

Roseberry Creek Watershed



The Lower End of Roseberry Creek

The 13 square mile Roseberry Creek Watershed is nestled between the Beaver Creek and Flat Creek Watersheds in northeast Knox County. Roseberry Creek originates in the Corryton Community and winds its way through 19.92 miles of pasture and pockets of rural residential land to its confluence with the Holston River.

The few commercial enterprises in the Roseberry Creek Watershed are mostly concentrated along the portion of Rutledge Pike that crosses the lower section of the watershed. Agriculture is the predominant land use encompassing 4,400 acres of the 8,400 acres in the watershed. Part of House Mountain State Park is in the eastern portion of the watershed. The balance of the land is predominately rural residential with a few subdivisions clustered along Washington Pike. Emory road traverses the headwaters of the watershed.

Roseberry Creek is listed as impaired for *E. coli* by the Tennessee Department of Environment and Conservation (TDEC). This means that the bacteria *E. coli* is above levels considered safe for human contact. Exposure to high levels of this bacteria may cause illness. TDEC has determined that the elevated *E. coli* levels result from failing septic systems and poor pasture on agricultural land. Runoff from these sources carry the bacteria to the creek. KUB has limited sewer service in this watershed. This means that the majority of dwellings are on septic systems. East Knox Utility supplies drinking water to most of the watershed.



Watering system and fencing on farm

The Knox County Soil Conservation District (Knox Co. SCD) and the Natural Resource Conservation Service (NRCS) have worked with several farmers in the watershed providing cost share funds to put Best Management Practices (BMPs) on agricultural properties in the watershed. These practices have helped improve pasture and reduce runoff containing *E. coli* to Roseberry Creek.

In addition, Several Years ago the Tennessee Stream Mitigation Program (TSMP) restored 2,385 feet of three tributaries to Roseberry Creek in the Stonewood Creek subdivision off Bud Hawkins Road. Buffers (streamside vegetation) were an important part of this restoration. Root systems from trees, shrubs, and grasses, not only hold streambanks in place and provide shade for fish, but act as filters for harmful bacteria like *E. coli*.

Installing improvements such as the ones mentioned above have helped. According to TDEC monitoring results, *E. coli* levels in Roseberry Creek were reduced substantially between 2008 and 2013. However, *E. coli* levels are still over twice the amount recommended for public health and safety.



Stonewood Creek TSMP Restoration

Help is on the way. Knox County Stormwater Management was recently notified that the Tennessee Department of Agriculture has awarded Knox County \$144,000 from its 319(h) clean water grant program to help pay the costs of fixing homeowner's failed septic systems and putting improvements on farm properties. This grant will be in place by spring of 2017.

Stay tuned for details!