FRENCH BROAD RIVER BASIN

tour Ecologica, the

Total miles of streams: 3.985

Total acres of lakes: 1,736

Municipalities within basin: 24

Counties within basin: 8

Size: 2,829 square miles

Population: 485,140 (2010 U.S. Census)

The French Broad originates from a tiny waterfall (left); the basin's Mount Mitchell is the tallest peak in the East (below).

The Cherokee Indians already had countless names for the French Broad River by the time white huntsmen first approached this mountain region. Their river was "Long Man" and its tributaries "Chattering Children."

The settlers were more literal in their naming of the river. They had already encountered wide streams, or broads, that flowed away from the ocean that they or their parents had crossed. But this river ran northwest, into what was then French territory, and

eventually joined the mighty Mississippi. To the newcomers, it was plainly the French Broad.

The headwaters of the French Broad River spill from a 50-foot waterfall in Transylvania County. Known as Court House Falls, the waterfall rushes into a creek that feeds the North Fork, which joins the West Fork near Rosman and eventually the Middle and East forks to form the French Broad. About half of the land surrounding these headwater streams is forested, with much of the basin within the Pisgah National Forest or Pisgah Game Lands. Steep slopes limit the land area suitable for building and farming. In fact, the tallest mountain east of the Mississippi River rises from this basin—Mount Mitchell stretches 6,684 feet skyward. Cold Mountain, immortalized by the novel and film of the same name, rises 6,030 feet above the Shining Rock Wilderness area.

The French Broad River Basin drains land in both North Carolina and Tennessee. Besides the French Broad River, the basin includes two other major watersheds in North Carolina: the Pigeon and Nolichucky rivers—tributaries that join the French Broad in Tennessee. The Mills, Davidson and Swannanoa rivers are major tributaries of the French Broad River in North Carolina.



SILL LEA





Pink Beds A large, flat valley within the Pisgah National Forest's Cradle of Forestry area contains the most extensive system of upland valley bogs and marshes in the Southern Appalachians, according to the N.C. Natural Heritage Program. These wetlands are home to North Carolina's largest population of the swamp pink (pictured above), a plant in the lily family that is federally listed as a threatened species. The entire area is nicknamed the Pink Beds and got its name from the resident pinkblooming flowers that also include wild phlox and mountain laurels.

Trout are abundant in the upper reaches of the basin, and many waters A bobcat makes a rare have such good quality that the state classifies them as Outstanding Resource Waters. About 263 miles of Outstanding Resource Waters framed in fall foliage. in the basin include most of the South Fork Mills River, the South Toe River (which joins the Nolichucky River) and Cataloochee Creek and its feeder streams (which empty into the Pigeon River). These waters receive extra protection due to excellent water quality and exceptional ecological or recreational significance.

Unique plants and animals also distinguish the French Broad River Basin. It contains two aquatic salamanders, the common mudpuppy and hellbender, and is the only basin with the distinctive turtle known as the Eastern spiny softshell. The Nolichucky, Cane, South Toe and North Toe rivers contain several rare fish, notably the entire state population of sharphead darters.



WAYNE VAN DEVENDER



The Eastern spiny softshell (far right) and the hellbender (right) can both be found in the French Broad River Basin.

ASHEVILLE IS THE BASIN'S LARGEST CITY.

Several riverfront parks are part of a revitalized downtown in Asheville. Paddlers can access the French Broad at several sites within the city limits. Asheville is also home to a growing greenway system enjoyed by citizens and tourists alike.

CHARLES BRASWELL I



The most ecologically significant aquatic area in the basin is the lower section of the French Broad River from the town of Marshall to the Tennessee state line. Numerous fish species found in no other rivers of the state appear here, including the freshwater drum and mooneye.



Rock Window The faulted and folded rocks of the Hot Springs area form an extraordinary geologic "window" where you can see sedimentary rock buried under older metamorphic rock. Other nearby earthly attractions include Paint Rock and Lover's Leap.

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d foldedof river between Barnard and Hot Springs.t Springs
extraordi-
window"The Pigeon River below Canton had been
affected for years by polluted discharge from
a paper mill. Now an employee-owned com-
pany, the mill releases much lower levels of
contaminants and continues to improve its
operation. Water quality in the Pigeon River
has improved dramatically. Biologists in North
Carolina and Tennessee are reintroducing
native snail, fish and mussel species to the
river. Today, the Pigeon River is a progres-
sively cleaner resource that supports raft-
ing, paddling and fishing.

As in many areas across the state, the population in the French Broad River Basin is increasing, particularly in Buncombe and Henderson counties. Population growth is



often accompanied by the removal or alteration of natural areas, which may damage or destroy wildlife habitat and harm surrounding waters when pollutants wash into them. Many types of land use in the basin are affecting the condition of receiving waters, including land development and construction activities, forestry operations, mining operations, orchards and cropland, animal feeding lots, failing septic systems, roads and parking lots. When improperly managed, these activities generate contaminants—including sediment, pesticides, fertilizers and animal waste—that are carried to nearby waterways by rain and melted snow.

The landscape of the French Broad River Basin has changed dramatically over a short period of time. Cultivated and uncultivated cropland, along with pastureland, decreased by 91 percent between 1982 Nature lovers pause along the Appalachian Trail in the Pisgah National Forest.



Looking Glass Falls, Transylvania County (below left); a whitewater kayaker finds thrills, not spills (below right).

N.C. DIVISION OF TOURISM, FILM AND SPORTS DEVELOPMENT







The Little River flows through the 10,400-acre DuPont State Forest.

and 1997, while urban and developed areas grew by more than 85 percent. This change is most apparent around Fletcher, Flat Rock and Hendersonville in the upper French Broad region. These areas account for some of the highest growth rates in the basin. The population of Hendersonville has increased by 50 percent since 1990. In rapidly growing areas, development has historically redirected stormwater in a way that accelerates flooding and

Triple Falls, Dupont State Forest



DUGGINS, NCWR

erosion. Proper land-

use design and management can help control stormwater runoff in both urban and rural areas.

View from Looking Glass Rock

Local organizations are cooperating to protect and promote the ecological and recreational importance of the entire French Broad River Basin. By working together, community organizations and natural resource agencies can combine professional expertise and local knowledge to determine the best way to protect the basin's water resources. To learn how you can help, contact any of the organizations listed on the back page.

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WHERE SHOULD I GO



What makes the French Broad River Basin special? See for yourself. Visit these Environmental Education Centers to discover more about your ecological address:

- Appalachian Highlands Science Learning Center
- Blue Ridge Parkway
- Bullington Center
- Asheville Museum of Science
- Forest Discovery Center, Cradle of Forestry in America
- Holmes Educational State Forest

- Mount Mitchell State Park
- Mountain Trail Outdoor School
- The North Carolina Arboretum
- North Carolina Outward Bound School
- Pisgah Center for Wildlife Education
- Western North Carolina Nature Center
- YMCA Blue Ridge Assembly
- YMCA Camp Greenville

For more information about Environmental Education Centers in North Carolina, check out the Office of Environmental Education and Public Affairs' website at www.eenorthcarolina.org.



You can gain a sense of community pride by learning more and helping to protect streams, rivers and lakes in the French Broad River Basin. The contacts listed below can help you do just that. To find out about local river organizations and conservation groups, contact your local soil and water conservation district.

Clean Water Management Trust Fund https://cwmtf.nc.gov/

French Broad Basinwide Plan* https://deq.nc.gov/about/divisions/waterresources/planning/basin-planning

Land of Sky Regional Council www.landofsky.org North Carolina Association of Soil & Water Conservation Districts www.ncaswcd.org

North Carolina Division of Water Resources Education Programs https://deq.nc.gov/about/divisions/waterresources/water-resources-training/publicinvolvement/project-wet

North Carolina Water Science Center http://nc.water.usgs.gov/

*Basinwide water quality planning is a nonregulatory, watershed-based approach to restoring and protecting the quality of North Carolina's surface waters. The N.C. Division of *Water Resources* welcomes community input.

To order additional brochures on any of North Carolina's 17 river basins, a general river basin booklet or a poster, fill out the online order form at www.eenorthcarolina.org.