

The Fletcher Creek Watershed is a major tributary of the Wolf River. Cities located within the watershed include portions of Lakeland, Bartlett, Memphis as well as unincorporated Shelby County. Lakeland's portion is located between Interstate 40, US 64, and Davies Plantation Road. Starting near I-40, it passes under Fletcher Trace Parkway and US 64. From here it enters Memphis and passes under Germantown Parkway, Interstate 40, Sycamore View Road, and US 70 (Summer Avenue). It empties into the Wolf River near Summer Avenue and is a part of the Wolf River Watershed.

The watershed encompasses nearly 20,700 acres (390 of which are in Lakeland city limits). Of the 390 acres located within Lakeland, 48% consists of residential subdivisions, while the rest is comprised of retail businesses, part of Stonebridge Golf Course, and undeveloped land. The subdivisions/areas that are a part of this watershed include: Stonebridge (phases 1-3, part of phase 5), Kimberly Trace, Champion Hills Apartments, Fletcher Trace Townhomes, Fairway Village Condominiums, Plantation Fairways, and Club Walk. The watershed experiences nearly 55 inches of rainfall each year. The surface and subsurface geologic formations consists of clay, silt, sand, chalk, gravel and lignite.

The City of Lakeland has been actively working on addressing the impairment issues that are reported by the Environmental Protection Agency (EPA). The Tennessee Department of Environment and Conservation have issued impairments for the Watershed. This impairment rating can be found in the EPA 303(d) listing. A copy of the impairments is provided in the table below.

Issues of Impairment with Oliver Creek Watershed

Impairment	Consequence of Impairment	Source of Impairment
Phosphorus Level	<ul style="list-style-type: none"> • Excessive growth of algae, which, over time, can use up oxygen levels negatively affecting the health and life span of fish and other aquatic animals. • Affects quality of drinking water 	<ul style="list-style-type: none"> • Wastewater and Septic System discharge • Detergents and Fertilizers • Animal waste • developments/paved surfaces • Industrial discharge • Synthetic materials
E-Coli (fecal coliform) Level	<ul style="list-style-type: none"> • Affects quality of drinking water • Contains harmful bacteria for humans that has the potential to lead to death 	Feces of warm blooded animals
Sediment/Siltation Level	<ul style="list-style-type: none"> • Reduces water storage capacity which can limit drinking water over time • Increased transportation of nutrients, such as phosphorous, into the water • Degrades the appearance of the creek • Degrades habitat for wildlife • Affects quality of drinking water 	<ul style="list-style-type: none"> • Sediment from surrounding erosion: <ul style="list-style-type: none"> ○ Construction sites ○ Paving ○ Inadequate agricultural practices
Physical Substrate Habitat Alterations	<ul style="list-style-type: none"> • Limited habitat such as aquatic plants, natural rock/gravel, etc. for wildlife. 	<ul style="list-style-type: none"> • Channelization
Low Dissolved Oxygen Content	<ul style="list-style-type: none"> • Limited oxygen for aquatic wildlife 	<ul style="list-style-type: none"> •

Fletcher Creek is also impaired for low levels of arsenic but this is within the Memphis portion and not within Lakeland.