

# *LOCATION*

The Chariton River originates in Iowa in southeastern Clarke County. It flows eastward and southward until it is dammed to form 11,000-acre Rathbun Reservoir in Appanoose County, Iowa. After flowing southward for approximately 30 miles the Chariton River enters Missouri, forming the boundary between Putnam and Schuyler counties. It continues to flow to the south through Adair and Macon counties. Upon entering the northeastern corner of Chariton County, the river takes a southwesterly route to its confluence with the Missouri River. The basin's eastern boundary is known as the "Grand Divide". All streams to the east flow to the Mississippi River, all streams to the west are tributaries of the Missouri River.

Major tributaries of the Chariton River include Mussel Fork Creek, which reaches its confluence in southeastern Chariton County, and Shoal Creek, which meets the Chariton in the middle of Putnam and Schuyler counties. The Little Chariton River, formerly a tributary of the Chariton, now flows into the Missouri River in the southeastern corner of Chariton County. For practical reasons, the Little Chariton River is included in this inventory of the Chariton River basin. Major tributaries to the Little Chariton are Middle Fork and East Fork (Figure 1).

## **Stream Orders and Mileages**

Streams were identified on USGS 7.5-minute topographic maps and ordered according to Strahler (1957). There are 158 third-order and larger streams in the basin (Appendix A). The Chariton River is the longest (209 miles) and largest (sixth order). Mussel Fork (100 miles long) and Shoal Creek (60 miles long) are major fifth order tributaries. Short fifth-order streams include Walnut Creek (17 miles), Blackbird Creek (26 miles), and Elm Creek (9 miles). A 7-mile reach of Little Chariton River is sixth order, but its Middle Fork (63 miles) and East Fork (100 miles) tributaries are fifth order streams. All other streams in the basin are fourth-order or smaller.

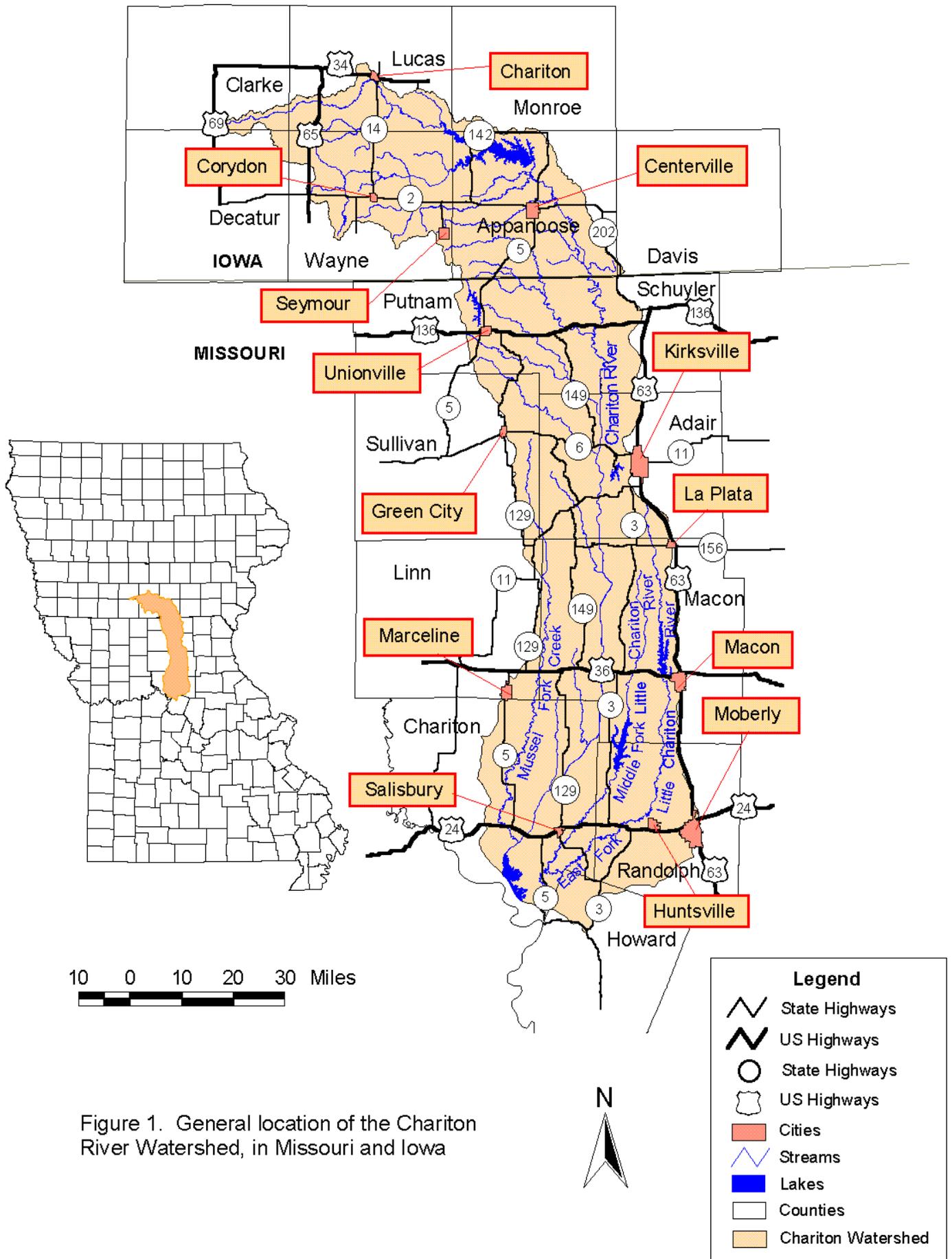


Figure 1. General location of the Chariton River Watershed, in Missouri and Iowa