Where's My Creek?

North Oconee River



Where is the North Oconee River?

The drainage area of the North Oconee River watershed is 311 square miles, with 94 percent of the upper portion of the watershed located outside of Athens Clarke County to the north. 20 square miles of the watershed is contained within ACC. The North Oconee River flows south through the middle of Athens, including through the downtown area. It borders the eastern edge of the UGA campus, south from River Road.

Land cover in the study area primarily consists of developed land and forest, with about 15 percent impervious cover. Upstream of the Sandy Creek Nature Center, forested wetlands surround the edges of the river.

The river is accessible at North Oconee River Park East, Dudley Park. The ruins of an 18th century dam and mill are just downstream from Dudley Park.



The North Oconee River has the designated use of drinking water from the Jackson County line to Trail Creek, and fishing below Trail Creek. The river does not meet its designated use due to sediment and fecal coliform bacteria throughout the watershed.

Athens withdraws drinking water from the North Oconee River.

Watershed Issues!

Impervious Surfaces

Due to development, there are areas of impervious surface where water cannot soak into the ground. This can cause increased runoff which leads to erosion and sediment buildup in the creek.



Nutrient Pollution The North Oconee has elevated levels of nutrients, specifically nitrogen, which can be caused by overuse of fertilizer, stormwater runoff, and sewage discharges. This can cause algal blooms and deplete oxygen in the water.

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 North Oconee watershed have been impacted by development.

Poo-lution

The North Oconee has high levels of fecal coliforms (poop). This is due to leaking sewer pipes, sewer overflows, and animal waste.

Overloaded with Sediments



Most of the North Oconee river bed is filled with sand and sediments which leads to poor stream health and reduced diversity of aquatic life.

Water Quality in the North Oconee River



Fecal coliform bacteria are an indicator of pollution from human and animal waste. E. coli is a species of coliform bacteria. The horizontal lines show the average concentration during the previous 5 years and the historical average. The dashed red line at 500 cfu demarks threshold for recreational activity (not recommend above). The higher thresold indicates major contamination.

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.

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.

Pick up your pet's waste to prevent fecal coliforms from ending up in your creek.







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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.

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



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.













