



High Water Mark Sign Project

Rio Grande-Big Bend Partners Meeting

May 12, 2009

Terlingua, TX

Ben Weiger

Southern Region Headquarters

ben.weiger@noaa.gov



History of project

- High water mark (HWM) signs recommended by USGS/NWS Workgroup, 1997.
- NWS's Southeast River Forecast Center began pilot project in 2006.
- First signs installed in Rome, GA (March 2007), Franklin, VA and Tarboro, NC (May 2007).
- First sign installed outside of SERFC service area in SR – Jackson, MS (April 2009).



Goals of Project

- Commemorate historic floods.
 - Best Practice – Unveil HWM signs during historical flood anniversary.
- Raise awareness of local flood risk for newcomers and future generations.
- Provide information on where people may learn more about local flood threat.



Sign Placement Coordination

- Local Weather Forecast Office consults with local emergency management officials to determine interest.
- Emergency management officials coordinate with city/county/state government on sign placement.
- Installation easiest on government property.

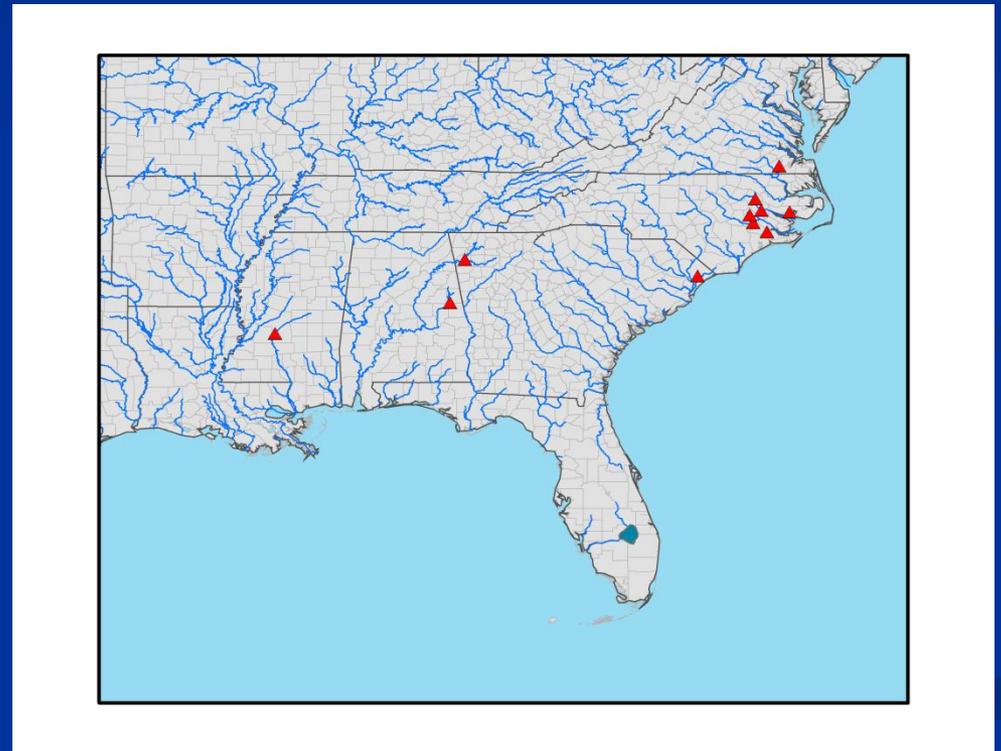


Sign Installation

- High water mark may be surveyed in from river gauge by USGS and NWS personnel.
- High water mark may be based on local history if height is well-established.
- Signs are generally installed on buildings for maximum impact.
- Signs may also be installed on posts in well-traveled public areas.

Completed Installations in SERFC/LMRFC service areas as of 5/09:

- AL: Wadley
- GA: Rome
- SC: Conway
- NC: Snow Hill,
Pollocksville,
Tarboro, Belhaven,
Greenville, Kinston
- VA: Franklin
- MS: Jackson



Planned Installation along the lower Rio Grande River

- Rio Grande River at the International Bridge/Laredo
 - Flood of Record – Jan 1, 1965 (62.48 ft)
 - 202 blocks of Laredo business district were inundated
 - Proposed HWM sign location – parking lot of the mall.

Project Outreach

- HWM guidelines/presentation provided to NWS HQ; planned integration with national outreach toolbox.
- National map of HWM installations – coordination with NWS HQ.
- WFO/RFC collaborative outreach project with external customers/partners.

Some signs reference inland flooding from tropical systems:

HIGH WATER MARK

37 feet 5.6 inches (23 feet 5.6 inches ABV FLOOD STAGE)

SEPTEMBER 23, 1999

ON THIS DAY, *HURRICANE FLOYD* CAUSED WATER FROM THE NEUSE RIVER
TO RISE TO THIS LEVEL AT THIS LOCATION.

FOR MORE INFORMATION, CONTACT:

NATIONAL WEATHER SERVICE MOREHEAD CITY, NC
weather.gov/mhx

SOUTHEAST RIVER FORECAST CENTER
weather.gov/serfc

USGS NORTH CAROLINA WATER SCIENCE CENTER
nc.water.usgs.gov



Kinston, NC

Some signs commemorate non-tropical inland flooding:

HIGH WATER MARK
37.20 FEET (24.30 FEET ABOVE FLOOD STAGE)

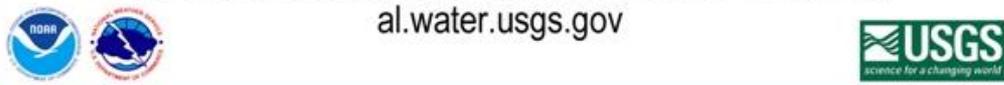
MAY 8, 2003

ON THIS DAY, WATER FROM THE TALLAPOOSA RIVER ROSE TO THIS LEVEL AT THIS LOCATION. FOR MORE INFORMATION, CONTACT:

NATIONAL WEATHER SERVICE BIRMINGHAM, AL
www.srh.noaa.gov/bmx

SOUTHEAST RIVER FORECAST CENTER
weather.gov/serfc

USGS ALABAMA WATER SCIENCE CENTER
al.water.usgs.gov



Wadley, AL

Location of HWM line flexible so text
can be closest to eye level:

SEPTEMBER 21, 1999

ON THIS DAY, *HURRICANE FLOYD* CAUSED WATER FROM THE TAR RIVER
TO RISE TO THIS LEVEL AT THIS LOCATION.

FOR MORE INFORMATION, CONTACT:

NATIONAL WEATHER SERVICE MOREHEAD CITY, NC
weather.gov/mhx

SOUTHEAST RIVER FORECAST CENTER
weather.gov/serfc

USGS NORTH CAROLINA WATER SCIENCE CENTER
nc.water.usgs.gov



HIGH WATER MARK

25 feet 8 inches

Greenville, NC

HWM Sign Unveiling Ceremonies

