

City of Chattanooga Water Quality Program



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

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# Welcome to the Chattanooga Creek Watershed

# What is a Watershed?

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

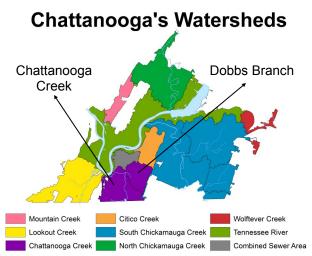
Watersheds:

- Collect and move rain water from a higher elevation to a lower one.
- Can potentially transport pollutants such as oil, grease, trash and dirt by way of stormwater runoff 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.

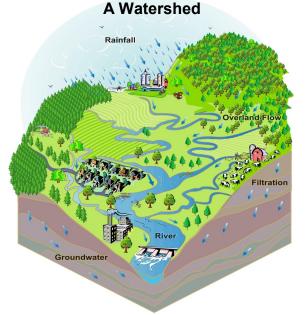
### Where am I?

At one time the Chattanooga Creek Watershed, consisting of Alton Park, Piney Woods, St. Elmo, and South Chattanooga, was considered part of the "*Dynamo of Dixie.*" The Chattanooga Creek Watershed is divided into two sub-watersheds: Dobbs Branch and Chattanooga Creek.



## Chattanooga Creek Watershed Facts:

- Chattanooga Creek extends over 7<sup>1</sup>/<sub>2</sub> miles from N. Georgia to South Chattanooga.
- The watershed drains approximately 8,323 acres of south Chattanooga.
- With a 1 inch rain, nearly 226,005,120 gallons of water discharge into the Tennessee River equaling 4,520,102.4 baths.





# Water Quality Issues in the Chattanooga Creek 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 Chattanooga Creek Watershed?

# 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 57 field screening sites within the Chattanooga 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 18.8 miles of stream in the Chattanooga Creek Watershed.
- The macroinvertebrates (stonefly nymphs, caddisfly larvae, dragonfly larvae, etc.) that inhabit a stream can be used as water quality indicators. The City has designated a benthic sampling point within the Dobbs Branch section of Chattanooga Creek which is sampled two times per year.

# 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 wasterwater 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 lateral.



# What can I do to improve water quality in the Chattanooga 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): <u>www.state.tn.us/environment/wpc/</u> Environmental Protection Agency (EPA): <u>www.epa.gov/owow/watershed/</u> Center for Watershed Protection: <u>http://www.cwp.org/</u>

