# Sources: AP News (Aug 7, 2025); weather.com (Aug 8, 2025); NC FIMAN; USGS; NC DEQ Stormwater; NCEM Hazard Mitigation.

# Spring Hope Tragedy → Statewide Action

Briefing to the Nash County Board of Commissioners — August 11, 2025

Mayor Kyle Pritchard, Town of Spring Hope

### What Happened (Aug 6, 2025)

Two Louisburg residents (24, 55) died after their vehicle was swept into a ~6 ft deep ravine, fast-moving drainage along NC-581 in Spring Hope.

Spring Hope police officer Lt.
Jason Leary attempted a rescue and was swept away but was thankfully rescued by the Spring Hope Fire Department; searches recovered the victims later that day.

The region was under flash flood warnings; localized totals up to ~5" were reported across parts of the Triangle and Nash County.





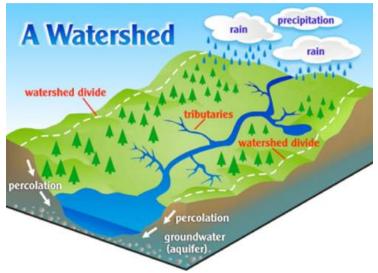
Citations: AP News (Aug 7, 2025); The Weather Channel report (Aug 8, 2025).

### Why It Happened — A Systems View

Watershed-scale runoff exceeded small-channel capacity during a short, intense storm. Local retention ponds functioned per permit but cannot offset upstream impervious growth on their own.

Fragmented standards and jurisdictions (State, federal, municipal, county, DOT, private subdivisions) diffuse accountability and slow fixes.

Grading and watershed plans met permit requirements but that has not prevented repetitive local flooding within the subdivisions when they experience cloudburst



References: NC DEQ Stormwater MDC; Regional Hazard Mitigation Plan (N.E.W.).

### Our Posture — From Loss to Leadership

- Honor the victims by acting with urgency and humility.
- Lead collaboratively: towns, county, state agencies, and private sector.
- Focus on data-driven, watershed-wide solutions that prevent repeat tragedies.



# Modeled on state hazard mitigation coordination; aligns with NCEM planning framework.

# Proposed Resolution of Support

- Nash County endorses establishing a Statewide Flash Flood Action Committee (SFFAC).
- Purpose: modernize standards, datasharing, and emergency alerting across watersheds.
- Membership: NCEM, NC DEQ (EMLR & Water Resources), NCDOT, USGS, NC FIMAN (NC Flood Inundation Mapping & Alert)/DEM, Army Corps, municipalities, counties, and developers' representatives.
- Charge (60 days): identify priority hotspots, recommend interim fixes, and propose funding pathways (BRIC (Building Resilient Infrastructure Communities), HMGP(Hazard Mitigation Grant Proram), Infrastructure Investments Jobs Act, state).

### **Immediate First Actions (Next 30 Days)**

- Deploy additional FIMAN/USGS stage & rain sensors at Spring Hope hotspots and key upstream tributaries.
- Stand up a county—town incident data room (maps, culvert IDs, prior complaints, videos).
- Begin 24/7 alert integration with FIMAN + CodeRED/Wireless
   Alerts for road closures at low-water crossings.
- Ask NC DOT & County to inspect & camera-prioritize critical culverts; clear debris & note undersized structures.
- Request NCEM technical assistance to validate hot-spot list using the N.E.W. Haz Mit Plan & recent call logs.
- Adopt unified language for public communications: routes, detours, and 'turn around, don't drown'.

# Specific to Walnut Cove and Bryson's Ridge – to see why they are flooding during cloudburst

- Request Aug 6, 2025 hydrograph and rainfall data from USGS Sapony Creek sites (0208215200, 02082500).
- Download NC FIMAN archived stage/rainfall data for the same date and locations.
- Overlay LiDAR DEM slope data on 2022 USGS topo map for Walnut Cove & Bryson's Ridge subdivision areas.
- Highlight low-point roadway entrances and conveyance paths prone to blockage.
- Prepare map/hydrograph visuals for inclusion in county/state flood report.
- Coordinate with County GIS staff for map creation and validation



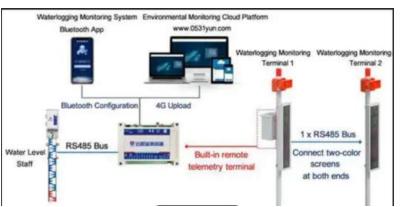
Refs: NC FIMAN; USGS NWIS; NCEM Hazard Mitigation Planning; Raleigh FEWS example.

### 60-90 Day Moves (County + Town)

- Commission rapid H&H screening (examines historical rainfall and stream gauge records to determine probable storm/flood events) of subwatersheds feeding Spring Hope using available GIS (LiDAR, soils, impervious).
- Pilot 2–3 low-water crossing treatments (depth markers, automated gates, cameras, flashing beacons).
- Draft countywide culvert & detention review triggers for large upstream permits.

- Seek cost-share for added sensors via NCEM/FIMAN and local partners.
- Submit pre-apps to FEMA BRIC/HMGP for culvert upsizing and road elevation projects.
- Convene developers to align on updated stormwater performance outcomes, not just paperwork.

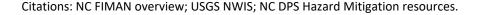
Waterproof box



### **North Carolina Context**

- Eastern NC's watersheds are often already altered from historical farming and drainage projects, many straightened streams move water too quickly now
- The State has had success with **stream restoration programs** (NC Stream Initiative) but mostly on smaller creeks, not filling flood prone basins
- NC is experiencing more intense rain events, so reshaping alone won't solve it it has to be paired with stormwater adjustments, upstream land use changes, and targeted infrastructure

"We need a watershed-by-watershed plan that restores natural flood buffers upstream, better guides impervious growth by working with developers, and protects downstream towns – because the water doesn't stop at county lines"



### Standards & Design — Where We'll Improve



Use NC DEQ Minimum Design Criteria (MDC) as a baseline and evaluate retention/detention and watershed performance under cloudburst events.

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Target the 1-year, 24-hour storm discharge protection for receiving streams; review drawdown and bypass safely.



Advance watershed-based requirements for upstream—downstream fairness and accountability.

### **Additional Data Sources We Can Use**

- NC FIMAN: 550+ sensors statewide with real-time water level & rainfall and inundation libraries near gauges.
- USGS NWIS: authoritative streamflow & stage data; long-term records for trend & threshold setting.
- County/State GIS: elevation (LiDAR), land cover, soils, culvert inventory, FEMA FIRMs;
   NCDOT structures.
- Field Studies

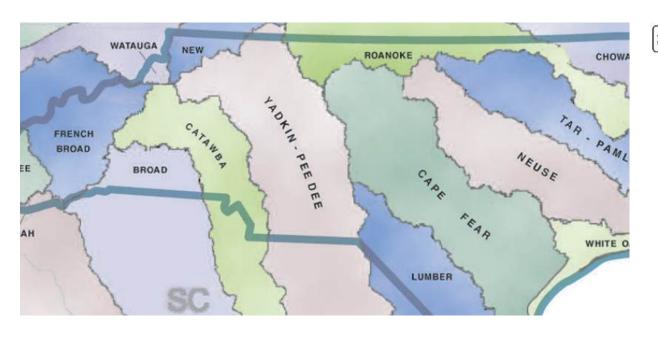
# **Committee Priority Watershed Basins**

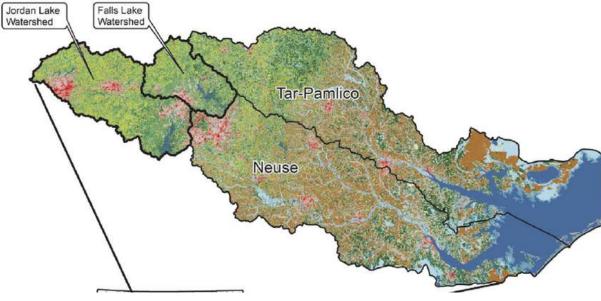
**Tar-Pamlico (Tar River subbasin)** — *Includes Spring Hope (Tar River at Spring Hope USGS gauge).* This is your town's basin and already has hydrologic modeling and documented flood-inundation work — so it's the top place to pilot watershed reshaping + monitoring. **Water Quality Data** 

**Neuse River Basin** — large central/eastern basin with expanding development and repeated flash-flood problems (a focus of USACE and state mitigation work). High population + tributary flash-flood risk makes it high priority. **SAW** 

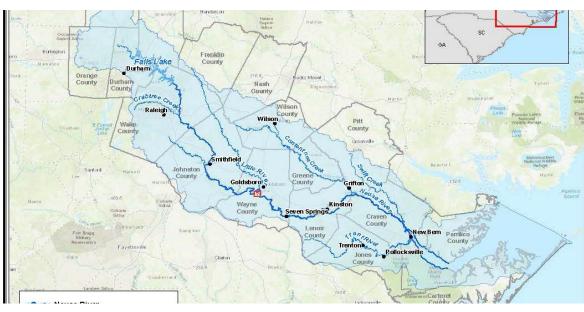
**Cape Fear River Basin** — the largest basin entirely inside NC, includes rapidly developing Piedmont areas whose upstream runoff drives downstream flash events; strategic for upstream land-use controls.

(Selecting these three gives our committee geographic diversity — a small-town, an urbanizing basin, and a large statewide basin — so pilot policies can be tested across contexts.)











### How Watershed Improvements Help Wastewater Capacity

Watershed improvements (buffers, floodplain benches, detention) slow and reduce stormwater runoff.

Lower peak runoff reduces stress on drainage systems and creeks.

Less stormwater entering sanitary sewers through inflow & infiltration (I&I).

Reduced I&I means wastewater basins and plants can handle flow more effectively during storms.

Outcome: Increased effective wastewater capacity without costly plant expansions.





## How Spring Hope & Nash County Can Lead Together

- Clean out creeks, streams and stormwater systems around Spring Hope for maximum capacity and flow
- **Pilot project on a target tributary** in the Tar basin (re-meander + small detention upstream of town (other options: riparian buffers, floodplain benches, rain gardens, bioswales). Use state modeling already available for Tar-Pamlico.
- Culvert Upgrades (NCDOT + county crews) identify 3 highestrisk crossings for immediate upgrade. N.C. Department of <u>Transportation</u>
- Deploy 3–5 stream sensors with alarms in the Spring Hope subbasin to create an early-warning network for residents and first responders. National Weather Service
- Organize a Tar-Pamlico working group under our statewide committee idea to share data and force upstream land-use conversations. (Tar basin already has modeling & basin committees.)
- Challenge: We can make our watershed more efficient, however if upstream counties keep paving & developing without controls, our improvements may get overwhelmed.

## **Funding & Partners**

- FEMA: BRIC, HMGP(Hazard Mitigation Grant Program -requires adopted/updated multijurisdictional plan).
- State: NCEM technical assistance; potential legislative appropriations.
- Federal science: USGS cost-share for gauges;
   Army Corps Silver Jackets coordination.









- Local: County—Town capital match for culvert upsizing and alerting tech.
- Private: Developer participation in off-site mitigation where nexus is clear.
- University/Extension: NCSU for stormwater innovation pilots (e.g., treatment wetlands).



# To Our Residents — Straight Talk



YOUR SAFETY COMES FIRST. WE'RE WORKING ON FIXING THE WEAK SPOTS AND UPGRADING ALERTS.



THIS ISN'T ABOUT
BLAME; IT'S ABOUT
MODERNIZING AN
OUTDATED,
FRAGMENTED SYSTEM.



WE WILL CARRYOUT
MORE DUE DILIGENCE
UP FRONT TO SAVE LIVES
AND AVOID REPEAT
REPAIR COSTS LATER ON
ALL NEW
DEVELOPMENTS



COMMITTEE WILL BEGIN
INVESTIGATING MINIMUM
DESIGN CRITERIA (MDC) AS A
BASELINE AND EVALUATE
RETENTION/DETENTION
PERFORMANCE AND
STORMWATER FLOW UNDER
CLOUDBURST EVENTS.

### Ask of the Board — Today

- Adopt the Resolution of Support for the Statewide Flash Flood Action Committee.
- Authorize immediate 30-day actions and coordination with NCEM/USGS/NC FIMAN.
- Direct staff to bring back a 60–90 day implementation report with cost options and potential funding sources















### Statewide Flash Flood Action Committee Resolution of Support

<b>RESOLUTION</b>	NO
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### A RESOLUTION SUPPORTING THE FORMATION OF A STATEWIDE FLASH FLOOD ACTION COMMITTEE

Whereas, flash flooding on August 6, 2025 in Spring Hope resulted in tragic loss of life and property; and

Whereas, flood risks span watershed boundaries and require cooperation among communities, state agencies, federal and the development community; and

Now, therefore, be it resolved, that the Nash County Board of Commissioners supports the formation of a Statewide Flash Flood Action Committee to coordinate data-sharing, establish consistent standards, and strengthen emergency planning, and response; and

**Be it further resolved,** that County staff are directed to collaborate with state and federal partners to partner with Spring Hope to establish a **State Wide Flash Flood Action Committee** and return within 60 days recommendations, educational presentations, possible action plans and funding strategies from relevant agencies to enhance long-term flood resilience and make Nash County a model.

Adopted this the 11th day of August, 2025.

Chair, Nash County Board of Commissioners ATTEST:

Clerk to the Board

