

North Carolina: Overview

Everything in the main manual and the skill guides applies in North Carolina exactly as written. What's different here is the specific hazard profile and the state, local, and legal context around it. This page is the starting point; the other three pages under North Carolina go deeper on laws, local resources, and the data behind the risks named here.

Hurricane Helene: catastrophic flooding hundreds of miles from the coast

Hurricane Helene made landfall on Florida's Gulf Coast on September 27, 2024, but its most catastrophic effects happened far inland, in the mountains of western North Carolina. Helene's remnants dropped 20-30 inches of rain across the Blue Ridge in a matter of days, and the French Broad and Swannanoa rivers in Asheville rose to levels not seen since a 1916 flood, breaking that century-old record by roughly 5 feet. The storm killed 107 people in North Carolina, roughly half of all deaths Helene caused across six states, making it the deadliest hurricane in modern North Carolina history and the costliest disaster of any kind the state has recorded. This site's Case for Preparedness page covers Helene as a national case study; see the Risks page here for the full North Carolina-specific data.

When the water system itself is the casualty

One detail from Helene is worth calling out specifically: the flooding didn't just damage homes, it severed the pipes connecting Asheville's water treatment plants to the city itself, leaving large parts of the city without safe drinking water for weeks. This is a useful, concrete illustration of why this manual treats water storage and purification as a Tier 1 priority even for households who assume municipal water is a given, sometimes the infrastructure itself is what fails.

What this means for how you use the rest of this manual

The manual's Tier structure and the skill guides apply without modification. What's different in North Carolina: households in the western mountains, not just the coastal counties most people associate with hurricane risk, need a real flash flood and water-system-failure plan, and the state's coastal counties still carry the more conventional storm surge and wind risk on top of that.

Sources

- Hurricane Helene North Carolina death toll and damage: Wikipedia, sourced to NHC and NC state officials; this site's Case for Preparedness
- Asheville water system damage and river level records: WRAL

North Carolina: Laws & Legal Considerations

Rainwater harvesting: legal, and local governments can’t ban it outright

North Carolina liberalized its rainwater harvesting rules substantially, and state law goes further than simple permission, it explicitly bars local governments from prohibiting the practice.

Rule	North Carolina
Source water	Rooftop or other catchment
Permit required	No, for residential systems under 5,000 gallons
Permitted uses	Non-potable: toilet flushing, laundry, irrigation; must be a system entirely separate from the municipal water supply
Legal protection from local bans	N.C. General Statute §143-138 bars any local building code from prohibiting cistern use for non-potable purposes
HOA rules	HOAs may regulate appearance (matching siding color, screening) but cannot use aesthetic rules to effectively ban a system

Where to find it: the N.C. Department of Environmental Quality (deq.nc.gov) publishes rainwater harvesting guidance; larger or non-residential systems fall under the state Building Code Council’s Appendix C-1 requirements.

Water rights: riparian reasonable use, with roots in an 1868 state case

North Carolina follows the same riparian reasonable-use doctrine common across the Southeast, tracing back to a specific 19th-century state Supreme Court case.

Concept	How it works in North Carolina
Who holds the right	Owners of land adjacent to a natural watercourse
Governing principle	Reasonable use: a riparian owner may use water for domestic, agricultural, and industrial purposes, but not in a way that unreasonably interferes with other riparian owners
Foundational case	Willcox v. Whisnant (1868), which established the reasonable-use framework still applied today

Where to find it: the UNC School of Government (sog.unc.edu) publishes guidance on North Carolina water law for local governments and property owners.

Concealed carry: shall-issue with mandatory training, administered at the county level

North Carolina requires a permit to carry concealed, and unlike Pennsylvania’s no-training shall-issue system, it requires state-approved firearms training before a sheriff will issue one.

Requirement	Detail
Standard	Shall-issue: a county Sheriff issues a Concealed Handgun Permit (CHP) to any applicant who meets the statutory criteria
Minimum age	21
Residency	North Carolina resident for at least 30 days (or military permanently posted in the state)
Training required	A state-approved firearms training course, unlike Pennsylvania's no-training system
Duty to inform	A CHP holder must inform a law enforcement officer they're carrying upon initial contact

Where this sits relative to the other states covered so far

North Carolina is the first state on this site to pair a shall-issue standard with a real training requirement administered directly at the county level, a meaningfully different combination from Pennsylvania’s no-training shall-issue system, California’s state-administered 16-hour course, and the permitless systems in Utah, Texas, Florida, Ohio, and Georgia.

Sources

- North Carolina rainwater harvesting law, SB 163, and NCGS §143-138: LegalAtlas; LegalClarity
- North Carolina riparian water rights and Willcox v. Whisnant: State Regs Today
- North Carolina Concealed Handgun Permit requirements: Alien Gear Holsters; Protect With Bear

[BY STATE](#) › [NORTH CAROLINA](#)

North Carolina: Local Resources

NCEM and ReadyNC

North Carolina Emergency Management, part of the Department of Public Safety, runs public preparedness outreach through the ReadyNC campaign.

A feature worth knowing about specifically

ReadyNC directly tracks coastal evacuation zones and provides a lookup tool, a genuinely useful feature given how central hurricane evacuation planning is to the state's coastal risk profile, on top of its standard household plan and supply kit guidance.

Where to find it: readync.gov.

NC State Extension: North Carolina's version of the other states' land-grant Extension programs

NC State Extension runs the same category of program as every other state covered on this site, through Cooperative Extension Centers in every county.

- **Extension Master Gardener Volunteer Program:** 40 hours of basic training in home horticulture, followed by 40 hours of volunteer service to earn certification, then 20 volunteer hours and 12 continuing-education hours annually to maintain it.

Where to find it: emgv.ces.ncsu.edu lists the program by county.

CERT: run directly by NCEM, statewide

Unlike the fully decentralized county-by-county model seen in some other states, North Carolina's CERT program is administered directly by NCEM at the state level, with ReadyNC serving as the central information and training hub, similar in spirit to Ohio's hybrid model.

Where to find it: readync.gov/get-involved/cert.

Sources

- NCEM and ReadyNC campaign features: ReadyNC
- NC State Extension Master Gardener Volunteer Program requirements: NC State Extension
- North Carolina statewide CERT program administration: ReadyNC

North Carolina: Risks & Trends

Same standard as every other page on this site: every figure below is independently sourced, and figures that vary across sources, or measure genuinely different things, are flagged as such rather than collapsed into one number that looks more precise than the underlying data actually supports.

Hurricane Helene (2024): the deadliest hurricane in modern North Carolina history

Metric	Figure
Total North Carolina deaths	107-108
Direct deaths (NHC classification)	86
Indirect deaths (NHC classification)	21
North Carolina damage estimate	\$59.6 billion, costliest disaster in state history
Total damage, all affected states	\$78.7 billion
Rainfall over the mountains	20-30 in
French Broad/Swannanoa river levels in Asheville	~5 ft above the previous 1916 record
Landfall strength (Florida)	Category 4, 140 mph

Direct versus indirect deaths, the same distinction this site applies consistently

The NHC’s own classification splits Helene’s North Carolina toll into 86 direct deaths (drowning, structural collapse, and similar causes tied directly to the storm’s physical effects) and 21 indirect deaths (causes like lack of medical care or accidents during cleanup, in the storm’s aftermath). Both are part of the same official 107-108 total; this isn’t a case of two competing counts, just a breakdown by cause, the same kind of distinction this site applies to Hurricane Ian’s Florida death toll.

Why the damage concentrated in the mountains, not the coast

Helene made its actual landfall on Florida's Gulf Coast, more than 500 miles from Asheville, but the storm's remnant moisture met the Blue Ridge Mountains' steep terrain days later, the same fundamental mechanism behind Pennsylvania's Hurricane Agnes and Ida flooding, a tropical system's rainfall colliding with mountainous or hilly terrain far from where it made landfall. Roughly half of all deaths Helene caused across the six states it touched happened in North Carolina alone, and the flooding was severe enough to break a flood-level record set in 1916.

What this means

Helene is the clearest single illustration on this site of a pattern that also appears in Pennsylvania and, less dramatically, Texas: hurricane risk isn't confined to the coastline a storm actually crosses. North Carolina's mountain counties, hundreds of miles inland and with no history of hurricane landfall, absorbed the deadliest and costliest disaster in the state's modern history from a storm that never came near them directly.

Sources

- Hurricane Helene North Carolina death toll (direct/indirect) and damage figures: Wikipedia, sourced to NHC and NC state officials; NHC tropical cyclone report
- Asheville-specific river level records and water system damage: WRAL
- This site's own Hurricane Helene case study: Case for Preparedness