

# ***BLACK RIVER***

## ***WATERSHED INVENTORY AND ASSESSMENT***

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February 2004

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### **EXECUTIVE SUMMARY**

The Black River originates in Reynolds and Iron Counties, MO and flows south through Wayne and Butler Counties and into Arkansas. Due to the differences in geology, hydrology, habitat, biota, land use, and water quality, the basin is separated into two subbasins: the upper subbasin upstream of Clearwater Dam and the lower subbasin downstream of Clearwater Dam to the Arkansas state line.

The Black River drains 1,756 square miles in Missouri. The upper subbasin lies in the Ozark Plateau and the lower subbasin lies within both the Ozark Plateau and the Mississippi Alluvial Plain. The majority of the upper subbasin is forested. Soils in the upper basin are primarily suited for trees and are considered highly erodible. The lower subbasin is 55% forested and 45% rowcrop or pasture. Wetland drainage, timber clearing, and flood control projects have converted the southern and eastern sections of the lower subbasin into a vast agricultural area.

Overall, streambank erosion is not a major problem in the basin and riparian corridors are mostly forested and usually rated as good. In the upper subbasin, there are excessive amounts of gravel bedload in the stream channel. All of the streams in the south and eastern portion of the lower subbasin have been channelized and leveed, causing severe aquatic habitat problems.

Basin streams generally exhibit good water quality throughout the Ozark portion of both subbasins. Most streams are classified as full use attainment. However, there have been some water quality problems associated with a waste water treatment facility, a quarry, and a lead mine. In the southeast portion of the lower subbasin, approximately 30% of the wells exceed nitrate water quality standards.

Two reservoirs in the upper subbasin, Clearwater Lake and Lower Taum Sauk Lake, affect stream flows and fish movement. Flow in the lower Black River is primarily regulated by water released through Clearwater Lake.

Public land in the basin totals more than 298,500 acres. The U. S. Forest Service owns the majority of this land followed by the Missouri Department of Conservation and the U.S. Army Corps of Engineers.

The basin exhibits good aquatic biodiversity. One hundred thirty two fish species, 42 mussel species, 12 crayfish species have been found. Twenty-six fish, four crayfish, and nine mussel species are considered a species of concern.

Angling opportunities for black bass and shadow bass are good throughout the basin. Giggling for suckers throughout the basin is also good. In the lower Black River, angling opportunities for walleye, channel catfish, and paddlefish exist. In Tenmile Creek, also in the lower subbasin, a Special Smallmouth Bass Management Area is present.

Four major goals for the basin are:

GOAL I: Maintain or improve aquatic habitat conditions to meet the needs of native aquatic biota while accommodating society's demands for agricultural production and economic development.

GOAL II: Maintain or improve water quality throughout the basin so that it is sufficient to support diverse aquatic biota.

GOAL III: Maintain diversity of native aquatic organisms and improve the quality of fishing.

GOAL IV: Improve the public's knowledge and appreciation of stream resources; recreational opportunities; and proper watershed, riparian corridor, and streambank management.

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