

Jessamine Creek watershed (051002-05-130)

Geography. The Jessamine Creek watershed occupies central Jessamine County. The land is in the inner subregion of the Bluegrass physiographic region, which is 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. Jessamine Creek empties into the Kentucky River between Pollys Bend and Handys Bend, south of Wilmore. Among the creeks that feed it are Town Fork (Town Branch, Nicholasville) and Wilmore Town Branch.

Land and water use. Land in the watershed is more than 80% agricultural, almost 10% residential, and roughly 2% industrial, 2% commercial, and 4% rural and wooded. The surface waters of the watershed supply the drinking water for the municipal system in Wilmore. 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 segment in this watershed fully supports its 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>			
Medium	Medium	Medium	High	Medium	III

Watershed Highlights

Watershed covers 40 square miles.

Part of source water protection zones 2 and 3 for Harrodsburg's water system.

Wilmore, Jessamine Creek Environmental Control, and Nicholasville treatment plants discharge sewage into the watershed.

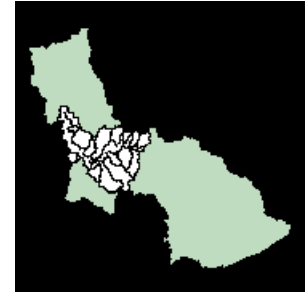
Water supply is an issue.

Groundwater is more sensitive than anywhere in the basin.

Livestock density is substantially higher than the basin average.

Watershed is in PRIDE service region. PRIDE identified 34 straight pipes or failing septic systems in the watershed.

This is a Watershed Watch Citizen Action Plan watershed.











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 