

Hell Creek & Walker Creek watershed (051002-01-220)

Geography. The Hell Creek & Walker Creek watershed is in northern Lee County and extends into southern Wolfe County. The land is in the plateau area of the Eastern Kentucky Coal Field physiographic region, which is characterized by rolling terrain, medium to rapid surface runoff, and slow to moderate 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. Parts of the watershed is over sandstone aquifers.

Waterways. Walker Creek empties into the North Fork Kentucky River just west of Airedale, and Hell Creek empties into the North Fork just west of Walker Creek. Among the creeks that feed Walker Creek are Hell for Certain Creek and Huff Cave Branch. Bowman Fork feeds into Hell Creek.

Land and water use. Land in the watershed is mainly rural and wooded, but about 10% is agricultural. Two businesses and organizations hold permits for discharges into the creeks. See the 2000 Assessment Report for full details.

Agency data assessment. The assessed segment of Walker Creek fully supports its designated uses, and the assessed segment of Hell Creek only partially supports its designated uses, based on biological and/or water-quality data. Habitat alterations contribute 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 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	Low	Medium	Medium	Medium	IV

Watershed Highlights

Watershed covers 22 square miles.

Part of source water protection zones 1, 2, and 3 for the Beattyville water system.

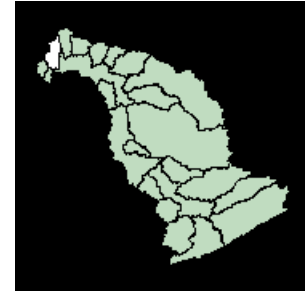
Aquatic life partially impaired by habitat alteration in Hell Creek from its mouth to Bowman Fork (2nd priority TMDL 2002).

The potential for agricultural erosion is substantially higher than the basin average.

Watershed is in PRIDE service region. PRIDE identified 2 straight pipes or failing septic systems in the watershed.











North Fork Region



See the color map of this region on p. 121.

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 