

LAND USE

Historical Land Use

Even though the French laid claim to area as early as 1682, Native Americans of the Missouri, Osage, Fox and Sac tribes were in undisputed possession of northern Missouri until the United States took ownership in 1803 as part of the Louisiana Purchase (Klein and Daley 1974, NRCS 1995, NRCS 1997). Beginning in 1804, Native Americans made a series of treaties that eventually relinquished their claims to land in Missouri. Development of the Salt River basin, so named because of its numerous salt springs and licks, proceeded rapidly following the War of 1812. White settlers came mostly from Kentucky and Tennessee, and agriculture quickly became the area's economic base.

Current boundaries for most counties in the basin were established between 1820 and 1836. Human population of the region grew rapidly until about 1920 and then began to decline. For example, the population of Shelby County from 1900 to 1990 fell from 16,167 to 6,942. Most other counties exhibited similar demographic trends.

Much of the presettlement landscape of the basin was prairie (Schroeder 1982). The proportion of prairie land in Macon, Shelby, Monroe, Ralls, and Audrain counties ranged from 38% to 74%. The most notable presettlement prairie in the basin was the Grand Prairie which covered nearly all of Audrain County and portions of Monroe, Ralls, and Pike counties. This prairie, once covered with massive expanses of native blue stem grass and roaming grounds for bison, elk and other wildlife, rapidly diminished with onset of row cropping and livestock grazing in the early 1800's. In 1865, just 10% of the land in Audrain County was cultivated. Currently, nearly 90% of the land is cultivated (NRCS 1995). Narrow, ridge prairies were also found throughout the basin in upland areas between stream valleys, and wet, bottom-land prairies occurred on most floodplains. Wooded areas were usually limited to steeper hills and along streams.

Although agriculture has been the main economic base of the basin, mineral resources also contributed significantly to the economic development of the basin (Klein and Daley 1974). Mining activities have included coal, sand and gravel, limestone, shale, and fire clay. At one time Audrain County was a world leader in the production of refractory brick (NRCS 1995).

Recent Land Use

Estimates of recent land use were determined from the 1992 National Resources Inventory conducted by the Soil Conservation Service (SCS 1992). Similar to other basins in northeast Missouri, 70% of the land in the Salt River basin is used for agricultural purposes (Figures II, ml, and ul). Half of the land is cultivated for crops. Only about 14% of the land is forested. Interestingly, cultivated cropland decreased by 102,900 acres and forest land increased by 36,100 acres from 1982 through 1992.

Crop production reports for Adair, Audrain, Monroe, Ralls, and Shelby counties indicate that soybeans are the most important field crop in terms of acres harvested (Missouri Agricultural

Statistics Service 1996). Corn and wheat rank second and third. Audrain County is among the state's top producers of soybeans, wheat, and sorghum. Annual livestock production in the above five counties during 1996 ranged from about 18,500 to 39,000 head of cattle and 6,600 to 101,000 hogs. Audrain and Shelby counties are among the state's top swine producers.

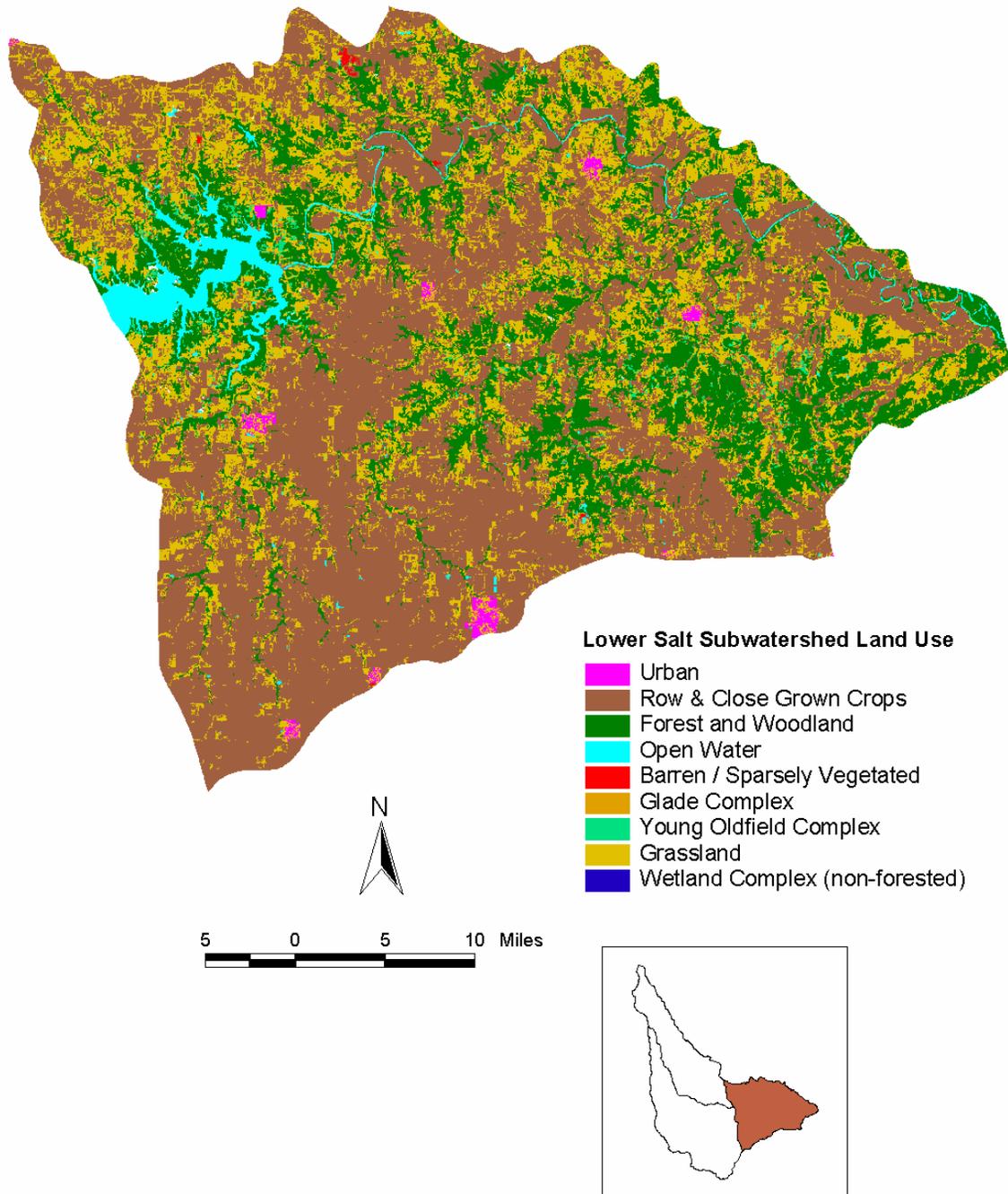


Figure II. Land use in the lower Salt River subwatershed, in Missouri.

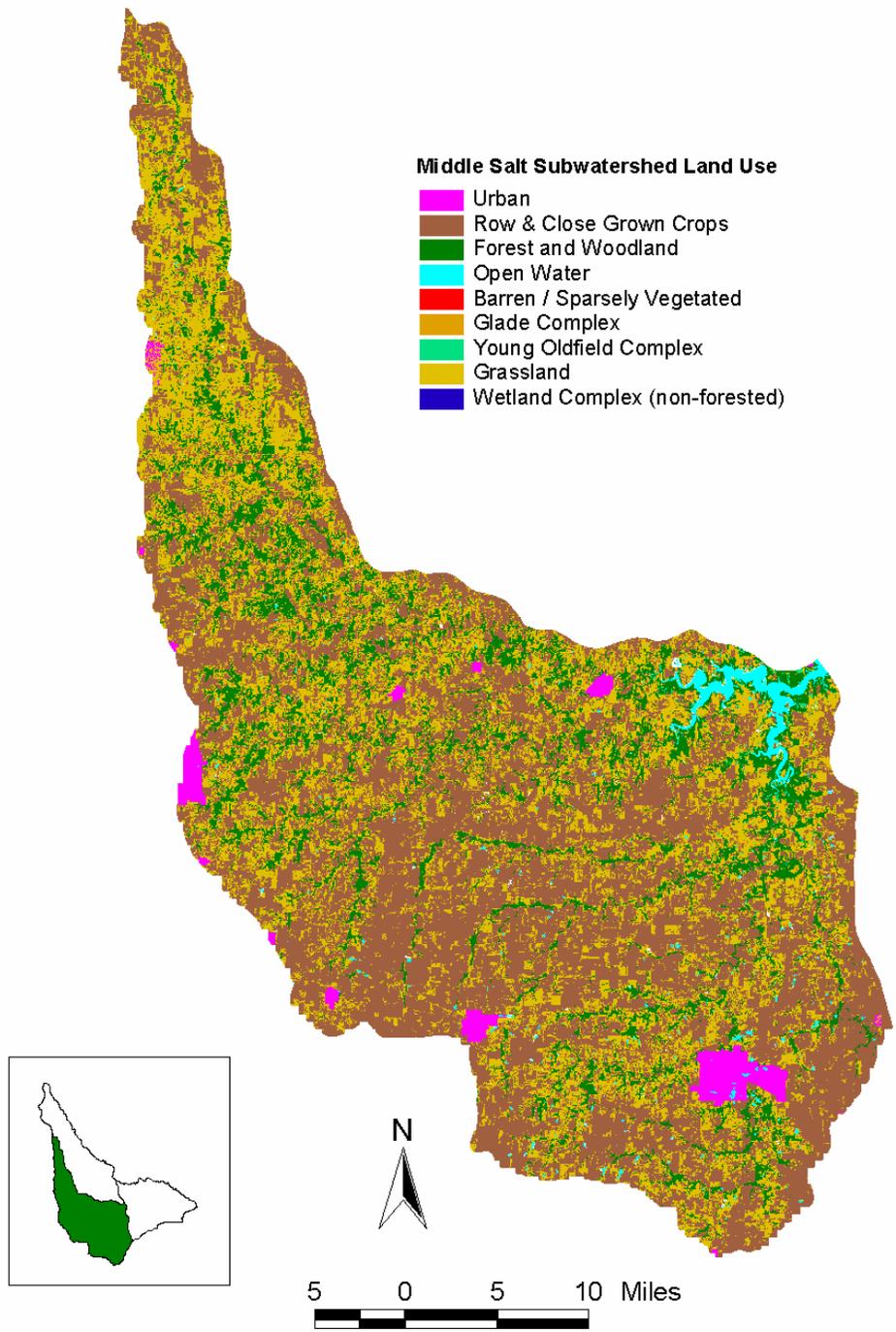


Figure ml. Land use in the middle Salt River subwatershed, in Missouri.

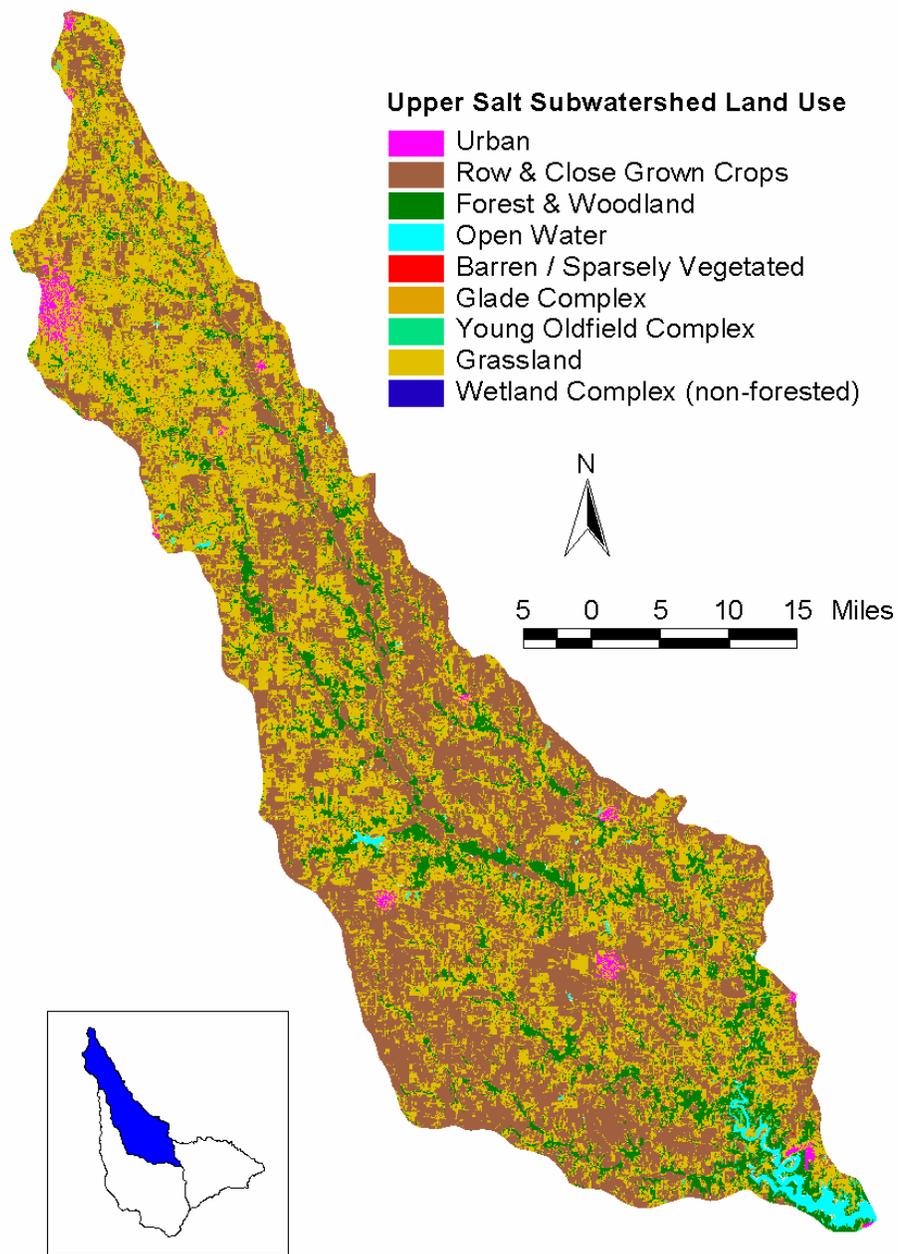


Figure ul. Land use in the upper Salt River subwatershed, in Missouri.