Millers Creek watershed (051002-04-040)

**Geography.** The Millers Creek watershed occupies the eastern tip of Estill County and northern corner of Lee County. The land is in the escarpment area of the Eastern Kentucky Coal Field physiographic region, which is characterized by hilly terrain, very 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. Some of the watershed lies over sandstone aquifers and some over easily weathered clay shales that store water but allow little groundwater flow. Other parts of the watershed lie above interbedded clay shales and siltstones.

**Waterways.** Millers Creek empties into the Kentucky River between Pryse and the town of Millers Creek. Among the creeks that feed it are Cave Fork, Zachariah Fork, Little Sinking Creek, Billey Fork, Woodward Creek, Furnace Fork, and Sudders Fork.

**Land and water use.** Land in the watershed is more than 80% rural and wooded, about 15% industrial, and about 3% agricultural. Three 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 fully support their designated uses, based on biological and/or water-quality data. See the 2000 Assessment Report or 2000 305(b) list and the 2002 303(d) list of impaired streams for full details.

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Watershed Highlights

Watershed covers 75 square miles.
Part of source water protection zones 2 and 3 for the Irvine water system.
Groundwater is substantially more sensitive than the basin average.
This is a Watershed Watch Citizen Action Plan watershed. Watershed is in PRIDE service region. PRIDE identified 23 straight pipes or failing septic systems in the watershed.

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

See the color map of this region on p. 127.