

The Clear Creek Watershed (also called Cypress Creek) is located in Western Fayette and Eastern Shelby County. Roughly the eastern 1/3 of Lakeland is drained by the waterway. Cypress Creek starts in Oakland and runs west into Shelby County before merging with Hall Creek north of I-40 (along the Arlington/Lakeland border) and becoming Clear Creek. It empties into the Loosahatchie River and is a part of the Loosahatchie River Watershed.

The watershed encompasses about 41,200 acres (4900 of which are in Lakeland city limits). Of the 4900 acres located within Lakeland, 13% consists of residential subdivisions, with the rest of the land being used for agriculture. The subdivisions that are a part of this watershed include: Herons Ridge, Oakwood, The Grove at Lakeland, Winstead Farms, Veranda Woods, Lakeland Heights, Ivy Creek, and Evergreen Hills. 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 Clear Creek Watershed

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

