

Kentucky River watershed above Ravenna (051002-04-030)

Geography. The Kentucky River watershed above Ravenna straddles the southern end of the boundary between Lee County and Estill County. The land is in the escarpment area of the Eastern Kentucky Coal Field physiographic region, which is characterized by hilly terrain, very rapid surface runoff, and moderate rates of groundwater drainage. The watershed is underlain by coals, sandstones, and shales: this geology is generally conducive to productive wells, although water quality may be low for wells that draw from coal layers. Parts of the watershed lie over easily weathered clay shales that store water but allow little groundwater flow. Other parts of the watershed lie above interbedded clay shales and siltstones.

Waterways. This watershed includes the Kentucky River between Sturgeon Creek (Heidelberg) and Station Camp Creek (Irvine). Among the creeks that feed it are Cave Branch, Willow Branch, Ross Creek, Wolf Pen Branch, Buck Lick Branch, Buck Creek, and Big Doe Creek. Water from the Millers Creek, Sturgeon Creek, Cow Creek, and Kentucky River above Heidelberg watersheds also flow into this watershed.

Land and water use. Land in the watershed is mainly rural and wooded; about 10% is agricultural. The surface waters of the watershed supply the drinking water for the municipal system in Irvine. Two businesses hold permits for discharges into the creeks. See the 2000 Assessment Report for full details.

Agency data assessment. Assessed creek segments in this watershed fully support their designated uses, based on biological and/or water-quality data. 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>			
Low	Low	Low	High	Medium	IV

Watershed Highlights

Watershed covers 60 square miles.

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

Groundwater is substantially more sensitive than the basin average.

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

Watershed is in PRIDE service region. PRIDE identified 35 straight pipes or failing septic systems in the watershed.



Mid-Kentucky River



See the color map of this region on p. 127.

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

