

Cow Creek watershed (051002-04-060)

Geography. The Cow Creek watershed is located in north-central Estill County. Most of the watershed is in the escarpment area of the Eastern Coal Field physiographic region, which is characterized by hilly terrain, very rapid surface runoff, and moderate rates of groundwater drainage. The lowest, southern section of the watershed is in the Knobs physiographic region, characterized by hilly terrain, very rapid surface runoff, and very slow groundwater drainage. In level parts of the Knobs, runoff and groundwater drainage are slow. 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. Cow Creek empties into the Kentucky River at Ravenna. Among the creeks that feed it are Rogers Fork, Tickey Fork, and Campbell Creek.

Land and water use. Land in the watershed is mainly rural and wooded; about 5% is 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 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	Medium	Low	IV

Watershed Highlights

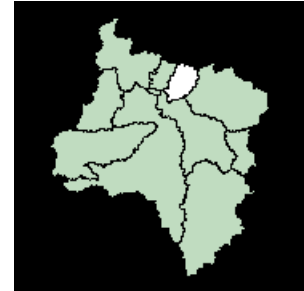
Watershed covers 17 square miles.

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

Watershed is in PRIDE service region. PRIDE identified 3 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 

