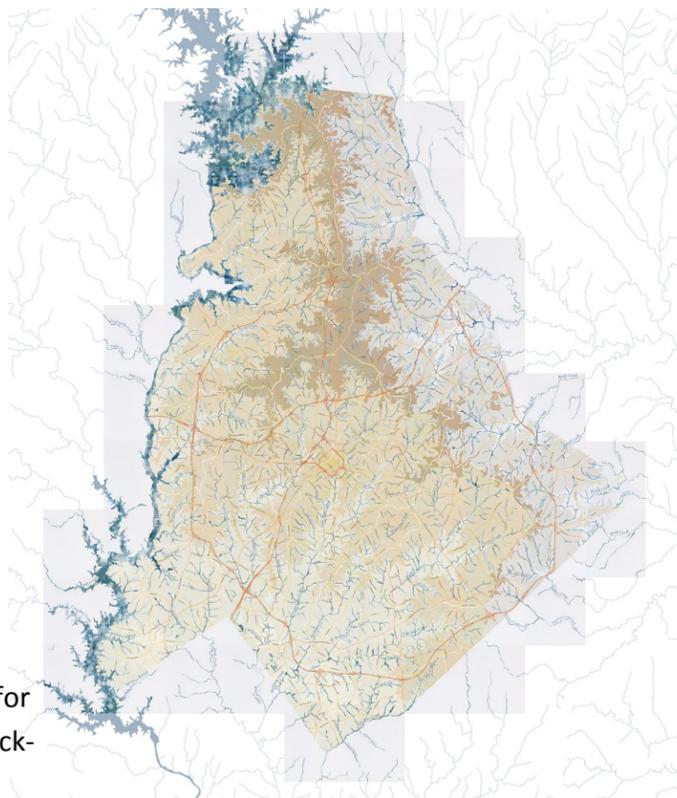


DID YOU KNOW?

- Every Mecklenburg County creek except two starts in Mecklenburg.
- Water stored in the cracks and spaces in soil, sand and rock is called groundwater. It moves, slowly, through the ground and is the water source for wells and springs.
- Nature uses floodplains to deal with heavy rains. A floodplain is the level land near a creek, river or lake that may be submerged by floodwaters.
- In Charlotte, spring water stays a fairly constant 54 degrees Fahrenheit.
- About 1755, Thomas Spratt built a cabin at what's now Caswell and Randolph roads, up a hill from Little Sugar Creek. He and his family were the first known white residents in what became Charlotte.
- Uptown Charlotte was settled along a ridge between two creeks – Little Sugar Creek and Irwin Creek.
- Mecklenburg County creeks are an essential part of the storm drain system. The storm drain system is how rain water is drained off highways, streets and parking lots.
- In Charlotte the storm drains funnel rain water into pipes which send water directly into creeks.
- In 1701 explorer John Lawson walked through what's now uptown Charlotte. He described the area as "... abounding in many pleasant and delightful Rivulets."
- Today, after almost 50 years of anti-pollution laws and government regulations, more fish are living in Little Sugar Creek.
- Who owns the water in the county's creeks? We all do, as citizens of North Carolina. State law says: "... the water and air resources of the State belong to the people."



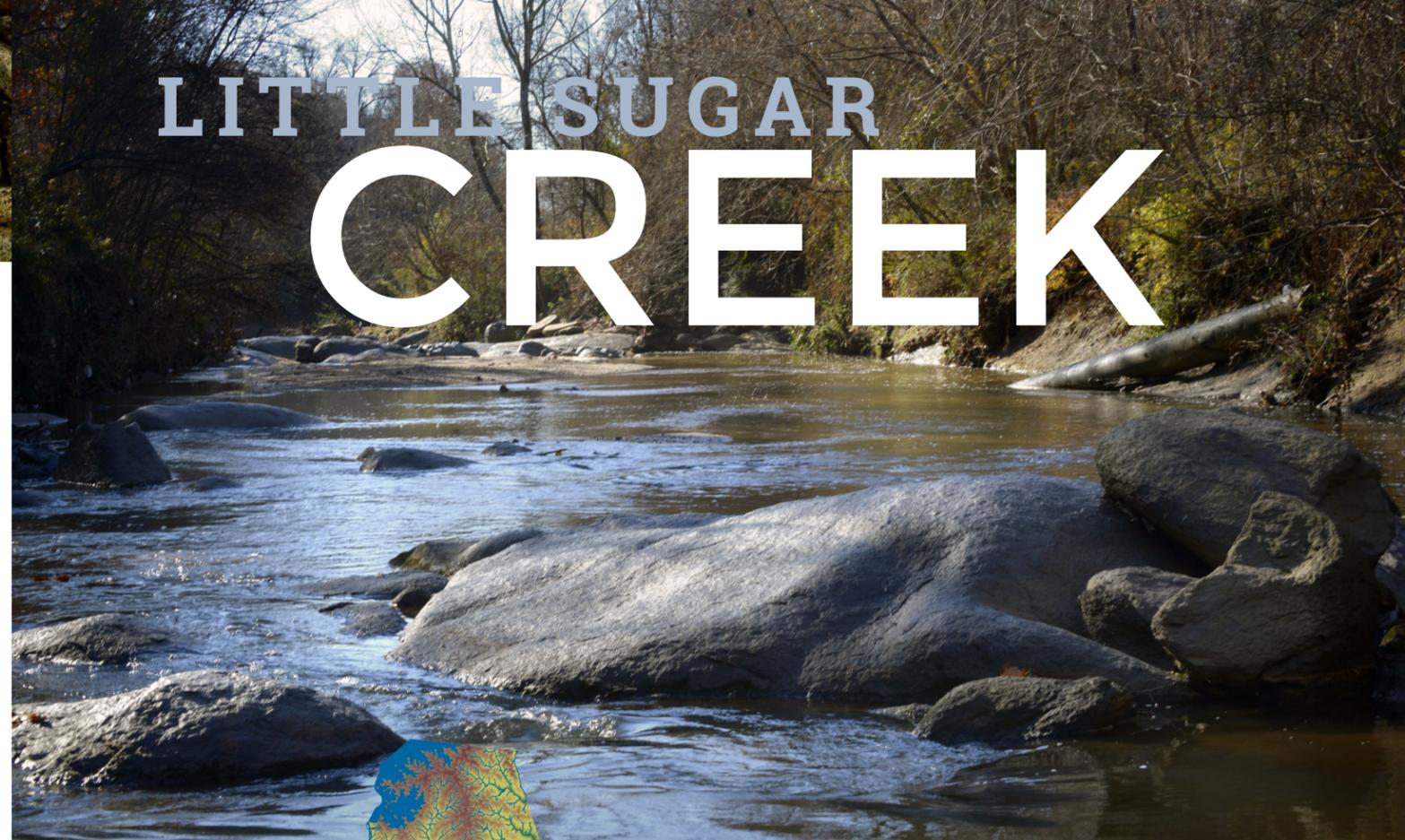
LEARN MORE

Visit KeepingWatch.org and click on "Explore Creeks" for stories, videos, maps and other information about Mecklenburg County's creeks.



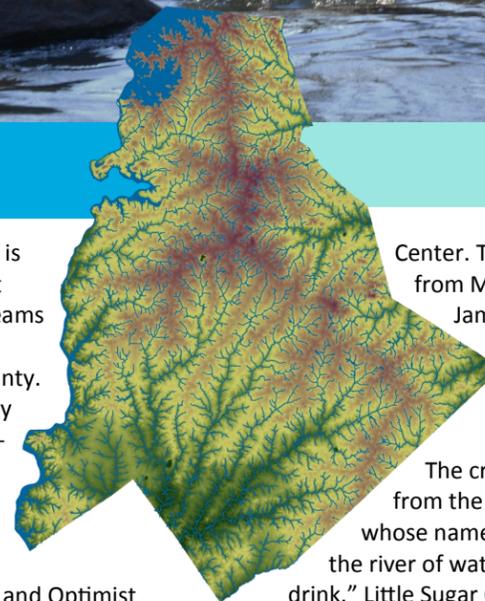
The Autobell® Creek Challenge is funded by Autobell® Car Wash.

LITTLE SUGAR CREEK



Little Sugar Creek is probably the best known of the streams running through Mecklenburg County. It begins in a dingy puddle in the Hidden Valley neighborhood, then flows through NoDa, Villa Heights, Belmont and Optimist Park neighborhoods before it gets to uptown Charlotte. From uptown it flows through Freedom Park and then all the way to Pineville and into South Carolina. Just past the state line Little Sugar Creek flows into a larger stream called Sugar Creek, which flows into the Catawba River.

The watershed for Little Sugar Creek was home to some of Charlotte's earliest European settlers. In 1755 Thomas Spratt built a cabin on a ridge about a half-mile from the creek, near today's Novant Health Presbyterian Medical



Center. The only president from Mecklenburg County, James K. Polk, was born in 1795 in a cabin beside the creek in what's now Pineville. The creek's name comes from the Sugaree Indians, whose name meant "people of the river of water which is unfit to drink." Little Sugar Creek in the past was called Sugar Creek or Sugaw Creek. And its water has been unfit to drink for many years.

Because thousands of people and businesses settled in its watershed for more than two centuries, Little Sugar Creek suffered from years of ill treatment. People used it as a sewer. Businesses piped chemical wastes into the water. People built houses and factories near the creek and put pavement in its **floodplains**. In 1959, a large parking lot was built over the creek for a shopping mall called Charlottetown Mall. Other park-

ing lots nearby also covered the creek with concrete. Because the creek ran through **culverts** and wasn't open to the sky, its aquatic life suffered.

In 1969, a newspaper reporter investigated pollution in the creek and found that the creek was basically dead.

But the creek did not die. Instead, it was helped by the U.S. Clean Water Act of 1972 and by many new anti-pollution regulations adopted later. The act made polluting streams, lakes and rivers harder, especially for **point-source pollution** from factories and sewer plants.

Other regulations were put in place to protect the creeks and make it harder to build in floodplains. Today you have to leave undeveloped spaces, called **buffers**, beside many creeks. The old Charlottetown Mall and its concrete parking lots over Little Sugar Creek were demolished, and a new greenway opened in 2010. That popular greenway lets people walk or bicycle beside the creek, and

they now notice that the creek is there. One day you'll be able to walk beside Little Sugar Creek all the way to South Carolina.

More fish have come back, and there is more aquatic life. Little Sugar Creek is still considered "impaired," though. The problem today is not usually from factories but from streets, parking lots and **storm water runoff**, what's called **nonpoint-source pollution**. Rain water flows off the pavement, bringing **sediment** and pollutants, and it **erodes** the streambed. Other problems include copper, lack of diversity in aquatic insects, lack of diversity in fish species, and **fecal coliform bacteria**. This makes for a bad **habitat** for aquatic life.

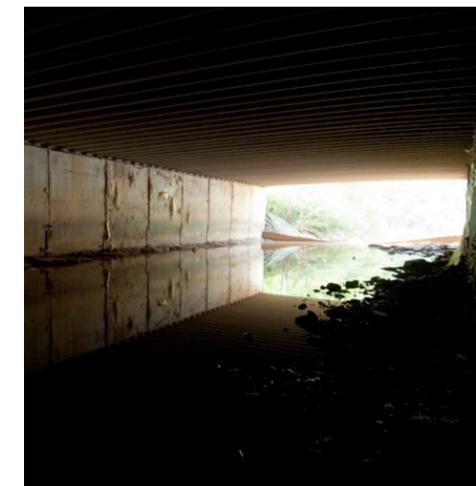
Have the **restoration** projects, buffers and other environmental laws been enough to remove pollution from Little Sugar Creek? Only the future will tell.

Key vocabulary

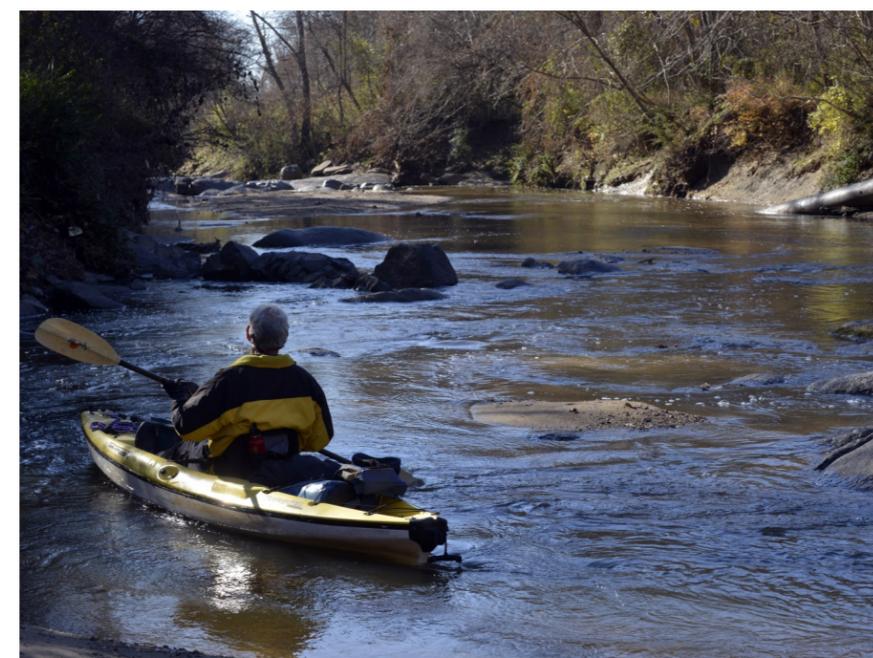
- Buffers** – Naturally vegetated area along a river or stream corridor.
- Culvert** – A tunnel carrying a stream under a street, road or railroad.
- Erode** – To eat into or eat away.
- Fecal coliform** – A bacteria found in the waste of warm-blooded mammals, its presence indicates untreated sewage or droppings from pets or wildlife.
- Floodplain** – Level land near a creek, river or lake that may be submerged by floodwaters.
- Habitat** – Place that is natural for the life and growth of an organism.
- Impaired** – Damaged or weakened.
- Nonpoint-source pollution** – Coming from many different sources, such as runoff.
- Point-source pollution** – Coming from specific sources like factories or sewer treatment plants.
- Restoration** – Act of returning something to its original condition by cleaning or repairing.
- Sediment** – Sand and dirt that settles in the bottom of lakes, rivers and streams.
- Storm drain system** – Designed to drain rain that does not soak into the ground.

What's in the Little Sugar Creek watershed?

- **Landmarks:** Blumenthal Performing Arts Center, Spirit Square, Harvey B. Gantt Center for African-American Arts + Culture, Levine Museum of the New South, ImaginOn, Time Warner Cable Arena, Park Road Shopping Center, Charlotte Nature Museum, Carolina Place Mall, President James K. Polk State Historic Site.
- **Colleges:** Central Piedmont Community College-Central Campus, Queens University of Charlotte.
- **Parks:** Alexander Street Park, Colonial Park, Cordelia Park, Derita Creek Park, Edgehill Park, Freedom Park, First Ward Park, Huntingtowne Farms Park, Independence Park, Latta Park, Little Peoples Park, Marion Diehl Park, Park Road Park, Sugaw Creek Park, Tryon Hills Park.



Part of creek was under concrete until 2007. Photo: Nancy Pierce



A kayaker paddles along Little Sugar Creek in south Charlotte, north of Carolina Place Mall. Photo: Nancy Pierce



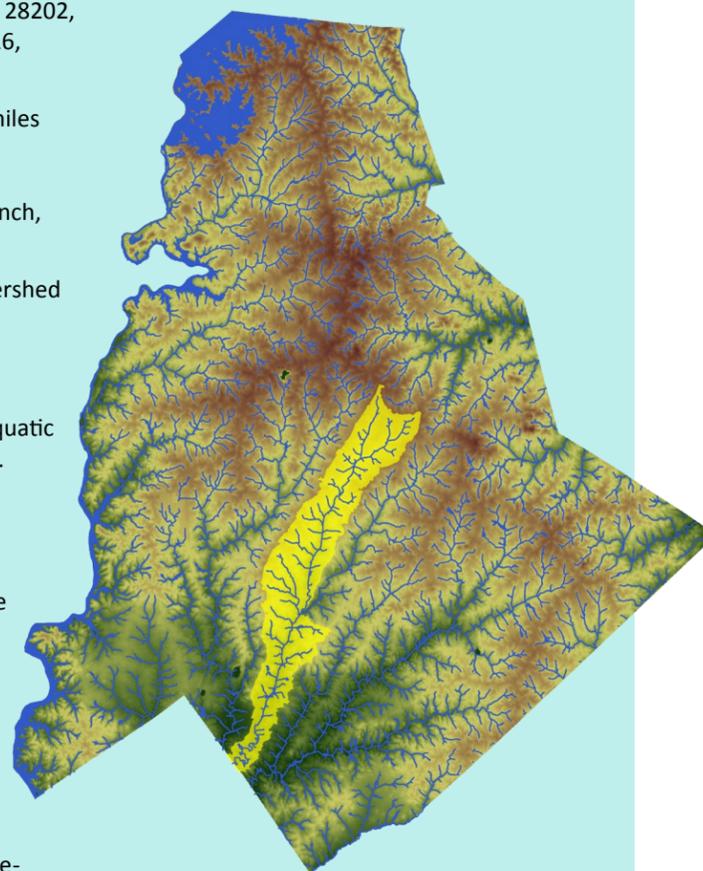
Concrete gone, Little Sugar Creek Greenway today. Photo: Nancy Pierce



Blue heron along Little Sugar Creek. Photo: Nancy Pierce

Profile

- **Location:** northeast to southwest Charlotte, Pineville (zip codes: 28202, 28203, 28204, 28205, 28206, 28207, 28209, 28210, 28213, 28216, 28217, 28269, 28134)
- **Approximate land area in Mecklenburg County:** 29.31 square miles
- **Estimated population in 2010:** 92,375
- **Creeks and tributaries:** Little Sugar Creek, Briar Creek, Dairy Branch, Derita Branch, Little Hope Creek, Little Hope Tributary
- **Drains into:** Sugar Creek (in South Carolina)/Catawba River watershed
- **Miles of perennial streams:** 48.74
- **Impaired streams:** Entire length of Little Sugar Creek
- **Reason for impairment:** Turbidity, copper, lack of diversity of aquatic insects, lack of fish-species diversity, fecal coliform and mercury.
- **Number of buildings in the regulated floodplain:** 529



Fun facts

- Little Sugar Creek is named for the Sugaree Indians, whose name meant "people of the river of water which is unfit to drink."
- Little Sugar Creek along Kings Drive was covered by a concrete parking lot in 1959 for Charlottetown Mall. The concrete cover was torn down in 2007 to create Little Sugar Creek Greenway.
- Little Sugar Creek was very polluted with waste from factories, sewers and litter.
- It smelled so bad in the 20th century that the city dripped orange-blossom-scented perfume into the water to try to hide the stink.



Little Sugar Creek is surrounded by pavement near Sugar Creek Road. Photo: Nancy Pierce



President James K. Polk State Historic Site. Cabin is replica of Polk birthplace.