

North Fork Kentucky River headwaters watershed (051002-01-010)

Geography. The North Fork Kentucky River headwaters watershed occupies central Letcher 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. The North Fork Kentucky River flows east and crosses a watershed boundary near Blackey, where Rockhouse Creek joins it to flow into the North Fork Kentucky River near Hazard watershed. Among the many creeks that feed it in the headwaters watershed above Blackey are Millstone Creek, Potter Fork, Cram Creek, and Pine Creek.

Land and water use. Land in the watershed is nearly all rural and wooded. The surface waters of the watershed supply the drinking water for municipal systems of Whitesburg and Fleming-Neon. Twenty-four 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 four that do not support some or all of their designated uses, based on biological and/or water-quality data. Siltation, pH, and organic enrichment from effluent of septic systems 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.

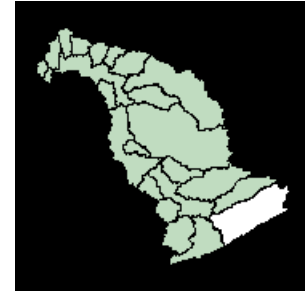
Watershed Restoration Ranking			Watershed Protection Rank	Overall Watershed Rank	Framework Mobilization Category
<i>Observed Impacts</i>	<i>Potential Impacts</i>	<i>Combined Rank</i>			
High	High	High	High	High	II

Watershed Highlights

Watershed covers 131 square miles.
 Provides drinking water for Whitesburg, Fleming-Neon.
 Part of source water protection zones 1, 2, 3 for Blackey.
 Whitesburg and Fleming-Neon discharge treated sewage.
 Fleming-Neon plant has not always met limits.
 Covered by TMDL program's North Fork pathogen report.
 No 2000 DOW assessments for pathogens.
 Sediment impairs aquatic life in North Fork (Cowan Cr. to Boone Fk) and in Left Fk. Millstone; sewage impairs aquatic life in Potter Fk. (1st priority TMDL 2002).
 Watershed Watch focused sampling showed high bacteria throughout the watershed, low pH in Crafts Colly Creek.
 Water supply is a critical issue. KGS study funded by KRA says deep mine at Crafts Colly is potential source.
 Watershed is in PRIDE service region. PRIDE identified 1,307 straight pipes or failing septic systems in watershed.










North Fork Region



See the color map of this region on p. 119.

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 