

THE STUDY AREA

A. Stream Characteristics

The Rogue River is a major tributary of the Grand River. It drains an area of approximately 234 square miles in Newaygo and Kent counties. Its headwaters are a series of ditches that drain the old Rice Lake bed in southern Newaygo County. In this area the stream has been dredged and straightened for drainage purposes leaving limited fish habitat. The ditch conditions extend into Kent County and the Rouge River State Game Area for 1 1/8 mile below 22 Mile Road. The upper portions of the river are characterized by a rather sluggish current. Natural diversion channels frequently leave the mainstream, flow through lowlands, then rejoin the mainstream. The bottom type throughout this stretch is predominantly sand and silt. A dense canopy of lowland hardwoods provides overhead shading. Numerous dead elms in the river reduce the flow rate which tends to warm the water. From Pine Island Drive downstream to the confluence with the Grand the stream gradient increases and the bottom type changes to gravel, sand and rubble. This creates numerous riffles and pools which keep the water well oxygenated and furnish trout cover.

The tributaries of the Rogue maintain its excellent water quality. Without these spring fed tributaries (Spring, Cedar, Duke, Stegman, Rum, Shaw and Barkely Creeks) the Rogue could not support cold-water species of fish. There are also warm-water tributaries such as Post, Hickory, Walter, and Ball Creeks. In addition, Ransom, Camp, Freska, Grass (Bella Vista), Indian and Spring Lakes all have outlets flowing into the Rogue. It should be noted that this creates a delicate ecological balance. If the cold water conditions were altered and the waters of the Rogue warmed, the trout fishery would probably be destroyed. The present combination of cold, clean, fresh water plus the addition of nutrients from fertile agricultural lands contribute to the superior growth exhibited by trout and helps provide a fishery capable of supporting extensive fishing pressure.

The upper portions of the river are difficult to fish and canoe because of streamside brush and numerous fallen trees. Downstream from 13 Mile Road wading and floating conditions are excellent. The river width varies from 15 to 20 feet in the upper portions to approximately 80 feet in the lower reaches. Stream depths range from 1 to 4 feet with deeper holes in spots.

Portions of the river upstream from Grange Avenue are characterized by a floodplain 1/4 to 1/2 mile in width. This floodplain, which remains wet much of the year, has tended to limit development and helped maintain a natural buffer zone along the riverbanks.

There are two impoundments on the river. The Rockford Impoundment provides the domestic water for the Rockford area and the Childsdale Impoundment provides water for the Rockford Paper Mill. Plans are now being considered to remove the Childsdale Impoundment. (NOTE: There is no longer a dam at Childsdale.)

B. Historic and Archeological Sites

Although Kent County is rich in history, sites of historic or archeological interest are not common in the proposed Natural River District. Most Indian villages and early developments were situated on the higher ground away from the immediate riverbanks. Hinsdale's Archeological Atlas of Michigan indicates there was an Indian village on the west bank of the Rogue near the confluence with the Grand River. Indian villages were also located on the east shores of Indian and Camp Lakes. Trails connected these villages, but they did not follow the river.

There were many mills built on tributaries of the Rogue, but few on the Rogue itself. The generally slight gradient of the Rogue does not provide a head of water that would have been sufficient to power the early mills. Stegman Creek did have 12 mills built on it. At one time there was a barrel mill near the mouth of Cedar Creek. There is also the remains of the race of the original saw mill built on the Rogue just north of Rogue River Drive. This now appears to be a naturally flowing creek.

The Pennsylvania railroad bridge crossing Stegman Creek is also of interest. Consideration should be given to preserving this unique stone structure.

C. Soils

The watershed is within the Southern Drift Plain. Topography varies from near level to moderately and steeply hilly land with some small lakes and wetlands in depressions. The Rogue flows through a former glacial channel which is flat and swampy with poor drainage. Surface elevations vary from 610 feet at the outlet to 1,000 feet in the headwaters. Lowland soils are characterized by the very poorly drained Brookston Loam and Carlisle Muck series. The upland soils are characterized by the moderately well-drained Berrien Sandy Loam and the very poorly drained Newton Loamy Sand series. These conditions lead to flooding and inadequate drainage of the surrounding lands.

D. Vegetation

Vegetation adjacent to the stream varies along its length. In southern Newaygo County muckland crops are common. The organic soils support crops of onions, mint, carrots and celery. In Kent County upland crops (principally corn and hay) and lesser amounts of forest and pastureland are found. Lowland hardwoods such as elm, basswood, soft maple, and ash are found in the floodplain and along adjacent banks. The immediate banks of the river in the lowlands are characterized by Sagittaria, various grasses and hedges and herbacious shrubs. The in-stream submergent and emergent vegetation types are dominated by Potamogeton, Vallisneria, Elodea, Sparangium, and Nasturtium.

E. Climate

The Rogue River watershed is in the latitude where convergence of polar and tropical air masses create rapidly changing weather patterns. However, Lake Michigan operates as a modifier and makes for generally cooler summers and milder winters than experienced by other areas of the same general latitude.

The area has an average annual precipitation of over 33 inches with a fairly uniform distribution throughout the year. Average annual snowfall is 58.1 inches. The average annual temperature is 47.8 degrees with the highest monthly maximum temperature average occurring in July - 72.9 degrees - and the lowest monthly minimum temperature average occurring in February - 17.5 degrees. The average growing season extends from the first week in May to the first week in October. The prevailing winds are from the southwest at about 10 mph. On the average during each year, the percent possible sunshine is about 50 percent.

F. Ownership and Accessibility

Approximately 80 percent of the land along the mainstream of the Rogue is privately owned. The major portion of publicly owned land - 5,260 acres - is located in the Rogue river State Game Area. Public access to the river can be gained at the State Game Area or at any of the bridges and culverts crossing the river. There is an access site near the mouth of the Rogue in Plainfield Township, and Kent County leases to the Department of Natural Resources an access site and park at the junction of 12 Mile Road and Summit Avenue. Because access sites with adequate parking spaces are needed, the State is attempting to buy additional parcels along the river. They are negotiating to buy the Nawara property in Section 22 of Algoma Township and have recently purchased the Powell property in Section 23. This provides an additional 1800 feet of river frontage for public use. They have also purchased 43 acres south of Fonger Road in Section 30 of Algoma Township, and approximately 40 acres in the NW 1/4 of the SW 1/4, Section 32 Algoma Township, near Pine Island Drive.

EXISTING USES

A. Agriculture

Agriculture is the major land use in the Rogue River watershed. Fifty-five percent of the land is in cropland. In Newaygo County, muckland crops predominate. The drainage from these lands are the headwaters of the mainstream of the Rogue. Periodic cleaning of these drains may cause downstream siltation in the river. In Kent County, pasture land, upland crops and forest land are found along the banks of the river.

Supplemental irrigation of croplands near the river is an established practice. Algoma Township has about 100 acres of land in irrigation from surface water sources. Plainfield , Sparta and Tyrone Townships all have lesser amounts.