

Otter Creek watershed (051002-05-040)

Geography. The Otter Creek watershed covers north-central Madison County. The land is in the outer subregion of the Bluegrass physiographic region, characterized by undulating terrain, moderate to rapid surface runoff, and moderate rates of groundwater drainage. Parts of the watershed lie over interbedded shales and limestones (these are 20% limestone; water conduction is poor because of the clay content of the shale). Other areas are underlain by interbedded limestones and shales (>20% limestone, allowing groundwater flow where the clay content is low enough).

Waterways. Otter Creek empties into the Kentucky River at Ford. Among the creeks that feed it are Hicks Branch, Tribble Branch, East and West Forks Otter Creek, Lost Fork, and Stony Run.

Land and water use. Land in the watershed is about 85% agricultural; the rest of the land is divided roughly equally among commercial, residential, and rural wooded categories. Six businesses and organizations hold permits for discharges into the creeks. See the 2000 Assessment Report for full details.

Agency data assessment. The assessed creek segments in this watershed include one (East Fork Otter Creek) that only partially supports its designated uses, based on biological and/or water-quality data. Excess nutrients contribute to the impairment of the stream. See the 2000 Assessment Report or 2000 305(b) list and the 2002 303(d) list of impaired streams for full details.

Kentucky River Basin Management Plan, 2002. Information is from the first basin cycle (1997-2002), including the 1998-1999 monitoring effort and the 2000 Assessment Report. See kywatersheds.org or www.uky.edu/WaterResources/Watersheds for the complete Assessment Report and Management Plan.

Watershed Restoration Ranking			Watershed Protection Rank	Overall Watershed Rank	Framework Mobilization Category
<i>Observed Impacts</i>	<i>Potential Impacts</i>	<i>Combined Rank</i>			
Medium	High	Medium	Low	Low	IV

Watershed Highlights

Watershed covers 65 square miles.

Part of source water protection zones 1, 2, and 3 for the Richmond water system.

Richmond discharges treated sewage into the watershed (Dreaming Creek sewage treatment plant).

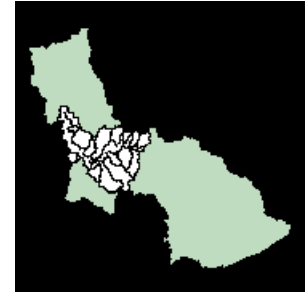
Aquatic life partially impaired by overenrichment in the East Fork of Otter Creek from its mouth to 2.7 miles upstream (2nd priority TMDL 2002).

Groundwater is substantially more sensitive than the basin average.

The potential for agricultural erosion is substantially higher than the basin average.

Livestock density is substantially higher than the basin average.

Population without access to public sewers is substantially higher than the basin average.



Palisades Region



See the color map of this region on p. 133.

LEGEND

Area of this watershed

Sewage plants

Public water supplies

Other water withdrawals

Locks & dams

Cities and towns

Rivers and larger streams

Smaller streams

County borders

