What recovery after 2016 W.Va. floods can tell us about rebuilding after Helene

RADIO IQ | By Roxy Todd

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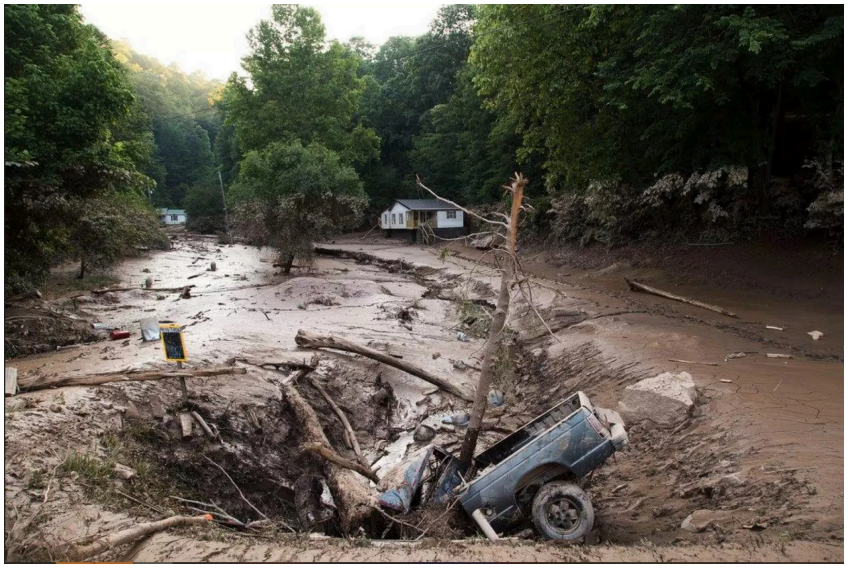

Kara Lofton / WV Public Broadcasting

A mud sinkhole that engulfed a blue truck in Clendenin, West Virginia during the June 2016 floods, which killed 23 people.

When floods swept across Appalachia three weeks ago during Helene, it was one of the worst natural disasters to hit the region in a generation. But flash flooding in the mountains *does* happen. One example is the 2016 flood in West Virginia, which killed 23 people and destroyed more than two thousand homes.

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Tripp Shealy is an associate professor of civil engineering at Virginia. He and a graduate student spent the past four years conducting interviews with planners, residents and officials in West Virginia about what made it easier for some towns to rebuild.

"A lot of the things that we learned, I think are going to be really applicable to North Carolina," Shealy said.

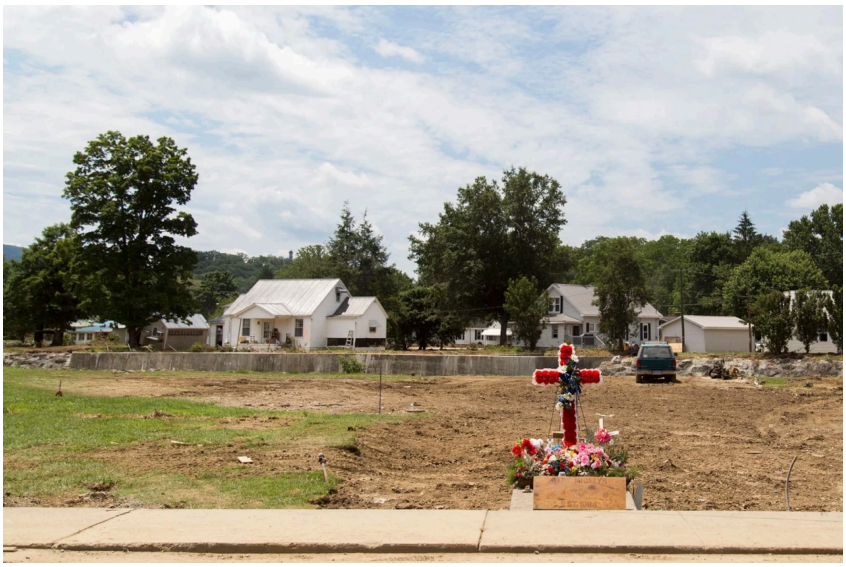
He said one thing that helped the town of White Sulphur Springs was forming a vision early on for new housing projects.

"If you don't have people in place to help you think about the long term vision, of what we want to build back, and how we want to build back, FEMA's gonna come around with their checkbook and you're gonna be messed up," Shealy explained.

He said it also helped that White Sulphur had more access to philanthropy and wealth than other communities that were impacted, so the town raised its own money to start rebuilding right away. The town's leadership decided to rezone one residential area that had flooded, and turned it into a public park.

The town also donated land and raised money to build a new housing development, called Hope Village, for displaced residents to live, and construction began just a few months after the flood, largely aided by volunteer groups.

Ironically, one thing that helped West Virginia in 2016 is the state suffered a flood the year before. So communities were already used to the recovery process, and had formed a statewide volunteer network, called the West Virginia Voluntary Organizations Active in Disaster (VOAD). This group, made up largely of faith-based organizations, was able to jump in quickly to coordinate volunteer response for the 2016 flood. They helped rebuild residential bridges and repaired damaged homes.



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A small memorial marks the former homestead of the Nicely family, who died in the 2016 flooding in White Sulphur Springs, W. Va.

Another benefit for this town that helped them move quickly is local, state and federal leaders already knew each other. "They trusted each other. The permitting processes were easier," Shealy said.

He said one of the biggest lessons from the 2016 flood in West Virginia is towns and counties that are able to work collaboratively on grants and applications can leverage more funding to help them rebuild together. His suggestion for communities impacted by Helene is that they begin as soon as possible to unify around a shared vision for how they want to build back, and ask tough questions about the safest places for people to rebuild.

In their research, they interviewed residents who lost their homes in the flood, who said if they had been allowed to rebuild in the exact same location, they would have. "Many said yes, even though they knew it was not the decision. And it's this attachment to place, that I think is really strong in West Virginia," Shealy said.

"And one of the ways White Sulphur Springs was able to overcome that is they built a park, and also plaques in remembrance of who the land belonged to, and allows them to go back and reserve that space to be able to have for community events and still come back to it, but not necessarily live there day to day," Shealy said.

"The environment is changing, whether we like it or not. The flooding events are only going to get worse," Shealy said. He explained this is partly due to an increase of urban sprawl with lots of concrete, which means water doesn't have as much earth to soak into during heavy rain events. It's also due to climate change.

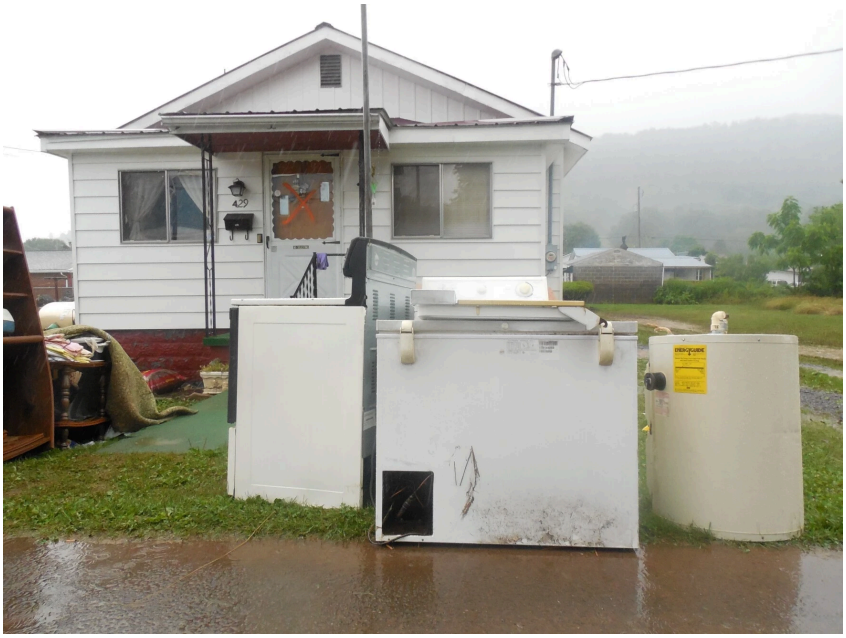
"As the planet gets hotter, that means there's more moisture in the air. And so these rain events become even more frequent and heavier at times," Shealy said. "Flooding is just getting worse, and that's unfortunately just what is happening."

Civil engineers in the private sector, he said, often aren't likely to bring up these risks to their clients. Increasingly though, engineering students are aware of the threats of the changing climate. In the beginning of one class he teaches about how to build communities sustainably, he asks students what they think is the number one threat to humanity. Three out of four answer, climate change.

"They see the world that they're inheriting, and they're going into civil engineering because they see that as an opportunity to make change," Shealy said.

Even though residents affected by flooding might be allowed by zoning laws to rebuild their home exactly the same, that may prove harmful to them financially later on. Once flood maps are redrawn and insurance companies reassess the full scope of future flood threats, residents may be put in a tough position with higher insurance premiums in years to come. Even if insurance payouts and FEMA might allow someone the financial means to rebuild exactly the same, that may not be the smartest decision long-term. He said the same kind of assessment is important for city and county officials to make as they envision how to rebuild.

"What you don't want is kind of the short-term response and initial recovery to become the long-term solution," Shealy said. "Because you're potentially gonna be more vulnerable to the next disaster event."



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Home in Rainelle, W.Va. that was damaged by flooding in June 2016

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Roxy Todd is Radio IQ's New River Valley Bureau Chief.

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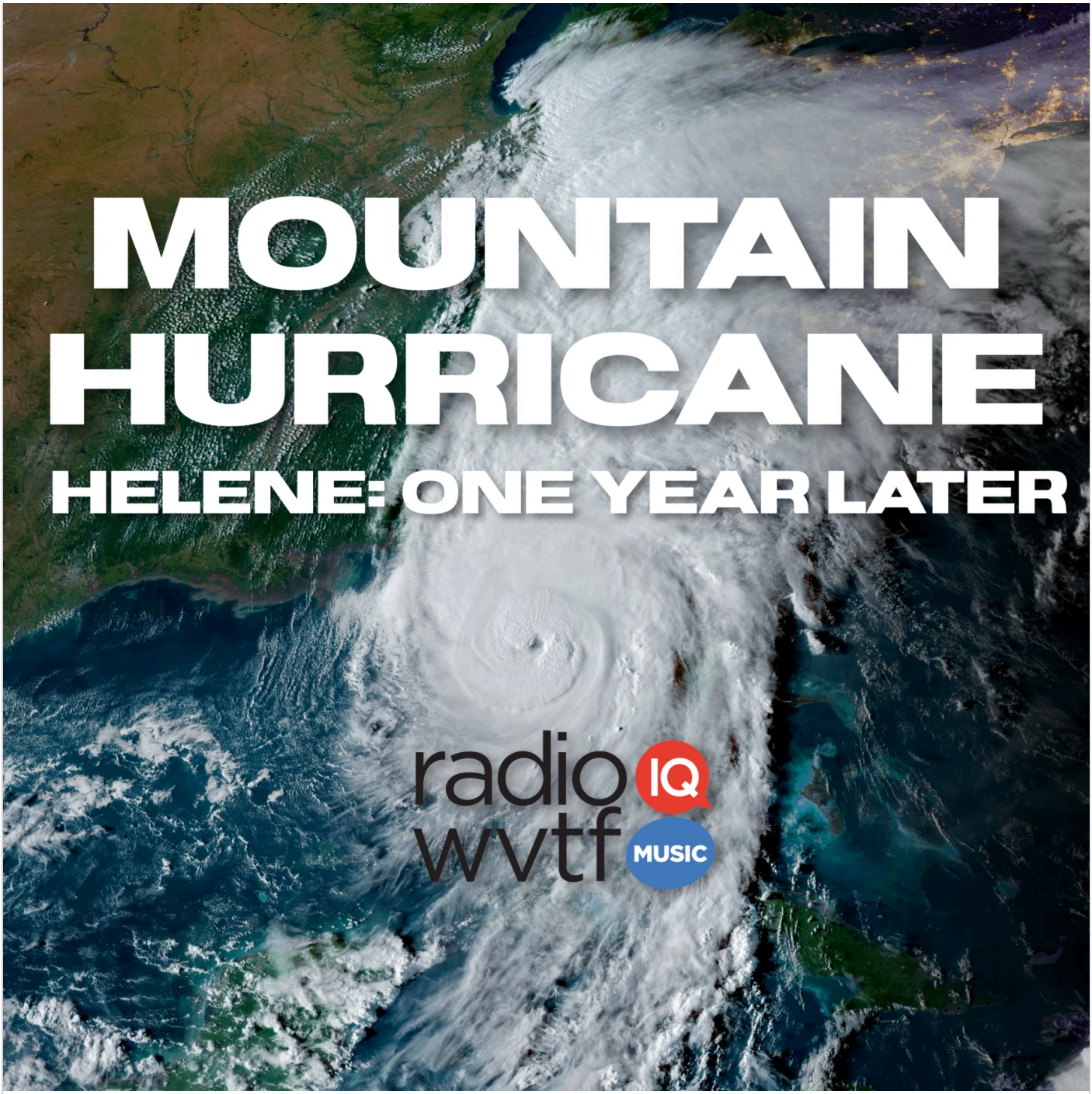

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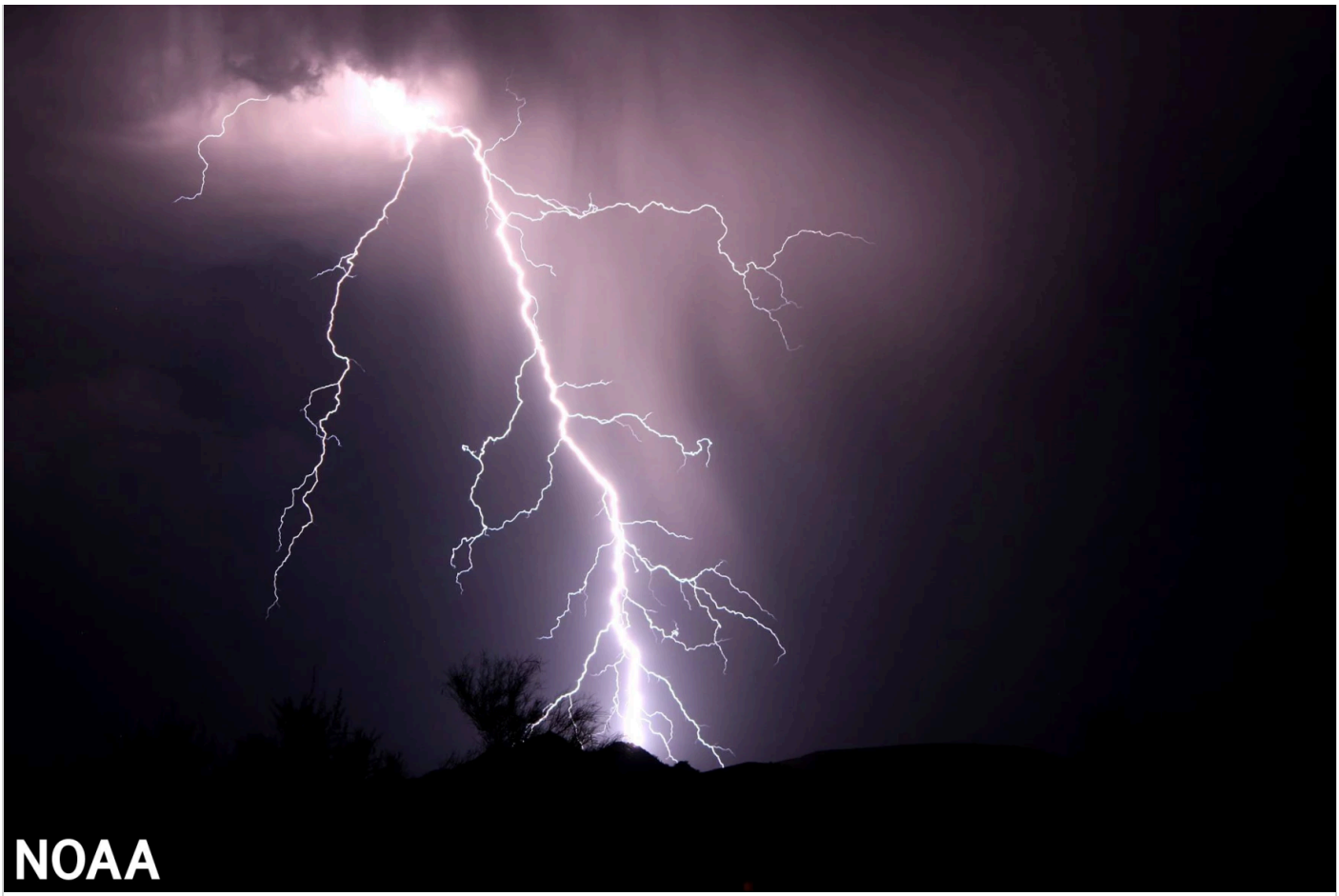

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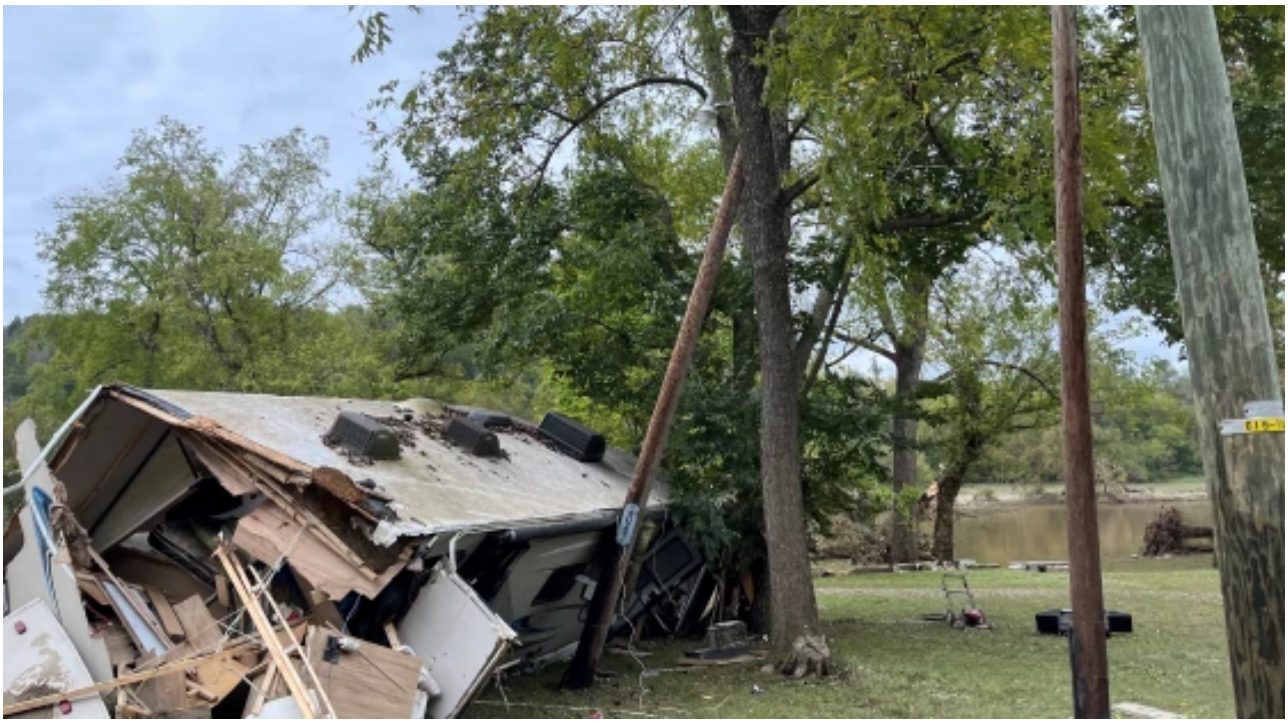

News

Residents across Southwest Virginia begin long process of recovery after Helene

Roxy Todd, September 30, 2024

Emergency officials are still assessing the full extent of the damage to southwest Virginia from tropical storm Helene. Many communities are without water and power, and residents evacuated across seven counties.

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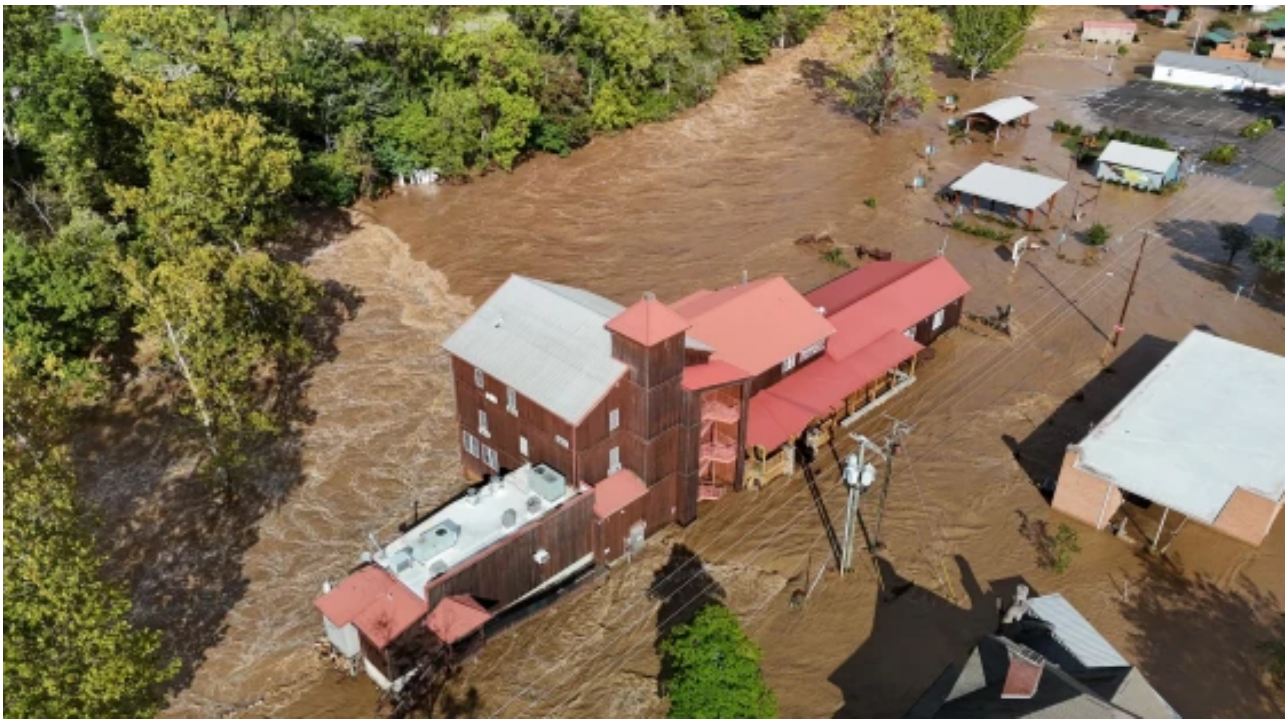

News

In Damascus, Helene destroyed over a dozen homes. Parts of Route 58 and the Va. Creeper Trail will have to be rebuilt, officials say

Roxy Todd, October 10, 2024

It's been almost two weeks since Helene damaged hundreds of homes across Southwest Virginia and took the lives of two people. In some of the hardest hit communities, including Damascus and surrounding areas, it could take more than a year to rebuild washed out roads and fully reopen the Virginia Creeper Trail.

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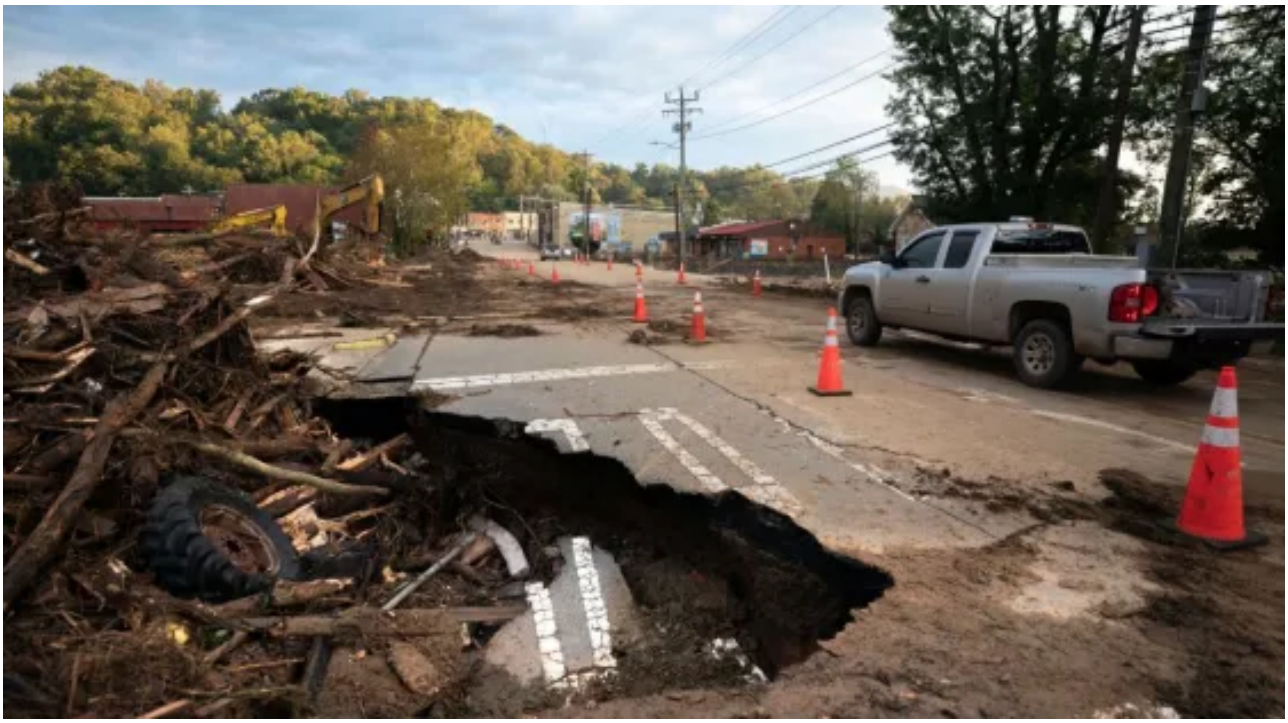

Devastated roads and bridges hinder recovery efforts in Western North Carolina

Joel Rose, October 9, 2024

The remnants of Hurricane Helene washed out hundreds of roads and bridges across Western North Carolina. The extensive damage is making it harder to restore power and cell service to thousands.

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