

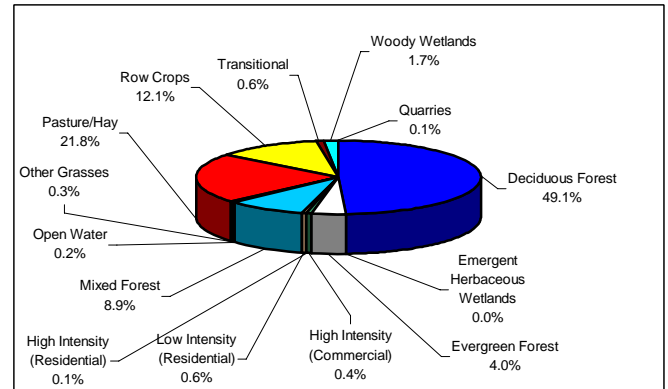
# Summary – Lower Tennessee River Watershed (06020001)

In 1996, the Tennessee Department of Environment and Conservation Division of Water Pollution Control adopted a watershed approach to water quality. This approach is based on the idea that many water quality problems, like the accumulation of point and nonpoint pollutants, are best addressed at the watershed level. Focusing on the whole watershed helps reach the best balance among efforts to control point sources of pollution and polluted runoff as well as protect drinking water sources and sensitive natural resources such as wetlands. Tennessee has chosen to use the USGS 8-digit Hydrologic Unit Code (HUC-8) as the organizing unit.

The Watershed Approach recognizes awareness that restoring and maintaining our waters requires crossing traditional barriers (point vs. nonpoint sources of pollution) when designing solutions. These solutions increasingly rely on participation by both public and private sectors, where citizens, elected officials, and technical personnel all have opportunities to participate. The Watershed Approach provides the framework for a watershed-based and community-based approach to address water quality problems.

Chapter 1 of the Lower Tennessee River Watershed Water Quality Management Plan discusses the Watershed Approach and emphasizes that the Watershed Approach is not a regulatory program or an EPA mandate; rather it is a decision-making process that reflects a common strategy for information collection and analysis as well as a common understanding of the roles, priorities, and responsibilities of all stakeholders within a watershed. Traditional activities like permitting, planning and monitoring are also coordinated in the Watershed Approach.

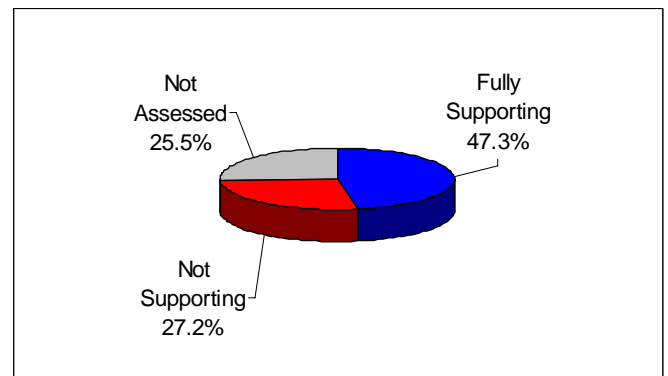
A detailed description of the watershed can be found in Chapter 2. The Lower Tennessee River Watershed is approximately 1,870 square miles (1,201 mi<sup>2</sup> in Tennessee; 457 mi<sup>2</sup> in the Group 4 portion) and the Group 4 portion includes parts of four Tennessee counties. A part of the Tennessee River drainage basin, the Group 4 portion of the watershed has 482.6 stream miles and 10,380 lake acres.



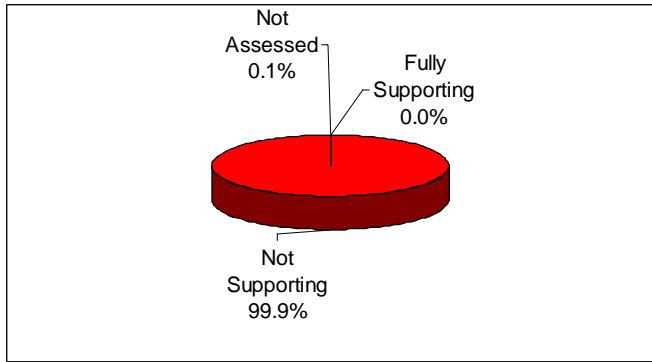
*Land Use Distribution in the Tennessee Portion of the Group 4 Portion of the Lower Tennessee River Watershed.*

One national military park, three designated state natural areas, one state forest, one state park, and two wildlife management areas are located in the watershed. One hundred eleven rare plant and animal species have been documented in the watershed, including six rare fish species, eight rare mussel species, five rare amphibian species, one rare snail species, and three rare crustacean species. A Portion of one stream in the Lower Tennessee River Watershed is listed in the National Rivers Inventory as having one or more outstanding natural or cultural values.

A review of water quality sampling and assessment is presented in Chapter 3. Using the Watershed Approach to Water Quality, 215 sampling events occurred in the Group 4 portion of the Lower Tennessee River Watershed in 2000-2005. These were conducted at ambient, ecoregion or watershed monitoring sites. Monitoring results support the conclusion that 47.3% of stream miles assessed fully support one or more designated uses.



*Water Quality Assessment of Streams and Rivers in the Tennessee portion of the Group 4 Portion of the Lower Tennessee River Watershed. Assessment data are based on the 2004 Water Quality Assessment of 482.6 stream miles in the watershed.*



*Water Quality Assessment of Lakes in the Tennessee Portion of the Group 4 Portion of the Lower Tennessee River Watershed. Assessment data are based on the 2004 Water Quality Assessment of 10,380 lake acres in the watershed.*

Also in Chapter 3, a series of maps illustrate overall use support in the watershed, as well as use support for the individual uses of Fish and Aquatic Life Support, Recreation, Irrigation, and Livestock Watering and Wildlife. Another series of maps illustrate streams that are listed for impairment by specific causes (siltation/habitat alteration, E. coli, pH).

Point and Nonpoint Sources are addressed in Chapter 4. Chapter 4 is organized by HUC-12 subwatersheds. Maps illustrating the locations of STORET monitoring sites and stream gauging stations are also presented in each subwatershed.

HUC-10	HUC-12
0602000105	060200010501 (Tennessee River)
	060200010502 (Tennessee River)
	060200010503 (Chattanooga Creek)
	060200010504 (Lookout Creek)
	060200010505 (Suck Creek)
	060200010506 (Tennessee River)
	060200010507 (Tennessee River)
0602000107	060200010701 (Upper N. Chickamauga Ck)
	060200010702 (Lower N. Chickamauga Ck)
0602000108	060200010801 (East Chickamauga Creek)
	060200010802 (Little Chickamauga Creek)
	060200010803 (West Chickamauga Creek)
	060200010804 (South Chickamauga Creek)

*The Group 4 Portion of the Lower Tennessee River Watershed is Composed of thirteen USGS-Delineated Subwatersheds (12-Digit Subwatersheds).*

Point source contributions to the Group 4 portion of the Tennessee portion of the Lower Tennessee River Watershed consist of 24 individual NPDES-permitted facilities, sixteen of which discharge into streams that have been listed on the 2004 303(d) list. Other point source permits in the watershed (as of October 9, 2007) are Tennessee Multi-Sector Permits (166), Aquatic Resource Alteration Permits (27), Ready Mix Concrete Plant Permits (7), Mining Permits (6), Water Treatment Plant Permits (1), and Aquatic Herbicide Application Permits (1). Agricultural operations include cattle, chicken, hog, and sheep farming. Maps illustrating the locations of permit sites and tables summarizing livestock practices are presented in each subwatershed.

Chapter 5 is entitled *Water Quality Partnerships in the Lower Tennessee River Watershed* and highlights partnerships between agencies and between agencies and landowners that are essential to success. Programs of federal agencies (Natural Resources Conservation Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Army Corps of Engineers, and Tennessee Valley Authority), and state agencies (TDEC/State Revolving Fund, TDEC Division of Water Supply, Tennessee Department of Agriculture, and Georgia Department of Natural Resources/Environmental Protection Division) are summarized. Local initiatives of organizations active in the watershed (North Chickamauga Creek Conservancy, The Nature Conservancy, and Southeast Tennessee RC&D Council) are also described.

Point and Nonpoint source approaches to water quality problems in the Group 4 portion of the Lower Tennessee River Watershed are addressed in Chapter 6. Chapter 6 also includes comments received during public meetings, links to EPA-approved TMDLs in the watershed, and an assessment of needs for the watershed.

The full Group 4 portion of the Lower Tennessee River Watershed Water Quality Management Plan can be found at: <http://www.state.tn.us/environment/wpc/watershed/wsmplans/>