SURFACE WATER RESOURCES

OF

BARRON COUNTY

WISCONSIN CONSERVATION DEPARTMENT

MADISON 1

1964

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SURFACE WATER RESOURCES OF BARRON COUNTY

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Wisconsin Conservation Department
Madison 1, Wisconsin
1964

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INTRODUCTION

In 1959, the Legislature and Governor asked the Conservation Department to develop a program for classification of lakes by use. To fulfill this mandate, the Department must first prepare a water resources inventory to acquire the necessary data from which to formulate generalizations necessary for classification. Inventories are being prepared on a county by county basis to conform with other resource inventories conducted by the Conservation Department. This summary of the surface water resources of Barron County is the seventeenth completed thus far. The basic premise underlining this program is the growing realization that the uses for which surface waters are demanded steadily increase and conflicts arise between uses. There are conflicts between the angler, irrigator, speedboater, cottage owner and duck hunter, to name a few. These conflicting interest groups tend to infringe upon the activities of others. Often certain uses are destructive to the very nature and future existence of the water resource. A method of insuring the continued enjoyment of this natural resource for the benefit of all concerned is therefore necessitated.

This inventory is intended to provide a summarization of the quantity, quality and character of the surface water resources of Barron County, including both lakes and streams. Use potential will be described and methods of protection discussed. The inventory will have served its purpose if it can be used as a guide in planning for the wise use and good management of the waters of Barron County.

Data for this inventory were gathered from a variety of sources. The principal sources were aerial photographs, U.S.G.S. maps, field inspections, interviews and actual sampling. Since this activity was approached as an inventory of recreational waters, little consideration was given to industrial and agricultural uses of surface waters. The waters files of the district fish managers were used in determining some of the fish species compositions. Because a definite time limit was necessarily imposed on data collections, detailed comprehensive surveys were not always possible.

SOURCES OF DATA FOR THIS COMPILATION WERE

Agricultural Stabilization Committee Aerial Photos, 1951 and 1963

Barron County Clerk's Records

Coordinating Committee of Conservation Needs Reports, 1960, 1961 and 1962

Committee on Water Pollution Files

Conservation Department Game Management Reports

Conservation Department Fish Management Water Files

Farm Plat Book of Barron County, 1961

Forestry Surveys

Lake Classification Field Surveys, 1962-1963

Population Census Report, 1960

Public Service Commission Reports

Soil Surveys

State Highway Department Maps

Weather Reporting Services

U.S. Geological Survey Water Supply Reports and Topographic Maps

GENERAL SETTING OF THE WATERS OF BARRON COUNTY

The surface waters of Barron County are mostly within one drainage stream, the Red Cedar River. Of the 889 square miles of land and water in Barron County, the Red Cedar River drains 750 square miles of this area. The other drainage systems of the county are the St. Croix River, the Apple River, Sand Creek, and North Branch Beaver Brook which have a total watershed of 28.3 square miles. Land areas within this drainage system that have no permanent surface waters or drainage outlets comprise 52.7 square miles and landlocked areas with measurable lake surface waters account for the remaining 58.0 square miles of the county's area (Figure 1). The maximum elevation of Barron County is about 1,640 feet in the Blue Hills and the minimum is 995 feet above sea level at the outlet of the Red Cedar River.

The most recent glacier to reach Barron County, the Wisconsin glacier, covered only about one-third of the county. Earlier ice sheets, however, completely covered the county. Glacial debris, or till, was deposited in large quantities by the receding Wisconsin stage in the form of terminal moraines diagonally across the northeast and northwest corners of the county. The young drift area of the terminal moraine is distinct in having a typically hilly appearance, a large number of kettle hole, bog and irregularly shaped lakes, and a number of swamps. The moraine area is poorly drained and the streams have numerous and typical cattail, sedge, and tamarack marshes and swamps bordering them. Also, the streams of this newer glaciation begin as intermittent flows from lakes or swamps. In general, the waters tend to have the following characteristics: high temperatures, slightly acid, brownish color, and stream gradients vary from high in the headwater areas to extremely low in the outwash plains near the outlets.

Quartzite ridges are prominent features east of Rice Lake in the Blue Hills. Varying from soft sandstone to vitreous quartzite; and, with only a thin overlying glacial till, the water storage capacity of this region is small. Consequently, there is only a limited amount of spring activity in this region and no natural lakes.

From the slightly undulating terminal moraine in the northern part, the topography changes in the remaining southern part to hills that are deeply incised by rivers and streams. Broad valley bottom plains lie along the Red Cedar, Hay, Yellow and Vermillion Rivers. These have well-developed drainage patterns with few swamps. There are, also, few natural lakes in this ground moraine and outwash plain. Those that do occur here are shallow and marshy, and often ephemeral, and not deep enough to prevent winter fish kills from oxygen depletion. The lakes of the terminal moraine area and outwash moraine to the north of them are usually quite deep and have a considerable range in sizes, shapes and types.

The soils in the bottom lands are generally sandy loams and silt loams, while the soils of the uplands are generally silt loams. The geological formations which underlie Barron County are the Barron quartzite, as mentioned, in the eastern part, and Upper Cambrian (Potsdam) sandstone over the remainder of the county. There are also Lower Magnesian limestone caps on the upland ridges in the southwest. Glacial drift is thick over the bedrock in the northwest and northeast and thin elsewhere.

Alluvial gravel and sand forms a broad plain along the Red Cedar River and its tributaries in the central and southern portions of the county. The underground

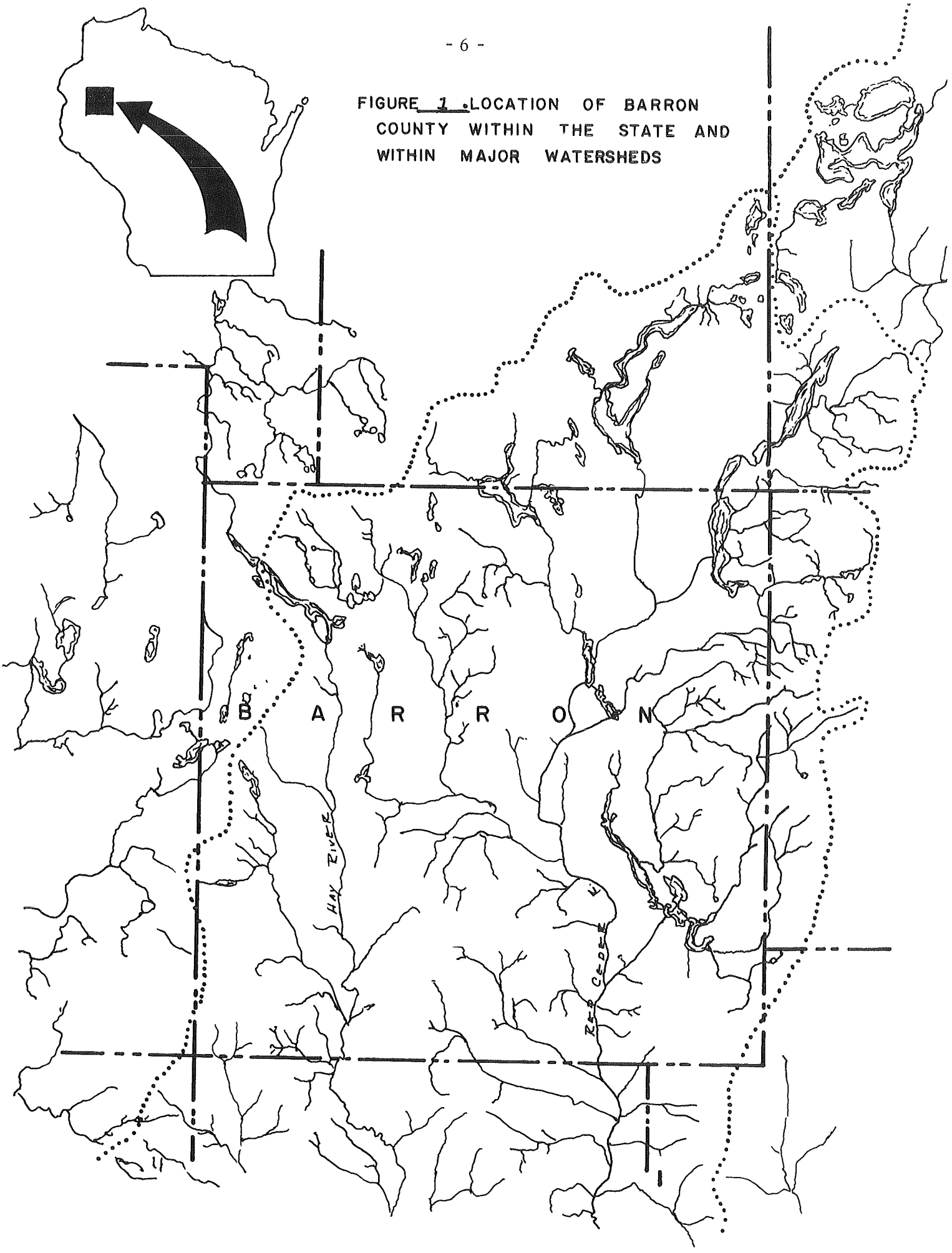


FIGURE 1 .LOCATION OF BARRON COUNTY WITHIN THE STATE AND WITHIN MAJOR WATERSHEDS

water-bearing horizons are the sandstone, the glacial drift, and the alluvial sands and gravel along the river. Springs are common along the valley bottom edges. The water of springs and ground supplies is generally low in mineral content. This soft water of most of this county is less fertile in the production of plant animal life than waters flowing from a bedrock of limestone, such as in the limestone formations and its harder water in the southwest part of the county.

Barron County has an average annual precipitation of about 30 inches. The average annual runoff amounts to about 10 inches at Colfax on the Red Cedar River (Table 1). The more permeable soils of this region evidently permit a greater portion of rainfall to percolate into the ground and enter ground water flows than in regions of less rugged topography and clay soils. Maximum precipitation occurs in June. Highest runoff, however, is usually experienced earlier in the spring during April, when snowmelt occurs, the ground is still frozen and rains may occur.

Mean temperatures drop below freezing in mid-November and freeze-up of lakes follows soon afterward. Ice cover remains until mid-April. Snow cover and fluctuating water levels affect waters by shutting out light and reducing depths and water volume. The shallow water lakes may then become faced with oxygen depletion when plants are unable to carry on photosynthesis and winter fish kills result.

The land use factors which also influence surface water quality and quantity in Barron County are shown in Table 2. The forested areas of the north, mainly, tend to stabilize the runoff, although altogether the total runoff may be reduced. The agricultural areas, that cover most of the remaining parts of the county, tend to reduce the amount of surface waters through ditching and erosion. There is thus a tendency toward more extreme natural fluctuations in water levels in both lakes and streams.

According to the Conservation Department's forest inventory of the 237 square miles of commercial forest in Barron County, the various forest types are ranked as follows, with the square miles of each type: aspen - 66, oak - 63, northern hardwoods - 51, upland brush and grass - 29, conifer - 13, lowland hardwoods - 8, and lowland brush - 7 square miles.

Table 1. Climatic data for Barron County area*

STATION**	Temperature in degrees Fahrenheit: Mean	Maximum	Minimum	Mean precipitation in inches: Annual precip.	Annual snowfall	No. days with rain
Spooner	42.4	110	-46	27.81	45.8	60
Cumberland	42.5	107	-52	30.72	47.3	61
Weyerhauser	42.0	109	-41	30.10	43.3	60
Amery	43.0	108	-46	27.65	41.2	58
River Falls	44.1	109	-47	29.57	38.4	60
Menomonie	45.2	101	-40	30.53	49.0	59
Winter	38.9	107	-46	30.45	58.0	64

Red Cedar River at Colfax***

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Mean
Discharge in C.F.S.:													
High water, 1943	554	538	876	2,165	934	2,804	1,283	737	571	773	686	534	1,036
Low water, 1949	346	358	1,294	822	469	338	975	605	385	355	458	415	571
Runoff in inches:													
High water, 1943	.51	.47	.92	2.33	1.11	3.19	1.08	.74	.56	.65	.61	.53	12.7
Low water, 1949	.36	.32	1.45	.98	.58	.38	1.03	.58	.40	.30	.46	.37	7.21

* Wisconsin Climatological Data, Wisconsin Crop Reporting Service, 1961
** 30-Year Records
*** Selected Years

Table 2. Land use in Barron County*

	Acres	Percent of Total Area	
Forest land:			
Commercial forest	151,700		
Noncommercial forest	-		
Total forest land	151,700		27
Nonforest land:			
Farm	369,251	64	
Marsh and muskeg	11,000	2	
Recreational, industrial, residential	4,500	1	
Right-of-way	14,100	3	
Total nonforest land	398,851		70
Water:			
Lakes:	17,265		
Natural - 13,127			
Impoundment - 4,138			
Streams:	1,184		
Total water	18,449		3
Total Area of Barron County (889 square miles)	569,000		100

* Source: Wisconsin Conservation Department's forest inventory except waters data.

DESCRIPTION OF THE WATERS OF BARRON COUNTY

Lakes, impoundments and streams have been defined for inventory purposes. A lake is all waters navigable, meandered or public that are wet nine out of ten years. Impoundments are those bodies which owe one-half or more of their maximum depth to an artificial impounding structure. The streams referred to in the inventory are all those which have a permanent flow or any streams of intermittent flow or seasonal flow which have a significance for recreational purposes. For further definition of lake types, wetlands and other terms used to describe and classify waters, a glossary is provided at the end of this summary.

A more detailed description of the named lakes is provided than for the unnamed lakes that follow them. Only a few of the named lakes have hydrographic contour maps available for them.

In the preparation of the maps accompanying this summary, a numbering system was devised for unnamed lakes based on township name and legal description. They are referred to by township, section and sixteenth section, etc., in which they are situated. An example of this system would be Town of Cedar Lake 29-12a. This lake can be located in the twelfth numbered forty-acre parcel, of Section 29, in the Town of Cedar Lake (T36N, R10W). The small letter "a" refers to the location within the forty. Each forty is divided into ten-acre tracts and are lettered counter clockwise as a, b, c, or d, starting with the northwest corner of the forty. Lakes and streams with duplicate names are differentiated by the use of the Town name after the lake or stream name, in which they are mostly situated.

The maps reproduced in this publication were not intended for legal and regulatory use. They should, therefore, not be considered or used as factual or final authority because of natural or man-made changes which may have occurred.

Named Lakes

Anderson Lake T36N, R13W, Section 13
Surface Acres = 10.8, S.D.F. = 1.39, Maximum Depth = 15 feet

A soft water seepage lake, it is landlocked and has a fish population of largemouth and smallmouth bass, bluegills, pumpkinseeds and bullheads. The slow growth rate of the panfish is a management problem. A town road ends at the lake edge and provides public access with limited parking. Private development consists of two farms near the lakeshore. The remainder of the lakeshore is under cultivation or pasture. Wildlife value is limited to providing feed for a few ducks.

Bailey Lake T33N, R11W, Section 25
Surface Acres = 43.3, S.D.F. = 1.57, Maximum Depth = 7 feet

A soft water seepage lake, landlocked and subject to complete winterkill conditions. The fish population consists of bullheads. Five acres of marshy wetlands bordering the lake provide habitat for muskrats and nesting puddle ducks and mergansers. Cultivated land surrounds the lake and it has no private development, public frontage or access.

Barron Flowage #1 T34N, R12W, Section 27
Surface Acres = 47.0, S.D.F. = 2.60, Maximum Depth = 13 feet

A hard water drainage lake on the Yellow River in the City of Barron. The flowage is formed by a 13-foot impounding structure on its outlet which is a public utility dam operated by the City of Barron. The flowage is managed for northern pike, bass and panfish. The most abundant fish species are bullheads, followed by northern pike, largemouth bass, bluegills, black crappies and pumpkinseeds, walleyes, smallmouth bass, rock bass, brook trout and white suckers. An acre of marshy wetlands provides habitat for muskrats and a few ducks. Public access with limited parking is located near the dam. There is a small park with a picnicking area near the access. Public frontage consists of 2,000 feet of city frontage. Private development is made up of three dwellings.

Barron Flowage #2 T34N, R12W, Section 28
Surface Acres = 1.5, S.D.F. = 1.92, Maximum Depth = 10 feet

A hard water drainage impoundment on the Yellow River having a three-foot water control structure on its outlet. The City of Barron maintains this flowage as a swimming area with bathhouses, lifeguard and lighting; it is part of the City of Barron Park. Bluegills, bullheads and brook trout are present in this flowage. The entire shoreline of 0.33 miles is in city ownership. It is of little significant value to waterfowl or other wildlife.

Barron Flowage #3 T34N, R12W, Section 21
Surface Acres = 32.9, S.D.F. = 3.17, Maximum Depth = 10 feet

A hard water drainage impoundment on the Yellow River with an 11-foot water control structure on its outlet. This dam is maintained by the City of Barron. The most abundant fish are bullheads. The next most common species are northern pike, largemouth bass, bluegills, black crappies and pumpkinseeds. Walleyes, smallmouth bass, rock bass and white suckers are also present. This public utility impoundment provides some habitat for muskrats, beaver and nesting ducks of the puddle variety. The City of Barron provides a camping area and two public landings near the dam. Private development consists of six dwellings along the lakeshore.

Bass Lake - Town of Bear Lake T36N, R12W, Section 10
Surface Acres = 22.7, S.D.F. = 1.44, Maximum Depth = 21 feet

A soft water seepage lake, landlocked and having a fish population of largemouth bass, bluegills and pumpkinseeds. The slow growth of the panfish is a management problem. Mallards and wood ducks may be found nesting in the lake area. It has no public frontage or access and is located on Boy Scout Camp property.

Bass Lake - Town of Cedar Lake T36N, R10W, Section 2
Surface Acres = 19.6, S.D.F. = 1.30, Maximum Depth = 41 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, largemouth bass, bluegills and black crappies. An eight-acre wetland area provides habitat for beaver, muskrats and nesting mallards, black ducks, wood ducks and hooded mergansers. A number of other puddle ducks and diving ducks use the lake during migratory periods. There is no public access, private development or public frontage. Most of the lakeshore is hardwood and conifer upland, however, a tamarack alder swamp is located in the northeast part of the lakeshore.

Bass Lake - Town of Chetek T33N, R10W, Section 34
Surface Acres = 118.0, S.D.F. = 1.28, Maximum Depth = 17 feet

A soft water seepage lake, landlocked and having a fish population of largemouth bass, bluegills, bullheads and white suckers. The lakeshore is predominantly upland hardwood and conifers except for small marshy bays and the tamarack, black spruce swamp on the northeast shore. An approximate 100 acres of wetlands provide habitat for migratory and nesting puddle and diving ducks. It has no public access, private development or public lands.

Bass Lake - Town of Crystal Lake T35N, R14W, Section 7
Surface Acres = 37.2, S.D.F. = 1.73, Maximum Depth = 61 feet

A soft water seepage lake having an intermittent outlet to Staples Creek. The fish population consists of largemouth bass, bluegills and bullheads. Most of the lakeshore is upland hardwood, except for about five acres of marshy wetlands which provide habitat for muskrats and nesting mallards and wood ducks. It has only a private access with a boat rental and private development consisting of two dwellings. There is no public frontage.

Bass Lake - Town of Turtle Lake T33N, R14W, Section 32
Surface Acres = 18.9, S.D.F. = 1.12, Maximum Depth = 19 feet

A soft water seepage lake, landlocked and having a fish population of largemouth bass, bluegills, pumpkinseeds and bullheads. This lake may be subject to an occasional partial winterkill. Pastured upland hardwoods surround most of the lake except for a 19-acre wetland on the west side that provides habitat for muskrats and nesting mallards and wood ducks. There is no public frontage, access roads or private development.

Bear Lake T36, 37N, R12, 11W, Sections - several
Surface Acres = 1,345.0, S.D.F. = 2.58, Maximum Depth = 100 feet

A hard water drainage lake with an outlet, Bear Creek, having a 13-foot water control structure on it controlled by the Northern States Power Company. Bear Lake also lies partly in Washburn County. The most common fish species include walleyes, northern pike, largemouth bass, perch, bluegills, black crappies, rock bass, pumpkinseeds, yellow bullheads and suckers. Other species present include smallmouth bass, redhorse and bullhead. About 875 acres of predominantly tamarack swamp and leatherleaf bog adjoin the lake. These and other marshy wetlands provide habitat for muskrats, beaver, nesting puddle ducks, mergansers, coot and loon. Larger numbers of diving ducks, coots and Canada geese along with puddle ducks use the lake during migratory season. Private and commercial development numbers six resorts, three boat rental places, 102 cottages and a Boy Scout Camp of the Chippewa Valley Council. There are nine town and county access roads on the lake and additional public frontage is owned by Barron and Washburn Counties, partly in County Forest, for a total of 2.13 miles of public frontage. The majority of the lakeshore frontage is covered by upland hardwood vegetation.

Beaver Dam Lake T35, 36N, R13, 14W, Sections - several
Surface Acres = 1,112.1, S.D.F. = 3.85, Maximum Depth = 106 feet

A soft water seepage lake with an intermittent outlet to the headwaters of the Hay River. There is a one-foot water control structure on its outlet controlled by

the City of Cumberland. The maximum depth of the lake is 106 feet and makes it the deepest lake in Barron County. The most common fish species found here are northern pike, walleyes, largemouth bass, perch, bluegills and black crappies. Bullheads, cisco, carp and white suckers are also common, and other species present include smallmouth bass, rock bass and pumpkinseeds. Habitat destruction by carp is a problem. Water chemistry analysis indicates some domestic pollution present. Approximately 110 acres in marshy wetlands provide habitat for muskrats and nesting puddle ducks. Other numbers of puddle ducks and diving ducks, coots and Canada geese also use the lake during migratory seasons. Eleven city and county roads provide public access to the lake and a city park of 42-1/2 acres provides camping, boat landing and swimming and picnic facilities. Public frontage on the lake amounts to 0.88 miles of mainly city frontage. Commercial and private development includes eight resorts, eight boat rental places, 242 cottages and dwellings, mainly in the City of Cumberland, and an organizational camp.

Big Dummy Lake T36N, R13W, Section 28
Surface Acres = 135.1, S.D.F. = 1.28, Maximum Depth = 58 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, largemouth bass, bluegills, bullheads, carp and white suckers. Most of the lakeshore is conifer and hardwood uplands, and the remainder is tag alder and tamarack marsh. A 149-acre wetland area provides habitat for muskrat, mallards, black ducks, wood ducks and mergansers. There is no public access and public frontage amounts to 0.35 miles of state land on the northwest shore of the lake, and is part of the remnant warm water fish habitat acquisition project. The island in Dummy Lake is owned by the Conservation Department. Private development consists of two cottages and a number of others are being constructed.

Big Moon Lake T33N, R14W, Section 17
Surface Acres = 178.4, S.D.F. = 1.45, Maximum Depth = 46 feet

A hard water drainage lake with an outlet, Moon Creek, draining into Turtle Creek. A two-foot water control structure on the outlet maintains the level of the lake. This dam is owned by Barron County. Extensive destruction to game fish habitat by carp brought about the chemical rehabilitation of this lake. Future fish management will include the stocking of rainbow trout, walleyes, muskellunge, ciscos and fathead minnows. Five acres of wetlands adjoining the lake provide habitat for nesting mallards and wood ducks. A town boat landing at the east end of the lake provides access, while other public frontage on the lake includes school forest lands for a total of 0.76 miles of public frontage. Private development consists of one resort and 22 cottages and homes.

Blueberry Lake T35N, R14W, Section 8
Surface Acres = 8.4, S.D.F. = 1.20, Maximum Depth = 6 feet

A soft water seepage lake with an intermittent outlet to Staples Creek. Its fish population is limited to forage minnows due to winter freeze-out conditions. It is a wilderness-type lake surrounded by upland hardwoods. A four-acre marshy wetland provides habitat for muskrats, nesting mallards and wood ducks. It has no public frontage, access roads or private development.

Bolger Flowage T36N, R10W, Sections 25, 36
Surface Acres = 78.0, S.D.F. = 2.22, Maximum Depth = 15 feet

A soft water drainage impoundment on Hemlock Creek. It has an eight-foot water control structure on its outlet owned by Barron County. The most common fish species here are northern pike, largemouth bass, bluegills, black crappies, bullheads and white suckers; muskellunge, rock bass and pumpkinseeds are also present. The lakeshore vegetation consists mainly of upland hardwoods with some tag alder along part of the shore. Some wetlands habitat is available for muskrats and nesting puddle ducks and mergansers. Other migratory ducks and coots use the lake during migratory periods. The lake does not have a public access. County Forest frontage amounts to 0.75 miles on the west shore. Private development consists of only one cottage.

Buck Lake T36N, R13W, Section 34
Surface Acres = 56.6, S.D.F. = 1.83, Maximum Depth = 19 feet

A soft water drainage lake on a feeder stream to the Yellow River. The fishery consists of largemouth bass, bluegills and bullheads. Northern pike and pumpkinseeds are also present. Upland hardwoods, partly pastured, border the lake, along with 46 acres of wetland habitat used by muskrats, nesting mallards, black ducks, teal, wood ducks, mergansers, coot and loon. Canada geese also use the lake during migratory seasons. It has no public frontage, access roads, or private development.

Bullhead Lake T36N, R14W, Section 33
Surface Acres = 13.7, S.D.F. = 1.22, Maximum Depth = 8 feet

A soft water seepage lake, landlocked and having a fish population of only forage minnows due to winter freeze-out conditions. White pine upland and open pasture surround the lake, except for a three-acre shrub and marsh wetland on the south side. It provides habitat for muskrats, nesting mallards and wood ducks. Two farm homes make up its private development. It has no public frontage or access roads.

Butternut Lake T36N, R12W, Section 6
Surface Acres = 136.4, S.D.F. = 1.65, Maximum Depth = 15 feet

A soft water seepage lake having intermittent outlet to Bear Creek in Washburn County. Its fish population includes northern pike, largemouth bass, bluegills, black crappies, perch, green sunfish, bullheads and white suckers. Most of the lakeshore is upland hardwood and with some open pasture. Nine acres of marsh wetlands bordering the lake provide habitat for muskrats, nesting puddle ducks and mergansers. The lake is provided with two public accesses, one on the southwest side owned by Barron County and another town boat landing on the southeast having limited parking. Public frontage amounts to 0.16 miles of town-owned lakeshore and private development consists of six cottages and homes.

Cameron Flowage T34N, R11W, Section 20
Surface Acres = 67.2, S.D.F. = 2.61, Maximum Depth = 3 feet

A hard water drainage impoundment on Cranberry Creek in the Village of Cameron. The fish populations consist of largemouth bass, perch, bluegills, rock bass, pumpkinseeds, bullheads and white suckers. A city park provides access

and swimming facilities at the lower end. Boats may also be landed off the town road on the north end of the flowage. A total of 2.45 miles of village and county-owned frontage border the lake. Three cottages constitute the extent of private development. A 42-acre marshy wetland area along the flowage provides habitat for nesting puddle ducks and mergansers.

Chain Lake - Town of Cedar Lake T36N, R10W, Section 7
Surface Acres = 107.2, S.D.F. = 3.40, Maximum Depth = 15 feet

A soft water seepage lake, landlocked and having a fish population of walleyes, largemouth bass, bluegills, black crappies, pumpkinseeds and bullheads. Management problems consist of an occasional winterkill and slow growing panfish. The lakeshore is mostly pastured upland hardwood with a small marshy wetland area providing habitat for muskrats and nesting puddle ducks. Three dwellings are the only private development and access may be had off County Highway "B" at the lower end of the lake.

Chain Lake - Town of Lakeland T36N, R13W, Section 23
Surface Acres = 43.4, S.D.F. = 2.61, Maximum Depth = 15 feet

A soft water seepage lake, landlocked and having a fish population of largemouth bass and bluegills. It is subject to winter freeze-out conditions. Its lakeshore is mostly upland hardwoods with the exception of a 45-acre wetland area that provides habitat for muskrats, nesting mallards, and wood ducks. The lake has no public frontage, access roads or private development, and has wilderness lake-type qualities.

Couderay Lake T33N, R10W, Section 2
Surface Acres = 11.4, S.D.F. = 1.40, Maximum Depth = 3 feet

A soft water seepage lake that has an intermittent outlet to Moose Ear Creek. Due to water level fluctuations and shallow depths, it is subject to winterkill. The fish population consists of forage minnows. The lake was once used as a Department rearing pond, but high water levels have diminished its use for that function. There is no access road or public frontage, and private development consists of one farm home. Muskrats, mallards and teal use the lake edge.

Cranberry Lake T36N, R14W, Section 34
Surface Acres = 8.6, S.D.F. = 1.07, Maximum Depth = 28 feet

A soft water seepage lake, landlocked with a fish population of largemouth bass, bluegills and bullheads. It is a wilderness-type lake surrounded by upland hardwoods and 38 acres of predominantly wooded wetlands. The wetlands provide habitat for muskrats and nesting puddle ducks and mergansers. There is no private development, nor do public access roads or public frontage exist. Low levels of dissolved oxygen cause occasional winterkill conditions.

Crooked Lake T36N, R12W, Section 10
Surface Acres = 15.4, S.D.F. = 1.75, Maximum Depth = 10 feet

A soft water seepage lake, landlocked and having a fish population of largemouth bass, bluegills and green sunfish. Problems to management are

freeze-out conditions and slow growing panfish. Upland hardwoods surround the lake except for a marshy shoreline, wetland area that provides habitat for nesting mallards, blue-winged teal and wood ducks. A public access is provided on the lakeshore and the entire frontage is under a Boy Scout Camp ownership.

Crystal Lake T35N, R14W, Section 28
Surface Acres = 90.5, S.D.F. = 2.03, Maximum Depth = 24 feet

A soft water seepage lake, landlocked and subject to occasional winterkill. It is managed for walleyes, northern pike, largemouth bass and panfish--bluegills, black crappies and bullheads. The surrounding lakeshore is mostly pastured upland hardwoods and scattered white pine. A three-acre marsh wetland provides habitat for nesting puddle ducks and mergansers. There is no access road. Four farm homes make up the private development. Public frontage consists of 0.33 miles of shoreline on the three state-owned islands.

Crystal Bay Lake T34N, R13W, Section 14
Surface Acres = 9.2, S.D.F. = 1.29, Maximum Depth = 16 feet

A soft water seepage lake with an intermittent outlet to the Vermillion River. It is subject to an occasional winterkill condition due to the shallow depth. Northern pike, largemouth bass, bluegills and bullheads are common here, as well as other species that might migrate up from the Vermillion River during spring high-water periods. A three-foot earthen dike on its outlet maintains the lake level. The surrounding lakeshore is open pasture and upland hardwoods with a few scattered white pine. One farm home is the extent of private development. There is no public access or public frontage on the lake. A two-acre wetland area of predominently shrubs provides habitat for muskrats and nesting puddle ducks.

Dallas Flowage T32N, R12W, Section 14
Surface Acres = 27.1, S.D.F. = 2.32, Maximum Depth = 9 feet

A hard water drainage impoundment on Upper Pine Creek. A nine-foot water control structure is maintained by the Village of Dallas on its outlet. Bullheads and forage minnows are the most common fish species. Weeds and excessive algae growth constitute a problem to management. A village park provides a picnicking area, public access and swimming facilities. Another public access near the dam also provides boat landing but has limited parking facilities. A few puddle and diving ducks use the flowage during migratory periods. Public frontage amounts to 0.2 miles of village-owned shoreline. Private development consists of six dwellings. The remaining lakeshore is under cultivation and pasture.

Deer Lake T36N, R13W, Section 3
Surface Acres = 8.8, S.D.F. = 1.20, Maximum Depth = 17 feet

A soft water seepage lake with an intermittent outlet to a headwaters feeder of the Yellow River. It is managed for northern pike, largemouth bass and bluegills. Bullheads and white suckers are also present. It is a wilderness-type lake with no development or access roads. It also lacks public frontage. Aspen, birch and open pasture surround the lake and a five-acre wetland area provides habitat for nesting wood ducks.

Dietz Lake #1 T34N, R11W, Section 2
Surface Acres = 20.8, S.D.F. = 1.30, Maximum Depth = 15 feet

Dietz Lake is a soft water seepage lake, landlocked and subject to winter freeze-out. The fish population consists of northern pike, largemouth bass, bluegills and bullheads. Mudminnows are also abundant. Upland hardwood and white pine surround the lake and an acre of cattail-marsh grass, wetland edge provides habitat for muskrats, nesting puddle ducks and mergansers. One farm home is the extent of private development and it has no public frontage or access road.

Dietz Lake #2 T34N, R11W, Section 2
Surface Acres = 12.1, S.D.F. = 1.29, Maximum Depth = 8 feet

A soft water seepage lake, landlocked and subject to winterkill conditions. The fish species consist of bluegills and bullheads. Mudminnows are also abundant. Upland hardwoods surround this lake. Private development consists of one farm home. Public frontage and an access road are lacking. Puddle ducks nest in the lake edge.

Dietz Lake #3 T34N, R11W, Section 11
Surface Acres = 16.2, S.D.F. = 1.42, Maximum Depth = 23 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, largemouth bass, bluegills and bullheads. Mudminnows are also abundant. A canoeable channel connects Dietz Lake #3 with #4. Upland hardwoods surround the lake except for a three-acre wetland of marsh grass and evergreen at the south end. Muskrats are common here as well as mallards, teal, wood ducks and mergansers. The lake lacks private development, public frontage and an access road.

Dietz Lake #4 T34N, R11W, Section 11
Surface Acres = 14.8, S.D.F. = 1.76, Maximum Depth = 12 feet

A soft water seepage lake, landlocked and subject to an occasional winterkill. The fish population consists of northern pike, largemouth bass, bluegills and bullheads. Mudminnows are also abundant. A canoeable channel connects this lake to Dietz Lake #3. Upland hardwoods, white pine and open pasturelands surround the lake, except for a four-acre wetland area of mostly cattails that provides habitat for muskrats and nesting puddle ducks and mergansers. Private development, access roads or public frontage are lacking.

Duck Lake T36N, R13W, Section 32
Surface Acres = 99.6, S.D.F. = 1.13, Maximum Depth = 28 feet

A soft water drainage lake on a feeder stream to the Yellow River. Its most common fish species are northern pike, bluegills, black crappies and bullheads. Other species present include, perch, largemouth bass, rock bass, pumpkinseeds and suckers. The north and east shores are hardwood and grass uplands. The remaining lakeshore is tamarack, alder and bog wetland. A county access road is located on the north side, and total public frontage amounts to 0.22 miles of mainly Department-owned frontage on the southeast. Private development consists of eight cottages and dwellings. The lake also provides habitat for muskrats and nesting puddle ducks.

Echo Lake T34N, R14W, Section 8
Surface Acres = 164.0, S.D.F. = 1.67, Maximum Depth = 40 feet

A soft water seepage lake with intermittent outlet flowing into the North Branch of Beaver Brook. The fish population consists of northern pike, largemouth bass, bluegills, black crappies, pumpkinseeds, bullheads and walleyes are also present. Naturally occurring water fluctuations are a problem to its use. Most of the surrounding lakeshore is open pasture other than the space taken up by 17 cottages and homes. The marsh wetland bordering the lake provides habitat for muskrats and nesting puddle ducks and mergansers. The public frontage consists of only the town road access on the west shore.

Fish Lake T36N, R12W, Section 33
Surface Acres = 8.33, S.D.F. = 1.29, Maximum Depth = 34 feet

A soft water seepage lake with an intermittent outlet to the headwaters of Hickey Creek. The most common fish species here are northern pike, largemouth bass, bluegills, and pumpkinseeds. Perch, bullheads and white suckers are also present. The majority of the lakeshore is open pasture. An acre of wetland lake edge provides habitat for muskrats, nesting mallards and teal. There is no public frontage, access roads or private development.

Gates Lake T35N, R14W, Section 22
Surface Acres = 15.3, S.D.F. = 1.15, Maximum Depth = 9 feet

A soft water seepage lake, landlocked and subject to winterkill. Fish population consists of only forage minnows. Pastured upland hardwoods and cultivated land surrounds the lake, except on the south end where the town road provides access to the lake. It has no other public frontage, and private development consists of two farm homes. Puddle ducks and mergansers nest in the lake area.

Ginder Lake T35N, R12W, Section 11
Surface Acres = 20.5, S.D.F. = 1.84, Maximum Depth = 18 feet

A soft water seepage lake with intermittent outlet to the headwaters of Engle Creek. It is subject to winter freeze-out and has a fish population of northern pike, largemouth bass, bluegills, bullheads and white suckers; golden shiners, common shiners and creek chubs are also common. The surrounding lakeshore is open pasture and upland hardwoods. Muskrats, nesting mallards and wood ducks inhabit the lake edge. It has no private development, public frontage or access roads.

Goose Lake T36N, R10W, Section 18
Surface Acres = 11.6, S.D.F. = 1.59, Maximum Depth = 12 feet

A soft water seepage lake, landlocked with a fish population of bluegills and black crappies. The slow growth of the panfish is a problem. This clear water, sand-bottomed lake is surrounded by open pastureland on the north and oak, birch, aspen and maple hardwoods on the remaining shore. It is a wilderness-type lake. Mallards and wood ducks may nest in the lake area. Public frontage, access roads and private development are lacking.

Granite Lake T36N, R13W, Sections 20, 29
Surface Acres = 151.1, S.D.F. = 2.13, Maximum Depth = 32 feet

A soft water drainage lake on the headwaters of the Yellow River. Fish population consists mainly of northern pike, largemouth bass, bluegills and bullheads. Other species present include walleyes, perch, black crappies, rock bass, pumpkinseeds and white suckers. Upland hardwoods surround the lake except for seven acres of marshy wetlands along the lakeshore edge near the south end. Muskrats, puddle ducks and mergansers use the lake wetland area. There is one resort and 15 cottages on the lake. It is accessible from the east side by a town road access with a limited parking area. The remainder of the public frontage consists of two county-owned lake lots on the southeast shore.

Greely Lake T36N, R13W, Section 17
Surface Acres = 56.1, S.D.F. = 2.89, Maximum Depth = 13 feet

A soft water seepage lake, landlocked, subject to winterkill conditions. A fish population consists of northern pike, largemouth bass, and bullheads. Upland hardwood and cultivated farmlands surround the lake except for an occasional marshy lakeshore edge where puddle ducks and mergansers nest. Two farm homes occupying the lakeshore here is the only development. It has no public access road and public frontage consists of 0.82 miles of federal government-owned land on the southeast shore.

Hemlock Lake T36N, R10W, Sections 25, 26
Surface Acres = 410.2, S.D.F. = 2.72, Maximum Depth = 21 feet

A soft water drainage lake on Hemlock Creek with an outlet flowing into Red Cedar Lake. Water control structure in Red Cedar Lake maintains the level of Hemlock Lake. The most common fish species here include northern pike, walleyes, largemouth bass, perch, bluegills, black crappies and white suckers. Other species present are smallmouth bass, muskellunge, rock bass, pumpkinseeds, black, brown and yellow bullheads, redhorses, bowfin, common shiners, golden shiners, creek chubs and brook silversides. Most of the lakeshore is covered by upland hardwoods and scattered white pine. Forty acres of predominently marshy woodlands provides habitat for muskrats, mallards, black ducks, blue-winged teal, wood ducks, mergansers, coot and loon. Besides these species, Canada geese may also use the lake during migratory seasons. There are two resorts, two boat liveries and 16 cottages on the lake and the public access is located on the south side. This town access road and the county-owned land near the inlet has a total of 0.14 miles of public-owned frontage. There is also 0.75 miles of Conservation Department lakeshore frontage on the three state-owned islands, a total of 0.99 miles of town, county and state-owned frontage.

Hogback Lake T36N, R13W, Section 11
Surface Acres = 15.1, S.D.F. = 1.56, Maximum Depth = 8 feet

A soft water seepage lake, landlocked and subject to natural water level fluctuations and winterkill conditions. Fish populations consist of largemouth bass, bluegills and bullheads. It is surrounded by upland hardwood and a marshy lake edge provides habitat for nesting mallards, black ducks, wood ducks and mergansers. It is accessible from the town road at the north end and it has no other public frontage or private development.

Horseshoe Lake T36N, R14W, Section 3
Surface Acres = 115.0, S.D.F. = 1.72, Maximum Depth = 25 feet

A soft water seepage lake, landlocked having a fish population of northern pike, walleyes, largemouth bass, bluegills, black crappies and bullheads. Upland hardwoods and cultivated farmlands surround the lake except for a small tamarack alder swamp on the east end. Thirty-eight acres of predominently marshy wetlands provide habitat for muskrats and nesting puddle ducks and mergansers. There are six cottages and dwellings on the lake and public access is located off the town road on the lake's west end. It has no other public frontage.

Kelly Lake - Town of Bear Lake T36N, R12W, Section 7
Surface Acres = 17.16, S.D.F. = 1.84, Maximum Depth = 41 feet

A soft water seepage lake which is landlocked. The fish population consists of largemouth bass, bluegills, pumpkinseeds. Lakeshore vegetation is made up of upland hardwoods and white pine. Twenty acres of wetland adjoining the lake provides habitat for muskrats and beavers, nesting puddle ducks and mergansers. The north half of the lakeshore is county forest and it has no public access. Private development consists of one cottage.

Kelleys Lake - Town of Maple Plain T36N, R14W, Section 7
Surface Acres = 18.7, S.D.F. = 1.21, Maximum Depth = 12 feet

A soft water seepage lake, landlocked and subject to winter freeze-out conditions. Fish population consists of bluegills and bullheads. It is a wilderness lake surrounded by upland hardwood on County Forest land. The wildlife resource consists of muskrats and nesting mallards, black ducks, wood ducks and mergansers. There is no public access or private development.

Kidney Lake T36N, R12W, Section 27
Surface Acres = 35.4, S.D.F. = 1.73, Maximum Depth = 35 feet

A soft water seepage lake with intermittent outlet to Beaver Dam Lake. Fish populations consist mainly of northern pike, largemouth bass, bluegills, black crappies and bullheads. Perch, rock bass, pumpkinseeds and white suckers are also present. A two-acre marshy wetland provides habitat for muskrats, nesting puddle ducks and mergansers. Private development consists of one cottage and the lake has no public access other than the 66-foot wide undeveloped platted access at the south end of the lake. There is no other public frontage.

Kirby Lake - Town of Bear Lake T36N, R12W, Section 8
Surface Acres = 7.4, S.D.F. = 1.58, Maximum Depth = 13 feet

A soft water seepage lake, landlocked and having a fish population of largemouth bass, bluegills, perch, pumpkinseeds and white suckers. It is a wilderness-type lake surrounded by County Forest land of upland hardwood. Beaver are present as well as nesting mallards, teal and wood ducks. The lake lacks a public access and private development.

Kirby Lake - Town of Maple Plain T36N, R14W, Section 14
Surface Acres = 91.7, S.D.F. = 2.41, Maximum Depth = 19 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, largemouth bass, bluegills and bullheads. The lake is surrounded by upland

hardwood with the exception of a cattail-sedge marsh edge that provides habitat for the muskrats, nesting puddle ducks, and mergansers. Two miles of the shoreline on the west side is under County Forest ownership. A campground and public access is available. There is no private development.

Lake Chetek T33N, R10W, Sections - several
Surface Acres = 683.0, S.D.F. = 2.43, Maximum Depth = 22 feet

A soft water drainage lake with its level held by a 10-foot public utility dam operated by Northern States Power Company. Fish populations consist of walleyes, northern pike, largemouth bass, smallmouth bass, bluegills, black crappies and bullheads. Excessive algae growth is a problem. Three public roads provide access to the lake for boat launching. Six other platted access points provide walking trails to the lake. A total of three boat liveries, 177 cottages and homes and a Bible camp constitutes its private development. Besides the access points, there is no other public frontage on the lake, except a city park on the south side that has swimming and picnicking facilities.

Lake Desair T35N, R11W, Section 6
Surface Acres = 73.7, S.D.F. = 1.66, Maximum Depth = 33 feet

A soft water seepage lake with an intermittent outlet flowing to Bear Creek. Its fish population consists of northern pike, largemouth bass, bluegills, crappies and bullheads. Walleyes are also present. Five acres of wetlands provide habitat for muskrats, nesting mallards, black ducks, blue-winged teal, wood ducks, hooded mergansers, coot and loon. Canada geese also use the lake during migratory periods. It is accessible from a county road access on the west shore. Private development consists of four cottages. It has no other public frontage other than the access. The land surrounding the lake is pastured upland hardwood.

Lake Thirty T36N, R12W, Section 30
Surface Acres = 71.7, S.D.F. = 1.68, Maximum Depth = 39 feet

A soft water seepage lake with an intermittent outlet stream to the Yellow River. Its fish population includes northern pike, largemouth bass, bluegills, black crappies, perch, rock bass, pumpkinseeds, bullheads and white suckers. Upland hardwoods surround the lake and an adjoining 45-acre wetland provides habitat for muskrats, nesting puddle ducks and mergansers. The public access is located on the east side and is the only public frontage on the lake. One cottage is the extent of its private development.

Little Bass Lake T36N, R14W, Section 22
Surface Acres = 24.3, S.D.F. = 1.33, Maximum Depth = 56 feet

A soft water, landlocked seepage lake. The fish population consists of northern pike, walleyes, largemouth bass, bluegills, black crappies and bullheads. The lakeshore is predominently upland hardwoods and the lake edge provides nesting habitat for puddle ducks and mergansers. Four cottages make up the private development. It has no public frontage or access roads.

Little Butternut Lake T36N, R12W, Section 7
Surface Acres = 18.6, S.D.F. = 1.98, Maximum Depth = 16 feet

A hard water seepage lake with an outlet channel to Butternut Lake. It is subject to an occasional winter fish kill. The fish population here includes northern pike, largemouth bass, bluegills, black crappies, perch, green sunfish, bullheads and white suckers. Most of the lakeshore is upland hardwood with the exception of the marsh, tag alder and leatherleaf wetlands bordering the lower end of it. These wetlands provide habitat for muskrats, beaver, nesting mallards, teal and wood ducks. The only public frontage on the lake is 0.01 miles of County Forest on the lower end. There is no private development or public access other than the channel from Butternut Lake.

Little Dummy Lake T36N, R13W, Section 28
Surface Acres = 30.9, S.D.F. = 1.32, Maximum Depth = 44 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, largemouth bass, bluegills, bullheads, white suckers and carp. Upland hardwoods surround the lake with the exception of a 17-acre marshy wetland bordering the north and south ends. The wetland provides habitat for muskrats, nesting mallards and wood ducks. There is no public access to the lake; however, there is a private landing at the north end. About 0.33 miles of Conservation Department frontage on the southwest side is public frontage. This land was purchased as part of the remnant warm water fish habitat project. Private development consists of one farm home.

Little Granite Lake T36N, R13W, Section 29
Surface Acres = 22.0, S.D.F. = 1.36, Maximum Depth = 56 feet

A soft water seepage lake, landlocked and managed for brook and rainbow trout after recent chemical rehabilitation. The lakeshore is predominently upland hardwood with scattered white pine; however, leatherleaf bog is intermittently growing along the shore. There is a Department-owned access at the north end of the lake, and its private development consists of one resort with boat rental and two cottages.

Little Lake T34N, R12W, Section 28
Surface Acres = 7.2, S.D.F. = 1.14, Maximum Depth = 7 feet

A soft water seepage lake, landlocked and having a fish population of only forage minnows. It is subject to winterkill conditions. The marshy wetland edge provides habitat for muskrats, nesting mallards and wood ducks. The lake has no private development, public frontage or access road.

Little Moon Lake T33N, R14W, Section 18
Surface Acres = 27.0, S.D.F. = 1.32, Maximum Depth = 30 feet

A hard water seepage lake having an intermittent outlet stream to Big Moon Lake and Moon Creek. It has been chemically rehabilitated and restocked with largemouth bass. It has no private development, public frontage or access roads. Five acres of marshy wetlands provide habitat for muskrats, nesting puddle ducks and mergansers.

Little Sand Lake T36N, R14W, Sections 27, 28, 34
Surface Acres = 84.7, S.D.F. = 1.49, Maximum Depth = 41 feet

A soft water seepage lake having an intermittent outlet to Sand Lake in the Sand Creek drainage system. There is a seven-foot water control structure on the outlet. Northern pike, largemouth bass, bluegills, black crappies and bullheads are common here. Most of the lakeshore has upland hardwood on it except for a 54-acre marsh wetland area in the south end. This wetland provides habitat for muskrats, nesting mallards, black ducks, teal, wood ducks, mergansers, coot and loon. A town road on the north end of the lake near the dam provides access. There is no private development. Public frontage consists of 0.28 miles of state-owned lands on the northeast shore.

Little Silver Lake T36N, R13W, Section 23
Surface Acres = 18.0, S.D.F. = 1.83, Maximum Depth = 20 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, largemouth bass, bluegills and bullheads. Upland hardwoods surround the lake, and an 18-acre wetland adjoining the lake provides habitat for mallards and wood ducks. There is no public frontage other than a town road access. It also lacks private development.

Long Lake - Town of Crystal Lake T35N, R14W, Section 20
Surface Acres = 39.9, S.D.F. = 2.41, Maximum Depth = 13 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, walleyes, largemouth bass, bluegills, pumpkinseeds, bullheads and white suckers. It is subject to an occasional winterkill. It is surrounded by upland hardwoods, white pine and cultivated lands. It also has an 82-acre wetland area adjoining the lake. Muskrats and nesting mallards, wood ducks and mergansers use these wetlands. It is accessible from a town road access on the north end. There is no private development or any public frontage other than the access site.

Long Lake - Town of Vance Creek T32N, R14W, Section 6
Surface Acres = 5.6, S.D.F. = 1.51, Maximum Depth = 6 feet

A hard water seepage lake with an intermittent outlet to the headwaters of the South Fork of the Hay River. Due to shallow depth, it is subject to winter freeze-out and its fish population consists of only forage minnows. It is surrounded by a sedge swamp and cultivated farmland. It has no public frontage, access roads or private development.

Loon Lake T35N, R14W, Section 32
Surface Acres = 92.4, S.D.F. = 1.70, Maximum Depth = 25 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, walleyes, largemouth bass, bluegills, black crappies, bullheads and white suckers. Shoreline vegetation includes upland hardwoods, white pine, tamarack, open pasture and cultivated lands. A five-acre wetland provides habitat for muskrats, nesting puddle ducks and mergansers. There is one boat rental place on the lake and one farm home. There is no public frontage or access roads.

Lower Devils Lake T36N, R11W, Section 5
Surface Acres = 107.6, S.D.F. = 2.34, Maximum Depth = 29 feet

A soft water seepage lake, landlocked but having a channel to Upper Devils Lake. It is subject to occasional winterkill and its fish population consists of northern pike, walleyes, largemouth bass, smallmouth bass, bluegills, black crappies, perch, rock bass, pumpkinseeds, bullheads and white suckers. A 19-acre marsh wetland provides habitat for muskrats, nesting mallards and wood ducks. A heron rookery is also present. The lake has two boat rental places and two farm homes. Its only public frontage consists of 0.5 miles of state-owned island shoreline. It has no public access other than through the channel from Upper Devils Lake, however this is not always usable. Canada geese may also be present on the lake during migratory periods.

Lower Spirit Lake T36N, R14W, Section 34
Surface Acres = 23.7, S.D.F. = 1.51, Maximum Depth = 42 feet

A soft water seepage lake, landlocked, having a fish population of largemouth bass, black crappies and bullheads. Surrounded mostly by upland hardwoods and cultivated fields. It has a five-acre wetland area adjoining it. The wetland provides habitat for muskrats, nesting puddle ducks and mergansers. It has one farm home as private development and no access road or public frontage.

Lower Turtle Lake T34N, R14W, Sections 34, 35
Surface Acres = 278.5, S.D.F. = 1.67, Maximum Depth = 22 feet

A hard water drainage lake on Turtle Creek. The fish population consists of walleyes, northern pike, largemouth bass, bluegills, black crappies, perch, rock bass, pumpkinseeds, bullheads, white suckers and carp. Open farmland surrounds most of the lake, with the exception of 18 acres of marshy wetlands near its inlet and outlet. These wetlands provide habitat for muskrats, nesting puddle ducks and mergansers. Two public accesses are located on the east side of the lake; there is no other public frontage. Private development consists of 12 cottages and homes.

Lower Waterman Lake T36N, R14W, Section 8
Surface Acres = 13.8, S.D.F. = 1.83, Maximum Depth = 21 feet

A hard water drainage lake situated on Sand Creek. Fish species present include northern pike, largemouth bass, bluegills, black crappies and bullheads. A five-acre marsh wetland provides habitat for muskrats, mallards and wood ducks. Canada geese frequently stop over here during migratory seasons. There is 0.01 miles of county-owned frontage on the south end of the lake. Access may be had by a channel from Upper Waterman Lake. There is one farm home near the lake

Minnow Lake T36N, R10W, Section 34
Surface Acres = 25.9, S.D.F. = 1.47, Maximum Depth = 12 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, perch, largemouth bass, smallmouth bass, bluegills and bullheads. Slow growth of the panfish is a problem to its management. A four-acre sedge-cattail

marsh provides habitat for a few puddle ducks and diving ducks. It is a wilderness-type lake, surrounded by upland hardwoods and a few tamarack. The lake has no public frontage, access roads or private development.

Mitchell Lake T36N, R12W, Section 10
Surface Acres = 27.7, S.D.F. = 1.78, Maximum Depth = 14 feet

A soft water seepage lake, landlocked and with a fish population of largemouth bass, bluegills and green sunfish. The lake is located entirely on Boy Scout Camp property and has no public access, private development or public frontage. The lake edge provides habitat for wood duck nesting. Lakeshore vegetation is predominantly aspen and birch.

Montanis Lake T35N, R11W, Section 34
Surface Acres = 219.2, S.D.F. = 1.42, Maximum Depth = 15 feet

A soft water drainage lake near Rice Lake. Its inlet stream is Spring Creek and the outlet, Meadow Creek flows to the Red Cedar River. The lake also receives an intermittent flow of water from a cranberry marsh near Rice Lake occasionally. Its fish population consists of northern pike, walleyes, largemouth bass, bluegills, pumpkinseeds and bullheads. One hundred and fourteen acres of wetlands bordering the south end of the lake provide habitat for muskrats, nesting puddle ducks, mergansers, coot and loon. Canada geese also use the lake during migratory seasons. Most of the surrounding lakeshore vegetation is open pasture, tamarack, alder and cattail-sedge marsh. It is accessible on the east side by a town road end on the southwest near the outlet by a county public boat landing. Private development consists of one resort and three cottages. It has no other public frontage than the access points.

Moon Lake T35N, R11W, Section 34
Surface Acres = 83.6, S.D.F. = 1.51, Maximum Depth = 5 feet

A soft water seepage lake, landlocked and because of its shallow depth, is subject to frequent winterkill and has no fish population. Nine acres of marsh wetlands border the lake and provide habitat for muskrats and nesting puddle ducks. The remainder of the lakeshore is pastureland. There is no public frontage, private development or access roads. Besides the nesting ducks, other puddle ducks, divers, coots and Canada geese frequent the lake during migratory seasons in large numbers. The City of Rice Lake is adjacent to the lake.

Moose Ear Lake T33N, R10W, Section 23
Surface Acres = 33.6, S.D.F. = 3.24, Maximum Depth = 6 feet

A soft water drainage lake on Moose Ear Creek. Its fish population consists of northern pike, largemouth bass, bluegills and bullheads. One hundred and forty acres of predominantly marsh wetlands provide habitat for nesting puddle ducks and mergansers. The remainder of the lakeshore is upland hardwood and open pasture. It has no private development or public frontage, other than a road bridge crossing the lower end of the lake. This bridge also provides an unimproved access to the lake.

Mosquito Lake T33N, R14W, Section 12
Surface Acres = 24.5, S.D.F. = 1.99, Maximum Depth = 11 feet

A soft water seepage lake, landlocked, subject to winter freeze-out conditions. Its fish population consists of bluegills, bullheads, fathead minnows and mudminnows. Cultivated and pastured farmlands surround the lake. An extensive marshy shoreline provides habitat for nesting puddle ducks and mergansers. There is no public frontage or access roads. Private development consists of two farm homes.

Mud Lake - Town of Almena T34N, R14W, Section 29
Surface Acres = 19.2, S.D.F. = 1.35, Maximum Depth = 4 feet

A soft water seepage lake having intermittent outlet flow to a headwaters feeder of Turtle Creek. It is subject to winterkill conditions due to shallow depths. Its only fish population consists of fathead minnows and mudminnows. Twenty-nine acres of mostly marshy wetlands provide habitat for muskrats and nesting mallards and wood ducks. There is no public frontage, private development or access road.

Mud Lake - Town of Bear Lake T36N, R12W, Section 30
Surface Acres = 24.4, S.D.F. = 1.30, Maximum Depth = 7 feet

A soft water seepage lake having intermittent outlet to the Yellow River. Due to its shallow depth it is subject to winterkill conditions, and its only fish population is forage minnows. Forty acres of wetlands surrounding the lake, provide habitat for muskrats and nesting puddle ducks. There is no private development, public frontage or access road.

Mud Lake - Town of Bear Lake T36N, R12W, Section 34
Surface Acres = 3.5, S.D.F. = 1.14, Maximum Depth = 17 feet

A soft water seepage lake having intermittent outlet to the headwaters of Hickey Creek. Its fish population consists of largemouth bass, bluegills, and white suckers. A two-acre marsh wetland on the south end of the lake provides habitat for muskrats and nesting blue-winged teal. The remainder of the lakeshore is open pasture. The lake has no private development, public frontage or access roads.

Mud Lake - Town of Chetek T33N, R10W, Sections 6, 7
Surface Acres = 567.1, S.D.F. = 2.45, Maximum Depth = 15 feet

A soft water drainage lake in the Chetek Lake Chain. Its level is maintained by the water control structure on Lake Chetek. The lake's fish population consists of northern pike, walleyes, largemouth bass, bluegills, black crappies, pumpkinseeds and bullheads. Other species present include perch, smallmouth bass, rock bass and white suckers. Pokegama Creek, which flows into Mud Lake from the north, provides a spawning area for northerns and walleyes. Excessive algal growth is a problem to this lake's use and management. Located in the farming area, the lake is surrounded by upland hardwoods, white pine and cultivated farmland. The lower half of the lake has a considerable amount of private development on it, with three resorts, three boat liveries and 50 cottages and homes. About three acres of marsh wetlands on the northeast shore provide habitat for muskrats, nesting mallards, teal and wood ducks. The lake is accessible by two blacktopped boat landings. Other public frontage on the lake consists of four undeveloped roads in plats.

Mud Lake - Town of Crystal Lake T35N, R14W, Section 16
Surface Acres = 23.4, S.D.F. = 1.68, Maximum Depth = 11 feet

A soft water seepage lake, landlocked and subject to an occasional partial winterkill. Its fish species consist of northern pike, largemouth bass, bluegills, pumpkinseeds and bullheads. Fifty-three acres of cattail, tag alder and marsh grass wetlands surround most of the lake, and provide habitat for muskrats, nesting puddle ducks and mergansers. The lake has no private developments, public frontage or access roads.

Mud Lake - Town of Sioux Creek T32N, R11W, Section 2
Surface Acres = 21.9, S.D.F. = 1.59, Maximum Depth = 19 feet

An acid bog lake with an intermittent outlet to the Chetek River. It is subject to an occasional winterkill. Its fish population consists of northern pike, largemouth bass, bluegills, black crappies, perch, pumpkinseeds, bullheads and white suckers. The immediate lakeshore vegetation is predominantly black spruce, tamarack and tag alder bog with some cattail and sedge marsh. These 88 acres of wetlands provide habitat for muskrats and nesting puddle ducks. It is a wilderness type of lake and has no private development, public frontage or road access. One boat rental is available.

North Lake T35N, R14W, Section 9
Surface Acres = 88.6, S.D.F. = 1.54, Maximum Depth = 23 feet

A soft water seepage lake having a fish population of northern pike, largemouth bass, bluegills, black crappies, bullheads and white suckers. The surrounding lakeshore is mostly upland hardwoods and farmland. The marshy lake edge provides habitat for muskrats,and nesting puddle ducks. Two dwellings on the lakeshore the extent of its private development. It is accessible by county road access on the northeast shore. Public frontage amounts to 0.05 miles of county-owned shoreline.

Old Mill Pond T34N, R14W, Section 31
Surface Acres = 5.1, S.D.F. = 1.99, Maximum Depth = 9 feet

A soft water seepage lake, landlocked and subject to occasional winterkill conditions. The only fish species are fathead minnows and mudminnows. Located in the Village of Turtle Lake, its surrounding shoreline is open field and a two-acre marsh grass, tag alder and cattail marsh on the southeast. This wetland provides habitat for muskrats, nesting mallards and wood ducks. Private development consists of two dwellings and the lake has no public frontage or access road.

Peterson Lake T35N, R13W, Section 14
Surface Acres = 36.5, S.D.F. = 1.30, Maximum Depth = 13 feet

A soft water seepage lake having an intermittent outlet stream to Vermillion Lake and the Vermillion River system. Fish population consists of northern pike, largemouth bass, bluegills, pumpkinseeds and black bullheads. The slow growth of the panfish is a management problem here. It has a variety of lakeshore vegetation with northern pine, white pine, upland hardwoods and a tamarack swamp edge on the south and west. The adjoining wetlands provide habitat for muskrats, nesting puddle ducks, mergansers and coot. A town road access is available on the northeast corner of the lake and is the only public frontage.

Pickerel Lake T36N, R10W, Section 3
Surface Acres = 37.0, S.D.F. = 1.99, Maximum Depth = 25 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, walleyes, largemouth bass, smallmouth bass, bluegills, pumpkinseeds, bullheads and white suckers. The shoreline is heavily pastured upland hardwood of elm and oak. Public frontage consists of one state-owned island and a county access on the west side of the lake for a total of 0.13 miles of public frontage. There is no private development. The lake edge provides habitat for nesting mallards, blue-winged teal and wood ducks.

Pokegama Lake T33N, R10W, Sections 17, 18, 20
Surface Acres = 494.0, S.D.F. = 3.56, Maximum Depth = 19 feet

A soft water drainage lake in the Chetek Lake Chain between Mud Lake and Lake Chetek. The water level is maintained by the water control structure on the outlet of Lake Chetek. The fish population consists of northern pike, walleyes, largemouth bass, smallmouth bass, perch, bluegills, black crappies, rock bass, pumpkinseeds, bullheads and white suckers. Excessive algae growth is a problem to its use and management. The immediate lakeshore vegetation is pine and hardwood with the exception of several marsh-edged bays. These marshes provide habitat for muskrats and nesting puddle ducks. The lake has nine resorts, nine boat liveries and 109 cottages and dwellings, mainly on the south and northwest shores. It is accessible by two public boat landings and five other undeveloped platted access points, providing a total of 0.07 miles of public frontage.

Poskin Lake T34N, R13W, Section 16
Surface Acres = 150.0, S.D.F. = 2.38, Maximum Depth = 28 feet

A hard water drainage lake on the Vermillion River. It has a one-foot water control structure on its outlet owned by Stanley Kris. The fish population consists of northern pike, largemouth bass, bluegills, black crappies, perch, pumpkinseeds, bullheads and white suckers. The slow growth of the panfish is a management problem. Most of the lakeshore is open farmland with the exception of a six-acre marshy wetland area near the inlet which provides habitat for muskrats, nesting puddle ducks and mergansers. The town road access is located on the west side of the lake. Private development consists of one resort, a boat rental, and 36 cottages and homes. There is no other public frontage other than the access points.

Prairie Farm Flowage T32N, R13W, Section 21
Surface Acres = 28.9, S.D.F. = 2.52, Maximum Depth = 8 feet

A hard water drainage impoundment on the Hay River in the Village of Prairie Farm. A 16-foot water control structure at the outlet is maintained by the Village of Prairie Farm. Fish species present in this flowage include northern pike, walleyes, smallmouth bass, bluegills, rock bass, pumpkinseeds, bullheads and white suckers, besides several species of minnows. The village park, Pioneer Park, on the west shore of the flowage provides swimming, picnicking and boat launching facilities. There are eight homes on the flowage and public frontage amounts to 0.75 miles of village-owned shoreline.

Prairie Lake T33, 34N, R10, 11W, Sections - several
Surface Acres = 1,545.0, S.D.F. = 2.90, Maximum Depth = 16 feet

A soft water drainage lake and the largest lake in the Chetek Lake Chain. The lake level is maintained by the water control structure on Lake Chetek. The fish species consist of northern pike, walleyes, largemouth bass, smallmouth bass, perch, bluegills, black crappies, black bass, pumpkinseeds, bullheads and white suckers. Excessive algae growth presents a problem to use and management. The lakeshore is predominantly upland hardwoods and pine. Private development on the lake is extensive, with 24 resorts, 25 boat rental places, 366 cottages and a church camp. Veteran's Memorial Park, a county park on the north end of the lake, provides picnicking and camping facilities. There are seven access roads to this lake and 14 platted undeveloped access sites for a total of 0.22 miles of public frontage. Three acres of marsh edge along the lake provide habitat for muskrats, nesting puddle ducks and mergansers. Coot and Canada geese also use the lake during spring and fall migratory periods.

Red Cedar Lake T36N, R10W, Sections - several
Surface Acres = 1,881.8, S.D.F. = 2.62, Maximum Depth = 53 feet

A hard water drainage lake on the Red Cedar River. It has an 11-foot water control structure on its outlet that is maintained by Northern States Power Company. The most common fish species here are walleyes, northern pike, largemouth bass, smallmouth bass, perch and rock bass. Other species present include muskellunge, bluegills, black crappies, pumpkinseeds, yellow bullheads, cisco, white suckers, redhorse, bowfin and several minnow species. The lakeshore is predominantly upland hardwood with an eight-acre wetland that supports muskrats, nesting puddle ducks, mergansers, coot and loon. Canada geese also use the lake during migratory seasons. Extensive private development on the east side of the lake consists of 12 resorts, 12 boat rentals, 72 cottages and dwellings and a Boy Scout Camp. Camping is available at the Barron County Park on the northwest shore of the lake. Two public accesses are located on the west shore, and there are nine other undeveloped platted access sites for a total of 0.23 miles of public frontage. Altogether, the public frontage includes the access sites, county park and a shoreline of six, state-owned islands. There is also a golf course on the east shore of the lake.

Rice Lake T35N, R11W, Sections - several
Surface Acres = 1,064.0, S.D.F. = 4.47, Maximum Depth = 22 feet

A hard water drainage lake on the Red Cedar River. Bear Creek and the outlet of Stump Lake also flow into Rice Lake from the north. The 11-foot public utility dam on the outlet of Rice Lake is controlled by the Northern States Power Company. Fish populations include northern pike, walleyes, largemouth bass, bluegills, black crappies, rock bass, pumpkinseeds, bullheads, white suckers, redhorse and bowfin. Located within the city limits of Rice Lake, most of the lakeshore has been developed by 11 resorts and 278 cottages and homes. There are also three boat rental places on the lake. The lake edge provides some habitat for muskrats, nesting mallards, teal, wood ducks and coot. A few Canada geese may also be seen on the lake during migratory periods. A total of 11 public access roads in Rice Lake offer access. Also, five city parks offer picnicking, boat launching, camping and swimming facilities. There is a total of 0.69 miles of public frontage on Rice Lake; this figure includes the access sites, parks and six undeveloped platted accesses.

Robinson Lake T36N, R13W, Section 26
Surface Acres = 3.4, S.D.F. = 1.36, Maximum Depth = 30 feet

A soft water seepage lake, landlocked and having a fish population of only forage minnows. The surrounding lakeshore is open pastured land. No public frontage or access roads exist. One home on the lake is the extent of private development.

Round Lake - Town of Bear Lake T36N, R12W, Section 10
Surface Acres = 17.6, S.D.F. = 1.33, Maximum Depth = 16 feet

A soft water seepage lake, landlocked and having a fish population of largemouth bass, bluegills and green sunfish. The entire shoreline is upland hardwood, Norway and white pine, and is under the ownership of the Boy Scout Camp. No access roads, public frontage, or private development exist.

Round Lake - Town of Cedar Lake T36N, R10W, Section 7
Surface Acres = 10.1, S.D.F. = 1.30, Maximum Depth = 10 feet

A soft water seepage lake, landlocked and having a navigable channel to Chain Lake. It is subject to an occasional winter fish kill, and the fish population consists of walleyes, largemouth bass, bluegills, black crappies, pumpkinseeds, bullheads and golden shiners. Most of the shore is pastured birch hardwood upland. A small wetland area provides habitat for muskrats, nesting puddle ducks and mergansers. There is no private development, public frontage or access roads.

Sand Lake T36N, R14W, Section 21
Surface Acres = 300.0, S.D.F. = 2.46, Maximum Depth = 60 feet

A hard water drainage lake on Sand Creek. This lake has a five-foot water control structure maintaining the lake level. Sand Lake's fish population consists of northern pike, walleyes, largemouth bass, perch, bluegills, black crappies, smallmouth bass and bullheads. The lakeshore vegetation is mainly upland hardwoods, with a few scattered white pine. A 27-acre marshy wetland adjoining the lake provides habitat for muskrats, nesting puddle ducks, mergansers, coot and loon. A few Canadian geese also use the lake during migratory season. It is accessible from an improved access at the south end. A total of 0.27 miles of Conservation Department-owned frontage is located on the south end of the lake and 150-foot wide undeveloped access plat is located on the west shore. Private development consists of three resorts, two boat rental places and 29 cottages and homes.

Scott Lake T35N, R14W, Section 16
Surface Acres = 77.7, S.D.F. = 1.60, Maximum Depth = 25 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, walleyes, largemouth bass, perch, bluegills, black crappies, pumpkinseeds, bullheads and white suckers. Most of the lakeshore is upland hardwoods and open fields. The 54 acres of adjoining wetlands offer habitat for muskrats, nesting mallards and wood ducks. It is accessible off County Highway "G", at the public boat landing. Private development consists of one resort and boat rental place and one farm home. There is no other public frontage.

Silver Lake T36N, R13W, Sections 24, 25
Surface Acres = 338.5, S.D.F. = 2.25, Maximum Depth = 78 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, walleyes, largemouth bass, perch, bluegills, black crappies, rock bass, bullheads, whitefish and white suckers. It is managed as a two-story trout lake and has rainbows present. The lakeshore vegetation consists mainly of upland hardwoods and open farmland with a few scattered white pine. It is accessible at the south end of the lake by county access. Plans are being made for developing a park with swimming facilities here. Total public frontage amounts to 0.18 miles. Private development consists of 25 cottages and homes.

Skinway Lake T34N, R14W, Section 30
Surface Acres = 36.6, S.D.F. = 1.42, Maximum Depth = 10 feet

A soft water seepage lake subject to winterkill. The fish population consists of largemouth bass, bluegills, pumpkinseeds, bullheads, fathead minnows and mudminnows. The surrounding lakeshore is upland hardwood pasture, and a 25-acre wetland adjoins the north end of the lake. The wetland provides habitat for muskrats, nesting puddle ducks and mergansers. There is one farm home on the lake; public frontage and access roads are lacking.

Spider Lake T36N, R13W, Section 1
Surface Acres = 39.6, S.D.F. = 2.10, Maximum Depth = 13 feet

A soft water seepage lake, landlocked and subject to an occasional winterkill. Its fish population consists of largemouth bass, bluegills, black crappies, bullheads and bowfin. Upland hardwoods surround the lake, except for an eight-acre marsh on the south side. Mallards, black ducks, wood ducks and mergansers nest on the lake edge. There are two farm homes on the lake and a public access at the north end. There is 0.05 miles of public frontage that includes the state-owned island shoreline and some lands acquired for game management under a scattered wetland project.

Spring Lake T36N, R14W, Section 25
Surface Acres = 60.3, S.D.F. = 2.23, Maximum Depth = 56 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, largemouth bass and bullheads. The lakeshore vegetation consists of upland hardwood, white pine, open pasture and cultivated farmland. One hundred and sixty acres of wetlands near the lake provide habitat for muskrats, nesting puddle ducks and mergansers. The lake has one boat rental place and four farm homes. A public access is located on the east end of the lake and is maintained by the county as a small park. Total public frontage amounts to 0.03 miles of county-owned frontage.

Staples Lake T35N, R14W, Section 19
Surface Acres = 336.8, S.D.F. = 1.31, Maximum Depth = 15 feet

A soft water drainage lake on the Polk County border. It has an inlet, Staples Creek, and an outlet that is the headwaters of the Apple River. The fish population consists of northern pike, walleyes, largemouth bass, bluegills, black crappies,

pumpkinseeds, bullheads and perch. The shoreline vegetation is mainly upland hardwood with some scattered white pine and open farmland. Sixty-five acres of wetland near the lake offer habitat for muskrats, nesting puddle ducks, mergansers and coot. A few Canada geese use the lake during migratory seasons. A public access is located on the northwest side of the lake and is the only public frontage. Private development consists of two resorts and boat rental places and 12 cottages and homes.

Stump Lake T35N, R11W, Sections 4, 9
Surface Acres = 120.0, S.D.F. = 2.18, Maximum Depth = 5 feet

A hard water drainage lake having an inlet, Bear Creek, and an outlet stream to Rice Lake. The water control structure on Rice Lake partly maintains the water level of Stump Lake. Winterkill, excessive weed growth and snags are problems to this lake's use and management. The fish species present here include northern pike, largemouth bass, bluegills, black crappies, and bullheads. Twenty-two acres of cattail and marsh grass wetlands along the lakeshore provide habitat for muskrats, nesting puddle ducks, mergansers, coot and loon. Canada geese also use the lake during migratory seasons. The lake has no public access or public frontage other than State Highway 48, where it crosses the lake outlet. Private development consists of five homes.

Sweeny Pond T33N, R13W, Section 35
Surface Acres = 47.2, S.D.F. = 2.08, Maximum Depth = 12 feet

A hard water drainage impoundment on Sweeny Pond Creek. This restored flowage is part of a game management waterfowl habitat project and was constructed in 1963. This pond may be subject to winterkill and the future fish population will likely consist of northern pike, bullheads, white suckers and redhorse. It has no private development. The adjoining wetlands provide habitat for muskrats, nesting mallards, black ducks, blue-winged teal, wood ducks and mergansers. Access may be had off the town road at the flowage outlet.

Sylvan Lake T36N, R13W, Section 15
Surface Acres = 67.3, S.D.F. = 1.73, Maximum Depth = 39 feet

A soft water seepage lake, landlocked and having a fish population of northern pike, largemouth bass, bluegills, black crappies, pumpkinseeds and bullheads. Slow growing panfish are a problem to management. Twenty-seven acres of wetlands at the upper and lower ends of the lake are habitat to muskrats, nesting puddle ducks and mergansers. Access may be had to the lake off the town road on the south end. There is no other public frontage on the lake and private development consists of a boat rental place, 13 cottages and a church camp. The lake is also known locally as "Pipe" Lake.

Tenmile Lake T33N, R10W, Sections 27, 28, 32, 33
Surface Acres = 393.0, S.D.F. = 2.07, Maximum Depth = 10 feet

A soft water drainage impoundment in the Chetek Lake Chain. The lake level is controlled by the outlet dam on Lake Chetek. Fish species counted here include walleyes, northern pike, largemouth bass, perch, bluegills, black crappies, pumpkinseeds, bullheads and white suckers. Excessive algae growth complicates use and management. Muskrats, nesting mallards and wood ducks use the 27 acres

of lake edge wetlands. Tenmile Lake is also quite highly developed with two resorts and 69 cottages and homes. It is accessible at two public boat landings on the east shore. A county park also on the east shore provides picnicking and camping facilities. A total of 0.05 miles of public frontage is available on the lake. This figure includes the developed access sites, the county park and seven undeveloped platted accesses.

Tuscobia Lake T36N, R11W, Section 33
Surface Acres = 157.4, S.D.F. = 3.57, Maximum Depth = 27 feet

A hard water drainage lake with an outlet flowing into Bear Creek. Much of the lake is shallow with a resultant excessive growth of weeds. It is also subject to an occasional, partial winterkill. Managed for northern pike, largemouth bass, bluegills, black crappies, perch, rock bass, pumpkinseeds and bullheads, there are white suckers and bowfin also present. The lakeshore vegetation is upland hardwood and the shoreline is predominantly soft bottom, marsh grass and bog wetland. One hundred and sixty acres of wetlands provide habitat for muskrats, nesting puddle ducks, mergansers, coot and loon. Canada geese also use the lake during migratory seasons. Private development consists of a cottage and a farm home. The lake has no public access. There is 0.17 miles of county-owned frontage on the east shore.

Upper Devils Lake T36N, R11W, Section 6
Surface Acres = 67.2, S.D.F. = 2.06, Maximum Depth = 10 feet

A soft water seepage lake, landlocked with an intermittent channel to Lower Devils Lake. It is subject to an occasional, partial winterkill, and the fish population consists of northern pike, walleyes, largemouth bass, perch, bluegills, black crappies, rock bass, pumpkinseeds, bullheads and white suckers. Twenty-five acres of wetlands bordering the lake provide habitat for muskrats and nesting wood ducks. One farm home is the only private development. The lake is accessible from the town road that passes the lake on the north side. The total public frontage amounts to 0.57 miles of public lakeshore, that includes the frontage on several state-owned islands and the town road. The lakeshore vegetation is made up of maple, oak, willows, sedge-cattail-bullrush marshes and open farmland.

Upper Spirit Lake T36N, R14W, Section 35
Surface Acres = 7.0, S.D.F. = 1.35, Maximum Depth = 6 feet

A soft water seepage lake, landlocked and subject to frequent winterkill conditions due to shallow depths. The only fish present are forage minnows. Lakeshore vegetation is upland hardwood and one farm home is the extent of private development. Six acres of marsh wetlands provide habitat for muskrats, nesting puddle ducks and mergansers. It has no public frontage or access roads.

Upper Turtle Lake T34N, R14W, Sections 16, 21, 22
Surface Acres = 423.5, S.D.F. = 2.34, Maximum Depth = 25 feet

A hard water drainage lake on the headwaters of Turtle Creek. The fish populations include northern pike, walleyes, largemouth bass, perch, bluegills, black crappies, rock bass, pumpkinseeds, bullheads, white suckers, carp and several species of minnows. The lakeshore is mostly open farmland with some

upland hardwood and white pine. One hundred and ten acres of wetlands provide habitat for muskrats, nesting puddle ducks, mergansers, coot and loon. Canada geese also use the lake occasionally during migratory seasons. The lake has one resort, one boat livery and 53 cottages and homes. The total amount of public frontage is 0.03 miles.

Upper Waterman Lake T36N, R14W, Section 5
Surface Acres = 27.4, S.D.F. = 1.12, Maximum Depth = 52

A hard water drainage lake on Sand Creek. The fish population includes northern pike, largemouth bass, bluegills, pumpkinseeds, bullheads and white suckers. Four acres of wetlands provide habitat for mallards, black ducks, blue-winged teal, wood ducks, hooded mergansers, coot and loon. Canada geese also use the lake during migratory periods. Surrounding lakeshore vegetation is upland hardwood and sedge marshes. There is no private development on the lakeshore. It is accessible from a town road on the west side and has no other public frontage.

Vermillion Lake T35N, R13W, Section 15
Surface Acres = 282.0, S.D.F. = 2.64, Maximum Depth = 56 feet

A hard water drainage lake on the headwaters of the Vermillion River. The fish population consists of northern pike, walleyes, largemouth bass, perch, bluegills, black crappies, pumpkinseeds, bullheads and white suckers. The lake is surrounded by open farmland, upland hardwood, white pine and a tamarack-tag alder swamp in the middle narrows section. Seventy-two acres of wetland adjoining the lake provide habitat for muskrats, nesting puddle ducks, mergansers, coot and loon. Canada geese also use the lake at times during migratory seasons. It is accessible on the east and west sides by three public accesses. Private development consists of one resort and boat rental place and four cottages and homes. It has no public frontage other than the access sites.

Wickerts Lake T35N, R14W, Section 9
Surface Acres = 13.4, S.D.F. = 1.35, Maximum Depth = 12 feet

A soft water seepage lake, landlocked and subject to an occasional winter fish kill. Northern pike, largemouth bass, bluegills, black crappies and bullheads are present. The surrounding lakeshore is upland hardwood and farmland. A channel connects this lake with North Lake. The marshy lake edge provides habitat for muskrats, nesting mallards, wood ducks and mergansers. There is no private development, public frontage or access road.

Wildcat Lake T36N, R14W, Section 25
Surface Acres = 8.9, S.D.F. = 1.15, Maximum Depth = 26 feet

An acid bog lake, landlocked and having a fish population of bluegills and bullheads. The lake is surrounded mostly by tag alder, marsh grass and leather-leaf wetlands, an area of about 45 acres. These wetlands provide habitat for muskrats, nesting mallards, black ducks, wood ducks and mergansers. It is accessible from a town road access on the west side, and there is no private development or other public frontage.

Unnamed Lakes

The description of each of the following is presented in tabular form for quick reference. Locations of these lakes can be seen in accompanying maps.

Town of Almena
T34N, R14W

4-7a
Soft water, seepage lake
Acres = 7.6
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

4-7c
Soft water, seepage lake
Acres = 3.4
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

4-9
Soft water, seepage lake
Acres = 4.2
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

4-10
Soft water, seepage lake
Acres = 3.5
Maximum Depth = 11 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

4-11
Soft water, seepage lake
Acres = 2.7
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

4-12
Soft water, drainage lake
Acres = 4.3
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats, beaver
Access: no improved road - wilderness
Public frontage: none

5-2
Soft water, seepage lake
Acres = 3.1
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

5-3
Soft water, seepage lake
Acres = 9.3
Maximum Depth = 15 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

5-4
Soft water, seepage lake
Acres = 2.6
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

5-7
Soft water, seepage lake
Acres = 2.4
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

5-8
Soft water, seepage lake
Acres = 5.7
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

5-9b
Soft water, seepage lake
Acres = 3.5
Maximum Depth = 21 feet
Landlocked
Fishery: panfish
Game: none
Access: no improved road - wilderness
Public frontage: none

5-9c
Soft water, seepage lake
Acres = 2.2
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: panfish
Game: beaver
Access: no improved road - wilderness
Public frontage: none

5-9d
Soft water, seepage lake
Acres = 2.3
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

5-10
Soft water, seepage lake
Acres = 16.2
Maximum Depth = 16 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

5-13b
Soft water, seepage lake
Acres = 1.0
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

5-13d
Soft water, seepage lake
Acres = 11.4
Maximum Depth = 9 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, beaver, muskrats
Access: no improved road - wilderness
Public frontage: none

5-14
Soft water, seepage lake
Acres = 3.5
Maximum Depth = 9 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

5-15
Soft water, seepage lake
Acres = 4.5
Maximum Depth = 17 feet
Landlocked
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

6-1
Soft water, seepage lake
Acres = 0.6
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road -wilderness
Public frontage: none

6-6
Hard water, drainage lake
Acres = 0.1
Maximum Depth = 3 feet
Not landlocked, intermittent
Winterkill
Fishery: none
Game: none
Access: none, no improved road
Public frontage: none

9-5
Soft water, seepage lake
Acres = 2.2
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: none, no improved road
Public frontage: none

18-4
Soft water, seepage lake
Acres = 0.5
Maximum Depth = 14 feet
Outlet flow to Beaver Brook
Fishery: forage minnows
Game: muskrats
Access: no improved road - wilderness
Public frontage: none

19-1
Soft water, seepage lake
Acres = 10.1
Maximum Depth = 10 feet
Intermittent outlet to Beaver Brook
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

19-14
Acid, bog lake
Acres = 0.5
Maximum Depth = 21 feet
Intermittent outlet to Beaver Brook
Fishery: forage minnows
Game: duck nesting, beaver, muskrats
Access: no improved road - wilderness
Public frontage: none

19-16
Soft water, seepage lake
Acres = 12.5
Maximum Depth = 7 feet
Intermittent outlet to 19-14
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: none
Public frontage: 0.36 Turtle Lake School Forest

20-6
Soft water, seepage lake
Acres = 9.3
Maximum Depth = 8 feet
Intermittent outlet to 19-1
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: none
Public frontage: none

23-10
Soft water, seepage lake
Acres = 5.5
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: WCD walleye rearing pond
Game: none
Access: none
Public frontage: none

27-9
Hard water, seepage lake
Acres = 1.5
Maximum Depth = 3 feet
Intermittent outlet to Turtle Creek
Winterkill
Fishery: none
Game: duck nesting
Access: none
Public frontage: none

29-6
Soft water, seepage lake
Acres = 22.7
Maximum Depth = 10 feet
Landlocked
Fishery: northern pike, largemouth bass, panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

30-3
Soft water, seepage lake
Acres = 11.8
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: none, no improved road
Public frontage: none

30-7
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 5 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: largemouth bass, panfish
Game: duck nesting, beaver, muskrats
Access: none, no improved road
Public frontage: none

Town of Bear Lake
T36N, R12W

9-14 - Camp Lake
Soft water, seepage lake
Acres = 2.3
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: none, no improved road
Public frontage: none

10-14
Soft water, drainage lake
Acres = 3.0
Maximum Depth = 11 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none
Private: Chippewa County Council Boy Scouts

12-14
Acid, bog lake
Acres = 1.5
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

15-4
Soft water, seepage lake
Acres = 7.7
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

15-5
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road - wilderness
Public frontage: 0.09 miles County Forest

16-2
Soft water, seepage lake
Acres = 3.3
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: muskrats
Access: none
Public frontage: 0.30 miles County Forest

18-7
Soft water, seepage lake
Acres = 4.2
Maximum Depth = 19 feet
Landlocked
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: 0.32 miles County Forest

18-9
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

Town of Cedar Lake
T36N, R10W

4-1
Soft water, seepage lake
Acres = 2.9
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: panfish
Game: none
Access: no improved road
Public frontage: none

4-2
Soft water, seepage lake
Acres = 12.2
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

5-1
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

7-7
Soft water, seepage lake
Acres = 5.3
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

7-8
Soft water, seepage lake
Acres = 0.7
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

7-9b
Soft water, seepage lake
Acres = 5.0
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

7-9d
Soft water, seepage lake
Acres = 3.5
Maximum Depth = 9 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

7-10
Soft water, seepage lake
Acres = 2.5
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: muskrats
Access: no improved road - wilderness
Public frontage: none

7-11
Soft water, seepage lake
Acres = 7.4
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

7-12
Soft water, seepage lake
Acres = 2.6
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

9-4
Soft water, seepage lake
Acres = 0.5
Maximum Depth = 3 feet
Intermittent outlet to Red Cedar Lake
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

17-7
Soft water, seepage lake
Acres = 4.6
Maximum Depth = 8 feet
Landlocked
Winterkill
Fluctuating water level
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: 0.46 miles County Forest

17-10c
Soft water, seepage lake
Acres = 1.4
Maximum Depth = 10 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

17-10d
Soft water, seepage lake
Acres = 4.6
Maximum Depth = 8 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

17-11a
Soft water, seepage lake
Acres = 4.0
Maximum Depth = 7 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

17-11c
Soft water, seepage lake
Acres = 3.6
Maximum Depth = 8 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

17-11d
Soft water, seepage lake
Acres = 1.5
Maximum Depth = 6 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

17-14
Soft water, seepage lake
Acres = 2.2
Maximum Depth = 10 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

17-15
Soft water, seepage lake
Acres = 3.2
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.38 miles County Forest

18-2
Soft water, seepage lake
Acres = 3.4
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

18-4
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 7 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: muskrats
Access: no improved road - wilderness
Public frontage: none

18-5
Soft water, seepage lake
Acres = 3.0
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

18-8
Soft water, seepage lake
Acres = 4.3
Maximum Depth = 13 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

18-9
Soft water, seepage lake
Acres = 0.5
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

18-13
Soft water, seepage lake
Acres = 2.4
Maximum Depth = 7 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.32 miles County Forest

18-14
Soft water, seepage lake
Acres = 2.4
Maximum Depth = 11 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.33 miles County Forest

18-16
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 8 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: bullheads
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

19-1
Soft water, seepage lake
Acres = 3.9
Maximum Depth = 14 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road, - wilderness
Public frontage: 0.33 miles County Forest

19-2a
Soft water, seepage lake
Acres = 6.7
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, beaver
Access: no improved road - wilderness
Public frontage: 0.54 miles County Forest

19-2b
Soft water, seepage lake
Acres = 1.6
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.20 miles County Forest

19-3
Soft water, seepage lake
Acres = 4.3
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

19-13
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.20 miles County Forest

20-3
Soft water, seepage lake
Acres = 13.3
Maximum Depth = 15 feet
Landlocked
Fishery: bass, panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 1.08 miles County Forest

20-7a
Soft water, seepage lake
Acres = 12.2
Maximum Depth = 11 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: 1.60 miles County Forest

20-7c
Soft water, seepage lake
Acres = 1.0
Maximum Depth = 4 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.19 miles County Forest

20-10
Soft water, seepage lake
Acres = 3.4
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: 0.39 miles County Forest

20-12a
Soft water, seepage lake
Acres = 9.4
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: 0.70 miles County Forest

20-12b
Soft water, seepage lake
Acres = 6.4
Maximum Depth = 18 feet
Landlocked
Fishery: bass, panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: 0.52 miles County Forest

20-14
Soft water, seepage lake
Acres = 2.1
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road - wilderness
Public frontage: .52 miles County Forest

23-12
Soft water, seepage lake
Acres = 15.7
Maximum Depth = 7 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

26-3
Acid, bog lake
Acres = 5.3
Maximum Depth = 38 feet
Intermittent outlet to Hemlock Lake
Fishery: bass, panfish
Game: duck nesting, beaver
Access: no improved road - wilderness
Public frontage: none

26-4
Acid, bog lake
Acres = 9.4
Maximum Depth = 23 feet
Intermittent outlet to 26-3
Fishery: bass, panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

26-7
Acid, bog lake
Acres = 4.9
Maximum Depth = 27 feet
Intermittent outlet to 26-8
Fishery: bass, panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

26-8
Acid, bog lake
Acres = 5.0
Maximum Depth = 53 feet
Intermittent outlet to 26-9
Fishery: bass, panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

26-9
Acid, bog lake
Acres = 8.1
Maximum Depth = 56 feet
Intermittent outlet to Hemlock Lake
Fishery: bass, panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

28-10
Alkaline, bog lake
Acres = 2.2
Maximum Depth = 18 feet
Landlocked
Intermittent outlet to Turtle Creek
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

29-5
Soft water, seepage lake
Acres = 19
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: 0.25 miles County Forest

29-12a
Acid, bog lake
Acres = 0.6
Maximum Depth = 32 feet
Landlocked
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.05 miles County Forest

29-12d
Soft water, seepage lake
Acres = 0.4
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

29-15
Acid, bog lake
Acres = 0.3
Maximum Depth = 11 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road - wilderness
Public frontage: none

34-6
Soft water, seepage lake
Acres = 10.1
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

35-4
Acid, bog lake
Acres = 3.3
Maximum Depth = 11 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

36-6
Acid, bog lake
Acres = 9.8
Maximum Depth = 32 feet
Landlocked
Fishery: bass, panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

Town of Chetek
T33N, R10W

11-2
Soft water, seepage lake
Acres = 6.1
Maximum Depth = 1 foot
Intermittent outlet to Moose Creek
Fluctuating water level
Winterkill
Fishery: forage minnows, northern pike, white suckers
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

21-10b
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 7 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

21-10c
Soft water, seepage lake
Acres = 0.5
Maximum Depth = 4 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

33-1
Soft water, seepage lake
Acres = 0.3
Maximum Depth = 4 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

33-3
Soft water, seepage lake
Acres = 0.5
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

Town of Clinton
T34N, R13W

5-16
Soft water, seepage lake
Acres = 5.2
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

Town of Crystal Lake
T35N, R14W

2-6
Soft water, seepage lake
Acres = 2.3
Maximum Depth = 12 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

2-10
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 2 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: Private hatchery lic. #347
and #357
Game: none
Access: no improved road
Public frontage: none

3-1
Soft water, seepage lake
Acres = 0.7
Maximum Depth = 21 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road - wilderness
Public frontage: none

3-4
Soft water, seepage lake
Acres = 1.0
Maximum Depth = 2 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: Private hatchery lic. #347
and #357
Game: none
Access: no improved road
Public frontage: none

3-13
Soft water, seepage lake
Acres = 10.1
Maximum Depth = 32 feet
Landlocked
Fishery: northern pike, bass, panfish
Game: duck nesting
Access: no improved road
Public frontage: none
Private: one dwelling

3-16
Soft water, seepage lake
Acres = 1.6
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

5-4
Soft water, seepage lake
Acres = 1.2
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

5-10
Soft water, seepage lake
Acres = 9.1
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

5-11
Soft water, seepage lake
Acres = 2.4
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

8-8
Soft water, seepage lake
Acres = 0.5
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

10-2
Soft water, seepage lake
Acres = 1.5
Maximum Depth = 13 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved roads - wilderness
Public frontage: none

10-7
Acid, bog lake
Acres = 0.1
Maximum Depth = 9 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road - wilderness
Public frontage: none

10-10
Soft water, seepage lake
Acres = 4.0
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

10-13
Acid, bog lake
Acres = 2.1
Maximum Depth = 14 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

11-3
Hard water, seepage lake
Acres = 2.0
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none
Private: one dwelling

12-13
Acid, bog lake
Acres = 0.5
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road
Public frontage: none

15-15
Soft water, seepage lake
Acres = 5.2
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

17-11a
Soft water, seepage lake
Acres = 5.0
Maximum Depth = 10 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

17-11c
Soft water, seepage lake
Acres = 1.3
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

17-14
Soft water, seepage lake
Acres = 5.6
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

17-15
Soft water, seepage lake
Acres = 4.8
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none
Private: one dwelling

18-16
Soft water, seepage lake
Acres = 13.5
Maximum Depth = 10 feet
Intermittent outlet to Staples Lake
Winterkill
Fishery: northern pike, bass, panfish
Game: duck nesting
Access: no improved road
Public frontage: none

20-10
Soft water, seepage lake
Acres = 1.5
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

22-6
Acid, bog lake
Acres = 3.0
Maximum Depth = 11 feet
Landlocked
Winterkill
Fishery: northern pike, bass, panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none
Private: one dwelling

22-9
Soft water, seepage lake
Acres = 9.3
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: panfish, forage minnows
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

23-11
Soft water, seepage lake
Acres = 1.2
Maximum Depth = 13 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

27-8
Soft water, seepage lake
Acres = 25.9
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

27-10b
Soft water, seepage lake
Acres = 5.6
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none
Private: two dwellings

27-10d
Soft water, seepage lake
Acres = 20.8
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none
Private: one dwelling

27-15
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

28-13
Soft water, seepage lake
Acres = 3.2
Maximum Depth = 6 feet
Landlocked (channel to Crystal Lake)
Winterkill
Fishery: northern pike, walleyes, bass, panfish
Game: duck nesting
Access: no improved road
Public frontage: none

29-13
Soft water, seepage lake
Acres = 1.1
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

30-7
Soft water, drainage lake
Acres = 0.1
Maximum Depth = 4 feet
Intermittent outlet to Apple River
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

32-1
Soft water, seepage lake
Acres = 29.8
Maximum Depth = 15 feet
Landlocked
Winterkill
Fishery: northern pike, bass, panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: 0.62 miles Loon Lake Wildlife Area

33-3
Soft water, seepage lake
Acres = 6.2
Maximum Depth = 9 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats, beaver
Access: no improved road - wilderness
Public frontage: none

33-4
Soft water, seepage lake
Acres = 2.8
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

33-9
Soft water, seepage lake
Acres = 0.7
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

34-7
Soft water, seepage lake
Acres = 2.4
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

Town of Cumberland
T35N, R13W

4-15
Soft water, seepage lake
Acres = 10.2
Maximum Depth = 5 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

5-4
Soft water, seepage lake
Acres = 4.1
Maximum Depth = 6 feet
Intermittent outlet to Yellow River feeder
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

5-6
Soft water, seepage lake
Acres = 0.6
Maximum Depth = 3 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: none
Access: no improved road
Public frontage: none

8-3
Soft water, seepage lake
Acres = 5.2
Maximum Depth = 12 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

10-12
Soft water, seepage lake
Acres = 10.1
Maximum Depth = 4 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

11-4
Soft water, seepage lake
Acres = 12.2
Maximum Depth = 17 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none
Private: two dwellings

11-6
Soft water, seepage lake
Acres = 13.3
Maximum Depth = 18 feet
Intermittent outlet to Vermillion Lake
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved roads
Public frontage: none
Private: four dwellings

14-12
Acid, bog lake
Acres = 7.3
Maximum Depth = 10 feet
Intermittent outlet to Vermillion River System
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

20-12
Hard water, drainage lake
Acres = 7.4
Maximum Depth = 10 feet
Outlet to Hay River, 10-foot dam
Fishery: northern pike, panfish
Game: none
Access: no improved road
Public frontage: none
Private: one dwelling

Town of Doyle
T35N, R10W

8-16
Soft water, seepage lake
Acres = 0.4
Maximum Depth = 3 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

Town of Lakeland
T36N, R13W

2-11
Acid, bog lake
Acres = 6.6
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: panfish
Game: muskrats
Access: no improved road
Public frontage: none
Private: one dwelling

3-10
Soft water, seepage lake
Acres = 4.0
Maximum Depth = 18 feet
Intermittent outlet to Deer Lake
Fishery: bass, panfish
Game: duck nesting
Access: no improved road
Public frontage: none

3-11
Soft water, seepage lake
Acres = 12.2
Maximum Depth = 18 feet
Intermittent outlet to Yellow River
Fishery: northern pike, bass, panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

4-2
Soft water, seepage lake
Acres = 2.3
Maximum Depth = 19 feet
Landlocked
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

4-4
Soft water, seepage lake
Acres = 0.8
Maximum Depth = 6 feet
Intermittent outlet to 4-13
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

4-13
Soft water, seepage lake
Acres = 1.3
Maximum Depth = 7 feet
Intermittent outlet to Yellow River system
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

6-10
Soft water, seepage lake
Acres = 7.5
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: WCD walleye rearing pond
Game: duck nesting
Access: no improved road
Public frontage: none

6-12
Soft water, seepage lake
Acres = 10.0
Maximum Depth = 21 feet
Landlocked
Winterkill
Fishery: WCD rearing pond
Game: none
Access: no improved road - wilderness
Public frontage: none

10-8
Soft water, seepage lake
Acres = 5.2
Maximum Depth = 11 feet
Landlocked
Winterkill
Fluctuating water level
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

11-7
Soft water, seepage lake
Acres = 2.6
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

11-8
Soft water, seepage lake
Acres = 10.1
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

14-1
Soft water, seepage lake
Acres = 8.0
Maximum Depth = 18 feet
Landlocked
Fishery: bass, panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

14-9
Soft water, seepage lake
Acres = 3.9
Maximum Depth = 18 feet
Landlocked
Winterkill
Fishery: bass, panfish
Game: duck nesting
Access: no improved road
Public frontage: none

14-14
Hard water, seepage lake
Acres = 2.2
Maximum Depth = 15 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

14-15b
Soft water, seepage lake
Acres = 3.6
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: bass, panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

14-15d
Soft water, seepage lake
Acres = 9.1
Maximum Depth = 9 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: bass, panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none
Private: one dwelling

15-3
Soft water, seepage lake
Acres = 3.0
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

15-9
Soft water, seepage lake
Acres = 8.0
Maximum Depth = 12 feet
Intermittent outlet to Yellow River
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: 0.54 miles County land

15-15
Soft water, seepage lake
Acres = 4.0
Maximum Depth = 22 feet
Landlocked
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

16-14a
Soft water, seepage lake
Acres = 4.5
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

16-14c
Soft water, seepage lake
Acres = 2.6
Maximum Depth = 15 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

18-14
Soft water, drainage lake
Acres = 1.2
Maximum Depth = 17 feet
Outlet to Granite Lake
Winterkill
Fishery: northern pike, bass, panfish
Game: muskrats
Access: no improved road - wilderness
Public frontage: none

19-2
Soft water, seepage lake
Acres = 6.9
Maximum Depth = 8 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none
Private: one dwelling

19-3
Soft water, seepage lake
Acres = 4.1
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none
Private: one dwelling

19-7
Soft water, seepage lake
Acres = 5.0
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.19 miles County land

19-9
Soft water, seepage lake
Acres = 3.0
Maximum Depth = 11 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: muskrats
Access: no improved road - wilderness
Public frontage: none

19-11
Soft water, seepage lake
Acres = 2.3
Maximum Depth = 9 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

19-12
Soft water, seepage lake
Acres = 2.9
Maximum Depth = 16 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road - wilderness
Public frontage: none
Private: one dwelling

19-13
Soft water, seepage lake
Acres = 4.3
Maximum Depth = 13 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

19-16
Soft water, seepage lake
Acres = 6.8
Maximum Depth = 9 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

20-13
Soft water, seepage lake
Acres = 14.1
Maximum Depth = 11 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road
Public frontage: none

20-14
Soft water, seepage lake
Acres = 9.1
Maximum Depth = 15 feet
Landlocked
Fishery: bass, panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

20-15
Soft water, seepage lake
Acres = 0.7
Maximum Depth = 2 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

21-11
Soft water, seepage lake
Acres = 4.7
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

22-3
Soft water, seepage lake
Acres = 13.4
Maximum Depth = 10 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

23-5
Acid, bog lake
Acres = 33.2
Maximum Depth = 14 feet
Landlocked
Winterkill
Weeds
Fishery: bass, panfish
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 1.55 miles State land

23-8
Hard water, seepage lake
Acres = 12.8
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: 0.66 miles State land

23-11
Soft water, seepage lake
Acres = 4.3
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.33 miles State land

26-2
Soft water, seepage lake
Acres = 1.9
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

29-7
Soft water, seepage lake
Acres = 2.4
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road
Public frontage: none
Private: one dwelling

29-11
Acid, bog lake
Acres = 3.6
Maximum Depth = 15 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road -wilderness
Public frontage: none

30-1
Soft water, seepage lake
Acres = 1.0
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

30-4b
Soft water, seepage lake
Acres = 2.9
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

30-4d
Soft water, seepage lake
Acres = 6.4
Maximum Depth = 12 feet
Landlocked
Winterkill
Fishery: panfish
Game: none
Access: no improved road - wilderness
Public frontage: none

30-13
Acid, bog lake
Acres = 2.2
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none
Private: one dwelling

30-16
Acid, bog lake
Acres = 1.4
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

32-3
Soft water, seepage lake
Acres = 4.2
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

33-11
Hard water, drainage lake
Acres = 6.3
Maximum Depth = 20 feet
Outlet flow to Buck Lake
Fishery: northern pike, bass, panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: 0.40 miles State land

33-16
Soft water, seepage lake
Acres = 3.1
Maximum Depth = 6 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: none
Access: no improved roads
Public frontage: none

34-11
Soft water, seepage lake
Acres = 1.8
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

34-16
Soft water, seepage lake
Acres = 8.1
Maximum Depth = 6 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road
Public frontage: none

35-11
Soft water, seepage lake
Acres = 3.0
Maximum Depth = 6 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

35-12
Soft water, seepage lake
Acres = 5.0
Maximum Depth = 9 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

Town of Maple Grove
T33N, R12W

5-7
Soft water, seepage lake
Acres = 2.9
Maximum Depth = 7 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: none
Access: no improved road - wilderness
Public frontage: none

Town of Maple Plain
T36N, R14W

1-8
Soft water, seepage lake
Acres = 2.1
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road
Public frontage: none

1-9
Soft water, seepage lake
Acres = 15.2
Maximum Depth = 9 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: 0.80 miles County Forest

2-1
Soft water, seepage lake
Acres = 0.5
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

3-6
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

4-8
Soft water, seepage lake
Acres = 1.0
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

4-10
Soft water, seepage lake
Acres = 4.8
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: 0.50 miles County Forest

4-12
Soft water, seepage lake
Acres = 8.7
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

5-6
Soft water, seepage lake
Acres = 6.4
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, beaver, muskrats
Access: no improved road - wilderness
Public frontage: 0.75 miles County Forest

6-16
Soft water, drainage lake
Acres = 0.3
Maximum Depth = 5 feet
Outlet to Sand Creek
Winterkill
Fishery: forage minnows
Game: muskrats
Access: no improved road - wilderness
Public frontage: none

7-9
Soft water, seepage lake
Acres = 7.4
Maximum Depth = 8 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: 0.94 miles County Forest

7-10
Hard water, seepage lake
Acres = 1.0
Maximum Depth = 2 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: 0.14 miles County Forest

9-3
Soft water, seepage lake
Acres = 1.1
Maximum Depth = 2 feet
Landlocked
Winterkill
Fishery: none
Game: muskrats
Access: no improved road - wilderness
Public frontage: none

9-7a
Hard water, drainage lake
Acres = 7.3
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, beaver, muskrats
Access: no improved road - wilderness
Public frontage: 0.75 miles County Forest

9-7c
Soft water, seepage lake
Acres = 3.9
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: 0.44 miles County Forest

9-8a
Soft water, seepage lake
Acres = 0.2
Maximum Depth = 2 feet
Landlocked
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: 0.08 miles County Forest

9-8d
Soft water, seepage lake
Acres = 0.6
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: muskrats
Access: no improved road - wilderness
Public frontage: 0.14 miles County Forest

9-14
Soft water, seepage lake
Acres = 0.9
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: muskrats
Access: no improved road
Public frontage: none

10-3
Soft water, seepage lake
Acres = 1.7
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

10-13
Soft water, seepage lake
Acres = 11.8
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

11-9
Soft water, seepage lake
Acres = 9.6
Maximum Depth = 10 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: 0.48 miles County Forest

11-11
Soft water, seepage lake
Acres = 12.9
Maximum Depth = 7 feet
Landlocked
Winterkill
Fishery: panfish
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

11-12
Soft water, seepage lake
Acres = 4.7
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

12-10
Soft water, seepage lake
Acres = 3.9
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage fish
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

13-11
Soft water, seepage lake
Acres = 4.3
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: muskrats
Access: no improved road - wilderness
Public frontage: 0.32 miles County Forest

14-6
Soft water, seepage lake
Acres = 0.6
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: muskrats
Access: no improved road - wilderness
Public frontage: none

15-1
Soft water, seepage lake
Acres = 10.3
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows, bullheads
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

18-8
Soft water, seepage lake
Acres = 2.0
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

18-9
Soft water, seepage lake
Acres = 16.2
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

24-8a
Soft water, seepage lake
Acres = 3.8
Maximum Depth = 12 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

24-8d
Soft water, seepage lake
Acres = 2.4
Maximum Depth = 28 feet
Landlocked
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

24-16
Soft water, drainage lake
Acres = 6.7
Maximum Depth = 11 feet
Landlocked
Winterkill
Fishery: WCD rearing pond
Game: none
Access: no improved road
Public frontage: none
Private: one dwelling

25-9
Soft water, seepage lake
Acres = 2.7
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

25-11
Soft water, seepage lake
Acres = 6.0
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

25-15c
Soft water, seepage lake
Acres = 1.2
Maximum Depth = 8 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road - wilderness
Public frontage: none

25-15d
Soft water, seepage lake
Acres = 11.1
Maximum Depth = 5 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

26-16
Soft water, seepage lake
Acres = 3.6
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

27-7
Soft water, drainage lake
Acres = 21.6
Maximum Depth = 12 feet
Intermittent outlet to Little Sand Lake
Fluctuating water level
Winterkill
Fishery: WCD rearing pond
Game: none
Access: no improved road
Public frontage: 0.90 miles WCD

29-12
Soft water, seepage lake
Acres = 3.8
Maximum Depth = 6 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

29-14
Soft water, seepage lake
Acres = 28.2
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

30-4
Soft water, seepage lake
Acres = 5.6
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: muskrats
Access: no improved road
Public frontage: none

34-14
Soft water, seepage lake
Acres = 0.7
Maximum Depth = 15 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting, muskrats
Access: no improved road - wilderness
Public frontage: none

35-12
Soft water, seepage lake
Acres = 10.2
Maximum Depth = 9 feet
Landlocked
Winterkill
Fishery: bass, panfish
Game: duck nesting
Access: yes
Public frontage: 0.01 miles Town

36-2
Soft water, seepage lake
Acres = 6.6
Maximum Depth = 20 feet
Landlocked
Fishery: bass, panfish
Game: duck nesting
Access: no improved road
Public frontage: none
Private: one farm

Town of Rice Lake
T35N, R11W

11-13
Soft water, seepage lake
Acres = 4.6
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

12-13
Soft water, seepage lake
Acres = 4.5
Maximum Depth = 8 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: panfish
Game: duck nesting
Access: no improved road
Public frontage: none

13-7
Soft water, seepage lake
Acres = 1.0
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting
Access: no improved road
Public frontage: none

13-9
Acid, bog lake
Acres = 4.2
Maximum Depth = 3 feet
Intermittent outlet to Spring Creek
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

22-9
Soft water, seepage lake
Acres = 3.9
Maximum Depth = 5 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

35-12
Soft water, seepage lake
Acres = 2.6
Maximum Depth = 5 feet
Landlocked
Winterkill
Fishery: forage minnows
Game: duck nesting
Access: no improved road
Public frontage: none

Town of Sioux Creek
T32N, R11W

15-9
Soft water, seepage lake
Acres = 1.6
Maximum Depth = 18 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: none
Access: no improved road - wilderness
Public frontage: none

Town of Stanfold
T35N, R12W

18-2
Soft water, seepage lake
Acres = 8.1
Maximum Depth = 4 feet
Landlocked
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

20-16
Spring pond
Acres = 0.7
Maximum Depth = 1 foot
Intermittent outlet to Engle Creek
Fishery: forage minnows
Game: muskrats
Access: no improved road
Public frontage: none

32-1
Hard water, seepage lake
Acres = 2.9
Maximum Depth = 3 feet
Landlocked
Winterkill
Fishery: none
Game: muskrats
Access: no improved road
Public frontage: none

Town of Stanley
T34N, R11W

26-7
Soft water, seepage lake
Acres = 1.0
Maximum Depth = 4 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: none
Access: no improved road
Public frontage: none

Town of Sumner
T34N, R10W

30-3
Hard water, seepage lake
Acres = 1.8
Maximum Depth = 3 feet
Landlocked
Fluctuating water level
Winterkill
Fishery: none
Game: duck nesting, muskrats
Access: no improved road
Public frontage: none

Town of Vance Creek
T32N, R14W

29-5
Hard water, seepage lake
Acres = 0.1
Maximum Depth = 8 feet
Outlet to Hay River
Winterkill
Fishery: northern pike, white suckers, forage minnows
Game: none
Access: no improved road
Public frontage: 0.06 miles Reeve Park, an artificially constructed pond

Streams

Apple River T35N, R14W, Sections 30-31
Surface Acres = 1.8, Miles = 1.7, Gradient = 4 feet per mile

The Apple River is one of the main drainage streams of St. Croix and Polk Counties. The headwaters are, however, located in Barron County, originating as the outlet flow from Staples Lake. The short section of river in Barron County is small in size and has a sand and silt bottom. The main fishery of this drainage stream is forage minnows. The wildlife value is limited to muskrat habitat. One road bridge crosses the stream in Barron County and there is no other public frontage on it. An unused water diversion ditch along the county line once supplied Horseshoe Lake with the stream's surplus water. Most of the stream bank is pastured and other parts of the stream have dense willow and tag alder growths along its banks.

Barker Creek T34N, R12W, Section 2 to T35N, R14W, Section 30
Surface Acres = 5.4, Miles = 5.6, Gradient = 4 feet per mile

A low gradient drainage stream flowing through an extensively-farmed area. Fluctuating water levels and overpasturing has limited this stream's fishery to mainly forage minnows; however, northern pike, and smallmouth bass may also be present. Five road bridges provide access to the stream. Public frontage amounts to 0.05 miles of Department-owned frontage. One hundred and six acres of marsh wetlands provide some habitat for wildlife.

Bear Creek T36N, R11W, Section 18 to T35N, R11W, Section 8
Surface Acres = 20.9, Miles = 9.6, Gradient = 11 feet per mile

Beginning at Bear Lake, near Haugen, this drainage stream flows southward and joins the Red Cedar River at Rice Lake. A 13-foot water control structure on the creek at Bear Lake is owned by Northern States Power Company. Fish species found in this stream are northern pike, walleyes, perch, largemouth bass, bluegills, black crappies, rock bass, green sunfish, bullheads, white suckers and a variety of minnows. Water is diverted from this stream for irrigation purposes. Much of the stream bed is silted-in, due to pasturing along its banks. Ten road bridges cross the stream and there is no other public frontage. Ninety-two acres of scattered wetlands on the stream edge provide habitat for muskrats, nesting teal and wood ducks. Little Bear Creek is the only feeder stream flowing into Bear Creek.

Beaver Creek T32N, R10W, Sections 22-3
Surface Acres = 8.7, Miles = 7.2, Gradient = 4 feet per mile

Originating near the New Auburn Wildlife Area in an extensive marshland, this stream flows northeast and again northwest into Tenmile Creek. Due to its extremely low gradient, muck, sand and silt bottoms and warm water temperatures, the only fish present are forage minnows. Six road bridges cross the stream and public frontage amounts to four miles of Conservation Department-owned game management lands. The adjoining marshes provide habitat for muskrats, beaver, nesting puddle ducks, mergansers and a number of other migratory waterfowl.

Brill River T36N, R11W, Section 1 to T36N, R10W, Section 31
Surface Acres = 36.4, Miles = 7.5, Gradient = 7 feet per mile

Flows south from the Long Lake outlet in Washburn County into the Red Cedar River. Numerous springs flowing into the stream below Long Lake provide a cold water habitat suitable for trout. From the county line downstream to the middle of Section 13, brook and brown trout are common. In-stream habitat has deteriorated through bank erosion from pasturing. On the lower portion of the stream, water is used for irrigation. Here, excessive weed growth and warm water temperatures render the stream unsuitable for trout. Eight road bridges cross the stream and it has no public frontage otherwise. Muskrats, nesting mallards, teal and wood ducks may be found along the stream bank and its approximate 89 acres of wetlands.

Brown Creek T33N, R12W, Section 24 to T33N, R11W, Section 16
Surface Acres = 2.2, Miles = 4.6, Gradient = 13 feet per mile

This warm water drainage stream, flowing from the west into the Red Cedar River, has a fish population of forage minnows. Extreme water flow fluctuations and a marsh drainage limit the quality of this stream. A large shallow marsh on the north feeder and a tamarack-sedge swamp near the outlet provide some habitat for nesting wood ducks. It is accessible from five road bridges; beyond this it has no other public frontage.

Chetek River T33N, R10W, Section 30 to T32N, R11W, Section 10
Surface Acres = 62.2, Miles = 5.4, Gradient = 5 feet per mile

The main drainage stream of the Blue Hills area. The origin is at the outlet of the Chetek Lake Chain and flows southwest into the Red Cedar River. A 10-foot high water control structure on the outlet of Lake Chetek is controlled by the Northern States Power Company. Extreme fluctuations in water levels limit fish and game habitat here. Fish species that are present include northern pike, walleyes, perch, largemouth bass, smallmouth bass, bluegills, black crappies, rock bass, pumpkinseeds, bullheads, white suckers, redhorse, burbot and several minnow species. Tributary streams include, Tenmile Creek (an overflow stream from Tenmile Lake in the Chetek Lake Chain) and two small feeders near the outlet of the Chetek River. These are forage minnow streams having warm water fish habitats. Ninety-six acres of marshy wetlands along the stream provide habitat for nesting mallards, teal and wood ducks. Canada geese occasionally frequent the river during migratory seasons. The stream is accessible from three road bridges; and there is a total of 0.25 miles of City of Chetek frontage on this stream.

Connors Creek T32N, R14W, Sections 33-32
Surface Acres = 0.6, Miles = 1.1, Gradient = 35 feet per mile

A short, cold water stream entering the South Fork of the Hay River. Bank erosion from pasturing and fluctuating water levels has somewhat limited the trout habitat; however, brook trout are present here. The stream has no public frontage and is accessible by two town road bridges.

Cranberry Creek T34N, R11W, Sections 8-32
Surface Acres = 2.3, Miles = 3.2, Gradient = 13 feet per mile

A warm water, marsh and swamp drainage stream flowing south into the Red Cedar River. The Cameron Flowage with a water control structure of eight feet is situated midway downstream. The present stream bed of Cranberry Creek may have been an older channel of the Red Cedar River. Its fish population consists mainly of minnows but northern pike are also present seasonally. An extensive 160-acre wetland provides habitat for wood ducks. A total of 1.75 miles of county and Village of Cameron frontage, borders the stream. It is accessible at two road bridges.

Cruikshank Creek T32N, R11W, Sections 26-27
Surface Acres = 0.7, Miles = 1.7, Gradient = 34 feet per mile

A small, spring water, forage minnow stream, flowing west and south into the Red Cedar River near the Dunn County line. Flowing through open and cultivated farmland, it is accessible at four road bridges and has no other public frontage.

Dority Creek T33N, R13W, Section 33 to T32N, R13W, Section 4
Surface Acres = 2.7, Miles = 4.4, Gradient = 26 feet per mile

Flowing southwest through an agricultural region and into the Hay River. Although part of the upper mid-section is limited to intermittent pools during certain times of the year, the main stream has excellent water quality suitable for trout. Brook trout are abundant and brown trout are also present. The upper end of the stream is heavily pastured while the lower end is open field. Bank cover is generally poor. A 95-acre wetland provides habitat for a few nesting blue-winged teal. It is accessible at seven road bridges and there is no other public frontage.

East Branch Upper Pine Creek T32N, R12W, Sections 1-14
Surface Acres = 0.9, Miles = 3.5, Gradient = 37 feet per mile

Flows southwest into the Dallas Flowage and Upper Pine Creek. The fish population consists of white suckers and several other minnow species are present. The lower end has especially good water quality. The upper part of the stream cover is grassy and marshy and the lower is tag alders. Pasturing has been detrimental to the habitat. It is accessible from one road bridge and has no other public frontage.

Engle Creek T35N, R12W, Sections 21-32
Surface Acres = 3.7, Miles = 3.8, Gradient = 4 feet per mile

Flows generally south into the Yellow River. This cold water stream has a number of large springs in the upper section. Although it has good water quality, the upper section has been damaged by beaver and the lower section by pasturing. Brook trout are present in this stream in Section 29. Sixty-two acres of marshy wetlands provide habitat for beaver, nesting mallards, black ducks, blue-winged teal and wood ducks. Other waterfowl and diving ducks use the stream during migratory seasons. It is accessible at one road bridge and has no other public frontage.

Fourmile Creek T33N, R12W, Section 21 to T34N, R12W, Section 34
Surface Acres = 5.8, Miles = 9.6, Gradient = 10 feet per mile

A forage minnow and drainage stream, flowing from the southwest into the Yellow River south of Barron. It is mostly an open pasture stream, except where it drains a large sedge and tag alder swamp near its headwaters. It is crossed by six road bridges and has no other public frontage. Johnson Creek is a tributary stream.

German Creek T34N, R10W, Sections 22-30
Surface Acres = 5.0, Miles = 5.2, Gradient = 5 feet per mile

A warm water, forage minnow drainage stream, flowing west into Pokegama Creek just above the Chetek Lake Chain. Parts of the stream have been ditched for more rapid drainage. Most of the stream bank is pastured. It is accessible at three road bridges and has no other public frontage.

Hay River T35N, R13W, Section 20 to T32N, R13W, Section 33
Surface Acres = 116.2, Miles = 27.4, Gradient = 6 feet per mile

Beginning as an intermittent flow from Beaver Dam Lake near Cumberland, the headwaters begin from permanently flowing springs in Section 20, Township 35N, Range 13W. Although it has some cold water habitat in the upper three miles of its headwaters, the majority of its length is warm water drainage. The Prairie Farm Flowage, with a water control structure of 16 feet in height, is located at its lower end near the county line. A number of cold water, trout streams flow into the river, and at times, trout may be found in the river near these. The stream bottom, for the most part in its lower sections, alternates from a silted bottom to a gravel and rocky bottom. Heavy pasturing of its banks and fluctuating water levels has greatly reduced the quality of its fish habitat. Fish populations at present include northern pike, walleyes, largemouth bass, smallmouth bass, bluegills, rock bass, bullheads, occasional brook trout, carp, white suckers, redhorse, burbot and numerous minnow species. Almost 600 acres of wetlands along its bank provide wildlife habitat for muskrats, beaver, nesting puddle ducks and mergansers and other migratory waterfowl. It is accessible from 17 road bridges, and it has no other public frontage on it.

Hickey Creek T35N, R12W, Sections 4-17
Surface Acres = 4.2, Miles = 5.4, Gradient = 10 feet per mile

A spring water feeder stream flowing into the Yellow River. Its most abundant fish population is brook trout. In general, the stream habitat is good but moderately pastured. Water quality is also good. Three hundred and eighty acres of adjoining wetlands provide habitat for nesting teal and other migratory puddle ducks and diving ducks. Four road bridges cross the stream and 0.12 miles of Conservation Department-owned frontage touch the stream as part of the Yellow River Wildlife Area.

Johnson Creek T33N, R12W, Section 14 to T34N, R12W, Section 34
Surface Acres = 1.1, Miles = 2.5, Gradient = 16 feet per mile

A small, forage minnow stream flowing north into Fourmile Creek, south of Barron. It has a warm water fish habitat and a pastured tag alder bank edge. Four road bridges cross the stream, and it has no other public frontage.

Jones Creek T32N, R14W, Section 14 to T32N, R13W, Section 7
Surface Acres = 1.1, Miles = 2.2, Gradient = 38 feet per mile

A cold water habitat stream flowing northeast into Turtle Creek. It is managed for brook trout. Water quality is good as is the in-stream cover. However, the upper part is pastured moderately. About 57 acres of wetlands along the stream bank provide habitat for muskrats. Two road bridges cross the stream and it has no other public frontage.

Lightning Creek T34N, R14W, Section 3 to T34N, R13W, Section 29
Surface Acres = 8.8, Miles = 7.3, Gradient = 9 feet per mile

A warm water drainage stream flowing southeast through Almena and into the Hay River. Forage fish are the principal species present. A large beaver flowage is located in Section 14. A 422-acre marsh wetland provides habitat for muskrats, mallards, teal, wood ducks, mergansers and other waterfowl. Six road bridges cross the stream and 0.05 mile of Conservation Department frontage is leased under the scattered wetlands project.

Little Bear Creek T36N, R12W, Section 16 to T36N, R11W, Section 30
Surface Acres = 4.6, Miles = 6.3, Gradient = 13 feet per mile

This stream originates in a large marshy swamp and flows southeast into Bear Creek. It has a warm water fishery of northern pike, bluegills, perch, rock bass, pumpkinseeds, green sunfish, bullheads, suckers and several minnow species. Beaver are active on the creek. An approximate 766-acre wetland provides habitat for muskrats and nesting puddle ducks. Five road bridges cross the stream and 0.36 mile of County Forest frontage borders the stream.

Little Vance Creek T32N, R13W, Sections 30-32
Surface Acres = 0.6, Miles = 2.1, Gradient = 20 feet per mile

A small, spring water feeder to Vance Creek. This sand and silt-bottomed stream originates in a large sedge marsh. Forage minnows are its main fishery. It is accessible at three road bridges and has no other public frontage.

Lower Pine Creek T32N, R12W, Section 23 to T32N, R12W, Section 29
Surface Acres = 2.4, Miles = 6.7, Gradient = 5 feet per mile

A drainage stream flowing southeast into Dunn County and the Red Cedar River. The stream edge is mostly farmland and its banks are extensively pastured. The lower portion of stream from the outlet of the South Fork of the county line is brown trout water. It is accessible at five road bridges and has no other public frontage.

Meadow Creek T33N, R11W, Section 34 to T34N, R11W, Section 5
Surface Acres = 3.4, Miles = 3.1, Gradient = 6 feet per mile

A drainage stream flowing from Montanis Lake and southwest into the Red Cedar River. It has a warm water fish habitat but forage minnows are the predominant fish present. Bullheads, perch and white suckers are also present. About 57 acres of bordering wetlands provide habitat for nesting teal. A large number of other migratory ducks provide good duck hunting. It is accessible at three road bridges and has no other public frontage.

Moon Creek T33N, R14W, Sections 18-10
Surface Acres = 0.8, Miles = 2.7, Gradient = 5 feet per mile

A warm water drainage stream, originating in Little Moon Lake, supporting only forage minnows. Beginning as an intermittent stream, it picks up a permanent flow before running into Big Moon Lake. From Big Moon Lake, and its one-foot outlet structure, Moon Creek flows east into Turtle Creek. It is a low gradient, silt-bottomed stream having an extensive marsh edge. Three road bridges cross the stream, and it has one mile of Turtle Lake School Forest frontage bordering it.

Moose Ear Creek T34N, R12W, Section 10 to T33N, R10W, Section 27
Surface Acres = 22.5, Miles = 12.4, Gradient = 15 feet per mile

Begins as a rock-bottomed stream flowing from the Blue Hills in Rusk County and flows southwest into Barron County and Tenmile Lake. It is a brook and brown trout stream in its upper part downstream to Section 12, Township 33N, Range 10W. The remainder of the stream has a fish population of northern pike, largemouth bass, perch, bluegills, rock bass, bullheads, suckers, redhorse and several minnow species. The stream bank is extensively pastured and somewhat silt-covered in its lower half. Moose Ear Lake, on the lower part of the stream, has a warm water fish population. An intermittent stream from Couderay Lake and a spring feeder from a pond in Sections 2 and 11 also supply water to the stream. A 152-acre wetland adjoining the stream near Moose Ear Lake provides habitat for muskrats and nesting puddle ducks. Ten bridges cross the stream and 2.2 miles of Barron County-owned frontage are the extent of its public-owned stream bank.

North Branch Beaver Brook T34N, R14W, Sections 18-19
Surface Acres = 4, Miles = 1.1, Gradient = 18 feet per mile

Originating in Echo Lake as an intermittent stream, it acquires permanent flow in a small pond in Section 18, Township 34N, Range 14W. It is a warm water, forage minnow stream and may be described as being a straight ditch through a sedge marsh. It is accessible at one road bridge.

North Branch Upper Pine Creek T33N, R11W, Section 35 to T32N, R11W, Section 11
Surface Acres = 2.0, Miles = 1.6, Gradient = 20 feet per mile

A cold water stream flowing south into the Dallas Flowage in the Upper Pine Creek system. Brook and brown trout are common. The lower part of the stream is open pasture of upland hardwood and tag alder. It has good water quality; however, it needs bank cover badly. It is accessible at four road bridges and has no other public frontage.

Pigeon Creek T36N, R10W, Sections 12-11
Surface Acres = 1.7, Miles = 2.4, Gradient = 29 feet per mile

A forage minnow and drainage stream flowing from Rusk County west into Red Cedar Lake. Beaver are common to the stream and approximately 184 acres of wetland provide habitat for nesting puddle ducks. It is accessible at one road bridge in Barron County and 1.76 miles of stream bank is in County Forest ownership.

Pokegama Creek T35N, R10W, Section 21 to T34N, R10W, Section 31
Surface Acres = 27.8, Miles = 15.3, Gradient = 27 feet per mile

Originating as an intermittent stream from the children's fishing ponds at Seck Memorial Park, it flows south into Mud Lake and Chetek Lake Chain. It has cold water habitat, and brook and brown trout are present in the stream from the outlet of Silver Creek downstream to Highway 8. The remainder of the stream has forage minnows. Silver and Rock Creeks, also trout streams, flow into the Pokegama Creek as does German Creek, a forage minnow stream. Pokegama Creek is subject to extreme water level fluctuations. Muskrats and beaver are common, as well as nesting puddle ducks on its 127 acres of wetlands. It is accessible at 10 road bridges. A public access near Highway "M" and two county parks are located on it. Seck Memorial Park near its headwaters and Bandli Park near the outlet of Rock Creek provide camping facilities. A total of 0.16 miles of county-owned land borders the stream.

Quaderer Creek T33N, R12W, Section 7 to T34N, R12W, Section 28
Surface Acres = 5.9, Miles = 6.9, Gradient = 5 feet per mile

A warm water drainage stream flowing north into the Yellow River at Barron. It is principally a forage minnow stream, however, northern pike, bluegills and bullheads are also present. Fluctuating water levels are a problem to management. It is a low gradient, silt-bottomed stream with an extensive sedge marsh along its banks. The stream also has abundant weeds and is heavily pastured. Beaver and nesting puddle ducks utilize the stream on its 110 acres of adjoining wetlands. It is accessible at six road bridges and has 1.88 miles of Conservation Department-owned frontage purchased under the scattered wetlands project.

Red Cedar River T36N, R10W, Section 22 to T32N, R11W, Section 34
Surface Acres = 505.0, Miles = 37.9, Gradient = 5 feet per mile

The main drainage stream of Barron County. All the streams of the county flow into Red Cedar except for several on the west border, mainly Sand Creek, North Branch of Beaver Brook and the Apple River. There are two water control structures on the stream, the Rice Lake Dam and the Red Cedar Dam. The former is used for power and controlled by the Northern States Power Company. The stream's banks have excessive pasturing. The most predominant type of vegetation is grass and hardwood uplands beside some scattered pine, hardwood lowlands and sedge swamps bordering it. The fish population includes northern pike, walleyes, smallmouth bass, perch, black crappies, rock bass and yellow bullheads, and several species of minnows. Over 600 acres of wetlands along its banks provide habitat for muskrats, beaver, nesting puddle ducks and mergansers. Other waterfowl such as coot and Canada geese also use the stream during migratory seasons. It is accessible at 15 road bridges and public frontage amounts to 0.1 miles of county-owned land and 0.25 miles of City of Rice Lake frontage.

Rice Creek T34N, R11W, Sections 11-27
Surface Acres = 37.2, Miles = 2.4, Gradient = 1.9 feet per mile

Originating from a tag alder and tamarack swamp, it flows south into Prairie Lake of the Chetek Lake Chain. Although it is chiefly a forage minnow stream, walleyes use the lower end of it for spawning. Muskrats are common, as well as a few nesting teal and wood ducks on its 38 acres of wetlands. Four road bridges cross the stream, and it has no other public frontage.

Rock Creek T35N, R10W, Section 25 to T34N, R10W, Section 6
Surface Acres = 13.8, Miles = 11.4, Gradient = 21 feet per mile

A cold water stream flowing from the Blue Hills in Rusk County and west into Pokegama Creek in Barron County. It is a scenic, rock-bottomed stream, and has brook trout in its upper half and brown trout in the lower half. Northern pike, rock bass and several minnow species are also present. About 140 acres of wetland provide habitat for muskrats, nesting mallards, teal and wood ducks. Beaver are also present on this stream. It is accessible at five road bridges, and it has one mile of County Forest stream bank in public ownership.

Roux Creek T35N, R11W, Sections 13-24
Surface Acres = 0.7, Miles = 1.0, Gradient = 25 feet per mile

A short, spring water feeder stream to Spring Creek. It has a fish population of brook trout. The stream banks have been severely eroded by pasturing. It is accessible at one road bridge and has no other public frontage.

Sand Creek T36N, R14W, Sections 17-6
Surface Acres = 4.2, Miles = 3.5, Gradient = 11 feet per mile

Originates as an intermittent flow from Little Sand Lake in the northwest part of the county. Its permanent flow begins at Sand Lake and from there flows through Upper and Lower Waterman Lakes and into Burnett County. It has three impounding structures on it; at Little Sand Lake (7 feet), Maple Plains Rearing Pond (12 feet) and the Sand Lake Dam (5 feet). The portion of the stream above the lake is a warm water drainage-type stream, and below Lower Waterman Lake, brook and brown trout are present. Other species in the stream include northern pike, bluegills, bullheads and various species of minnows. Muskrats are common on the stream. It is accessible at five road bridges and 0.05 miles of County Forest land borders the stream.

Silver Creek - Town of Doyle T35N, R10W, Section 22 to T34N, R10W, Section 6
Surface Acres = 2.4, Miles = 4.1, Gradient = 58 feet per mile

A cold water habitat stream flowing southwest into Pokegama Creek. Brook trout are common in the stream. Water quality and habitat are good. Muskrats are common here. It is accessible at five road bridges and has no other public frontage.

Silver Creek - Town of Vance Creek T32N, R14W, Sections 2-1
Surface Acres = 1.3, Miles = 2.8, Gradient = 17 feet per mile

A cold water habitat stream flowing east into Turtle Creek. Brook trout are common. Beaver are present, as well as muskrats and a few nesting teal and wood ducks. A total of 2.19 miles of County Forest land borders the stream.

Sioux Creek T32N, R11W, Sections 17-22
Surface Acres = 1.3, Miles = 2.7, Gradient = 19 feet per mile

A forage minnow stream flowing east into the Red Cedar River. It is subject to extreme fluctuations of water levels and heavy pasturing. It is accessible at four road bridges and has no other public frontage.

South Fork Hay River T32N, R14W, Sections 29-32
Surface Acres = 2.0, Miles = 2.4, Gradient = 19 feet per mile

Permanent flow begins near the Village of Reeve, where it then flows south into Dunn County. An artificial pond at Reeve Park adds a small flow to this stream. It is principally a forage minnow stream, however, brook trout are present. Fish habitat has deteriorated by heavy pasturing, however, it has good water quality. It is accessible at two road bridges and has 0.04 miles of town land bordering it.

South Fork Lower Pine Creek T32N, R12W, Sections 31-28
Surface Acres = 0.4, Miles = 2.1, Gradient = 16 feet per mile

A spring feeder stream flowing through the Village of Ridgeland in Dunn County and northeast into Lower Pine Creek. It is a brown trout stream and subject to bank erosion from pasturing. It is accessible at four road bridges and has no other public frontage.

Spring Creek - Town of Dallas T32N, R12W, Sections 17-29
Surface Acres = 0.3, Miles = 2.1, Gradient = 19 feet per mile

A weed-choked, forage minnow stream flowing south into Lower Pine Creek. A few brook trout may also be found here. This small stream has two road bridges crossing it and no other public frontage.

Spring Creek - Town of Doyle T35N, R10W, Section 12 to T35N, R11W, Section 35
Surface Acres = 27.1, Miles = 16.0, Gradient = 12 feet per mile

Originating as a rock-bottomed, high gradient stream in the Blue Hills of Rusk County, it flows west into Barron County and empties into Montanis Lake. The middle portion of it, from Section 17 to the outlet of Roux Creek, where the stream joins Roux Creek is intermittent during most of the year. The upstream section has forage minnows, and the lower end has northern pike, walleyes, bass and panfish. Walleyes and northerns use the marshy lower end for spawning. Brook trout are also present in the stream immediately below the outlet of Roux Creek. The downstream end of Spring Creek including Roux Creek is probably an old channel of the Red Cedar River. Most of the stream banks are extensively pastured; silting-in of the stream bottom and bank erosion has taken place. Four hundred and sixty acres of predominantly marshy wetlands provide habitat for muskrats, nesting teal and wood ducks. It is accessible at 14 road bridges and has no other public frontage.

Staples Creek T35N, R14W, Sections 18-19
Surface Acres = 1.0, Miles = 2.1, Gradient = 8 feet per mile

A warm water, forage minnow and drainage stream beginning intermittently from Bass and Blueberry Lakes, it then flows south into Staples Lake. Its fish species include bullheads, white suckers and other minnow species. Weeds and algae are abundant in its low quality water. It is accessible at one road bridge and there is no other public frontage on the stream.

Sucker Creek T36N, R10W, Sections 1-2
Surface Acres = 1.2, Miles = 2.0, Gradient = 15 feet per mile

A shallow, warm water drainage stream with a low gradient and rocky bottom. It flows from the corner of Sawyer and Washburn Counties and southwest into Red Cedar Lake. The fish population in Barron County is principally forage minnows. Beaver are present. It is accessible at two road bridges and has no other public frontage.

Sweeny Pond Creek T33N, R13W, Section 15 to T34N, R13W, Section 26
Surface Acres = 4.1, Miles = 6.8, Gradient = 2 feet per mile

Flows north from the central part of the county and into the Vermillion River. This drainage stream is dominated by forage fish. Species consist of mostly common shiners and creek chubs. It also has northern pike, bullheads, white suckers, redhorse and carp. These waters begin in a cattail marsh, and the stream is otherwise rather weed-filled. Near the lower end, a large wild rice marsh-edge borders the stream, where the reconstructed Sweeny Pond is located. It is a game management waterfowl habitat project. The stream provides habitat for nesting puddle ducks, and muskrats are common. It is accessible at three road bridges and the Conservation Department has an easement on 2.12 miles of stream bank.

Tainter Creek T33N, R13W, Sections 30-32
Surface Acres = 8.0, Miles = 2.3, Gradient = 33 feet per mile

A small, spring feeder to the Hay River. Its fish population consists mainly of forage minnows. Pasturing and extreme water level fluctuations have been destructive to fish habitat. It is accessible at four road bridges and has no other public frontage.

Tenmile Creek T32N, R10W, Section 1 to T33N, R10W, Section 31
Surface Acres = 1.2, Miles = 5.1, Gradient = 3 feet per mile

Flows from the southwest corner of Rusk County and east through Tenmile Lake into the Chetek River. A portion of the stream above Tenmile Lake is about four times larger than the outlet stream of Tenmile Lake to the Chetek River. Part of the flow of Tenmile Lake is diverted into the Chetek Lake Chain, where it then flows directly into the Chetek River. It is a warm water stream with forage minnows being the most common fish species above the inlet of Beaver Creek. The downstream portion below Beaver Creek inlet is a broad, low gradient area where bass, panfish, northern pike and walleyes are most common. Forage minnows are also the most common fish species in the section of creek between Tenmile Lake and the Chetek River. The whole stream has a low gradient, and is mostly marsh drainage water. It is accessible at six bridges and has no other public frontage.

Tiller Creek T32N, R11W, Sections 24-22
Surface Acres = 0.9, Miles = 2.4, Gradient = 17 feet per mile

A small, warm water forage minnow stream flowing west into the Red Cedar River. Its stream banks are badly eroded from pasturing. It has four bridge crossings and no other public frontage.

Turtle Creek T34N, R14W, Section 27 to T32N, R13W, Section 28
Surface Acres = 46.4, Miles = 15.3, Gradient = 12 feet per mile

Beginning at Upper Turtle Lake, it flows through Lower Turtle Lake and south, emptying into the Hay River at Prairie Farm. Its fishery includes northern pike, rock bass, bullheads, white suckers, redhorse, burbot, various minnow species and carp. Brook and brown trout are common in the area between Section 23, Township 33N, Range 14W, downstream to the town line of Township 32N, Range 13W. For the most part it is a broad, shallow stream with a warm water fishery. Puddle ducks and mergansers nest along its banks and its 273 acres of wetland. Silver Creek, a trout stream, as well as, the warm water streams, Moon Creek and Jones Creek and two small unnamed feeders, flow into Turtle Creek. It is accessible at eight road bridges and has 2.11 miles of County Forest and leased Game Management Division frontage along it.

Tuscobia Creek T36N, R11W, Sections 29-27
Surface Acres = 0.1, Miles = 1.5, Gradient = 35 feet per mile

A short, spring feeder stream of good water quality and habitat, flowing south into Tuscobia Lake. The most abundant fish are brook trout. The stream bank cover in the upper portion is hardwoods. The lower stream branches out into several fingers going through a tag alder swamp before reaching the lake. It is not accessible by road, and it has no public frontage.

Upper Pine Creek T32N, R12W, Section 4 to T32N, R11W, Section 32
Surface Acres = 12.2, Miles = 10.1, Gradient = 10 feet per mile

Flows southeast through the Village of Dallas and into Dunn County and the Red Cedar River. The stream is divided into two sections by the Dallas Flowage. A nine-foot head impoundment structure on the outlet of the flowage is controlled by the Village of Dallas. The portion of stream above the flowage is brown and brook trout water. The portion of stream below the flowage has northern pike, rock bass, bullheads and various minnow species. The cover of the stream is mostly tag alder and stream bank quality has deteriorated from pasturing. About 79 acres of wetlands bordering the stream provide habitat for muskrats and nesting puddle ducks. It is accessible at nine bridges. There is no other public frontage on the stream.

Vance Creek T32N, R14W, Section 35 to T32N, R13W, Section 31
Surface Acres = 2.3, Miles = 3.2, Gradient = 26 feet per mile

A spring feeder stream flowing southeast into Dunn County and into the Hay River. Brook trout are present in the headwaters area and brown trout are common in downstream areas. It is subjected to extreme fluctuations in water levels. Although this stream still provides trout fishing, the fish habitat has greatly deteriorated from pasturing. It is accessible at five bridges. There is no other public frontage on the stream.

Vermillion River T35N, R13W, Section 9 to T34N, R12W, Section 20
Surface Acres = 46.2, Miles = 12.7, Gradient = 6 feet per mile

This stream originates above Vermillion Lake and flows south and east through Poskin Lake and into the Yellow River. Wetland areas totaling about

310 acres provide habitat for muskrats and nesting puddle ducks. The upper one-third of its length is a broad, low gradient stream flowing through a cattail-sedge marsh. Near Sweeny Pond Creek outlet, a wild rice marsh borders the stream. The remaining downstream section, not being bordered by wetlands, is heavily pastured. The lower half is northern pike water, and the remainder is forage minnow water. It is accessible at 18 road bridges. It has no other public frontage.

Yellow River T36N, R13W, Section 10 to T33N, R11W, Section 8
Surface Acres = 108.0, Miles = 33.1, Gradient = 7 feet per mile

Begins near the Washburn County line and flows south through the central part of Barron County for two-thirds of its length, and then southeasterly into the Red Cedar River. Three flowages at Barron, with 11, 3 and 13-foot water controlled structures on their outlets, divide the stream into two separate habitat types. Above the flowages, to its headwaters, brown, brook and rainbow trout are its main fish species. Below the flowages to the Red Cedar River, northern pike, smallmouth bass, and a few panfish are its main fish species. The lower portion of the stream has good instream cover, but is heavily pastured. The upper stream is good quality, cold water habitat, and is also subject to some pasturing. Seven hundred and seventy-two acres of marshy wetlands provide habitat for muskrats, beaver and nesting puddle ducks and mergansers. It is accessible at 15 road bridges and 7.86 miles of public frontage is in County Forest, other county, city park and Conservation Department-owned frontage. The latter is the Yellow River Wildlife Area. Hunting for puddle and diving ducks, coots and Canada geese is an important use of this stream, besides its being one of the better trout fishing streams of the county.

ANALYSIS OF INVENTORY DATA

The following comments and tables are the result of a compilation of the data obtained from general waters information forms prepared for the waters of Barron County. The forms were completed as a part of the waters classification and inventory program.

To adequately illustrate the location, significance and public use possibilities of these waters, four county maps were prepared showing all water resources in the county. Drainages, stream widths and lengths, and lake sizes are presented on each map. Of the four maps, one indicates the water fertility and glaciation types (Figure 2), another the fishery resources of the various lakes and streams (Figure 3), another, public lands by ownership and the public use areas present in the county (Figure 4), and the fourth shows access (Figure 5).

In order to present a summary of the various individual resources of each body of water, two appendices are included, one for lakes and the other for streams. These appendices contain most of the specific information gathered in the inventory and include the following items: surface acreages, miles of shoreline, shore development figures, maximum depths, lengths and widths for lakes and average depths and widths for streams, stream lengths, miles of public frontage, methyl purple alkalinity tests, conductance and pH readings, comparative water color, date of sampling, areas of direct drainage and of total watersheds, types and approximate areas of wetlands, miles of trout streams, drainage systems, and average stream gradients. The comments that follow refer to some of the items and data in these appendices.

Quantitative Aspects

The total surface water area of the county is 18,448.7 acres. Of this figure, 17,264.9 acres are in the surface areas of 368 lakes and impoundments and 1,183.8 acres are in the stream surfaces of 55 named streams. Total stream length is 366.2 miles, of which 103.2 miles are considered to be trout streams. Frontage on both sides of streams amounts to about 732 linear miles, while lake frontage totals 426 miles. Even though the stream frontage is greater than that for lakes, if one were to compare the amount of stream frontage to lake frontage on an average per acre basis, there would be 3,264 feet of stream frontage to an acre of water, and 122 feet of lake frontage per acre of lake surface water.

The area of the natural lakes accounts for about three-fourths of the total lake surface area in the county, while the other one-fourth constitutes impounded waters. The main flowage area is that of the Chetek Lake Chain with its total area of 3,682 acres and having 55.7 total miles of shoreline.

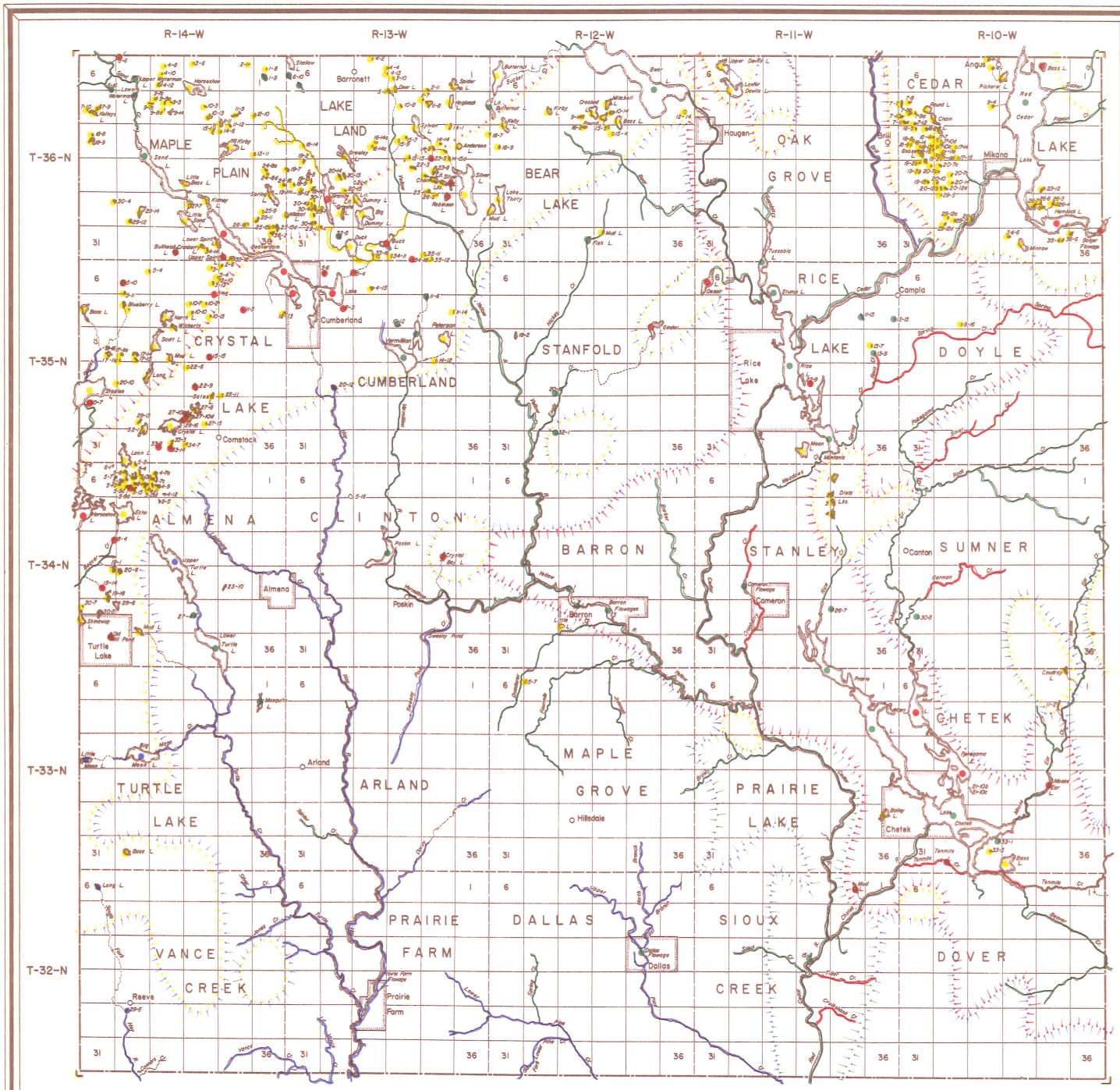
Size classes of natural lakes and impoundments are noted in Table 3. Although the large majority of lakes (322) are under 50 acres, the most acreage is provided by the remaining larger lakes (46) with 14,640 acres.

Shore development (Appendix 1, cf. S.D.F.), is a convenient expression of the degree of regularity or irregularity of shoreline, and is of value in describing and comparing lake shapes. The shore development index figure is never less than one and as its value increases from one, an increase in irregularity is indicated. Generally, a high shore development index will indicate a geologically young lake or a flowage-type lake, and the lakes of this irregular type often have greater biological activity and productivity. The index may be regarded as a measure of the littoral processes of a lake. Lakes of Barron County are of three general shoreline configuration types, the near circular kettle hole glacial lakes, complex multiple basin glacial lakes, and elongate, highly configurated flowages. The minimum index figure occurs in a small kettle hole lake having 1.00, and is circular. The highest index figure was found to be Rice Lake with 4.47. The average for all the county's lakes was 1.56.

The gradients of the streams of Barron County are moderate to low. The steepest is Silver Creek - Town of Doyle, in the Blue Hills, with an average drop of 58 feet per mile. The lowest is Sweeny Pond Creek with a two-foot per mile decent. Red Cedar Lake, a natural lake, is the largest single body of water with 1,881.8 surface acres. Prairie Lake, in the Chetek Lake Chain, is the largest impoundment with 1,545 surface acres. The greatest maximum depth occurs in Beaver Dam Lake with 106 feet of water. The Red Cedar River, not counting its impoundments, is the largest stream with 505 acres of surface water, and it has an average width of 110 feet.

Lake Types

A few generalizations about surface water characteristics may be helpful at this point, before discussing further the various types into which lakes may be classified. The management, regulation, and conservation of water for multiple use is dependent upon a number of basic characteristics of lake and stream habitats.



KEY

Glacial Deposits	Lake Stream	Total M.P. Alkalinity (p.p.m.)	Classification	Fish & Plant Life Production
End Moraines		0-20	Very Soft	Low
Outwash, Pitted		21-40	Soft	Low to Medium
Outwash, Unpitted		41-90	Medium Hard	Medium to High
Ground Moraines		90 or more	Hard	High

Dam
Bridge
< 10'
10' to 20'
20' to 40'
> 40'

NUMBERING SYSTEM FOR LAKES LESS THAN 10 ACRES

DATA

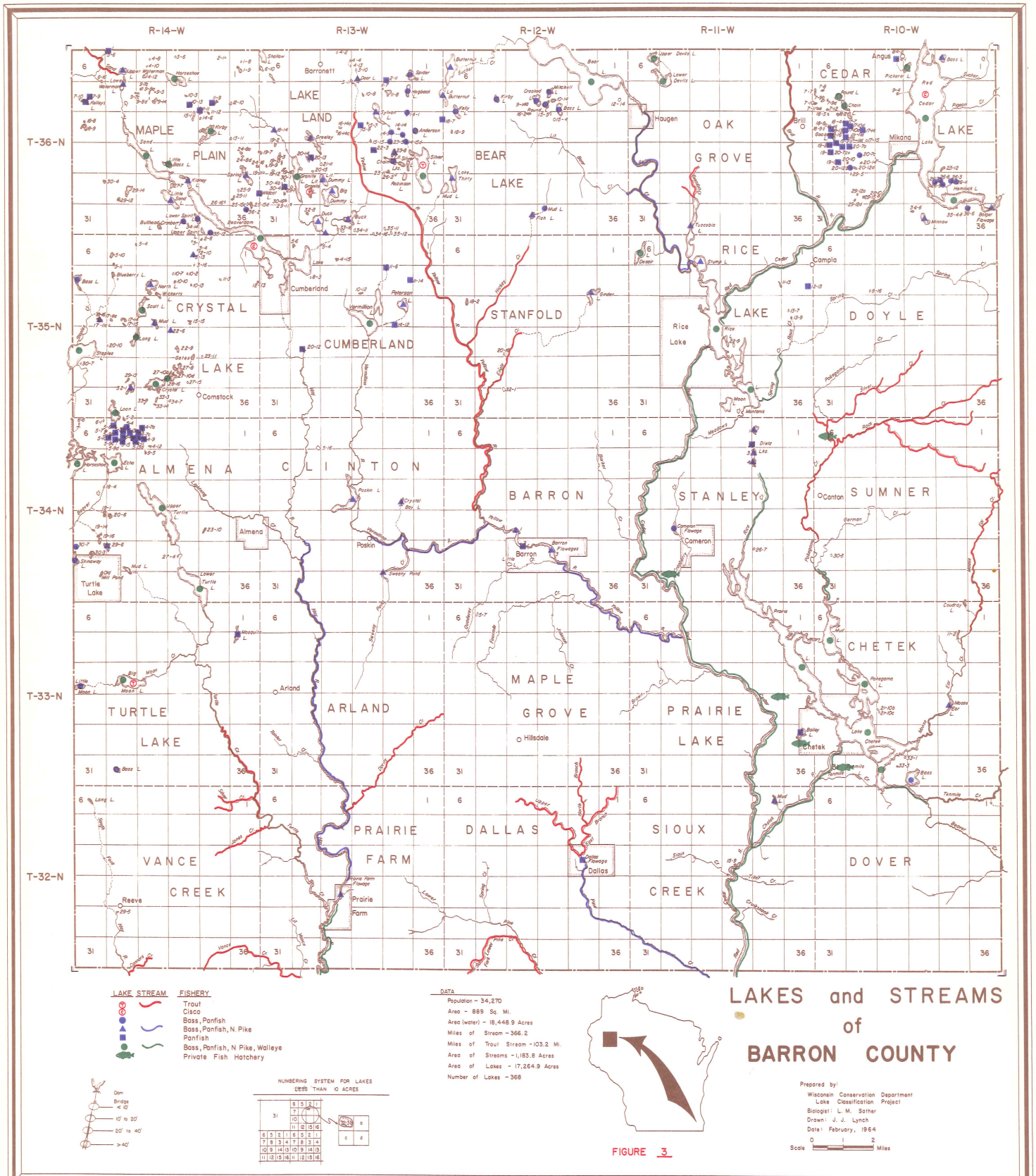
Population - 34,270
Area - 889 Sq. Mi.
Area (water) - 18,448.9 Acres
Miles of Stream - 366.2
Miles of Trout Stream - 103.2 Mi.
Area of Streams - 1,183.8 Acres
Area of Lakes - 17,264.9 Acres
Number of Lakes - 368

FIGURE 2

LAKES and STREAMS of BARRON COUNTY

Prepared by:
Wisconsin Conservation Department
Lake Classification Project
Biologist: L. M. Sather
Drawn: J. J. Lynch
Date: February, 1964

Scale 0 1 2 Miles



LAKE STREAM FISHERY

- Trout
- Cisco
- Bass, Panfish
- Bass, Panfish, N. Pike
- Panfish
- Bass, Panfish, N. Pike, Walleye
- Private Fish Hatchery

Dam
Bridge
< 10'
10' to 20'
20' to 40'
> 40'

NUMBERING SYSTEM FOR LAKES LESS THAN 10 ACRES

DATA

Population – 34,270
Area – 889 Sq. Mi.
Area (water) – 18,448.9 Acres
Miles of Stream – 366.2
Miles of Trout Stream – 103.2 Mi.
Area of Streams – 1,163.8 Acres
Area of Lakes – 17,264.9 Acres
Number of Lakes – 368

FIGURE 3

LAKES and STREAMS of BARRON COUNTY

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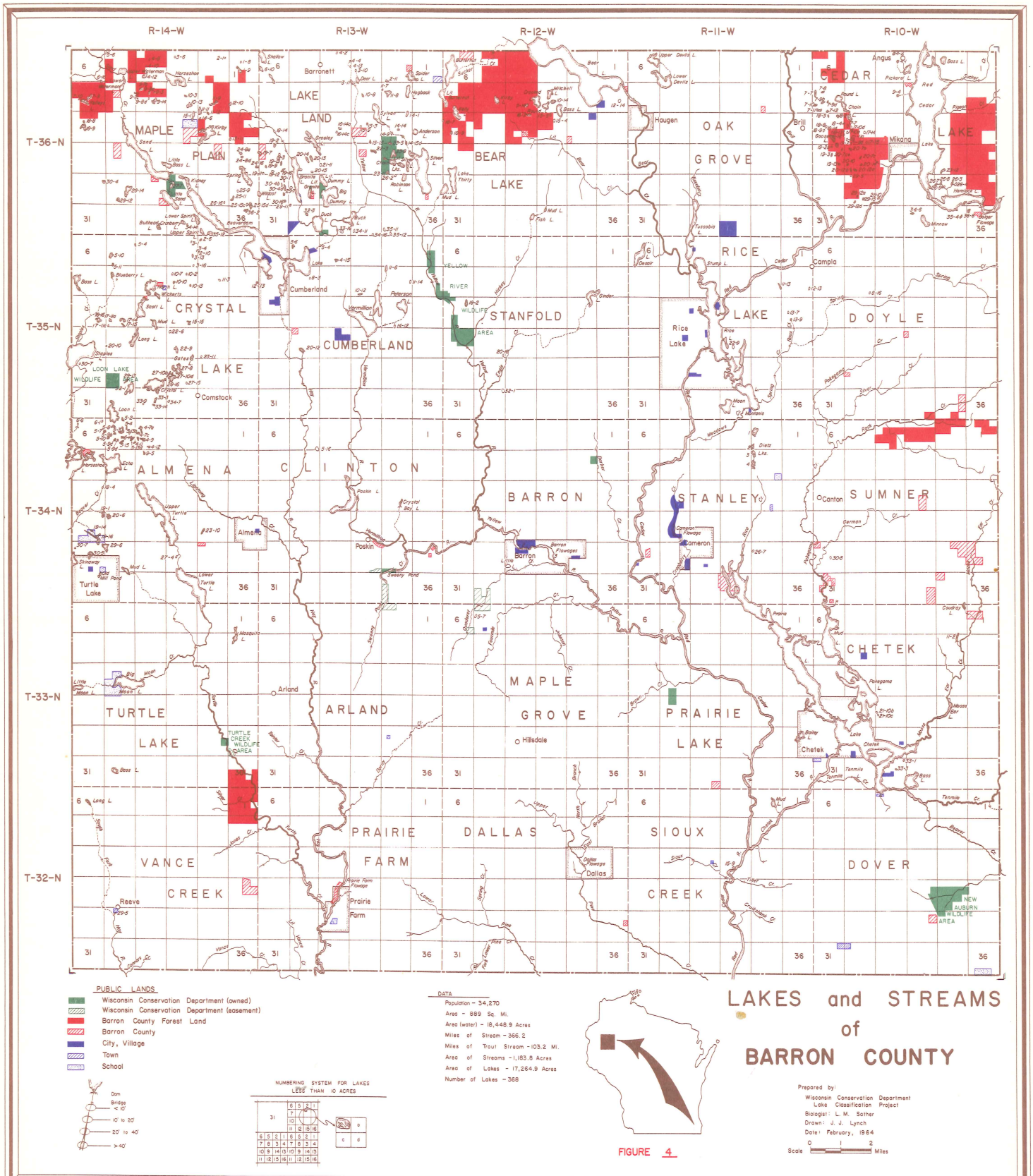
Date: February, 1964

Scale 0 1 2 Miles



PUBLIC LANDS
- Wisconsin Conservation Department (owned)
- Wisconsin Conservation Department (easement)
- Barron County Forest Land
- Barron County
- City, Village
- Town
- School

Dam
- Bridge < 10'
- 10' to 20'
- 20' to 40'
- > 40'

NUMBERING SYSTEM FOR LAKES LESS THAN 10 ACRES

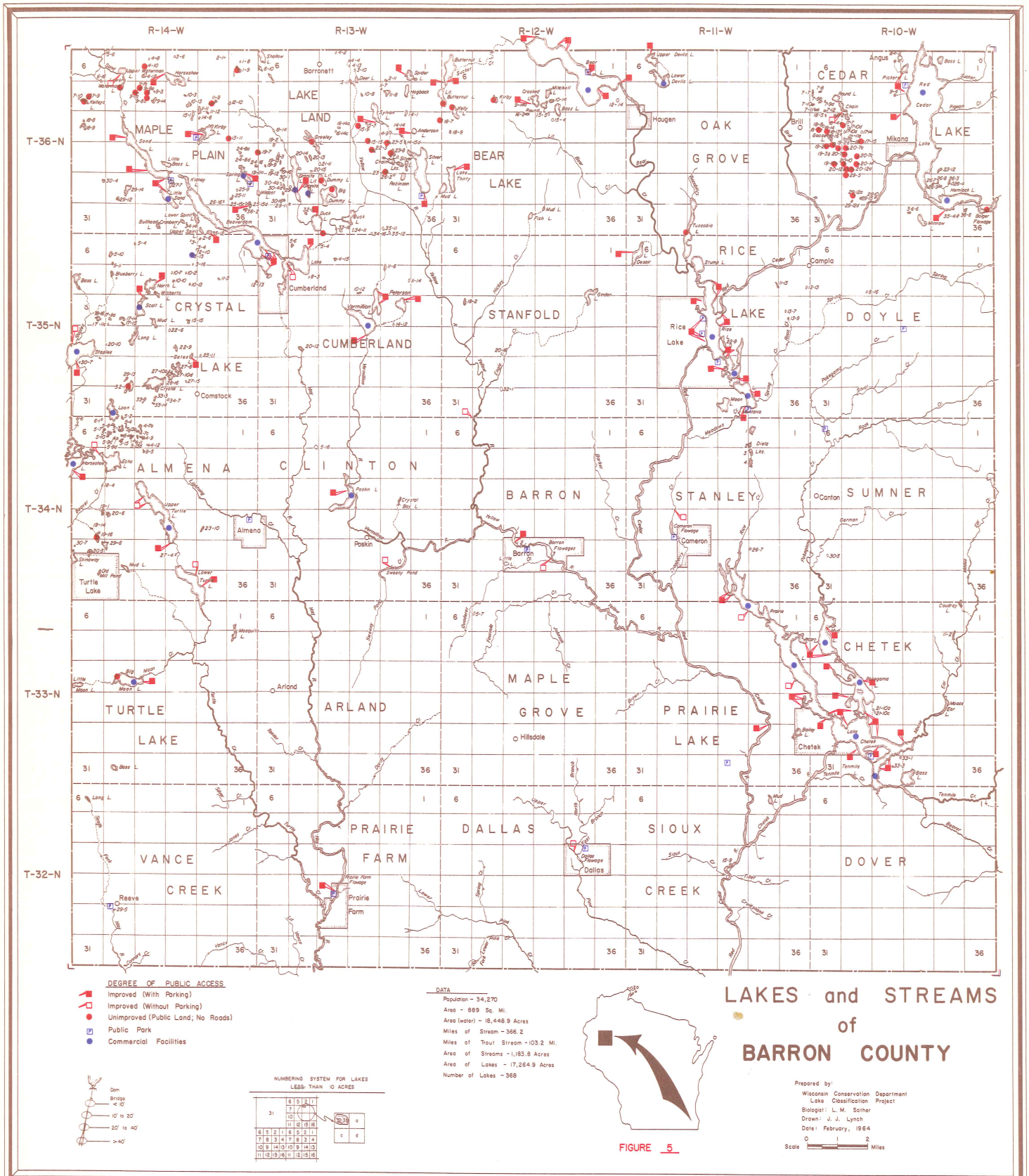
DATA
- Population - 34,270
- Area - 889 Sq. Mi.
- Area (water) - 18,448.9 Acres
- Miles of Stream - 366.2
- Miles of Trout Stream - 103.2 Mi.
- Area of Streams - 1,183.8 Acres
- Area of Lakes - 17,264.9 Acres
- Number of Lakes - 368

FIGURE 4

LAKES and STREAMS of BARRON COUNTY

Prepared by:
Wisconsin Conservation Department
Lake Classification Project
Biologist: L. M. Sather
Drawn: J. J. Lynch
Date: February, 1964

Scale 0 1 2 Miles



DEGREE OF PUBLIC ACCESS

- Improved (With Parking)
- Improved (Without Parking)
- Unimproved (Public Land; No Roads)
- Public Park
- Commercial Facilities

Dam
Bridge
< 10'
10' to 20'
20' to 40'
> 40'

NUMBERING SYSTEM FOR LAKES LESS THAN 10 ACRES

DATA

Population – 34,270
Area – 889 Sq. Mi.
Area (water) – 18,448.9 Acres
Miles of Stream – 366.2
Miles of Trout Stream – 103.2 Mi.
Area of Streams – 1,183.8 Acres
Area of Lakes – 17,264.9 Acres
Number of Lakes – 368

FIGURE 5

LAKES and STREAMS of BARRON COUNTY

Prepared by:
Wisconsin Conservation Department
Lake Classification Project
Biologist: L. M. Sather
Drawn: J. J. Lynch
Date: February, 1964

Scale 0 1 2 Miles

Table 3. Size classes of Barron County's natural lakes and impoundments.

Acreage Classes	Natural Lakes No.	Natural Lakes Total Acreage	Impoundments No.	Impoundments Total Acreage	Total No.	Total Total Acreage
Ponds 0.1-9.9	233	844.5	2	7.6	235	852.1
Small 10.0-49.9	82	1,608.9	5	183.1	87	1,792.0
Small Medium 50.0-99.9	15	1,161.7	2	145.2	17	1,306.9
Medium 100.0-199.9	11	1,520.2	1	120.0	12	1,640.2
Medium 200.0-499	8	2,588.7	2	887.0	10	3,475.7
Medium Large 500-1,000	0	-	2	1,250.1	2	1,250.1
Large 1,000	4	5,402.9	1	1,545.0	5	6,947.9
Total	353	13,126.9	15	4,138.0	368	17,264.9

As stated earlier in the general setting of the waters of Barron County, the geologic history of the region, and the nature of the soil over which the lake lies and which is the source of ground and surface water runoff, are major factors in determining the character of a lake or stream. However, they are not the sole factors that influence a water's character. For example, waters may receive runoff from agriculture lands and effluents of waste matter that have been richly supplied with critical nutritive elements and compounds. These nutrients become incorporated in the food cycle of a lake or river, and increase the amount of vegetation, fish life and algae bloom that occurs in them. A few other items that determine water type are the depth of a lake and the shape of the shoreline and bottom. These may be limiting factors in fish or waterfowl production.

The interrelationships of factors contributing to the character of surface waters and their trophic nature and productivity are diagrammed by Figure 5. One of the factors of primary importance is the fertility of water, the basis for organic production. Its origin, significance and modification can be traced on the chart.

The lakes of Wisconsin and Barron County fall naturally into four main types: hard water drainage, soft water drainage, hard water seepage, and soft water seepage lakes. To these four classes, three other subtypes of lakes have been added for more descriptive purposes in the inventory. They are: acid bog lakes, alkaline bog lakes, and spring ponds. The last type, the spring pond or limnokrene, occurs only once in Barron County. Table 4 summarizes the various lake types that are found in the County. The significant limnological characteristics perculiar to these classes are based on physical (i.e. water source, effects of vegetation) and chemical properties. Correspondingly, the production of plant and animal life varies with respect to each type of lake. A more detailed explanation of the seven types may be found in the "definitions" section of this summary. Since this classification system is a somewhat arbitrarily determined method of evaluation, there may be some lakes that exhibit characteristics of more than one type. However, border line cases and overlapping of types occur only infrequently.

Table 4. Lake types in Barron County.

Lake Type	Number	Acreage - Range	Total Acreage
Hard water drainage	26	0.1 - 1,881.8	7,157.4
Soft water drainage	19	0.1 - 1,545.0	4,542.3
Hard water seepage	11	1.0 - 60.3	135.7
Soft water seepage	285	0.2 - 1,112.1	5,239.7
Acid bog	25	0.1 - 43.4	186.9
Alkaline bog	1	2.2 -	2.2
Spring ponds	1	0.7 -	0.7

Water Fertility

The factor used in the measurement of fertility is alkalinity (M.P.A.), expressed as the amount of available carbonates, bicarbonates and hydroxides in parts per million of water. The lakes of Barron County are low in alkalinity and are thus considered to be of soft water quality. The pH (hydrogen ion concentration) range is quite low, making the water acid (below 7.0 pH), rather than alkaline (above 7.0).

Table 5 summarizes the above items for the surface waters of this county. The total concentration of dissolved electrolytes is included for these waters also. This is expressed in terms of electrical conductance of waters, or micromhos at 77 degrees Fahrenheit. This information corresponds roughly, though on a different scale of values, to the methyl purple alkalinity test for fertility and is also useful in management work.

Table 5. Fertility of waters in Barron County.

	Number of Samples	Range	Mean
Acidity:			
Lakes	368	4.8-8.8	6.2
Streams	55	6.0-8.8	7.5
Methyl Purple Alkalinity: (ppm)			
Lakes	368	5-123	21
Streams	55	28-236	85
Conductance: (micromhos)			
Lakes	368	15-257	55
Streams	55	62-320	170

A more complete chemical analysis of some Barron County lakes was made in order to determine the relative quantities of their nutrients (see Table 6). Trace elements, however, were not included in the analysis. With the exception of the pH and conductance readings, all other figures are expressed in parts per million in Table 6.

Upper Turtle Lake has an alkalinity of 100 parts per million (Figure 2 map). This would place the lake in the categories of "hard" water and "high" production of fish and plant life according to Moyle (Table 7).

Silver Lake, with its total alkalinity of 10 parts per million, would be classed as "very soft" water and have a "low" productivity of fish and plant life.

Fishery Resources

The surface waters of Barron County that are of major importance in providing a fishery resource are summarized as follows: of the 368 lakes with 17,264.9 acres of surface water -- 170 lakes with total area of 15,305.4 acres have game fish and panfish populations. The remaining 198 lakes with their 1,959.5 surface acres have, if any, only minnow populations. The fishing waters are classified further here by the number of lakes and their total acreages where such species occur.

(a) Walleyes are common in 32 lakes having a total area of 12,009.8 acres. These natural lakes and impoundments vary in size from 10.1-acre, Round-Town of Cedar Lake to 1,881.8-acre Prairie Lake. They include all of the larger waters over 200 acres, such as, the Chetek Lake Chain, Beaver Dam, Red Cedar, Bear, Sand and Rice Lakes.

Table 6. Chemical analysis of the waters of some Barron County lakes.

Sample	MOA (ppm)	Specific Conductance (mmhos at 77° F)	pH	PO4(T) (ppm)	PO4(D) (ppm)	NH3(N) (ppm)	KN (ppm)	NO3(N) (ppm)	Cl (ppm)	SOA (ppm)	CA (ppm)	Mg (ppm)	Na (ppm)	K (ppm)	Fe (ppm)
Barron Flow. #1	75	149	7.7	.10	.275	.06	0.60	0.50	2.20	0.1	13.0	7.0	2.60	1.1	0.230
Bear Lake	68	134	7.9	.02	.175	.01	0.65	0.50	1.10	0.1	12.5	6.5	1.90	1.0	0.080
Beaver Dam L.	44	118	7.1	.35	.600	.04	1.05	0.50	10.80	0.1	7.5	2.5	8.00	2.2	0.120
Chetek Lake	32	89	7.2	.40	.175	.15	0.90	0.51	2.25	1.0	10.0	3.0	2.60	2.0	0.190
Duck Lake	25	55	7.0	.06	.125	.05	0.80	0.75	2.00	0.1	4.0	2.0	1.15	1.5	0.200
Little Granite L.	8	24	6.4	.01	.128	.02	0.60	0.50	1.00	0.1	1.5	0.5	0.55	1.0	0.050
Red Cedar Lake	63	129	8.0	.01	.060	.02	0.55	0.50	1.50	0.1	10.0	6.0	1.70	0.6	0.075
Rice Lake	70	139	8.3	.20	.380	.02	0.63	0.40	1.90	0.1	13.0	6.8	2.10	0.9	0.100
Silver Lake	13	36	6.9	.01	.170	.01	0.51	0.40	1.30	0.1	20.0	1.0	0.75	1.5	0.050

Table 7. Annual yield of yellow walleye fingerling in pounds per acre and total alkalinity of 69 Minnesota rearing ponds (Moyle, 1946).

Total Alkalinity-ppm	Average Yield in Lbs. Per Acre	Maximum Yield in Lbs. Per Acre	Productivity of Fish & Plant Life
8 - 20	17.1	50	Low
21 - 40	28.3	83	Low to medium
41 - 80	63.3	234	Medium to high
81 - 120	62.7	232	High
121 - or more	48.2	194	High

(b) Northern pike inhabit 80 lakes with a total area of 13,991.5 acres. These waters include the above lakes and a number of others of acreages of less than 200 acres.

(c) Largemouth bass occur in 115 lakes having a total acreage of 14,674.2.

(d) Panfish are the most commonly occurring species of fish in Barron County that are desired by the angler. They occur in 168 lakes having a total area of 15,105 acres. The species most abundant are, probably, the bluegills, then in order are perch, bullheads, pumpkinseeds, black crappies, rock bass, and green sunfish.

(e) Trout are present in three of the lakes of Barron County, singly in Little Granite Lake, and in Silver and Big Moon Lakes as two-story managed lakes. The total area of the trout lakes is 538.9 acres.

(f) Muskellunge are only common in two waters, the Bolger Flowage and Big Moon Lake with a total acreage of 256.4 acres.

(g) Cisco are present in three waters, Beaver Dam, Big Moon and Red Cedar Lakes, their total area is 1,472.3 acres.

There are 366.2 linear miles of streams in Barron County. The total estimated surface area of these streams is 1,183.8 acres. Their importance is as follows:

(a) Trout streams number 22 and comprise 103.2 miles of stream. The principal ones are the Yellow River above Barron, Upper Pine Creek and its feeders, Silver Creek-Town of Vance Creek, Rock Creek, Pokegama Creek, Hickey Creek and Dority Creek. The remaining trout waters include the Brill River, Connors, Engle, Jones, Lower Pine, Moose Ear, Roux, Sand, Silver-Town of Doyle, Turtle, Tuscobia and Vance Creeks. Brook and brown trout are the major species and trout streams comprise 28 percent of the total stream length. Geographically, they are scattered throughout the county.

(b) Northern pike streams total 112.8 miles and include the following waters---The Red Cedar, Hay, Chetek, Vermillion, and Yellow (below Barron) Rivers, Bear, Little Bear, Upper Pine (below Dallas), lower part of Spring-Town of Doyle, and Tenmile (below Beaver Creek outlet) Creeks. Smallmouth bass streams total 74.4 miles and include the Chetek, Red Cedar, Hay and Yellow (below Barron) Rivers. Walleyes are common to 53 miles of stream, in the Red Cedar, and Hay (below Prairie Farm) Rivers and the lower parts of Rice Creek, Spring Creek-Town of Doyle and Tenmile Creek below Beaver Creek outlet. Altogether, the warm water fishery streams total 117 miles in length.

(c) The remaining 220 miles of stream in Barron County have forage minnows as their main fishery, although, some panfish, northern pike, etc., may be present in some of these 22 streams.

Six licensed private fish hatcheries operate in the county, as compared to 822 in the state. There are no commercial fishery operations in Barron County, other than the cooperative removal of carp from Beaver Dam Lake by a sportsman's group and the state, and the sale of bait minnows by licensed minnow dealers.

Of the 22,335 fishing licenses sold during 1962 in Barron County, 35 percent were purchased by nonresidents. The county accounted for 2.2 percent of the total number of resident and nonresident fishing licenses sold in the state that year.

Aquatic Game Resource

The presence of many small glacial lakes in upper Barron County, and the poorly drained topography of the outwash plains along the terminal moraines provide an important waterfowl habitat area. Beaver are active in these areas also, and their flowages furnish additional waterfowl habitat. Streams where beaver are present, include the major rivers, the Red Cedar, Hay and Yellow and the small creeks, such as Beaver, Engle, Lightning, Little Bear, Pigeon, Pokegama, Quarderer, Rock, Silver-Town of Vance Creek and Sucker Creeks. The Game Management Division, by construction of small flowages, as for example Sweeny Pond, have provided additional habitat for waterfowl. These projects are similar in effect to an established beaver flowage; however, they are permanent structures and offer the advantage of water level manipulation. The proper manual, seasonal adjustments in flowage levels increases the amount of plant food production desired by ducks. Muskrats are more commonly found in the marshy wetlands of the agricultural areas and streams banks than elsewhere in the county.

The total wetlands adjoining the surface waters in the county amounts to about 14,186 acres - streams with 8,297 acres and lakes with 5,889 acres. Wild rice marshes are extensive only along Sweeny Pond Creek and the Vermillion River. The most common nesting waterfowl are mallards, blue-winged teal, wood ducks, coot and loon. Of the spring and fall migratory puddle ducks, in descending order of numbers, are mallards, wood ducks and blue-winged teal. Less common are black ducks, green-winged teal, pintails, gadwalls, and shovelers. Migratory diving ducks that stop over are the goldeneyes, buffleheads, ring necks, lesser scaup, mergansers, redheads, ruddy ducks, canvasbacks, and baldpates. Blue, Snows and Canada geese and whistling swans are also a part of the migratory scene.

The New Auburn Wildlife Area and the Loon Lake Wildlife Area are primarily Game Management lands, managed for waterfowl. In addition, other lands are being leased and purchased as waterfowl preservation areas under the Scattered Wetlands Project.

Of the 2,816 trapping licenses issued in the state during 1962, 54 were issued in Barron County. This county also accounted for 4,393 (1.3%) of the 338,885 resident small game and voluntary sportsmen's licenses sold in the state and 3,348 (2%) of the 170,278 resident deer hunting licenses sold.

During the 1958-1959 season, 170 of the 14,232 beaver harvested in the state, were taken in Barron County; also, 15,800 of the 538,958 muskrats and 602 of the 34,025 mink were taken in the county. Nineteen otter were tagged in Barron County during the same period.

Boating

Seventeen natural lakes and impoundments of over 200 acres in size offer a total of 11,674 acres of surface water to the boater and water-skier. This figure is 68 percent of all the surface water (17,265 acres) in the county. These seventeen lakes and impoundments are the five lakes of the Chetek Lake Chain, Red Cedar, Beaver Dam, Bear, Hemlock, Upper and Lower Turtle, Montanis, Sand, Silver, Staples, Vermillion, and Rice Lakes. Good public access is provided to all these waters. Motorboating is available on the Red Cedar River and canoeing is possible on the Hay, Chetek, Yellow and Vermillion Rivers. Many other streams may be canoed with more or less difficulty.

The diagrammatic presentation of stream widths on the waters map, indicates sizes of water courses and the streams that may have canoeing or boating potential. Streams less than 20 feet wide will have practically no value; those from 20 and 40 feet wide will have limited value; while those over 40 will be good canoeing waters. Rivers over 200 feet wide are usually able to accommodate all types of boating.

During the summer of 1963, aerial boating observations were made by Law Enforcement and Lake Classification personnel. Table 8 summarizes the boating picture as observed on weekdays, weekends and holiday weekends. There were no water-skiers on any of the lakes during these observation flights.

The boating density for the 34 lakes checked in Barron County, a total of 12,863 acres, had one boat in use per 49 acres of surface waters.

Swimming

A number of lakes in the northern outwash moraine region have the qualifications of clear water, firm and sandy bottoms, and minimum algae and weed growth that make them desirable for the development of good swimming beaches. Silver Lake is an example of these qualifications and it is intensively used by swimmers, even though it has inadequate facilities as yet. The lakes of

Table 8. Summary of aerial boating observations.

Lake Size-classes	No. of lakes	Total acreage on all flights	No. fishing boats	No. pleasure boats	Total no. boats	Acres per boat
0-49	4	390.0	1	0	1	390
50-199	14	5,155.1	33	0	33	156
200-499	9	13,161.2	274	7	281	47
500-1,000	2	6,933.5	191	11	202	34
1,000	5	27,749.1	544	25	569	49
Total	34	53,388.9	1,043	43	1,086	49

the terminal moraine, on the other hand, often have mixed gravel and sand bottoms, steep beaches, and, if small in size, they have silt-covered bottoms, but clear water. The bog-type lakes have characteristic mats of vegetation bordering the shore, sharp drop-offs, brown water and mucky bottoms, making them inferior for swimming also. The Chetek Lake Chain, Rice Lake, the lower part of Beaver Dam Lake and Upper and Lower Turtle Lakes have algae blooms which make the development of good swimming difficult.

Facilities for public swimming are provided at Barron Flowage #2, Lake Chetek, Beaver Dam Lake, Rice Lake, and the Cameron, Dallas and Prairie Farm Flowages.

Aesthetics

The most distinctive feature of Barron County is its terminal moraine in the north, the rocky Blue Hills in the east and the broad river valley plains of the central and south. The terminal moraine is a hilly woodland set with more than 300 kettle hole lakes and ponds. The Blue Hills are composed of red quartzite, partly as pipestone, and appear as high and scenic parallel ridges. Although much of the remaining part of the county is open agricultural land, it is irregularly broken by streams and patches of hardwood and white pines. The scenic qualities of the larger lakes are being reduced, however, by the increasing development of cottages, resorts and homes.

AVAILABILITY OF THE WATER RESOURCE

Area and Population

Barron County has 0.9 percent of the total state population. Table 9 compares the county population and area with that of the state. The county is more rural in population than urban with 61 percent of the people living on farms and in small communities of less than 1,000 persons. The rural population decreased by 4.3 percent over the last decade and the urban population increased by 1.5 percent. The entire county had a population loss of 1.25 percent as compared to a 15.1 percent gain for the rest of the state.

Table 9. Population and area comparison of Barron County with the State of Wisconsin.*

	Area (Sq. miles)	Population	Percent change (1950-1960)	Per square miles
Barron County	889	34,270	-1.25	38.5
State of Wisconsin	52,044	3,951,771	-15.1	75.9

The county area, including surface waters, is 889 square miles, or about 1.9 percent of the area of the entire state, ranking it 25th in size. The water area is 18,449 acres or about 1.7 percent of the state's water area, ranking Barron County 15th in acreage. The surface water available per capita is 0.54 acres.

Of the 425.77 miles of lake frontage, 37.87 miles, or 8.8 percent, are publicly-owned. Of the 732.4 miles of stream frontage, 29.49 miles, or four percent is publicly-owned. Table 10 is a breakdown of land lease and ownership types. Public lands appear on the map provided (Figure 4).

Public Access to Water

All but two of the lakes in Barron County of over 100 acres in size have one or more improved public access roads. The accompanying map (Figure 5) shows the location and types of access. The lakes smaller than 100 acres, more often than not, lack an improved road access. A number of these lakes

* Rural and Urban Population Change in Wisconsin, 1950-1960, Department of Rural Sociology, University of Wisconsin, Madison, March, 1961.

Table 10. Public-owned and leased lands*

Ownership	Acres Leased	Acres Owned	
State of Wisconsin:			
Conservation Department:			
Loon Lake Wildlife Area		160.00	
Maple Plain Rearing Station		102.15	
New Auburn Wildlife Area		554.78	
Remnant Fish Habitat Project	8.00	129.52	
Scattered Wetlands Project	493.09	505.00	
Yellow River Wildlife Area		607.00	
Total Acres	501.09	2,058.45	
Total State Lands			2,559.54
Barron County-owned lands:			
County Forest in Towns of Bear Lake, Cedar Lake, Doyle, Maple Plain, Turtle Creek & Vance Creek		12,974.14	
Town of Almena		35.55	
Town of Bear Lake		152.88	
Town of Cedar Lake		25.00	
Town of Chetek		89.50	
Town of Clinton		14.37	
Town of Crystal Lake		14.00	
Town of Cumberland		30.00	
Town of Dovre		35.00	
Town of Doyle		100.00	
Town of Lakeland		209.11	
Town of Maple Grove		1.00	
Town of Maple Plain		254.11	
Town of Oak Grove		10.00	
Town of Prairie Farm		40.00	
Town of Rice Lake		7.40	
Town of Stanley		245.27	
Town of Sumner		630.50	
Town of Vance Creek		112.92	
Total County-owned lands			14,980.75
Town-owned lands:			
Town of Arland		1.30	
Town of Crystal		29.50	
Town of Dovre		82.00	

* Excluding road right-of-ways.

Table 10. Continued

Town of Doyle	1.00	
Town of Lakeland	37.39	
Town of Oak Grove	1.00	
Town of Sioux Creek	1.00	
Town of Stanfold	2.50	
Town of Stanley	8.00	
Town of Sumner	1.00	
Town of Vance Creek	7.00	
Total Town-owned lands		171.69
City and Village-owned lands:		
City of Barron	142.98	
City of Chetek	78.00	
City of Cumberland	420.29	
City of Rice Lake	288.30	
Village of Almena	10.00	
Village of Cameron	130.00	
Village of Dallas	11.20	
Village of Haugen	40.00	
Village of Prairie Farm	25.00	
Village of Turtle Lake	4.00	
Total City and Village-owned lands		1,149.77
School-owned lands:		575.01
U. S. Government-owned lands:		.82
Total Public-owned lands:		18,936.49
Total Public-leased lands:		501.09
Total Public lands:		19,437.58

are winterkill lakes and have only a limited potential, and boat access to them at this time is not important. Access to other lakes by an improved road may not be desirable because of wilderness qualities that should be preserved; therefore, a foot trail over publicly-controlled land would be adequate. Public lands, principally County Forest, already border many of these small lakes.

Stream access is improving on some of the important trout streams in the county. Purchase and lease of lands on Silver Creek-Town of Vance Creek, the Yellow River, Hickey Creek, Moose Ear Creek and Turtle Creek have opened up some of their frontage to public recreation; at the same time, public control will insure the preservation, restoration and continued enjoyment of these streams in years to come. Additional "Wildlife Area" and "Remnant Cold Water Fish Habitat" projects have been established on several other trout streams where access and preservation of trout habitat would also be accomplished by public ownership or easement. Access to the larger warm water streams is presently limited to the use of private lands and bridge accesses. These streams include the Red Cedar, Chetek, Hay, Lower Yellow, and Vermillion Rivers. Improvement of their fish habitat is also desirable.

Public Park Areas

There are 378.6 acres of public parks in Barron County. Table 11 and Figure 4 indicate the ownership, acreage, types of facilities available, (all have picnicking areas) and locations. Barron County has been active in providing this type of recreational facilities on many of its major lakes. County parks are presently being developed on Prairie and Silver Lakes. There are no state parks in the county, the nearest state parks to Barron County are Interstate Park at St. Croix Falls and Brunet Island Park at Cornell. With the 378.6 acres of public parks available in the county, there is one acre of parkland to every 90 people of Barron County.

Private Development

The lake frontage that is the most desirable for private cottage, resort, and camp development is, of course, the frontage on larger lakes having game fish populations and good quality building sites with sandy beaches. Beaver Dam Lake exemplifies this pattern, although its location in Cumberland has also contributed to its rapid development. Table 12 shows the comparative levels of development of lakeshore by the number of lakes in each size class. Considering the total shoreline of these lakes, or their total surface acreages by the same class, their development levels are all relatively low except for Rice Lake, Beaver Dam Lake and the Chetek Lake Chain. These three waters together have 1,291 of the 1,856 cottages and lakeshore homes and 71 of the 105 resorts in the county, or 65 percent of the county's total private development.

Table 11. Public parks of Barron County*

Ownership and name	Waters adjoining	Park acreage	Swimming facilities	Camping facilities	Improved boat landing
County:					
Bandli Park	Pokegama Creek	2.00	no	yes	no
Kirby Lake Park	Kirby Lake	2.00	no	yes	yes
Lake Montanis Park	Lake Montanis	1.50	no	yes	yes
North Lake Park	North Lake	13.00	no	yes	yes
Red Cedar Lake Park	Red Cedar Lake	15.00	no	yes	yes
Seck Memorial Park	Pokegama Creek	10.00	no	yes	no
Silver Lake Park	Silver Lake	3.19	no	yes	yes
Tenmile Lake Park	Tenmile Lake	9.50	no	yes	yes
Veteran's Memorial Park	Prairie Lake	155.80	no	yes	yes
Town:					
Reeve Park	Reeve Pond	7.00	no	yes	no
City:					
Barron Park	Barron Flow. Nos. 1, 2, and 3	92.98	yes	yes	yes
Chetek Park	Lake Chetek	2.00	yes	yes	yes
Cumberland Park	Beaver Dam Lake	1.00	yes	yes	yes
Eagle Point Park	Beaver Dam Lake	10.00	no	yes	yes
Hiawatha Park	Rice Lake	15.63	no	yes	no
Indian Mound Park	Rice Lake	1.00	no	yes	yes
Narrows Park	Rice Lake	3.00	no	yes	no
Rice Lake Park	Rice Lake	3.00	yes	no	no
Southworth Park	Lake Chetek	1.00	no	no	no
Village:					
Almena Park	-	2.00	no	yes	no
Cameron Park	Cameron Flowage	2.00	yes	yes	no
Dallas Park	Dallas Flowage	1.00	yes	yes	yes
Pioneer Park	Prairie Farm Flowage	25.00	yes	yes	yes
Total public park acreage		378.60			

* Does not include wayside parks.

Table 12. The private development of lakeshore in Barron County.

Lake size by acreage	Number of lakes	Cottages & houses	Resorts	Boat rentals	Organizational camps
50	322	85	1	1	0
50-99	17	44	1	4	1
100-199	12	122	6	7	0
200-499	10	318	19	16	0
500-1,000	2	227	17	5	1
1,000	5	1,060	61	51	4
Total	368	1,856	105	84	6

SURFACE WATER PROBLEMS

In the management of surface waters, the problems of water quality to be dealt with are caused by either nature or man. Winterkill is a common problem in Barron County originating from natural conditions. At least 265 lakes of the county, with a total area of 2,580 acres, are subject to annual complete, partial, or occasional freeze-out with correspondingly severe fish mortalities, if fish populations are present. The winterkill occurs as a result of oxygen depletion from the water. The depletion may be due to shallow lake depths, types of snow-ice cover that do not permit adequate light penetration, the removal of oxygen by decaying plant and animal materials, and in some instances, the reduction of light penetration by dark brown, bog water, or a combination of these factors may cause a winter fish kill.

Another naturally occurring problem in some Barron County lakes is an unbalanced population relationship between the numbers of predator fish to the numbers of forage fish. An unbalanced population is indicated by the small size of one species, or groups of fish, usually the panfish. The smaller, low fertility lakes are the waters most affected by this problem of slow growth rate. The exact number of lakes in the county where population imbalance occurs is not available. Chemical rehabilitation of surface waters is possible; however, reestablishment of a balanced predator-forage fish population is difficult to achieve. Brook, rainbow and sometimes, brown trout are used in restocking because they do not reproduce in small, seepage lakes; thus, the population size can be controlled to fit the available food supply.

A variety of problems are encountered in the management of streams in Barron County. There is a lack of cold water habitat in the newer glaciated areas of the northwest and northeast. Large swampy lowlands border these streams and a number of lakes on the stream courses feed warm surface runoff waters to these streams, thus eliminating them as trout habitat.

Larger streams, such as the Red Cedar, Chetek, Lower Yellow, and Hay Rivers have excessively rocky, boulder-covered bottoms, or shifting sand and silty bottoms. They are also subject to extreme variations in volumes of water flow. Deep pools, that ordinarily would provide habitat for warm water game fish, seldom occur naturally in these rivers.

Overdeveloped stream drainage systems exist in the agricultural region covering about 70 percent of the county. The erosion of stream bank cover, the unstable, silt and muck covered bottoms, great turbidity, and higher water temperatures are problems to both cold and warm water habitats. Trout habitat has deteriorated in practically all of the streams on pastured lands, and so too, the northern pike and smallmouth bass streams have become, as such, sucker and redhorse streams. An attempt to improve the remaining cold water habitat has been initiated through the state acquisition and easement of lands bordering trout streams.

Carp inhabit the Hay River and Turtle Creek drainage system and are causing habitat destruction in Beaver Dam, Upper and Lower Turtle Lakes, and, until recently, in Big and Little Moon Lakes. The latter two lakes have been chemically rehabilitated and restocked. Cooperative removal of carp from Beaver Dam Lake has been attempted by the local Sportsman's Club and the Conservation Department.

Excessive algae growth may be considered a problem in the Chetek Lake Chain and the lower part of Beaver Dam Lake. In these cases, shallow depths, high nutrient content of the waters, and carp are causative factors to the problem. The overfertilization of waters by domestic waste disposals, fertilizers, and topsoils washing and seeping into the lake basin should always be kept in mind by planning agencies and cottage builders. Potential sources of organic pollution exist wherever the active, effluents, either fluid or solid, are discharged into recreational waters. Most sewage treatment facilities in present use are still limited in their abilities to remove all the undesirable materials from an effluent discharge. The most effective systems of disposal, of course, are those which do not ordinarily involve the use of recreational waters for effluent disposal, such as, the artifically constructed lagoon and the ridge and furrow irrigation disposal of wastes. Table 13 summarizes the methods of treatment various municipalities in Barron County employ for waste disposal. Forty-seven percent of the people of the county are served by these waste treatment facilities.

In addition to the municipal disposal treatment system mentioned, several other sources of treatment and potential pollution exist in the county. A cheese factory near the Brill River needs additional facilities for waste treatment and a retinning company on the Red Cedar discharges waste waters which contain acids, alkalies, and cleaners that eventually reach the Red Cedar River. Since there is no mining carried on in Barron county, except for sand and gravel removal operations, no other inorganic pollution from that source takes place in the county.

Table 13. Methods of municipal disposal in Barron County.

Municipality	Method of treatment	Waters that may be affected by effluents
Almena	Primary & chlorination	Lightning Creek
Barron	Trickling filter	Yellow River
Cameron	Trickling filter	Cranberry Creek
Chetek	Trickling filter	Chetek Lake
Cumberland	Trickling filter	Beaver Dam Lake
Dallas	Primary, chlorination & stabilization pond	Upper Pine Creek
Prairie Farm	Activated sludge plant & stabilization pond	Hay River
Rice Lake	Trickling filter	Red Cedar River
Turtle Lake	Trickling filter	Swamp tributary to Moon Creek

Although all of the lakes over 200 acres have public access in various degrees of development, mostly exceptionally good, a few still remain to be opened on lakes of less than 200 acres. Even though Barron County is basically agricultural, there is a trend throughout the county toward the awareness of its recreational assets. The county is currently engaged in a development program for the better utilization of its recreational values by constructing public access sites to lakes and other recreational areas, development of county parks, and the multiple use concept on county-controlled lands. The accompanying map shows the public access locations and degrees of improvement. Waters with no public use opportunity are not individually marked on the map, but may be rated by their lack of an access symbol.

Lake and river frontage is continually being sought for development of cottages, summer homes or year-around residences. On larger, more desirable bodies of water the remaining building sites are limited. This has resulted in the use of less desirable sites and a shift toward development on less desirable lakes. In many cases, it results in unauthorized fillings along lakeshores and increased application of sand blankets, both of which can materially change the habitat. The protection required to preserve the fish and game habitat of the lake community is inadequate. Zoning and accellerated acquisition is necessary to achieve this end.

As suggested earlier in this summary, and in Figure 6, the natural processes of topography, geologic formation, and climate along with the adverse influences of man, determine the quality and location of surface waters. The requirements for good water quality may range from water deep enough for navigation to clear water for swimming, to fertile water to sustain good fishing without excessive weed and algae growths. A lake ages by natural agencies, such as erosion and vegetation accumulation, at relatively slow rate. As aging proceeds, habitat types change to fit the lake age -- from a deep, cold water lake that supports cisco, to a shallower and weedier bass-panfish lake, and finally to a marshy duck pond. Man may hasten the natural aging process as he fertilizes the watershed, fills in the wetlands, allows erosion on his fields, or uses the surface waters as his sewage disposal unit. Initially, these influences may seem to be a benefit to lake's fertility. Their overall effect, however, has been the destruction, rather than the maintenance of good water quality and habitat.

THE FUTURE

Barron County is one of the prominent possessors of the surface water areas of the state. As such, it has also inherited many of the problems, as well as the assets, common to growing communities of lakeshore dwellers. There are encouraging signs of advancement in soil and water conservation practices and thinking on the part of the citizens of Barron County. Its governing bodies are becoming more aware of its problems. Solutions lie in the direction of land and water use planning for the protection of its outdoor resource. The continued cooperation of the county conservation committee, the sportsmen's groups and civic organizations with state agencies is appreciatively anticipated. Through their further efforts, the protection and good management of the surface waters here is expected.

ACKNOWLEDGEMENTS

Appreciation is extended to other members of the Fish Management Division who assisted in the field investigations, Dennis D. Devine, Ed Guttke, Duane W. Johnson, Ed Olund, P. J. Perkins, Norman Pokorny and Randolph Steuck; and to the Law Enforcement Division pilot, Earl Gingles. Acknowledgement is also extended to personnel of the agencies providing other data for this inventory.

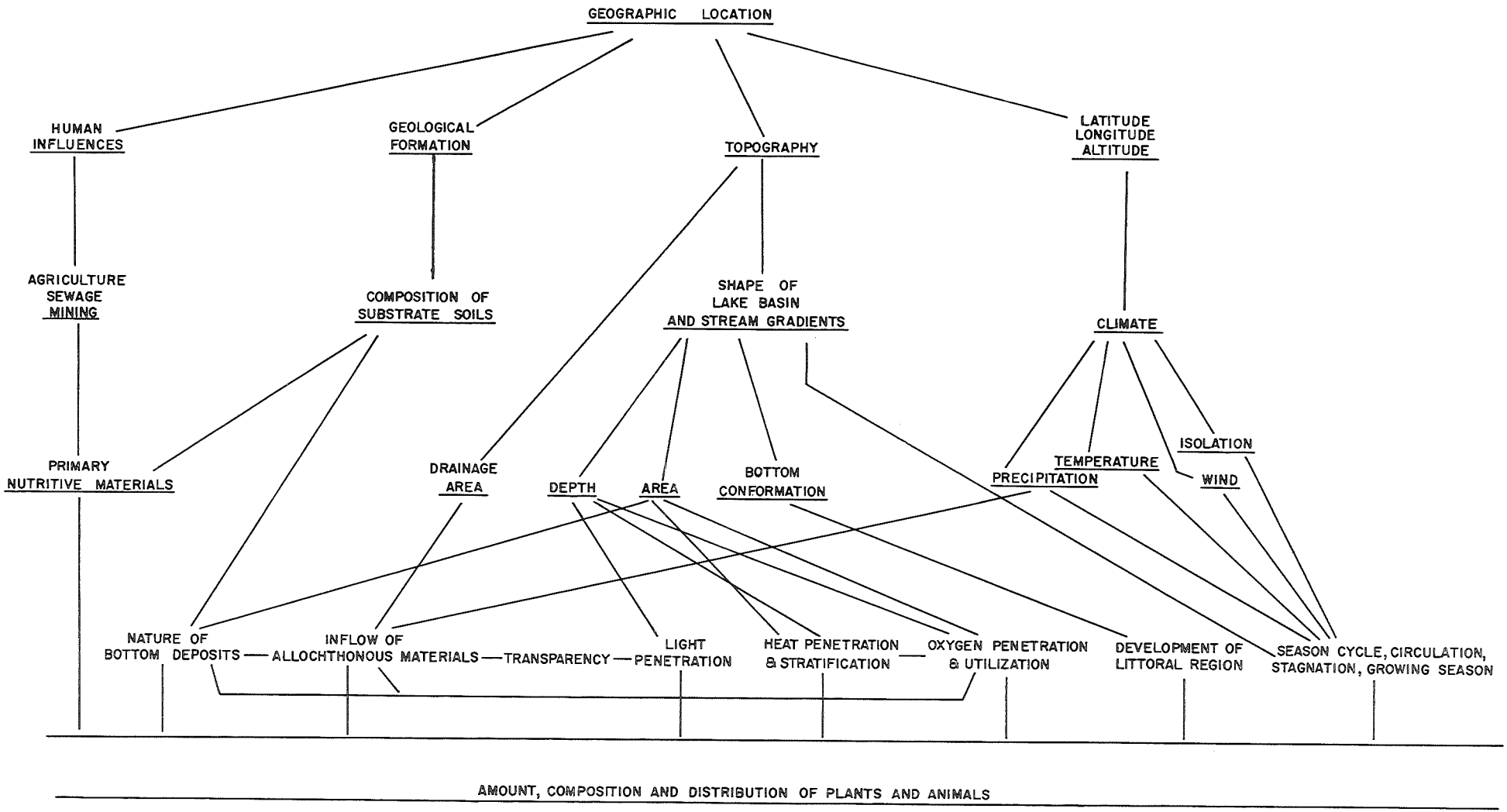


Figure 6. Factors contributing to the character of surface waters and their trophic nature and productivity (after Rawson and Prescott).

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DEFINITIONS

aesthetics - The scenic qualities of water and its surroundings. Wild shorelines usually have higher scenic values than developed shorelines because they harbor wildlife and a varied plant life. The marshes are often spawning and nesting grounds.

direct drainage area - The land area where runoff flows directly into only a particular lake or stream, as differentiated from watershed areas. The direct drainage for streams is only the area drained within the county; for lakes the drainage area includes the total area that may also drain into the lake from other counties.

estimated normal flow, c.f.s. - The amount of water measured in cubic feet per second flow that may be expected in streams at their outlet, either to another stream or at the county line. Estimations of flow were not measured during periods of excess runoff, such as during March, April, and May; hence, they are not average flows.

lake types - There are significant limnological characteristics peculiar to each lake type, based on their physical and chemical properties. The production of plant and animal life generally varies in accordance with lake type. The lakes of Wisconsin (Prescott, 1951) fall into four main types, hard water and soft water, seepage and drainage lakes. Three other subtypes have been added for further classification of the four main types, since these three lake types, the acid bog, alkaline bog, and spring pond show additional definitive characteristics.

hard water drainage lakes: Impoundments and lakes whose main water source is from stream drainage. Methyl purple alkalinity (or M.P.A.) of 50 ppm or over, year-around. Usually a pH of 7.0 and above.

soft water drainage lakes: Impoundments and lakes whose main water source is from stream drainage. M.P.A. below 50 ppm at least during part of the year, or year-around; usually have a pH below 7.0.

hard water seepage lakes: Landlocked, or nearly so. Water levels maintained by ground water table and bottom seal. M.P.A. of 50 ppm, or over; usually a pH of 7.0 and above.

soft water seepage lakes: Landlocked, or nearly so. Water levels maintained by ground water table and bottom seal. M.P.A. of less than 50 ppm; usually pH below 7.0. Perhaps, the most common lake type in Wisconsin.

acid bog lakes: Small usually brown water lakes of the kettle hole type; usually landlocked or with only little outlet flow; only slight fluctuations of water levels; and encroaching marginal mats of vegetation of Sphagnum, leatherleaf, etc., from 50 percent of the shore. With pH below 7.0 and a low M.P.A.

alkaline bog lakes: Small, brown water kettle hole lakes with a stream meandering through them, and with a pH above 7.0 and an M.P.A. medium to high.

spring ponds (limnokrenes): Clear water, with ground water flowing visibly out of the bottom of the basin and the overflow of which forms the beginning of a stream. Seldom freeze-over in winter. M.P.A. usually above 50 ppm with a pH neutral or above 7.0.

landlocked - Shut in by land and not connected by a stream flowing eventually to the oceans.

littoral - The shoreward region of a body of water. The zone affected by waves and currents near the shore. The term is more literally interpreted when describing small lakes which have modest wave action.

methyl purple alkalinity, M.P.A. - The test used to determine the amount of available carbonates, bicarbonates, and hydroxides in parts per million of water. This measurement is used to express the level of fertility of waters. Low alkalinity waters are generally biologically less productive than those with high alkalinities.

moraine - An accumulation of debris deposited by a glacier. Moraines are classified in part as follows:

terminal moraine: Glacial till deposits left at the forward edge, or end, of the receding ice sheet. The till is composed of a mixture of clay, silt, sand, gravel and sometimes boulders. Numerous small knolls and ridges, interspersed with basins forming many kettle hole lakes and marshes, are characteristics of the terminal moraine.

ground moraine: Extended sheets of glacial till deposited irregularly over the path of the glacier. These nearly level areas are also composed of a mixture of sand, gravel, boulders, and clay, and occasionally, the bedrock is left exposed. The few lakes found in this type of moraine are usually shallow and marshy.

glacial outwash: These are morainic deposits made up of the material produced by glaciers and carried, sorted and deposited by water that originated mainly from melting of glacial ice. The deposits now exist as stratified beds of clay, sand, or gravel in the form of plains, valley trains, and deltas of old glacial lakes. The outwash may extend far beyond the farthest advance of the ice. In outwash of Barron County fewer lakes occur than in terminal moraine, and beaches are usually composed of sorted deposits of sand. Outwash in other areas was often a calving grounds for glaciers and the melting of buried ice blocks produced numerous lakes. Outwash of this kind is known as pitted outwash.

pH - The negative logarithm of the hydrogen ion concentration expressed in gram equivalents. A pH of less than 7.0 is acid, a pH of 7 neutral and more than 7.0 is alkaline. Usually, swamp drainage contributes to a low pH.

panfish - Includes the bluegills, perch, rock bass, green sunfish, pumpkinseeds, crappies, rock and warmouth bass, and bullheads. To be described as either a panfish or forage minnow lake suggests the waters in question have a winterkill problem.

predator fish - Includes muskellunge, northern pike, walleyes, largemouth and smallmouth bass as the predominating members of this fish group.

private development - The improvement of lakeshore resulting from the construction of commercial resort facilities, cottages, organizational camps, marinas, etc.

public access - An improved roadway over lands owned or leased by a unit of government for egress to lakes and streams.

public frontage - The government-owned or leased shoreline bordering lakes or streams.

shore development figure, S.D.F. - The ratio of the perimeter of a given lake to that of a circle with the same area as the lake.

specific conductance - The total concentration of dissolved electrolytes in waters expressed in micromhos at 77 degrees Fahrenheit. Corresponds roughly to the methyl purple alkalinity test, though of a different value scale.

stream gradient - The overall average per mile fall of water levels from a stream's permanent source to its outlet.

trout stream - The term implies a stream which has cool water, is fed by numerous springs and is capable of supporting cold water fish in the salmonoid family.

water color - Either clear, light brown, medium brown, or dark brown. Dark brown is a "coffee" color derived from drainage of humic materials in swamps, and the other browns are lighter. Color is a limiting factor in light penetration and, subsequently, determines the amount of dissolved oxygen supplied by the photosymthetic activity of plants to waters.

watershed area - The whole water gathering land surface of a lake or stream basin, and includes the runoff surfaces of other lakes and streams above the one in question. Stream watershed areas, however, are only the runoff surfaces above to the county line, while lake watershed areas include the entire basin system within and out of the county.

wetlands - Any area where the water table is at such a level that raising of a cultivated crop is usually not possible. Wetland definitions follow those used by the U. S. Fish and Wildlife Service for wetlands inventories. Wetland classifications are as follows:

deep marshes: Water from six inches to three feet in depth during growing season. Vegetation of cattails, reeds, bulrushes, spike rushes and pond weed.

shallow marshes: Water present during most of the growing season, at least in parts of the area. Vegetation of cattails, river rush, bulrushes, and spike rushes.

fresh meadows: Soggy ground or seasonally flooded areas which are normally too wet for agricultural practices. Vegetation of smartweeds, grasses, sedges, broad-leaved plants, or bur reed.

shrub swamp: Waterlogged soil, with occasional standing water. Vegetation of alders, willow, dogwoods, etc.

timber swamps: Waterlogged soil, with occasional standing water. Vegetation of tamarack, black spruce, black ash, balsam, etc.

bogs: Waterlogged soil conditions. Vegetation of leatherleaf, cranberries, and Labrador tea.

Plant species above are not intended to be a complete list for each type: they are a guide to groups of which serve as indicators for various types.

wilderness lake - A body of water near which there are no buildings or car accesses or commercial facilities within 200 feet of the shore, but where access is possible, trail or water.

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes.

Named Lakes	Location T-N	Location R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
Anderson	36	13	10.8	15	.22	.12	.64	6.0	18	28	Clear	Aug., 1962
Bailey	33	11	43.3	7	.46	.30	1.45	6.8	5	29	Clear	Nov., 1962
Barron Flow. #1	34	12	47.0	13	.74	.16	2.50	7.4	80	162	Turbid	Nov., 1962
Barron Flow. #2	34	12	1.5	10	.15	.03	.33	7.4	78	161	Turbid	Nov., 1962
Barron Flow. #3	34	12	32.9	10	.75	.11	2.55	7.4	79	163	Turbid	Nov., 1962
Bass - Bear L.	36	12	22.7	21	.33	.13	.96	6.4	8	19	Clear	Aug., 1962
Bass - Cedar L.	36	10	19.6	41	.28	.18	.78	6.8	26	55	Clear	Nov., 1962
Bass - Chetek L.	33	10	118.0	17	.62	.54	1.95	6.8	9	24	Clear	Sept., 1962
Bass - Crystal	35	14	37.2	61	.54	.25	1.48	6.2	13	42	Med. Brown	Nov., 1962
Bass - Turtle L.	33	14	18.9	19	.24	.19	.68	7.0	16	63	Clear	Jan., 1963
Bear	36	12	1345.0	100	4.50	1.00	13.25	7.2	50	110	Clear	Oct., 1962
Beaver Dam	36	14	1112.1	106	4.75	.50	18.00	7.2	33	94	Clear	Oct., 1962
Big Dummy	36	13	135.1	58	.67	.53	2.20	6.2	6	23	Lt. Brown	Nov., 1962
Big Moon	33	14	178.4	46	1.00	.42	2.72	7.4	91	238	Clear	Nov., 1962
Blueberry	35	14	8.4	6	.19	.12	.49	5.8	11	31	Clear	Feb., 1963
Bolger Flowage	36	10	78.0	15	1.00	.20	2.75	7.2	35	90	Clear	Nov., 1962
Buck	36	13	56.6	19	.51	.36	1.93	6.4	28	69	Clear	Mar., 1963
Bullhead	36	14	13.7	8	.22	.18	.63	6.0	25	84	Dk. Brown	Feb., 1963
Butternut	36	12	136.4	15	1.05	.40	2.70	6.8	5	30	Lt. Brown	Nov., 1962
Cameron Flowage	34	11	67.2	3	1.18	.17	3.00	6.4	66	135	Clear	Jan., 1963
Chain - Cedar L.	36	10	107.2	15	.95	.64	4.94	6.7	8	30	Med. Brown	Nov., 1962
Chain - Lakeland L.	36	13	43.4	15	.68	.22	2.41	6.4	6	25	Lt. Brown	Aug., 1962
Couderay	33	10	11.4	3	.25	.11	.66	6.0	8	63	Lt. Brown	Mar., 1962
Cranberry	36	14	8.6	28	.17	.10	.44	6.2	18	48	Lt. Brown	Feb., 1963
Crooked	36	12	15.4	10	.29	.17	.96	6.6	7	19	Clear	Aug., 1963
Crystal	35	14	90.5	24	.68	.40	2.70	6.2	11	35	Clear	Nov., 1962
Crystal Bay	34	13	9.2	16	.24	.08	.55	6.6	37	98	Clear	Jan., 1963
Dallas Flowage	32	12	27.1	9	.47	.37	1.69	8.8	89	212	Med. Brown	Aug., 1962
Deer	36	13	8.8	17	.21	.09	.50	6.6	8	28	Lt. Brown	Aug., 1962

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Named Lakes	Location T-N	Location R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
Dietz #1	34	11	20.8	15	.30	.15	.83	5.8	12	38	Clear	Jan., 1963
Dietz #2	34	11	12.1	8	.25	.13	.63	6.2	15	46	Clear	Jan., 1963
Dietz #3	34	11	16.2	23	.28	.13	.80	6.4	16	39	Clear	Jan., 1963
Dietz #4	34	11	14.8	12	.31	.13	.95	6.2	18	41	Clear	Jan., 1963
Duck	36	13	99.6	28	.55	.42	1.58	7.0	17	52	Dk. Brown	Oct., 1962
Echo	34	14	164.0	40	.85	.73	3.00	6.0	8	44	Clear	Nov., 1962
Fish	36	12	8.3	34	.23	.09	.52	7.0	37	77	Clear	Jan., 1963
Gates	35	14	15.3	9	.22	.15	.63	6.8	10	38	Turbid	Nov., 1962
Ginder	35	10	20.5	18	.37	.17	1.27	6.2	21	56	Clear	Jan., 1963
Goose	36	10	11.6	12	.29	.10	.76	6.9	6	21	Clear	Aug., 1962
Granite	36	13	151.1	32	1.50	.25	3.65	6.8	27	54	Lt. Brown	Nov., 1962
Greeley	36	13	56.1	13	.74	.29	3.03	6.0	14	44	Clear	Mar., 1963
Hemlock	36	10	410.2	21	2.10	.55	8.28	7.1	45	100	Clear	Mar., 1964
Hogback	36	13	15.1	8	.32	.11	.84	6.0	9	29	Clear	Mar., 1962
Horseshoe	36	14	115.0	25	.76	.36	2.58	6.4	8	31	Clear	Nov., 1962
Kelly - Bear L.	36	12	17.6	41	.42	.13	1.08	6.2	9	35	Clear	Jan., 1963
Kelleys - Maple Plain	36	14	18.7	12	.28	.15	.73	6.0	7	33	Lt. Brown	Feb., 1963
Kidney	36	14	35.4	35	.54	.14	1.44	6.8	12	35	Clear	Oct., 1962
Kirby - Bear L.	36	12	7.4	13	.17	.08	.60	6.0	6	25	Clear	Jan., 1963
Kirby - Maple Plain	36	14	91.7	19	.79	.59	3.23	6.8	6	23	Clear	Oct., 1962
Lake Chetek	33	10	683.0	22	2.00	1.36	8.90	7.2	44	89	Lt. Brown	Nov., 1962
Lake Desair	35	11	73.7	33	.85	.27	2.00	7.0	25	68	Med. Brown	Nov., 1962
Lake Thirty	36	12	71.7	39	.78	.25	1.99	6.4	10	39	Clear	Jan., 1963
Little Bass	36	14	24.3	56	.36	.17	.92	6.6	10	30	Clear	Oct., 1962
Little Butternut	36	12	18.6	16	.52	.09	1.20	7.4	88	189	Med. Brown	Nov., 1962
Little Dummy	36	13	30.9	44	.38	.18	1.30	6.2	6	21	Lt. Brown	Nov., 1962
Little Granite	36	13	22.0	56	.38	.11	.89	6.4	5	35	Clear	Aug., 1962
Little Lake	34	12	7.2	7	.17	.09	.43	7.0	16	69	Lt. Brown	Jan., 1963
Little Moon	33	14	27.0	30	.37	.15	.90	7.2	112	239	Med. Brown	Nov., 1962
Little Sand	36	14	84.7	41	.79	.27	1.93	6.4	12	26	Clear	Oct., 1962
Little Silver	36	13	18.0	20	.40	.15	1.09	6.2	25	21	Lt. Brown	Aug., 1962

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Named Lakes	Location T-N	Location R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
Long - Crystal L.	35	14	39.9	13	.70	.18	2.13	5.8	15	46	Clear	Feb., 1963
Long - Vance Creek	32	14	5.6	6	.22	.07	.50	6.9	93	226	Med. Brown	Aug., 1962
Loon	35	14	92.4	25	.75	.34	2.30	6.4	8	30	Lt. Brown	Nov., 1962
Lower Devils	36	11	107.6	29	.75	.70	3.40	6.4	14	32	Lt. Brown	Aug., 1962
Lower Spirit	36	14	23.7	42	.42	.14	1.03	6.4	18	48	Clear	Feb., 1963
Lower Turtle	34	14	278.5	22	1.50	.35	3.90	7.4	88	189	Clear	Nov., 1962
Lower Waterman	36	14	13.8	21	.20	.11	.95	7.6	86	160	Clear	Nov., 1962
Minnow	36	10	25.9	12	.41	.15	1.05	6.9	12	34	Clear	Aug., 1962
Mitchell	36	12	27.7	14	.37	.22	1.31	6.2	6	22	Clear	Aug., 1962
Montanis	35	11	219.2	15	1.07	.47	2.95	7.4	48	116	Turbid	Oct., 1962
Moon	35	11	83.6	5	.58	.42	1.94	6.8	19	37	Clear	Nov., 1962
Moose Ear	33	10	33.6	6	.23	.23	2.63	6.2	23	60	Lt. Brown	Sept., 1962
Mosquito	33	14	24.5	11	.55	.16	1.38	7.2	25	78	Turbid	Nov., 1962
Mud - Almena	34	14	19.2	4	.36	.12	.83	6.4	10	83	Lt. Brown	Jan., 1963
Mud - Bear L. - Sec. 30	36	12	24.4	7	.32	.16	.90	6.4	10	42	Lt. Brown	Jan., 1963
Mud - Bear L. - Sec. 34	36	12	3.5	17	.12	.06	.30	6.4	10	75	Clear	Jan., 1963
Mud - Chetek	33	10	567.1	15	2.00	.45	8.20	6.8	24	66	Clear	Sept., 1962
Mud - Crystal	35	14	23.4	11	.38	.16	1.14	5.8	16	39	Lt. Brown	Feb., 1963
Mud - Sioux Creek	32	11	21.9	19	.40	.13	1.04	6.2	32	81	Clear	Mar., 1962
North	35	14	88.6	23	.56	.42	2.03	6.2	8	35	Med. Brown	Nov., 1962
Old Mill Pond	34	14	5.1	9	.23	.08	.63	6.2	30	69	Clear	Jan., 1963
Peterson	35	13	36.5	13	.42	.25	1.10	6.8	10	27	Lt. Brown	Nov., 1962
Pickerel	36	10	37.0	25	.50	.28	1.70	7.2	9	31	Dk. Brown	Aug., 1962
Pokegama	33	10	494.0	19	2.10	.75	11.10	6.8	25	74	Clear	Nov., 1962
Poskin	34	13	150.0	28	1.33	.55	4.09	8.0	67	154	Lt. Brown	Nov., 1962
Prairie Farm Flow.	32	13	28.9	8	.75	.20	1.90	7.6	103	236	Med. Brown	Aug., 1962
Prairie	33	11	1545.0	26	7.00	1.00	16.00	6.8	45	88	Clear	Sept., 1962
Red Cedar	36	10	1881.8	53	3.33	1.02	15.90	7.2	66	127	Clear	Oct., 1962
Rice	35	11	1064.0	22	3.40	.75	20.40	7.4	64	128	Clear	Sept., 1962
Robinson	36	13	3.4	30	.11	.09	.35	6.4	22	59	Med. Brown	Mar., 1963
Round - Bear L.	36	12	17.6	16	.25	.22	.78	6.2	4	37	Clear	Aug., 1962
Round - Cedar L.	36	10	10.1	10	.20	.14	.58	6.2	8	24	Med. Brown	Nov., 1962

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Named Lakes	Location T-N	Location R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
Sand	36	14	300.0	60	2.35	.31	5.96	7.4	75	158	Clear	Nov., 1962
Scott	35	14	77.7	25	.74	.32	1.98	6.2	9	33	Lt. Brown	Nov., 1962
Silver	36	13	338.5	78	1.60	.40	5.80	7.0	10	68	Clear	Nov., 1962
Skinaway	34	14	36.6	10	.47	.22	1.20	6.2	17	61	Clear	Jan., 1963
Spider	36	13	39.6	13	.43	.26	1.85	6.1	10	29	Clear	Mar., 1962
Spring	36	14	60.3	56	.77	.22	2.43	7.0	8	30	Clear	Oct., 1962
Staples	35	14	336.8	15	1.24	.68	3.38	6.6	15	47	Clear	Nov., 1962
Stump	35	11	120.0	5	.82	.67	3.35	7.0	58	111	Clear	Sept., 1962
Sweeny Pond	33	13	47.2	12	.79	.15	2.00	7.2	106	191	Lt. Brown	Oct., 1963
Sylvan	36	13	67.3	39	.79	.17	1.99	6.4	12	37	Clear	Oct., 1962
Tenmile	33	10	393.0	10	2.00	.34	11.50	6.8	44	93	Clear	Sept., 1962
Tuscobia	36	11	157.4	27	2.20	.16	6.25	7.2	70	160	Clear	Oct., 1962
Upper Devils	36	11	67.2	10	.51	.44	2.37	6.4	9	24	Lt. Brown	Aug., 1962
Upper Spirit	36	14	7.0	6	.22	.08	.50	6.0	26	72	Med. Brown	Feb., 1963
Upper Turtle	34	14	423.5	25	2.37	.42	6.74	7.4	100	202	Clear	Oct., 1962
Upper Waterman	36	14	27.4	52	.30	.24	.82	7.4	81	162	Clear	Oct., 1962
Vermillion	35	13	282.0	56	1.77	.45	6.22	7.2	82	189	Clear	Oct., 1962
Wickerts	35	14	13.4	12	.27	.11	.69	6.2	10	35	Med. Brown	Nov., 1962
Wildcat	36	14	8.9	26	.19	.11	.48	6.8	8	31	Lt. Brown	Oct., 1962

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Location T-N	Location R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
Almena	34	14										
4-7a			7.6	8	.25	.13	.68	6.2	13	29	Lt. Brown	Jan., 1963
4-7c			3.4	10	.14	.06	.36	6.2	13	33	Lt. Brown	Jan., 1963
4-9			4.2	6	.13	.09	.39	6.0	16	33	Clear	Jan., 1963
4-10			3.5	11	.11	.07	.29	6.2	13	33	Clear	Jan., 1963
4-11			2.7	10	.07	.05	.26	6.0	13	32	Clear	Jan., 1963
4-12			4.3	3	.15	.08	.31	5.9	22	90	Med. Brown	Feb., 1964
5-2			3.1	5	.12	.05	.32	5.8	10	33	Clear	Feb., 1963
5-3			9.3	15	.24	.11	.80	6.0	7	28	Clear	Feb., 1963
5-4			2.6	10	.18	.04	.43	6.0	9	31	Clear	Feb., 1963
5-7			2.4	3	.10	.07	.30	6.0	41	91	Clear	Feb., 1963
5-8			5.7	4	.17	.12	.48	6.0	14	39	Clear	Feb., 1963
5-9b			3.5	21	.10	.07	.30	6.0	7	28	Clear	Feb., 1963
5-9c			2.2	10	.08	.08	.23	5.8	11	28	Clear	Feb., 1963
5-9d			2.3	4	.08	.07	.28	6.0	38	34	Clear	Feb., 1963
5-10			16.2	16	.35	.12	1.18	6.0	9	29	Clear	Feb., 1963
5-13b			1.0	8	.08	.04	.18	6.2	17	35	Lt. Brown	Jan., 1963
5-13d			11.4	9	.35	.13	1.13	6.2	13	29	Lt. Brown	Jan., 1963
5-14			3.5	9	.13	.07	3.10	5.8	16	36	Clear	Feb., 1963
5-15			4.5	17	.17	.07	.39	5.8	13	33	Clear	Feb., 1963
6-1			0.6	5	.07	.03	.18	6.0	22	52	Lt. Brown	Feb., 1963
6-6			0.1	3	.025	.02	.09	6.0	72	146	Turbid	Feb., 1963
9-5			2.2	5	.14	.07	.49	6.8	21	48	Clear	Jan., 1963
18-4			0.5	14	.04	.03	.08	5.8	24	72	Lt. Brown	Feb., 1963
19-1			10.1	10	.25	.09	.64	6.0	12	35	Clear	Jan., 1963
19-14			0.5	21	.05	.04	.13	6.0	26	33	Lt. Brown	Feb., 1963
19-16			12.5	7	.23	.11	.65	6.0	11	37	Lt. Brown	Feb., 1963
20-6			9.3	8	.18	.14	.50	6.0	15	55	Clear	Jan., 1963
23-10			5.5	5	.25	.05	.54	6.8	34	99	Clear	Jan., 1963
27-9			1.5	3	.07	.06	.19	7.0	65	128	Lt. Brown	Jan., 1963
29-6			22.7	10	.32	.25	.88	6.6	21	54	Clear	Jan., 1963
30-3			11.8	5	.26	.17	.83	6.2	28	165	Clear	Jan., 1963
30-7			2.0	5	.14	.04	.35	6.0	14	47	Lt. Brown	Jan., 1963

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Location T-N	R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
Bear Lake	36	12										
9-14			2.3	6	.08	.07	.23	5.8	8	27	Turbid	Jan., 1963
10-14			3.0	11	.09	.07	.26	5.9	11	26	Clear	Feb., 1964
12-14			1.5	4	.07	.05	.20	6.2	10	42	Dk. Brown	Jan., 1963
15-4			7.7	5	.18	.10	.45	6.0	8	19	Med. Brown	Jan., 1963
15-5			2.0	5	.10	.08	.30	5.8	11	30	Lt. Brown	Jan., 1963
16-2			3.3	5	.11	.07	.30	6.2	13	32	Clear	Jan., 1963
18-7			4.2	19	.12	.07	.32	6.2	7	23	Lt. Brown	Jan., 1963
18-9			2.0	3	.08	.05	.20	5.8	7	25	Lt. Brown	Jan., 1963
Cedar Lake	36	10										
4-1			2.9	8	.11	.05	.28	6.2	10	36	Dk. Brown	July, 1962
4-2			12.2	4	.28	.15	1.19	6.4	9	32	Dk. Brown	July, 1962
5-1			2.0	3	.08	.06	.22	6.3	5	20	Med. Brown	July, 1962
7-7			5.3	4	.26	.05	.65	5.5	3	18	Med. Brown	July, 1962
7-8			0.7	5	.10	.02	.20	6.3	9	20	Med. Brown	July, 1962
7-9b			5.0	10	.14	.09	.38	6.6	6	22	Lt. Brown	July, 1962
7-9d			3.5	9	.14	.09	.39	5.9	7	27	Med. Brown	July, 1962
7-10			2.5	7	.13	.08	.34	6.1	6	18	Lt. Brown	July, 1962
7-11			7.4	7	.24	.12	.89	6.2	6	16	Lt. Brown	July, 1962
7-12			2.6	7	.11	.08	.33	6.1	10	38	Med. Brown	July, 1962
9-4			0.5	3	.04	.03	.12	6.3	10	31	Clear	July, 1962
17-7			4.6	8	.18	.06	.46	6.0	5	17	Clear	Jan., 1963
17-10c			1.4	10	.08	.05	.25	6.0	12	25	Clear	Jan., 1963
17-10d			4.6	8	.17	.10	.56	5.8	12	25	Clear	Jan., 1963
17-11a			4.0	7	.21	.06	.56	6.0	15	25	Clear	Jan., 1963
17-11c			3.6	8	.11	.05	.28	6.2	10	21	Clear	Jan., 1963
17-11d			1.5	6	.07	.04	.19	6.2	13	19	Clear	Jan., 1963
17-14			2.2	10	.11	.05	.30	6.0	12	27	Clear	Jan., 1963
17-15			3.2	8	.14	.07	.38	6.2	7	25	Med. Brown	July, 1962

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Location T-N R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
18-2		3.4	5	.15	.07	.38	6.2	10	33	Dk. Brown	July, 1962
18-4		2.0	7	.13	.04	.33	6.0	7	20	Clear	Jan., 1963
18-5		3.0	5	.13	.08	.38	6.0	9	26	Dk. Brown	July, 1962
18-8		4.3	13	.21	.11	.70	6.5	6	16	Lt. Brown	Aug., 1962
18-9		0.5	5	.04	.02	.12	6.6	9	31	Lt. Brown	Aug., 1962
18-13		2.4	7	.12	.07	.32	5.8	9	26	Clear	Jan., 1963
18-14		2.4	11	.12	.06	.33	5.8	11	31	Med. Brown	Jan., 1963
18-16		2.0	8	.12	.06	.33	5.8	10	19	Clear	Jan., 1963
19-1		3.9	14	.11	.08	.33	6.0	8	16	Clear	Jan., 1963
19-2a		6.7	10	.17	.12	.54	6.0	11	24	Clear	Jan., 1963
19-2b		1.6	5	.08	.04	.20	6.0	14	24	Clear	Jan., 1963
19-3		4.3	10	.18	.12	.73	6.0	10	24	Clear	Jan., 1963
19-13		2.0	8	.08	.06	.20	5.6	9	21	Clear	Jan., 1963
20-3		13.3	15	.31	.14	1.08	6.0	7	22	Med. Brown	July, 1962
20-7a		12.2	11	.33	.27	1.60	5.8	9	25	Clear	Jan., 1963
20-7c		1.0	4	.07	.04	.19	5.8	9	24	Clear	Jan., 1963
20-10		3.4	7	.14	.07	.39	5.8	6	15	Lt. Brown	July, 1962
20-12a		9.4	8	.23	.15	.70	6.0	5	21	Lt. Brown	July, 1962
20-12b		6.4	18	.20	.07	.52	6.0	5	21	Lt. Brown	July, 1962
20-14		2.1	5	.09	.05	.23	5.8	5	12	Med. Brown	July, 1962
23-12		15.7	7	.27	.17	.82	5.8	9	31	Clear	Jan., 1963
26-3		5.3	38	.15	.10	.43	6.0	11	31	Lt. Brown	Jan., 1963
26-4		9.4	23	.25	.10	.82	6.0	14	36	Lt. Brown	Jan., 1963
26-7		4.9	27	.11	.11	.35	6.4	13	35	Lt. Brown	Jan., 1963
26-8		5.0	53	.14	.08	.34	6.4	12	31	Lt. Brown	Jan., 1963
26-9		8.1	56	.20	.09	.50	6.0	12	28	Lt. Brown	Jan., 1963
28-10		2.2	18	.09	.05	.35	6.3	14	49	Dk. Brown	July, 1962
29-5		1.9	5	.07	.06	.25	5.7	5	15	Med. Brown	July, 1962
29-12a		0.4	32	.03	.02	.10	5.3	7	28	Turbid	Jan., 1964
29-12d		0.4	3	.04	.02	.12	4.8	4	34	Dk. Brown	Aug., 1962
29-15		0.3	11	.03	.02	.08	6.0	8	21	Dk. Brown	Aug., 1962
34-6		10.1	6	.24	.15	.80	6.3	13	34	Lt. Brown	Aug., 1962
35-4		3.3	11	.09	.07	.26	6.0	10	23	Lt. Brown	Jan., 1963
36-6		9.8	32	.17	.12	.48	6.0	8	16	Lt. Brown	Jan., 1963

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	T-N	R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
Chetek	33	10										
11-2			6.1	1	.28	.09	.80	6.8	47	105	Clear	Mar., 1962
21-10b			2.0	7	.10	.04	.25	6.6	45	101	Lt. Brown	Mar., 1962
21-10c			0.5	4	.04	.03	.12	6.4	46	100	Clear	Mar., 1962
33-1			0.3	4	.06	.04	.14	6.0	46	108	Lt. Brown	Mar., 1962
33-3			0.5	5	.04	.04	.12	6.0	10	94	Med. Brown	Mar., 1962
Clinton	34	13										
5-16			5.2	10	.12	.11	.40	7.4	36	80	Clear	Jan., 1963
Crystal Lake	35	14										
2-6			2.3	12	.09	.05	.25	5.8	14	50	Clear	Apr., 1962
2-10			2.0	2	.12	.05	.36	5.6	9	30	Clear	Apr., 1962
3-1			0.7	21	.04	.03	.12	6.2	18	49	Lt. Brown	Apr., 1962
3-4			1.0	2	.06	.04	.14	5.6	6	23	Clear	Apr., 1962
3-13			10.1	32	.25	.11	.72	6.2	11	35	Clear	Apr., 1962
3-16			1.6	4	.13	.03	.32	6.2	24	89	Clear	Apr., 1962
5-4			1.2	8	.06	.06	.16	6.0	10	34	Lt. Brown	Feb., 1963
5-10			9.1	3	.19	.11	.52	6.0	21	53	Lt. Brown	Feb., 1963
5-11			2.4	6	.08	.06	.30	6.8	13	40	Clear	Apr., 1962
8-8			0.5	3	.06	.03	.13	5.8	19	56	Lt. Brown	Feb., 1963
10-2			1.5	13	.07	.04	.19	6.2	8	28	Lt. Brown	Feb., 1963
10-7			0.1	9	.03	.02	.05	5.6	10	43	Lt. Brown	Apr., 1962
10-10			4.0	8	.12	.10	.32	5.8	8	34	Clear	Apr., 1962
10-13			2.1	14	.11	.05	.29	5.6	12	27	Clear	Apr., 1962
11-3			2.0	3	.10	.05	.26	6.6	64	136	Clear	Feb., 1963
12-13			0.5	8	.08	.06	.30	6.0	9	49	Clear	Feb., 1963
15-15			5.2	6	.23	.07	.75	6.0	24	54	Clear	Feb., 1963
17-11a			5.0	10	.14	.10	.43	6.0	10	23	Clear	Feb., 1963
17-11c			1.3	5	.09	.03	.22	6.4	18	27	Clear	Feb., 1963
17-14			5.6	5	.18	.12	.83	5.8	16	38	Lt. Brown	Feb., 1963
17-15			4.8	10	.19	.07	.40	5.8	13	24	Clear	Feb., 1963

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Location T-N	Location R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
18-16			13.5	10	.24	.22	.84	6.0	10	32	Clear	Feb., 1963
20-10			1.5	5	.07	.06	.22	6.0	14	36	Clear	Feb., 1963
22-6			3.0	11	.10	.07	.25	6.0	10	33	Lt. Brown	Feb., 1963
22-9			9.3	4	.26	.11	.66	6.0	24	61	Clear	Feb., 1963
23-11			1.2	13	.06	.04	.18	6.0	18	40	Lt. Brown	Feb., 1963
27-8			25.9	8	.72	.38	1.91	6.0	18	41	Clear	Mar., 1963
27-10b			5.6	5	.25	.05	.59	6.0	25	45	Clear	Mar., 1963
27-10d			20.8	10	.31	.23	1.06	6.0	13	38	Clear	Feb., 1963
27-15			2.0	6	.09	.07	.24	6.0	19	39	Clear	Feb., 1963
28-13			2.1	6	.09	.07	.24	6.4	42	89	Clear	Mar., 1963
29-13			1.1	8	.06	.04	.18	6.0	16	82	Clear	Feb., 1963
30-7			0.1	4	.01	.01	.05	6.0	26	78	Clear	Feb., 1963
32-1			29.8	15	.45	.19	1.49	6.0	17	49	Clear	Feb., 1963
33-3			6.2	9	.18	.11	.56	6.0	17	33	Clear	Feb., 1963
33-4			2.8	5	.11	.07	.34	6.0	21	32	Clear	Feb., 1963
33-7			0.7	3	.06	.05	.19	6.0	22	44	Clear	Feb., 1963
34-7			2.4	8	.10	.05	.25	6.2	17	34	Lt. Brown	Mar., 1963
Cumberland	35	13										
4-15			10.2	5	.23	.14	.88	6.2	13	42	Clear	Mar., 1962
5-4			4.1	6	.15	.07	.43	6.0	38	79	Med. Brown	Jan., 1963
5-6			0.6	3	.08	.03	.20	6.0	26	135	Med. Brown	Jan., 1963
8-3			5.2	12	.14	.09	.38	6.4	24	76	Clear	Mar., 1962
10-12			10.1	4	.23	.11	.66	6.0	24	116	Clear	Mar., 1962
11-4			12.2	17	.23	.13	.59	6.4	19	89	Lt. Brown	Jan., 1963
11-6			13.3	18	.36	.08	.82	6.8	30	77	Lt. Brown	Jan., 1963
14-12			7.3	10	.24	.07	.56	6.0	7	34	Med. Brown	Jan., 1963
20-12			7.4	10	.19	.08	.46	7.0	123	257	Lt. Brown	Jan., 1963
Doyle	35	10										
8-16			0.4	3	.05	.03	.12	6.4	11	58	Clear	Mar., 1962

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Location T-N	Location R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
Lakeland	36	13										
2-11			6.6	5	.14	.11	.38	6.9	9	27	Med. Brown	Aug., 1962
3-10			4.0	18	.12	.06	.33	7.0	20	57	Turbid	Aug., 1962
3-11			12.2	18	.35	.12	.82	7.0	20	52	Turbid	Aug., 1962
4-2			2.3	19	.08	.06	.24	7.0	12	36	Dk. Brown	Aug., 1962
4-4			0.8	6	.06	.04	.14	6.2	14	33	Clear	Feb., 1963
4-13			1.3	7	.08	.04	.18	6.8	17	52	Turbid	Aug., 1962
6-10			7.5	5	.20	.08	.49	6.4	37	94	Clear	Mar., 1963
6-12			10.0	21	.39	.06	.88	6.2	22	95	Clear	Mar., 1963
10-8			5.2	11	.22	.06	.50	6.0	12	34	Lt. Brown	Aug., 1962
11-7			2.6	4	.08	.07	.26	7.0	5	20	Clear	Aug., 1962
11-8			10.1	5	.23	.17	.82	6.4	5	16	Clear	Aug., 1962
14-1			8.0	18	.28	.09	.69	6.2	5	19	Med. Brown	Oct., 1962
14-9			3.9	18	.10	.07	.29	6.2	15	27	Brown	Aug., 1962
14-14			2.2	15	.08	.07	.22	5.9	8	32	Med. Brown	Mar., 1964
14-15b			3.6	10	.13	.07	.35	7.2	15	29	Brown	Aug., 1962
14-15d			9.1	9	.23	.15	.65	6.0	18	49	Lt. Brown	Feb., 1963
15-3			3.0	7	.11	.08	.30	6.0	7	17	Lt. Brown	Sept., 1962
15-9			8.0	12	.19	.11	.54	6.2	7	24	Clear	Feb., 1963
15-15			4.0	22	.12	.10	.36	6.4	5	18	Med. Brown	Sept., 1962
16-14a			4.5	7	.14	.12	.46	6.4	4	24	Clear	Aug., 1962
16-14c			2.6	15	.12	.06	.32	6.2	8	21	Med. Brown	Aug., 1962
18-14			1.2	17	.07	.03	.18	6.0	18	49	Clear	Feb., 1963
19-2			6.9	8	.17	.11	.44	6.2	7	23	Med. Brown	Aug., 1962
19-3			3.7	7	.09	.08	.33	6.4	21	77	Clear	Feb., 1964
19-7			5.0	8	.13	.09	.34	6.2	15	51	Med. Brown	Feb., 1963
19-9			3.0	11	.11	.06	.26	6.2	9	27	Lt. Brown	Aug., 1962
19-11			2.3	9	.12	.06	.30	6.8	6	19	Lt. Brown	Aug., 1962
19-12			2.9	16	.11	.08	.30	6.2	13	33	Dk. Brown	Aug., 1962
19-13			4.3	13	.22	.07	.64	6.2	18	40	Med. Brown	Aug., 1962
19-16			6.8	9	.23	.07	.50	6.1	9	38	Clear	Feb., 1964

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Location T-N	Location R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
20-13			14.1	11	.33	.11	.84	6.0	14	37	Clear	Feb., 1963
20-14			9.1	15	.34	.08	.76	6.0	12	29	Clear	Feb., 1963
20-15			0.7	2	.06	.02	.14	6.0	14	52	Dk. Brown	Feb., 1963
21-11			4.7	3	.13	.08	.36	6.0	21	44	Med. Brown	Feb., 1963
22-3			13.4	10	.37	.17	1.32	6.0	15	39	Med. Brown	Feb., 1963
23-5			33.2	14	.42	.33	1.55	6.0	26	50	Brown	Aug., 1962
23-8			12.8	6	.22	.15	.66	6.4	5	23	Lt. Brown	Oct., 1962
23-11			4.3	8	.14	.08	.33	6.0	17	29	Med. Brown	Feb., 1963
26-2			1.9	5	.09	.05	.23	6.0	8	64	Med. Brown	Mar., 1963
29-7			2.4	5	.09	.06	.23	6.0	15	46	Lt. Brown	Feb., 1963
29-11			3.6	15	.10	.07	.29	6.0	13	44	Med. Brown	Feb., 1963
30-1			1.0	4	.05	.04	.14	6.2	9	25	Lt. Brown	Aug., 1962
30-4b			2.9	7	.11	.06	.28	6.5	11	44	Dk. Brown	Aug., 1962
30-4d			6.4	12	.17	.08	.45	6.3	10	42	Med. Brown	Aug., 1962
30-13			2.2	10	.08	.06	.20	6.2	18	44	Med. Brown	Feb., 1963
30-16			1.4	10	.07	.04	.18	6.2	16	41	Med. Brown	Feb., 1963
32-3			4.2	5	.10	.09	.30	6.0	30	75	Dk. Brown	Feb., 1963
33-11			6.3	20	.13	.12	.40	7.0	17	48	Med. Brown	Oct., 1962
33-16			3.1	6	.10	.08	.29	6.2	13	33	Lt. Brown	Aug., 1962
34-11			1.8	5	.12	.04	.25	6.0	20	38	Med. Brown	Mar., 1963
34-16			8.1	6	.14	.12	.39	6.2	29	55	Dk. Brown	Aug., 1962
35-11			3.0	6	.11	.07	.32	6.2	13	88	Dk. Brown	Aug., 1962
35-12			5.0	9	.19	.07	.49	6.0	15	42	Lt. Brown	Aug., 1962
Maple Grove	33	12										
5-7			2.9	7	.12	.01	.29	6.2	15	43	Clear	Mar., 1962
Maple Plain	36	14										
1-8			2.1	3	.08	.06	.25	6.0	13	71	Clear	Mar., 1962
1-9			15.2	9	.30	.10	.80	6.2	28	75	Clear	Mar., 1962
2-1			0.5	3	.04	.02	.10	6.0	12	81	Clear	Mar., 1962

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Location T-N R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
3-6		2.0	4	.10	.05	.32	6.0	13	35	Clear	Mar., 1962
4-8		1.0	4	.07	.04	.19	6.0	11	34	Clear	Mar., 1962
4-10		4.8	5	.15	.12	.50	5.8	13	50	Dk. Brown	Feb., 1963
4-12		8.7	5	.20	.12	.54	6.0	6	30	Dk. Brown	Feb., 1963
5-6		6.4	10	.17	.09	.46	6.2	28	72	Clear	Feb., 1963
6-16		0.3	5	.02	.02	.08	5.8	32	63	Lt. Brown	Feb., 1963
7-9		7.4	8	.28	.13	.94	6.0	9	34	Med. Brown	Feb., 1963
7-10		1.0	2	.05	.04	.14	5.8	7	33	Med. Brown	Feb., 1963
9-3		1.1	2	.06	.05	.18	6.0	18	53	Med. Brown	Feb., 1963
9-7a		7.3	7	.20	.12	.75	5.8	10	35	Med. Brown	Feb., 1963
9-7c		3.9	4	.15	.07	.44	5.8	7	31	Lt. Brown	Feb., 1963
9-8a		0.2	2	.04	.03	.08	6.0	15	46	Lt. Brown	Feb., 1963
9-8d		0.6	4	.05	.04	.14	6.0	10	33	Med. Brown	Feb., 1963
9-14		0.9	5	.05	.04	.14	5.8	28	60	Med. Brown	Feb., 1963
10-3		1.7	5	.09	.04	.20	5.3	10	54	Dk. Brown	Feb., 1963
10-13		11.8	8	.21	.14	.63	6.0	8	31	Lt. Brown	Feb., 1963
11-9		9.6	10	.22	.10	.95	6.0	4	36	Lt. Brown	Feb., 1963
11-11		12.9	7	.23	.13	.58	6.0	12	46	Lt. Brown	Feb., 1963
11-12		4.7	4	.18	.15	.76	6.0	6	31	Lt. Brown	Feb., 1963
12-10		3.9	6	.14	.07	.38	5.8	9	27	Lt. Brown	Feb., 1963
13-11		4.3	6	.12	.09	.32	6.0	11	30	Lt. Brown	Feb., 1963
14-6		0.6	3	.07	.04	.14	5.8	20	51	Lt. Brown	Feb., 1963
15-1		10.3	8	.34	.07	.82	6.0	7	29	Lt. Brown	Feb., 1963
18-8		2.0	6	.09	.06	.24	5.6	9	38	Med. Brown	Feb., 1963
18-9		16.2	8	.25	.22	.78	6.0	12	33	Lt. Brown	Feb., 1963
24-8a		3.8	12	.11	.07	.32	6.2	8	33	Dk. Brown	Feb., 1963
24-8d		2.4	28	.09	.05	.23	6.2	12	32	Dk. Brown	Feb., 1963
24-16		6.7	11	.17	.12	.52	6.4	19	54	Clear	Jan., 1963
25-9		2.7	6	.09	.07	.25	6.4	3	16	Clear	Oct., 1962
25-11		6.0	8	.20	.09	.68	5.8	8	29	Lt. Brown	Feb., 1963
25-15c		1.2	8	.07	.04	.20	6.0	18	48	Lt. Brown	Feb., 1963
25-15d		11.1	5	.30	.12	.82	5.8	13	33	Lt. Brown	Feb., 1963

Appendix 1a. Physical and Chemical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Location T-N	R-W	Surface Acres	Maximum Depth (Feet)	Maximum Length (Miles)	Maximum Width (Miles)	Miles Shoreline	pH	Methyl Purple Alkalinity (ppm)	Specific Conductance (mmhos at 77° F)	Water Color	Sample Date
26-16			3.6	5	.16	.07	.52	6.0	12	32	Med. Brown	Feb., 1963
27-7			21.6	12	.30	.17	.90	7.2	9	29	Clear	Oct., 1962
29-12			3.8	6	.11	.09	.36	5.8	8	28	Clear	Feb., 1963
29-14			28.2	5	.41	.16	1.06	5.6	5	35	Med. Brown	Feb., 1963
30-4			5.6	3	.13	.11	.38	5.9	19	45	Med. Brown	Feb., 1963
34-14			0.7	15	.05	.05	.13	6.2	17	47	Med. Brown	Feb., 1963
35-12			10.2	9	.17	.13	.52	6.6	8	24	Clear	Oct., 1962
36-2			6.6	20	.16	.12	.55	5.8	12	50	Dk. Brown	Feb., 1963
Rice Lake	35	11										
11-13			4.6	4	.31	.04	.65	6.2	28	95	Med. Brown	Mar., 1962
12-13			4.5	8	.15	.07	.34	6.4	33	84	Clear	Mar., 1962
13-7			1.0	4	.06	.04	.16	5.7	5	100	Dk. Brown	Mar., 1962
13-9			4.2	3	.10	.10	.32	6.8	53	135	Lt. Brown	Mar., 1962
22-9			3.9	5	.16	.06	.35	6.6	25	83	Clear	Mar., 1962
35-12			2.6	5	.09	.06	.24	6.4	18	81	Clear	Mar., 1962
Sioux Creek	32	11										
15-9			1.6	18	.11	.04	.28	6.2	34	138	Clear	Mar., 1962
Stanfold	35	12										
18-2			8.1	4	.23	.08	.53	6.6	25	55	Clear	Jan., 1963
20-16			0.7	1	.08	.04	.15	6.8	82	135	Clear	Jan., 1963
32-1			2.9	3	.09	.08	.26	6.4	51	121	Clear	Jan., 1963
Stanley	34	11										
26-7			1.0	4	.05	.05	.15	6.6	49	25	Clear	Dec., 1962
Sumner	34	10										
30-3			1.8	3	.11	.05	.29	6.4	54	168	Lt. Brown	Dec., 1962
Vance Creek	32	14										
29-5			0.1	8	.02	.01	.06	7.8	147	273	Clear	Oct., 1963
Total			17,264.9				425.77					
Average								6.2	21	55		

Appendix 1b. Physical Characteristics of Barron County Lakes.

Named Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
Anderson	Landlocked	.04	80	20	.04	1.39	2	0	100	.01
Bailey	Landlocked	1.39	70	30	1.39	1.57	5	90	10	0
Barron Flow. #1	Yellow River	.32	90	10	109.97	2.60	1	90	10	.38
Barron Flow. #2	Yellow River	.18	75	25	109.65	1.92	0	0	0	.33
Barron Flow. #3	Yellow River	2.28	75	25	109.47	3.17	0	0	0	.02
Bass - Bear L.	Landlocked	.14	0	100	.14	1.44	0	0	0	0
Bass - Cedar L.	Landlocked	.07	0	100	.07	1.30	8	50	50	0
Bass - Chetek	Landlocked	1.13	0	100	1.13	1.28	102	30	70	0
Bass - Crystal L.	Staples Creek	.32	0	100	.54	1.73	5	75	25	0
Bass - Turtle L.	Landlocked	1.42	75	25	1.42	1.12	19	50	50	0
Bear	Bear Creek	7.52	3	97	24.82	2.58	875	60	40	2.13
Beaver Dam	Hay River	8.34	50	50	8.53	3.85	110	95	5	.88
Big Dummy	Landlocked	.64	50	50	.64	1.28	149	50	50	.35
Big Moon	Moon Creek	.41	75	25	6.68	1.45	5	50	50	.76
Blueberry	Staples Creek	.25	30	70	.25	1.20	4	50	50	0
Bolger Flow.	Red Cedar River	.55	0	100	22.34	2.22	1	10	90	.75
Buck	Yellow River	1.59	15	85	8.85	1.83	46	50	50	0
Bullhead	Landlocked	.28	70	30	.28	1.22	3	50	50	0
Butternut	Sucker Creek	1.65	0	100	2.17	1.65	9	30	70	.16
Cameron Flow.	Cranberry C.	1.47	75	25	3.09	2.61	42	80	20	2.45
Chain - Cedar L.	Landlocked	.41	50	50	.41	3.40	10	50	50	.39
Chain - Lakeland	Landlocked	.26	0	100	.26	2.61	45	50	50	0
Couderay	Moose Creek	.11	10	90	.71	1.40	0	0	0	0
Cranberry	Landlocked	.16	0	100	.16	1.07	38	30	70	0
Crooked	Landlocked	.05	0	100	.05	1.75	10	95	5	0
Crystal	Landlocked	.77	65	35	.77	2.03	3	90	10	.33
Crystal Bay	Vermillion R.	.87	15	85	.87	1.29	2	5	95	0
Dallas Flow.	Pine Creek	.03	70	30	19.66	2.32	0	0	0	.20
Deer	Yellow River	.58	20	80	1.40	1.20	5	40	60	0
Dietz #1	Landlocked	.21	70	30	.21	1.30	1	95	5	0
Dietz #2	Landlocked	.21	70	30	.21	1.29	0	0	0	0
Dietz #3	Landlocked	.37	60	40	.37	1.42	3	95	5	0
Dietz #4	Landlocked	.13	80	20	.13	1.76	4	50	50	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Named Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
Duck	Yellow River	1.27	22	78	7.04	1.13	95	80	20	.22
Echo	Beaver Brook	.97	50	50	.97	1.67	47	75	25	.01
Fish	Hickey Creek	.32	70	30	1.32	1.29	1	60	40	0
Gates	Landlocked	.15	80	20	.15	1.15	0	0	0	0
Ginder	Engle Creek	.40	60	40	.40	1.84	0	0	0	0
Goose	Landlocked	.17	20	80	.17	1.59	3	70	30	0
Granite	Yellow River	.93	20	80	5.77	2.13	7	85	15	.03
Greeley	Landlocked	.25	40	60	.25	2.89	10	50	50	.82
Hemlock	Red Cedar River	3.93	15	85	30.57	2.72	40	90	10	.89
Hogback	Landlocked	.07	0	100	.07	1.56	8	25	75	0
Horseshoe	Landlocked	1.69	80	20	1.69	1.72	38	90	10	.01
Kelly - Bear L.	Landlocked	.09	0	100	.09	1.84	20	50	50	.60
Kelleys - Maple Plain	Landlocked	.12	0	100	.12	1.21	44	15	85	.73
Kidney	Sand Creek	.19	75	25	.19	1.73	2	100	0	.01
Kirby - Bear L.	Landlocked	.04	0	100	.04	1.58	8	50	50	.60
Kirby - Maple Plain	Landlocked	.60	0	100	.60	2.41	53	40	60	2.00
Lake Chetek	Chetek River	3.58	100	0	196.35	2.43	0	0	0	.17
Lake Desair	Bear Creek	6.59	75	25	6.59	1.66	5	50	50	.01
Lake Thirty	Yellow River	1.12	40	60	1.12	1.68	45	30	70	.01
Little Bass	Landlocked	1.23	10	90	1.23	1.33	0	0	0	0
Little Butternut	Sucker Creek	.52	0	100	.52	1.98	56	50	50	.10
Little Dummy	Landlocked	.20	50	50	.20	1.32	17	70	30	.33
Little Granite	Landlocked	.09	25	75	.09	1.36	3	65	35	.13
Little Lake	Landlocked	.17	60	40	.17	1.14	6	50	50	0
Little Moon	Moon Creek	.48	85	15	1.59	1.32	5	80	20	0
Little Sand	Sand Creek	1.95	10	90	1.95	1.49	54	100	0	.28
Little Silver	Landlocked	.11	0	100	.11	1.83	19	30	70	0
Long - Crystal	Landlocked	.29	20	80	.29	2.41	32	50	50	0
Long - Vance Creek	Hay River	1.81	100	0	4.63	1.51	10	100	0	0
Loon	Landlocked	.78	50	50	.78	1.70	5	50	50	0
Lower Devils	Landlocked	1.38	100	0	1.38	2.34	19	100	0	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Named Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
Lower Spirit	Landlocked	.18	15	85	.18	1.51	5	50	50	0
Lower Turtle	Turtle Creek	2.50	60	40	7.51	1.67	18	90	10	.02
Lower Waterman	Sand Creek	.11	15	85	5.77	1.83	5	50	50	.01
Minnow	Landlocked	.15	50	50	.15	1.47	4	50	50	0
Mitchell	Landlocked	.09	0	100	.09	1.78	2	0	100	0
Montanis	Meadows Creek	.93	50	50	27.05	1.42	114	20	80	.02
Moon	Landlocked	.43	90	10	.43	1.51	9	95	5	0
Moose Ear	Moose Ear C.	1.36	40	60	34.08	3.24	140	80	20	0
Mosquito	Landlocked	1.06	100	0	1.06	1.99	27	85	15	0
Mud - Almena	Turtle Creek	.42	40	60	.42	1.35	29	50	50	0
Mud - Bear L. - Sec. 30	Yellow River	.24	0	100	1.36	1.30	40	75	25	0
Mud - Bear L. - Sec. 34	Hickey Creek	.89	60	40	.89	1.14	2	100	0	0
Mud - Chetek	Chetek River	5.44	50	50	56.58	2.45	3	95	5	.06
Mud - Crystal	Landlocked	.47	20	80	.47	1.68	53	50	50	0
Mud - Sioux Creek	Chetek River	.43	0	100	.43	1.59	88	15	85	0
North	Landlocked	.66	40	60	.66	1.54	133	45	55	.05
Old Mill Pond	Landlocked	.52	80	20	.52	1.99	2	50	50	0
Peterson	Vermillion R.	.56	70	30	.56	1.30	30	70	30	.01
Pickerel	Landlocked	.25	85	15	.25	1.99	1	100	0	.01
Pokegama	Chetek River	9.50	70	30	66.08	3.56	2	95	5	.05
Poskin	Vermillion R.	2.20	65	35	19.94	2.38	6	85	15	.01
Prairie Farm Flow.	Hay River	2.30	50	50	89.32	2.52	0	0	0	.75
Prairie	Chetek River	13.13	79	21	21.01	2.90	3	50	50	.22
Red Cedar	Red Cedar River	10.23	30	70	84.12	2.62	8	70	30	.11
Rice	Red Cedar River	8.75	97	3	229.66	4.47	0	0	0	.20
Robinson	Landlocked	.10	100	0	.10	1.36	0	0	0	0
Round - Bear L.	Landlocked	.06	0	100	.06	1.33	0	0	0	0
Round - Cedar L.	Landlocked	.03	0	100	.03	1.30	7	50	50	0
Sand	Sand Creek	3.08	22	78	5.30	2.46	27	80	20	.28
Scott	Landlocked	.80	60	40	.80	1.60	54	30	70	.01
Silver	Landlocked	7.47	30	70	7.47	2.25	0	0	0	.18

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Named Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
Skinaway	Landlocked	.23	30	70	.23	1.42	25	40	60	0
Spider	Landlocked	.37	40	60	.37	2.10	8	50	50	.32
Spring	Landlocked	.52	70	30	.52	2.23	160	50	50	.04
Staples	Apple River	2.90	40	60	11.19	1.31	65	50	50	.01
Stump	Red Cedar River	.90	85	15	65.48	2.18	23	50	50	0
Sweeny Pond	Vermillion R.	.40	65	35	9.74	2.08	3	80	20	.01
Sylvan	Landlocked	.80	30	70	.80	1.73	27	20	80	0
Tenmile	Tenmile Creek	4.62	60	40	61.52	2.07	27	50	50	.05
Tuscobia	Bear Creek	1.82	84	16	6.72	3.57	160	50	50	.17
Upper Devils	Landlocked	1.15	100	0	1.15	2.06	25	100	0	.13
Upper Spirit	Landlocked	.13	10	90	.13	1.35	6	50	50	0
Upper Turtle	Turtle Creek	4.31	40	60	4.31	2.34	110	50	50	.03
Upper Waterman	Sand Creek	.46	15	85	6.26	1.12	4	50	50	.01
Vermillion	Vermillion R.	1.47	50	50	4.14	2.64	72	50	50	.03
Wickerts	Landlocked	.13	10	90	.13	1.35	23	15	85	0
Wildcat	Landlocked	.27	20	80	.27	1.15	45	25	75	.01

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent	Miles Public Frontage
Almena										
4-7a	Landlocked	.12	0	100	.12	1.76	8	0	100	0
4-7c	Landlocked	.10	0	100	.10	1.39	7	15	85	0
4-9	Landlocked	.10	0	100	.10	1.16	7	15	85	0
4-10	Landlocked	.01	0	100	.01	1.08	7	25	75	0
4-11	Landlocked	.05	0	100	.05	1.13	5	50	50	0
4-12	Landlocked	.04	20	80	.04	1.07	4	40	60	0
5-2	Landlocked	.10	0	100	.10	1.30	7	25	75	0
5-3	Landlocked	.06	0	100	.06	1.86	7	0	100	0
5-4	Landlocked	.02	0	100	.02	1.90	4	15	85	0
5-7	Landlocked	.07	0	100	.07	1.38	9	10	90	0
5-8	Landlocked	.06	30	70	.06	1.44	4	25	75	0
5-9b	Landlocked	.06	0	100	.06	1.18	8	15	85	0
5-9c	Landlocked	.06	0	100	.06	1.10	5	20	80	0
5-9d	Landlocked	.10	0	100	.10	1.32	6	15	85	0
5-10	Landlocked	.06	0	100	.06	2.09	15	15	85	0
5-13b	Landlocked	.06	0	100	.06	1.29	4	10	90	0
5-13d	Landlocked	.04	0	100	.04	2.39	6	40	60	0
5-14	Landlocked	.10	0	100	.10	1.18	2	20	80	0
5-15	Landlocked	.05	0	100	.05	1.31	6	20	80	0
6-1	Landlocked	.01	60	40	.01	1.67	3	50	50	0
6-6	Landlocked	.04	100	0	.04	2.03	0	0	0	0
9-5	Landlocked	.09	65	35	.09	2.36	5	50	50	0
18-4	Beaver Brook	.01	0	100	.98	1.00	12	0	100	0
19-1	Beaver Brook	.10	0	100	.14	1.44	18	80	20	0
19-14	Beaver Brook	.06	0	100	.20	1.31	6	90	10	0
19-16	Beaver Brook	.14	0	100	.14	1.31	7	80	20	.36
20-6	Beaver Brook	.10	15	85	.10	1.17	5	85	15	0
23-10	Landlocked	.09	100	0	.09	1.64	0	0	0	0
27-9	Turtle Creek	.10	65	35	.10	1.11	1	10	90	0
29-6	Landlocked	.40	85	15	.40	1.32	0	95	5	0
30-3	Landlocked	.27	25	75	.27	1.72	15	65	35	0
30-7	Landlocked	.08	0	100	.08	1.77	7	50	50	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
Bear Lake										
9-14	Landlocked	.03	0	100	.03	1.08	40	20	80	0
10-14	Landlocked	.10	0	100	.10	1.07	7	3	97	0
12-14	Landlocked	.09	20	80	.09	1.17	15	85	15	0
15-4	Landlocked	.03	0	100	.03	1.16	17	30	70	0
15-5	Landlocked	.03	0	100	.03	1.52	5	0	100	.09
16-2	Landlocked	.03	0	100	.03	1.18	23	20	80	.30
18-7	Landlocked	.06	0	100	.06	1.11	8	80	20	.32
18-9	Landlocked	.04	0	100	.04	1.01	4	25	75	0
Cedar Lake										
4-1	Landlocked	.02	100	0	.02	1.17	0	0	0	0
4-2	Landlocked	.02	100	0	.02	2.43	0	0	0	0
5-1	Landlocked	.06	100	0	.06	1.11	7	50	50	0
7-7	Landlocked	.03	100	0	.03	2.01	3	0	100	0
7-8	Landlocked	.02	100	0	.02	1.71	2	100	0	0
7-9b	Landlocked	.02	100	0	.02	1.21	0	0	0	0
7-9d	Landlocked	.02	100	0	.02	1.49	0	0	0	0
7-10	Landlocked	.01	100	0	.01	1.53	5	100	0	0
7-11	Landlocked	.04	100	0	.04	2.34	2	100	0	0
7-12	Landlocked	.02	100	0	.02	1.46	0	0	0	0
9-4	Red Cedar River	.48	100	0	.48	1.21	0	0	0	0
17-7	Landlocked	.04	0	100	.04	1.53	0	0	0	.46
17-10c	Landlocked	.01	0	100	.01	1.51	3	30	70	0
17-10d	Landlocked	.03	0	100	.03	1.87	0	0	0	0
17-11a	Landlocked	.04	0	100	.04	2.00	2	60	40	0
17-11c	Landlocked	.03	0	100	.03	1.05	2	70	30	0
17-11d	Landlocked	.02	0	100	.02	1.11	0	0	0	0
17-14	Landlocked	.03	0	100	.03	1.44	4	20	80	0
17-15	Landlocked	.03	0	100	.03	1.51	3	25	75	.38
18-2	Landlocked	.05	100	0	.05	1.47	0	0	0	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
18-4	Landlocked	.01	0	100	.01	1.67	7	70	30	0
18-5	Landlocked	.02	40	60	.02	1.56	0	0	0	0
18-8	Landlocked	.10	100	0	.10	2.41	4	60	40	0
18-9	Landlocked	.01	100	0	.01	1.21	2	60	40	0
18-13	Landlocked	.02	0	100	.02	1.47	3	50	50	.32
18-14	Landlocked	.04	0	100	.04	1.52	1	90	10	.33
18-16	Landlocked	.01	0	100	.01	1.67	3	50	50	0
19-1	Landlocked	.02	0	100	.02	1.20	0	0	0	.33
19-2a	Landlocked	.06	0	100	.06	1.49	7	50	40	.54
19-2b	Landlocked	.02	0	100	.02	1.13	3	30	70	.20
19-3	Landlocked	.03	100	0	.03	2.51	11	50	50	0
19-13	Landlocked	.05	0	100	.05	1.01	12	50	50	.20
20-3	Landlocked	.06	0	100	.06	2.11	18	40	60	1.08
20-7a	Landlocked	.13	0	100	.13	3.27	30	50	50	1.60
20-7c	Landlocked	.02	0	100	.02	1.36	2	70	30	.19
20-10	Landlocked	.02	0	100	.02	1.51	1	100	0	.39
20-12a	Landlocked	.02	0	100	.02	1.63	2	80	20	.70
20-12b	Landlocked	.04	0	100	.04	1.47	1	100	0	.52
20-14	Landlocked	.03	0	100	.03	1.13	8	30	70	.52
23-12	Landlocked	.25	0	100	.25	1.48	10	75	25	0
26-3	Red Cedar River	.11	0	100	.32	1.33	2	60	40	0
26-4	Red Cedar River	.21	0	100	.21	1.91	3	80	20	0
26-7	Red Cedar River	.06	0	100	.06	1.13	13	20	80	0
26-8	Red Cedar River	.04	0	100	.10	1.08	12	90	10	0
26-9	Red Cedar River	.05	0	100	.15	1.25	17	70	30	0
28-10	Landlocked	.10	0	100	.10	1.68	34	5	95	0
29-5	Landlocked	.02	0	100	.02	1.29	1	100	0	.25
29-12a	Landlocked	.02	0	100	.02	1.13	88	50	50	.05
29-12d	Landlocked	.01	100	0	.01	1.35	15	70	30	0
29-15	Landlocked	.01	50	50	.01	1.04	20	50	50	0
34-6	Landlocked	.11	100	0	.11	1.80	0	0	0	0
35-4	Landlocked	.04	0	100	.04	1.02	7	70	30	0
36-6	Landlocked	.27	0	100	.27	1.09	4	70	30	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct D ainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
Chetek										
11-2	Moose Ear C.	.15	0	100	.15	2.31	19	85	15	0
21-10b	Landlocked	.03	50	50	.03	1.26	1	75	25	0
21-10c	Landlocked	.02	50	50	.02	1.21	0	0	0	0
33-1	Landlocked	.03	0	100	.03	1.81	0	0	0	0
33-3	Landlocked	.10	0	100	.10	1.21	27	0	100	0
Clinton										
5-16	Landlocked	.14	95	5	.14	1.25	0	0	0	0
Crystal Lake										
2-6	Landlocked	.09	0	100	.09	1.18	2	50	50	0
2-10	Landlocked	.31	0	100	.31	1.82	0	0	0	0
3-1	Landlocked	.11	0	100	.11	1.03	2	70	30	0
3-4	Landlocked	.01	0	100	.01	1.00	0	0	0	0
3-13	Landlocked	.18	20	80	.18	1.62	5	50	50	0
3-16	Landlocked	.31	0	100	.31	1.81	0	0	0	0
5-4	Landlocked	.14	20	80	.14	1.04	12	40	60	0
5-10	Landlocked	.08	30	70	.08	1.23	10	90	10	0
5-11	Landlocked	.18	90	10	.18	1.38	0	0	0	0
8-8	Landlocked	.05	0	100	.05	1.31	0	0	0	0
10-2	Landlocked	.12	60	40	.12	1.11	0	0	0	0
10-7	Landlocked	.15	0	100	.15	1.13	19	85	15	0
10-10	Landlocked	.08	30	70	.08	1.14	4	90	10	0
10-13	Landlocked	.76	0	100	.76	1.43	0	0	0	0
11-3	Landlocked	.11	100	0	.11	1.31	1	50	50	0
12-13	Landlocked	.05	90	10	.05	3.03	1	80	20	0
15-15	Landlocked	.47	65	35	.47	2.35	5	95	5	0
17-11a	Landlocked	.11	0	100	.11	1.37	11	20	80	0
17-11c	Landlocked	.10	0	100	.10	1.37	5	50	50	0
17-14	Landlocked	.48	30	70	.48	2.50	3	75	25	0
17-15	Landlocked	.14	0	100	.14	1.30	1	95	5	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
18-16	Apple River	.10	50	50	.10	1.63	5	25	75	0
20-10	Landlocked	.04	0	100	.04	1.28	0	0	0	0
22-6	Landlocked	.13	0	100	.13	1.03	4	50	50	0
22-9	Landlocked	.02	30	70	.02	1.54	7	60	40	0
23-11	Landlocked	.49	70	30	.49	1.17	0	0	0	0
27-8	Landlocked	.14	0	100	.14	2.68	15	10	90	0
27-10b	Landlocked	.05	80	20	.05	1.78	0	0	0	0
27-10d	Landlocked	.16	50	50	.16	1.66	1	100	0	0
27-15	Landlocked	.04	0	100	.04	1.21	0	0	0	0
28-13	Landlocked	.06	30	70	.06	1.18	0	0	0	0
29-13	Landlocked	.09	60	40	.09	1.23	8	80	20	0
30-7	Apple River	.04	30	70	11.23	1.13	2	100	0	0
32-1	Landlocked	.49	85	15	.49	1.97	76	60	40	.62
33-3	Landlocked	.07	10	90	.07	1.61	2	90	10	0
33-4	Landlocked	.11	0	100	.11	1.45	4	5	95	0
33-9	Landlocked	.10	0	100	.10	1.62	0	0	0	0
34-7	Landlocked	.04	90	10	.04	1.15	1	50	50	0
Cumberland										
4-15	Landlocked	.63	10	90	.63	1.97	1	0	100	0
5-4	Yellow River	.02	100	0	.02	1.51	0	0	0	0
5-6	Landlocked	.04	85	15	.04	1.85	0	0	0	0
8-3	Landlocked	.14	15	85	.14	1.19	0	0	0	0
10-12	Landlocked	.33	60	40	.33	1.48	0	0	0	0
11-4	Landlocked	.54	95	5	.54	1.20	1	90	10	0
11-6	Vermillion R.	.38	96	4	.38	1.56	4	50	50	0
14-12	Vermillion R.	.52	40	60	1.08	1.48	40	5	95	0
20-12	Hay River	.09	89	11	.09	1.21	0	0	0	0
Doyle										
8-16	Landlocked	.04	100	0	.04	1.35	0	0	0	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
Lakeland										
2-11	Landlocked	.08	75	25	.08	1.05	8	10	90	0
3-10	Yellow River	.03	0	100	.03	1.18	0	0	0	0
3-11	Yellow River	.07	50	50	.77	1.67	10	50	50	0
4-2	Landlocked	.06	0	100	.06	1.13	5	100	0	0
4-4	Yellow River	.02	50	50	.02	1.12	0	0	0	0
4-13	Yellow River	.68	50	50	.70	1.12	2	80	20	0
6-10	Landlocked	.19	0	100	.19	1.28	0	0	0	0
6-12	Landlocked	.41	0	100	.41	1.99	3	15	85	0
10-8	Landlocked	.22	0	100	.22	1.57	1	50	50	0
11-7	Landlocked	.01	50	50	.01	1.15	1	40	60	0
11-8	Landlocked	.06	0	100	.06	1.84	6	40	60	0
14-1	Landlocked	.06	0	100	.06	1.74	7	90	10	0
14-9	Landlocked	.07	100	0	.07	1.05	10	90	10	0
14-14	Landlocked	.10	0	100	.10	1.06	0	0	0	0
14-15b	Landlocked	.05	5	95	.05	1.32	2	5	95	0
14-15d	Landlocked	.09	0	100	.09	1.54	4	25	75	0
15-3	Landlocked	.05	30	70	.05	1.23	7	40	60	0
15-9	Yellow River	.10	30	70	.10	1.36	4	50	50	.54
15-15	Landlocked	.08	0	100	.08	1.28	2	100	0	0
16-14a	Landlocked	.02	0	100	.02	1.55	5	20	80	0
16-14c	Landlocked	.02	0	100	.02	1.42	11	30	70	0
18-14	Yellow River	4.84	0	100	4.84	1.17	2	100	0	0
19-2	Landlocked	.10	60	40	.10	1.20	0	0	0	0
19-3	Landlocked	.17	40	60	.17	1.23	12	50	50	0
19-7	Landlocked	.11	0	100	.11	1.08	1	100	0	.19
19-9	Landlocked	.07	100	0	.07	1.07	0	0	0	0
19-11	Landlocked	.10	100	0	.10	1.41	5	100	0	0
19-12	Landlocked	.11	100	0	.11	1.26	0	0	0	0
19-13	Landlocked	.03	100	0	.03	2.20	1	100	0	0
19-16	Landlocked	.10	80	20	.10	1.37	0	0	0	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
20-13	Landlocked	.17	50	50	.17	1.60	0	0	0	0
20-14	Landlocked	.05	0	100	.05	1.80	0	0	0	0
20-15	Landlocked	.02	5	95	.02	1.20	0	0	0	0
21-11	Landlocked	.04	5	95	.04	1.19	1	90	10	0
22-3	Landlocked	.10	10	90	.10	2.58	30	50	50	0
23-5	Landlocked	.10	0	100	.10	1.92	35	85	15	1.55
23-8	Landlocked	.06	0	100	.06	1.32	0	0	0	.66
23-11	Landlocked	.04	10	90	.04	1.13	4	5	95	.33
26-2	Landlocked	.05	0	100	.05	1.19	2	60	40	0
29-7	Landlocked	.02	10	90	.02	1.06	0	0	0	0
29-11	Landlocked	.04	0	100	.04	1.09	6	0	100	0
30-1	Landlocked	.10	0	100	.10	1.00	5	90	10	0
30-4b	Landlocked	.10	40	60	.10	1.17	2	100	0	0
30-4d	Landlocked	.14	50	50	.14	1.27	3	100	0	0
30-13	Landlocked	.12	25	75	.12	1.05	3	85	15	0
30-16	Landlocked	.13	30	70	.13	1.08	7	75	25	0
32-3	Landlocked	.02	10	90	.02	1.04	22	95	5	0
33-11	Yellow River	.20	5	95	7.24	1.14	140	90	10	.40
33-16	Landlocked	.02	50	50	.02	1.18	1	100	0	0
34-11	Landlocked	.01	0	100	.01	1.33	4	90	10	0
34-16	Landlocked	.05	100	0	.05	1.05	0	0	0	0
35-11	Landlocked	.03	60	40	.03	1.32	5	100	0	0
35-12	Landlocked	.03	80	20	.03	1.56	0	0	0	0
Maple Grove										
5-7	Landlocked	.11	80	20	.11	1.22	2	90	10	0
Maple Plain										
1-8	Landlocked	.76	50	50	.76	1.23	5	55	45	0
1-9	Landlocked	.12	50	50	.12	1.46	3	50	50	.80
2-1	Landlocked	.19	1	99	.19	1.01	1	0	100	0
3-6	Landlocked	.08	25	75	.08	1.62	1	10	90	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
4-8	Landlocked	.21	15	85	.21	1.36	2	50	50	0
4-10	Landlocked	.06	0	100	.06	1.63	2	75	25	.50
4-12	Landlocked	1.65	40	60	1.65	1.31	35	40	60	0
5-6	Sand Creek	.09	0	100	.89	1.30	0	0	0	0
6-16	Sand Creek	.11	20	80	.11	1.03	0	0	0	0
7-9	Landlocked	.03	0	100	.03	2.47	6	20	80	.94
7-10	Landlocked	.10	0	100	.10	1.00	2	100	0	.14
9-3	Landlocked	.10	0	100	.10	1.23	18	90	10	0
9-7a	Landlocked	.08	0	100	.08	1.98	44	70	30	.75
9-7c	Landlocked	.09	0	100	.09	1.59	45	85	15	.44
9-8a	Landlocked	.08	0	100	.08	1.28	0	0	0	.08
9-8d	Landlocked	.06	0	100	.06	1.30	0	0	0	.14
9-14	Landlocked	.10	0	100	.10	1.05	0	0	0	0
10-3	Landlocked	.03	15	85	.03	1.09	16	40	60	0
10-13	Landlocked	.50	25	75	.50	1.31	49	35	65	0
11-9	Landlocked	.22	0	100	.22	2.06	0	0	0	.48
11-11	Landlocked	.18	0	100	.18	1.15	9	10	90	0
11-12	Landlocked	.09	0	100	.09	2.50	23	15	85	0
12-10	Landlocked	.20	0	100	.20	1.38	157	95	5	0
13-11	Landlocked	.09	0	100	.09	1.10	4	0	100	.32
14-6	Landlocked	.15	0	100	.15	1.30	5	20	80	0
15-1	Landlocked	.40	0	100	.40	1.82	80	5	95	0
18-8	Landlocked	.09	30	70	.09	1.21	3	15	85	0
18-9	Landlocked	.10	20	80	.10	1.38	7	50	50	0
24-8a	Landlocked	.10	80	20	.10	1.17	4	80	20	0
24-8d	Landlocked	.11	80	20	.11	1.06	5	75	25	0
24-16	Landlocked	.04	90	10	.04	1.43	0	0	0	0
25-9	Landlocked	.03	10	90	.03	1.08	4	10	90	0
25-11	Landlocked	.07	0	100	.07	1.98	11	0	100	0
25-15c	Landlocked	.10	0	100	.10	1.30	3	10	90	0
25-15d	Landlocked	.07	70	30	.07	1.76	8	80	20	0

Appendix 1b. Physical Characteristics of Barron County Lakes. (Continued)

Unnamed Lakes	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	S.D.F.	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Public Frontage
26-16	Landlocked	.04	15	85	.04	1.93	11	20	80	0
27-7	Sand Creek	.27	10	90	2.22	1.38	0	0	0	.90
29-12	Landlocked	.04	0	100	.04	1.32	5	25	75	0
29-14	Landlocked	.48	0	100	.48	1.42	54	20	80	0
30-4	Landlocked	.48	25	75	.48	1.15	90	60	40	0
34-4	Landlocked	.09	0	100	.09	1.11	15	25	75	0
35-12	Landlocked	.12	20	80	.12	1.16	0	0	0	.01
36-2	Landlocked	.11	100	0	.11	1.53	0	0	0	0
Rice Lake										
11-13	Landlocked	.18	0	100	.18	2.17	0	0	100	0
12-13	Landlocked	1.36	50	50	1.36	1.15	2	0	100	0
13-7	Landlocked	.05	50	50	.05	1.14	3	75	25	0
13-9	Spring Creek	.19	40	60	.19	1.11	16	0	100	0
22-9	Landlocked	.04	100	0	.04	1.27	0	0	0	0
35-12	Landlocked	.06	0	100	.06	1.06	12	25	75	0
Sioux Creek										
15-9	Landlocked	.02	100	0	.02	1.58	0	0	0	0
Stanfold										
18-2	Landlocked	.55	30	70	.55	1.33	0	0	0	0
20-16	Engle Creek	.02	100	0	.02	1.28	2	100	0	0
32-1	Landlocked	.35	100	0	.35	1.09	0	100	0	0
Stanley										
26-7	Landlocked	.01	95	5	.01	1.07	0	0	0	0
Sumner										
30-3	Landlocked	.02	50	50	.02	1.55	0	0	0	0
Vance Creek										
29-5	Hay River	.06	100	0	.06	1.35	0	0	0	.06
Total		196.92					5,889			37.87
Average						1.56				

Appendix 2a. Physical and Chemical Characteristics of Barron County Streams.

Name	Outlet Location S.	T-N	R-W	Surface Acres	Length (Miles)	Width (Av. Feet)	Approx-imate Depth (Av. Feet)	Average Gradient (Ft./Mile)	pH	Methyl Purple Alkalinity (ppm)	Specific Conduct-ance (mmhos at 77° F)	Water Color	Sampling Date
Apple River	31	35	14	1.8	1.7	5	0.7	4	6.2	49	125	Turbid	Sept., 1963
Barker Creek	30	34	11	5.4	5.6	8	1.0	9	7.0	57	120	Turbid	Oct., 1963
Bear Creek	30	36	11	20.9	9.6	18	0.8	11	7.6	59	111	Lt. Brown	Oct., 1963
Beaver Creek	3	32	10	8.7	7.2	10	1.0	4	6.8	48	99	Turbid	Oct., 1963
Brill River	31	36	10	36.4	7.5	40	1.5	7	7.6	96	186	Clear	Oct., 1963
Brown Creek	16	33	11	2.2	4.6	4	0.4	13	7.0	67	112	Lt. Brown	Oct., 1963
Chetek River	10	32	11	62.2	5.4	95	1.0	5	7.4	74	117	Clear	Oct., 1963
Connors Creek	32	32	14	.6	1.1	5	0.5	35	6.6	192	341	Clear	July, 1963
Cranberry Creek	17	34	11	2.3	3.2	6	1.0	13	6.2	28	62	Dk. Brown	Oct., 1963
Cruikshank Creek	27	32	11	.7	1.7	3	0.3	34	7.6	40	91	Clear	July, 1963
Dority Creek	4	32	13	2.7	4.4	5	0.6	26	7.2	128	264	Clear	July, 1963
East Branch Upper Pine Creek	11	32	12	.9	3.5	4	0.4	37	8.8	136	292	Clear	Oct., 1963
Engle Creek	32	35	12	3.7	3.8	8	1.0	4	7.2	67	134	Clear	Oct., 1963
Fourmile Creek	34	34	12	5.8	9.6	5	0.5	10	7.2	50	115	Clear	Oct., 1963
German Creek	30	34	10	5.0	5.2	8	0.5	5	6.8	34	85	Lt. Brown	Oct., 1963
Hay River	33	32	13	116.2	27.4	35	1.5	6	8.6	112	233	Lt. Brown	Oct., 1963
Hickey Creek	17	35	12	4.2	5.4	7	0.7	10	7.2	75	150	Clear	Oct., 1963
Johnson Creek	34	34	12	1.1	2.5	2	0.5	16	6.0	42	112	Clear	July, 1963
Jones Creek	7	32	13	1.1	2.2	4	0.6	38	8.4	173	250	Clear	Sept., 1963
Lightning Creek	23	34	13	8.8	7.3	10	0.5	9	8.4	122	227	Lt. Brown	Oct., 1963
Little Bear Creek	22	36	12	4.6	6.3	6	1.0	13	7.0	85	168	Lt. Brown	Aug., 1963
Little Vance Creek	32	32	13	.6	2.1	2.5	0.5	20	8.2	183	335	Clear	July, 1963
Lower Pine Creek	30	32	12	2.4	6.7	3	0.5	5	8.2	100	213	Clear	July, 1963
Meadow Creek	5	34	11	3.4	3.1	9.5	1.5	6	7.1	67	120	Turbid	Aug., 1963
Moon Creek	15	33	14	.8	2.7	2.5	0.5	5	8.8	171	286	Lt. Brown	July, 1963
Moose Ear Creek	27	33	10	22.5	12.4	15	0.7	15	7.1	73	150	Clear	Feb., 1964
North Branch Beaver Brook	19	34	14	.4	1.1	3	0.4	18	6.8	64	111	Dk. Brown	Sept., 1963

Appendix 2a. Physical and Chemical Characteristics of Barron County Streams. (Continued)

Name	Outlet Location S.	T-N	R-W	Surface Acres	Length (Miles)	Width (Av. Feet)	Approx-imate Depth (Av. Feet)	Average Gradient (Ft./Mile)	pH	Methyl Purple Alkalinity (ppm)	Specific Conduct-ance (mmhos at 77° F)	Water Color	Sampling Date
North Branch Upper Pine Creek	11	32	11	2.0	1.6	5	0.6	20	8.6	123	269	Clear	Oct., 1963
Pigeon Creek	11	36	10	1.7	2.4	6	0.4	29	7.2	53	117	Lt. Brown	Oct., 1963
Pokegama Creek	31	34	10	27.8	15.3	15	1.0	27	6.4	43	85	Clear	Oct., 1963
Quaderer Creek	32	34	12	5.9	6.9	7	1.0	5	6.0	73	148	Clear	Oct., 1963
Red Cedar River	34	32	11	505.0	37.9	110	2.5	5	7.2	79	78	Lt. Brown	Oct., 1963
Rice Creek	23	34	11	37.2	2.4	100	1.0	19	6.4	48	98	Lt. Brown	July, 1963
Rock Creek	6	34	10	13.8	11.4	10	0.7	21	7.4	55	101	Clear	Oct., 1963
Roux Creek	24	35	11	0.7	1.0	6	0.5	25	6.6	31	104	Clear	Nov., 1962
Sand Creek	6	36	14	4.2	3.5	10	0.6	11	7.0	68	138	Clear	June., 1963
Silver Creek - Doyle	6	34	10	2.4	4.1	5	0.8	58	6.2	34	66	Lt. Brown	Oct., 1963
Silver Creek - Vance C.	1	32	14	1.3	2.8	4	0.8	17	8.8	180	318	Clear	Sept., 1963
Sioux Creek	22	32	11	1.3	2.7	4	0.5	19	7.6	43	102	Lt. Brown	Oct., 1963
South Fork Hay River	32	31	14	2.0	2.4	7	0.6	19	8.8	164	292	Clear	Sept., 1963
South Fork Lower Pine Creek	28	32	12	0.4	2.1	3	0.7	16	8.6	142	320	Clear	July, 1963
Spring Creek - Dallas	29	32	12	0.3	2.1	1	0.6	19	7.6	58	116	Clear	July, 1963
Spring Creek - Doyle	35	35	11	27.1	16.0	14	0.8	12	6.4	39	113	Lt. Brown	Oct., 1963
Staples Creek	19	35	14	1.0	2.1	4	0.5	8	7.4	145	279	Turbid	Sept., 1963
Sucker Creek	2	36	10	1.2	2.0	5	0.5	15	7.3	52	109	Lt. Brown	Oct., 1963
Sweeny Pond Creek	26	34	13	4.1	6.8	5	1.0	2	7.2	106	191	Lt. Brown	July, 1963
Tainter Creek	32	33	13	.8	2.3	3	0.4	33	6.8	62	148	Clear	Oct., 1963
Tenmile Creek	31	33	10	1.2	5.1	22	1.5	3	6.8	38	81	Turbid	July, 1963
Tiller Creek	22	32	11	.9	2.4	3	0.4	17	7.2	34	73	Clear	Oct., 1963
Turtle Creek	14	32	13	46.4	15.3	25	1.0	12	8.6	166	292	Clear	July, 1963
Tuscobia Creek	28	36	11	1.0	1.5	6	0.5	35	7.3	75	156	Clear	Oct., 1963
Upper Pike Creek	14	32	12	12.2	10.1	10	1.0	10	8.6	113	269	Clear	July, 1963
Vance Creek	31	32	13	2.3	3.2	6	0.7	26	8.8	236	365	Clear	July, 1963
Vermillion River	20	34	14	46.2	12.7	30	2.0	6	7.2	80	158	Lt. Brown	Oct., 1963
Yellow River	8	33	11	108.0	33.1	27	2.0	7	7.6	88	175	Lt. Brown	Oct., 1963
Total				1,183.8	366.2								
Average									7.4	86	170		

Appendix 2b. Physical Characteristics of Barron County Streams.

Name	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	Esti-mated Normal Flow (cfs)	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Trout Stream	Miles Public Frontage
Apple River	St. Croix R.	1.80	90	10	14.64	3.5	16	90	10	0	0
Barker Creek	Red Cedar R.	17.42	95	5	17.42	4.5	106	80	20	0	.50
Bear Creek	Red Cedar R.	16.18	80	20	65.48	12.0	92	50	50	0	.01
Beaver Creek	Chetek River	20.97	20	80	35.65	4.5	179	80	20	0	4.00
Brill River	Red Cedar R.	7.74	85	15	40.12	50.0	89	60	40	2.2	0
Brown Creek	Red Cedar R.	8.94	30	70	8.94	2.5	125	50	50	0	0
Chetek River	Red Cedar R.	7.53	70	30	204.31	85.0	96	80	20	0	.25
Connors Creek	Hay River	5.59	75	25	5.59	3.0	30	75	25	1.1	0
Cranberry Creek	Red Cedar R.	3.26	60	40	4.73	5.0	160	50	50	0	1.75
Cruikshank Creek	Red Cedar R.	1.53	85	15	1.53	0.2	35	60	40	0	0
Dority Creek	Hay River	8.24	95	5	8.24	5.0	95	95	5	4.4	0
East Branch Upper Pine Creek	Red Cedar R.	5.34	35	65	10.30	9.0	41	70	30	3.5	0
Engle Creek	Yellow River	11.77	85	15	12.19	9.0	62	50	50	3.8	0
Fourmile Creek	Yellow River	11.98	85	15	17.02	5.0	83	60	40	0	0
German Creek	Pokegama C.	10.05	20	80	10.05	2.5	38	80	20	0	0
Hay River	Red Cedar R.	49.58	80	20	152.24	90.0	573	60	40	0	0
Hickey Creek	Yellow River	10.66	60	40	11.98	7.0	380	80	20	5.4	.12
Johnson Creek	Fourmile C.	5.04	40	60	5.04	1.5	57	50	50	0	0
Jones Creek	Turtle Creek	4.08	80	20	4.08	3.5	57	50	50	2.2	0
Lightning Creek	Hay River	20.98	60	40	20.98	5.0	422	85	15	0	.50
Little Bear Creek	Bear Creek	10.27	90	10	10.27	4.0	766	60	40	0	.36
Little Vance Creek	Vance Creek	3.41	95	5	3.41	2.5	36	75	25	0	0
Lower Pine Creek	Red Cedar R.	18.98	85	15	35.03	30.0	79	50	50	1.3	0
Meadow Creek	Red Cedar R.	2.14	98	2	29.19	8.0	57	95	5	0	0
Moon Creek	Turtle Creek	9.89	95	5	12.61	0	193	95	5	0	0
Moose Ear Creek	Chetek River	18.42	50	50	41.86	15.0	152	30	70	7.0	2.20
North Branch Beaver Br.	Beaver Brook	2.58	20	80	3.90	0.3	103	90	10	0	0
North Branch Upper Pine Creek	Pine Creek	4.96	45	55	4.96	5.5	49	90	10	1.6	0

Appendix 2b. Physical Characteristics of Barron County Streams. (Continued)

Name	Drainage System	Direct Drainage (Sq. Miles)	Percent of Direct Drainage Agriculture	Percent of Direct Drainage Wooded	Watershed Area (Sq. Miles)	Esti-mated Normal Flow (cfs)	Wetlands (Total Acres)	Marsh (Percent)	Wooded (Percent)	Miles Trout Stream	Miles Public Frontage
Pigeon Creek	Red Cedar R.	1.61	40	60	10.13	3.0	184	60	40	0	1.76
Pokegama Creek	Chetek River	16.93	40	60	51.14	30.0	127	50	50	5.2	.16
Quaderer Creek	Yellow River	10.83	70	30	10.83	6.0	110	90	10	0	1.88
Red Cedar River	Chippewa R.	70.71	90	10	708.89	475.0	614	60	40	0	.18
Rice Creek	Chetek River	7.88	60	40	7.88	8.0	38	20	80	0	0
Rock Creek	Pokegama C.	11.99	40	60	17.33	5.0	141	50	50	11.4	1.00
Roux Creek	Spring Creek	.87	95	5	1.06	3.5	50	80	20	1.0	0
Sand Creek	N. Fork Calm R.	2.12	30	70	9.78	7.0	96	25	75	3.5	.50
Silver Creek - Doyle	Pokegama C.	4.83	30	70	4.83	2.5	81	40	60	4.1	0
Silver Creek - Vance C.	Turtle Creek	9.15	20	80	9.15	4.0	34	5	95	2.8	2.19
Sioux Creek	Red Cedar R.	8.13	90	10	8.13	1.0	29	50	50	0	0
S. Fork Hay River	Hay River	7.60	60	40	17.88	4.0	48	75	25	0	.04
S. Fork Lower Pine C.	Lower Pine C.	2.57	90	10	10.38	1.6	65	50	50	2.1	0
Spring Creek - Dallas	Lower Pine C.	5.67	100	0	5.67	1.0	23	70	30	0	0
Spring Creek - Doyle	Red Cedar R.	15.28	80	20	26.12	8.0	460	75	25	0	0
Staples Creek	Apple River	6.18	50	50	8.13	0.2	188	20	80	0	0
Sucker Creek	Red Cedar R.	1.04	40	60	14.17	0.5	55	85	15	0	0
Sweeny Pond Creek	Vermillion R.	9.86	55	45	10.26	3.5	92	60	40	0	2.12
Tainter Creek	Hay River	3.05	80	20	3.05	0.8	41	65	35	0	0
Tenmile Creek	Chetek River	8.60	30	70	63.82	18.0	93	60	40	0	0
Tiller Creek	Red Cedar R.	3.10	90	10	3.10	0.3	45	40	60	0	0
Turtle Creek	Hay River	26.30	75	25	59.47	25.0	273	60	40	5.5	2.11
Tuscobia Creek	Bear Creek	4.90	65	35	4.90	5.0	30	20	80	1.5	0
Upper Pine Creek	Red Cedar R.	23.50	45	55	33.83	18.0	79	50	50	4.1	0
Vance Creek	Hay River	8.25	50	50	14.97	4.5	48	60	40	3.2	0
Vermillion River	Yellow River	20.93	70	30	38.40	15.0	310	50	50	0	0
Yellow River	Red Cedar R.	48.19	70	30	153.51	120.0	772	65	35	23.3	7.86
Total		639.40					8,297			103.2	29.49

SURFACE WATER RESOURCE PUBLICATIONS

Barron County	1964
Chippewa County	1963
Dane County	1962
Dunn County	1962
Green County	1961
Kenosha County	1961
Marquette County	1963
Menominee County	1963
Milwaukee County	1964
Ozaukee County	1964
Polk County	1961
Racine County	1961
St. Croix County	1961
Vilas County	1963
Walworth County	1961
Washington County	1962
Waukesha County	1963