

Summary – Guntersville Lake Watershed (06030001)

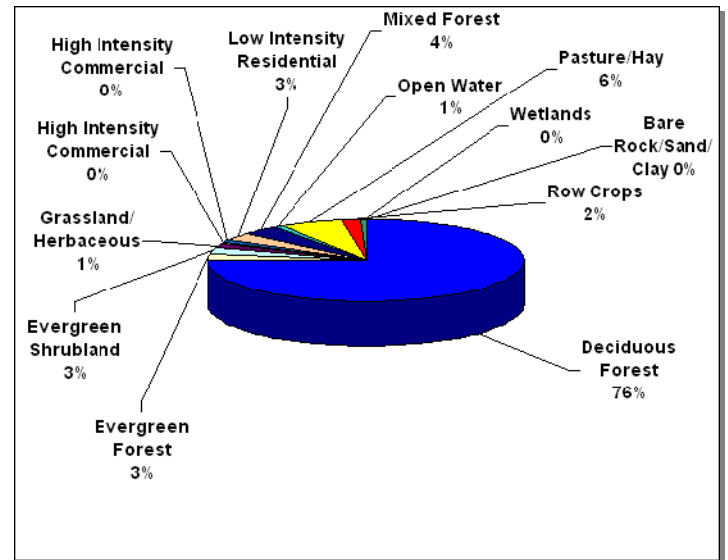
In 1996, the Tennessee Department of Environment and Conservation Division of Water Pollution Control adopted a watershed approach to water quality. This approach is based on the idea that many water quality problems, like the accumulation of point and nonpoint pollutants, are best addressed at the watershed 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 Guntersville Lake 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.

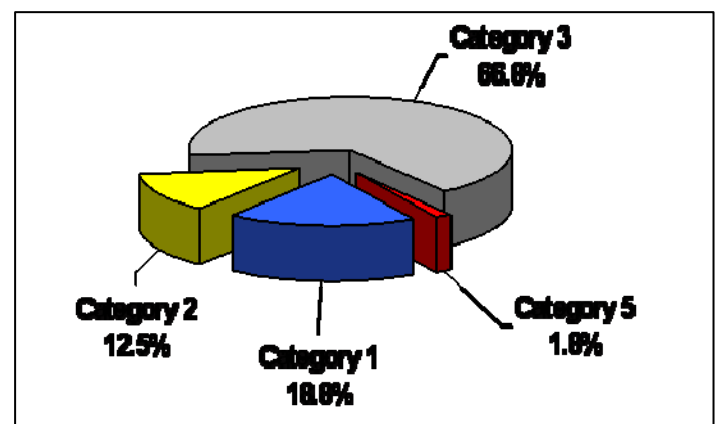
A detailed description of the watershed can be found in Chapter 2. The Guntersville Lake Watershed is approximately 1,983 square miles (337 mi² in Tennessee) and includes parts of three Tennessee counties. A part of the Tennessee River drainage basin, the watershed has 424.3 stream miles and 1,479 lake acres in the Tennessee portion of the watershed.

Two wildlife management areas, three Designated State Natural Areas, one state park, one state forest, and two streams listed in the National Rivers Inventory are located in the watershed. Sixty-eight rare plant and animal species have been documented in the watershed, including one rare mussel species and one rare crustacean species.



Land Use Distribution in the Tennessee Portion of the Guntersville Lake Watershed.

A review of water quality sampling and assessment is presented in Chapter 3. Using the Watershed Approach to Water Quality, 241 sampling events occurred in the Guntersville Lake Watershed in 2000-2005. These were conducted at ambient, ecoregion or watershed monitoring sites. Monitoring results support the conclusion that 94.4% of stream miles assessed fully support one or more designated uses.



Water Quality Assessment of Streams and Rivers in the Tennessee Portion of the Guntersville Lake Watershed. Assessment data are based on the 2006 Water Quality Assessment of 424.3 stream miles in the Tennessee portion of the watershed.

Also in Chapter 3, a series of maps illustrates 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. An additional map illustrates streams that are listed for impairment by specific causes (E. coli). Point and Nonpoint Sources are addressed in Chapter 4 which 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-8	HUC-10	HUC-12
06030001	060300101	06030010101 Tennessee River
		06030010103 Dry Creek
	060300102	06030010201 Battle Creek, Upper
		06030010202 Big Fiery Gizzard Creek
		06030010203 Battle Creek, Lower
		06030010204 Sweden Cove
	060300105	06030010501 Crow Creek, Lower
		06030010502 Crow Creek, Upper
		06030010503 Little Crow Creek
	060300106	06030010601 Little Coon Creek
		06030010602 Big Coon Creek

The Tennessee Portion of the Guntersville Lake Watershed is Composed of eleven USGS-Delineated Subwatersheds (12-Digit Subwatersheds).

Point source contributions to the Tennessee Portion of the Guntersville Lake Watershed consist of 5 individual NPDES-permitted facilities. Other permits in the watershed (as of October 20, 2008) are Mining Permits (8), Aquatic Resource Alteration Permits (3), Tennessee Multi-Sector Permits (17), Construction General Permits (2), Water Treatment Plant Permits (1), CAFO Permits (1), and Ready Mix Concrete Plant Permits (2). 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 Guntersville Lake 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, and Tennessee Valley Authority) and state agencies (TDEC/State Revolving Fund, TDEC Division of Water Supply, Tennessee Department of Agriculture, Tennessee Wildlife Resources Agency, and Alabama Department of Environmental Management). Local initiatives of organizations active in the watershed (Southeast Tennessee RC&D Council, Alabama Wildlife Federation) are also described.

Point and Nonpoint source approaches to water quality problems in the Guntersville Lake 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 Guntersville Lake Watershed Water Quality Management Plan can be found at:

<http://www.state.tn.us/environment/wpc/watershed/wsm/plans/>