

## Kentucky River watershed above Red River (051002-04-080)

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**Geography.** The Kentucky River watershed above Red River covers parts of western Estill County and eastern Madison County. The land 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 lies partly above fractured shales through which groundwater can easily move but which stores very little water. Other parts of the watershed lie over easily weathered clay shales that store water but allow little groundwater flow.

**Waterways.** This watershed includes the section of the Kentucky River between Station Camp Creek (Irvine) and the Red River (Clark County-Estell County line). Among the creeks that feed it are Calloway Creek, Possum Run, Blue Run, Falling Branch, Flint Creek, and Noland Creek. Water from the Station Camp Creek, Kentucky River above Ravenna, White Oak Creek, and Drowning Creek watersheds also flows into this watershed.

**Land and water use.** Land in the watershed is about half agricultural and half rural and wooded; commercial and residential areas make up about 3%. The surface waters of the watershed supply the drinking water for municipal systems in Irvine and Richmond. 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 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](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>			
Medium	High	Medium	High	Medium	IV

## Watershed Highlights

Watershed covers 52 square miles.

Provides drinking water for Irvine and Richmond.

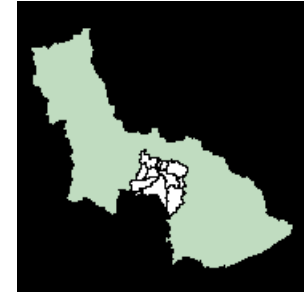
Part of source water protection zone 3 for the Winchester water system.

Irvine and the Estill County Water District discharge treated sewage into the watershed. Recent efforts to regionalize sewer service did not succeed.

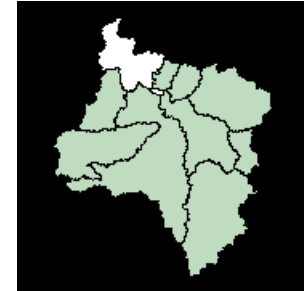
Water supply is an issue.

Because the latest assessment indicates full support for swimming, DOW has asked EPA to delist a segment of the Kentucky River that was previously listed as partially impaired by pathogens.

Except for the Madison County section, the watershed is in PRIDE service region. PRIDE identified 5 straight pipes or failing septic systems in the PRIDE part of 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

