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SERIES: THE TROUT STREAMS OF MICHIGAN

NO. 17 THE SUCKER RIVER

William J. Gruhn, Fisheries Biologist

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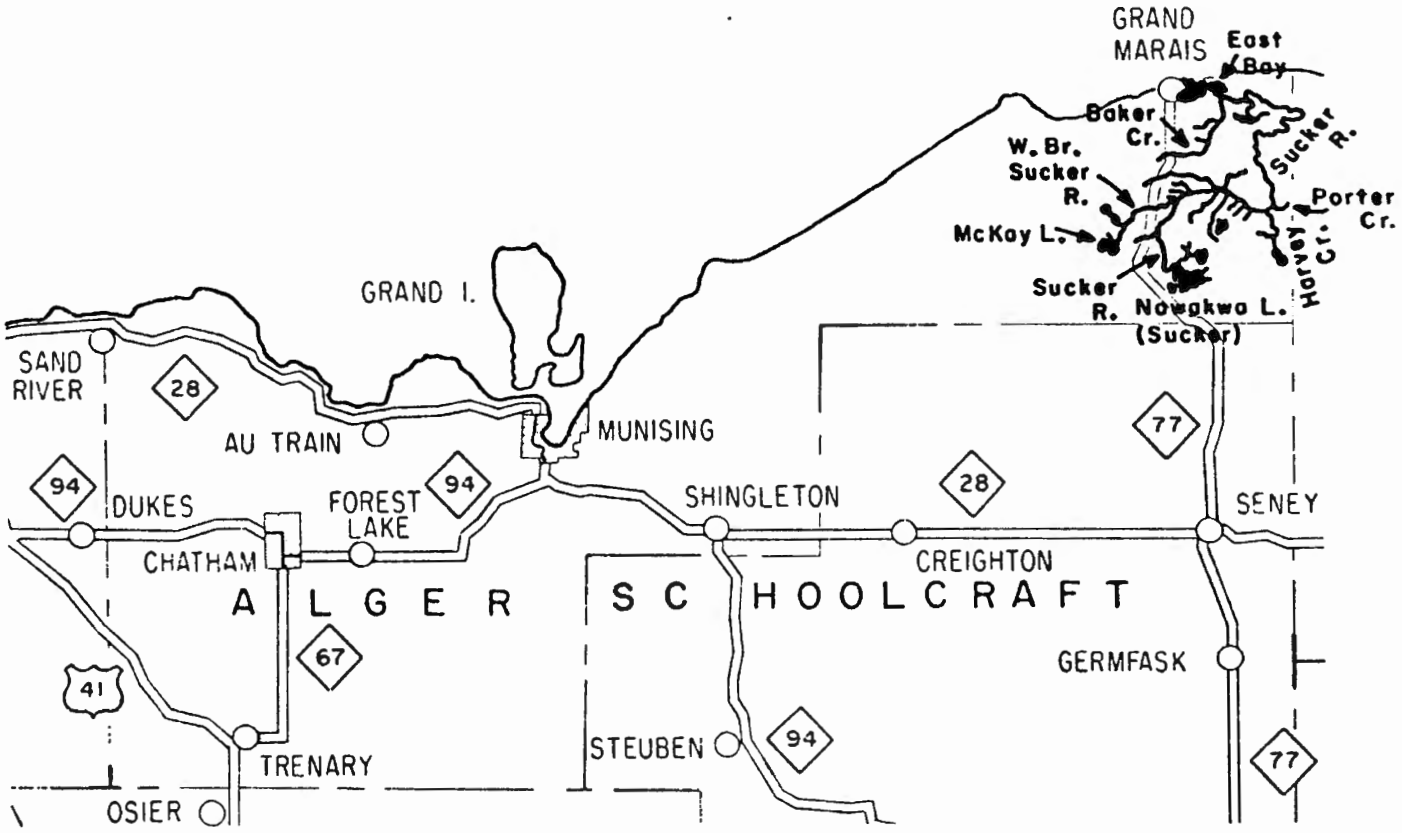
"THE SUCKER RIVER"



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The Sucker River artistically snakes its way northward through the flat to gently rolling pine plains of eastern Alger County before abruptly swinging west and emptying into Lake Superior near the village of Grand Marais. It did not always follow this route. Its natural mouth lies 11 miles east.

The Sucker River was widely used to transport logs in the late 1800's and early 1900's as were most of the major streams throughout the Upper Peninsula. Logs were boomed on Nawakwa (Sucker) Lake, behind a dam below Porter Creek (T48N, R13W, Sec. 1, NW 1/4), behind Stone Dam (near center of T49N, R13W, Sec. 23) and in the Sucker Marsh, just over the Luce County line (T49N, R12W, Sec. 7) to be floated downstream to Lake Superior through what is now the Blind Sucker River. They were then rafted back west through open water on Lake Superior to the mill in Grand Marais.

There were two problems with this route: It was difficult to move the logs through the Sucker Marsh, even on spring high water and it was a long dangerous trip to Grand Marais via Lake Superior. The answer seemed quite simple; reroute the river so it flowed into East Bay. In the 1870's, with great effort by man and beast, wood riprap and sand dikes were constructed below Pullup Hill (T49N, R12W, Sec. 7) and along an east-west ridge and the cut was made. Spoil from the cut was used to block the old channel. The river cut a new channel following the east-west ridge until it bounced off the hook shaped west end (T49N, R13W, Sec. 3) and hit Grand Marais Creek. From there it followed the creek's channel down to East Bay. The logs were then floated through the channel into West Bay and directly to the mills.

The logging in this area was a pine operation and was carried out in two phases. The initial work began in 1864 and finished about 1890 and the second phase began in 1890 and terminated about 1907. The second phase involved the utilization of all marketable timber left from the previous operation. In short, the initial operation took the cream of the crop and left the less desirable timber to someone else, as usual.

Lumber was shipped south via rail and loaded out of Thompson and Manistique bound for Chicago and other points along the southern lake. It was also loaded on ships in Grand Marais Harbor and shipped south, through the Soo Locks, to ports in both southern Lakes Huron and Michigan.

There is one other point of interest along this stream, the Old Whitewash Site, located at the mouth of a gully in east central Sec. 35, T49N, R13W. An old pine camp was located here and was probably named after that popular substitute for paint.

The Sucker River Watershed encompasses approximately 50,000 acres or 8 square miles and has an average summer discharge of about 35 cfs. The flood signs during a 1955 survey indicated the river floods range from 1-3 feet in general and as much as 3 to 5 feet at the extreme lower end. Twenty percent of the watershed is under public ownership and this includes roughly 40% of the river's banks.

The water is light brown in color, the pH is slightly above neutral and slightly productive. Water temperatures rarely exceed 70°F. The stream is considered good brook trout habitat and supports a good spring rainbow (steelhead) run.

Coho salmon smolts were planted each spring from 1968 through 1971, however, returns were so poor this program was dropped. Steelhead and chinook salmon were stocked in 1972 and 1973 to improve fishing. Varying numbers of legal sized brook trout were stocked from 1947 thru 1965 and sub-legals from 1959 thru 1970; plus legal rainbows from 1958 thru 1965 and one stocking of 24,000 fingerling rainbows in 1969. The West Branch Sucker River, Grand Marais and Baker Creeks were also stocked at varying levels with legal fish during the era of legal planting. Maintenance stocking has since been discontinued.

A stream improvement program was carried from 1956 thru 1960 which involved stabilizing 14,190 lineal feet of banks with 483 structures; either deflector or cover types. This work was carried out on both the main stream from a point approximately one mile upstream of the Old Whitewash Site to the confluence of Grand Marais Creek and Grand Marais Creek from Grand Marais Lake to the Sucker River. The primary problem attacked then was eroded banks.

While there are no established campgrounds on the river, the lower half is nearly all within the Grand Sable State Forest. Camping is permitted on these lands with a camp registration card and most of this is high dry hardwood forest or pine plain.

Accessibility along the entire stream is good. The main branch can be reached from: Segans Camp Road just 1/2 mile east of State Highway M-77, Section 1, T48N, R14W; a logging road, going north from Segans Camp Road 1 1/2 miles east of M-77, at the confluence of Blood Creek in Section 33, T48N, R14W; the Old Grand Marais-Seney Road (Co. 709); along the Whitewash Road running south from County Road Co. 700, about 3 miles east of Grand Marais; along the road running north from Co. 700 on the Alger County School Forest about 4 1/2 miles east of Grand Marais; Co. 700 about 5 3/4 miles east of Grand Marais, and on a logging road running south from Co. 700 about 6 miles east of Grand Marais. There are probably many other logging roads and trails that will provide access to the river and its tributaries not shown on the map.

To discuss the stream itself let us start with the West Branch Sucker River. Its headwaters are McKay Lake and a tributary from two small lakes just north of McKay Lake. It flows northeast through relatively flat poor rubicon sand plains covered with northern hardwoods (beech, red maple and some hard maple) and hemlock to its confluence with the Sucker River. There are also scattered stands of jack pine and grassy openings. The stream bank is densely lined with tag alders making fishing very difficult.

The stream at highway M-77 Bridge is small, 10-15 feet wide, up to 40 inches deep, and light brown in color. This area has a good brook trout population up to 12 inches in length. The bottom is sand. There is a mixture of minnows; creek chubs, blacknose dace and muddlers (C. bairdii); plus American brook lamprey. There are numerous small beaver dams scattered along the west branch providing some interesting fishing.

The main stream Sucker River has its headwaters in Nawakwa (Sucker) Lake and flows north to the west branch junction. The surrounding land is poor dry rubicon sand plains covered with northern hardwoods (beech, red maple and some hard maple) and hemlock with scattered jack pine and grass openings; some elm can still be found along the bottoms. The bank is again densely lined with tag alders.

The stream is about 10-20 feet wide, up to 60 inches deep, light brown in color, and clear. The bottom is sand and silty sand with some gravel riffles. There is a moderate growth of Vallisneria in this area. The stream is densely shaded by alders and a few instream logs provide cover. The banks are relatively low with little evidence of beaver. The predominate game species is brook trout with a few rainbow. The forage species are blacknose dace and creek chub plus American brook lamprey. Natural foods include minnows, caddis fly, diptera and mayfly larvae plus leeches. There are only two very small unnamed tributaries in this segment with no data available and some springs. (A large spring at Segan's Camp Site). To this point all adjacent lands are private.

From its confluence with its West Branch the river flows through the same poor sand, but varies from flat to gently rolling, to the Old Whitewash Site. The land is covered with northern hardwoods and hemlock with scattered jack pine stands and grassy openings progressing to large grassy open areas in the vicinity of the Old Grand Marais-Seney Road. The dense tag alder growth thins out as it progresses downstream. There are a few state owned forties along this stretch of stream.

The stream has nearly doubled in size and continues to grow as it picks up several fair sized tributaries through this area. In width it runs from 20 to 30 feet and varies from 1 to 6 feet in depth. The bottom is changing from shifting sand to gravel and rock rubble and velocity is increased slightly. The banks change from low (1 foot) and marshy to higher (40 feet) and brushy (maple and beech) with some localized raw areas. Instream vegetation peters out in this area and the cover is confined to logs and holes. Rainbow and salmon spawning habitat becomes abundant in the lower portion of this segment.

Brook trout are predominate in this area. Brookies seem to be well distributed in the spring but become more difficult to locate as the summer proceeds suggesting they may be seeking the cooler spring areas. Numerous juvenile coho and rainbow were collected in this area indicating good reproductive habitat for these species. The forage species include: blacknose, longnose, and redside dace; mottled sculpin (C. bairdii) and brook lamprey. Burbot are also found occasionally. Food organisms are caddis, stone fly, mayfly, dipteran and mosquito larvae, crayfish and snails.

There are a number of good tributary streams in this area, they are: Spring Creek, Haverstock Creek, Blood Creek, Klondike Creek, Porter Creek and Harvey Creek. All of these creeks are small, clear, cold water brook trout streams with sufficient spawning habitat to provide ample reproduction to sustain themselves. All but Harvey Creek are of spring origin. Harvey Creek flows out of Harvey Lake, thus, the upper portion of this creek is too warm and sandy to be good trout habitat. All have abundant populations of aquatic insects, plenty of cover, inflowing springs, and all provide homes for beaver. There are nine other small unnamed tributary creeks shown on the map with no data available.

From Porter Creek the Sucker flows north through poor rubicon and plains which become Autrain loamy sand ridges before it reaches County Road 700. As it passes the hill known as "Pullup", it slides thru a steep sand-rock escarpment to drop down to Lake Superior. The upper part of this stretch is open sand plains and with jack pine stands and scattered northern hardwood stands but as these give way to loamy sand ridges and hills, the cover becomes northern hardwoods, (red maple, hard maple, beech, yellow birch and white birch) and hemlock again.

The gradient of the stream picks up considerably as it crosses these sand hills. The stream banks are open with only maple and beech brush growing in small quantitites. Nearly all of this area is state owned.

The river in this stretch is up to 30 feet wide, up to 5 feet deep, and the velocity is rapid. The bottom is largely gravel with sand or silty sand shoals and has very little vegetation. The banks have become steep and some large raw areas occur. Cover is made up of log jams, logs, holes and undercut banks. Spawning habitat is abundant, as observed by J. Trimberger in 1968.

Brook trout are abundant ranging in size from 2 to 12 inches in length. Trimberger also noted an abundance of juvenile coho salmon and rainbow trout. Other species include: blacknose and longnose dace and mottled sculpin (C. bairdii). Natural foods are made up of mayfly, caddis fly, stonefly and mosquito larvae, crayfish and snails. There are no tributary streams in this segment, however, there are sufficient springs in the bottom and along the banks to keep the waters cold.

The final segment to be discussed is that from County Road 700 to East Bay. This area is a series of sand ridges and loamy sand bottoms covered with jack pine, red pine and red oak on the ridges and northern hardwoods (beech, red maple, yellow birch and elm) in the bottoms. The stream bank has scattered clumps of lowland brush made up of willow, alder, dogwood and huckleberry. The gradient of the stream in the area progresses from rapid below Road 700 to sluggish below the mouth of Baker Creek. The river is from 30 to 80 feet wide and has holes up to 6 feet deep except where it flows across its delta and into East Bay which is only 8 inches deep. The river splits into 2 branches as it flows across the delta. The bottom varies from gravel and rock rubble at the upper end and sand plus silty sand at its mouth. Cover is generally abundant in this area with undercut banks, logs, log jams and holes. The banks again are generally steep and high with some raw exposed areas. Spawning habitat for salmonids is abundant.

The two primary fish species are brook and rainbow trout along with minnows: blacknose dace, longnose dace, redside dace, creek chubs (rare) and mottled

sculpin (C. bairdii); burbot, white suckers, juvenile rainbow and coho and small sea lamprey. Natural foods: mayfly, caddis, stonefly and dipteran larvae, leeches, crayfish, clams and snails are abundant.

There are two tributaries in this stretch, Grand Marais Creek and Baker Creek. Grand Marais Creek is a moderate to sluggish clear water brook trout stream flowing from Grand Marais Lake. Both the creek and lake are weed choked with: Vallisneria, Potamogeton spp, Elodea, water cress, horned pond weed (Zannichellia sp), and Ceratophyllum sp. The bottom is largely sand with sufficient gravel for spawning and food is abundant.

Baker Creek is a small, rapid, light brown, cold brook trout stream. The bottom is largely rock and gravel and food is abundant. The banks along this little stream are steep, high and in some areas raw. Both creeks and the lake are good brook trout fishing. Baker Creek is utilizied heavily by spawning rainbow from Lake Superior. The East Bay flowed through a channel into West Bay and into Lake Superior prior to spring of 1973. During that spring the river washed through a section of a sand point (sand spit) known as Lonesome Point and began flowing directly into Lake Superior.

The Sucker River has been used extensively as a spawning area by the sea lamprey (Petromyzon marinus) as were most coastal streams. These fish showed up regularly in the collections made by Hanson, Ward and Vincent in 1958, however, only two are recorded in John Trimberger's work of 1969.

The U.S. Fish & Wildlife Service maintains a monitoring lamprey weir during spring and early summer in Sec. 3, T49N, R13W. With the use of T.F.M. lampricide this stream is programmed to lamprey eradication at regular intervals.