

North Elkhorn Creek watershed (051002-05-280)

Geography. The North Elkhorn Creek watershed occupies southern Scott County, northern Fayette County, and part of western Franklin County. The land is in the Inner Bluegrass physiographic region, characterized by an undulating terrain and moderate rates of surface runoff and groundwater drainage. Most of 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. Some areas lie above interbedded limestones and shales (>20% limestone, allowing groundwater flow where the clay content is low enough).

Waterways. The North Elkhorn runs generally northwest from its origin at the west edge of Fayette County and empties into the Kentucky River just east of Frankfort. Among the creeks that feed it are David Fork, Goose Creek, Boyd Run, Miller Run, Lanes Run, Dry Run, McCracken Creek, Blue Spring Branch, McConnell Run, and Lecomptes Run.

Land and water use. Land in the watershed is primarily agricultural, with several densely settled areas. Residential and commercial areas make up 10%. Less than 2% is forested. The watershed includes the north side of Lexington. Surface waters of the watershed supply drinking water for the municipal systems in Georgetown and Stamping Ground. Twenty-eight businesses and organizations hold permits for discharges into creeks. See the 2000 Assessment Report for full details.

Agency data assessment. The assessed creek segments in this watershed include seven that do not support some or all of their designated uses, based on biological and/or water-quality data. Two others only partially support their uses. Agriculture, construction, and sewage from municipal systems and small package plants all contribute to the impairment of these streams via siltation, pathogens, habitat modification, and nutrient enrichment. 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 276 square miles.

Provides drinking water for Georgetown. Supply is an issue.

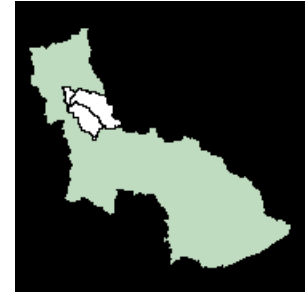
Georgetown (sewage plants 1 and 2) and Stamping Ground discharge treated sewage into the watershed.

Pathogens make contact recreation unsafe in N. Elkhorn Cr., Lanes Run, Cane Run, a tributary to Cane Run, and a tributary to Dry Run (1st priority TMDL 2002; TMDL under development for Cane Run above Ironworks Pike).

Aquatic life impaired by overenrichment in Cane Run above Ironworks Pike, by sedimentation below US 62 bridge, and by both overenrichment and sedimentation between US 62 and Ironworks Pike (1st priority TMDL 2002).

Aquatic life partially impaired by sedimentation, overenrichment in Dry and McConnell Runs. Aquatic life partially impaired by habitat alterations in N. Elkhorn Cr. between Avon Fk. and reservoir (2nd priority TMDL 2002).

Groundwater substantially more sensitive than basin average.



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

