

Goose Creek watershed (051002-03-040)

Geography. The Goose Creek watershed covers southwest Clay County, northern Knox County, and slivers of Laurel County. 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. Goose Creek empties into the South Fork Kentucky River close to Oneida. Among the creeks that feed it are Bull Creek, Collins Fork, Hammons Fork, Horse Creek, Laurel Creek, Paces Creek, and Little Goose Creek.

Land and water use. Land in the watershed is mainly rural and wooded; less than 10% is agricultural. The surface waters of the watershed supply the drinking water for the municipal system in Manchester. Eleven 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 several that only partially support their designated uses, based on biological and/or water-quality data. Siltation and pathogens contribute to the impairment of these streams. 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.

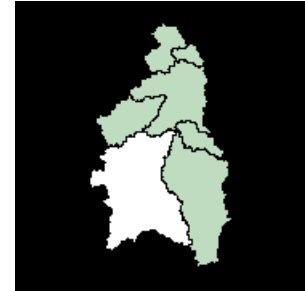
Watershed Restoration Ranking			Watershed Protection Rank	Overall Watershed Rank	Framework Mobilization Category
<i>Observed Impacts</i>	<i>Potential Impacts</i>	<i>Combined Rank</i>			
Medium	High	Medium	High	Medium	IV

Watershed Highlights

Watershed covers 260 square miles.
Provides drinking water for Manchester.
Manchester discharges treated sewage into the watershed.
Pathogens partially impair contact recreation in Goose Creek between Red Bird River and Laurel Creek (2nd priority TMDL 2002).
Aquatic life partially impaired by sedimentation in Bull Creek, Collins Fork, Hammons Fork, and Horse Creek (2nd priority TMDL 2002).
Hammons Fork and Laurel Creek are partially impaired by overenrichment (2nd priority TMDL 2002).
DOW plans to delist a stretch of Laurel Creek that was listed as impaired in 1996 and 1998, because sewage plants there have made important improvements.
Water supply is an issue.
Watershed is in the PRIDE region. PRIDE identified 1,001 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 

