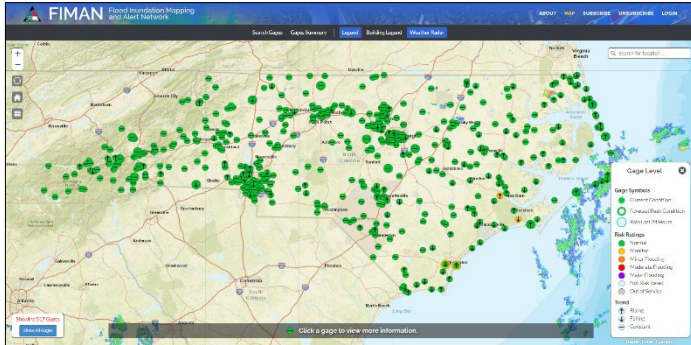


North Carolina Flood Inundation Mapping and Alert Network (FIMAN)

<https://fiman.nc.gov/>

Mission:

To support risk-based decision-making (RBDM) regarding floods by providing: rain and stream gage data, flood inundation maps, flooding impacts, and real-time alerts



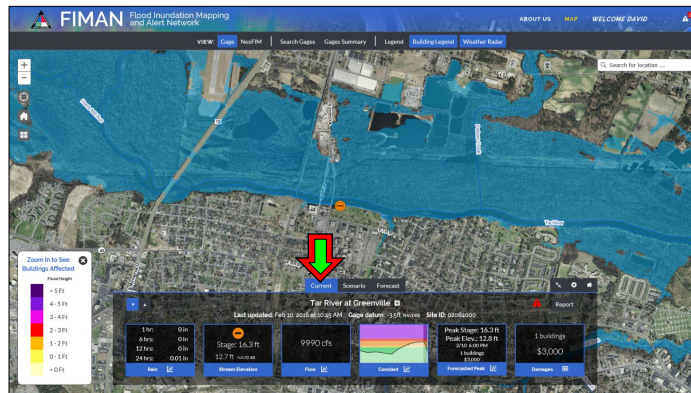
Goals:

- Gather and distribute reliable and accurate rain and stage gage data
- Provide real-time flood inundation maps and alerts
- Provide better information about flooding risks and impacts
- Prevent and reduce the loss of lives and property

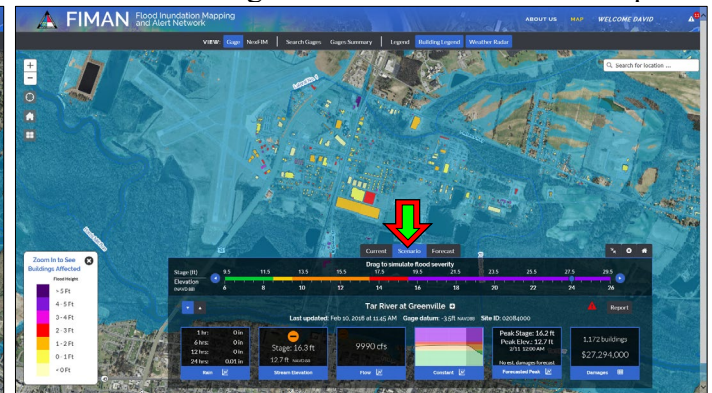


Modes:

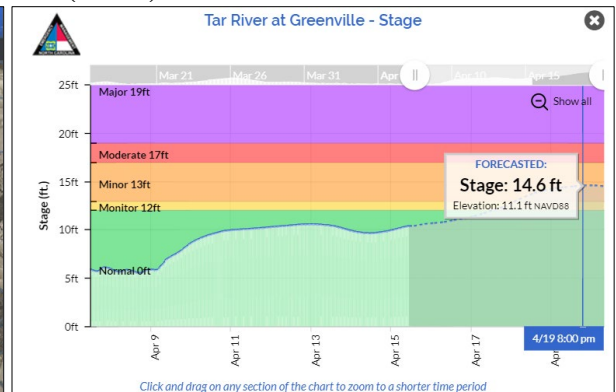
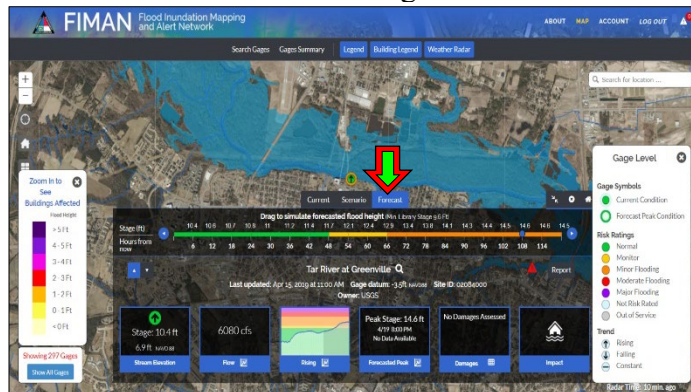
Current: Provides the most recent inundation extent



Scenario: Planning tool for visualization and impact



Forecast: Shows timeline using National Weather Service (NWS) forecast data



Alerts:

Email and text alerts

Subject: NC FIMAN ALERT: Tar River at Greenville (02084000) is now reporting Minor Flooding

The stream gage: **Tar River at Greenville** (02084000) is now reporting **Minor Flooding**.

Current stream conditions:
Stage = **16.2 ft**
Elevation = **12.7 ft (NAVD88)**

Go to [NC FIMAN](https://fiman.nc.gov/) to view more info about this alert.

If you have any questions, please contact FIMAN Administrators at fimanhelp@ncdps.gov

System-wide reports:

- Flooding Status Impact
- All Gages
- Flood Gages and Impact Summary



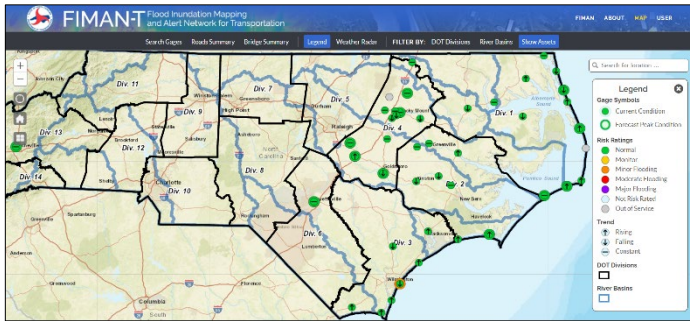


Flood Inundation Mapping and Alert Network for Transportation (FIMAN-T): Quick Guide

https://fimant.nc.gov/Documents/FIMAN_T_Quick_Guide.pdf

Mission:

To support risk-based decision-making during a flooding event by providing real-time (and forecasted where available) flooding impacts to roads, bridges, and other NCDOT assets.



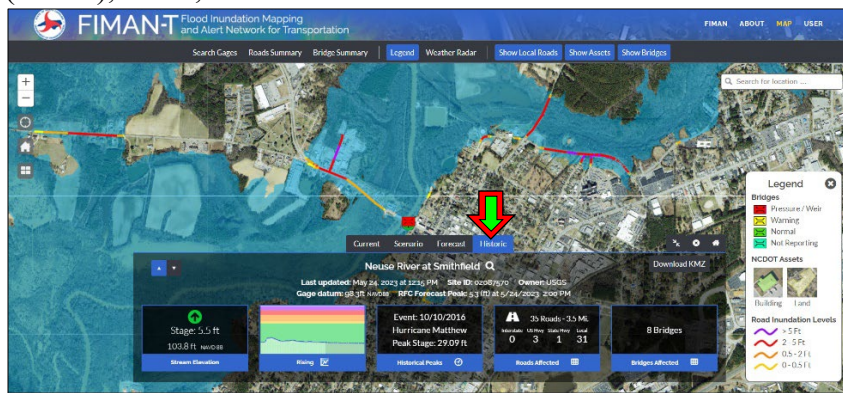
Goals:

- Provide visualization and metrics for roadway inundation, bridge hydraulic performance, and identify potentially impacted NCDOT assets
- Enhance NCDOT's responsiveness during flooding events
- Generate data and reports for use in disaster response and planning



Additional mode:

Historic: Flood inundation and impacts for select historic events (e.g., Hurricane Matthew, Hurricane Fran, or the Great Bahama Hurricane 1929) using data obtained from the United States Geological Survey (USGS), NWS, and other various sources



Historic Flood Summary

(Select an event in the table below to view flood inundation and impacts on the map)

Historic Event Name	Date	Peak Stage (ft)
Hurricane Matthew	10/10/2016	29.09
Hurricane Fran	09/08/1996	27.4
August 1908 Flood	08/01/1908	27.1
July 1919 Flood	07/24/1919	26.8
Great Bahama Hurricane 1929	10/03/1929	26.4

- Historic flood elevations obtained from USGS, NWS, NCEM, and other sources.
- Historic floodplain mapping shown may be rounded to the nearest FIMAN map inundation mapping available.
- Road and Bridge Impacts are based on current road elevations and bridge data and may not reflect transportation assets at the time of the event.

Note: All four inundation modes (Current, Scenario, Forecast, & Historic) can be exported as a KMZ file.

Additional widgets: with data within the inundation extent of the selected stream gage

Roads Affected:

- Summary of impacted roads table
- Impacted road segments table

Bridges Affected:

- Impacted bridges table

System-wide reports

Roads Summary:

Generates a summarized report by gage (pdf or Excel format) quantifying the length of impacted roads for both current and forecasted (if available) peak.

Bridge Summary:

Generates a report (pdf or Excel format) on mainstem bridges within the gage inundation library area for both current and forecasted (if available) peaks conditions. This report shows the estimated representative roadway and low chord elevation at each bridge.

