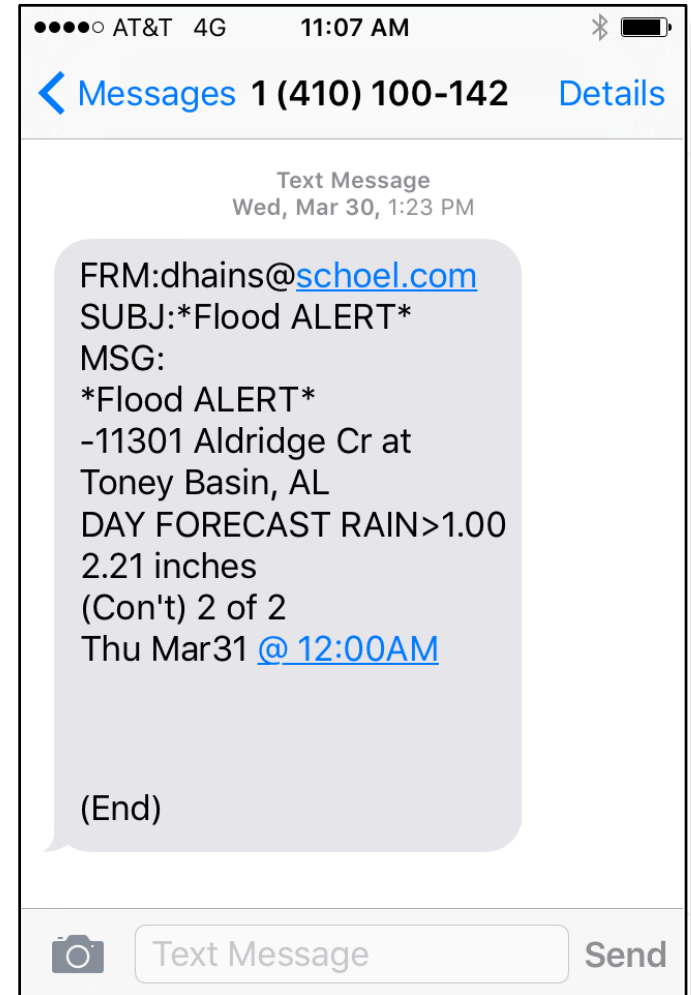
INUNDATION MAPPING

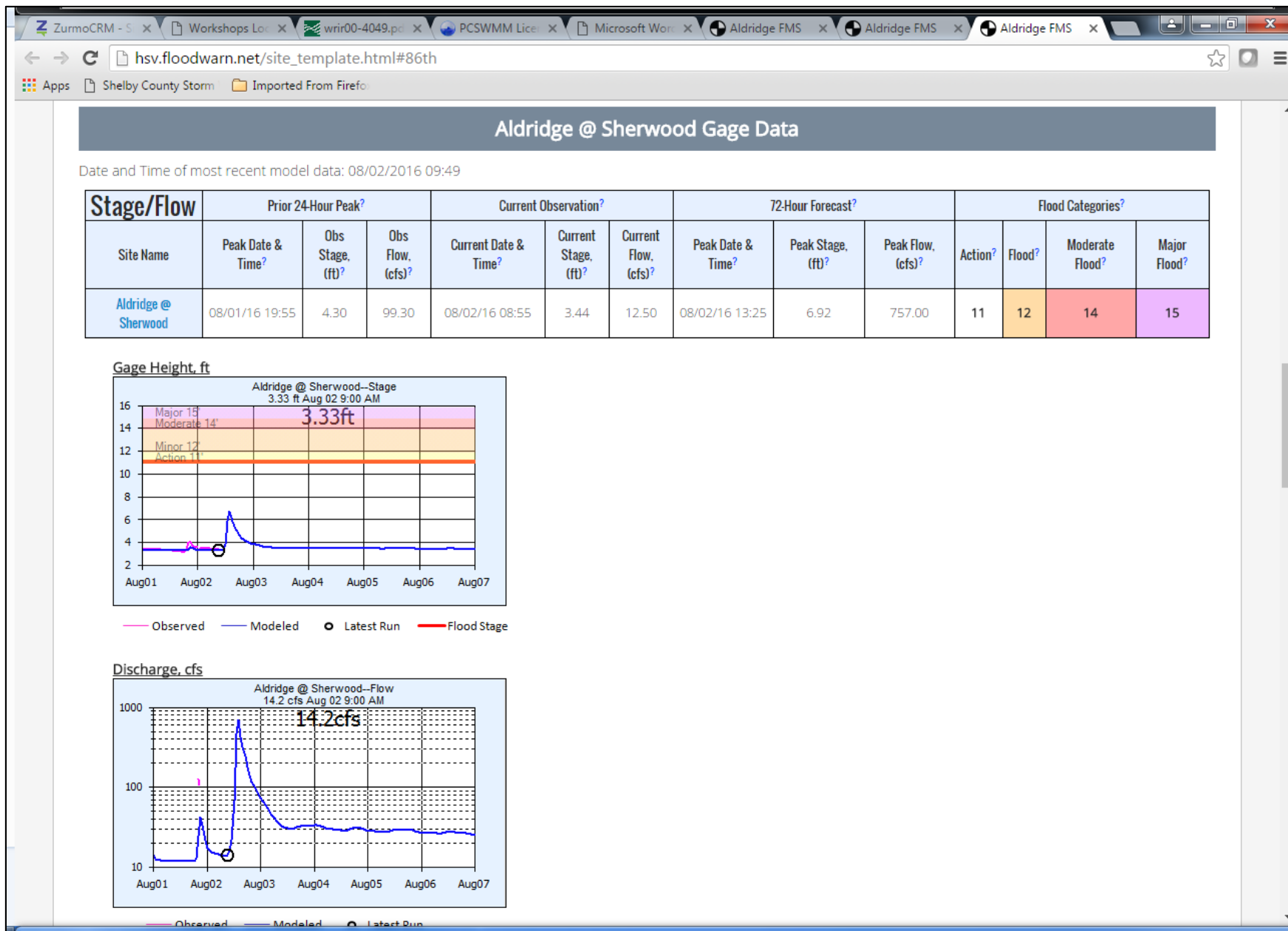
- Easily Assess Hazard
- Translate the Technical into Usable



NOTIFICATIONS

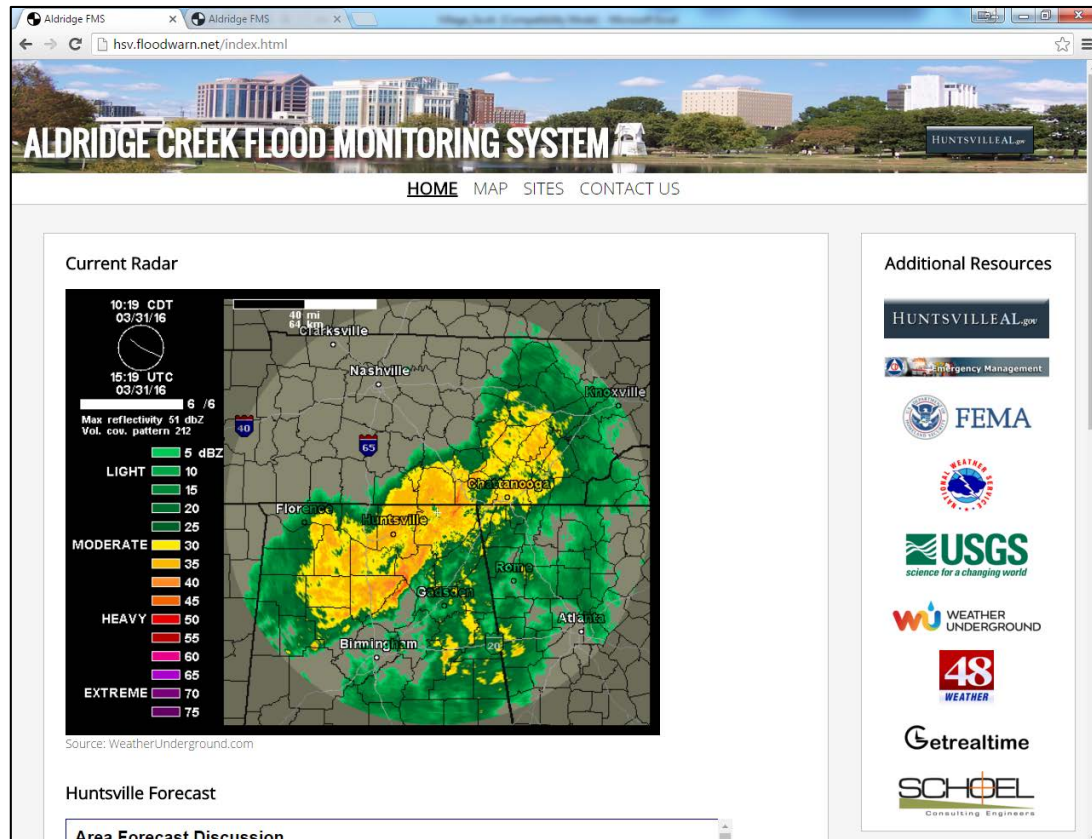
- Automated
- Based on Rainfall, Stage, or Flow
- Text or Email





QUESTIONS

- hsv.floodwarn.net



CONTACT INFORMATION

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