



Reducing Wildfire Risk Caused by Tropical Storm Helene

SPRUCE PINE, N.C.—With western North Carolina facing the risk of larger and more intense wildfires for years to come because of damage to its forests by Tropical Storm Helene, efforts are underway by government agencies, private forest owners and others to reduce the risk.

Timber grower Jim Phillips of Avery County is clearing debris-filled logging roads and rebuilding other roads in his forests damaged by Helene to give firefighters access to fight potential wildfires. “If we don’t have access, we’re going to burn down,” said Phillips.

Phillips’ forests, like many hundreds of thousands of acres of storm-damaged forestland in the region, are filled with 100-foot-tall trees blown down by the storm, with many broken and uprooted trees leaning into the canopies of still-standing trees. The destroyed trees are fuel for future wildfires.

Logging roads that once served as firebreaks and provided access for firefighters in the forest-covered mountains are blocked by fallen trees or damaged beyond repair by flooding or landslides. Streams that could be firebreaks are filled with debris.

Firefighters can’t contain wildfires if access is limited, so they will be forced to expand perimeters for wildfires, forestry officials say.

“It will result in bigger wildfires,” said Kevin Harvell, Assistant State Forester for forest protection with the North Carolina Forest Service.

Forestry officials are alarmed by the elevated wildfire risk facing storm-damaged counties. Most of the region’s population lives in the wildland-urban interface, where human development meets forests and other wildland vegetation, exposing inhabitants to increased wildfire risk.

“It poses a huge threat to public safety,” said Michael Cheek, Regional Forester for the western region with the state forest service.



A worker with the North Carolina Forest Service conducts a prescribed burn to reduce the risk of wildfires.

“This fall, we’ll see a dramatic increase in wildfires,” Harvell said, coinciding with when homeowners burn leaves. Debris burning is the main cause of wildfires in the state.

There likely will be some increase in wildfires this spring, he said. The state has a spring and fall fire season. The increased wildfire threat will remain for more than a decade, he said.

An estimated 822,000 acres of timberland in western North Carolina was damaged by the storm, 78 percent of it privately owned and 21 percent located in federal forests, according to the state forest service.

The U.S. Forest Service estimated 187,000 acres in the Pisgah and Nantahala national forests had moderate to catastrophic storm damage. That’s nearly 20 percent of the forests’ combined 1 million acres.

Most of the downed trees will be left in forests because of cost and safety issues to remove them.

Tropical Storm Helene ravaged western North Carolina on Sept. 27, 2024, with flooding, winds up to 100-miles an hour, landslides and tornadoes. The storm caused an estimated \$59.6 billion in damage. More than 100 people died and tens of thousands of homes were damaged or destroyed.

The storm-damaged forests are at serious risk for harmful invasive vegetation, and private owners need access into their forests not only to combat wildfires but to apply herbicides. Phillips, whose family has lived in the region since the early 1800s, said storm damage to his forests threatened his livelihood and may force him to sell forestland to developers.

He is trying to save some of his least-damaged forests by opening access into them, building flood-resistant logging roads and installing bigger culverts at creek crossings to better withstand flooding.

Forestry officials are referring private owners with damaged forests to programs like the Federal Emergency Forest Restoration Program, which helps owners of non-industrial forestland restore forests damaged by natural disaster. The program can provide up to \$500,000 funding to a single applicant.

The state forestry service also helps private forest owners and others reduce wildfire risk through prescribed burns, building fuel breaks and other services. State forest rangers are stationed in counties to help.

The agency doesn’t have the resources to meet the increased wildfire risk in private forests caused by the storm, Harvell said. The state agency plans to work with NOAA to use satellite images to help locate where the greatest fuel is in damaged forests to prioritize where firefighter access and fuel breaks are most needed.

The agency plans to bring in firefighters from other states to help deal with the increased wildfire risk in western North Carolina, pre-positioning them if needed, Harvell said.

The state forestry service gets funding from the U.S. Forest Service to maintain fuel breaks on private land next to the region’s national forests and has requested more funding for that effort following the storm.

The agency is engaged in a public awareness campaign about how to reduce wildfire risk, including around homes. It is encouraging participation in programs such as Firewise Communities USA.

The North Carolina State Extension is planning workshops for private forest owners that will focus on wildfire mitigation, battling invasive vegetation and related concerns. The state extension is also offering workshops on how to use chainsaws safely to remove downed trees and other storm debris.

Community organizations like the Southern Blue Ridge Prescribed Burn Association are also helping to lower wildfire risk. The association helps private landowners with small tracts conduct prescribed burns to reduce wildfire risk.