

## Boone Creek watershed (051002-05-070)

**Geography.** The Boone Creek watershed lies along the boundary between Fayette County and Clark County. The land is in the inner subregion of the Bluegrass physiographic region, characterized by undulating terrain and moderate rates of both surface runoff and groundwater drainage. The watershed lies above thick layers of easily dissolved limestone that form carbonate aquifers. Groundwater flows through channels in the limestone, so caves and springs are common in regions with this geology.

**Waterways.** Boone Creek empties into the Kentucky River just north of Clays Ferry and Interstate 75. Among the creeks that feed it are Baughman Fork, Jones Creek, and Mary Reynolds Creek.

**Land and water use.** Land in the watershed is mainly agricultural. Four 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 three that do not fully support designated uses, based on biological and/or water-quality data. Nutrients and pathogens from agricultural and municipal sources and from sewage package plants contribute to the impairment of these streams. See the 2000 Assessment Report or 2000 305(b) list and the 2002 303(d) list of impaired streams for full details. EPA approved a TMDL (total maximum daily load) plan for the unnamed tributary of Baughman Fork.

**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](http://kywatersheds.org) or [www.uky.edu/WaterResources/Watersheds](http://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>			
High	Medium	High	Medium	High	III

## Watershed Highlights

Watershed covers 44 square miles.

Part of source water protection zones 1, 2, and 3 for the Kentucky-American (Lexington) intake.

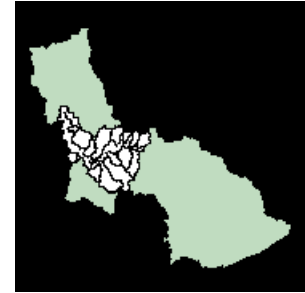
The Blue Sky plant discharges treated sewage into the watershed. Plant has not been in compliance.

Pathogens make contact recreation unsafe in Boone Creek above Baughman Fork (TMDL approved 2001).

Aquatic life impaired by overenrichment in the Blue Sky tributary of Baughman Fork (1st priority TMDL 2002), partially impaired by overenrichment in Baughman Fork below Blue Sky and in Boone Creek below Baughman Fork (2nd priority TMDL 2002).

Groundwater is substantially more sensitive than the basin average.

Livestock density 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

