

Benson Creek watershed (051002-05-260)

Geography. The Benson Creek watershed covers southwest Franklin County, eastern Shelby County, and northern Anderson County. The land lies mainly in the hills of the bluegrass subregion of the bluegrass physiographic region, which is characterized by hilly terrain, very rapid rates of surface runoff, and slow rates of groundwater drainage. The eastern section of the watershed is in the inner bluegrass subregion, with moderate rates of both surface and groundwater drainage. Much of the watershed lies above interbedded limestones and shales (>20% limestone, allowing groundwater flow where the clay content is low enough). Other parts of the watershed lie 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.

Waterways. Benson Creek empties into the Kentucky River at Frankfort. Among the creeks that feed it are North and South Benson Creek, Goose Creek, White Oak Creek, and Pigeon Creek.

Land and water use. Land in the watershed is 57% agricultural, 35% wooded, and 6% residential. Twenty-one 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 one segment of Benson Creek that does not support its designated uses, based on biological and/or water-quality data. Five creek segments only partially support their uses, and two are categorized as threatened. Agricultural activities, construction, road runoff, failing septic systems, and runoff through storm sewers may 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	Low	Medium	III

Watershed Highlights

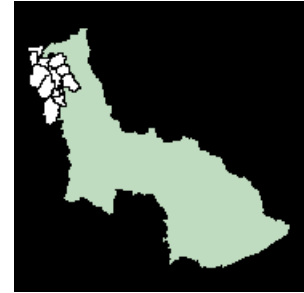
Watershed covers 107 square miles.

Aquatic life impaired by sedimentation and alteration of habitat in Benson Creek between North Benson Creek and Goose Creek (1st priority TMDL 2002).

Aquatic life partially impaired by combinations of over-enrichment, sedimentation, and habitat alteration in Benson Creek between North and South Benson, in North Benson and the North Fork of North Benson, and in Goose Creek (2nd priority TMDL 2002).

South Benson and the upper reach of Benson Creek were classified as threatened [2000 305(b)].

This watershed is a 2002 priority area for the EQIP conservation cost-share program of NRCS (see page 104).



Lower Kentucky River



See the color map of this region on p. 137.

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

