

Surviving Hurricane Helene

How Our Health System Stayed Afloat in the Storm

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Our mission

Honor those we serve
by delivering the best
possible care



Our vision

Build a legacy of
superior health by
listening to and
caring for those
we serve



Our values

Creativity
Caring
Honesty
Respect
Faith
Quality




Size, Scale and Presence


 **20**
hospitals
(including Level I trauma and
a dedicated children's hospital)

 **13,000**
team members

 **800**
employed providers in
over 200 locations

 **88,000**
annual inpatient discharges

 **202,000**
adjusted discharges

 **\$2.7 billion**
annual revenue

 **3.1 million**
annual outpatient visits

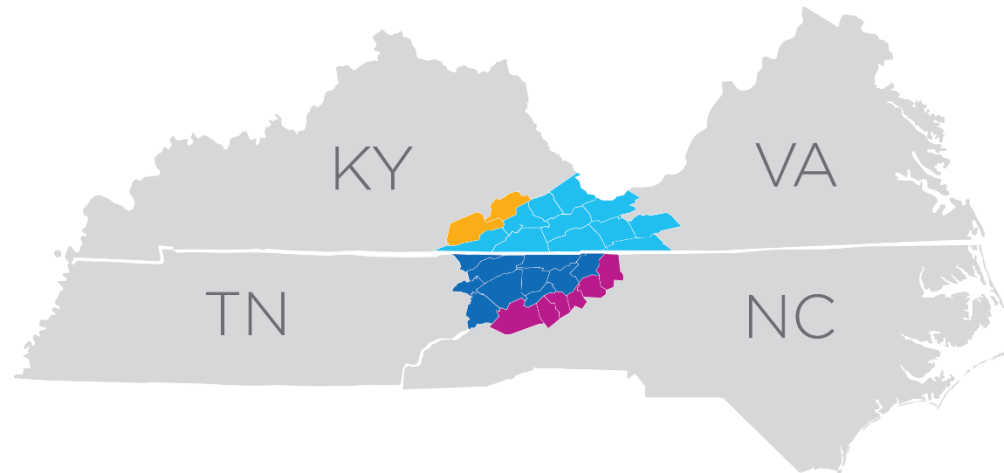
 **384,000**
annual ED visits

 **207,000**
urgent care visits

 **64,400**
telehealth visits

 **51,750**
surgeries

 **6,500**
deliveries



967,500
population

8,600
square miles

Geographic Footprint

As of 6/30/25

Hurricane Helene in the Appalachian Highlands

- On September 27, 2024, Hurricane Helene brought **unprecedented flooding** to the Ballad Health service area, severely impacting many rural communities in Northeast Tennessee and Southwest Virginia.
- The flooding caused **extensive damage to infrastructure and homes**, prompting immediate concerns for the safety of patients, team members, and first responders.
- The Nolichucky River, which runs through Greene and Unicoi Counties in Tenn., ran at more than 1.4 million gallons per second, **twice the speed of Niagara Falls**.



Before & After



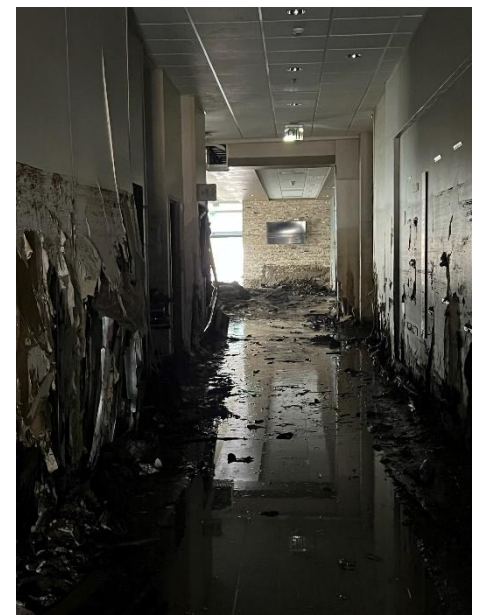
Unicoi County Hospital

2018



2024

Emergency Situation: Unicoi County Hospital was particularly impacted, with 70 individuals stranded on the hospital's roof and in nearby swift-water rescue boats due to rising flood waters.



























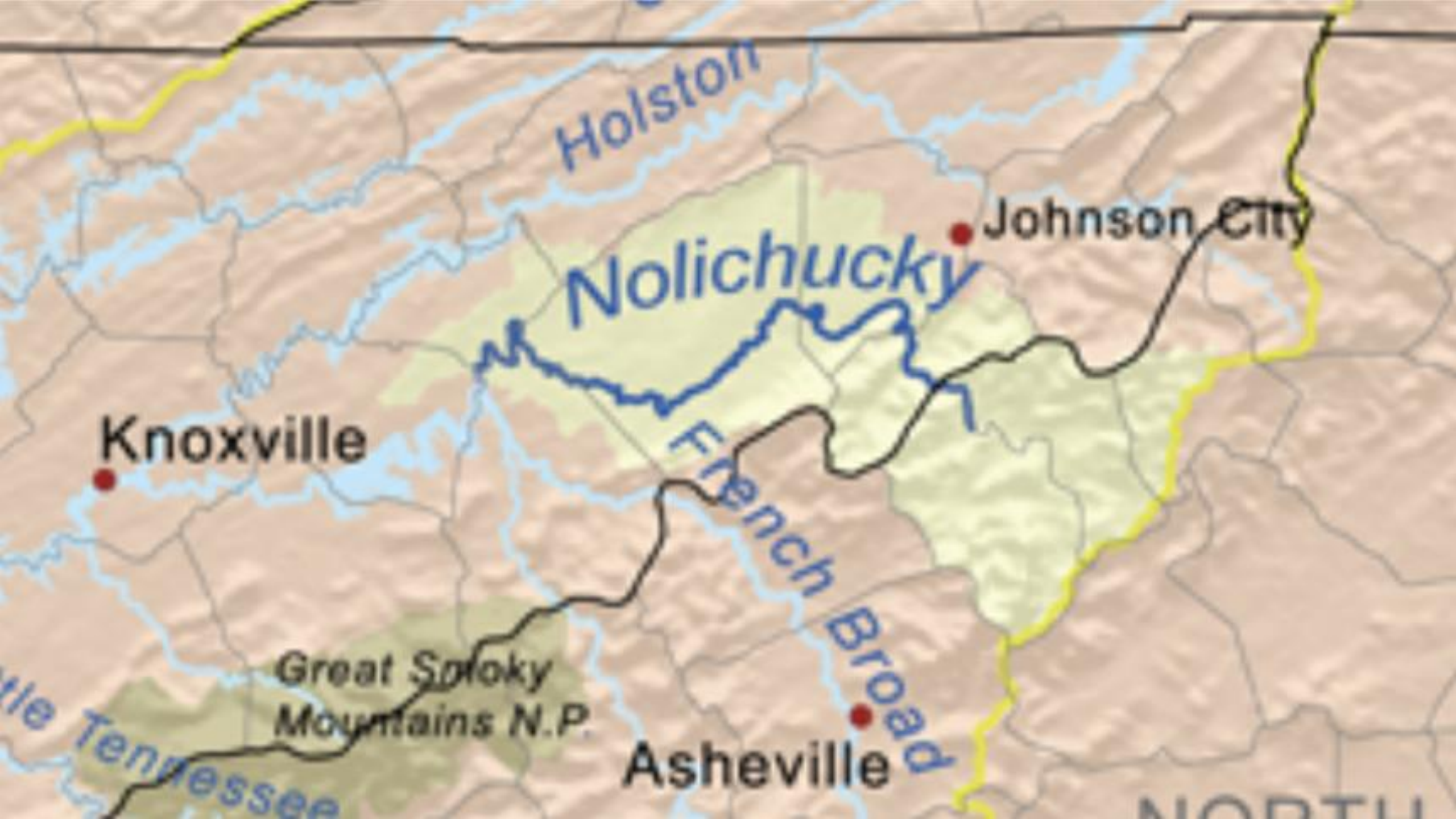








- Tennessee state climatologist Andrew Joyner is one of several experts **now calling for more river gauges to monitor water levels** and a network of weather stations in every county designed to **collect live precipitation data**. – *Kaiser Family Foundation*
- Thirty-eight states already operate similar systems, he said, estimating that setting up and staffing weather stations across Tennessee would cost less than \$4 million in the first year. – *Kaiser Family Foundation*
- Following a catastrophic flood in Waverly, Tennessee, that killed 20 people and destroyed hundreds of homes and businesses in 2021, the Tennessee General Assembly denied a \$200 million request to relocate 14 public schools across the state that had been deemed vulnerable to future flooding. – *Kaiser Family Foundation*



Holston

Johnson City

Nolichucky

Knoxville

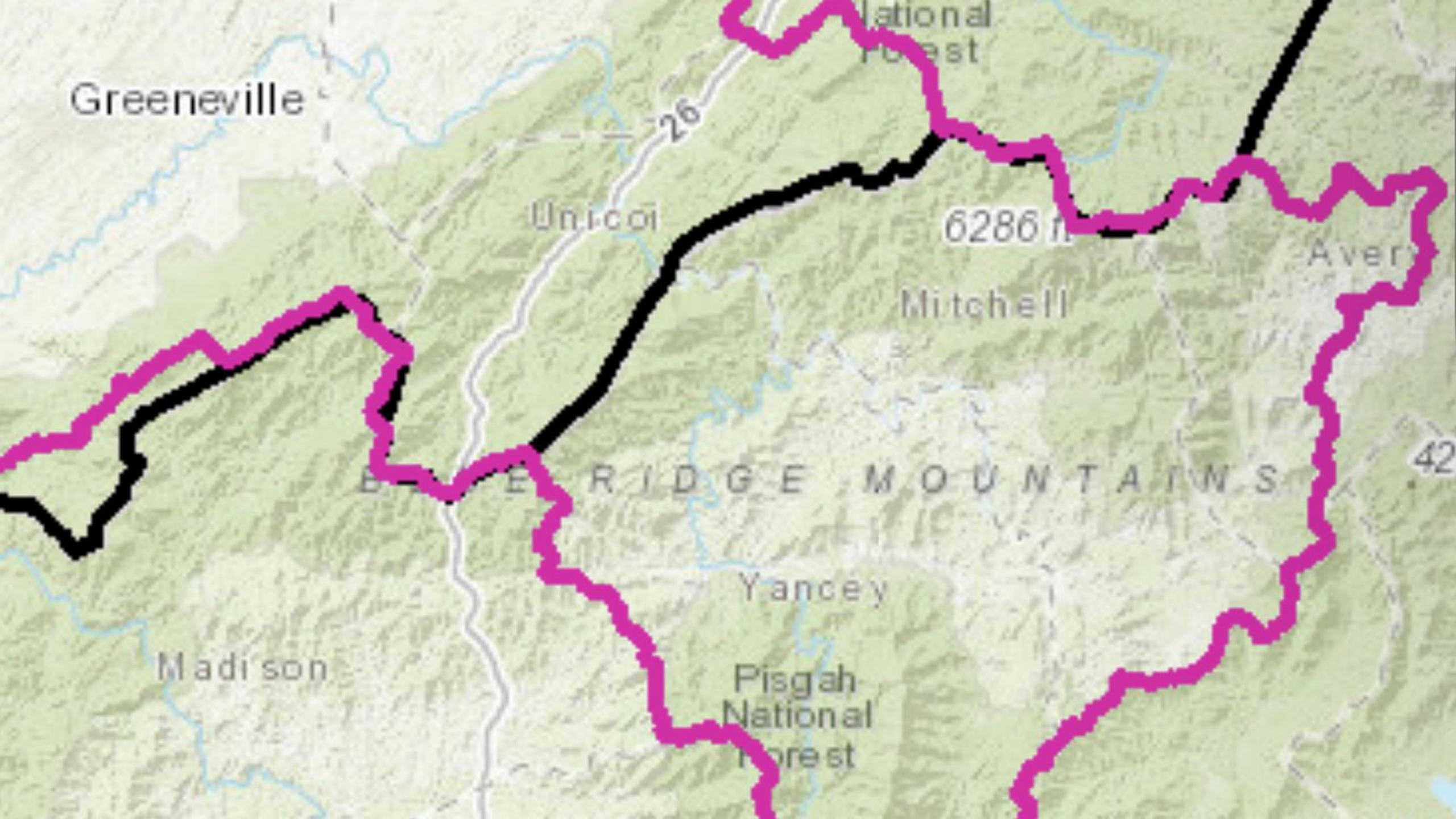
French Broad

Great Smoky
Mountains N.P.

Asheville

Tennessee

NORTH



Greenville

Unicoi

6286 ft

Mitchell

Avery

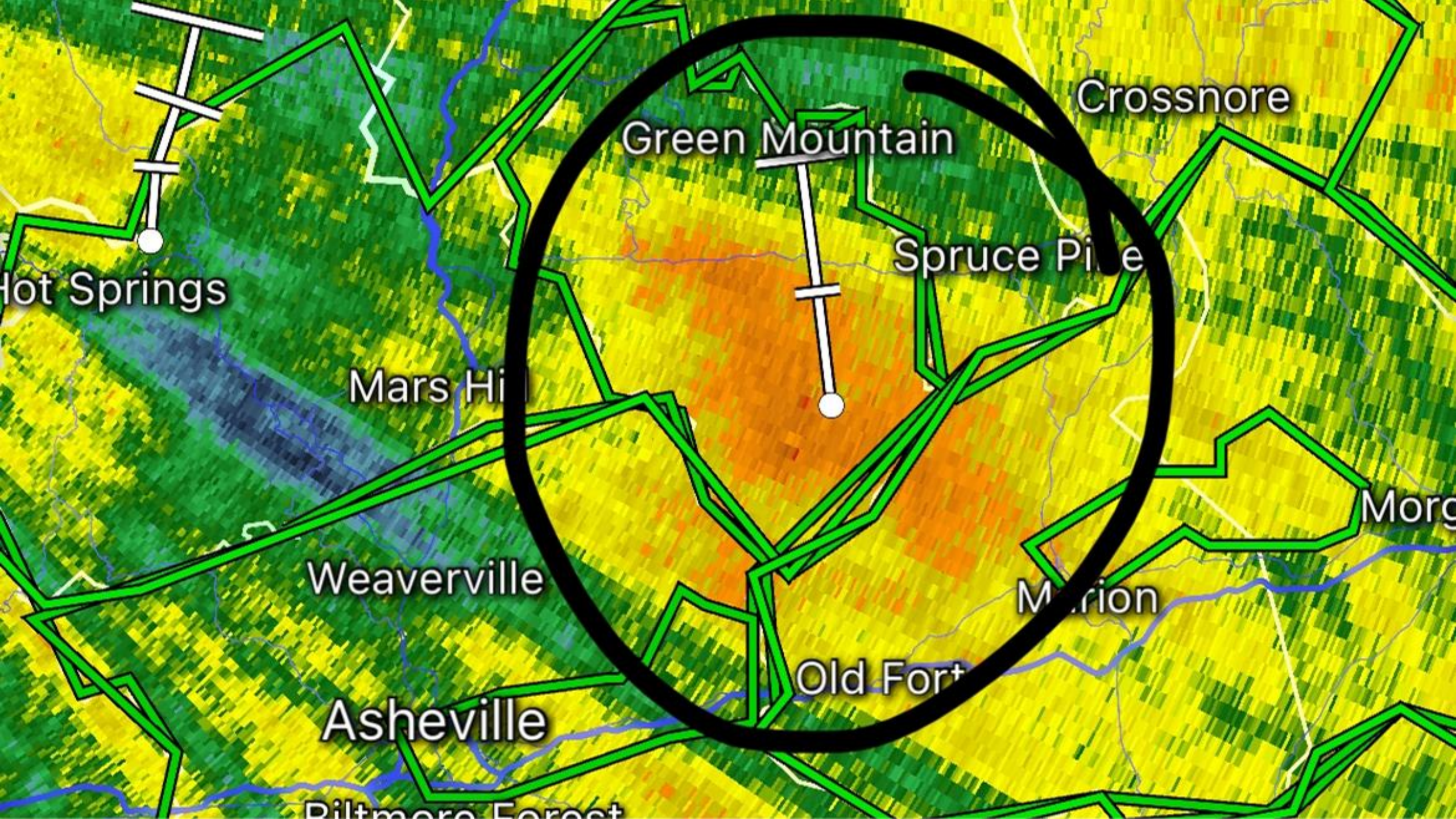
BLUE RIDGE MOUNTAINS

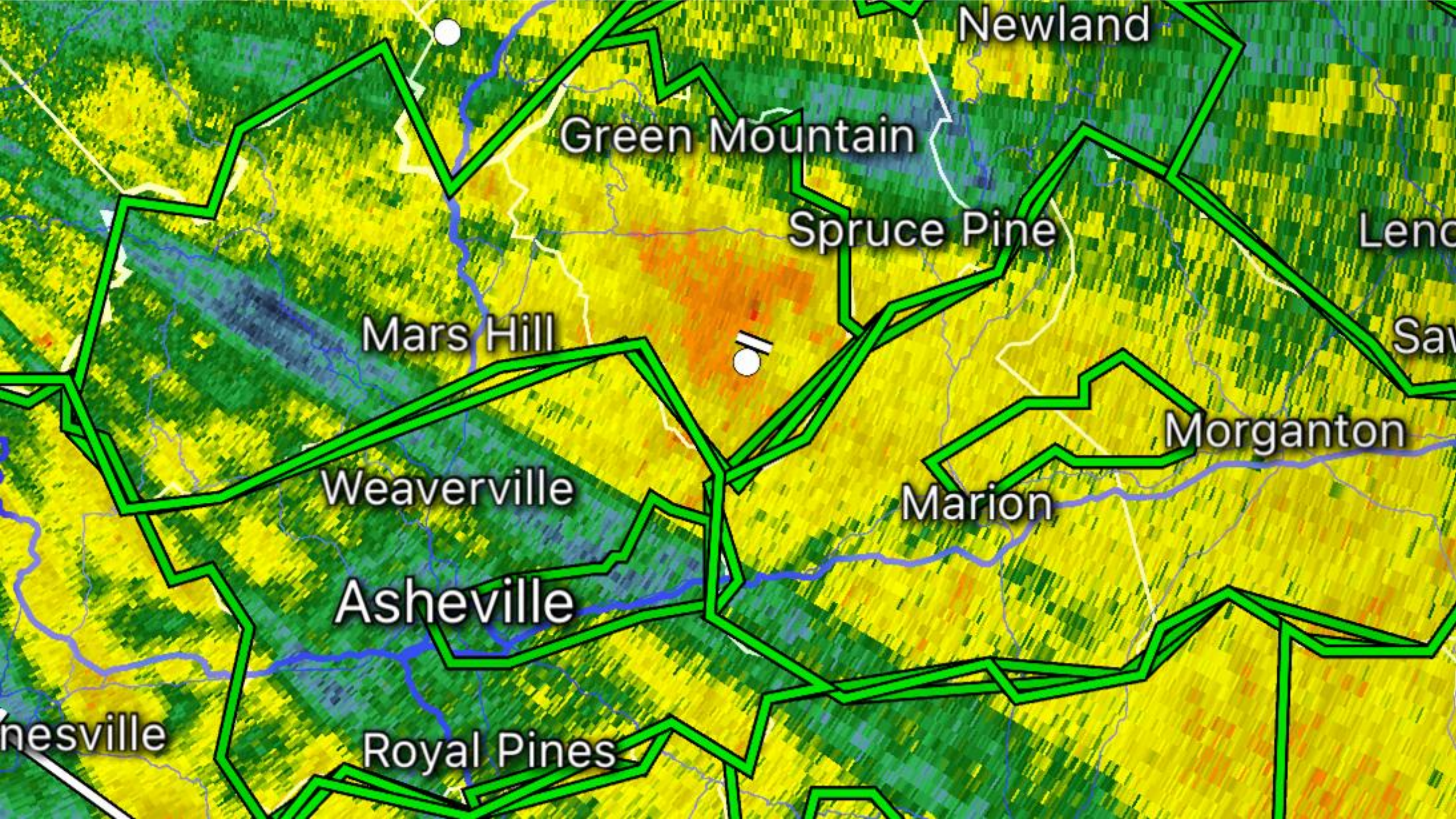
Yancey

Madison

Pisgah
National
Forest

National
Forest





Newland

Green Mountain

Spruce Pine

Lenoir

Swain

Mars Hill

Morganton

Marion

Weaverville

Asheville

Royal Pines

Hendersonville

Stage (FT)

17
14
11
8
5
2
-1

Moderate: 16 ft

Minor: 12 ft

Action: 10 ft

FCST: 15.5 ft / 63.7 kcfs

15.50 ft

9.25 ft

Low Threshold: 0 ft

Flow (KCFS)

73.87
54.77
38.09
22.8
9.4
1.18

12 am
Sep 22

12
Sep

Sat Sep 28, 2024 2:00:00 AM EDT

Site Time (EDT)

EMBT1 (plotting HGIRG) "Gage 0"

Datum (NGVD29): 1519.3'


Graph Created: (04:56 PM EDT Sep 26 2024) - Forecast Issued (03:03 PM EDT Sep 26 2024)

9. Sep

23. Sep

Observations courtesy of U.S. Geological Survey

How Quick Things change?




Understanding Flooding

West Gulf River Forecast Center

Created March 8th 2015 @ 4:30pm CST

[f NWSWGRFC](#) [@NWSWGRFC](#)


Urban / Small Stream Advisory WHAT IS IT? Flooding of small streams, streets and low-lying areas. WHAT TO DO? Stay away from areas that are prone to flooding and stay clear of rapidly moving water	Flood Watch WHAT IS IT? Flooding is possible – typically within a 6 to 48 hours before rain is expected to reach the area. WHAT TO DO? Stay tuned to local river forecasts; prepare for areas near rivers to spread towards nearby roads and buildings	Flash Flood Watch WHAT IS IT? Flash flooding is possible – typically 6 to 48 hours before rain is expected to reach the area. WHAT TO DO? Have a way to receive local warnings, expect hazardous travel conditions and have alternate routes available	Flood Warning 8:50am WHAT IS IT? Flooding impacts are occurring or imminent. WHAT TO DO? Stay alert for inundated roadways and follow all local signage! Additional impacts include homes and structures could become flooded and need to be evacuated	Flash Flood Warning 9:14am WHAT IS IT? Flash flooding impacts are occurring or imminent. WHAT TO DO? Conditions will rapidly become hazardous! Do not cross flooded roadways or approach inundated areas as water may still be rising	Flash Flood Emergency 9:20am WHAT IS IT? Flash flood situation that presents a clear threat to human life due to extremely dangerous flooding conditions. WHAT TO DO? Immediately reach higher ground by any means possible 9:26am
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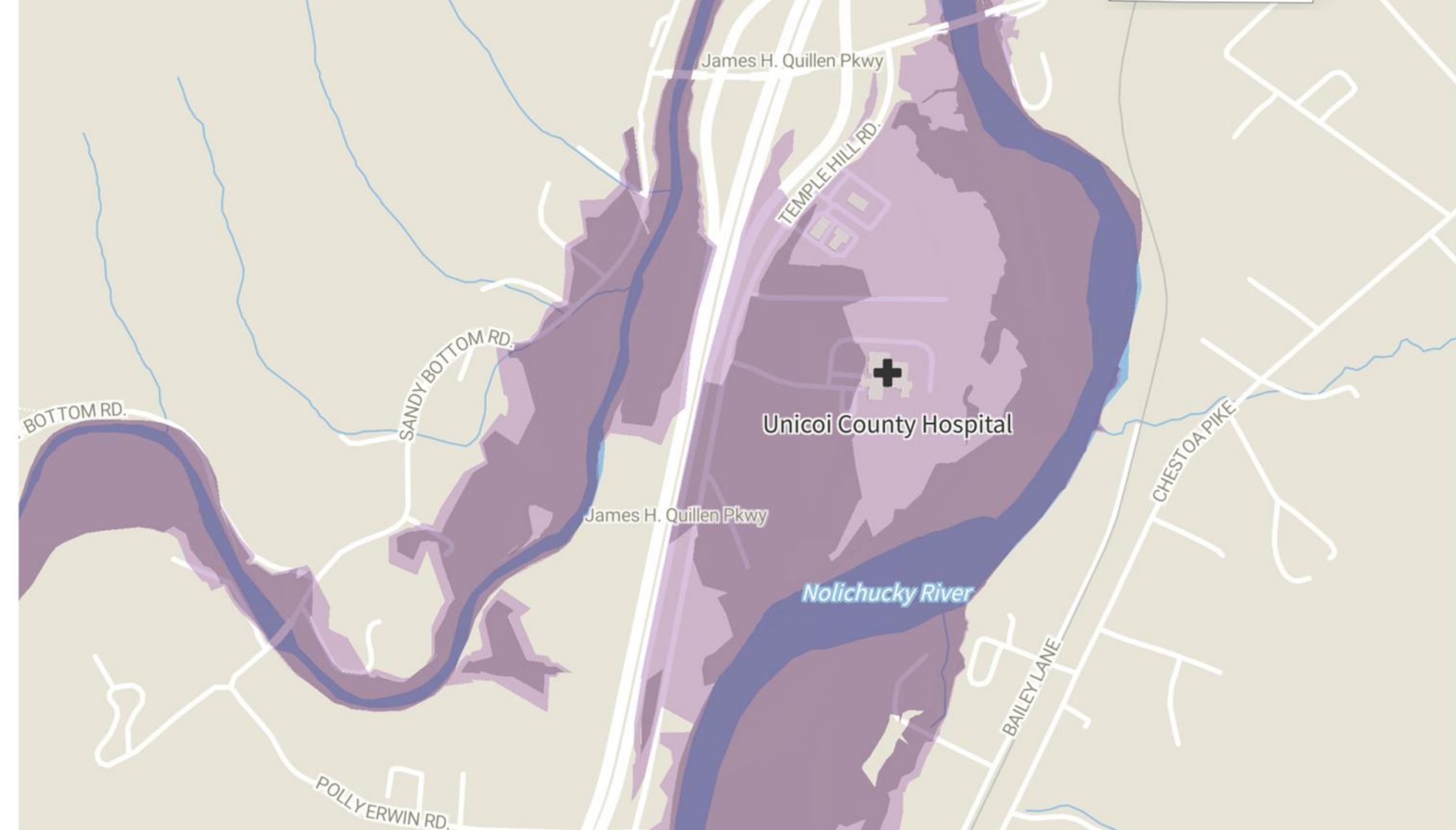


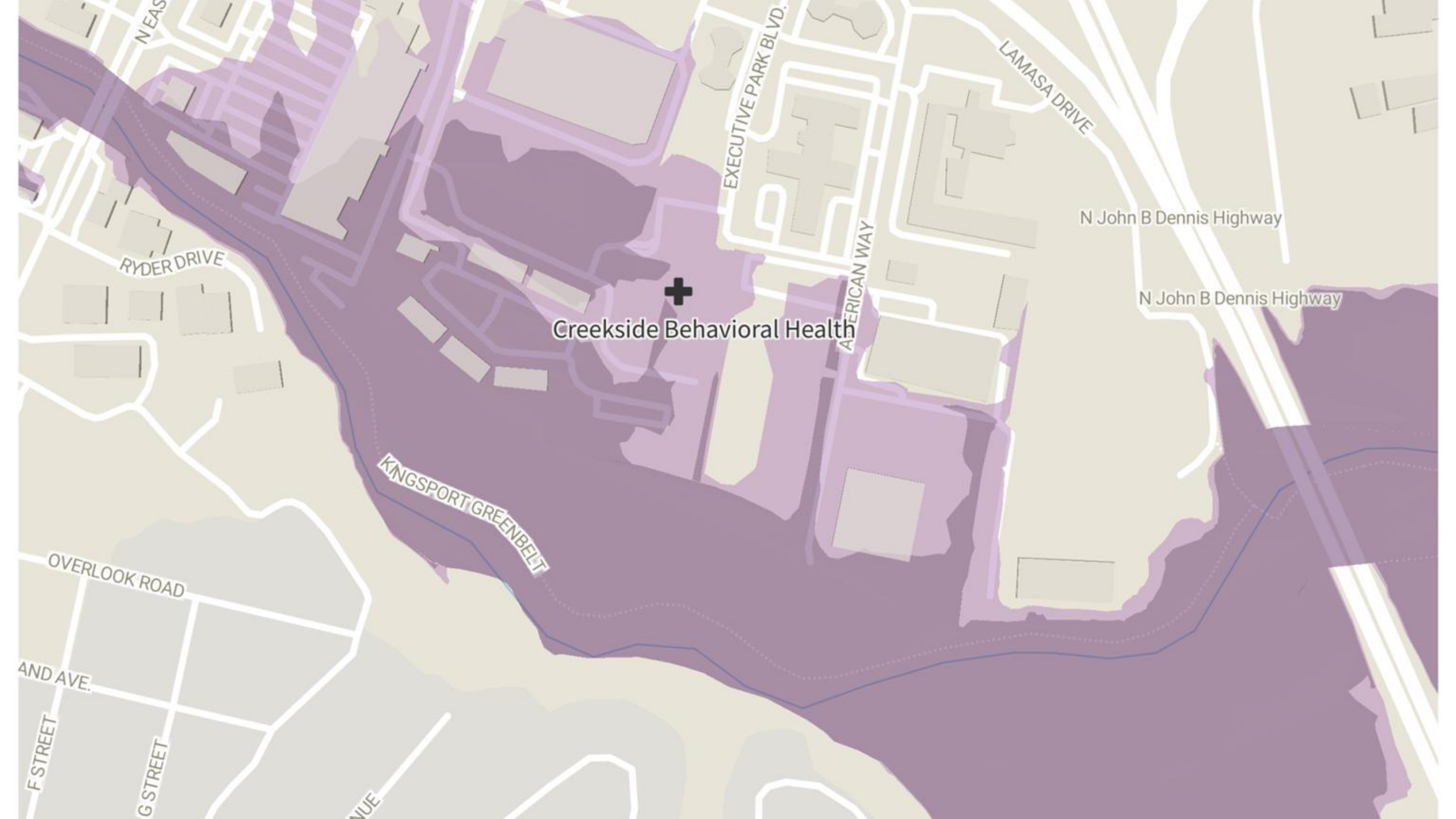
How is a flash flood different from a standard flood?

Flash floods are characterized by rapid rise of water on the order of a few minutes to 6 hours that can occur anywhere. A flood watch or warning pertains to larger streams and rivers that take much longer to respond (3 hours to weeks) but move much larger amounts of water through sensitive areas

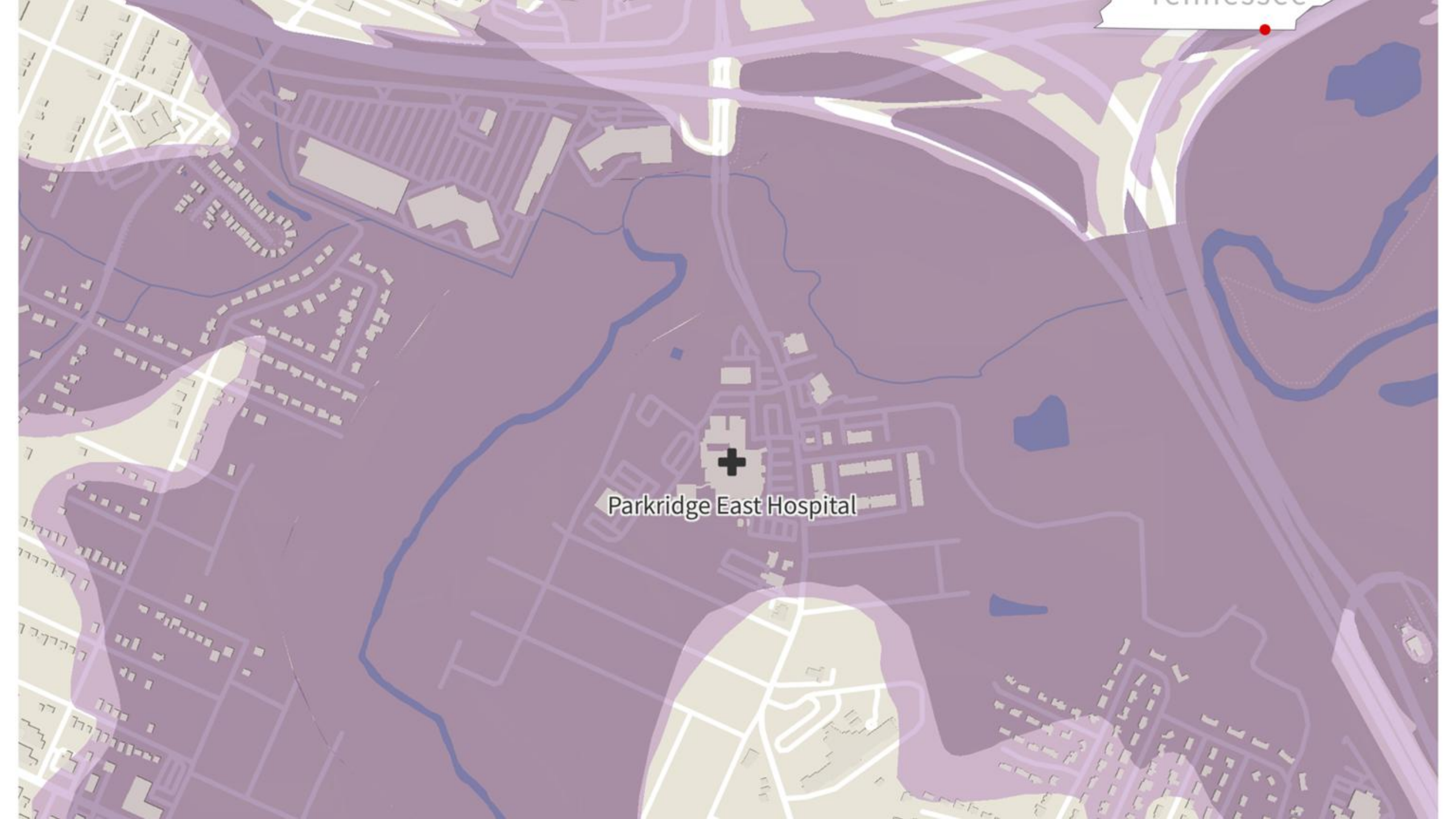
Flooding Can Happen Anywhere. Are you "Flood Prepared"?

 **Be Flood Aware. Turn Around. Don't Drown!**





Creekside Behavioral Health



Parkridge East Hospital

Tennessee

OLD WILLIAMSPORT PIKE



Pinewood Springs

FORREST HILLS

IDLEWILD

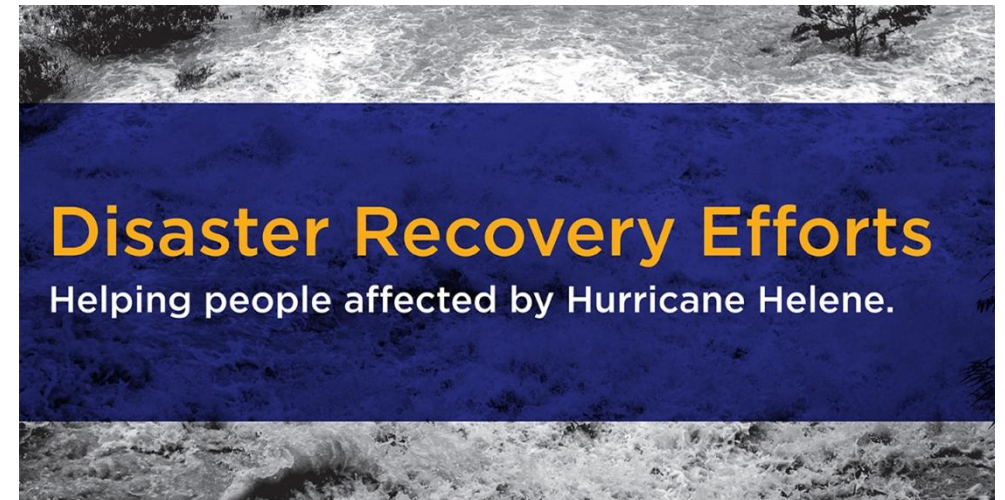
HAMPSHIRE PIKE

COLUMBIA GARDENS

The Time to Prepare is Now...Not the Day of

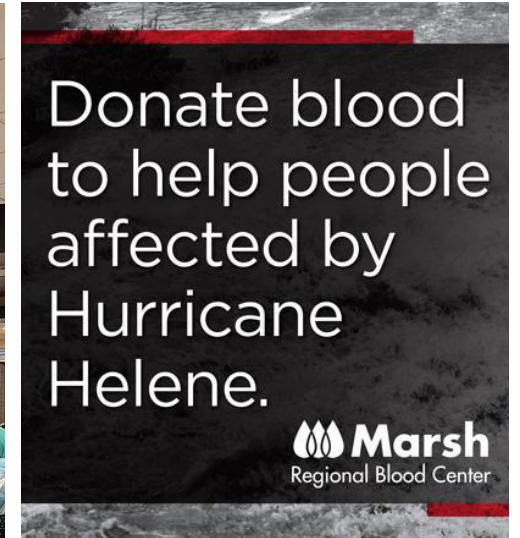


- **Coordination:** When flooding impacted local municipal water supplies, the emergency operations center coordinated efforts to relocate patients and adjust services temporarily.
 - **Unicoi County Hospital** – 70 people, including 10 patients and 60 team members, community members and first responders, were safely relocated from the facility by rescue helicopters.
 - **Greeneville Community Hospital** – 38 patients were transferred to Holston Valley Medical Center.
 - **Laughlin Healthcare**, a long-term care facility – 33 residents were relocated to a sister facility.
 - **Sycamore Shoals Hospital** – 31 med/surg patients and 9 gero-psych patients were evacuated to sister facilities.
 - **Johnson County Community Hospital** – 3 patients were transferred within the health system.



After the Storm

- **Comprehensive support:** Daily phone calls with emergency response teams took place and communication on the disaster response was provided to team members, media and government officials.
- Ballad Health mobilized resources to provide immediate medical assistance, supplies and emotional support to those affected by the flooding. **No request went unattended.**
- A **Medical Response Unit was established** in Unicoi County to ensure first responders and the community had access to medical services.
- **Displaced patients and team members in Greeneville and Elizabethton** returned to their home facility.



- **Long-term support:** A 24/7 Advanced Urgent Care opened in Erwin to serve the community while long-term plans are developed.
- A **national shortage of IV Fluids** forced Ballad Health clinical leaders to adopt conservation efforts to ensure adequate supply throughout the health system.
- Corporate Emergency Operations Center stood down on October 9, 2024.
- Active subcommittees addressing the long-term plan for medical services in Unicoi County, the national shortage of IV Fluids and behavioral health services continued.





- **Unicoi County EMS lost three ambulances and a supervisor truck**
- EMS transported 89 patients and had 11 EMS refusals
- Had three units in Unicoi and two units in Carter and Johnson County
- Team was deployed for 13 days





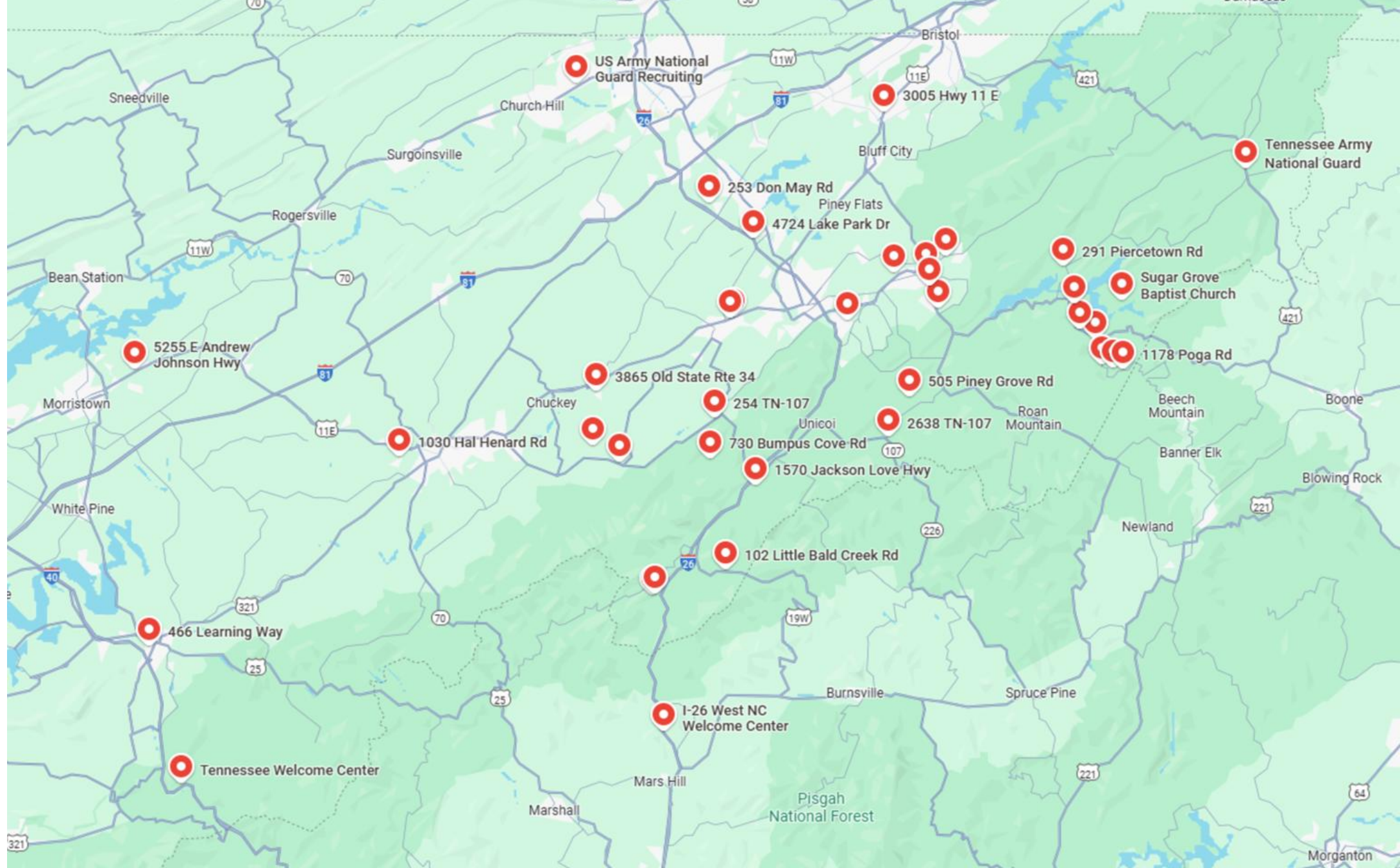
- Team arrived on the Sept. 29 and became operational at 16:30 on September 30.
 - Reviewed inventory lists of medical equipment and pharmacy supplies on hand.
 - Worked closely with Ballad Health to identify additional supplies needed.
 - Coordinated with local media, Ballad Health and Unicoi County Command Staff to communicate our location and medical capabilities, ensuring the community knew where to go for treatment
-
- **The mobile hospital treated 142 patients**
 - **The team was deployed for 18 days**



- 1. You don't have to *be* the expert.** But you need to *know* the experts.
- 2. Get to know your team**
- 3. Let the community you serve be your home.**
- 4. Stay calm.** And, if you can't, find someone on your team who can maintain calm for you.

SAT Phones and Push to Talk Devices





- Red dots indicate Starlink deployed























WALTRIP
GRANDSTAND
ROWS
1-30 X-Y
→

Thank you.