

# chowan

## RIVER BASIN

### **FAST FACTS:**

**Pronounced:** Cho-wonn

**Land area:** 3.2 million acres or 5,000 sq. mi.

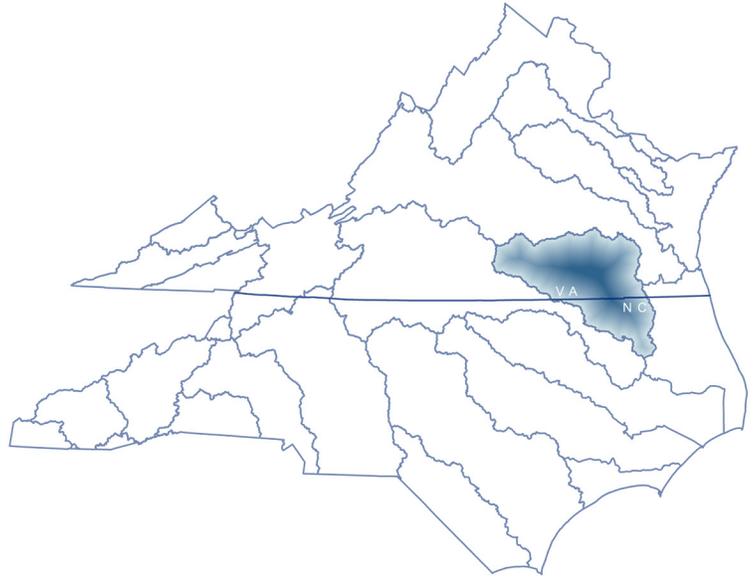
**Portion of basin in Virginia:** 75%

**Population (2010 Census):** 218,000

**Number of sub-basins:**

4 (Blackwater, Nottoway, Meherrin, Chowan)

Miles of rivers and streams: 9,916



Tucked between the mighty James and Roanoke Rivers and straddling the Virginia-North Carolina state line is a lesser-known watershed of remarkable diversity, history and beauty – the Chowan River basin. Encompassing a 3.2-million-acre rural and heavily forested area, the Chowan is formed by three major tributaries flowing out of southeastern Virginia – the Blackwater, Nottoway and Meherrin rivers. These distinctive waterways merge near the North Carolina line to form the Chowan River, the second-largest tributary to the Albemarle Sound, one of the country’s largest estuaries.

The tea-colored blackwater rivers and streams traversing this landscape—winding from lowland Piedmont forests to coastal plain wetlands—rank among Virginia’s healthiest waterways. More than 170 miles have been designated as part of the

Commonwealth’s Scenic Rivers System. In North Carolina, the Chowan River boasts more than 30 miles of permanently protected frontage, along with the largest conserved swamp forest in the northeastern part of the state.

The Chowan basin’s productive farm and timber lands support robust agriculture- and forestry-based businesses visible throughout the region. The nation’s first commercial peanut crop reportedly was grown here in 1842, and its heavily stocked timberlands, dubbed Virginia’s “pine belt,” rank among the most productive across the entire southeastern United States. Woven through this landscape is a rich history from Native American and post-colonization eras which helped shape the cultures of Virginia and North Carolina.

NC PARKS AND RECREATION



## Meherrin River

The **Meherrin River** is the westernmost river in the Chowan River basin. It travels more than 100 miles in Virginia, flowing past Lawrenceville and through Emporia. It meets the Chowan River 12 miles below the North Carolina state line, just east of Murfreesboro. Fifty percent of the Meherrin River watershed's 1 million acres is forested, with 23 percent used for farming and another 10 percent comprised of wetlands.

The Meherrin River is famed for its herring runs, which supported a vibrant fishing industry through much of the 1900s. In Lawrenceville, the river flows by historic Fort Christianna, which once served as a frontier outpost during the early colonial era. Below Emporia, where it is tapped for hydroelectric power, the river is flanked by some of Virginia's most extensive floodplain forests. The river takes its name from the Iroquois tribe that once inhabited the area.



*Sun over the peaceful Meherrin River in Hertford County, North Carolina.*

UNC CHAPEL HILL SCHOOL OF EDUCATION

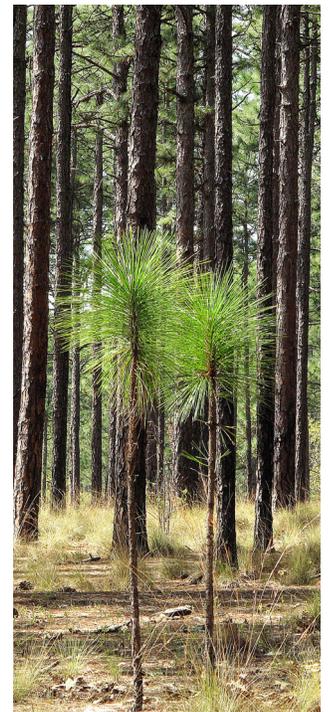
## Nottoway River

The **Nottoway River** stretches for 155 miles across southeastern Virginia from its Piedmont headwaters in Prince Edward and Lunenburg counties to its entry into the Chowan River along the state line in Southampton County. Near the fall line, exposed rocks form Class I and II rapids during periods of higher flow. At 1.1 million acres, the Nottoway sub-basin is the Chowan's largest. Nearly 55 percent of its land is forested, 10 percent is wetlands and 19 percent is farmland.

The Nottoway watershed supports diverse populations of freshwater mussels, including several rare varieties, and more than 90 fish species. It is considered one of the most intact Piedmont/Coastal Plain river systems of its size in the southeastern United States. Cactus Hill, located along the river shoreline in Sussex County, is a nationally significant archeological site containing 16,000-year-old human artifacts, among the oldest documented in the United States. Fort Pickett, a 41,000-acre Army National Guard reservation situated along the Nottoway near Blackstone, is the largest block of federally owned land in the Chowan Basin. Like the Meherrin, the Nottoway is named for the area's native Iroquois inhabitants.

## Blackwater River

The **Blackwater River**, the easternmost river in the basin, falls entirely within the coastal plain. Originating south of Petersburg and meandering southeast for 105 miles, the Blackwater meets the Nottoway River at the North Carolina state line. Extensive tupelo and cypress swamps flank the river, including a number of 1,000-year-old specimens. Sandy ridges along the eastern banks support globally rare longleaf pine forests.



*Longleaf Pine Forest*

Culturally, the Blackwater has a rich history. During the American Revolution, it served as Virginia's westernmost boundary for colonization from Jamestown. As early as 1713, the town of South Quay (pronounced "key") hosted a settlement and small shipyard along this river and was touted as the largest interior port in the tidewater region.

NC PARKS AND RECREATION

## Chowan River

The **Chowan River** flows for 50 miles and, like the Roanoke River, is a vital source of fresh water for the Albemarle Sound. In addition to Virginia's tributary rivers, the Chowan is fed by a number of smaller North Carolina waterways such as Bennett's Creek, Wiccacon River and Potecasi Creek. The river was first named in 1584 and is identified as one of the three oldest surviving place names in the United States. For more than 200 years, the Chowan served as the dominant transportation corridor linking plantations and farms to the port of Edenton, the first permanent English settlement in North Carolina. The river's tremendous natural resources, including its herring fishery, vast swamp forests and wildlife, make it one of the state's most ecologically significant waterways.



*Sheltered from the sea by North Carolina's famed Outer Banks, the Albemarle Sound mixes with the Pamlico Sound to create the second largest estuarine system in the United States. The estuary's watershed is approximately 28,000 square miles. The Chowan River Basin, shown here, is one of six river basins that sustain the Albemarle-Pamlico estuarine system.*

NC PARKS AND RECREATION





*In 2011, the House of Delegates named the striped bass Virginia's official saltwater fish. Also known as stripers, rockfish, or "rock," these fish spend much of their lives in the ocean but spawn in rivers along the Atlantic coast, including the rivers of the Chowan River basin.*

## Fish of the Chowan River Basin

The **rivers** of the Chowan basin are home to a rich array of aquatic life. Most impressive are massive runs of migratory fish, which enter the rivers each spring to spawn a new generation. Unfortunately, barriers to migration and historically unsustainable fishing have reduced populations significantly.

Migratory fish in the Chowan basin include **Atlantic and shortnose sturgeon**, which are both federally listed as endangered species. Sturgeon roe (eggs) is more popularly known as caviar, and demand for this product in colonial times contributed to the decline of these fish.

Several species of **herring and shad** also inhabit these waters. Lower on the food chain, these species are preyed upon by larger river and saltwater fish. They are seasonally popular delicacies for humans, too, with shad planking, herring shacks, and annual festivals in their honor.

Other aquatic residents stay in these rivers year-round. As rare as it is beautiful, the **Roanoke logperch** only lives in pristine rivers. Therefore, its presence is a good indicator of high water quality. The **dwarf wedgemussel** is another rare species that is particularly sensitive to agricultural runoff and dammed streams.

*Atlantic sturgeon can be 14 feet long and weigh over 800 lbs. That's roughly the size of grizzly bear. These endangered fish, which are dependent on rivers and estuaries, are at less than 3% of their historic population levels.*



## Forests and Wildlife of the Chowan River Basin

The line between water and land is not always clear in this region where **cypress-gum swamps** dominate the river banks. These swamps are home to an iconic scene repeated thousands of times: cypress trees growing directly from the water. Of course, seeds don't sprout underwater; these trees were once on dry land.

THE NATURE CONSERVANCY



The Chowan basin's upland areas also harbor a fascinating array of life. **Longleaf pine**, known as the "tree that built the tidewater," once blanketed the southeastern United States, but heavy harvesting for naval stores like resin, turpentine and timber has reduced these stands to less than 5 percent of their historic range. A range of other plant and animal species also depend on this keystone species, including the **red-cockaded woodpecker**, which makes its home only in mature pine trees.

*A red-cockaded woodpecker foraging (below). Red-cockaded woodpeckers prefer to forage and make their homes in open mature longleaf pine savannas, like the one pictured (at left).*

US MARINE CORPS BASE CAMP LEJEUNE

SMITHSONIAN MUSEUM



MISSOURI BOTANICAL GARDENS



*Michaux's sumac and Rattlesnake master (above)*



The region is home to several other rare plant species. **Michaux's sumac** is distantly related to poison sumac, its famously itchy cousin.

The largest population of this endangered species grows at Fort Pickett near Blackstone. The area also features several occurrences of **rattlesnake master**, so named for its use by Native Americans as an antidote to rattlesnake venom. Several species of carnivorous **pitcher plants** also dot the region.

## Human Impacts in the Basin

While the region is home to great natural splendor, it is also subject to **human impacts** from the people who live here. **Nutrients** like nitrogen and phosphorus are necessary to help plants, crops and lawns grow, but excess amounts damage rivers and estuaries. Nutrient pollution is the major cause of water quality problems in the Chowan River and its tributaries.

Nutrients are carried by **stormwater runoff** from urban areas, agricultural operations, failing and inadequate septic systems, wetland drainage, and natural conditions.

NC DIVISION OF WATER RESOURCES



*Excess nutrients in our waterways (at left) can oftentimes result in fish kills (at right).*

The most noticeable signs of nutrient pollution are blue-green **algal blooms** that sometimes occur, although not to the extent that once choked the river. These blooms block the penetration of sunlight into the waters, slowing photosynthesis in underwater plants. When the plants and algae die, their decomposition robs the waters of dissolved oxygen, killing fish and other organisms.

Like thick green paint, algal blooms smothered most of the Chowan River from Holiday Island to Albemarle Sound in 1972. Massive **fish kills** lined

the shores, and fishing abruptly stopped. The summer-long event stunned local citizens and galvanized public opinion and government agencies. Periodic blooms and declining fish harvests have since maintained public concern.

Today, the waters of the Chowan River are designated as “nutrient sensitive” in North Carolina. As a result, more stringent rules are applied to protect the river.

While people impact the waters of the Chowan, many are also working to protect and restore its natural resources.

A group of civic organizations, environmental non-profit groups and government agencies collaborate on Chowan basin issues as part of the **Albemarle-Chowan Watershed Roundtable**. In addition to their partnership in the roundtable, these organizations and agencies are individually responsible for dozens of outreach, land conservation, monitoring, science, management and policy efforts in the region.

Visit **acwrt.org** to learn about the roundtable and its participating partners.



# places to visit

---

## **Barrett's Landing**

*Intersection of S. Main St. and E. Barrett St., Franklin, VA*

*Barrett's Landing offers excellent access to the Blackwater River. Foot bridges, docks, and a public boat landing provide perfect places to fish, take a walk, or sit and enjoy nature's beauty. Kayak and canoe rentals are available nearby.*

## **Big Woods State Forest & Wildlife Management Area**

*32775 Cedar Sign Post Road, Wakefield, VA*

*Big Woods WMA is a recent addition to Virginia's wildlife management area system. This coastal plain forest offers aged pine forests and some hardwood bottom lands. The area provides habitat for a wide range of species including white-tailed deer, Eastern wild turkeys and bobwhite quail. Big Woods WMA is open to hunting.*

## **Blackwater Ecological Preserve**

**24326 Thomas Woods Trail, Zuni, Virginia**

**(757) 683-3595**

*The Blackwater Ecological Preserve hosts two of Virginia's rarest plant communities: longleaf pine-turkey oak flatwoods and longleaf pine savannas. This preserve also supports more than a dozen rare or noteworthy elements of Virginia's natural heritage. Because the preserve may be periodically closed for resource protection or prescribed burning, please call before visiting.*

## **Chowan Swamp Game Lands (NC)**

*Chowan Swamp is one of the most extensive wetland forests in North Carolina. The Chowan is home to many breeding neotropical migrants such as the prothonotary and Swainson's warblers and mammals such as black bear, bobcat and river otter. Canoeing or kayaking the area's tranquil blackwater streams is a wonderful way to explore the river and swamp forest. This site is located along the northeast shore of the Chowan River, from the mouth of the Meherrin River downstream to Cannon Ferry. This is a popular hunting spot, so check the hunting schedules before you go!*

## **Five Forks Battlefield**

**9840 Courthouse Road, Dinwiddie, VA**

**(804) 469-4093**

*Part of Petersburg National Battlefield Park, Five Forks Battlefield is drained by Hatcher's Run and Chamberlain's Bed Creek, which feed into the Nottoway River. Hiking and bicycle trails abound, and the outdoor exhibits located near these trails will help you understand the historic significance of Petersburg National Battlefield.*



NC PARKS AND RECREATION

## Merchant's Millpond State Park (NC)

176 Millpond Road, Gatesville NC

(252) 357-1191

*Merchants Millpond State Park is home to an "enchanted forest," primitive species of fish relatively unchanged over millions of years, towering bald cypress trees with massive trunks, and luxuriant growths of Spanish moss. Drift along the millpond in a canoe, fish for game species, choose from an assortment of camping opportunities, enjoy a picnic beside the millpond, or hike along the park's 9 miles of trails.*

## Tobacco Heritage Trail

Access points in Broadnax, La Crosse, Lawrenceville, South Hill, and Victoria  
[tobaccoheritagetrail.org](http://tobaccoheritagetrail.org)

*Surrounded by unspoiled woods, tobacco farms that have been passed from one generation to the next and homey little towns, the Tobacco Heritage Trail is a path to your outdoor recreation and relaxation. Explore the natural resources of this southern Virginia rail-trail on horse, bicycle, or foot and journey back to the history and culture of a simpler time.*

## Whittle's Mill:

1850 Bridge Rd., South Hill, VA

*The beautiful old mill site on the Meherrin River has been Southside Virginia's unofficial park for generations – and long South Hill's best-kept secret. Recent restoration of the site and the publication of a book about the mill have greatly heightened interest in the Meherrin River, the legacy of the Whittle family and the secrets of the old mill.*



The Albemarle-Chowan Watershed Roundtable is currently under the leadership of the **South Centre Corridors RC&D Council**

**Mailing Address:** P. O. Box 1237, Prince George, VA 23875  
Ph: 804-732-4375



<http://www.acwrt.org/>

3,400 copies of this public document were printed at a cost of \$5,977.15 or \$1.75 per copy.