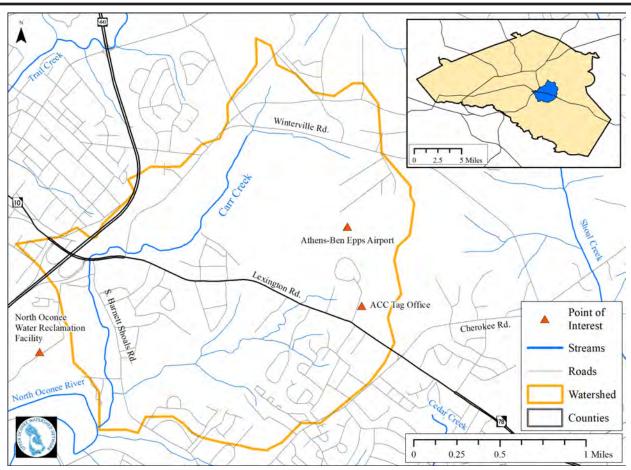


# Where's My Creek? Carr Creek





### Where is Carr Creek?

The Carr Creek watershed is located in east of Athens-Clarke County just outside of Loop 10. The creek is 2.7 miles long with a drainage basin covering 3 square miles. It is roughly bounded by Sping Valley Road to the north, Gaines School Road to the east, South Barnett Shoals to the south and southwest and, Winterville Road to the west.

Carr Creek is heavily impaired by various industrial sites within the watershed. Industrial sites include an out-of-operation fertilizer plant, Hanson Aggregates quarry, the Benn-Epps airport, and concrete plants. The watershed also includes a number of large retail centers and high density residential development. Lexington Road bisects the watershed. Dekle Lake occupies the center of the watershed. The rock guary and fertilizer plant impaired pH values for years; but UOWN has seen improvements in recent years.

# Why Care?

Pollutants from parking lots, roads, and other impervious surfaces surfaces and an extraordinary amount of litter end up in Carr Creek which flows into the North Oconee River. The North Oconee joins the Middle Oconee to form the Oconee River, a primary source of drinking water for many downstream users.

## Watershed Issues!



#### Industrial Sites

Contamination from industrial sites can lead to high conductivity and low pH in Carr Creek. This negatively impacts fish populations and other aquatic communities.



#### Low Dissolved Oxygen and Macroinvertebrates

Carr Creek has low levels of oxygen which makes it hard for aquatic organisms to survive. This, paired with low pH, makes Carr Creek a harsh environment for macroinvertebrates (acquatic insects), fish, and frogs.



#### Buffer Zone Reduction

It is unlawful to remove vegetation within 75 feet of a stream in Athens-Clarke County. Riparian buffers stabilize soil, filter runoff, and slow down rushing water before it enters the stream. Buffers in the Carr Creek watershed have been impacted by development.



#### Impervious Surfaces

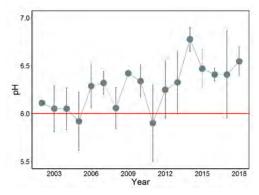
Due to high density development in the watershed, there are large areas of impervious surface where water cannot soak into the ground. This can cause increased flow which leads to erosion of banks and buffers.

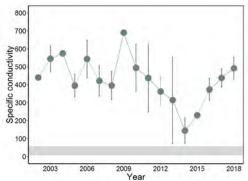


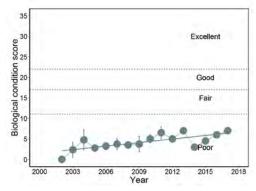
#### **Overloaded with Sediments**

Most of Carr Creek's stream bed is filled with sand and sediments which leads to poor stream health and reduced diversity of aquatic life.

# Water Quality in Carr Creek





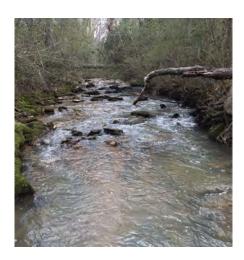


pH is a measure of hydrogen ions in the water. Safe water has a neutral pH (7.0). Low pH indicates acidicity. The red line indicates the level below which the water is considered impaired.

Specific conductivity is a measurement of dissolved solids in water. Regular monitoring helps determine baseline levels. Fluctuations in these levels are an indicator of pollution. The grey shading indicates baseline level of a typical minimially impacted stream in our region.

Biological scores are determined by diversity and abundance of macroinvertebrates (aquatic bugs) in a stream. The macroinvertebrates that are present in a stream can be used to determine stream health. The sloping line is a best fit trend over all samples.

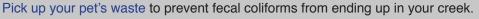
In the graphs above, each point represents the average concentration within a year. The vertical bars indicate the variation in that measurement.



# How You Can Help



Reduce fertilizer application. Contact the UGA Cooperative Extension Office for a soil test kit to determine soil fertility in your lawn or garden.







Plant native vegetation in riparian buffers along stream banks to help remove pollutants and reduce erosion.

Use permeable pavement to allow infiltration of water when it rains.





Disconnect roof downspouts from drainage systems to reduce the amount of concentrated stormwater runoff leaving your property.

Harvest rainwater to reduce runoff and use it to water your plants and garden.





Create rain gardens with plants and sandy soils to drain stormwater and filter nutrients and other pollutants.

Pick up trash from your neighborhood and the stream.



# Become a UOWN member today!

The Upper Oconee Watershed Network is dedicated to protecting water resources and improving stream health in your watershed through community-based advocacy, monitoring, education, and recreation.



Follow Us On Facebook



Follow Us On Twitter @UpperOconee



Go To Our Website www.UOWN.org