

## South Elkhorn Creek watershed (051002-05-270)

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**Geography.** The South Elkhorn Creek watershed covers western Fayette County, and northeastern Woodford County, and the southern edges of Scott and Franklin counties and a northern section of Jessamine County. The land is in the inner subregion of the Bluegrass physiographic region, 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.** South Elkhorn Creek empties into Elkhorn Creek at Forks of Elkhorn. Among the creeks that feed it are Vaughns Branch, Wolf Run, Steeles Run, Town Branch, Cave Creek, Shannon Run, Lee Branch, Beals Run, Buck Run, Hickman Branch, and Slickway Branch.

**Land and water use.** Land in the watershed is about 80% agricultural; the rest is urban, and almost 10% is residential. The watershed includes the University of Kentucky campus and downtown Lexington. Twenty-one 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 five that do not support some or all of their designated uses, based on biological and/or water-quality data. Three others only partially support their uses. Organic enrichment, alterations of flow and habitat, agricultural practices, municipal point sources, storm sewers, and urban runoff and pathogens all contribute to impairment of these streams. Total maximum daily load (TMDL) plans are in progress for Wolf Run and Town Branch. See the 2000 Assessment Report or 2000 305(b) list and the 2002 303(d) list of impaired streams for full details.

**See the Watershed Plan for this watershed on page 24.**

**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.

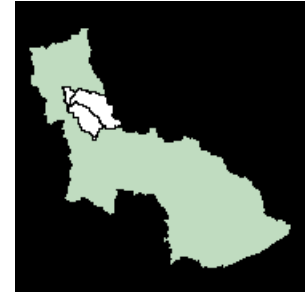
Watershed Restoration Ranking			Watershed Protection Rank	Overall Watershed Rank	Framework Mobilization Category
<i>Observed Impacts</i>	<i>Potential Impacts</i>	<i>Combined Rank</i>			
High	High	High	High	High	I

## Watershed Highlights

Watershed covers 179 square miles.

Lexington (Town Br. plant) and Midway discharge sewage. Pathogens partially impaired contact recreation in Lees Br. [2000 305(b)]. Midway has built a new treatment plant there since the last DOW stream assessment of Lees Br. Pathogens make contact recreation unsafe in Town Br. and Wolf Run (TMDL under development).

Sediment impairs aquatic life in S. Elkhorn Cr. from Town Br. to Old Frankfort Pike (1st priority TMDL 2002). Aquatic life partially impaired by nutrients and alteration of habitat and flow in Wolf Run and Town Br. (TMDLs in progress for these and the S. Elkhorn Cr. downstream). Groundwater substantially more sensitive than basin average. Livestock density substantially higher than basin average. Town Br./Wolf Run and S. Elkhorn Cr. are (separately) two Watershed Watch Citizen Action Plan watersheds.











Elkhorn Creek Region



See the color map of this region on p. 135.

### 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 