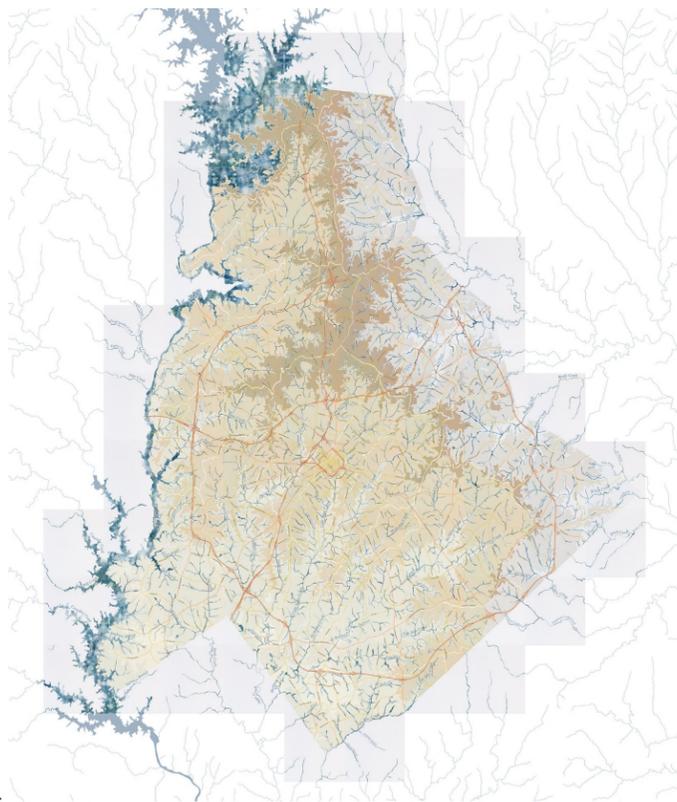


DID YOU KNOW?

- Two-thirds of Mecklenburg County is in the Catawba River watershed, and the creeks in that watershed flow into Lake Norman, Mountain Island Lake, Lake Wylie or other parts of the Catawba River.
- The eastern third of Mecklenburg County is in the Yadkin-Pee Dee watershed. Those creeks eventually flow into the Pee Dee River.
- Mecklenburg County has 126 named creeks. This includes creeks whose name is “tributary of.”
- Of those 126 named creeks, 81 have their own names (not “tributary of”).
- Six creeks in Mecklenburg have a name that starts “Mc...” They are McAlpine, McCullough, McDowell, McIntyre, McKee and McMullen creeks. Their names reflect the Scots-Irish heritage of many of the early white settlers.
- A nationwide survey of the condition of small streams throughout the U.S. in 2004-05 found 42 percent of the stream miles were in poor biological condition and 28 percent in good condition. In the Eastern region that includes Charlotte, only 18 percent of the stream miles were in good biological condition, and 52 percent were in poor condition.
- The most widespread problems for streams across the U.S. are nitrogen and phosphorus (called “nutrients”), sediments in the streambed, and activities that disturb the stream’s banks such as construction, farming or removing vegetation.
- Although they are “nutrients” – meaning they supply nutrition – high levels of nitrogen and phosphorus can hurt water quality. They can cause too much algae to grow, which uses so much oxygen that other aquatic life suffers. Algae blooms can also produce toxins that harm humans and animals.
- The excess nitrogen and phosphorus that pollute creeks can come from fertilizer on lawns and gardens, sewage treatment plants or leaking septic systems.
- The study of creeks/streams is called surface hydrology. It is a core element of environmental geography.



LEARN MORE

Visit KeepingWatch.org for stories, videos, maps and other information about Mecklenburg County’s creeks.



The Autobell® Creek Challenge is funded by Autobell® Car Wash.

LAKE WYLIE / BEAVERDAM

CREEK



The Lake Wylie-Beaverdam Creek watershed is in southwestern Mecklenburg County, extending from the southwest corner of Charlotte Douglas International Airport to the state’s border with South Carolina. This watershed is actually several different creeks’ watersheds, but because they are all relatively short and most flow directly into the Catawba River/Lake Wylie, they’re treated here as one watershed. There are more than 10 sites where the separate streams in this area empty into the river.

This area contains about 29 miles of **perennial** streams, including Beaverdam Creek, Neal Branch, Stowe Branch and Little Paw Creek.

One older house of interest in this

watershed is the Samuel Neel House, a historic property near Westinghouse Boulevard and Shopton Road West. This house was the childhood home of General William Henry Neel, who led a local militia group before the Civil War. Neel was also a county commissioner and was one of the county’s first citizens to run a cotton mill. Neal Branch, northeast of what’s now Thomas McAlister Winget Park, was likely named after the Neel family that lived nearby during the 1800s and late 1700s, although the creek and the family name are spelled differently. General Neel’s brother sold the house in 1899, and it’s now a private home on Samuel Neel Road, overlooking Lake Wylie.

The Neel family likely wouldn’t recognize their backyard today. Many properties along the Catawba River are

under water after the Wylie Dam was built on the river, including the county’s first woolen factory, Rock Island Woolen Mill, built in 1848.

The Wylie Dam was built in 1904 by Catawba Power Company to create a lake and generate electricity for a nearby textile mill. Originally known as Catawba Lake, Lake Wylie is the oldest of the seven artificial lakes along the Catawba River. All the lakes were intended to regulate water flow to generate **hydroelectric power**. In 1960, the lake was renamed for Dr. Gil Wylie, who founded the Catawba Power Company—now known as Duke Energy.

Today, McDowell Park and Nature Preserve is the largest park in the watershed and the second-largest park in the county. It was named after John McDowell, who was a county commissioner in the 1960s and 1970s. When it opened in June 1976, the preserve was only 136 acres along Lake Wylie. Today, it’s much larger—1,108

acres, including butterfly gardens, animal exhibits and bird-feeding stations. McDowell Nature Preserve preserves the **habitats** for 175 different species of animals and protects several plants including the endangered Schweinitz's sunflower. The nature preserve is also a gateway to Copperhead Island which, despite its name, isn't an island. This "island" is also a popular place for fishing and hiking and is Mecklenburg County's only public boat launch on Lake Wylie.

Also in the watershed area is Charlotte Premium Outlets, which opened in 2014 and sits at the headwaters of several Beaverdam Creek tributaries.

The state environmental office rates the Catawba River as **impaired** for several different reasons. The section of the river between the Mountain Island Dam and

Key vocabulary

Habitat – The natural home or environment of an animal, plant, or other organism.

Hydroelectric power – Electricity generated using flowing water (typically from a reservoir held behind a dam or other barrier) to drive a turbine that powers a generator.

Impaired – Weakened or damaged. Relating to water quality, it means the water is not suitable for the uses assigned to it.

Perennial stream – Has water in it year-round.

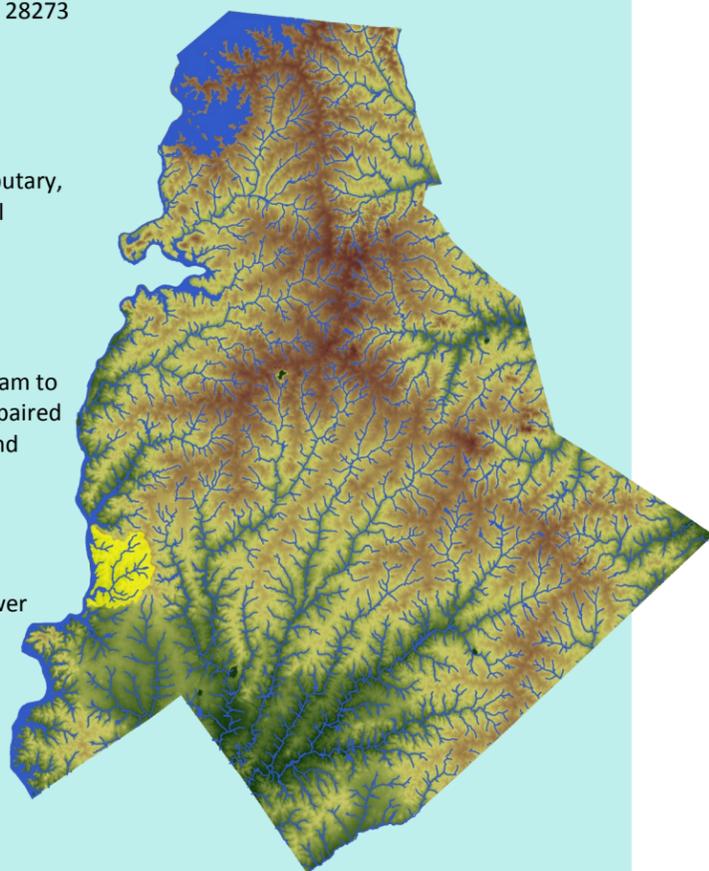
Interstate 85 is impaired due to low pH, which means the water is too acidic. Between Paw Creek and the South Carolina state line, the water is considered impaired due to copper and high water temperatures.

Profile

- **Location:** Southwestern edge of Mecklenburg County (zip codes: 28273 and 28278)
- **Approximate land area:** 19.67 square miles
- **Estimated population in 2010:** 13,481
- **Creeks and tributaries:** Beaverdam Creek, Beaverdam Creek Tributary, Catawba River Tributary #1, Little Paw Creek, Stowe Branch, Neal Branch
- **Drains into:** Lake Wylie / Catawba River Watershed
- **Miles of perennial streams:** 29.166
- **Impaired** The Catawba River is impaired from Mountain Island Dam to Interstate 85 due to low pH. The Catawba River/Lake Wylie is impaired from Paw Creek to the South Carolina state line due to copper and high water temperatures.

Fun facts

- Lake Wylie was named for Dr. Gil Wylie, founder of Catawba Power Company, which became Duke Energy.
- Beaverdam is one of six creeks in the county with names related to animals. The others are Duck, Goose, Gar and Mallard creeks and Swan Run.

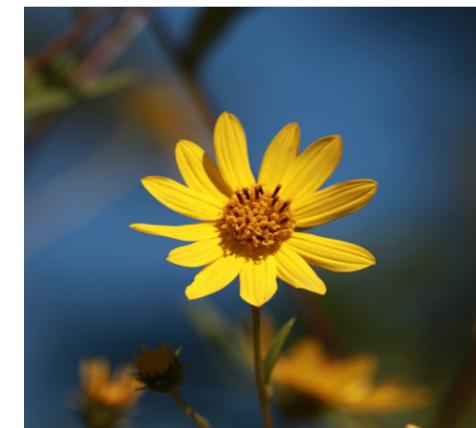


What's in the Lake Wylie/Beaverdam Creek watershed?

- **Landmarks:** Charlotte Premium Outlets shopping center, western side of Charlotte Douglas International Airport, the historic William Henry Neel house.
- **Parks:** Copperhead Island, McDowell Park and Nature Preserve, T.M. Winget Regional Park.



This is the Catawba River dam that forms Lake Wylie. Photo: Nancy Pierce



Schweinitz's sunflower, an endangered sunflower, is in a protected habitat at McDowell Nature Preserve. Photo: John Flannery - Flickr CC BY-SA 2.0



Beaverdam Creek near where it enters Lake Wylie at Brown's Cove. Photo: Nancy Pierce



Children paddling in Brown's Cove of Lake Wylie, at the mouth of Beaverdam Creek. Photo: Nancy Pierce

What you can do to protect our creeks

- **Don't dump hazardous chemicals down drains.** Take them to a recycling center.
- **Don't dump yard waste in drains or creeks.** Bag, recycle or compost it.
- **Prevent soil erosion.** Plant trees and bushes along creek banks and in bare areas of the yard.
- **Scoop the poop.** Dog waste can pollute local creeks.
- **Use a car wash, not the driveway.**
- **Use fewer fertilizers and chemicals** in your yard. Don't apply chemicals 48 hours before a heavy rain.

- **Don't dump cooking grease and oil down the sink.** Grease clogs are the most common cause of sewage spills into Mecklenburg County creeks.
- **Report pollution, including soil erosion.** Call 311. To report online, or use the Water Watcher app visit <http://charmec.org/stormwater/ReportPollution>
- **Reduce how much runoff leaves your property.** Plant trees, use rain barrels, limit the use of pavement and limit the use of pipes to send rainwater into storm drains.