Geography. The Tenmile Creek watershed occupies northwestern Grant County and adjacent corners of Gallatin, Boone, and Kenton Counties. The land is in the hills of the bluegrass subregion of the Bluegrass physiographic region, which is characterized by hilly terrain, very rapid surface runoff, and slow groundwater drainage. The watershed lies partly 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. Other areas lie above interbedded limestones and shales (>20% limestone, allowing groundwater flow where the clay content is low enough).

Waterways. Tenmile Creek empties into Eagle Creek close to Folsom. Among the creeks that feed it are Kittle Run, Bullock Run, Sulphur Lick Branch, North Fork, Little Tenmile Creek, Arnolds Creek, Flat Creek, and Napoleon Branch.

Land and water use. Land in the watershed is about 60% agricultural, 30% rural and wooded, and 10% residential or commercial. The surface waters of the watershed supply the drinking water for the Bullock Pen Water District. Five 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 (Arnolds Creek) that only partially supports its designated uses, based on biological and/or water-quality data. Siltation contributes to the impairment of the stream. See the 2000 Assessment Report or 2000 305(b) list and the 2002 303(d) list of impaired streams for full details.

Watershed Highlights

Watershed covers 68 square miles.
Contains reservoir for Bullock Pen Water District.
Aquatic life partially impaired by sedimentation in Arnolds Creek from its mouth to an unnamed tributary 10.8 miles upstream. (2nd priority TMDL 2002).
The potential for agricultural erosion is substantially higher than the basin average.
Population without access to public sewers is substantially higher than the basin average.

See the color map of this region on p. 139.