

## Sexton Creek watershed (051002-03-050)

**Geography.** The Sexton Creek watershed occupies northwest Clay County, and extends into Jackson and Owsley Counties. The land is in the Eastern Kentucky Coal Field physiographic region, characterized by mountainous terrain, rapid surface runoff, and moderate rates of groundwater drainage. 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.

**Waterways.** Sexton Creek empties into the South Fork Kentucky River at Taft. Among the creeks that feed it are Robinson Creek, Bray Creek, Ellis Branch, Cradlebow Branch, and Little Sexton Creek.

**Land and water use.** Land in the watershed is mainly rural and wooded; about 10% is agricultural. One business holds 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 a segment of Sexton Creek that only partially supports its designated uses, based on biological and/or water-quality data. Acidity (pH) contributes to the impairment of the stream. 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>			
High	Low	High	Medium	High	IV

## Watershed Highlights

Watershed covers 71 square miles.

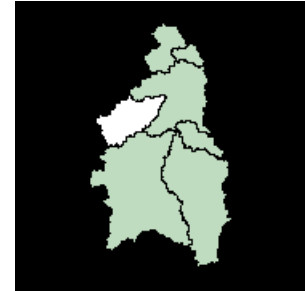
Part of source water protection zone 3 for the Booneville water system.

Aquatic life partially impaired by sedimentation and low pH in Sexton Creek between Little Sexton Creek and Bray Creek (2nd priority TMDL 2002).

Watershed is in PRIDE service region. PRIDE identified 180 straight pipes or failing septic systems in the watershed.



South Fork Region



See the color map of this region on p. 125.

### 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

