

City of Chattanooga Water Quality Program



- To report illicit discharges (water pollution) call (423) 643-6311
- Visit our website www.chattanooga.gov /waterquality

**Public Works Administrator** Justin Holland

**Assistant City Engineer** Jim Luebbering

**Water Quality Manager** Mounir Minkara

> **Water Quality Supervisors** Don Green Rebecca Robinson

**Public Information Specialist** 

Kimberly Strong

1250 Market Street **Suite 2100** Chattanooga, TN 37402 ChattanoogaWQ@chattan ooga.gov

Phone: 423-643-5877 Fax: 423-643-5862

Welcome to the South Chickamauga Creek Watershed

#### What is a Watershed?

A watershed is an area of land that water flows across on its way a particular body of water such as a pond, stream, river or ocean. In Chattanooga, all of the watersheds drain to the Tennessee River.

#### Watersheds:

- Collect and move rain water from a higher elevation to a lower one.
- Transport pollutants such as oil, grease, trash and dirt by way of rain through the watershed to the receiving water body.

We all live in a watershed. The City of Chattanooga consists of 9 unique watersheds: Chattanooga Creek, Citico Creek, Combined Sewer Area, Lookout Creek, Mountain Creek, North Chickamauga Creek, South Chickamauga Creek, Tennessee River, and Wolftever Creek.

# A Watershed Rainfal Groundwater

### Where am I?

The South Chickamauga Creek has its origins in Georgia eventually emptying into the Nickajack Lake portion of the Tennessee River in Chattanooga. It is divided into three sub-watersheds: South Chickamauga Creek, Friar Branch, and Mackey Branch. This area is comprised of 31,415 acres;

making it the largest watershed in Chattanooga!

# **Chattanooga's Watersheds** Friar Branch South Chickamauga Creek Mackey Branch Mountain Creek Lookout Creek South Chickamauga Creek Chattanooga Creek North Chickamauga Creek Combined Sewer Area

# **South Chickamauga Creek** Watershed Facts:

- This watershed is the same size as the City of Anaheim. California: and can hold over 890,000 football fields!
- The South Chickamauga Greenway will eventually connect the River walk to Camp Jordan.
- With 1 inch of rain, nearly 853,051,886 gallons of water discharge into the Tennessee River equaling 17,061,038 baths!

Wow-that's a

lot of water



# Water Quality Issues in the South Chickamauga Watershed

- Habitat Loss
- Pathogens
- Urban influences (i.e. trash, pet waste, grass clipping, motor oil, and gasoline)



What is the City doing to manage the water quality issues in the South Chickamauga Creek Watershed?

### Stream Restoration -

The City in cooperation with the Tennessee Stream Mitigation Program, restored over 6,000 ft of Friar Branch from a concrete channel to a more natural stream channel. Restoring the channel improves the water quality, habitat condition, and ecological function.

## Monitoring -

- A continuous field screening program is being used to detect illicit discharges and improper disposals into the stormwater system. Field screening involves testing chemical characteristics such as temperature, pH, conductivity, dissolved oxygen, phosphates, chlorine, detergents, phenol, copper, ammonia, and hydrogen sulfide. There are 204 field screening sites within the South Chickamauga Creek Watershed.
- The City also designed the Stream Corridor Evaluation (SCORE) program to provide a comprehensive and
  consistent approach to identify and evaluate stream channel stability, sediment loading, and in-stream habitat. In
  doing so, the Water Quality staff surveys all of the waterways within the City including the 59 miles of stream in the
  South Chickamauga Creek Watershed.

# Pathogen Reduction -

The Water Quality Program has partnered with Moccasin Bend Waste Water Treatment Authority and implemented a Sanitary Lateral Assessment Program (SLAP) to identify breaks in the sanitary sewer lines in an effort to eliminate potential sources of pathogens from contaminating our waterways. A sewer lateral is the pipe that carries the wastewater from the house to the sanitary sewer main line in the street. The sewer laterals are inspected by putting smoke in a public sewer main and observing if the smoke is escaping from the ground; indicating a comprised sewer

# What can I do to improve water quality in the South Chickamauga Creek Watershed?

- Maintain vehicles to reduce the discharge of oil and other motor fluids to the watershed.
- Wash cars in grassy areas to prevent runoff of washing chemicals into the storm drains.
- Do not discard your used motor oil, leaves, paint, or anything else into storm drains.
- To avoid blockages in your sanitary service line, pour grease and/or cooking oil in closed containers to be disposed of in your trash cans instead of in the sink.
- Pick-up after your pet to reduce pathogens in the watershed.
- Dispose of your grass clippings/wood debris through compositing or the brush pick-up service offered by the City.
- Use mulch to control weeds instead of pesticides.



### **Additional Resources:**

TN Department of Environment & Conservation (TDEC): <a href="www.state.tn.us/environment/wpc/">www.state.tn.us/environment/wpc/</a>
Environmental Protection Agency (EPA): <a href="www.epa.gov/owow/watershed/">www.epa.gov/owow/watershed/</a>
Center for Watershed Protection: <a href="http://www.cwp.org/">http://www.cwp.org/</a>

