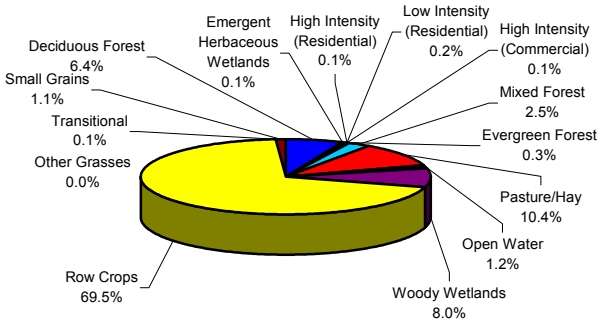
Summary – Forked Deer River

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 Forked Deer 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.

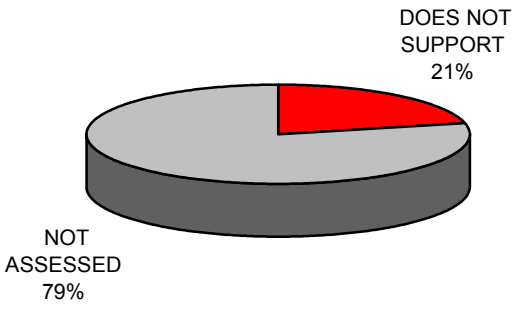
A detailed description of the watershed can be found in Chapter 2. The Forked Deer River Watershed is approximately 72 square miles and includes parts of two West Tennessee counties. A part of the Mississippi River drainage basin, the watershed has 55 stream miles.



Land Use in the Forked Deer River Watershed is based on MRLC Satellite Imagery.

Two rare plant and animal species have been documented in the watershed, including one rare fish species and one rare bird species.

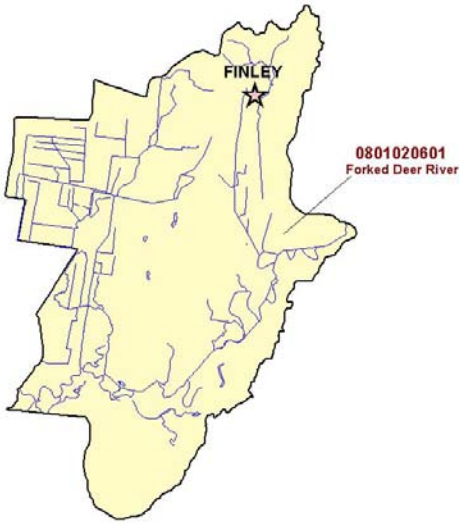
A review of water quality sampling and assessment is presented in Chapter 3. The Forked Deer River Watershed is relatively small in size and thus using the Watershed Approach to Water Quality, only 1 ambient monitoring site was utilized. Monitoring results support the conclusion that the 21% of total stream miles (based on RF3) assessed do not support designated uses.



Water Quality Assessment in the Forked Deer River Watershed is Based on the 1998 303(d) List.

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 (pollutants) such as Pathogens, Habitat Alteration and Siltation.

Point and Nonpoint Sources are addressed in Chapter 4, which is organized by HUC-10 subwatersheds. This watershed is comprised of only one HUC 10 subwatershed. Maps illustrating the locations of STORET monitoring sites and USGS stream gauging stations are presented for the subwatershed.



HUC-10 Subwatershed in the Forked Deer River Watershed.

Point source contributions to the Forked Deer River Watershed consist of one Mining Permit. Agricultural operations include cattle, chicken and hog farming. A maps illustrating the locations of the NPDES permit site is presented in the subwatershed.

Chapter 5 is entitled *Water Quality Partnerships in the Forked Deer 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. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Geological Survey), and state agencies (TDEC Division of Community Assistance, TDEC Division of Water Supply, West Tennessee River Basin Authority and Tennessee Department of Agriculture) are summarized.

Point and Nonpoint source approaches to water quality problems in the Forked Deer River Watershed are addressed in Chapter 6. Chapter 6 also includes comments received during public meetings, along with an assessment of needs for the watershed.

The full Forked Deer River Watershed Water Quality Management Plan can be found at: http://www.state.tn.us/environment/wpc/watershed/wsmplans/.