

Kentucky River watershed below Frankfort (051002-05-250)

Geography. The Kentucky River watershed below Frankfort occupies central Franklin County and extends along the border between Henry and Owen Counties. The land is in the hills of the bluegrass subregion of the Bluegrass physiographic region, characterized by hilly terrain, very rapid surface runoff, and slow groundwater drainage. Much of 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. Other 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). Still other areas are underlain by interbedded limestones and shales (>20% limestone, allowing groundwater flow where clay content is low). Unconsolidated silts, sands, and gravels occur in the river’s flood plain and adjoining upland terraces.

Waterways. This watershed includes the Kentucky River between the mouth of Benson Creek in Frankfort and the mouth of Eagle Creek at the Carroll County line. Among the creeks that feed it within the watershed are Barrel Branch, Stony Creek, Duvall Branch, Steeles Branch, Sand Ripple Creek, Stevens Creek, Pot Ripple Creek, Clay Lick Creek, Canes Run, Gullion Creek, and Little Twin Creek. Water from the Kentucky River Palisades, Benson Creek, Elkhorn Creek, Flat Creek, Cedar Creek, Severn Creek, Sixmile Creek, Drennon Creek, and Mill Creek & Big Twin Creek watersheds also flows into this watershed.

Land and water use. Land in the watershed is 45% agricultural and 45% rural and wooded; about 5% is residential. Five 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 that only partially supports its designated uses, because of pathogens. 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.

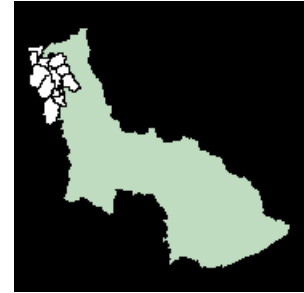
Watershed Restoration Ranking			Watershed Protection Rank	Overall Watershed Rank	Framework Mobilization Category
<i>Observed Impacts</i>	<i>Potential Impacts</i>	<i>Combined Rank</i>			
Low	High	Low	High	Low	IV

Watershed Highlights

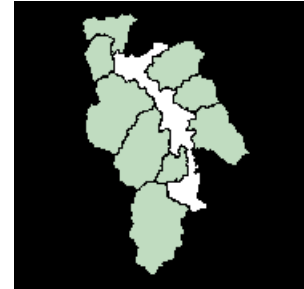
Watershed covers 116 square miles.

Frankfort and Eminence discharge treated sewage into the watershed.

Pathogens partially impair contact recreation in 41 miles of the Kentucky River from Elkhorn Creek to Eagle Creek (2nd priority TMDL 2002).



Lower Kentucky River



See the color map of this region on p. 137.

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

