

ne Resource

A Publication of the City of North Augusta Stormwater Management Department

Know Your Watershed

A watershed is an area of land to which water drains to a common waterway such as a stream, lake, estuary, wetland, river, or even ocean. Watersheds come in all shapes and sizes. They cross local, state and national boundaries. No matter where you are, you're in a watershed!

Watersheds are made up networks of different types of conveyances for water. Each watershed is made up of drainage basins that contain perennial, intermittent and ephemeral streams that lead to the main branch. Perennial streams are identified by well defined banks and natural channels that have continuously flowing water year round. Intermittent streams also have well defined banks and natural channels that typically have flowing water from a headwater source for only a portion of the year. Ephemeral streams do not have well defined channels and flow only in response to rainfall.

Below is a map of the drainage basins in North Augusta. All of North Augusta's drainage basins are part of the larger Middle Savannah watershed and have the same outlet, the Savannah River.

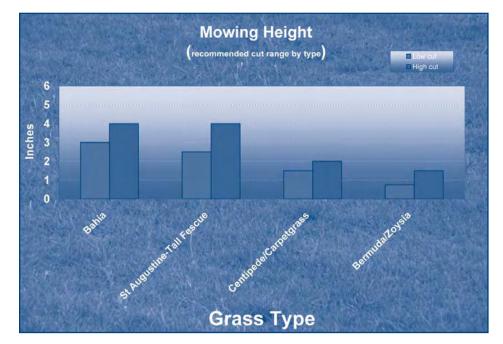
To learn more about watersheds, visit the South Carolina Department of Health and Environmental Control website at www.scdhec.com/water/shed/home.html.



Is Your Yard "Water Efficient"?

The sounds of summer are all around us. These sounds commonly include the buzz of lawn mowers and the swish of sprinklers. Before you crank up your mower or turn on your sprinkler this summer, consider the following water usage and conservation tips. You'll save time, conserve water and have a healthier lawn and garden!

- Grass Height Keep your lawn at the tallest recommended mowing height.
 Taller grass has deeper and stronger root systems, making it more drought resistant and pest tolerant.
- Sun versus Shade A lawn with full sun requires more water. Plant shrubs and trees to provide additional shade. The shade will decrease the amount of water required to maintain the lawn and the additional foliage will help to create a habitat for wildlife.
- Direct downspouts and gutters to drain onto lawns or flower beds.
- Mulch flower beds to a depth of three inches.
- Add a "rain-sensor shut-off device" to sprinkler systems to prevent the system from wasting water during or after a rainfall.



- Design or modify sprinkler systems to water lawn areas separately from plant beds that require less water. Flower beds with a drip or micro spray irrigation system are more efficient.
- Make and use rain barrels to collect stormwater for use in flower beds.

The Carolina Yardstick Workbook produced by the Clemson Extension Service

for their Carolina Yards and Neighborhoods program offers more information on designing water efficient yards. The workbook is available free of charge at www.clemson.edu/cyn. Additional information about specific plants or practices for landscaping can be found at Clemson's Home and Garden information center at http://hgic.clemson.edu.

East Indian Holly Fern

Unique to North Augusta

The East Indian holly fern, *Arachniodes* simplicior 'Variegata' is found growing wild in only one area of the United States - North Augusta. The fern was discovered growing here by local botanist, Dr. Judith Gordon, in 1981. Through aging techniques, Dr. Gordon determined that the plant had been growing in this area for approximately twenty-five years when she discovered it.

The East Indian holly fern is a native of Asia and China. These "introduced" populations most likely established from locally cultivated plants purchased for a garden. The plant grows along the stream banks that empty to the Savannah River. Although the fern is not currently a threat to native plant species, it underscores the importance of planting native species to prevent non-native populations from pushing out our own native plants.



Learn more about this interesting nonnative fern in the 1981 article "Arachniodes simplicior new to South Carolina and the United States," by Judith Gordon in American Fern Journal (71:65-68) or visit www.efloras.org.

What Are Native Versus Non-native Plant Species?

Native plants are those species that either arrived in our area without human intervention, perhaps thousands of years ago, or originated here. Non-native species were brought intentionally, or came accidentally in ships' ballasts, crop seed or in soil. Many non-native plants become naturalized in wetlands, lakes, woods, fields or roadsides.

One long-term effect of invasive nonnative species is to degrade habitat for native plants and animals. These plants can choke out native vegetation, diminish the availability of food plants normally sought by wildlife, and alter the behavior of native animals such as pollinators, plant-eating insects and fruit-eating birds. Unchecked, invasion by non-native plants could drive some species to extinction. This is why non native plants are a major concern to people who want to protect native species and natural areas. Visit the Native Plant Network for more information at www.wildflower2.org/index.html.

New Educational Kiosk in Walnut Lane Neighborhood Park



The City of North Augusta recently erected an educational kiosk at the Walnut Lane Neighborhood Park. The information posted at the kiosk will pertain to the environment, stormwater management, and the animals and plants located in the Carolina Bay located within the park.

In addition to learning from the information posted at the kiosk, visitors can share their knowledge by emailing information about their sightings of birds, mammals or reptiles at the park to *stormwater@northaugusta.net*. The information submitted will then be posted on the stormwater management web pages at *www.northaugusta.net* and at the kiosk.

More in-depth information about certain water-dependent species will also be posted. In the future, stormwater fact sheets and additional helpful links will be included on the site for teachers and students.

What is a Carolina Bay?

Carolina Bays are shallow oval shaped depressions that are sometimes wet and sometimes dry. They vary in size from one to thousands of acres. Scientists estimate there are between 10,000 - 20,000 Carolina Bays along the eastern Coastal Plain. Scientists aren't sure how Carolina Bays formed. Some say they are due to meteor showers while others attribute them to ocean currents or sinkholes. Undisturbed Carolina Bays are reported to have the greatest diversity of species compared to other wetlands.

The City of North Augusta wants to preserve the remaining part of the Carolina Bay at Walnut Lane Neighborhood Park for all its resident creatures and the public. Visitors to the park can help by staying on the walking path, keeping litter and yard waste out of the bay, and respecting the wildlife that call it home.





For additional information contact:

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