

Spears Creek & Mocks Branch watershed (051002-05-200)

Geography. The Spears Creek & Mocks Branch watershed occupies northeastern Boyle County and part of southern Mercer County. The land is in the inner sub-region of the Bluegrass physiographic region, characterized by undulating terrain and moderate rates of both 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 inter-bedded limestones and shales (>20% limestone, allowing groundwater flow where the clay content is low enough).

Waterways. Both Spears Creek and Mocks Branch flow into Herrington Lake (the Dix River) at Gwinn Island, northeast of Danville.

Land and water use. Land in the watershed is 92% agricultural, and most of the rest is residential or commercial (Spears Creek drains the northern half of Danville). Three businesses and organizations hold permits for discharges into the creeks. See the 2000 Assessment Report for full details.

Agency data assessment. No creeks were assessed in this watershed.

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>			
Low	Medium	Low	Medium	Low	III

Watershed Highlights

Watershed covers 26 square miles.

Mocks Branch watershed is part of source water protection zone 3 for the Harrodsburg water system.

Groundwater is substantially more sensitive than the basin average.

Livestock density is substantially higher than the basin average.

NRCS has conducted a special project to address nonpoint source pollution concerns in the watershed for the past five years, implementing a wide variety of best management practices.

The Agriculture Watershed Awareness Program (AWAP) trained volunteers and tested 12 sites in the watershed on four dates during 2001.




Dix River Region




See the color map of this region on p. 131.

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