Eagle Creek mouth watershed  
(051002-05-410)

**Geography.** The Eagle Creek mouth watershed begins in Grant County and covers southeast Carroll, southwest Gallatin, and northern Owen County. 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. Parts of the watershed lie over interbedded shales and limestones (these are 20% limestone; water conduction is poor because of the clay content of the shale). Other areas are underlain by interbedded limestones and shales (>20% limestone, allowing groundwater flow where the clay content is low enough). Unconsolidated silts, sands, and gravels occur along the flood plain of the creek.  

**Waterways.** This watershed includes the section of Eagle Creek between the mouth of Tenmile Creek (near Folsom in Grant County) and the confluence of Eagle Creek with the Kentucky River southwest of Worthville at the corner of Carroll, Owen, and Henry Counties. Among the creeks that feed it in this watershed are Indian Camp Creek, Moseby Branch, Hodge Branch, Lost Branch, Ellis Creek, Goose Creek, Lick Creek, Indian Creek, Buffalo Creek, and Buck Run. The watershed also receives water from the Tenmile Creek and Eagle Creek above Tenmile Creek watersheds.  

**Land and water use.** Land in the watershed is almost 60% agricultural, about 35% rural and wooded, and more than 5% residential and commercial. Three businesses and organizations hold permits for discharges into the creeks. See the 2000 Assessment Report for full details.  

**Agency data assessment.** The nine assessed creek segments in this watershed include two 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. Siltation, pathogens, and alteration of flow and other stream features 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.  

**See the Watershed Plan for this watershed on page 44.**


<table>
<thead>
<tr>
<th>Watershed Restoration Ranking</th>
<th>Watershed Protection Rank</th>
<th>Overall Watershed Rank</th>
<th>Framework Mobilization Category</th>
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<tr>
<td><strong>Observed Impacts</strong></td>
<td><strong>Potential Impacts</strong></td>
<td><strong>Combined Rank</strong></td>
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<tr>
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<td>High</td>
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<td>Medium</td>
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Watershed Highlights

Watershed covers 88 square miles.
Pathogens make contact recreation unsafe in Eagle Creek between Twomile Creek and Tenmile Creek (TMDL under development).
Aquatic life impaired by sedimentation in the lowest 0.9 miles of Buck Run (1st priority TMDL 2002).
Aquatic life impaired by alteration of flow and habitat in Moseby Branch [2000 305(b)].
Aquatic life partially impaired by sedimentation and habitat alteration in Lick Creek (2nd priority TMDL 2002).
Aquatic life partially impaired by flow alteration in Two-mile Creek (2nd priority TMDL 2002).
The potential for agricultural erosion is substantially higher than the basin average.

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. 139.