Eleven Point River

WATERSHED INVENTORY AND ASSESSMENT

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EXECUTIVE SUMMARY

The Eleven Point River originates near the town of Willow Springs, located in northeastern Howell County. The river flows southeasterly across northern Howell and Oregon Counties and then south, crossing the Arkansas state line about 2.5 miles west of the southeast corner of Oregon County. From there it flows generally south through Randolph County, Arkansas, joining the Spring River approximately 3.7 miles above the Spring River/Black River Confluence near Black Rock, Arkansas. The Black River is a tributary of the White River. Major tributaries of the Eleven Point River include Middle Fork, Spring Creek, Hurricane Creek, and Fredrick Creek. Greer Spring also contributes significantly to the flow of the Eleven Point River, turning the river into a cold water stream. The Eleven Point Watershed, which lies in the Salem Plateau Subdivision of the Ozark Plateau Physiographic Region, drains approximately 1,024 square miles in portions of five counties within Missouri. These include Howell, Oregon, Ripley, Carter, and Shannon. The watersheds bordering the Eleven Point Watershed include the Jacks Fork to the north, the Current and Fourche to the east, and the North Fork of the White River and Spring River to the west. Many caves, springs, and losing streams are present within

the watershed. This is due to the highly karst nature of its topography.

Land use/land cover within the Eleven Point Watershed is largely forest/woodland at 64.9%, while grassland/cropland comprises 34.4% of the watershed. Urban areas make up a very small percentage of land use at 0.4% of the watershed. The watershed has two urban areas with a population of over 1,000 persons. These are Mountain View, Missouri (population 2,036) and Willow Springs, Missouri (population 8,152). The population density of the watershed is approximately 14 persons per square mile. Approximately 22% of the watershed is in public ownership with the majority of this land managed as part of the Mark Twain National Forest.

Water quality within the Eleven Point Watershed is relatively good; however, high fecal coliform levels, nutrient loading, and sediment and gravel deposition are the most severe threats to water quality. Poor land use practices, gravel dredging, and increasing cattle populations are the primary causes of the water quality problems. Lead prospecting has occurred throughout the watershed. Lead prospecting and lead mining are potential threats to water quality in the watershed. There are three municipal waste water discharges within the watershed. Four additional National Pollution Elimination System discharges are also located within the watershed.

Condition of stream habitat within the Eleven Point Watershed is relatively good in most areas. Analysis of quantified Stream Habitat Assessment Device (SHAD) results from 16 sites within the watershed indicates that habitat at these sites range from 'fair' to 'excellent'. Riparian corridor land cover/land use within the watershed consists of more forest/woodland (65.0%) than grassland/cropland (33.7%). The Eleven Point River between Thomasville and Highway 142 has been designated as a National Scenic River Area. There have been no significant channel alterations anywhere within Missouri portion the Eleven Point Watershed. Small channelization projects have probably occurred on private and municipal property and also during road and bridge construction.

The biotic community of the Eleven Point Watershed is diverse. Sixty-six species of fish, 10 species of mussels, and 6 species of crayfish have been collected within the watershed. Several species of sport fish occur within the watershed including shadow bass, smallmouth bass, largemouth bass, chain pickerel, rainbow trout, warmouth, sauger, black crappie and walleye. In addition, a total of 76 "species of conservation concern" are known to occur within the watershed. This includes four species of fish, one species of amphibian, three species of mussel, and two species of crayfish.

The management goals, objectives, and strategies for the Eleven Point Watershed were developed using information collected from the Eleven Point Watershed Assessment and Inventory (WAI) and direction provided by the MDC Strategic Plan, and the Fisheries Division Five Year Strategic Plan (1995-2000). Objectives and strategies were written for instream and riparian habitat, water quality, aquatic biota, and recreational use. All goals are of equal importance. These goals include: (1) Improve riparian and aquatic habitats in the Eleven Point Watershed, (2) Improve surface and subsurface water quality in the Eleven Point Watershed, (3)Maintain the abundance, diversity, and distribution of aquatic biota at or above current levels while improving the quality of the sport fishery in the Eleven Point Watershed, (4) Increase public awareness and promote wise use of aquatic resources in the Eleven Point Watershed. The attainment of these goals will require cooperation with private landowners, other divisions within the Missouri Department of Conservation, as well as other state and federal agencies.

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