

A Proposal

AU SABLE RIVER



**WILD & SCENIC RIVER
ANNUAL STUDY
REPORT &
ENVIRONMENTAL
IMPACT STATEMENT**

FOREST SERVICE U. S. DEPARTMENT OF AGRICULTURE

TABLE OF CONTENTS

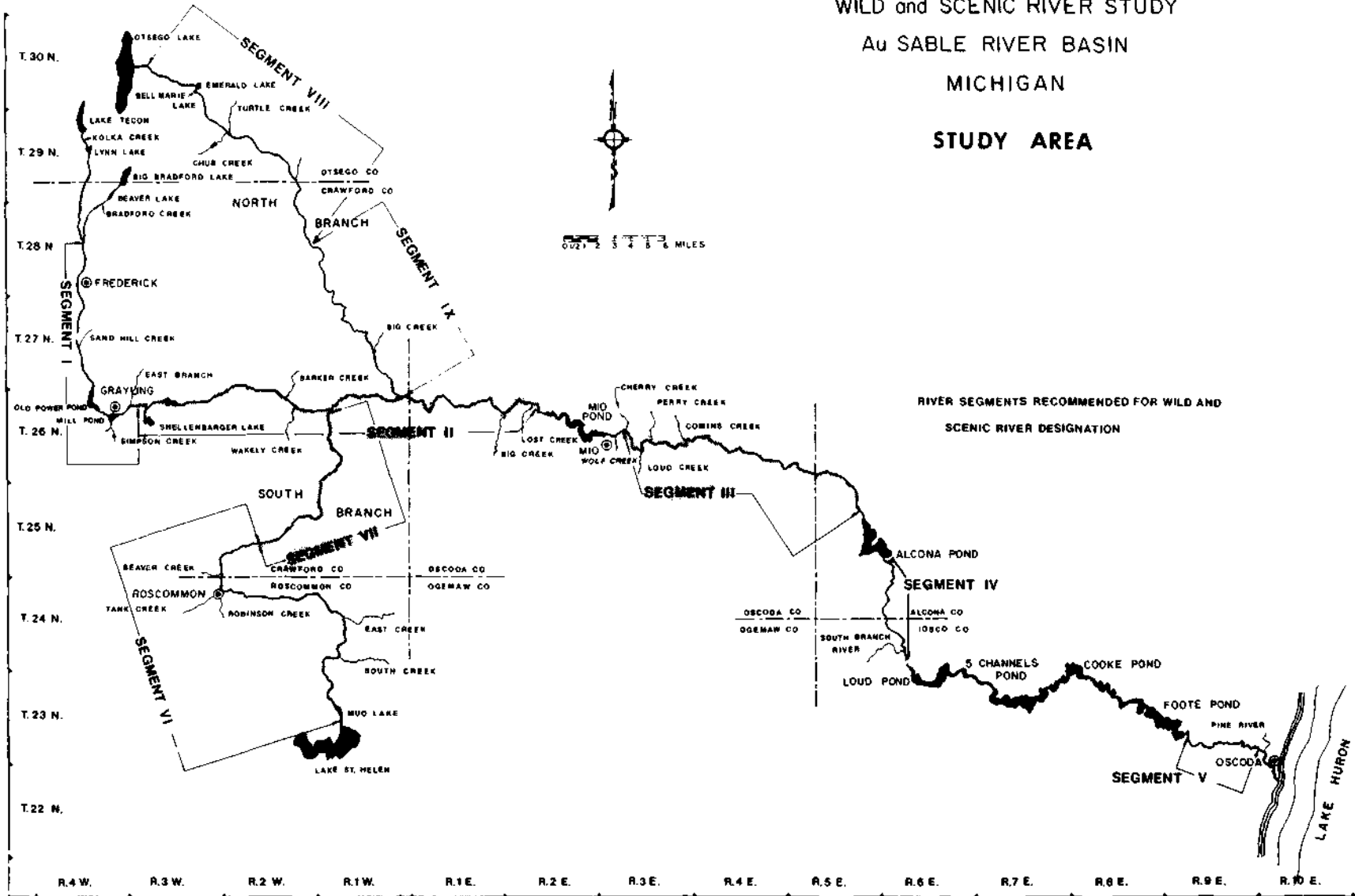
	<u>Page</u>
Summary of Recommendation.....	I
CHAPTER I - Introduction.....	1
CHAPTER II - River Basin Description.....	5
CHAPTER III - Corridor Description	
A. Overview of Segments.....	25
B. Physiography.....	32
C. Soils.....	37
D. Vegetation.....	40
E. Fish and Wildlife.....	45
F. Waterflow.....	50
G. Water Quality.....	54
H. Residential and Related Development.....	61
I. Water Uses and Related Development.....	69
J. Access.....	74
K. Landownership and Use.....	81
L. Minerals.....	85
M. Recreation.....	86
N. Cultural History.....	95
O. Visual Resource.....	98
CHAPTER IV - Wild & Scenic River Eligibility Classification	105
CHAPTER V - Analysis of Alternatives.....	121
Purpose.....	121
No Action Plan.....	122
National Economic Development Plans.....	125
Plan A.....	125
Plan B.....	128
State Natural River Plan.....	130
Wild & Scenic River Plans.....	132
Plan A.....	132
Plan B.....	136
CHAPTER VI - Conclusion and Recommended Management..	141
Management Guides	141
Land Use Control and Protection	148
Recreation Facility Plan	152

APPENDIXES

	<u>Page</u>
Appendix A - Environmental Impact Statement.....	A-1
Appendix B - Wild & Scenic Rivers Act, Michigan's Natural River Act and Guidelines.....	B-1
Appendix C - Outline and Application of Principles and Standard Procedures to Alternative Actions and Evaluation Criteria.....	C-1
Appendix D - Proposed River Boundary Maps.....	D-1
Appendix E - Visual Management System.....	E-1
Appendix F - Fish and Wildlife.....	F-1
Appendix G - Data Sources - Landownership, Income and Employment.....	G-1
Appendix H - Criteria for Determining Access, Capacity, Recreation, Experience Levels.....	H-1
Appendix I - Glossary.....	I-1
Appendix J - Nearby Rivers Offering Similar Recreational Opportunities,.....	J-1
Appendix K - Cultural Resources.....	K-1
Appendix L - Public Involvement.....	L-1
Appendix M - Memorandum of Understanding Pere Marquette Scenic River.....	M-1
Appendix N - Financial Assistance Available for Management of Scenic River Areas.....	N-1
Appendix O - Response to Draft Report.....	O-1
Appendix P -	P-1

SUMMARY OF RECOMMENDATION

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



Summary of Recommendation

RECOMMENDATION

The recommendation is to include certain segments of the Au Sable River in the National Wild and Scenic Rivers System under the following classifications.

<u>Segment of Au Sable River</u>	<u>Classification</u>	<u>Miles</u>
II. Interstate 75 to Mio Pond Federal Power Commission (FPC) Boundary	Recreation	35
III. Mio Pond FPC Boundary to Alcona Pond FPC Boundary	Scenic	23
VII. South Branch - Chase Bridge to Mainstream	Scenic	16
Total		74

Two steps were taken in determining whether the Au Sable River qualified for inclusion in the National Wild and Scenic Rivers System and writing a recommendation. First, the river and its surroundings were evaluated to determine whether it met the criteria established in the Wild and Scenic Rivers Act and the Secretary's Guidelines. Second, the possible effects of classification on social, economic, and environmental values were considered. Based on these evaluations, the Forest Service recommends that three segments, approximately 74 miles of the 165 miles of study river, should be protected for the benefit and enjoyment of present and future generations. The recommendation provides for the protection of approximately 20,060 acres of river corridor in the National Wild and Scenic Rivers System under the above classification.

The reasons for recommending inclusion of 74 miles of river include:

1. Presently the Au Sable River provides an opportunity for a river experience in a natural setting. The

impact of civilization is evident but solitude is available. Designation of the river would provide lasting protection of the natural and peaceful qualities of the river area, which are a special dimension of outdoor recreation;

2. Limitations on recreation overuse and heavy development, two major threats to the river area, will be emphasized. Better protection of all river values would result;

3. The outstanding scenic values would be protected in a natural condition;

4. Those segments that are free flowing would remain;

5. The Au Sable trout fishery is nationally recognized as outstanding. Classification would provide additional protection;

6. Local zoning and partial interests, except for Consumers Power Company land, will be emphasized for protecting river values. Therefore, classification would have no short term effect on the tax base;

7. Lasting protection of historic values, many of which remain to be inventoried, would be assured through Wild and Scenic Rivers Act designation.

8. Greater protection of visual, water, and fishery values would be assured by limiting oil, gas, gravel, sand, and forest products extraction within the river corridor;

9. The cost of protecting a national wild and scenic river would be shared by all the American people;

In summary, the proposed action is judged to provide protection to the highest Environmental Quality objective (EQ) 1/ with the least amount of cost to the National Economic Development objectives (NED) 1/.

The Michigan Department of Natural Resources supports designation of the lower 17 miles of the North Branch of the Au Sable. However, that segment was not recommended for the following reasons:

1/ EQ and NED objectives are defined in Chapter V.

1. Although the North Branch is eligible for designation, it is not recommended for classification because it is less well qualified than the other recommended segments. It has significantly less recognizable "Outstandingly Remarkable" values than segments II, III and VII.

2. The lack of public support for designation would increase the cost of protecting the river area. Administration would be difficult and the costs of obtaining local zoning or partial interests would increase without local support. The high cost would conflict with recommendations given by the General Accounting Office in May 1978.

3. The willingness of the State of Michigan and Lovell's Township to include the North Branch into the State Natural Rivers System indicates well established interest in protecting the North Branch area. State regulations and local zoning when enacted and effectively applied would protect many river values.

4. The majority of lands adjacent to the river are in private ownership. Although the Act does not give any direction toward classification based on land ownership, the cost of zoning or partial interests would be high in comparison with the proposed action.

Administration

It is recommended that administration of the Au Sable Wild and Scenic River be under the U.S. Department of Agriculture - Forest Service in close cooperation with the State of Michigan and local governments. The U.S. Forest Service concurs with Lovell's Township and the State of Michigan in supporting State designation and protection of the North Branch.

The U.S. Forest and State of Michigan will develop a memorandum of understanding to coordinate and agree on administrative matters affecting management and protection of the Au Sable River area.

The State of Michigan and local governments would be encouraged to cooperate in planning and administration of components of the system within their jurisdiction. Where appropriate, cooperative agreements outlining responsibilities for management and development would be entered into between the Huron-Manistee National Forests and the State of Michigan and local governmental units.

Management and Development

Replacement of some substandard recreation facilities would be necessary to protect scenic and water qualities. New facilities would be provided for picnicking. Development plans and management would follow the objectives of the two river classes within the limitations of protecting the river environment. Limitations on watercraft numbers, timing, and/or distribution would be implemented by special use permits, a user reservation system, state water use regulations and/or facility design.

Zoning, Partial Interest, and Acquisition

Zoning, enacted and enforced by local governments, would be emphasized. However, partial interests would be sought to protect river values on private land not adequately protected by local zoning. Partial interests would be purchased only within the river corridor boundary.

Fee title acquisition of private land would be restricted to willing seller and exchange transactions because the condemnation authority normally provided under the Act has been limited by the percentage of public lands within the river corridor. Fee title of private land would be acquired from willing sellers or by exchange if the offered properties met public recreation needs and could improve management effectiveness and/or protect river values.

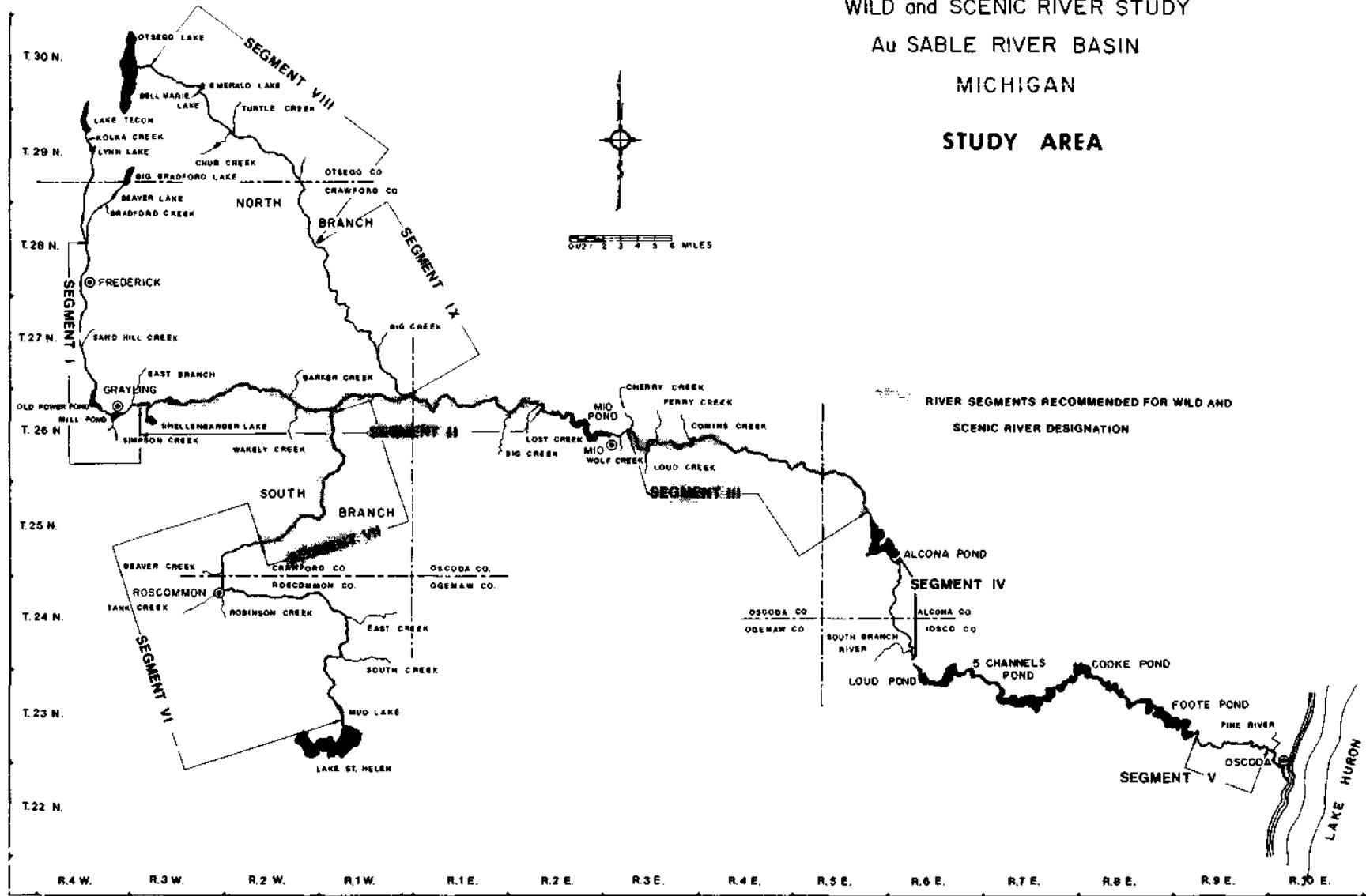
Acquisition of Consumers Power Company land by State and Federal governments would assure lasting protection of Au Sable wild and scenic river values and eliminate the costs of administering partial interests.



The Au Sable - North Branch - Spring.

CHAPTER I - INTRODUCTION

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



CHAPTER I

Introduction

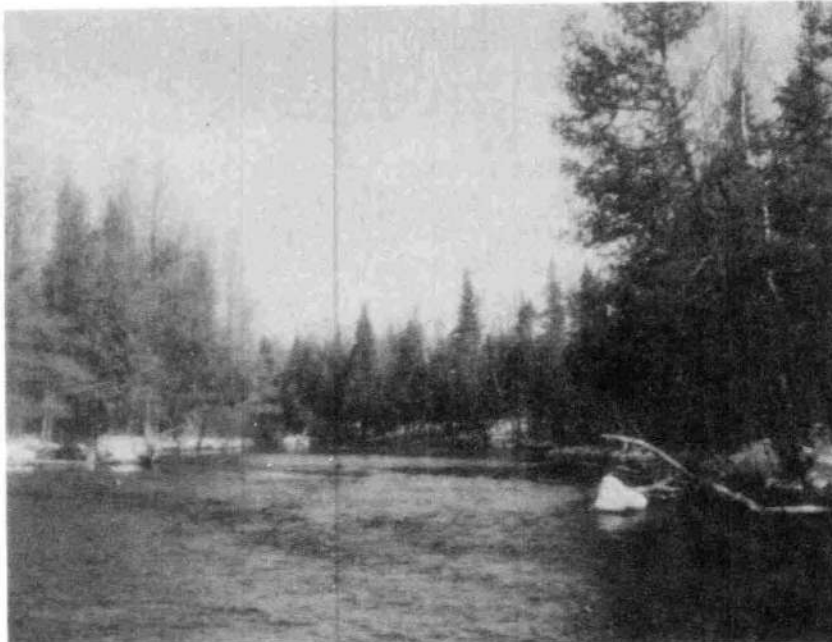
Purpose

The Wild and Scenic Rivers Act, P.L. 90-542, (Appendix B) became law on October 2, 1968. Its purpose is to preserve "certain selected rivers" that "possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic cultural, or other similar values ... in their free-flowing condition ... for the benefit and enjoyment of present and future generations".

A recent amendment of the Wild and Scenic Rivers Act, P.L. 93-621, (Appendix B) became law on January 3, 1975. It listed 29 new "study rivers" including the Au Sable River in Michigan.

Section (a), P.L. 93-621 identified those portions of the Au Sable River to be studied as:

"the segment downstream from Foote Dam to Oscoda and upstream from Loud Reservoir to its source including its principal tributaries and excluding Mio and Bamfield Reservoirs."



Therefore, of the total 148-mile length of the Au Sable mainstream (including reservoirs), 92 miles were studied for potential inclusion into the National Wild and Scenic Rivers System. An additional 36 miles of the North Branch and 37 miles of the South Branch were also studied because of their status as principal tributaries. Because of the Reservoirs and tributaries, it was administratively determined to view the river as 9 distinct segments.

This report evaluates the Au Sable River in Michigan, analyzes alternatives for conservation and protection of the river and offers a proposal for designation of eligible river segments as a National Wild and Scenic River.

The Study

The Forest Service was designated the lead agency through an agreement between the Departments of Agriculture and Interior to be assisted by the Michigan Department of Natural Resources, Heritage Conservation and Recreation Service, Soil Conservation Service, Fish and Wildlife Service, Great Lakes Basin Commission, and the Northwest Michigan Regional Planning and Development Commission. In November 1975, a joint Federal-State of Michigan study team was formed to carry out the Au Sable River Study.

The study effort proceeded in five basic phases:

Study Data. A substantial amount of information concerning the Au Sable River was included in various reports available to the study team. A contract for securing and analyzing economic data was completed by Commonwealth Associates, Inc., of Jackson, Michigan. Field data was collected by the study project leader. In addition, data was provided by many Federal and State agencies, regional and local organizations, citizens groups, and knowledgeable individuals.

Evaluation. The nine river segments designated for study in the Wild and Scenic Rivers Act then were evaluated to determine their suitability for inclusion in the national system. Direction for this phase was

found in the Wild and Scenic Rivers Act and supplemented in "Guidelines for Evaluating Wild, Scenic, and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic Rivers System under Section 2, P. L. 90-542."

A four-step process was used to determine suitability:

1. The nine river segments were evaluated to determine their eligibility for inclusion in the national system;
2. Those segments considered eligible were divided into classifiable units on the basis of length and similar characteristics;
3. The classification (wild, scenic, or recreational) for which each unit qualified was determined;
4. All comments from the public, including information obtained at the public meetings and in letters and responses, were carefully evaluated. This information was utilized by the study team to review its suitability determinations and to check for errors and oversights.

The results of this process are shown in Chapter IV.

Alternatives. Six alternatives, including a "No Action Alternative", was considered a reasonable range of management options and are presented in this study. The Economic and Environmental evaluation of these alternatives were developed in accord with the "Principles and Standards for Planning Water and Related Land Resources", published in the Federal Register, Vol. 38, No. 184, Part III (September 10, 1973). Basically, they require formulation of alternative plans based on a NED objective and an EQ objective. A recommended plan should have net economic benefits, except when the deficiency in net benefits results from benefits foregone or additional costs incurred to serve the EQ objective. In other words, a plan with no net economic benefit can be recommended if

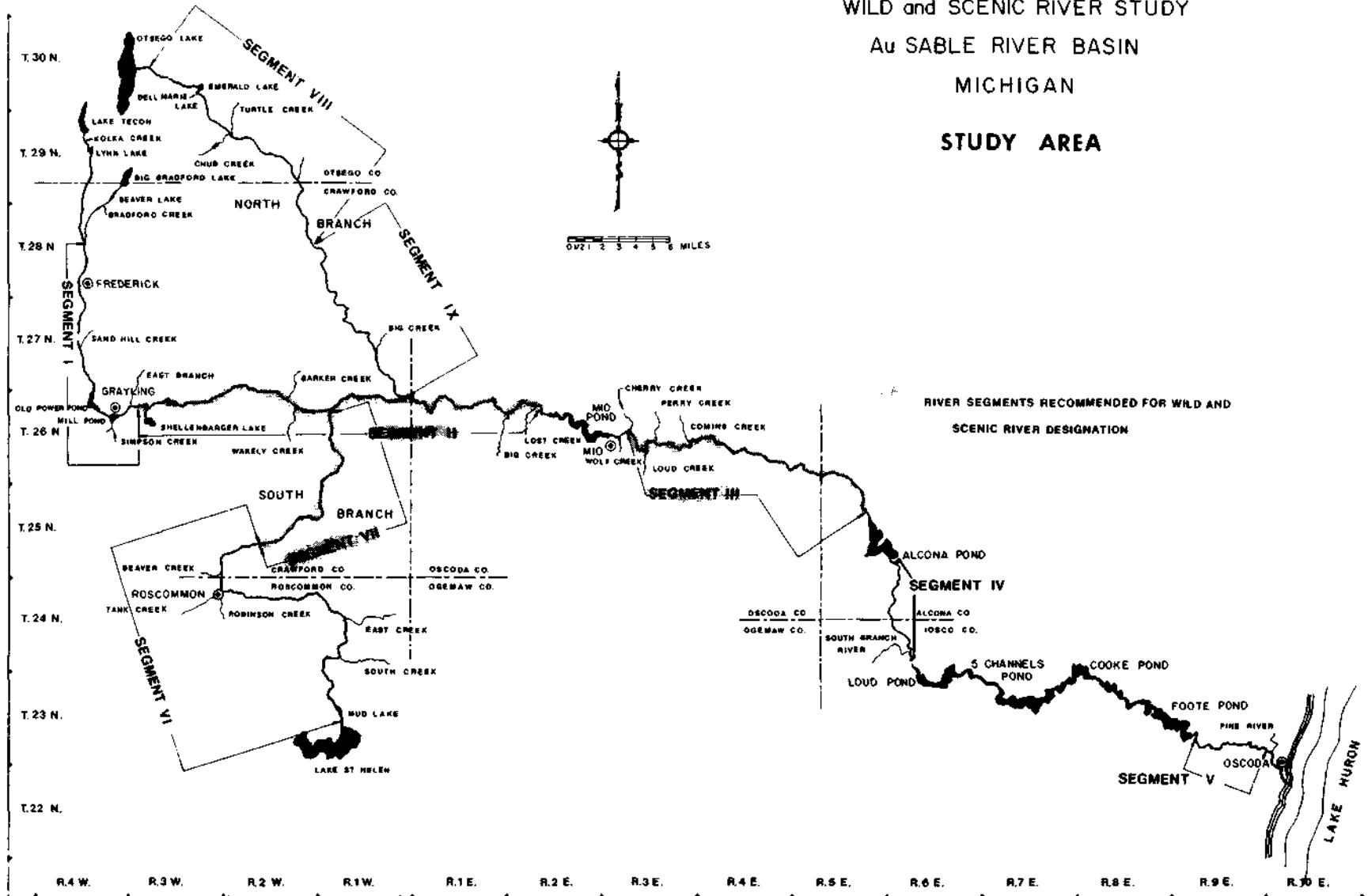
it has overriding, long-term environmental benefits. This process also requires assessment of the effects that the various plans have on regional development and social well-being. An outline of these procedures is included in Appendix C, with the results presented in Chapter IV.

Public Response. The public has been encouraged to respond to the Au Sable Wild and Scenic River Study. For the most part, reaction appeared to represent two dissimilar philosophies. Private landowners were concerned about the possibility of losing their property and/or landowner rights and the increased use and associated problems that designation might attract. On the other hand, conservationists and fishing and canoeing enthusiasts supported wild and scenic river designation to protect and preserve the river for present and future use.

Findings and Recommendations. The findings and recommendations presented in Chapter VI are the results of a thorough evaluation of social, economic, and biological conditions within the river corridor.

CHAPTER II - RIVER BASIN DESCRIPTION

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



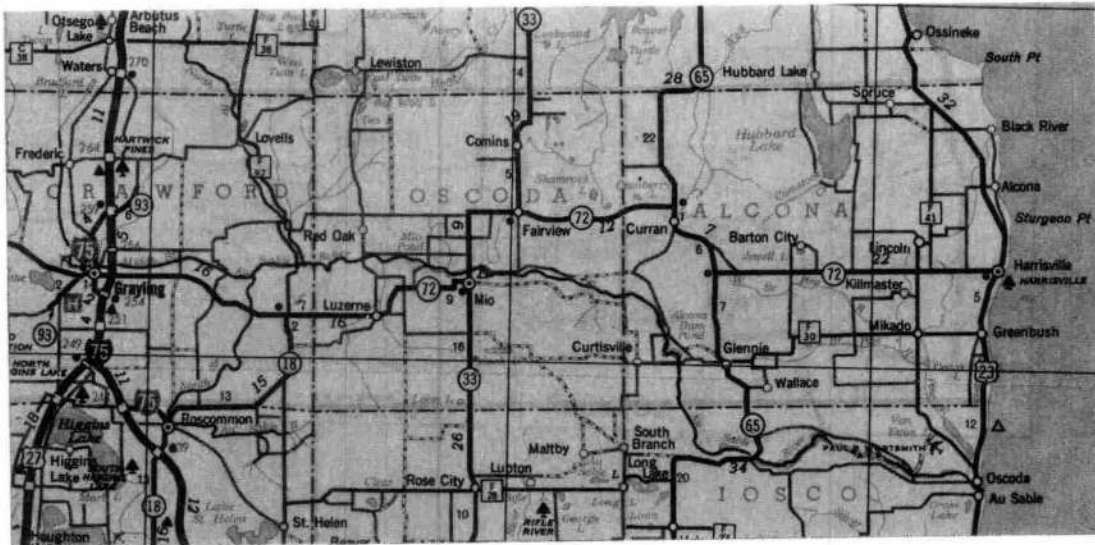
CHAPTER II

River Basin Description

Preface

This description of the Au Sable River basin gives a broad picture of the natural and human environments effected by this potential wild and scenic river. Its purpose is to sketch a general view of the larger province for which the Au Sable is a geographic and economic lifeline.

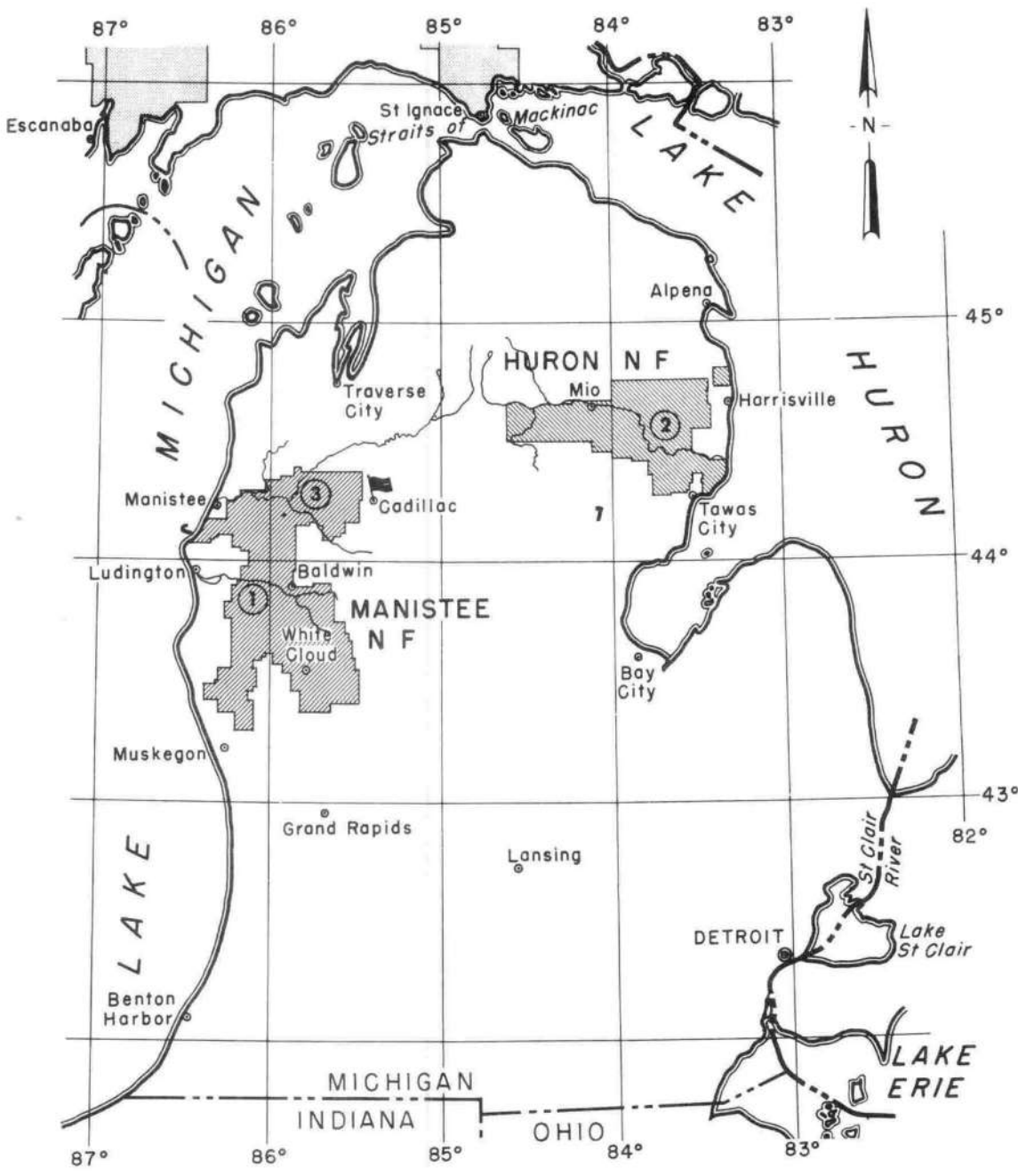
In choosing the hydrologic basin parameter rather than political boundaries, the intent is to show the Au Sable as part of a living system. Economic and social aspects are shown on a wider county basis to relate the river to their broader ranges of influence.




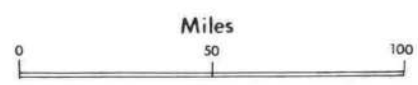
Location - Size

The Au Sable is a major tributary to Lake Huron. It drains a north-south basin that includes 1,932 square miles in north-central lower Michigan. The basin is approximately 90 miles long and 10 to 30 miles wide. The river basin is partially within the Huron National Forest and includes parts of Otsego, Montmorency, Crawford, Oscoda, Alcona, Roscommon, Ogemaw, and Iosco Counties.

Proximity Map of Potential and Existing Wild and Scenic Rivers



- LEGEND**
-  NATIONAL FOREST
 - ① PERE MARQUETTE SCENIC RIVER
 - ② AUSABLE STUDY RIVER
 - ③ MANISTEE STUDY RIVER



Physiography

The topography of the Au Sable River basin is rolling to flat. Maximum elevation above sea level is approximately 1,447 feet in the extreme western portion; minimum elevation is approximately 600 feet on the extreme eastern end. Rolling hills of up to 1,400 feet elevation are common on the western edge of the basin. The river basin has an approximate fall of 669 feet. The western half of the river basin is generally flat to slightly rolling. The eastern half is flat, broken only by stream channels.

Low swamps and marshes are common throughout the western half of the river basin - particularly in the river headwaters and margins. The eastern half is comparatively well drained and has relatively few lowland areas.

Climate

The Au Sable River basin offers a climate typical of the State's "north country". The warm days and cool nights offer a pleasant haven for vacationers. The winters provide an excellent climate for skiing, snowmobiling, and other winter sports.

Weather data for the Au Sable basin indicate a record high of 112°F with the record low of -47°F, both recorded at Mio. A temperature of 100°F is reached on an average of once in 10 years. At the other extreme, one can expect temperatures to fall below zero an average of 25 days per year. The average yearly temperature for the basin is 43.1°F.

Precipitation is heaviest during the summer season, averaging 63 percent of the annual total during the 6 month period, April through September. Heaviest rainfall for the basin is in September, with an average of 3.38 inches. Lowest rainfall occurs in February, with an average of 1.30 inches. Annual precipitation has averaged 28.30 for the 24 years of record.

Summer skies tend to be generally free of cloud cover and westerly breezes are nearly constant. Winter skies are generally cloud covered and windy.

Vegetation

Over 80 percent of the watershed is forested. Major vegetative types are aspen, jack pine, red pine, northern hardwoods, pine plantations, and mixed swampland species. Original cover on the better drained sites was predominantly red and white pine and northern hardwoods. These species were virtually eliminated during the early logging era. Nearly all stands are now in second or third growth cover. Plant types are predictable and ecologically diverse, depending on topographic situations, particularly in the river zone.

The well-drained sites support stands of northern hardwood, aspen or red, jack, and white pine. They often cover extensive upland areas, are productive, and generally even-aged. They provide good summer range for wildlife and support many varied forms of ground vegetation.

Lowland areas have higher water tables and poor drainage. Lowland conifers, hardwoods, and shrubs dominate these sites. The lowland types tend to be less extensive, are spotty, follow stream courses, and are densely vegetated. They tend to be less productive, excellent deer winter range, and have a rich variety of ground vegetation.

Terrestrial Wildlife

The watershed contains an interesting variety of wildlife. Hunting for both large and small game and waterfowl are popular recreational activities, as are such non-consumptive uses of wildlife as photography and observation. Most participants in these activities come from the southern metropolitan areas. Trapping of fur bearers is popular with local residents.

In the big game category, white-tailed deer is the most important species. Deer benefitted from plant succession following the logging and wildfire era in the late 1800's and early 1900's. Carrying capacity of the range and then subsequent deer populations rose dramatically about 1920. Populations exceeded the carrying capacity in the 1930's, leveled off in the 1940's, declined again in the 1950's and has again leveled off. A controlled harvest has helped to balance the population with habitat conditions. River bottom lands



A large variety of
wildlife inhabit the
river corridor...

American Osprey...



Wild Turkey...
Courtesy - R. McNeill, FSC



White Tailed Deer...
Courtesy - R. McNeill, FSC



Snow Shoe Rabbit...
Courtesy - R. McNeill, FSC.

and adjacent uplands are used by deer as winter habitat. A list of mammals found in the watershed is included in Appendix F.

The river basin area contains 35 percent of the huntable population of wild turkeys and is one of three such areas in Michigan. Hunting is controlled by a permit system. The birds are the result of an intensive management and stocking program by the Department of Natural Resources in cooperation with the Forest Service. The presence of these magnificent birds adds much to the wildlife attraction of the area.

The river area is used extensively by waterfowl and shore birds for nesting and brood rearing during the spring and summer. Deer also use the area and are an important species.

Upland game birds found in the area are ruffed grouse, woodcock, turkey, and, in farm areas, ring-necked pheasant. Small game species include cotton-tail rabbit snowshoe hare, fox, and gray squirrel.

At least 70 species of non-game birds are known to nest in the watershed. A list of the nesting bird species is included in the Appendix F. In addition, many other species migrate through the area. A complete list of nesting and migrating species would number well over 100.

Fur bearers open to trapping include beaver, muskrat, mink, otter, red fox, raccoon and skunk. Fur prices have increased so, that trapping has become a commercial enterprise as well as a sport.

Fish and Aquatic Life

The fish and aquatic life present in the North and South Branches and the middle mainstream indicate water quality is excellent. However, water tends to become progressively warmer downstream due to the influence of the six reservoirs. Water temperatures also tend to be

higher in the headwaters where water passes through wide open marsh country. Here it is warmed by sunlight and cooler ground water is absent. Therefore, the middle river areas, with their high inflow of cooler ground water, are vital to maintaining the cold water fishery and high water quality (See Page 49).

Other Animals

Many lesser creatures are indigenous to the area. In and along the river, several species of nonpoisonous reptiles such as the blue racer, common water snake, hog nose snake, snapping turtles, painted turtle, and soft shelled turtle can be found. Various frogs, toads, lizards, and salamanders are also commonly observed. Appendix F lists those breeding species found in the AuSable River basin.

Threatened and Endangered Species

The northern bald eagle (Haliaeetus leucocephalus, washingtoniensis) is currently being considered for listing as endangered where it is found in the "Lower 48" states except in the Lakes States where it is listed as threatened on the Federal list.

Currently, there are five pair of northern bald eagle actively nesting along the Au Sable River. The results of their nesting attempts has been monitored since the early 1960's and success has been quite variable. In the past 3 years, there has been a marked improvement in success with four of the five raising young in 1976. The eagles along the Au Sable have been able to continue nesting with better success than in other areas of lower Michigan. The probable reason for this is that their nests are in relatively inaccessible locations that prevents both inadvertent and intentional harassment by people; and, the relatively low amounts of persistent pesticide contamination in the fish eaten by eagles from the Au Sable.

If the bald eagle is to persist as a viable part of the fauna of the Au Sable, their nesting sites must not be intruded upon and the river must remain free of the pollutants that adversely affect this and other life forms.

The Kirtland's Warbler (Dendroica kirtlandii) has been classed as an endangered species, and its status has become increasingly perilous since 1961. Its nesting population was 200 pairs in 1976; only 40 percent of the 502 pairs counted in 1961. The Au Sable watershed is the heart of the nesting range of this species.

It is noted that the first nest to be found of this species was in 1903. This rare warbler has been found nesting in several suitable sites located in close proximity to the river. Some of the jack pine stands on suitable sites along the river are being considered for management as critical habitat as set forth in the "Recovery Plan for the Kirtland's Warbler."

There are no known threatened or endangered plant species within the river corridor.

Water Resources

The Au Sable River drains an area of 1,932 square miles and drops approximately 650 feet from its point-of-origin. The average discharge at the Mio Dam from a drainage area of 1,100 square miles equals 922 cubic foot per second (cfs). On a direct drainage area ration, the average discharge at the mouth is estimated to be 1,600 cfs.

There are six existing hydro-electric power plants in the Au Sable River basin, with a total installed capacity of 41,000 kilowatts and an average annual energy output of 139,000 megawatt hours (MWH). All of the power plants are operated by an investor owned utility company - Consumers Power Company of Jackson, Michigan. The six reservoirs were constructed during the period of 1911 through 1924.

Geology and Minerals

The watershed, like all others in the State of Michigan, shows the effects of glacial action. It lies in an area once covered by the Michigan Lake of the Pleistocene Glacier and is characterized by glacial moraines and outwash plains. The basin is underlain by glacial drift up to several hundred feet deep with no outcroppings of bedrock material.

The morainal areas are hilly with bold detached ridges. Outwash areas are relatively flat, undulating plains except where cut by stream channels. The ancient lake bed area east of Oscoda is extremely flat and was covered during ancient glacial periods by the waters of Lake Michigan.

The streamflow and water temperature characteristics are strongly influenced by the geology of the basin. Permeable sand and gravel in the outwash areas contribute relatively large amounts of ground water discharge to the river. This ground water maintains the flow during drought periods and cools the stream during the hot summer months. These areas also buffer sudden changes in river levels, thus reducing the probability of flash flooding.

There are excellent examples of the effects of the ice, water, and wind on the landscape. Kettle lakes, oxbow lakes, eskers, drumlins, kames, terraces, sandblows, and deltas can be observed.

Sandstones, shales, and small amounts of limestone directly underlie the unconsolidated glacial deposits. The shales, in some instances, are suitable for use in manufacturing brick and tile.

Relatively shallow oil and gas fields are scattered over much of the watershed. In addition to oil and gas, bromine, calcium chloride, and calcium magnesium chloride are either obtained directly from wells or produced from materials derived from the wells.

The general area, including all the lands contained in the watershed, is being subjected to a great amount of oil and gas lease activity and exploration. Geophysical work has been conducted over a large portion of the area. The present exploration activity is directed toward locating and testing coral reef developments in the older limestone formations. A few tests have been successful but the exploration activities in the deeper horizons are in an early stage.

Other than sand and gravel deposits, oil and gas are considered the only mineral resources with significant value in this area.

Population and Way-of-Life

Residential population within the Au Sable watershed has experienced a steady increase in the past 20 years. The counties encompassing the basin have grown approximately 60 percent in the same 20 year period. The State of Michigan population grew less than 30 percent in those years.

The average density across the basin is approximately 11 people per square mile. This compares to 22 per square mile in the northeast region and 156 per square mile for all of Michigan.

Most local units shared in the accelerated growth in this past decade. The U.S. Census tells us that 29 of the 30 townships grew faster than the State's average of 13.4 percent in 10 years.

Oscoda is the basin's largest town with a population of 3,475. A large portion of this population may be due to Air Force families attracted to nearby Wurtsmith Air Force Base. Oscoda's growth can be attributed to the attractiveness of Lake Huron lakeshore properties and the northern rural environment to people from the Detroit, Saginaw, Flint area. Populations in other major basin towns, Grayling - 2,143, Roscommon - 850, and Mio - 1,000, are increasing rapidly. This is due largely to the physical attractiveness of the area and easy access from urban areas via interstate highway 75.

The basin is rural in lifestyle. A distinctively small town atmosphere prevails in all towns of significance in the river basin. Tourist services, very light manufacturing, and forest related industries are the major employers.

A significant portion of the local population is seasonal and/or retirement. Seasonal populations are particularly heavy during June, July, and August. These trends can be attributed to more leisure time and greater interest in winter as well as summer outdoor activities.

Economy

The present economy of the Au Sable basin relies on light manufacturing, retail trade, forest products, and recreation. Industries such as forest products and recreation are obviously dependent on the regional resources. The manufacturing sector, which would include processing of forest products, is the leading employer in the region employing 30.6 percent of all regional employees. This, however, is considerably lower than the statewide factor of 43.0 percent of all employees in that sector. Significantly, the second leading employment sector, at 30.1 percent is retail trade. This figure is well above the State average of only 18.9 percent. Recreation services employ approximately 16.6 percent of the region.

The 60,250 person labor force in the study area suffered an unemployment rate of 13.8 percent in 1976, compared to State unemployment of only 10.1 percent for the same period. Also, lower than State levels was the per capita income of the region. The mean income level for all counties in the region was only \$3,776 in 1974, compared to a State average of \$5,880.

Transportation

The river basin is readily accessible by all major forms of transportation. Interstate highway 75 is a major Michigan north-south artery. It provides ready access to the Grayling area from all of southern Michigan. Highway 23 is a major Lake Huron shore route serving the Oscoda area and providing access from all of southeastern Michigan. State highways 72, 33, and 65 are intermediate routes serving the entire river basin. Aside from several very small areas with difficult access, the basin has a heavily developed system of Federal, State, county and Forest Service roads. (See Map IV - Transportation System.)

Con Rail lines serve Roscommon, Gaylord, and Grayling (freight service only). The Detroit and Mackinac Rail lines serve the Oscoda and Harrisville areas.

Commercial airline service is available at Alpena and Wurtsmith Air Force Base. The service at Wurtsmith is an air commuter line terminal that will be transferred to Tawas when facilities are expanded.

Private aircraft may land at small public airports in Tawas, Harrisville, Mio, South Branch, Roscommon, Grayling, and Gaylord. Commercial service is generally very limited in the central and western part of the basin and flights must be made through Traverse City.

Land Use and Ownership

Throughout Michigan in general, and in the Au Sable basin in particular, historic settlement patterns have led to fairly predictable land ownership patterns today. Since 1817, the choice productive agricultural lands, especially those with water and fertile soils, have been homesteaded and thereby taken out of public domain. The heavily timbered land was acquired by lumber companies and private individuals. The remaining area became public land (the Huron National Forest was established in 1909) and State forests. The original heavily timbered land was cut over and either held by the owners, sold to the State and Federal governments, or became tax delinquent and subsequently public land.

Attempts at agriculture have been largely unsuccessful in the river basin. Early homesteaders tried promising areas but moved on when the land "played out". Agriculture land now accounts for 8 percent of the river basin land area.

Beginning in 1909, large portions of unclaimed public domain land in the basin, especially unproductive timber land, became national forests. Tax delinquent "land no one wanted", was added to this, and national forests now comprise 5 percent of the total basin area. State forests were also formed during this period and now comprise 29 percent of the basin land area. An additional 3 percent of the basin land area is administered by the Michigan National Guard.

In the early 1900's, Consumers Power Company became interested in the hydro-electric potential of the Au Sable River. The river's power was harnessed with the construction of Mio Pond Dam in 1916; Alcona Dam in 1924; Loud Dam in 1913; 5-Channels Dam in 1912; Cooke Dam in 1911; and, Foote Dam in 1918. The hydro-electric development involved purchase of 13,010 acres within the study area, or 1 percent of the total river basin acreage.

Private interest in the land has increased during the past 25 years but is directed primarily toward the basin's recreation value and residential development.

This increased interest has led to extensive subdivision and seasonal and retirement home development, primarily along the river. Private land accounts for 62 percent of the basin land area.

Recreation and Scenery

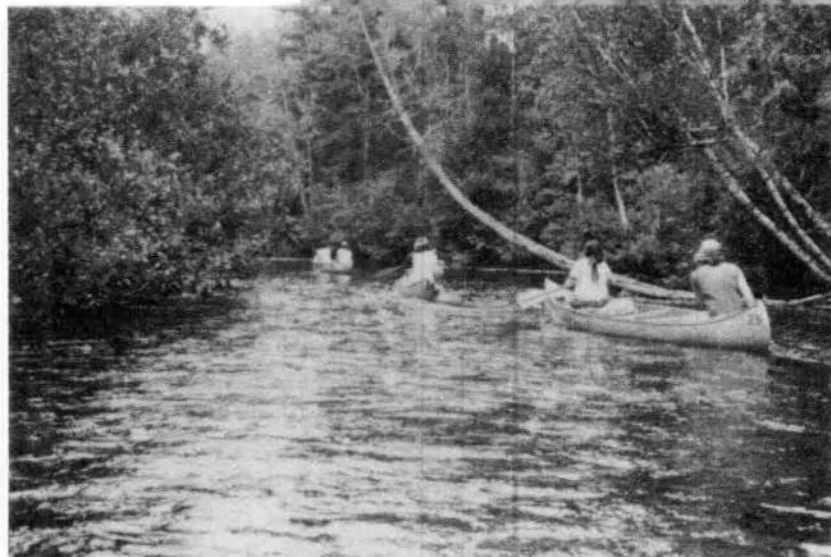
There is a high proportion of public and quasi-public land in the basin - state forests, national forests, and Consumers Power Company. In addition, a number of State, Federal, local government and private recreation facilities and areas are available and adequately developed for public use. There are 15 public campground facilities and 25 public access sites available along the Au Sable. Overnight and access facilities are well located and developed to meet public needs. Several overnight facilities have been upgraded during the past 2 years to better protect the site, screen them from the river, and improve site quality. All the above facilities have been provided by State or local governments.

Recreation opportunities are diverse and year-around activity in the river basin is increasing. More leisure time and increased interest in snowmobiling and cross-country skiing have opened the winter seasons to more recreationists. More and better winter sport facilities and equipment have also encouraged people to enjoy the winter out-of-doors.

Au Sable River fishing has attracted anglers since the very late 1800's. Today the river is rated as one of the most productive trout streams in the United States. The Michigan grayling captured the attention of early anglers, but was last seen in 1915. Brown trout were introduced long before the grayling disappeared. Brown, brook and rainbow trout are responsible for the river's reputation today.

Trout fishing develops in early spring and extends throughout the summer. It offers outstanding fishing opportunities and attracts anglers from throughout the midwestern United States. The Michigan recreation plan indicates fishing participation in the eight county region at 93,900 days annually with use projected to increase 10 percent by 1980, and 19 percent by 1990. A significant portion of the increased fishing use may be for anadromous fish in the rivers and Lake Huron.

Fly fishing for trout, camping and canoeing are three of the more popular recreational activities on the Au Sable.



The anadromous fishery has developed in the lower Au Sable during the past 10 years. Fish migration upstream is restricted by Foote Dam. However, the program has been highly successful and attracts vast numbers of anglers during the spring and fall seasons.

Canoeing could account for the highest single use on the Au Sable River. The canoeing season extends from late spring through Labor Day. A University of Michigan study indicates approximately 50,000 canoes travelled on the Upper Au Sable in 1971. This would include 25,000 canoes on the Grayling mainstream; 10,000 on the Mio mainstream and 15,000 on the South Branch. The Michigan Recreation Plan (1974) projects a 10.1 percent increase in canoeing by 1980 for the eight county region.

Canoe use is heavily concentrated in the Grayling to Au Sable River Road Bridge and South Branch sections. The Foote Dam to Oscoda section receives very light canoe use and the Alcona to Loud Pond section and North Branch have no measurable canoe use.

Mio, Alcona, Loud, 5-Channels, Cooke, and Foote Ponds are Consumers Power Company reservoirs and are available for public recreation use. The six reservoirs provide 6,625 acres of water for warm water fishing, boating, canoeing, and swimming. In addition, there are six camp-picnic sites available along the shore lines and public access sites to each reservoir.

In the fall, deer, ruffed grouse, and rabbit hunting are the primary recreational pursuits in the basin. Waterfowl are also hunted but to a lesser degree.

Skiing and snowmobiling has increased significantly during the past 10 years. The eight county area has 11 ski areas, or 17 percent of the State's downhill ski runs. The Michigan Tourist Council reports skiing has increased from 65,000 to 350,000 skiers during the 1954-1970 period. A large percentage of the increase is attributed to cross-country skiing. Although a large percentage of the snowmobiles are registered in the downstate urban areas, the heavy use occurs in the north country. The availability of heavy snow cover, public lands, and developed trails are the main attractions.

The Au Sable River corridor is a well-known, outstanding, scenic resource in the river basin and Midwest. It rates very high when compared with other rivers in the region. Its major scenic attractions are relatively undeveloped shorelines, high quality water, diverse vegetation, and sinuous course. Scenic qualities of the river-basin may be typical of the north one-half of lower Michigan. The rural landscape is heavily forested and broken by occasional small farms, towns, swamps, lakes, and streams. This is also an area of extensive jack pine sand plains without physiographic or vegetative variety. It lacks vistas and variety afforded by broken topography. Scenery rated typical within the basin would be considered outstanding in other areas of the midwest.

Archaeological, Historic, and Cultural Resources

The Au Sable River basin is almost achaeologically unknown. Virtually no systematic survey of the area has ever taken place; the few reported sites are primarily accidental discoveries with the exception of one major site near Oscoda. There is also little doubt that human action in the form of damming, logging, and other development has destroyed sites. Nevertheless, it is likely that a comprehensive survey of the Au Sable would yield numerous (albeit small) sites. It is speculated that the Au Sable and Manistee Rivers provided prehistoric inhabitants with an almost uninterrupted passage from Lake Michigan to Lake Huron, but its use has not been substantiated.

Historic Significance

Frenchmen may have explored portions of the river as early as 1688, but the area remained a mystery to white men for almost 150 more years. Some early atlases did not include the river on charted maps, and several names were applied to it. A 1795 United States gazeteer, for example, referred to it as the Beauais River. The area was labeled as inaccessible and essentially worthless in an inaccurate yet widely circulated survey. Alexis DeTocqueville, who visited Saginaw in 1831, warned that the territory northward was "covered by an almost impenetrable forest which extends uninterruptedly....full of nothing but wild beasts and Indians." Not everyone was discouraged by these observations, however. In 1835, several traders explored the Au Sable and small-scale logging operations commenced soon thereafter.



Sawlogs - lodged in the river bank - stark reminders of early river log drives and the lumbering era.
Courtesy - R. McNeil, FSC

The end of the Civil War, along with a huge influx of eastern capital, accelerated the growth of the logging industry. A 1866 timber survey found that, in contrast to earlier reports, the region contained extensive timber stands. Furthermore, the Au Sable River itself was wide, deep, and had few meanders; it was therefore, an almost perfect river for logging drifts. Beginning in the late 1860's, the industry grew at an astounding rate. The occasional warnings of the rapid depletion of the forests were ignored by the lumber industry, which felt the timber supply virtually unlimited and, in any case, was committed to a "cut and get out" policy.

Oscoda was the center of lumbering in the Au Sable River basin. Its mills sawed as much as 75 million board feet per year. Meanwhile, the extension of the railroad to Grayling in 1878, followed by narrow-gauge inland spurs, accelerated the industry's growth. The atmosphere of the boom was contagious and colorfully reported in such newspapers as Grayling's Crawford Weekly Avalanche. Some people, such as H.M. Loud of Oscoda, made fortunes. Most loggers, however, made subsistence wages, and labor disputes were frequent. A strike in 1884 at Oscoda almost led to the entry of militia.

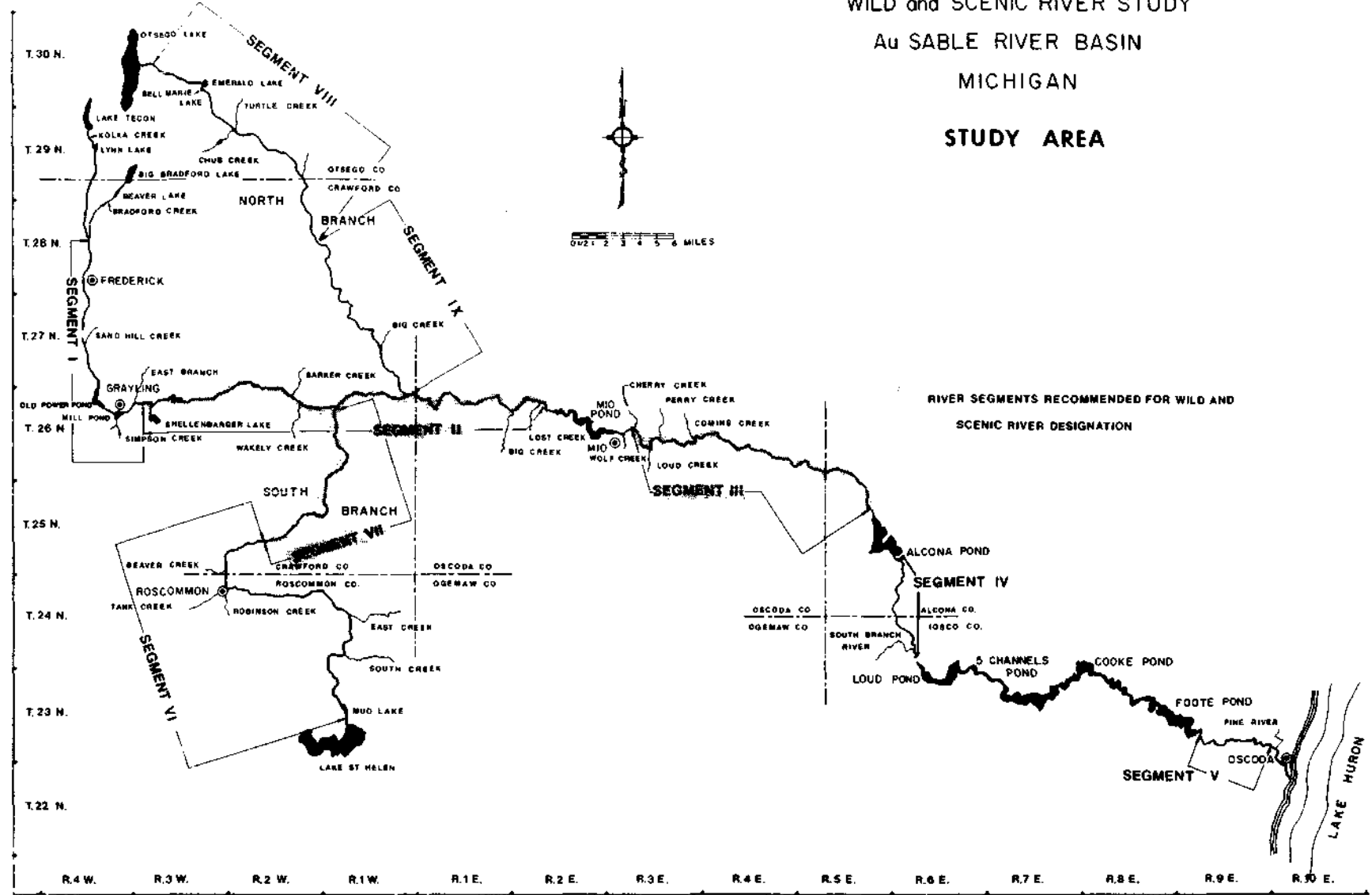
The logging industry faded rapidly after 1890, and the rise of recreation in subsequent years barely compensated for the transformation of forested land into cut-over, sandy acreage. There was one last brilliant chapter to the industry. A large tract of cork pine in northwestern Crawford County, near the headwaters of the Manistee and the Au Sable's Middle Branch remained untouched. It was owned by David Ward, a famous lumber speculator who had explored the area in the 1850's. Upon Ward's death in 1900, his heirs discovered that the estate required execution by 1912. The town of Deward was constructed in 1901 to harvest the timber. It included housing, a school, and one of the world's largest mills. By 1912 the forest was denuded, and Deward was abandoned. A few rotting buildings now mark the site of this ghost town. Ironically enough, Hartwick Pines, the State's last virgin White Pine Forest, lies only a few miles to the southeast.

Cultural Significance

The Au Salble's cultural value is most evident in the way it has influenced visitors and residents of the surrounding countryside. People can attain a greater appreciation of natural beauty and outdoor activity by visiting an outstanding natural area. The river has fostered legends which, through the years, impart a sense of feeling and appreciation for early river people and their lives.

CHAPTER III - RIVER CORRIDOR DESCRIPTION

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



CHAPTER III

River Corridor Description

Preface

This description of the 165 mile Au Sable River and its 41,520 acre corridor presents a closeup view of a potential wild and scenic river area and the lands associated with it in a river corridor 1/8 to 1/2-mile wide. Included is information on the various resources within the corridor, their uses, and potential use conflicts. This is the basic data used by the study team in its subsequent evaluation.

The river study was directed toward nine segments: (I) Au Sable Mainstream from its source to Interstate 75 Bridge, (II) Interstate 75 Bridge to Mio Pond FPC Boundary, (III) Mio Pond FPC Boundary to Alcona Pond FPC Boundary, (IV) Alcona Pond FPC Boundary to Loud Pond FPC Boundary, (V) Foote Pond FPC Boundary to Oscoda, (VI) South Branch - Source to Chase Bridge, (VII) Chase Bridge to Mainstream, (VIII) North Branch - Source to Lovell Bridge, (IX) Lovell Bridge to Mainstream.

A. Overview of the Nine Segments:

Segment I and II - Source to Mio Pond FPC Boundary

This is a diverse area covering five distinctly different subsegments.

1. Headwaters area (Segment I) - 3 miles - The Au Sable River originates at the intersection of Bradford and Kolka Creeks, 3 miles north of Frederick, Michigan. This is an area, 1,210 feet above sea level, of lowland conifer swamps, large expanses of tag alder marsh, and scattered upland aspen-birch types. Bradford and Kolka Creeks are small slow creeks 3 to 4 feet in width that meet to form the Au Sable River. This is an undeveloped area without roads or access.
2. Lowland marsh area (Segment I) - 9 miles - Here, the Au Sable varies from 4 to 20 feet in width and 6 to 18 inches in depth. It follows a gentle winding course through lowland conifer swamps and wide expanses of open tag aldersedge

Typical River Condition Above Interstate 75 - Segment I



River Source...

Above Grayling...



Within Grayling.

Courtesy - R. McNeill, FSC

marsh. The river is accessible in places by public road bridges. Occasionally residential development occurs on high ground.

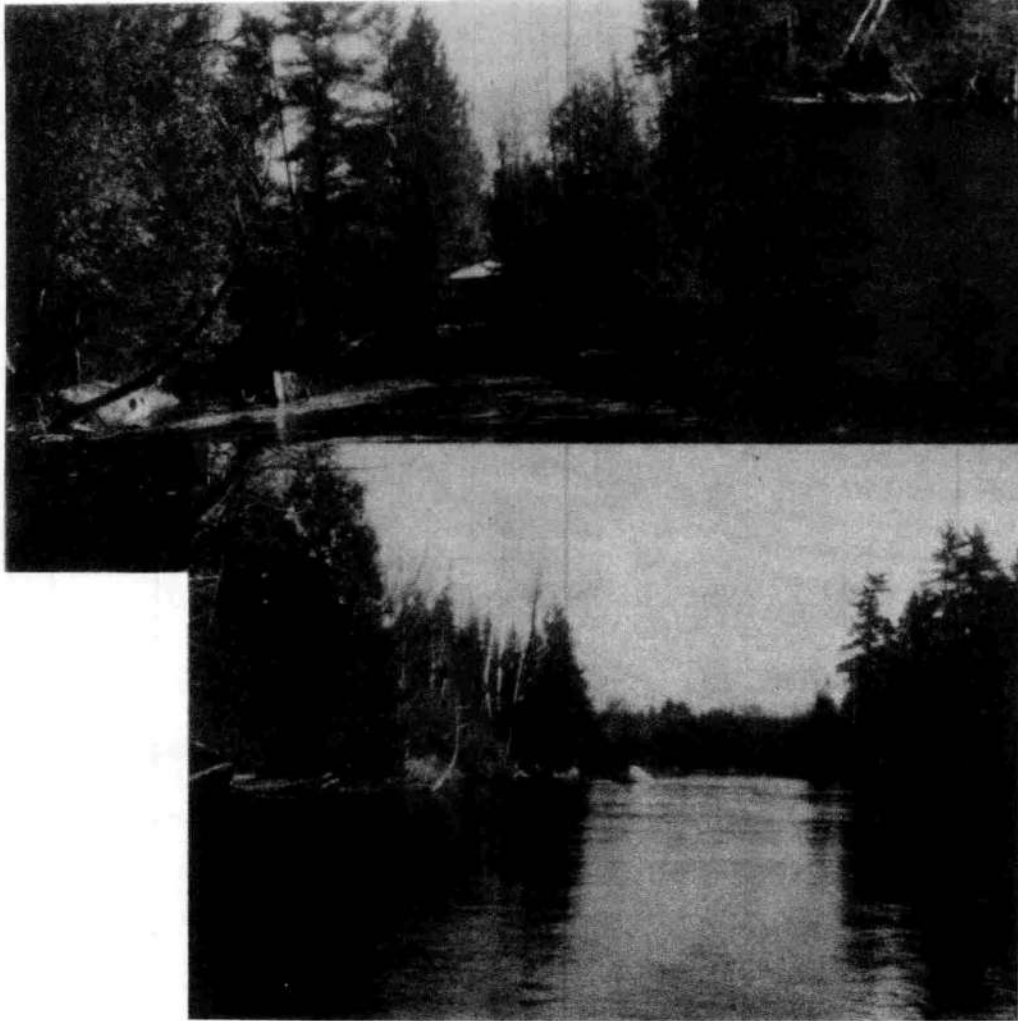
3. Urban area (Segment I) - 3 miles - Twelve miles from its source, the Au Sable passes through the Old Power Pond, Mill Pond, and the city of Grayling. Development and access is extensive. There are two impoundments in this area - the Old Power Pond, 2 miles west of Grayling, covers 46 acres and Mill Pond, immediately southwest of Grayling, covers 80 acres. The river current is slow and channel-width varies from 15 to 20 feet.
4. Interstate 75 Bridge to McMaster's Bridge (Segment II) - 21 miles - Below Grayling, the river channel flows quickly between alternately sandy soil and banks with jack pine and lowland conifer swamps with some open marsh. The channel varies from 20 to 30 feet in width and has many attractive river bends. It is heavily developed and readily accessible. Here, the Au Sable is rich in history and has achieved immortality in the hearts of fishermen.
5. McMaster's Bridge to Mio Pond FPC boundary (Segment (Segment II) - 14 miles - The river begins a stretch of wider, deeper, slower flow, largely due to the North and South Branch inflow. The channel becomes straighter and is lined with bottom land hardwoods and occasional aspen-birch. There is frequent residential development and access within this subsegment.

Segment III - Mio Pond FPC Boundary to Alcona Pond FPC Boundary

Middle Au Sable (23 miles) - Below Mio, the Au Sable becomes a large river flowing quick and strong between fluctuating high and low banks. It has a wider - up to 125 feet - attractive channel that is relatively straight with occasional curves. County roads 600 and 602 parallel the upper half of the segment. Access and development are very infrequent.



Typical River Channel and Vegetation
Below Grayling - Segment II





Typical River Channel And Vegetation Below Foote Dam - Segment V



Segment IV - Alcona Pond FPC Boundary to Loud Pond
FPC Boundary

Reservoir area (7 miles) - Below Alcona Pond, the Au Sable experiences the impact of fluctuating water levels from the power dam drawdown. It flows strong, deep, and attractively between occasional high sand bluffs and frequent long stretches of lowland conifer. Development and access in this segment is non-existent.

Segment V - Foote Dam to Oscoda (Detroit-Mackinac
Railroad Bridge)

Lower river area (12 miles) - This segment is also affected by fluctuating water levels due to Foote Pond drawdown. It is a smooth, powerful, almost straight flowing segment, with high banks in the upper half and a lower, wider flood plain in the lower half. Vegetation has changed conspicuously to all northern and lowland hardwoods. Access and development are nonexistent, but Wurtsmith Air Force Base does influence the solitude of this segment.

Segment VI and VII - South Branch - Source to
Au Sable Mainstream

The South Branch has three distinctly different subsegments:

1. Headwaters area (Segment VI) - 15 miles - From its source at Lake St. Helen, the South Branch wanders through 15 miles of open marsh, tag alder swamp, and lowland conifers to Roscommon. It is a small, almost impenetrable stream with very infrequent development and access.
2. Urban area (Segment VI) - 6 miles - Here, the South Branch flows through Roscommon to Chase Bridge. It is a larger, deeper river, but follows a slow wandering course through tag alder, marsh and lowland conifer swamp. River banks are extensively developed where possible and access is frequent.
3. Middle and lower South Branch (Segment VI) - (16 miles) - The South Branch changes abruptly to an area of relative solitude and primitive environs. The water flow increases and winds through extensive areas of lowland conifer and

South Branch of the Au Sable River



Below Roscommon - Segment VII...

Below Chase Bridge - Segment VII.



occasional aspen-conifer slopes. Access is infrequent and some development does occur in the lower 6 miles. This subsegment has achieved lasting fame as a "trout river" and for the primitive state management area known as the "Mason Tract".

Segment VIII and IX - North Branch - Source to
Au Sable Mainstream

The North Branch has two distinctly different subsegments.

1. Headwaters area (Segment VIII) - 19 miles - The North Branch arises from marsh and ground water seepage adjacent to Otsego Lake. It flows as a small, wandering creek through nearly impenetrable areas of tag alder and lowland conifer for approximately 11 miles. The lower headwater section increases rapidly in size, after passing Turtle and Chub Creek in-flows, until it reaches Lovell Bridge. The lower section becomes a wider shallow stream with occasional areas of heavy development. Overall, this subsegment has light development and infrequent access.

A small impoundment is located 1 mile below Bell Marie Lake and dam #2 is located 1.5 miles below the Turtle-Chub Creek in-flows.

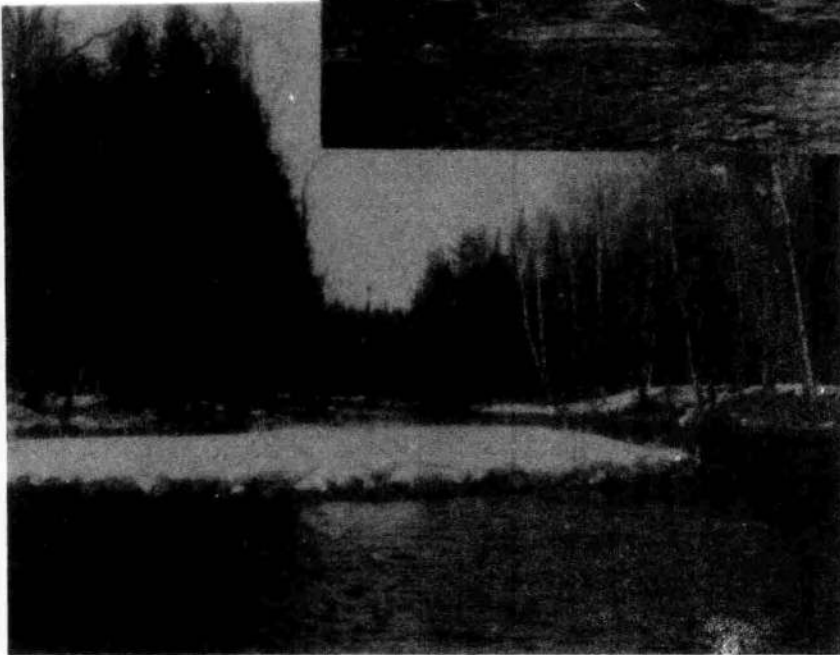
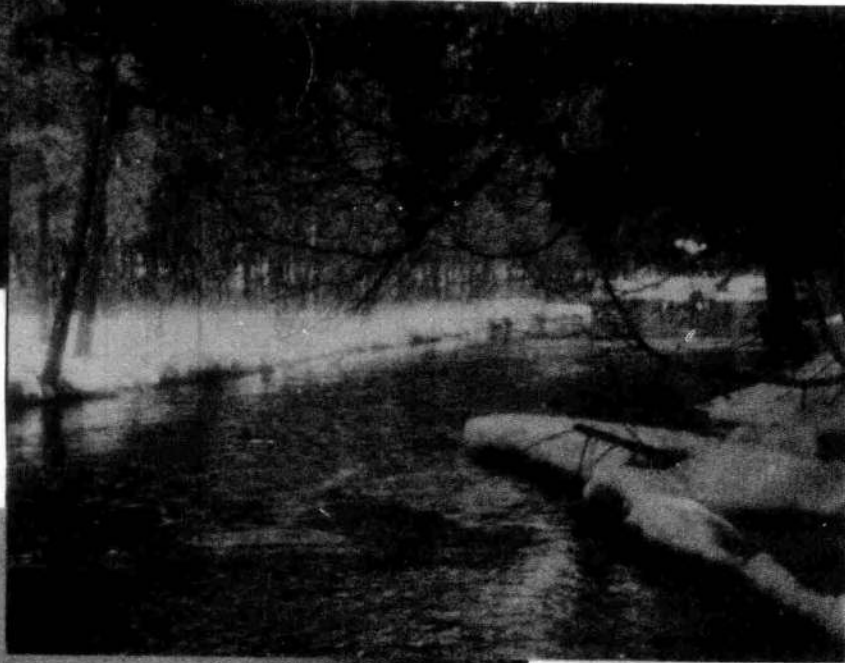
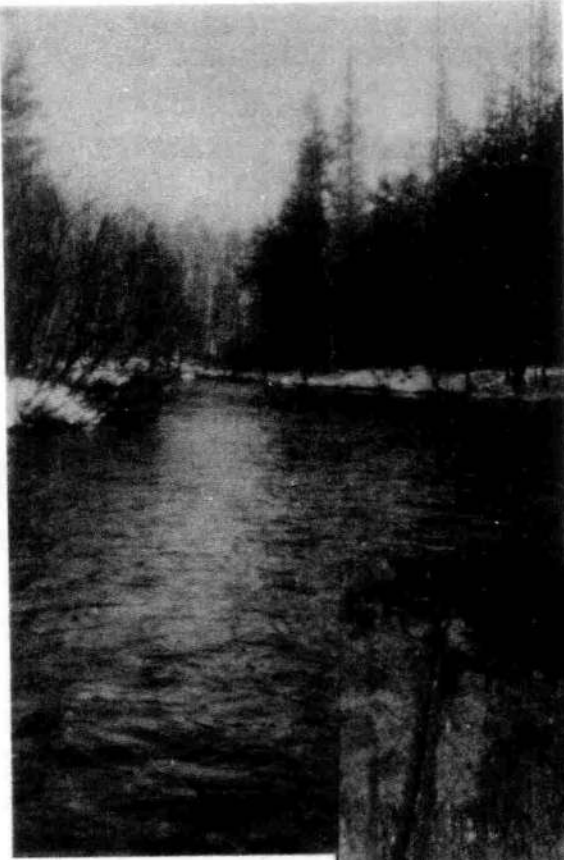
2. Middle and lower North Branch (Segment IX) - 17 miles - Except for heavy development immediately below Lovell Bridge and moderate development in the lower 6 miles, this segment retains a basically primitive shoreline. It is occasionally a broad-shallow and narrow-deep river with interesting bends and variable vegetative types. Access is infrequent.

B. Physiography

The Au Sable's outstanding scenery is presented in dramatic fashion by constantly changing topography. Each land form situation offers an attractive and varying display of geologic and vegetative conditions. High bluffs, lowland swamps, gentle slopes, river banks, upland plateaus, and marshland often fluctuate over relatively short distances and provide background for the river's outstanding scenic resource.

This review touches on some major physiographic features of the Au Sable River corridor.

Au Sable North Branch - Segment IX
River Channel and Vegetation.



Segment I - Source to Interstate 75 Bridge

From its source to the Old Power Pond, the upper Au Sable winds through a wide, low flood plain. Bank elevation may average 2 feet at the shoreline and often maintain that elevation for 1/2 mile back on both sides before abruptly rising. The higher upland is often visible from the river, vegetation permitting.

Segment II - Interstate 75 Bridge to Mio Pond FPC Boundary

The lower section to Mio Pond is quite diverse. The area from Grayling to McMaster's Bridge is characterized by 10 to 20 foot banks interrupted by occasional long stretches of lowland conifer swamp. The swampy areas lay 2 to 3 feet above water level and often extend several hundred feet or more from the river's edge to higher ground. The higher ground continues beyond the river corridor and is very flat to slightly rolling. The Shellenberger Lake inlet enters 2 miles below Grayling. At this point, the river occupies several paralleling channels flowing through 2 miles of semi-open marsh.

Stream gradient is approximately 2.8 feet per mile between Frederick and Grayling, a distance of 20 miles. Gradient averages 3 feet per mile between Grayling and McMaster's Bridge, a distance of 36 miles.

Segment III - Mio Pond FPC Boundary to Alcona Pond FPC Boundary

The river channel remains tightly confined between banks and slopes ranging from 10 to 80 feet high. Bank elevations vary in undulating fashion and continually approach and recede from the river's edge. The fringe of low swamp still occupies the terrace above water level but its width varies from 1/4 mile to nonexistent.

The segment has several very short stretches of open sedge-marsh.

River bank erosion occurs infrequently and may be caused by a combination of many factors. Rain, water, frost, waterlogged soils, wind, and man have all helped several bank areas to become severely eroded. It added an interesting physiographic feature to the riverscape.

Segment IV - Alcona Pond FPC Boundary to Loud Pond FPC Boundary

Here, the river remains similar to the above segment except higher banks and taller vegetation give it a more confined atmosphere. The swamp terrace ranges from 2 to 5 feet above water level and the primary terrace slope ranges up to 75 feet.

The waterline, accentuated by the fluctuating water level from Alcona Pond drawdown, is conspicuous during the first 5 miles. The waterline is evident from slight soil erosion and the "soil film" left on periodically submerged objects.

Large areas of severe bank erosion are strongly evident in several locations. Many eroded areas are the result of early logging. Foot traffic, natural fences and fluctuating water flow reduce their recovery rate. Overall, they are insignificant and may add interest to the riverscape.

River width in this segment ranges from 100 to 150 feet. Depth may average 24 inches during normal flow.

Segment V - Foote Dam FPC Boundary to Oscoda

There is an obvious change from the deeply cut river channel above Foote Dam. Here, the river enters an extremely flat ancient lake bed east of Oscoda. River banks rarely exceed 10 feet and the riverscape becomes very open and unconfining. The river continues to flow deep and strong with large, sweeping bends.

Bank erosion continues as a natural result of water action on erodable soils. It is accelerated in places by foot traffic and the fluctuating water level from Foote Dam drawdowns.

Segment VI - South Branch - Source to Chase Bridge

From Lake St Helen, the South Branch wanders through semi open marsh and tag alder swamp country. This is an extensive low area without highly significant land features, part of which is known as Hudson Creek Swamp. There is no perceptible change in elevation or high ground until Roscommon. From Roscommon to Chase Bridge, the land area has better drainage and river banks may range from 2 to 4 feet high but still retain the low tag alder swamp character.

Segment VII - Chase Bridge to Mainstream

There is a dramatic physiographic change below Chase Bridge. Bank elevation ranges from 1 to 15 feet and the primary terrace slope becomes strongly evident and confining. This slope will reach a height of 60 feet in the segment. The river channel will vary from 30 to 90-feet wide and follows a gentle winding, sometimes almost straight, course. The lowland swamp terrace, 1 to 2 feet above river level, will continue sporadically before diminishing below Smith Bridge. High, well-drained terraces persist below Smith Bridge until 1 mile before entering the mainstream. The last mile is a lowland terrace from the old river flood plain.

Segment VIII - North Branch - Source to Lovell Bridge

The North Branch gradually cuts a deeper channel as it progresses toward the mainstream and there is no abrupt physiographic change. It remains a small stream winding slowly through swamp and marsh country as it passes through Emerald Lake and the Chub and Turtle Creek intersection. Below Turtle and Chub Creeks, the river becomes more confined to its channel as the surrounding land area rises 10 to 20 feet. Here, the river widens to 70 to 80 feet but remains quite shallow, straight, open, and has many small islands.

Segment IX - Lovell Bridge to Mainstream

Below Lovell, and continuing to the mainstream, the river channel is well defined as it cuts into the out-wash plain. Bank elevations increase 2 to 10 feet and the primary terrace slope rises up to 60 feet before leveling out. River terraces often exceed 300 feet in width and remain swampy but

become considerably narrower below the Big Creek inflow. The river channel becomes increasingly sinuous below Lovell and particularly below the Big Creek intersection. Curves are often sharp and the channel is studded with occasional small islands. Overall, the North Branch channel averages 96 feet in width.

C. Soils (See Map II and Table I)

The soils of the Au Sable River are situated on three main levels - flood plains, terrace level, and outwash plain. The outwash plain was deposited as the glaciers started to recede. As the glaciers receded further and the amount of water increased, the Au Sable began to downcut through its own outwash plain, thus producing the terrace level and the present river level.

The outwash plain is primarily a deep medium sand soil with very little soil development. Because of its sandy nature, water percolates through it rapidly causing a water scarcity for plant life. The principle vegetation is jack pine and oak. There are some areas that have more developed sandy soils and others with heavy textured bands having better nutrient and moisture status to support quaking aspen, red pine, and higher site oak and jack pine.

On the terrace level, gravel is a predominate component of the soil. This gravel is found in many cases, throughout the soil profile, ranging from 5 to 30 percent of the soil material; often, it starts at 18 to 24 inches and continues throughout the profile. The texture of the layer above the gravel is sand, resembling the weakly developed soil of the outwash plain. The vegetation of this soil is jack pine and oak. Along this terrace there are many areas of well-drained, heavy textured soils and more strongly developed sands that support quaking aspen, white pine, and more productive red pine.

The soils in the flood plain are mostly poorly drained organics. The organic layer varies from about 6 inches to 5 feet deep. The mineral layers below are usually sand with a few having sands of finer textured materials just below the organic layer. White and black spruce, balsam fir, northern white cedar, and tag alder occur on these

AU SABLE RIVER WATERSHED SOIL ASSOCIATIONS AND USE LIMITATIONS

TABLE I

DEGREE OF LIMITATIONS FOR SELECTED USES

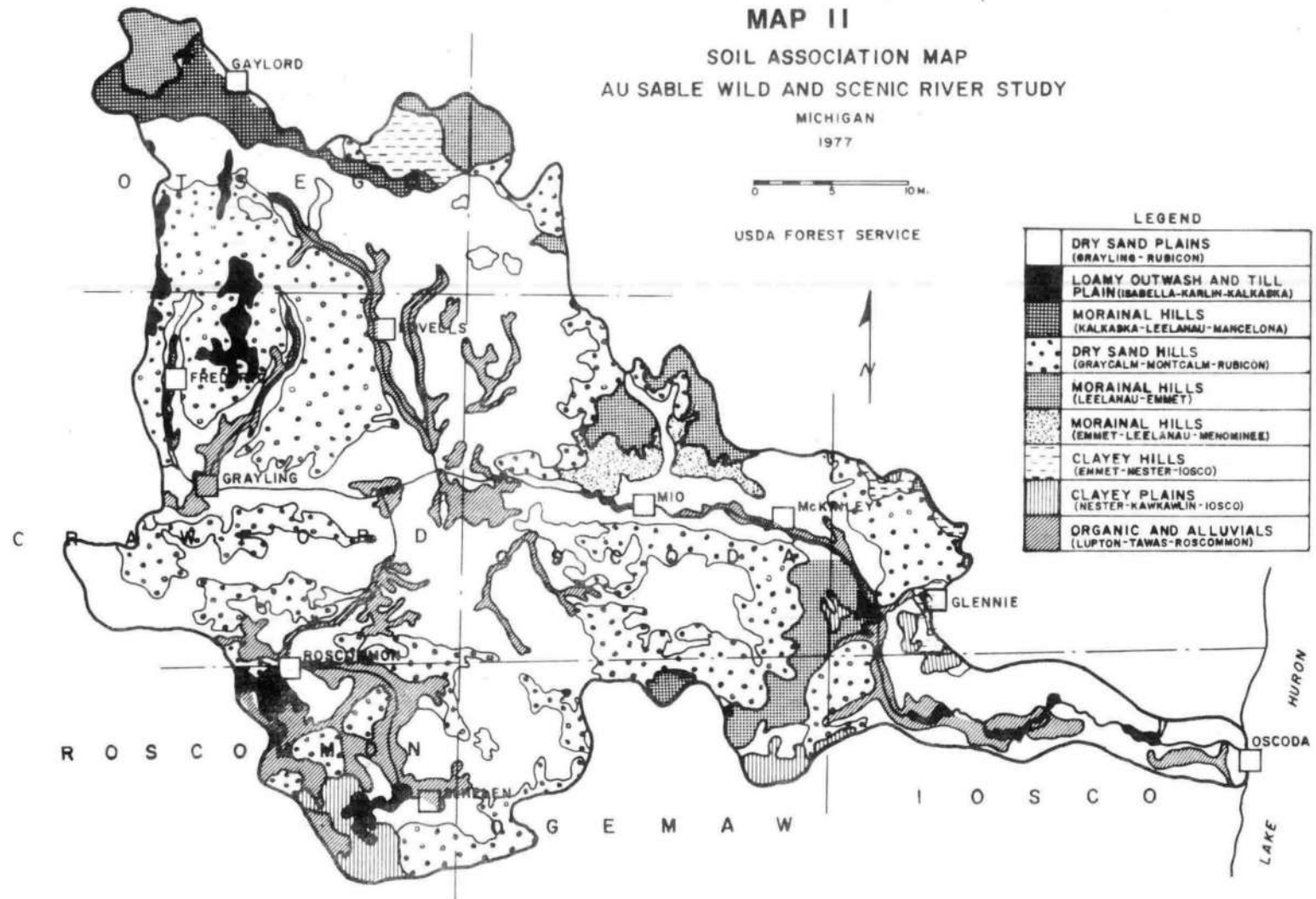
NAME	DOMINANT SLOPE	RESIDENTIAL WITH-OUT PUBLIC SEWER	COTTAGES & UTIL. BLDGS.	CAMP SITES & PICNIC AREAS	FACTORS LIMITING USE	PERCENT OF WATERSHED	PATHS & TRAILS	STREETS & HIGHWAYS
GRAYLING-RUBICON ASSOC. SANDY SOILS OF JACK PINE PLAINS	1-3%	SLIGHT	SLIGHT	MODERATE	BLOWING SOIL	44	MODERATE	SLIGHT
ISABELLA-KARLIN KALKASKA ASSOC. SANDY & LOAMY SOILS OF THE HWD PLAINS	1-3%	SLIGHT	SLIGHT	SLIGHT	BLOWING SOIL	2	SLIGHT	SLIGHT
KALKASKA-LEELANAU-MANCELONA ASSOC. DEEP SANDY & GRAVELLY SOILS OF HWD PLAINS	1-3%	SLIGHT	SLIGHT	SLIGHT	BLOWING SOIL	3	SLIGHT	SLIGHT
GRAYCALM-MONTCALM RUBICON ASSOC. GENTLY ROLLING TO HILLY SANDY UPLANDS	8-15%	MODERATE TO SEVERE	MODERATE TO SEVERE	MODERATE TO SEVERE	SLOPE, BLOWING SOIL	27	MODERATE	SLIGHT TO MODERATE
LEELANAU-EMMETT ASSOC. LOAMY SANDY SOILS ON THE ROLLING TO HILLY UPLANDS	8-15%	MODERATE TO SEVERE	MODERATE TO SEVERE	MODERATE TO SEVERE	SLOPE, BLOWING SOIL, SMALL STONES	7	MODERATE	SLIGHT TO MODERATE
EMMETT-LEELANAU MENOMINEE SANDY AND LOAMY SOILS ON THE UNDULATING TO ROLLING UPLANDS	3-8%	SLIGHT	SLIGHT	SLIGHT	SLOPE, BLOWING SOIL, SMALL STONES, SLOW PERCOLATION	3	SLIGHT	SLIGHT
EMMETT-NESTER-IOSCO ASSOC. WELL DRAINED TO SOMEWHAT POORLY DRAINED SANDY & LOAMY SOILS OF THE UNDULATING TILL PLAINS	3-8%	MODERATE TO SEVERE	MODERATE	SLIGHT TO MODERATE	SMALL STONES, SLOW PERCOLATION SHRINK-SWELL, FROST ACTION, LOW STRENGTH	2	SLIGHT	SLIGHT TO MODERATE
NESTER-KAWKAWLIN-IOSCO ASSOC. WELL DRAINED TO SOMEWHAT POORLY DRAINED HEAVY LOAMY SOILS OF THE UNDULATING TILL PLAINS	3-8%	SEVERE	MODERATE TO SEVERE	MODERATE TO SEVERE	WET, SLOW PERCOLATION, SHRINK-SWELL, FROST ACTION, LOW STRENGTH	2	SLIGHT TO MODERATE	MODERATE TO SEVERE
LUPTON-TAWAS-ROSCOMMON, ORGANIC SOILS & WET SANDY SOILS OF THE MARSHLANDS & THE SWAMPS	0-2%	VERY SEVERE	VERY SEVERE	VERY SEVERE	WET, FLOODS, LOW STRENGTH, EXCESS HUMUS	9	SEVERE	VERY SEVERE

MAP II
SOIL ASSOCIATION MAP
AU SABLE WILD AND SCENIC RIVER STUDY
MICHIGAN
1977

0 5 10 M.
 USDA FOREST SERVICE

LEGEND

	DRY SAND PLAINS (GRAYLING - RUBICON)
	LOAMY OUTWASH AND TILL PLAIN (ISABELLA-KARLIN-KALKASKA)
	MORAINAL HILLS (KALKASKA-LEELANAU-MANCELONA)
	DRY SAND HILLS (GRAYCALM-MONTCALM-RUBICON)
	MORAINAL HILLS (LEELANAU-EMMET)
	MORAINAL HILLS (EMMET-LEELANAU-MENOMINEE)
	CLAYEY HILLS (EMMET-MESTER-IOSCO)
	CLAYEY PLAINS (WESTER-KAWKAWLIN-IOSCO)
	ORGANIC AND ALLUVIALS (LUPTON-TAWAS-ROSCOMMON)



soils. In draws and pot holes on the terrace, similar soils also occur with lowland hardwoods such as elm, ash, and paper birch. Between the flood plain and terrace, there is often a transition zone containing the moderately well-drained and somewhat poorly drained soils that are sand or heavy textured. Quaking aspen, paper birch, and balsam fir dominate on these areas.

The heavier textured soils that are better drained and could be used for farming occur only in small areas and on steep slopes that are not conducive to farming. There is some evidence of small gravel pits, but apparently none have been commercially developed.

D. Vegetation

Vegetation is the basis to the Au Sable's outstanding values and their protection. The river's high scenic quality results from constantly changing vegetative types and conditions, all of which remain in a relatively natural condition and in apparent harmony with other natural elements. Vegetation shades the water helping to maintain low water temperatures. Vegetation softens incongruities and provides habitat and food for wildlife. Soils are stabilized and developed by vegetation. The great diversity of trees, shrubs, ferns, small flowering plants, lichens, mosses, and mushrooms offer an interesting variety of form, color and texture - often changing with each season.

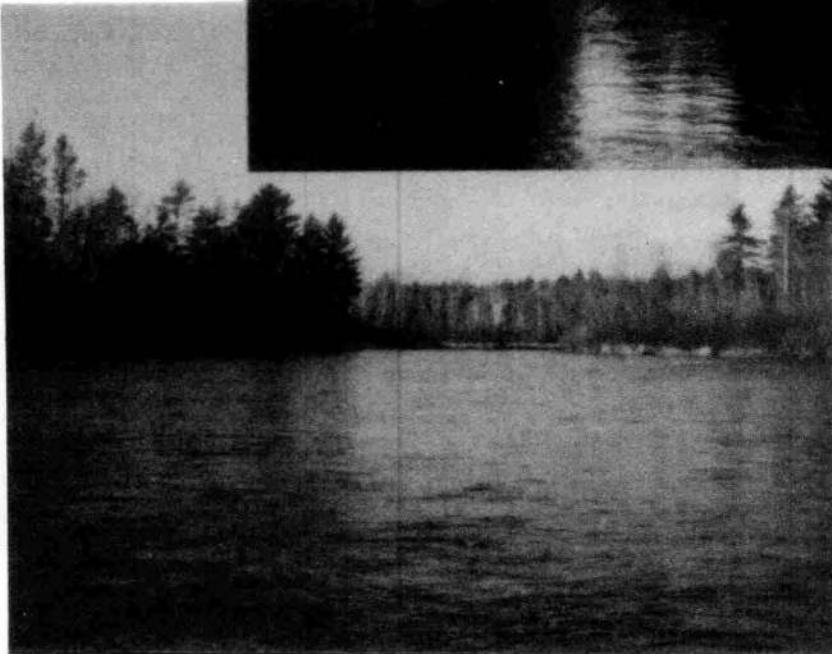
Vegetation along the Au Sable River is generally typical of east central Michigan. However, two features combine to produce distinctive local plant communities within the river zone. First, on the stream terraces, water from the river and local aquifers permit a greater variety of growth than that found on the surrounding plains. There is also a preponderance of silty and organic soils found on the river terraces with their associated different vegetative types. Secondly, the river winds through a variety of land forms and soil types, each having its own distinct vegetative cover.

This vegetative description is not all encompassing, but describes dominant plants in either the superstory or substory for the various land forms.

Typical Vegetative Conditions On The Ausable -



Below Grayling -
Segment II...



Below Mio Pond -
Segment III.



Typical Vegetative Conditions On
The Au Sable South Branch -
Segment VII.



Segment I - Source to Interstate 75 Bridge

Vegetation in the Au Sable headwaters is generally those species associated with an open marsh and swamp ecosystem. Tag alder, willow, low grasses, and sedges dominate but are interspersed with stretches of lowland conifer and clumps of aspen. From Batterson Road Bridge to 2 miles above the power pond, the river passes through an extensive lowland area of semiopen marsh and swamp. Tag alder and low sedges and grasses are predominate but willow, larch, and black spruce commonly occur.

Segment II - Interstate 75 Bridge to Mio Pond FPC Boundary

Below Grayling, the vegetation changes abruptly to lowland conifer species and jack pine with red and white pine mixed on well-drained soils. White cedar, white spruce, and tag alder dominate the poorly drained areas and the entire subsegment. Here, there is a rich profusion of vegetation and aspen, white birch, red oak, wild raisin, and red-stemmed dogwood are significant components. This condition prevails to McMaster's Bridge and offers many old stands of very large white spruce, white pine, and white cedar.

At McMaster's Bridge there is a change toward lowland hardwoods. Although the large elms have succumbed to Dutch elm disease, the dead snags remain and are being replaced by black oak, young elm, and a profusion of understory shrub species.

Segment III - Mio Pond FPC Boundary to Alcona Pond FPC Boundary

The lowland sites continue but are occupied by increasing amounts of white birch, aspen, and white cedar in the poorly drained areas. Stands of dead elm occur less frequently and are being replaced by tag alder, black ash, and red-stemmed dogwood.

Jack pine remains on the primary terrace edges, but large attractive clumps of red and white pine occur frequently on the slopes.

Segment IV - Alcona Pond FPC Boundary to Loud Pond FPC Boundary

The species composition on lowland sites becomes quite variable, shifting from white cedar-white spruce to white birch-balsam fir on better

drained sites. Stands of dead elm occur frequently and are being replaced by tag alder, red-stemmed dogwood, and occasional black ash and young elm. Overall, forest growth on the lowland sites is dense and tall.

Segment V - Foote Dam FPC Boundary to Oscoda

Conifer species are conspicuously absent in this segment and have been replaced by extensive stands of dense, tall lowland hardwoods. Black ash, box elder, and particularly silver maple, occur commonly with tag alder, dogwood, wild raisin, and willow in the understory. This is an area of dense vegetation with a large variety of grasses, sedges, and other herbaceous plants.

Segment VI - South Branch - Source to Chase Bridge

From Lake St. Helen to Roscommon, vegetation consists largely of marsh sedges, grasses, tag alder, dogwood, and occasional small clumps of larch-black spruce. Stands of white cedar and dead elm also occur less frequently. There are many open areas dominated by grasses, sedges, and low shrubs.

Segment VII - Chase Bridge to Mainstream

The white cedar swamps dominate shoreline vegetation from Chase Bridge to the Mainstem. It is occasionally interrupted by short stretches of pine and aspen types occupying slopes near the river and tag alder-sedge openings. Jack pine covers the plains area beyond the edge of the primary terrace and often mixes with excellent stands of white and red pine on the slopes. Existing forest stands are often composed of large, majestic trees.

Segment VIII - North Branch - Source to Lovell Bridge and Segment IX - Lovell Bridge to Mainstream

From its source to Lovell, the North Branch winds through low tag alder marsh, and white cedar swamp, with occasional short stretches of aspen clumps, white spruce, and black spruce. This is an area of lowland plant communities. Cedar-white spruce-tag alder swamp fringes continue below Lovell becoming quite narrowly confined to the river's edge. Fingers and short stretches of jack, and particularly red and white, pine occur more frequently on the primary terrace slopes. There is some birch-aspen mixed in. This vegetative condition prevails below Kellogg to the mainstream

except for an occasional short stretch of cattail marsh and several very small gravel bars covered with canary reed grass.

E. Fish & Wildlife

Fish and wildlife in the Au Sable River corridor are generally abundant and varied. The high quality water and its stable flow sustain an excellent cold water fishery and aquatic biota. As noted in Chapter II, the entire Au Sable Basin is an excellent wildlife area. The river corridor reflects this, often in an intensified way, since the stream flow tends to create a richer "ribbon of life" along the river terrace and also serves many species directly as a drinking source.

Historically, the Au Sable was nationally known for its outstanding fishery and the Michigan Grayling. However, fishing has declined due to pressure and environmental degradation since 1900. The Michigan grayling became scarce shortly after trout appeared in the river, about 1890. The grayling's disappearance was attributed to heavy fishing pressure, habitat destruction by logging, and the introduction of trout.

1. Fish - (See Appendix F for additional data.)

The Au Sable River is nationally known as an outstanding trout stream. Its crystal clear waters and sparkling riffles are held in highest esteem by those who best know the streams of America.

Segment I - Source to Interstate 75 Bridge

From the river's source to Grayling, trout populations vary from low to good. The upper half has good brook trout populations and is lightly fished. The lower half has low brown trout and lower brook trout populations. This lower half is heavily influenced by marginal water temperatures caused by a lack of cooler ground water inflow and the two impoundments near Grayling. There is also a greater occurrence of warm water fish in the lower half.

Segment II - Interstate 75 Bridge to Mio Pond FPC Boundary

The Grayling to Stephan's Bridge subsegment is still influenced by the two impoundments above Grayling. The upper half has low populations of larger brown trout and some warm water fish from the ponds. The

lower half of this subsegment is the beginning of quality trout fishing. The lower portion beginning at Burton's Landing is part of a DNR regulated "Quality Fishing Area".

Fish and other aquatic life suffer from inputs of polluting materials and siltation from the Grayling urban area. However, water quality has improved considerably since sewage effluent was removed in November 1971.

The Stephan's Bridge to McMaster's Bridge subsegment has excellent brown trout populations and good to low populations of brook and rainbow trout. This section is considered the "heart of Au Sable trout fishing" and is designated a "Quality Fishing Area" down to Wakely Bridge. Excellent water, cover, and bottom conditions make this a rich area for all aquatic biota.

There are good, but low density, brown trout populations below McMaster's Bridge. This remains a high quality cold water fishery but is fished lightly due to poor access and difficult wading.

Segment III - Mio Pond FPC Boundary to Alcona Pond FPC Boundary

This is high quality water, bottom, and cover and it sustains good populations of large brown trout. The Cummins flat to McKinley section is a DNR regulated "Quality Fishing Area" and the entire segment is managed for trophy trout.

Segment IV - Alcona Pond FPC Boundary to Loud Pond FPC Boundary

This segment has good populations of walleye, northern pike, and large brown trout. However, the fishery and aquatic life are affected by the fluctuating water level from Alcona dam and by warmer water from the reservoir. This segment is difficult to fish due to deep and fluctuating water and is utilized largely by local people.

Segment V - Foote Dam FPC Boundary to Oscoda

Below Foote Dam, there are very high populations of steelhead and salmon during seasonal spawning runs. Trout populations are marginal to low, largely due

to the impact of upriver reservoirs. Fishing pressure is extremely heavy on this segment during the anadromous fish runs.

Segment VI - South Branch - Source to Chase Bridge

The South Branch above Roscommon supports marginal to low populations of brook trout. This low fish population can be attributed to higher water temperatures normally found in headwater areas. The cold water fishery improves significantly downstream between Roscommon and Chase Bridge, with the entrance of cold water from Beaver Creek and good groundwater at Steckert Bridge. This sub-segment supports marginal populations of large brown trout.

Segment VII - Chase Bridge to Mainstream

The South Branch below Chase Bridge consists of excellent trout habitat, having the desired pool-to-riffle ratio indicative of quality trout waters and lower water temperatures. It has good populations of large brown trout whose production has remained unchanged over the past 10 years. This section is a DNR designated "Quality Fishing Area" and well-known for its heavy "hatches" of aquatic insects.

Segment VIII - North Branch - Source to Lovell Bridge
and Segment IX - Lovell Bridge to Mainstream

The North Branch above Lovell tends to have warmer water and therefore is a less productive cold water fishery. This is partly a result of two small dams, topography, and vegetation. The North Branch below Lovell supports very high populations of brook trout. It is a good trout fishery with excellent water, bottom characteristics, and fish cover for its entire length. The portion below Kellog's Bridge supports excellent populations of brown trout with many large fish. A DNR designated "Quality Fishing Area" is located between Sheep Ranch and the Mainstream.

2. Wildlife

The river corridor attracts a wide variety of wildlife species either as permanent residents or visitors. Availability of water and diverse vegetation offer an abundance of food and cover and attract many species not found outside the corridor. The corridor is heavily used by large flocks of robins,

cedar waxwings, vireos, warblers, woodcock, ruffed grouse, and many other small birds, particularly during dry seasons and when many plant species are bearing fruit. Appendix F provides a listing of wildlife species found within the watershed.

Although bald eagle nesting occurs largely in the Lower Au Sable, below Mio, they do range over the entire river corridor. Known nesting sites are located in the impoundment areas between Loud and Foote Ponds, near McKinley, Lake St. Helen, and between the East and North Branches.

The ice free areas below the reservoirs provide over-wintering areas for many ducks, particularly golden eye, bufflehead, American mergansers, and red-breasted mergansers.

Abundant forage, consistent winter temperatures, and protection from wind and snow make the river corridor high priority winter deer range. The corridor is also heavily used by deer during dry summers.

The river is a major population source for beaver. Beaver trapping on the mainstream is carefully regulated to provide a surplus for replacing beaver removed from feeder streams during the previous trapping season.

Segment I - Source to Interstate 75 Bridge

This segment has high mink populations down to the North Branch inflow. The best beaver and otter populations are also found above Grayling with seven to eight beaver ponds, two or three of which are active. This is a heavily used deer yarding area and the marshes below Batterson Road provide fair to good brooding areas for teal, black ducks, and mallards.

Otter populations decline from Grayling to Mio. Although heavily developed, the Grayling to Mio section continues to provide heavily used winter deer range. Many residences are unoccupied during winter seasons and, therefore, do not interfere with yarding activity.

The South Branch to Mio section is regarded as a critical deer yarding area. There are fair populations of mink and muskrat and beaver-otter populations are low to fair. Although the Kirtland's warbler nests in the adjacent jack pine stands, the river corridor is not essential to its existence. Pileated and other woodpecker species have responded favorably to the large areas of standing dead elm found in this area. There is also light use by waterfowl and the subsegment receives occasional use by small flocks of wild turkey.

Segment III - Mio Pond FPC Boundary to Alcona Pond FPC Boundary

Good beaver populations and high value deer yarding area continues between Mio and Alcona Ponds. Several thousand over-wintering golden eye, bufflehead, and red-breasted and American mergansers also use this section, particularly the upper half.

An active bald eagle's nest is located within the river corridor several miles above McKinley Bridge. A fair population of black bear, for this part of Michigan, occasionally uses the upper half of this segment. Extensive use of the corridor by wild turkey occurs during spring, summer, and fall.

Segment IV - Alcona Pond FPC Boundary to Loud Pond FPC Boundary

Critical deer yard areas continue between Alcona and Loud Ponds. This is a transition area between predominantly hardwood and conifer bottomland vegetation. This segment also has good populations of muskrat.

Segment V - Foote Dam FPC Boundary to Oscoda

This segment is less important as a deer yarding area but provides winter range for the only turkey flock in the area. It also provides low level waterfowl nesting.

Segment VI - South Branch - Source to Chase Bridge and Segment VII - Chase Bridge to Mainstream

The lowland marshes above Roscommon provide high value deer yarding areas and fair populations of beaver. There are also fair levels of waterfowl brooding. The St. Helen bald eagle nest is also

located in that vicinity. Below Roscommon, otter populations increase slightly and high priority deer winter range continues.

Segment VIII - North Branch - Source to Lovell Bridge
and Segment IX - Lovell Bridge to Mainstream

High value winter deer range continues along the entire North Branch. Above Lovell, large semiopen areas of grass and sedge provide nesting areas along the river for large concentrations of upland plover. Similar habitat is used extensively by woodcock.

The Kirtland's warbler nesting area occurs outside the corridor near Lovell. There is no known use of the river corridor at this point by the warblers.

The lower North Branch receives some over-winter use by waterfowl.

F. Waterflow

Highly stable waterflows of very high quality water may be the single most significant trait of the Au Sable River. The coarse sand-gravel composition of the watershed allows rapid infiltration of water and tends to level precipitation into a steady groundwater contribution to streamflow. Waterflows vary insignificantly throughout the season because most inflow is from groundwater sources. However, riverflow rates may respond to very rapid snow melts and some sections will experience increases in water level and turbidity. High or dangerous water conditions are rare.

The greatest river discharge occurs during April following snow melt, with an average discharge at Mio from 1961 to 1965 of 1,286 cfs. The average discharge drops to 1,163 cfs in May; 864 cfs in June and 746 cfs in July compared to an annual average of 957 cfs.

Segment I - Source to Interstate 75 Bridge and
Segment II - Interstate 75 Bridge to Mio Pond
FPC Boundary

The mainstream above Grayling has a narrow winding channel with occasional beaver dams and debris clogged passages. Although safely floatable from Cameron Road Bridge, it is arduous canoeing and not popular. Shallow water and partly submerged debris also discourage canoe use.

The stream gradient averages 4.0 feet per mile. The stream gauging station at Grayling indicates an average discharge of 73.5 cfs -- or approximately 4 percent of the total discharge at Oscoda.

Discharge increases rapidly between Grayling and Mio. Streamflow measurements in July 1972 indicate a discharge of 76 cfs at Grayling, 141 cfs at I-75, 230 cfs at Stephan's Bridge, 511 cfs at Beaver Bend, and, 862 cfs at Mio. The increase reflects East, North, and South Branch inflow as well as groundwater flow. Current speed below Grayling varies from 2 to 4 m.p.h. depending on depth, bottom conditions, and gradient. The gradient is 4.71 feet per mile below Grayling.

The river follows a sinuous, occasionally narrow course before straightening at McMaster's Bridge. It has sufficient depth for canoeing at all seasons, but heavy ice may be encountered above this area during severe winters. There are many short sections of fast riffle current, sharp turns, and occasional sweepers and down debris which constitute challenging and relatively safe floating for the novice and beginner canoeists.

Segment III - Mio FPC Boundary to Alcona FPC Boundary

From Mio to Alcona Pond, the river has occasional large curves and many short relatively straight stretches. The river is wide, flows at a moderate speed, and has sufficient depth for safe, pleasant canoeing by beginner-novice level canoeists. It is free of all debris and sweepers but may be iced over below McKinley during severe winters. There are occasional short stretches of riffle.

Current velocity may average 2 to 4 m.p.h. depending on channel configuration and discharge increases from 982 cfs (1966 average) at Mio to 1,350 cfs (1090-1914 average) at Alcona. The increase is attributed to inflow from Cherry, Perry, Comins, Wolf, and Land Creeks and groundwater sources.

Although the Mio Dam is still used by Consumers Power Company for power generation, an agreement between the DNR and Consumers Power in 1966 set Mio Dam discharge equal to pond inflow. Therefore, river discharge above and below the pond is equal and power generation should not affect the lower riverflow rates.

Segment IV - Alcona FPC Boundary to Loud FPC
Boundary and

Segment V - Foote FPC Boundary to Oscoda

Below Alcona Dam, the Au Sable flows through many large, gradual curves with few straight stretches over 1/4 mile long. It is a large river at this point and has sufficient depth and width for easy canoeing. However, during power generation discharge at Alcona, the water level may rise 4 feet and create somewhat hazardous conditions for inexperienced canoeists. Although this section is relatively free of debris, the current becomes quite strong forming deep eddies and some turbulence.

The power generating schedule at Alcona and Foote Dams, being dependent on waterflow, season, and power demand, is somewhat unpredictable. Therefore, water levels are also unpredictable. They maintain a partial flow of 14 cfs or 30 percent of full throttle 24 hours a day to provide water for the river below. This flow rate is something less than the inflow into the reservoir above. Twice a day, at approximately 10 a.m. and 3 p.m., the discharge is increased considerably to meet power demands and may run until noon and 9 p.m., respectively.



The water line, clearly evident in the above photo, results from the fluctuating water levels below Alcona Dam.

Average discharge at Alcona between 1909 and 1913 was 1,444 cfs without the influence of Alcona Reservoir. Discharge extremes during that same period were 4,800 cfs and 850 cfs. Discharge can be expected to range from 1,480 cfs to 3,650 cfs.

Conditions similar to those below Alcona also prevail below Foote Dam. However, the lower river has considerable amounts of sunken and partly submerged debris that is largely covered during high water.

Average annual discharge at Oscoda in 1966 was 1,937 cfs. Discharge at Foote Dam during power generation ranges from 1,480 to 3,650 cfs.

Segment VI - South Branch - Source to Chase Bridge

The South Branch above Roscommon follows a slow, sinuous course through lowlands. The channel is narrow and frequently choked with down trees, debris, and overhanging shoreline vegetation. Although safe, it is arduous, slow, and unattractive to most canoeists.

Below Roscommon, the river has adequate depth and width to provide safe, pleasant canoeing. It has many large gentle bends, several narrow channels, and many short interesting stretches of riffle. It is relatively free of debris, but may have several shallow stretches with exposed rock during very dry seasons.

Segment VII - Chase Bridge to Mainstream

August 1972 stream discharge at Chase Bridge, 6 miles below Roscommon was 91 cfs; Smith Bridge 136 cfs; Oxbow 178 cfs, and, at the mouth, 133 cfs. The lower river below Oxbow actually loses flow from infiltration and evaporation. An average annual discharge at Smith Bridge and the mouth would be 229 cfs and 252 cfs respectively. The stream gradient from Roscommon to the mouth is 4.4 feet per mile.

Segment VIII - North Branch - Source to Lovell Bridge and Segment IX - Lovell Bridge to Mainstream

The North Branch above Lovell progresses from a slow, narrow meandering stream, clogged with shoreline vegetation, to a much wider shallow river at Lowell. The vegetation, debris, and shallow water make this section very difficult to navigate with a canoe. Below Lovell, the first 1 1/2 miles may be

shallow and difficult during normal seasons but can be floated safely. The lower river has adequate depth and width for canoe use.

Streamflow measurements taken in July 1971, indicate discharges of 16 cfs at Old State Road; 79 cfs at the Ford; 125 cfs at Blackhole; 161 cfs at Lovell; 204 cfs at Kellogg; and 344 cfs at the mouth. Stream gradient from Dam #2 to the mouth is 8.7 feet per mile.

G. Water Quality

The Au Sable is an extremely stable stream because, like many other northern Michigan streams, it is fed mostly by ground water. The watershed is composed mostly of coarse sands. These possess high infiltration and percolation rates which tend to level precipitation extremes into a steady ground water contribution to the stream. This system also helps to lower stream temperatures during the summer months as groundwater inflow has a steady and low temperature.

Two monitoring programs are relied upon heavily in determining the existing water quality of the Au Sable River. One is the "Au Sable River Watershed Project Biological Report" (1971-1973) (ARBR) prepared by Gary F. Coopes and funded by the Northeast Michigan Regional Planning and Development Commission. The other is a monitoring system developed by the Huron-Manistee National Forest aimed at updating, extending, and supplementing the previous study. The Forest Service sampling was done at Burton's Landing, Smith Bridge, Reddog Property, Mio, Forest Road 4001, and Foote Dam. The discussion that follows comes from the data of these two studies.

Dissolved Oxygen (D.O.)

Dissolved oxygen is one of the most important indicators of water quality. It is necessary for the existence of most beneficial forms of aquatic life. The lack of dissolved oxygen in water causes an imbalance of normal aquatic life, and under extreme conditions, leads to the production of obnoxious odors. Dissolved oxygen is utilized in the stabilization and decomposition of organic materials.

Water Resource Commission's (WRC) water quality standards call for D.O. levels for intolerant fish, cold water species (trout, salmon), of not less than 6 mg/liter at any time for the average 7 day flow at a once in 10-year recurrence level. At greater flows, the D.O. should be in excess of this value.

Dissolved oxygen levels for the five Forest Service stations ranged from 6.1 to 13.1 mg/l. All values, therefore, exceeded the WRC minimum standards and most, in fact, were far in excess of the minimum. The ARBR indicated that effluent from treatment plants had depressed nocturnal dissolved oxygen levels but that new sewer systems at Roscommon and Grayling would correct these deficiencies by late 1973.

Nutrients

The most important nutrients to Michigan's lakes and streams are generally considered to be various forms of nitrogen and phosphorous. High levels of nitrates can come from ground water draining through organic soils, waste water, urban runoff, and septic tank drainage. Phosphates occur in surface or ground waters as a result of leaching from minerals, in natural processes of degradation, or as one of the stabilized products of decomposition of organic matter. It is an essential nutrient for plant and animal growth, and like nitrogen, passes through cycles of decomposition and photosynthesis. Nitrogen and phosphorous concentrations appear to be critical factors in regulating the biological production of lakes and streams.

Water Quality Criteria. The Federal Water Pollution Control Act (FWPCA, 1968) indicates that to avoid nuisance growths of aquatic vegetation, concentrations of total phosphorous should not be increased to levels exceeding 100 ppb in flowing streams or 50 p/b where streams enter lakes or reservoirs. It has also been reported that nitrate nitrogen at 100 p/b can cause excessive algae blooms in lakes, when essential concentrations of other nutrients are present. Flowing waters can generally contain more nutrient elements without problems than can lakes.

The ARBR report stated that samples indicated an average of 130 p/b nitrate nitrogen during the winter and that this was the level that could be expected from forested areas with little habitation and little land use. The Forest Service study found winter averages ranging from 70 p/b to 160 p/b at Smith Bridge and Mio, respectively.

Total phosphorous values ranged from 63 p/b at Mio to 4 p/b at Burton's Landing. The mean values ranged from 23 p/b at Smith Bridge to 10 p/b at Burton's Landing. All readings appear to be well within EPA guidelines for nuisance algae growth. This is supported by a lack of rooted or suspended aquatics in most of the river.

pH

The "pH" of water is a measure of the hydrogen ion concentration present. The practical pH scale extends from 0, very acidic, to 14, very alkaline, with the middle value (pH-7) corresponding to exact neutrality. Most natural waters are slightly alkaline due to the presence of carbonates and bicarbonates.

The WRC standards for pH call for hydrogen ion concentrations maintained between 6.5 and 8.8, with a maximum artificially induced variation of 1.0 unit within this range.

The mean pH values in the Forest Service study ranged from 7.8 to 8.1 for the 6 stations. No values were found outside of the acceptable range indicated by the WRC.

Temperature

Temperature influences aquatic productivity. Temperature changes may result from natural climatic conditions or man's manipulation of the riparian environment by people. Temperature is a function of latitude, season, time of day, duration of flow, depth, and many other variables.

The WRC standards for intolerant fish, cold water species, call for a range of from 32°F to a natural maximum limit. Peak temperatures should not exceed 70°F.

The ARBR report states: "Au Sable water temperatures are characteristically higher on the headwaters because of large lake surface areas (nearly all of its branches are formed by lake outlets) exposed to warming and the comparatively low volumes of flow, low velocities, and ground water availability" (Figure 9). Other areas of the river where temperatures normally exceed 70°F are in and below impoundments, and in low lying areas with little ground water input.

U.S. Geological Survey data for 1972, 1973, and 1974 was reviewed. Two stations are maintained. One is located at Grayling on the mainstream just upstream from the I-75 bridge, and one on the South Branch of the Au Sable River at Smith Bridge. For these three years of record, the mainstream averaged 23 days exceeding 70°F and the South Branch averaged 3 days. The peak temperature was 77.9°F and 74.3°F, respectively, for these two streams. The high temperature at Grayling probably resulted from the impoundment at Grayling, input from lakes, and less ground water inflow.

Fecal Coliform

Fecal coliforms are a specialized subgroup of the "total coliforms group", originating in the intestinal tract of man and other warm-blooded animals. They are not well adapted to survive outside of the intestinal tract, hence, their presence in water indicates relatively recent fecal contamination.

WRC standards call for the fecal coliform geometric average for 10 consecutive samples not to exceed 200 organisms/100 ml for total body contact recreation. Partial body contact allows the same average not to exceed 1,000. The FWPCA standards further indicate that not more than 10 percent of the total samples during any 30-day period should exceed 400.

The mean values for fecal coliform organisms range from 2 to 50 per 100 mililiters at Foote Dam and Burton's Landing, respectively. Only one individual sample exceeded the WRC standards.

Conductivity

Conductivity is a measure of a water's capacity to convey an electric current. It is an indication of the total concentration of ionized substances. By observing conductivity, variations in concentrations of dissolved solids can be observed. Often the dissolved solids can be estimated by multiplying conductivity by an empirical factor.

The ARBR study indicated that dissolved solids are about 60 percent of the measured conductivity. This gives dissolved solid values of approximately 200 pm or lower. The new WRC State standards allow up to 500 pm as a monthly average.

Segment I - Source to Interstate 75 Bridge and Segment II - Interstate 75 to Mio Pond FPC Boundary

Above Grayling, the greatest threat to water quality is high water temperature. The high temperatures result from Power Pond, Mill Pond, eight beaver dams and the lack of ground water inflow. The river also flows through marshy areas that increase exposure to sunlight and thereby raise water temperatures.

Existing development at Frederick, and Power Pond outside Grayling and the eventual failure of private septic systems also pose a threat to existing water quality. Housing units are increasing in the low lying areas adjacent to the river above Grayling, and therefore must be suspect in providing a seepage of nutrients and bacteria to the river.

Water samples at County 612 Bridge indicate high levels of nitrate-nitrogen as compared to the rest of the river system. Since there is little human use upstream, these inputs are unquestionably of natural origin. This situation diminishes downstream except for a sharp temporary upswing immediately below the East Branch. The higher concentrations in the East Branch are also of natural origin.

No appreciable increase in phosphate-phosphorous or coliform bacteria has been recorded at I-75, just below Grayling, since the sewage treatment plant was closed in 1971.

All other constituents tested were in normal ranges although chlorides increase sharply between test stations above and below Grayling. This increase is associated with storm water runoff from the Grayling area that contains street salt and other pollutants.

Bottom dwelling insect communities are often a good indication of water quality. The area below the former Grayling treatment plant is now well represented by intolerant insect species. However, while insect populations have rapidly responded to the diversion of the effluent from the river, any change in fish-community composition will take longer.

Below Grayling, chemical constituents are progressively diluted by groundwater and nutrients are rapidly utilized because of increased productivity in this area. However, the increased number of cottages along this stretch constitutes a threat to habitat quality because of the risk of nutrient seepage that stimulates aquatic plant growth in the prime trout waters below Burton's Landing.

Segment III - Mio Pond FPC Boundary to Alcona Pond
FPC Boundary

Nitrates are much lower in this section of the river because they are removed by biological production upstream. Their low level may be a limiting factor to productivity, while phosphates are at slightly higher levels of concentration than found in Mio. Chlorides continue to increase slightly as would be expected.

Warmer water temperatures and increased productivity (organic loading) have an adverse impact on insect communities below Mio Dam and reflect poor quality waters. This condition improves progressively downstream with cold water stream and ground water inflow.

Some contribution of nutrient matter to the river from the village of Mio is likely. Due to the

ground water contribution and the low levels of chemical concentrations tested at Comins Landing, this effect is probably minimal. However, contaminated well water found in samples tested by the Michigan Department of Public Health indicates the ground water aquifer is being contaminated by the septic systems in Mio.

Segment IV - Alcona FPC Boundary to Loud FPC Boundary
and Segment V - Foote FPC Boundary to Oscoda

Below Alcona and Foote Ponds, the greatest adverse impact on water quality continues to come from the ponds and drawdown from power generation. Warmer water temperatures and higher productivity affect insect communities and reflect poor water quality below the reservoir. The fluctuating water level also causes scouring of bottom vegetation and insects and smothers insect and plant organisms with fine layers of sand and clay.

Segment VI - South Branch - Source to Chase Bridge
and Segment VII - Chase Bridge to Mainstream

The chloride levels are of particular concern in the upper part of this stream. Although low compared to standards set for cold water streams, they are conspicuously high compared to normal levels found in the Au Sable basin. Samples indicate this may be a characteristic condition in the drainage area or there may be leakage in the pipeline carrying salt water in the St. Helen oilfield.

Nutrient concentrations have been reduced dramatically below Roscommon since the city converted its waste water treatment to a land treatment. The City had discharged treated effluent into the South Branch prior to October 1974. Insect communities and indicators of water quality have improved markedly downstream, while fish community improvements have occurred but at a less rapid rate.

The heavy cottage development below Roscommon remains a suspected source of nutrient seepage into the South Branch. Continued development and eventual failure of septic systems could degrade water quality in this section. Surface storm water runoff from the Roscommon area also continues pouring pollutants, organic material and soil into the South Branch.

Segment VIII - North Branch - Source to Lovell Bridge
and Segment IX - Lovell Bridge to Mainstream

Nitrate concentrations are lower here than anywhere else in the system, while phosphates are about the same. Temperatures in the river below Lovells are quite suitable for cold water species. Because of the abundant supply of shallow riffles, dissolved oxygen is always near saturation, even in areas of heavy aquatic plant activity. Chlorides are at low concentrations, especially downstream where levels are diluted by ground water input.

Essentially, the same conditions are present at Lovells and Red Dog, although Red Dog has cooler temperatures and a slightly higher fecal coliform count. Because these coliforms are of fecal origin, there may be septic seepage somewhere along the lower North Branch. However, this contamination could also be of animal origin and is well within acceptable limits. The insect data and water samples indicate the North Branch has the best combined water and substrate conditions for the support of intolerant insect species of any stream segment in the watershed.

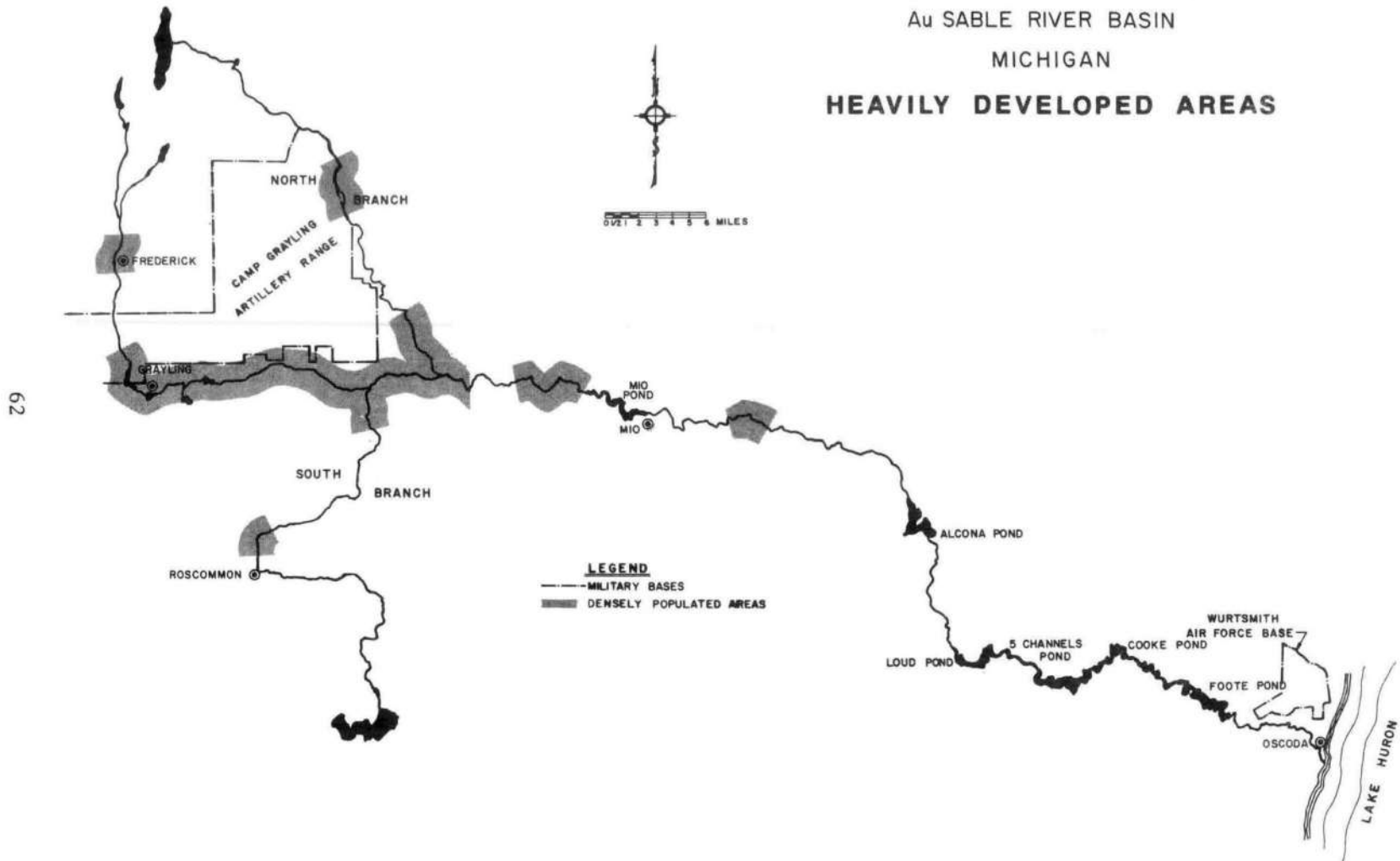
H. Residential and Related Development

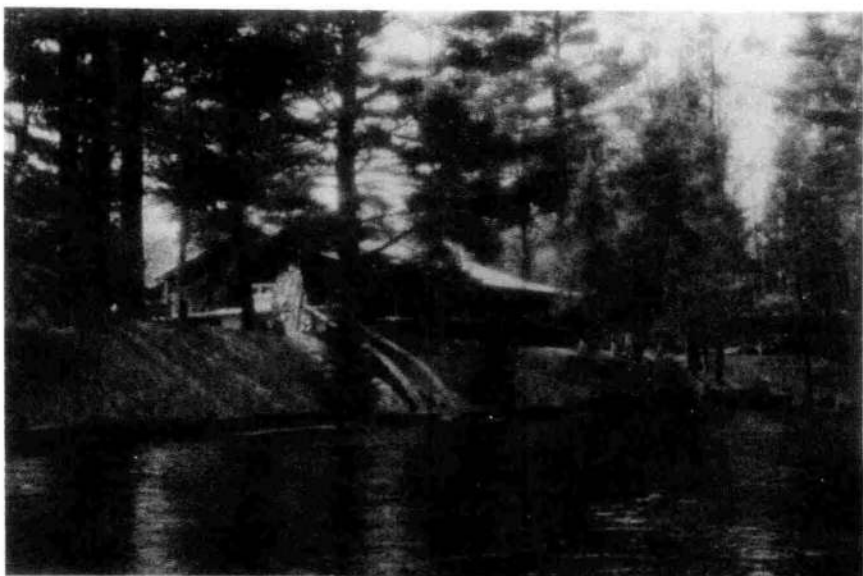
Development along the Au Sable consists of five different types:

1. Residential development is generally single family, modest to high value, and often receives only seasonal use. There are occasional large club or corporate lodges. There are approximately 830 structures associated with residential development visible from the river.
2. Commercial development is composed of small vacation resorts/motels with 5-10 individual visitor cabins. Canoe liveries are very common in the Grayling area and at bridge crossings. Approximately 14 small business developments are visible from the river.
3. Public facilities include campgrounds and fishing-canoeing access).
4. Powerlines numbering 80, 2 and 3 strand distribution lines cross the river. Two major transmission lines also intersect the river along with one pipeline.

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
HEAVILY DEVELOPED AREAS

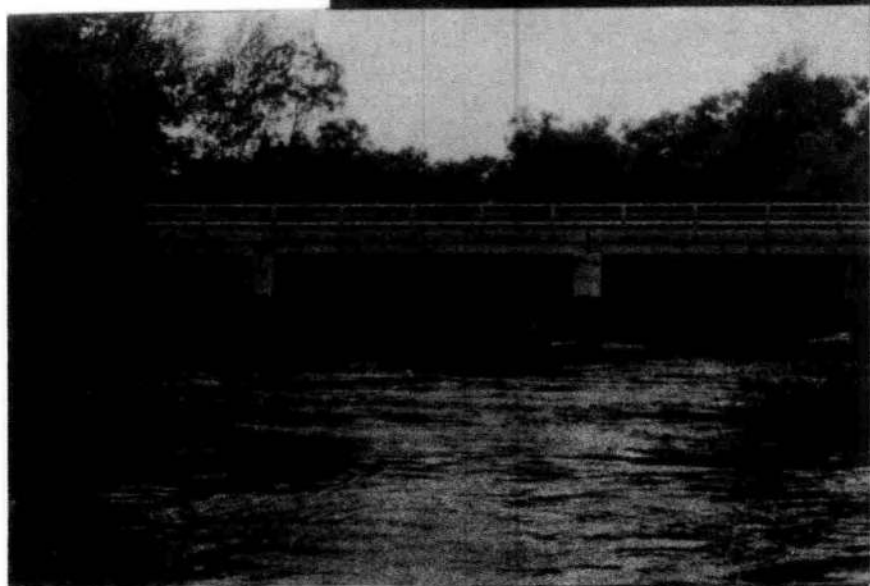
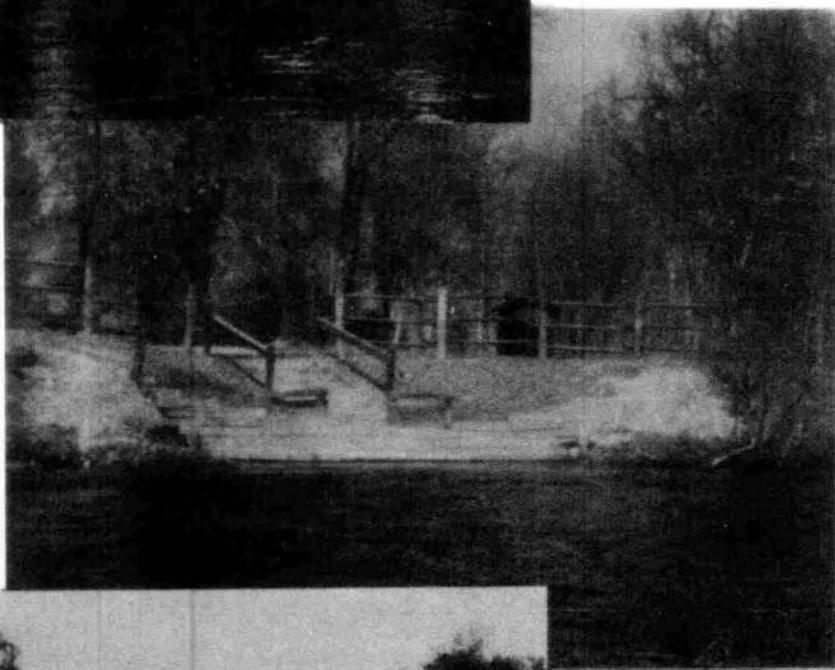
MAP 11





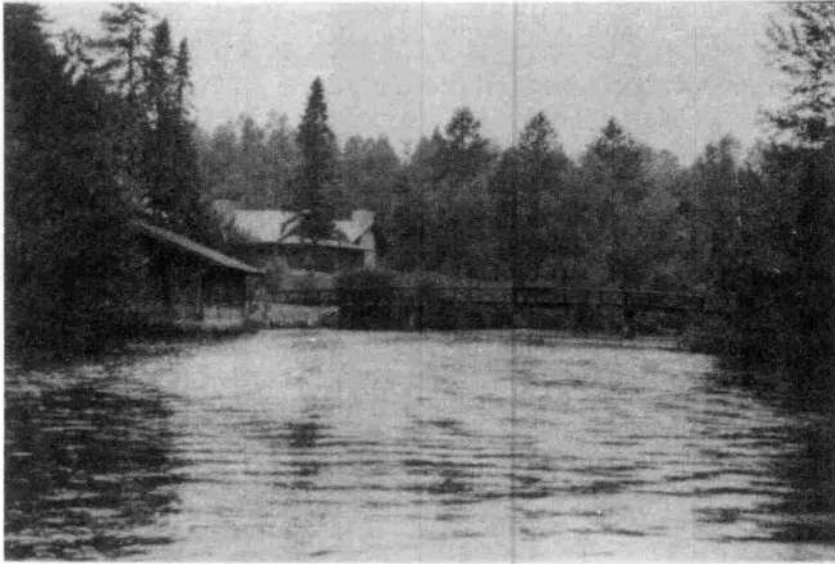
Residential
Structures...

Recreation
Facilities...



Bridges and
Powerlines.

Residential Development On The South Branch -



Below Smith Bridge -
Segment VII...



Immediately Below
Roscommon.

5. Bridges are all 2-lane concrete and/or steel spans. All are weathered and occasionally badly corroded.

Public facilities and bridges are covered under (1) "Access", page 70. Residential development is by far the most frequent and obtrusive development encountered.

Green belt ordinances offer a limited degree of protection from over-development. About half the counties in the basin have incorporated green belt ordinances into county Regulations. Green belt ordinances apply to the Au Sable in all of Crawford and Otsego Counties, Higgins Township - Roscommon County; Mentor Township - Oscoda County; and Mitchell Township - Alcona County. The remaining river area, aside from the North Branch and upper South Branch, is owned almost exclusively by State, Federal, local governments, or Consumers Power Company. The green belt ordinances place varying restrictions on set-back, vegetative strip widths, filling, lot use and size, and sanitary facilities. Development on land leased from Consumers Power Company remains a potential problem in townships without adequate zoning ordinances.

Segment I - Source to Interstate 75 Bridge

Development is very sparse to nonexistent above Frederick on the mainstream. Below Frederick, there are approximately 72 structures visible from the river down to Power Pond. Large subdivisions are located in the Frederick and Power Pond areas. Wakii Canoe Livery is situated on the river between 612 and Batterson Roads.

From Power Pond to I-75, the shoreline is heavily developed with residential and business structures as the AuSable passes through Grayling. There are six canoe liveries located on the river bank in this subsegment. River bank containment is extensive with numerous docks and walkways and three bridges.

Segment II - Interstate 75 Bridge to Mio Pond FPC Boundary

Residential development is extensive but evenly distributed along the entire stretch from Interstate 75 to Mio Pond. There are approximately 438 residential structures and many are designed and constructed to blend well with the riverscape. Docks, landings, walkways, and carefully tended lawns are associated with most residential structures.

Approximately 80 percent of the shoreline from Wakely Bridge downstream is owned by Consumers Power Company. Lots from the Consumers Power land have been leased for private home development, and structure density may be less in the section below Wakely Bridge than in the remaining segment.

Power distribution line crossings are numerous. There are at least 64 powerline crossings, with the heaviest concentration occurring below Stephan's Bridge to Mio Pond FPC Boundary. All powerline rights-of-way have minimum clearance and interfere very little with natural shoreline vegetation. One pipeline crossing is made above Stephan's Bridge.

There are commercial livery-rental cottage businesses at Wakely and McMaster's Bridges. Each business has approximately 50 canoes and five to eight cabins for visitors.

The DNR campgrounds are well developed and prominent features in the riverscape. White Pine and Rainbow Canoe Camps occupy a wide river front but were designed to blend with the riverscape and are constructed of natural looking materials.

Segment III - Mio Pond FPC Boundary to Alcona FPC Boundary

Residential development is restricted almost exclusively to the Park Subdivision. The subdivision occupies both river banks for 1.9 miles and is very heavily developed. Structural design, color, and location of the 50 plus residential structures are not compatible with the river environment. Three other structures are visible from the water at two different river corridor locations.

A high voltage transmission line crosses the river two times at Cumin's Flat. Another section of the same line is visible 2 1/2 miles below Mio. It runs parallel with the river for 1/4 mile.

Residential communities or subdivisions are situated at five locations along the river aside from the Park Subdivision. All except two developed areas are outside the river corridor boundary and west of McKinley.

Segment IV - Alcona Pond FPC Boundary to Loud Pond
FPC Boundary

This segment is void of all manmade structures except for a transmission line which passes close to the river at two different points.

Segment V - Foote Pond FPC Boundary to Oscoda

Residential and commercial development is entirely absent between Foote Dam and Oscoda (Detroit Mackinac Railroad Bridge). Beyond the railroad bridge to the river mouth, the Au Sable passes through the residential and commercial districts of Oscoda.

Wurtsmith Air Force Base is located on the north side of the river at Foote Dam. Although no development is located within the river corridor, constant noise and frequent low-flying aircraft are constant reminders of its presence. Although most air traffic is military, an air commuter service does have scheduled flights from the airstrip.

Segment VI - South Branch - Source to Chase Bridge

The South Branch, between its source and Roscommon, is very sparsely developed. Between Roscommon and Chase Bridge, the river passes through heavy residential and light commercial development in the Town of Roscommon. The shoreline is developed extensively with many modest-valued homes, docks, and bank retaining walls. There are approximately 122 cabins between the Roscommon DNR access and Chase Bridge - 6 miles downstream. Power distribution lines cross at 7 different locations.

Segment VII - Chase Bridge to Mainstream

Below Chase Bridge, residential development is restricted almost entirely to structures on land leased from Consumers Power below Highway 72. This lower section has approximately 40 structures visible from the river. Most are well designed, located, and constructed to harmonize with the riverscape but do represent an unnatural intrusion on this section of river. Several large club and corporate lodges are located in this section.

The upper section of this segment, between Smith and Chase Bridges, is commonly known as the "Mason Tract" (See Cultural History - page 94) and is essentially primitive. There is a three-structure cluster set back from the river 1 mile below Chase Bridge. Durant's Castle (See Cultural History - page 96) exists only as a "ruin" with foundations remaining. The Mason Chapel was designed and constructed by the DNR and although an intrusion, it blends well with the riverscape. Development in the subdivision at Smith Bridge is gradually increasing and is an obtrusion on the lower river.

Segment VIII - North Branch - Source to Lovell Bridge
and Segment IX - Lovell Bridge to Mainstream

The North Branch, from its source to Lovell Bridge, is lightly developed with residential structures. Development becomes more frequent within 4 miles of Lovell Bridge. Residential development is heavily concentrated in the 1 1/2 mile area below Lovell Bridge and the 6 mile area below Kellogg Bridge. There are approximately 60 residential structures in the 1 1/2 mile strip below Lovell and 41 structures in the next 9 miles to Kellogg. The lower 6 miles of river has 77 homes relatively well screened and designed to be compatible with river values. The development below Lovell Bridge lacks the screening, spacing, and structural design necessary to maintain or enhance scenic values. The central part of this section remains in a relatively primitive undeveloped condition.

There are 16 power distribution line crossings within the section. Most of them occur below Kellogg Bridge.

Noise from the National Guard artillery range is a distraction during the practice season. The artillery-machine gun practice occurs 2 to 5 miles from the river. Noise pollution is significant and may continue late into the evening. The practice season is generally on weekends throughout the summer and fall. Noise is not always evident during the week.

I. Water Uses and Related Developments

Water-based recreation and hydro-electric power production are by far the two leading uses of water in the Au Sable River system.

Supplemental irrigation as a land use practice has increased in acreage in the region. However, only 1,003 acres of agriculture, commercial and golf course land were irrigated in 1968 within the watershed counties. Thirty-one of the forty water sources for irrigation were surface water.

Municipal water needs along the river corridor are all supplied directly from ground water sources. There are 5 communities operating water supply systems within the corridor. Two military installations lay immediately outside the corridor boundary and rely to some extent on nearby municipal water supplies. Camp Grayling, in addition to operating its own water supply system, purchases 6.1 million gallons of water annually from the City of Grayling.

Municipal waste water discharges were discontinued for Roscommon in 1974 and Grayling in 1971 with the establishment of land disposal systems. The City of Oscoda continues discharging primary treated wastewater into the Au Sable at the Pine River inflow. Wurtsmith Air Force Base utilized a land disposal system in the Oscoda area. There is no known industrial waste disposal in the Au Sable aside from that in the Oscoda Area.

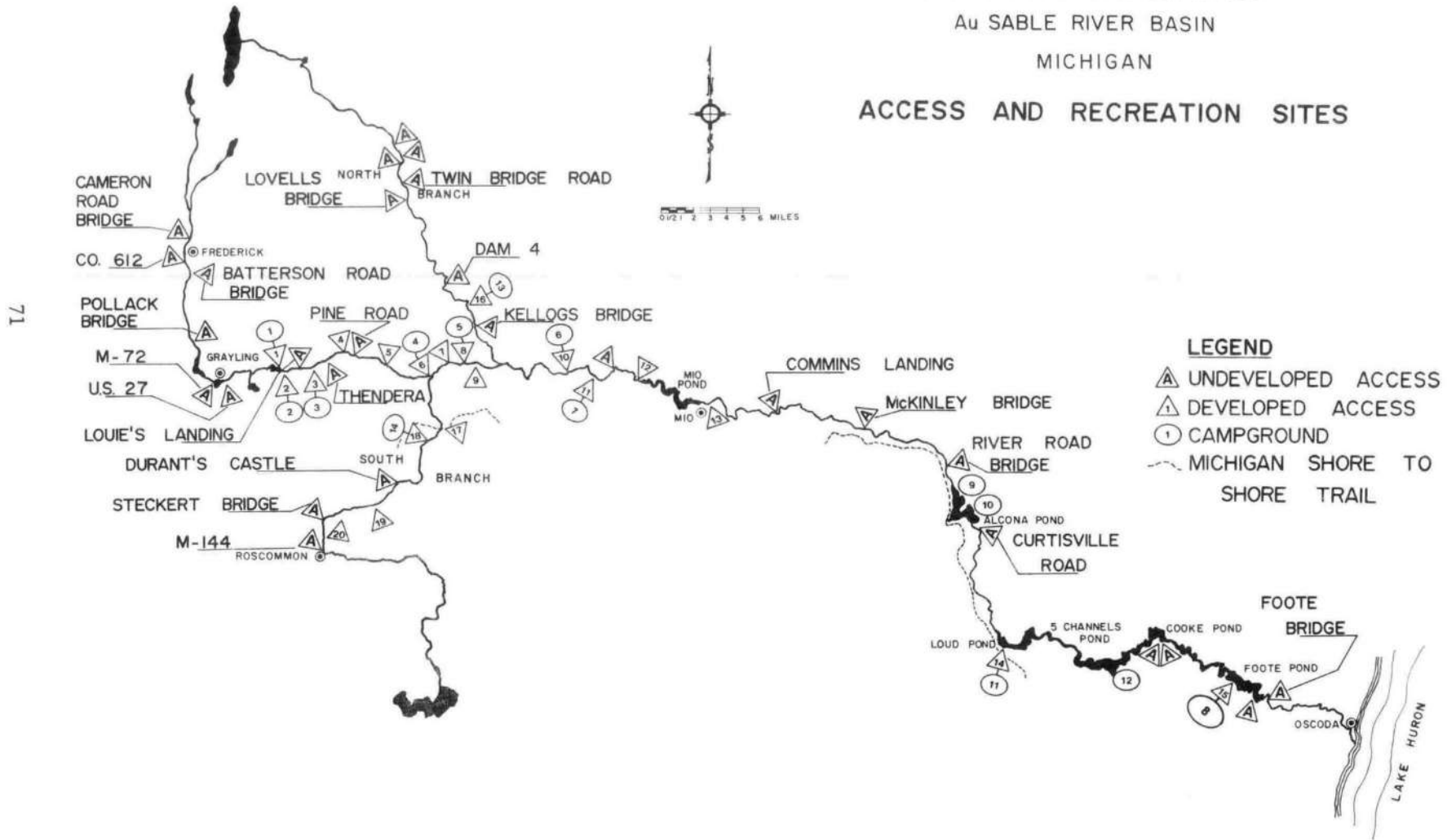
There is an undeveloped hydroelectric power potential within the Au Sable River basin involving six projects that have an installed capacity of 56,700 kilowatts. The projects would have a potential average annual energy output of about 156,900,000 kilowatt hours. A Saginaw-Au Sable River Basin Planning Status Report published by the Federal Power Commission in 1964 locates the six sites in river segments II, III, IV and V. Three sites were located in segment II between the South Branch intersection and Mio Pond, and one each in segments III, IV and V. Based on traditional procedures, current power values, and costs, the single-purpose hydroelectric power projects do not appear economically feasible.

<u>Developed Public Access Points</u>		<u>Developed Campground Facilities</u>	
	<u>Capacity</u> _{1/}		<u>Capacity</u> _{2/}
1. AuSable Canoe Camp	15	1. AuSable River Canoe Camp	190
2. Burton's Landing	24	2. Burton's	60
3. Keystone Landing	4	3. Keystone	90
4. Stephan's Bridge	25	4. White Pine Canoe Camp	300
5. Wakely Bridge	15	5. Rainbow Canoe Camp	35
6. White Pine Canoe Camp	20	6. Parmallee Bridge	75
7. Connors Flats	10	7. Luzerne Township Park	150
8. Rainbow Canoe Camp	10	8. Old Orchard County Park	2000
9. McMaster's Bridge	20	9. Curtis Township Park	816
10. Parmallee Bridge	6	10. Curtis Township Park	660
11. Luzerne Township Park	8	11. Rollways	105
12. Camp 10 Bridge	7	12. Monument	100
13. Mio Access	25	13. Sheep Pasture	60
14. Rollways	50	14. Canoe Harbor	520
15. Old Orchard County Park	55	Total	5161
16. Sheep Pasture Camp	23		
17. Smith Bridge	25		
18. Canoe Harbor Camp	-		
19. Chase Bridge	12		
20. Beaver Creek	<u>12</u>		
Total	366		

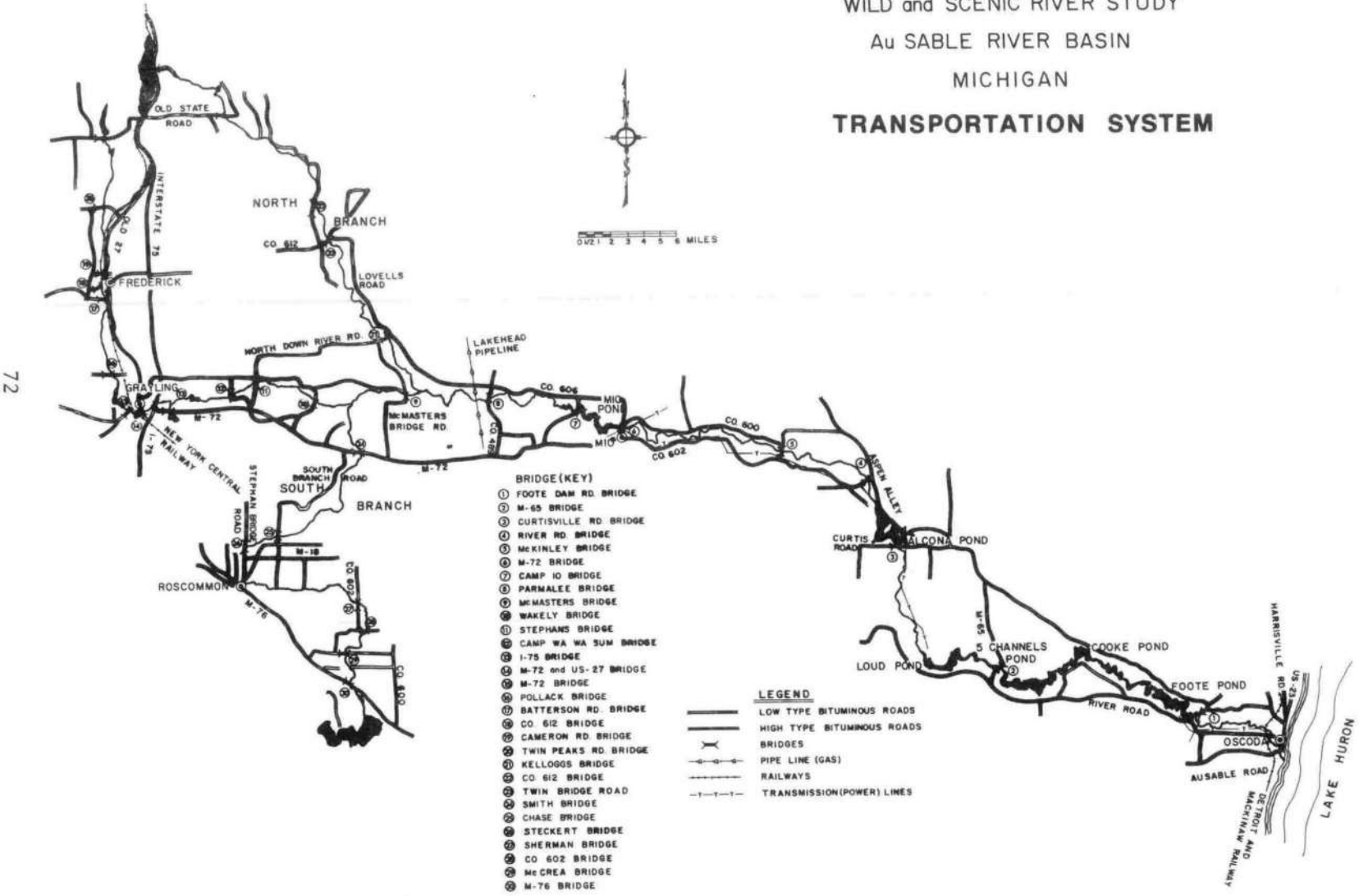
1/ Numbers of cars for which space is available.

2/ Capacity expressed in numbers of "people at one time" (PAOT)

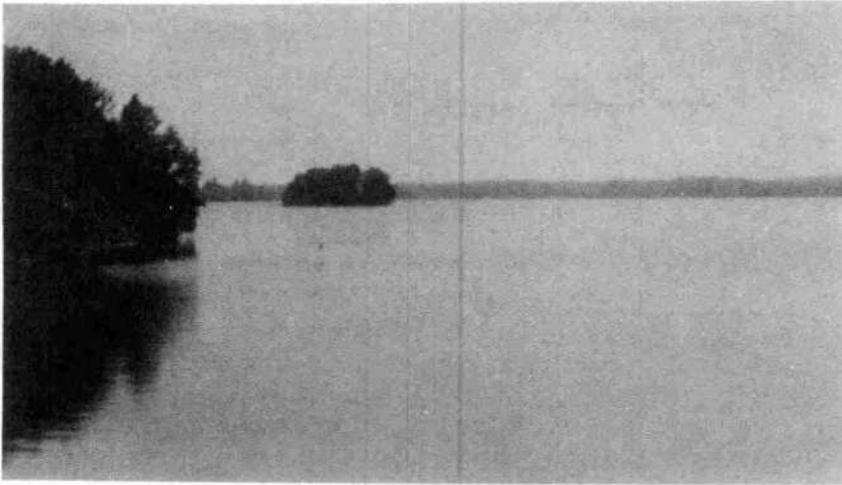
WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
ACCESS AND RECREATION SITES



WILD and SCENIC RIVER STUDY
 Au SABLE RIVER BASIN
 MICHIGAN
TRANSPORTATION SYSTEM



Views of Existing Impoundments and Hydroelectric Facilities on the
AuSable mainstem which were excluded from the study area:



Loud Reservoir...



The Abandoned
Mill Pond Above
Grayling...



Hydroelectric Facility
at Alcona Dam.

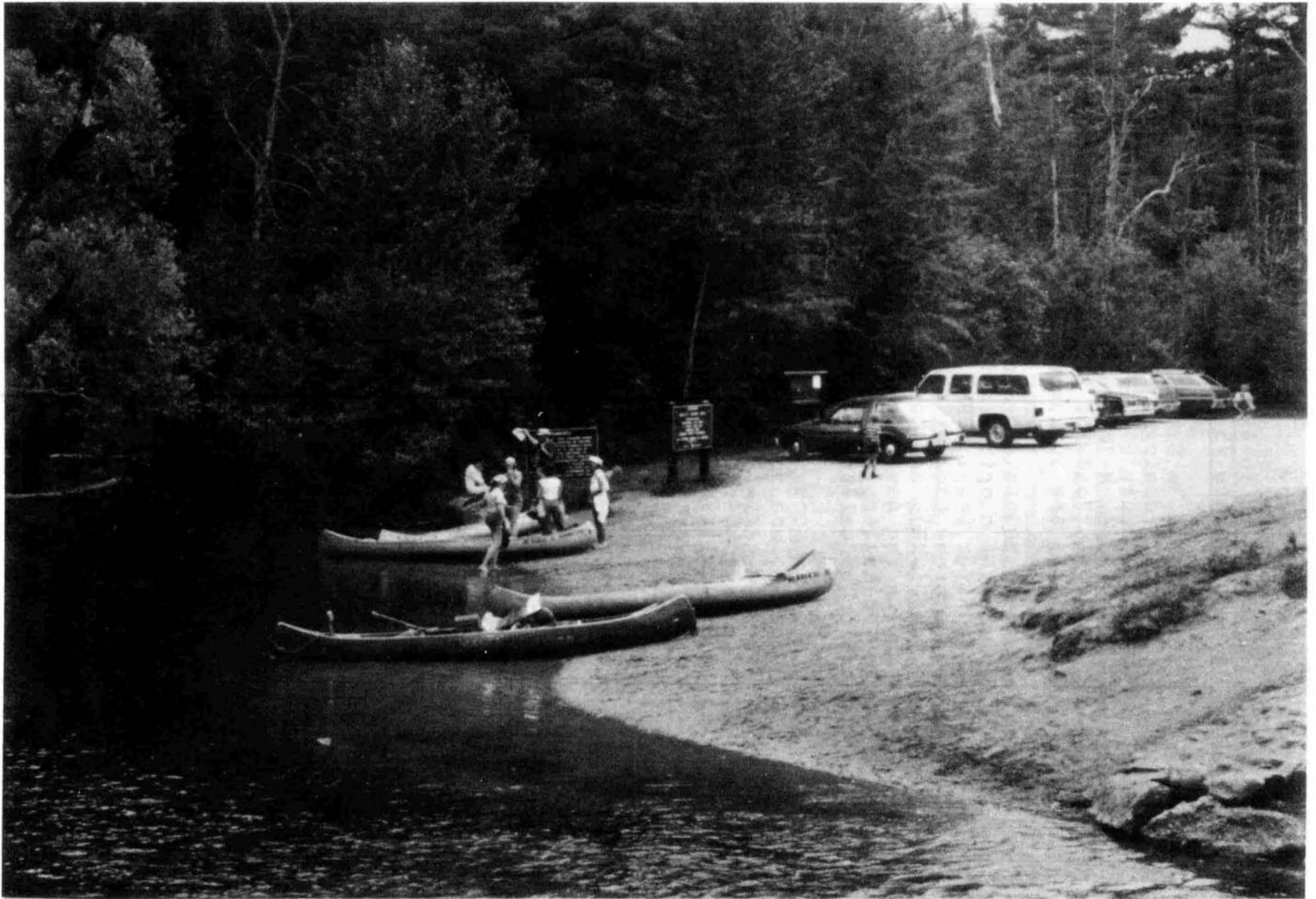
The six hydroelectric plants of the Consumers Power Company of Jackson, Michigan, represent a non-consumptive instream use of water that remains available for other downstream purposes. They have a total installed capacity of 41,000 kilowatts and generate energy totalling about 139 million kilowatts in an average year.

TABLE II - EXISTING HYDRO-ELECTRIC PROJECTS
 AuSable River Basin
 Consumers Power Company

Project Name	Licensed Proj.No.	Drainage Area Sq. Miles	Gross Head Feet	Installed Capacity KW	Average Annual Energy MWH	Initial Operation
Mio	2448	1,225	29	5,000	15,000	1916
Alcona	2447	1,469	39	8,000	26,000	1924
Loud	2449	1,602	27	4,000	18,000	1913
Five Channels	2453	1,613	36	6,000	25,000	1912
Cooke	2450	1,641	39	9,000	26,000	1911
Foote	2436	1,664	39	9,000	29,000	1918

J. Access

Access to the nine segments of the Au Sable varies from none to frequent. In some areas, the river travels through near primitive areas, in others it flows through towns and along State highways. Standards for determining access were established by the study team and are included in Appendix H. See Maps III and IV.



Public Access Site at Chase Bridge - South Branch - Managed by the Michigan DNR.

Segment I - Source to Interstate 75 Bridge and
Segment II - Interstate 75 to Mio Pond FPC Boundary

Public access to the Au Sable above Grayling is limited to bridge crossings. Bridge access exists at Cameron Road, County 612 (Frederick), Batterson Road, Pollack Bridge, M-72, and US-27. From Grayling to the Mio Pond FPC Boundary, a distance of 36 miles, there are 16 access points.

1. Seven access points are associated with developed overnight camping facilities. They are Au Sable River Camp, (DNR), Rainbow Canoe Camp (DNR), Keystone Landing (DNR), White Pine Canoe Camp (DNR), and Luzerne Park (Luzerne Township). The developed campgrounds provide access for anglers and rest stops and pullout points for canoeists.
2. There are six access sites developed primarily for access to and from the river. They are developed to varying degrees by the DNR, but all provide boat-canoe ramp, parking, and restroom facilities. They include Stephan's Bridge access, Wakely Bridge access, Connors Flat, Parmallee Bridge, McMaster's Bridge, and an access 1/2 mile below Luzerne Park.
3. Three undeveloped access points provide access to the river from county roads. At each point, the county road deadends at the river bank. The access points are located at Thendara Road, Lauier Landing, and Pine Road.

There are 17 miles of public road within the river corridor, 10 of which parallel the river course. The public roads are not visible from the river during leaf-on seasons except at road crossings and access points. Very short stretches of other public road may be visible during leaf-off periods when not obscured by high riverbanks. Except for heavier traffic on roads crossing the river, public roads receive moderate use from local and recreation traffic. Noise is not a significant impingement.

Bridges cross the river at I-75, Stephen's Bridge, Wakely Bridge, McMaster's Bridge, May Island, and Parmallee Bridge. I-75 is a 4-lane highway bridge

completed in 1963. The other four bridge crossings are county roads and have been in place for many years.

Segment III - Mio Pond FPC Boundary to Alcona Pond
FPC Boundary

The segment between Mio and Alcona Pond has three access points within its 23-mile length. An additional access point is located at Mio (Highway 33 - 72 Bridge). This access is a major entry point and located outside the proposed river corridor. It was developed and is maintained by the State of Michigan.

1. A Michigan DNR access is available at Comins Flat. Although undeveloped, it receives heavy use as a canoe rest stop and pull out and as an access point for anglers.
2. The McKinley Bridge access is an undeveloped access within the county road right-of-way. The access right is leased from Consumers Power by a private canoe livery and used by the general public.
3. The Au Sable River Road Bridge access is an undeveloped access within the Forest Road 4001 right-of-way. This right-of-way is on Consumers Power Company land.
4. The Michigan Shore to Shore Trail provides access to the river below McKinley Bridge.

There are 12 miles of public road within the river corridor, 10 miles of which parallels the river course. The road is not visible from the river except at bridge crossings, Comins Flat, and a point 1 mile above Comins Flat. Passing vehicles may be visible from the river at several additional points during leaf-off seasons only. Vehicle noise from use on the North River Road can be clearly heard between Mio and McKinley.

Bridges span the river at McKinley and Forest Road 4001. The 4001 Bridge is a new structure completed in 1970. It supports heavy volumes of traffic.

The McKinley Bridge is in poor condition and unsafe for heavy use. A proposal by the county to replace the structure is pending completion of this Wild and Scenic River Study and State-Federal approval. Replacement of the bridge would not affect eligibility of this segment or its recommended classification. The bridge is very popular with snowmobilers and receives use from loggers, local residents, anglers, and canoeists. Oscoda County recently began upgrading the South River Road between Mio and the 4001 Bridge. The McKinley Bridge would be located approximately 6 miles upstream from the 4001 Bridge and provide the same level of access as the proposed road but offer greater convenience to McKinley area residents. The existing structure may have some historical significance.

Segment IV - Alcona Pond FPC Boundary to Loud Pond FPC Boundary

There is no public access between the Alcona and Loud Dam FPC boundaries. Access to this 7-mile stretch is from the Curtisville Road Bridge immediately below Alcona Dam. This access is an undeveloped site beside the bridge.

Two-track woods roads and trails approach the river zone in three different locations, but none come within 1/8 mile of the river.

Segment V - Foote Dam FPC Boundary to Oscoda

Public access on this segment is nonexistent, except for the close proximity of South River Road at two different points below Foote Dam. The road passes within 300 to 500 feet of the river, but is not visible at each location due to vegetation and topography.

The segment is accessible by public road bridge crossings immediately above and below the river corridor boundaries at Foote Dam and Oscoda.

Segment VI - South Branch - Source to Chase Bridge
and Segment VII - Chase Bridge to Mainstream

Public access to the upper South Branch above Roscommon is limited to bridge crossings at M-76 Bridge, McCrea Bridge, County 602 Bridge, Sherman Bridge, and M-144 Bridge within the Roscommon city limits. Between Roscommon and Chase Bridge, access is available at Steckery Bridge and a DNR developed site at Beaver Creek. Deerheart Valley Road also deadends at the river in this area and provides legal access.

From its source to Chase Bridge, the South Branch is approached by many secondary and private roads. They serve largely recreation and local traffic needs.

There are five access points in the 16-mile stretch between Chase Bridge and the Mainstream.

1. A Michigan DNR developed access is located at Chase Bridge. It is a major put-in, pull-out site on the South Branch.
2. Access is available through an undeveloped State site at Durant's Castle. This access from South Branch Road comes within 1/8 mile of the river across State land. This site is largely a rest stop but also receives heavy use from canoeists, anglers, and provides access.
3. The Section 6 State access is similar to the site at Durant's Castle. It is undeveloped and used largely because of the short distance between the county road and river and State lands.
4. The Canoe Harbor Campground (DNR) has a developed access used in conjunction with the DNR campground. It is accessible by county road and a 1/8 mile walk.
5. The Michigan DNR developed access at Smith Bridge is a major access point for the South Branch.

There are 7 1/2 miles of public road within the river corridor boundary. Four miles of the road run parallel to the river. Although the road

passes close to the river course at several points, it is neither visible nor is road noise loud enough to become a detractant. The road is visibly conspicuous at the Chase and Smith Bridge crossings.

Bridges span the segment at Chase Road and Highway 72 (2 bridges). A private vehicle and 4-foot bridge crosses below Highway 72. The second bridge at Highway 72 is the old Highway 72 span and is now used for the access point. All the bridges below Highway 72 are privately owned and associated with the private development.

Segment VIII - North Branch - Source to Lovell Bridge
and Segment IX - Lovell Bridge to Mainstream

Public access on the North Branch above Lovell is limited to a DNR developed site at Emerald Lake and three DNR sites immediately above Twin Bridge Road. Bridge crossings also provide additional access at Old State Road and Twin Bridge Road.

There are five access points in the 17-mile stretch from Lovell Bridge to the Mainstream.

1. Undeveloped public access is available at Lovell Bridge. The access exists only because of the public road crossing and is used almost exclusively by anglers.
2. The Sheep Pasture site is an access-camp area developed by the DNR. Although available and used by campers, it lacks camp pads, tables and toilets and is not extensively developed for camping. It is used almost exclusively by anglers-campers.
3. The Kellogg Bridge access exists because of the public road crossing. There is no developed access but a bank stabilization structure does provide a "landing" within the road right-of-way.
4. The Dam 4 access is an undeveloped access point located at a county road and river intersection. It is located at an old bridge site and exists only because of the close public road-river relationship. The access is used largely by anglers and local people.

5. An end-of-the-road undeveloped access in Section 26, T27N, R1W.

There are 6.8 miles of public road within the river corridor boundary. Although county roads parallel the river for 3 miles within the corridor boundary, there is sufficient distance and vegetation to muffle noise and conceal vehicles from sight of the river. Roads are visible from bridge crossings and the access point. Private roads are rarely visible from the river.

Public highway bridges span the river at Lovell and Kellogg. Private foot bridges cross at High Bank Lodge, Section 6, and three other locations. Most foot bridges are well constructed and their design is somewhat compatible with the riverscape.

K. Landownership and Use

Approximately 48 percent of the river corridor land area is in private ownership. Ten percent of that land area is owned by Consumers Power Company, - 9 percent of which lies in the upper Au Sable mainstream. Most of the 30 percent in small private ownership has been subdivided and developed for residential use. (Refer to map inside back cover.)

Table III and Appendix give a breakdown of land ownership on the nine study segments. Private land ownership is further stratified by counties. The number of private owners is displayed in Appendix A.

Subsurface rights are either owned by the surface owner or reserved by an outstanding interest. Consumers Power Company has acquired subsurface rights on all or most of its ownership within the river corridor. The State of Michigan and Federal Government have acquired subsurface rights when available during land acquisition. Applications for mineral exploration and extraction are filed with the Michigan DNR for approval.

TABLE III

Landownership Within River Corridor by Study Segments
Au Sable River, 1980 1/

R I V E R S E G M E N T S

<u>Ownership</u>	<u>Total</u>	<u>I & II</u>	<u>III</u>	<u>IV</u>	<u>V</u>	<u>VI & VII</u>	<u>VIII & IX</u>
Private	21,120	9,440	430	80	80	4,130	6,960
State	10,025	2,333	792	0	160	4,800	1,940
Federal	8,378	40	4,818	1,680	1,440	400	0
Consumers Power Co.	1,997	1,327	170	0	0	500	0
Total	41,520	13,140	6,210	1,760	1,680	9,830	8,900

Within the river corridor 13,267 acres owned by Consumers Power Company, were offered for sale to State and Federal governments and private leaseholders. Approximately 1615 acres were acquired by the State, 7,648 acres by the U.S. Forest Service and 1,780 acres by leaseholders during 1980-81.

Segment I - Source to Interstate 75 Bridge and
Segment II - Interstate 75 to Mio Pond FPC Boundary

The 49-mile corridor varies from 1/4 to 2 1/2 miles in width and includes 13,140 acres. Seventy-two percent of it is private land, 10 percent of which is owned by Consumers Power Company. An additional 18 percent is owned by the State of Michigan.

Significant land uses include recreation (especially fishing and canoeing) and heavy residential development. Land for 13 developed access sites and campgrounds has been withdrawn by the State of Michigan.

1/ See Appendix G-1.

The area around Grayling has very heavy commercial-residential use. Many residential structures outside Grayling are summer homes or associated with large clubs and business organizations.

Segment III - Mio Pond FPC Boundary to Alcona Pond FPC Boundary

This 23-mile long segment includes a visual corridor 1/4 to 1 mile wide and encompasses 6,210 acres, 10 percent of which is private land (3 percent Consumers Power Company); 77 percent Federal land; and 13 percent State land. The private land is concentrated in the Parks Subdivision, 6 miles east of Mio.

Land uses here are almost exclusively recreation and timber production. This segment is extremely popular with canoeists and anglers. Although owned and managed by Consumers Power Company for timber production, there is a limited amount of timber production in the river corridor. Slopes, non-commercial timber types and river resource protection are limiting factors for timber production. Residential use is very heavy immediately outside the river corridor on private land. Timber harvest also increases substantially outside the river zone on national forest land.

Segment IV - Alcona Pond FPC Boundary to Loud Pond FPC Boundary

The Alcona Dam to Loud Pond segment is 7 miles long and has a corridor 1/2 to 3/4 miles wide. The corridor encompasses 1,760 acres. Four percent of the land is privately owned and 96 percent federally.

Land use is primarily for recreation and timber production. However, timber harvest within the seen area is minimal and occurs largely outside the corridor boundary. Recreation use is also low and largely consists of fishing and canoeing with lesser amounts of trapping and hunting.

Segment V - Foote Pond FPC Boundary to Oscoda

The 12-mile long corridor between Foote Dam and Oscoda varies from 1/2 to 3/4 mile wide and encompasses 1,680 acres, 10 percent of which is State land, 86 percent is Federal land. The remainder is in small private ownerships.

Recreation and timber production are the dominant land uses. The segment is heavily fished, particularly during the salmon and steelhead runs. It also receives light canoe, hunting, and trapping use. Timber harvest occurs largely on the outer edges of the corridor boundary and in the upper half of the segment. Noncommercial timber types, terrain, and water resource protection restrain timber production within the corridor.

Segment VI - South Branch - Source to Chase Bridge
and Segment VII - Chase Bridge to Mainstream

The 50-mile corridor from Lake St. Helen to the Au Sable mainstream has a visual corridor from 1/4 to 1/2 mile wide and encompasses 9,830 acres. Ownership within the corridor is 49 percent State, 4 percent Federal, and 47 percent private (5 percent Consumers Power Company ownership). Ownership below Chase Bridge becomes predominately public. Below Chase, 17 percent is private land, 63 percent State, 9 percent Federal and 11 percent Consumers Power Company.

Recreation, timber management, and residential and mineral development are the dominant land uses. Above Roscommon, there is light fishing, hunting, and trapping activity. This section also has some petroleum development, but it occurs largely outside the boundary. From Roscommon to Chase Bridge, the river corridor has heavy residential-commercial development and receives heavy fishing-canoeing use.

Below Chase Bridge, land uses are almost exclusively recreation and timber production, except for light residential development within the lower 6 miles. This section is famous for its highly productive trout fishing and quality canoeing experience.

Segment VIII - North Branch - Source to Lovell Bridge
and Segment IX - Lovell Bridge to Mainstream

The North Branch has a 33-mile long corridor from its source to the mainstream. The visual corridor ranges from 1/4 to 3/4 mile and encompasses 8,900 acres. Ownership above Lovell Bridge is 78 percent private, 22 percent State, below Lovell Bridge, ownership is 86 percent private and 14 percent State.

Land uses are predominately recreation and residential development. Residential development is sporadic with heavier concentrations around Lovell Bridge and below Kellogg. Recreation use is largely trout fishing with lesser amounts of hunting and warm-water fishing.

L. Minerals

The recent development of gas and oil in Michigan's northern lower peninsula may have an effect in parts of the river corridor. Although precise locations of future drilling activity are unknown, drilling trends indicate a high probability that hydrocarbon reserves lie under portions of several river segments. At present, an extremely vigorous exploration, drilling, and hydrocarbon production industry is present in Antrim, Crawford, and Otsego Counties. There are two existing wells within the corridor and two wells are projected to occur somewhere in the upper North Branch.

Also occurring in the study area are a few scattered natural gas wells developed in the Late Devonian Age Antrim Shale. At present, these deposits are not economically important. Hydrocarbons are also present in some Mississippian Age formations which lie stratigraphically above the Salina-Niagara strata. These occurrences are presently unimportant, but could have future economic potential.

Segments I, II, VI, VII, VIII and IX

Geological conditions and production data were studied throughout the Niagarian complex and estimates of untapped potential reserves were charted according to these averages. This data, when correlated with well occurrence under similar conditions, indicates six additional wells may occur within 1 mile of the North Branch and Mainstream. Their locations are unknown, but it is assumed that two wells could occur within the corridor of the Mainstream and North Branch.

The Lake St. Helen oil field is located in the headwaters of the South Branch. This drainage area has over 50 active wells, none of them occur within the river corridor.

Segments III, IV, and V have no known mineral or hydrocarbon potential.

M. Recreation

"Recreational opportunity" is the Au Sable's major attraction. The river has obtained national recognition for its trout fishery and attracts approximately 72,000 fishermen annually. It may also be the heaviest canoed river in the Country and offers pleasant scenic trips to approximately 200,000 canoeists each year. Camping is very popular and there is ample space found in campgrounds along the river corridor for approximately 14,000 visitors annually. Picnicking, although popular, is usually enjoyed as part of other recreational activities. Swimming and rubber tube floating is enjoyed by many but often discouraged by the Au Sable's cold water. Cross-country hiking during warm seasons and skiing during the winter is rapidly increasing with trail development in the river basin and national popularity. Use of shoreline access trails by fishermen is unknown but estimated to be very heavy. Photography, bird watching, driving, and walking for pleasure are casual pursuits of many river visitors. A rich variety of wildlife attracts hunters, trappers, and many people who simply wish to observe native fauna in a natural environment.

Accessibility, proximity to major population centers, availability of leisure time, and the lure of the Au Sable River all contribute to heavy recreation use. The change of seasons affects the amount and type of use, but midsummer canoeing, spring fishing, fall hunting, and midwinter snowmobiling are the heavy use periods.

Segment I - Source to Interstate 75 Bridge

Above Grayling, recreation use is predominantly trout fishing, particularly during the spring and early summer. The lower half of this section is canoeable and served by one livery, but it receives light use due to shallow and debris-filled water. This section is heavily hunted during the fall deer and small game seasons. Some snowmobiling and cross-country skiing occur but there are no facilities developed exclusively for either activity within the river corridor.

Segment II - Interstate 75 Bridge to Mio Pond FPC Boundary

Below Grayling, canoeing and fishing use is extremely heavy and definitely dominates the recreation scene. Canoe counts tallied by the University of Michigan in 1971 indicate approximately 50,000 people used the Upper Au Sable that year. Watercraft move



downstream from Grayling in a "bulge" and become progressively less as they either pull out or pass Burton's Landing, Louie's Landing, Stephan Bridge, and McMaster's Bridge. The use at Burton's and Louie's Landings peaks between noon and 3 p.m., while points downstream experience their peak loads between 3 p.m. and 6 p.m. This condition results from all the canoes starting at basically the same place and time in Grayling.

Trout fishing in this section is particularly heavy from May to June and tapers off rapidly during the summer. Peak periods of use are from 7 a.m. to 10 a.m. and 6 p.m. to 9 p.m. However, considerable fly fishing occurs after dark particularly during the heavy mayfly and caddis hatches. The readily available access and the AuSable's famous reputation for quality trout fishing make this section one of the two most popular on the river. Heaviest canoe use occurs from noon to 6 p.m.

Camping in conjunction with canoeing and fishing is a popular recreational pursuit. Developed campgrounds within the river corridor are located at Au Sable River Camp, White Pine Canoe Camp, Rainbow Canoe Camp, Parmalee Bridge Campground, Luzerne Park, Burton's Landings and Highbanks. The campgrounds are used largely by anglers and canoeists who leave their gear in camp and canoe in single day trips.

Snowmobiling, large and small game hunting, photography, scenery and nature appreciation, and picnicking are also highly popular recreational pursuits. Swimming and tubing, although popular, are somewhat limited by low water temperatures. Motorcycling is also popular within the river zone but generally restricted to roads and trails.

Segment III - Mio Pond FPC Boundary to Alcona Pond FPC Boundary

This segment lacks the easy access over major highways from highly populated urban areas. Therefore, while use remains very high, it is considerably less than in Segment I.

Use studies in 1971 indicated canoe use in this segment by 20,000 people. Although some use is from extended trips starting above Mio, most of

this use began at the Mio Bridge access. Approximately 36 percent of the canoeists reaching Comin's Flats exit there, and 65 percent of the canoes passing Comin's Flats pull out at McKinley Bridge. Forty-four percent of the canoes reaching McKinley pass on to Au Sable River Bridge. The percentage of canoes passing each point will be higher on week days because weekday trips tend to be longer.

Quality trout fishing continues in this segment but use is by a proportionately larger share of local people. Less access, deeper, more difficult wading, and lack of popularity all reduce fishing pressure to some degree. The use of boats and canoes for fishing is also more common in this section.

Camping here may be limited by a lack of developed campgrounds. Although campgrounds are available on adjoining State and federal lands, none are readily accessible to river uses. A problem exists with overnight campers using Consumers Power Company land that is open to the public for day use only.

The Michigan Shore-to-Shore Riding and Hiking Trail lies within the river corridor for approximately 4 miles between McKinley and Alcona Pond. The trail was constructed by the Forest Service for non-motorized use. This portion of the trail is located on Consumers Power Company land and receives moderate use.

This trail also parallels the river for approximately 3 miles in the lower half of this segment.

Segment IV - Alcona Pond FPC Boundary to Loud Pond FPC Boundary

The Alcona to Loud Pond segment is not a popular recreation use area. It lacks access, length, fishery and recognition of its recreation resource. The scenery and river are not sufficiently outstanding to attract significant numbers of canoeists, hikers, or campers.

Segment V - Foote FPC Boundary to Oscoda

The anadromous fishery along this segment is a major recreation attraction. Although the segment lacks developed access points, access for salmon-steelhead fishing is attained over Consumers Power Company land and by boat from Foote Dam and Oscoda. Fishing pressure is very heavy and often a problem. Littering, bank damage, and the poor behavior of some users have made this use controversial.

Canoe use is light and occurs largely on weekends. All canoeists paddle the entire 12 mile stretch between Foote Dam and Oscoda. This segment also does not have sufficient attractions for significant numbers of recreationists, other than local people.

Segment VI - South Branch - Source to Chase Bridge

Recreation use on the Lake St. Helen to Roscommon section is limited primarily to hunting, light fishing, and trapping. The marshy character of this section defies access to most people and the warmer water and difficult canoeing reduce the fishery values and discourage canoeists. The open marshes and tag alder swamps do offer a primitive and unique environment for many wildlife species, thus providing an area for nature study.

Canoe and fishing use increase substantially below Roscommon. This section, and particularly the area below Chase Bridge, bear some of the heaviest fishing and canoeing pressure on the river. The 1971 University of Michigan study indicated 15,000 canoes floated the South Branch that season. Total recreation hours of canoeing and fishing were determined to be 3,354 hours per mile per season.

Segment VII - Chase Bridge to Mainstream

The South Branch below Chase Bridge attracts many other types of recreation use. The primitive, undeveloped character of the area attracts many hikers, sightseers and photographers. Although camping is not permitted within the river corridor, Canoe Harbor Campground at Smith Bridge is a popular camping area within easy reach of the river.

Two track trails through adjacent public land and within the river corridor offer excellent opportunities for ski touring and snowmobiling.

Segment VIII - North Branch - Source to Lovell Bridge
and Segment IX - Lovell Bridge to Mainstream

Trout fishing is by far the dominant recreation use on the North Branch. Studies conducted from 1960 to 1963 indicate that the 47 fish caught per hour rate on the North Branch far exceeds the rate on other Au Sable segments. Low canoe use on the North Branch may be reflected in fishing use patterns. Fishing activity is fairly uniform on the North Branch, whereas it is heaviest during morning and evening hours, the periods of low canoe use on other segments.

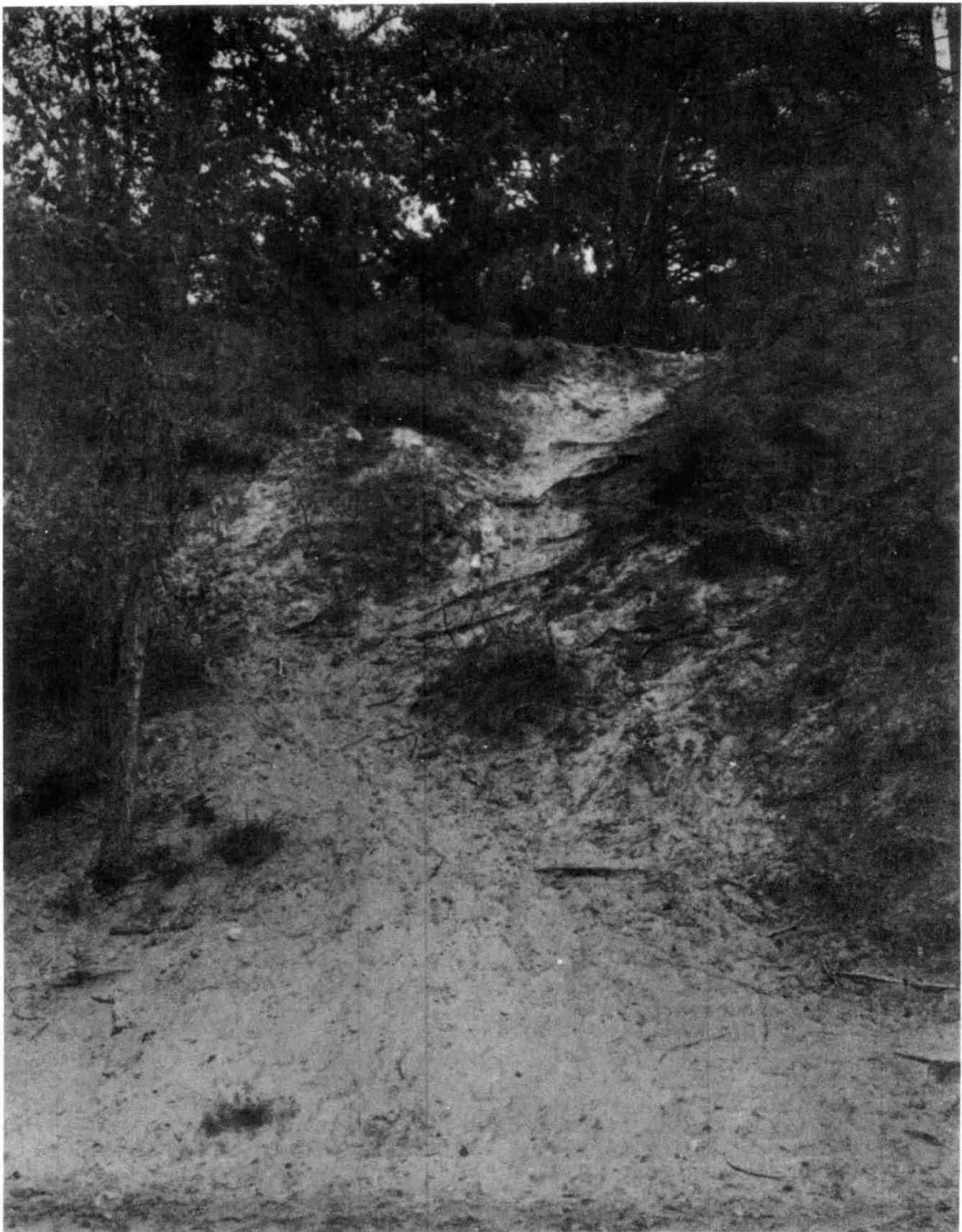
Canoeing on the North Branch is limited almost entirely to trips by privately owned canoes. Liveries are reluctant to rent canoes on the North Branch and even private canoe use is very light because of shallow areas, possible interference with fishing, and lack of access.

Although the Sheep Pasture Campsite (DNR) is available for use, it is the only developed campsite on the entire North Branch. Camping elsewhere is limited by private land ownership. Other recreation uses, although enjoyed on the North Branch, are also limited by private ownership.

RIVER USE CONFLICTS AND PROBLEMS 1/

Past experiences have shown that conflicts exist between canoeists, anglers, and other river users. The contributing factors are the excessive number and/or the distribution of users, conflicting user objectives, and user behavior.

1/ This section refers to all river segments,
Source: Characteristics and Attitudes-Michigan's
Au Sable River, 1972, Bassett, Driver & Shreyer.



Public Access Over Fragile Undeveloped Sites Often Leads to Severe Erosion Problems.

Conflicts - Number and Distribution of Users

Influential community members, residents, and livery owners agree that recreational use of the river has increased moderately to greatly since 1966, yet only 36 percent of them feel there are now too many people using the river.

However, from 31 to 61 percent feel certain sections of the river are overcrowded. Approximately 1/3 of the mainstream anglers feel that users are too numerous. In contrast, only 22 percent of the livery owners and 16 percent of all canoeists think there are too many people using the river.

It is interesting to note that one-third of all canoeists are undecided as to whether users are too numerous. Since 42 percent of all canoeists are first-time users of the Au Sable area, many of those who are undecided perhaps are unaware of, rather than indifferent to, the controversy over the carrying capacity of the river, particularly in the most heavily used sections. It seems reasonable to conclude this conflict concerning numbers of users will intensify as long as livery owners and canoeists see there is still room for more canoes.

The conflict associated with the number of canoeists is compounded by the concentration of users in time and space. On the average, daily canoe traffic on weekends is three to four times that on weekdays in the two most heavily used areas, from Grayling to Stephan Bridge and from Roscommon to Smith Bridge. Most canoes float through these stretches between 10 a.m. and 5 p.m. Although many cabins exist in these stretches, except in the Mason Tract, wading anglers concentrate in these same two stretches because public access points are abundant.

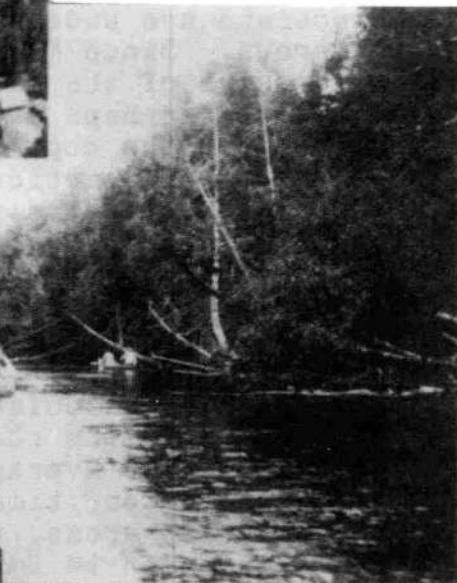
Daytime wading anglers are more numerous in May and June than later in the season, because the heavy hatches of the large aquatic insects are over by the end of June. Hence, canoes particularly interfere with daytime fly fishing during the first half of the summer, especially on the South Branch. As the summer progresses, canoeing interferes less with daytime fly fishing which diminish in number but interferes more with the occupants of cabins, who increase in number between midsummer and Labor Day.

Conflicts Often Develop Between Various User Interests On The AuSable
River As They Compete For Space And Opportunity-



Riparian Landowners
And Canoeists...

Courtesy -
G. Telfer - FSC



Canoeists Seeking
Solitude vs Social
Experiences...



Courtesy - B. Vollmer, DNR

Canoeists vs Fishermen
As Shown In This Scene
On The Pere Marquette
River.

Courtesy - R. McNeill, FSC

N. Cultural History

The Au Sable River corridor includes a variety of known historic resources from two distinct periods: (a) Indian occupation from 10000 B.C. and (b) white settlement, beginning shortly after 1835 with the commencement of logging operations. The archaeological record of the Au Sable is incomplete because virtually no systematic survey of the area has ever taken place.

Historic interest along the Au Sable is primarily of local significance and focuses almost exclusively on the boom days of 1860 to 1880 when the white pine attracted many hopeful loggers. Very few relics remain from the logging era. The Mill Pond ("stump pond") west of Grayling remains. It once served for collecting, storing, and washing logs prior to sawing at the Grayling mills. Rollways were used to store logs along the riverbank and, later during high water, roll them into the water for floating to the mills. The scarred and eroded banks remain as stark evidence of this practice and are particularly obvious in the McKinley and Alcona and Loud Ponds areas. Logs from early logging days remained stranded along river banks and partly submerged in sand and water. Small piles of old logs protrude from the river bank where they were jammed into the soil by water action and large log jams. These are particularly evident below Foote Dam. Old log brands are still evident on many logs. Above Oscoda, the logs were sorted by brands and held in large holding areas. The sorting "chutes" were stabilized by driving logs into the river bottom and floating logs between them. The upright logs remain after being cut off at water level.

The towns of Grayling, McKinley, and Oscoda were once booming sawmill and logging towns. The mills located in Grayling about 1878, after the railroad arrived and making it unnecessary to float logs to Oscoda for sawing and shipping. Populations soared to 4,049 in 1920 and dwindled to 3,097 in 1930. McKinley was once a thriving city of 800 residents and 2,000 woodsmen. In 1874, a narrow gauge railroad ran from the old McKinley roundhouse to Au Sable on Lake Huron. By 1900, the forests were depleted and the town deserted.



Log Sorting Booms As They Appeared During The Lumber Boom Days of 1860 - 1880.
Courtesy - Michigan History Division



McKinley Bridge during the late 1800's . Courtesy - Michigan History Division

Oscoda was the lakeport for boats to receive lumber sawed in the towns mills. The amount of logs floated down the Au Sable and eventually through Oscoda's mills between 1867 and 1883 is estimated to have been 1 1/2 billion feet.

Remains of Dams #2 and #4 exist on the North Branch. They were used to hold back and release water for floating logs to the mainstream.

Much of the Au Sable's colorful history surrounds its early fishing -- first, Michigan grayling and later trout. Lumbermen and early settlers first fished the Au Sable. Later anglers from many midwestern cities came by train and then automobile. They congregated at the Shoppenagon Hotel in Grayling. Several of the old clubs, hotels, and homes where these visitors stayed still stand - Douglas Hotel, built in 1900; Ed Kellogg house, 1914; Pierce Breakay Camp, 1932. Their existence is solid evidence of the lure and rich memories provided by the Au Sable's trout fishing.

"Lumberman's Monument", a bronze statue, was placed on the south edge of Cooke Pond as a lasting tribute to the memory of Michigan lumbermen. The 9-foot high statue depicting 3 early loggers was dedicated on July 16, 1932.

A solid tract of ownership extends along 10 miles of the South Branch. The land was acquired during the lifetime of George W. Mason and donated to the State of Michigan in 1954. The "Mason Tract" was to perpetuate the South Branch's primitive environment and quality trout fishing. The Mason Chapel was built along the South Branch to memorialize Mason's contribution.

Today, only the foundations of Durant's Dream Castle remain along the South Branch. It was constructed in the early 1900's and became a popular gathering place for sportsmen and politicians before being destroyed by fire.

O. Visual Resource - Character Type

The Au Sable watershed falls within the Central Lowland Province. The general landscape character is often monotonous and there is a noticeable lack of major distinctions. The Great Lakes section is characterized by an abundance of lakes, unequally distributed, ranging from less than 10 acres to 2000 acres. Swamps, large and small, represent intermediate stages between lakes and dry land. Flat plains are typical, but the glaciation pattern is evident by large areas of rolling ground moraines. Elevations range from about 580 feet above sea level at the Great Lakes shores to 1,706 feet at Briar Hill in the northeast corner of the Manistee National Forest.

Recent Michigan history has created much of the landscape character of the watershed. The towering white pine forests were logged off in Michigan between 1870 and 1890. By 1892, most merchantable timber was gone in lower Michigan and wild fires swept through the slash and debris left by the lumber companies. Michigan became known as the "Barrens" which characterized the denuded plains and constant winds that created sand blow-outs. It wasn't until the late 1920's that the forest area began to be planted by hand and machine. Jack pine was the major species planted because it grew fast and held the loose sand in place. Once the area was somewhat stabilized, natural regeneration of hardwoods and the native white pine began to return. Therefore, the vast majority of landscape in the watershed reflects people's impacts. This influence is generally accepted as natural occurrence by the using public.

VISUAL RESOURCE



CHARACTERISTIC LANDSCAPE

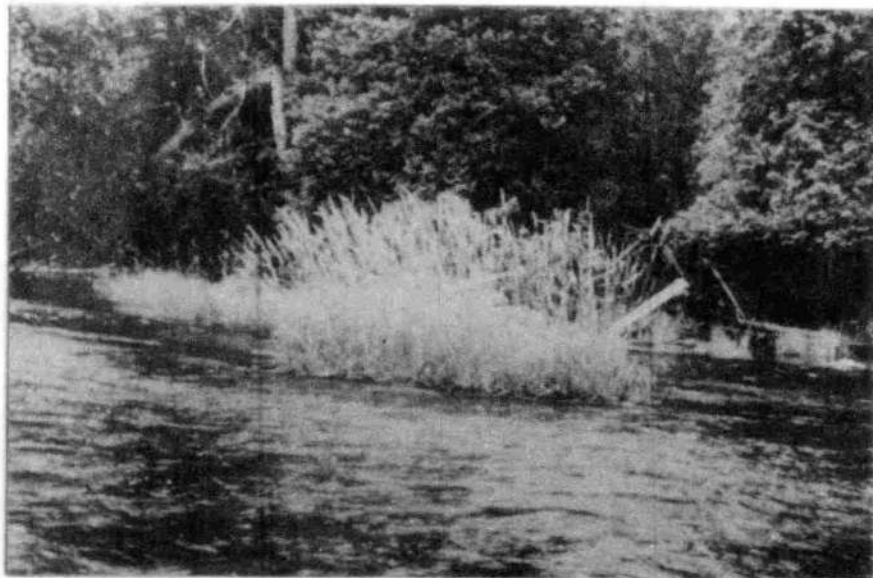
OF THE Au SABLE RIVER

Moving through the river corridor, you can sense an apparent harmony among all natural elements - ground forms, water characteristics, vegetation, and animal life.





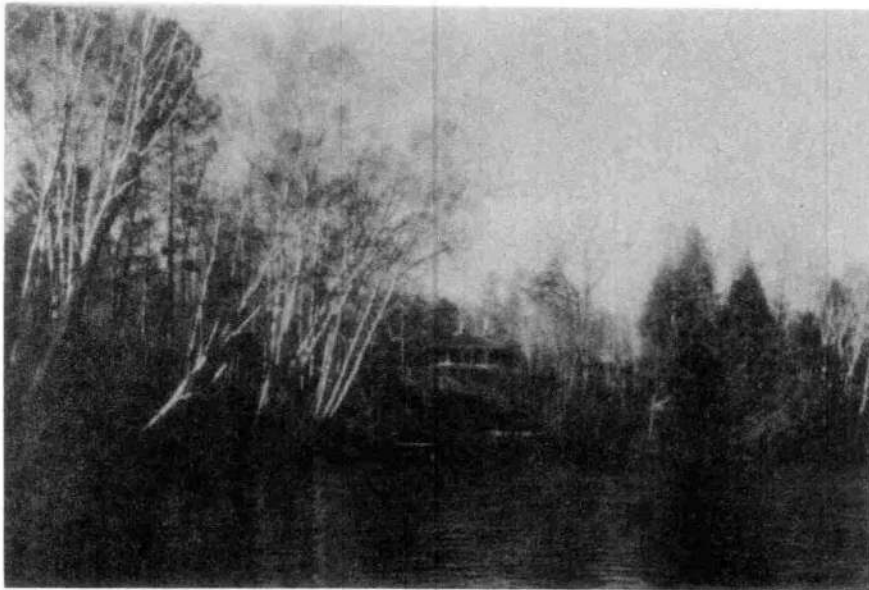
Heavy annual snows and rain replenish the AuSable. The water moves in trickles and creeks from deep swamps and marshes down through splendid forests of white cedar, aspen, white birch, pines and dense shrub and an occasional open sedge marsh. The majority of the area is devoid of evidence indicating recent severe modifications.

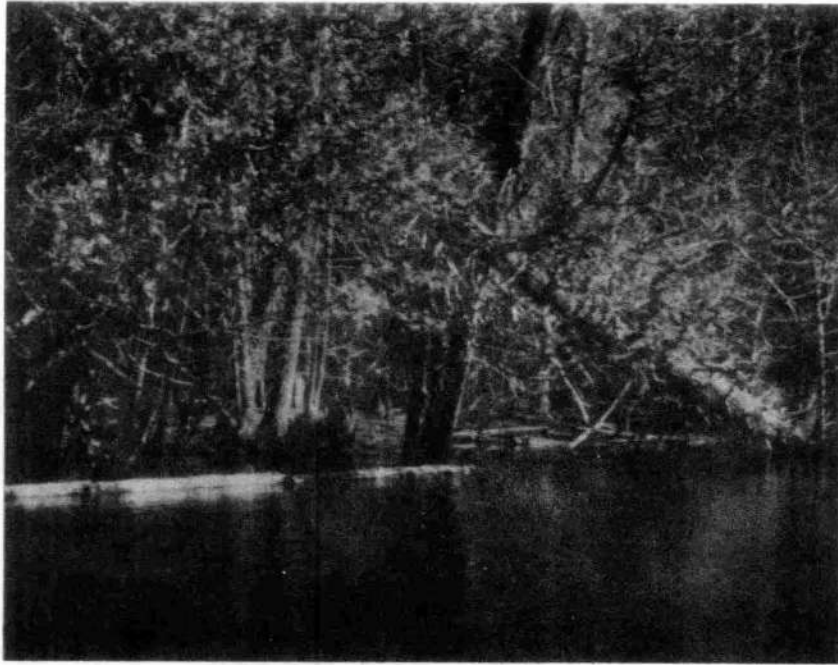




Courtesy - R. McNeill, FSC

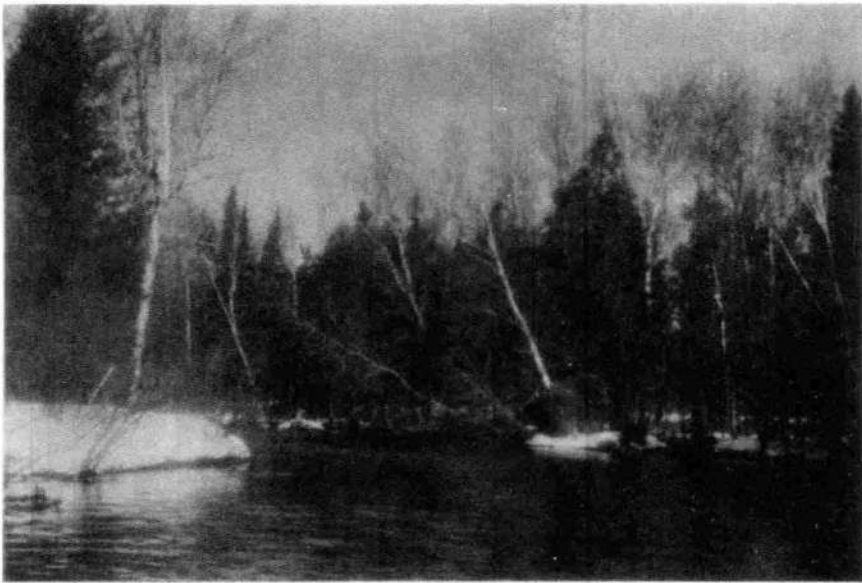
Trout, deer, beaver, woodchuck, eagle, turkey, songbird, grouse, mallard, and heron are part of the scene. People also live here, often appearing on the verge of threatening the intricacies of this complex and natural scene. Still, there is a feeling of peace, quiet, and continuing completeness. This is its landscape character.



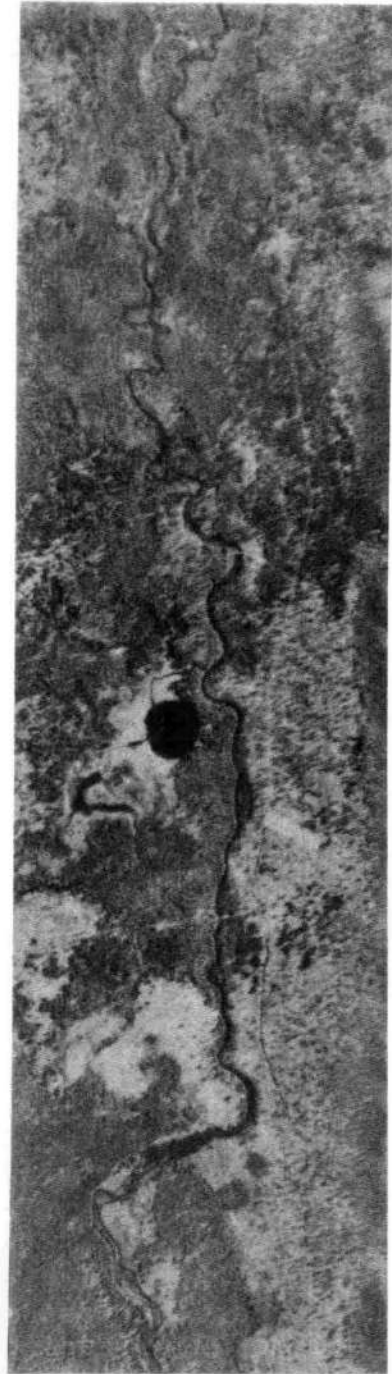
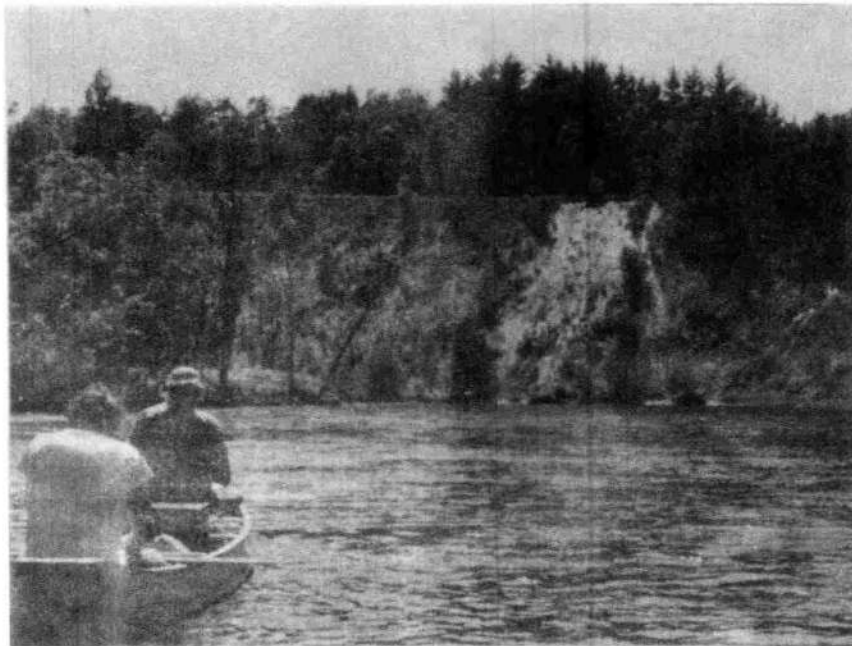


The landscape gets its character from the dark swamps with century old cedar, cold clear water gushing over logs, rock, sand and debris, high ridges heavily forested with aspen, birch and pine, an occasional sand bank sculptured by wind and rain, open sedge marshes, and frequent summer homes and lodges. Its diversity is in subtle changes of soil, slope, and vegetative species.

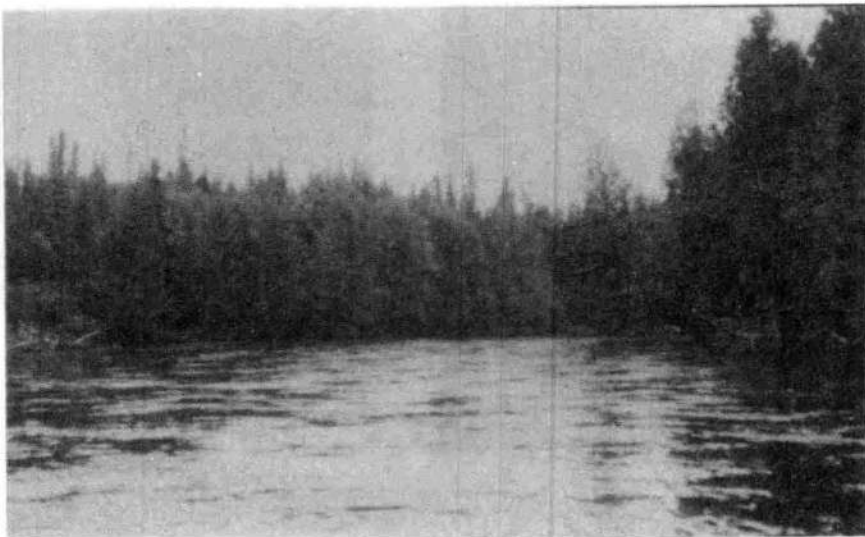




The river channels are a distinctive landscape type. Their features are carved and shaped by river flow - glacial terraces, braided meanders, broad valleys of swamp and open marsh, high steep banks forming V-shaped channels, and a sinuous undulating river channel, often twisting and doubling back on itself.

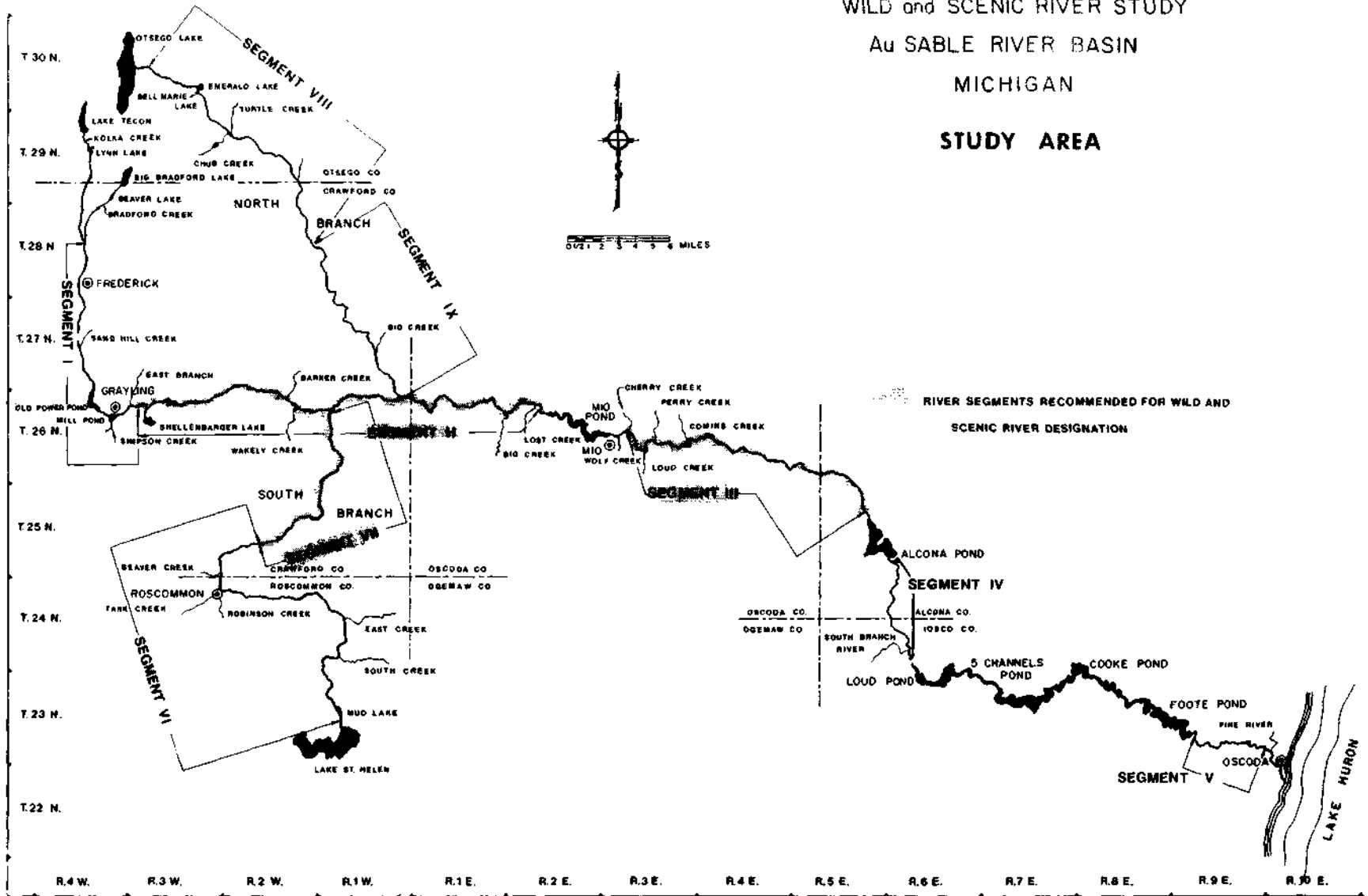


The channels offer variety --wide quiet flow through the flood plain; shallow fast riffles over gravel bottoms; strong, deeper flow over river rubble; and fast choppy flow around constant sharp river bends and over "sweepers" and debris.



**CHAPTER IV - WILD AND SCENIC RIVER ELIGIBILITY AND
CLASSIFICATION**

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



CHAPTER IV

Wild and Scenic River Eligibility Classification

After gathering relevant data on the nine study segments of the Au Sable River, the study team determined potential suitability in the following ways:

- the nine segments were evaluated in terms of their eligibility for inclusion in the national system;
- segments judged eligible were broken into classifiable units according to length and similar characteristics;
- the classification (wild, scenic, or recreational) which best describes the existing conditions of each unit was determined; and
- all comments from the public to date were evaluated.

.....

Basic criteria in the Wild and Scenic Rivers Act were supplemented by the "Guidelines for Evaluating Wild, Scenic, and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic River System Under Section 2, P.L. 90-542." (Appendix B). Pages 2-5 of that paper spell out the general characteristics of rivers to be included in the system, and outline the approach to be taken in evaluating them.

The nine study segments were identified through application of the above criteria and direction given in Public Law 93-621, Section 5, paragraph 29 - "Au Sable, Michigan: The segment downstream from Foote Dam to Oscoda and upstream from Land Reservoir to its source including its principle tributaries and excluding Mio and Bamfield reservoirs." All tributaries were identified and measured against those criteria to determine their eligibility for study. Tributaries, other than the North and South Branches, were found to be either significantly affected by impoundments or lacking outstanding qualities and very similar to other small streams in the region.

Table V., Page 119 -- Capsule summary of eligibility shows how these guidelines measured the eligibility of the six segments of the Au Sable River.

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Components of the Wild and Scenic Rivers System must be classified, designated, and administered as one of the following:

Wild river areas - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and water unpolluted. These represent vestiges of primitive America.

Scenic river areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Recreational river areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

.....

An intrinsic part of the study effort was to involve the public. In pursuit of this goal, three specific invitations for public comment were scheduled:

The first invitation to the public was issued in January 1976. The public throughout the State and Midwest was contacted through 600 individual mailings and the news media. They were asked to comment on what they considered to be existing controversial issues involving the Au Sable River. They were also asked to indicate whether they wished to be involved throughout the study process.

This phase of public involvement helped determine issues to be analyzed in a draft environmental impact statement and helped formulate objectives for alternative river management plans. It also introduced the public to the study process.

The second invitation for public review was issued in January 1977, to approximately 500 individuals, organizations, and news media in the same general area. People were asked to evaluate river sections familiar to them and determine whether they felt the sections met the eligibility criteria. This response was used by the team to help recognize outstanding values and obtain an indication of the public's evaluation of various river sections.

Public hearings held during July 1978, provided a third opportunity for public review and comments. The 90-day draft report review period enabled the public to review the proposal and submit either written comments or oral statements at the public hearings. This response was carefully analyzed and used to formulate the final recommendation.

A continuing effort was made throughout the study to obtain public comment by attending local organizational meetings. By responding to invitations from planning commissions, landowner associations, service clubs, county commissions, conservation organizations and news media, the study team had an opportunity to inform the public and obtain public view points vital to formulating alternatives and a preliminary recommendation. The efforts to obtain public input will continue throughout the study process.

Two contrasting positions, based on divergent philosophies, evolved from the public comments. The "No Action" Alternative was generally formulated through viewpoints expressed by residents living in the study area and particularly river landowners. The "No Action" alternative supported by this group recommends continuing and possibly strengthening local zoning to protect river values. This group opposes extended State-Federal intervention, heavier river use, and acquisition of private land or interests for public use.

The position "River Designation" generally supports viewpoints offered by conservationists, recreationists, and public organizations. This position represents the most protective approach to resource management and was later developed into three similar river designation alternatives. The second group generally favors protection of natural river values and opposes added development

and increased river use. Existing heavy river use and its influence on degrading river values is well recognized by all groups.

The attitudes expressed at the public meeting and in communications received from individuals since the meetings have mostly been divided between these two positions.

This material was sifted and weighed along with material generated by the study. The direction given in the Wild and Scenic Rivers Act; the guidelines and Principles and Standards were also applied. Six alternatives were selected as having those qualities best representing the various viewpoints. A seventh alternative resulted from comments received during the draft review period.

Determination of Classification Levels

The following criteria were summarized from the "Guidelines for Evaluating Wild, Scenic, and Recreation River Areas proposed...under Section 2, Public Law 90-452." They were used to determine the classification eligibility of the various segments after a decision had been made on which segments were eligible for inclusion in the Wild and Scenic Rivers System.

WILD

1. Flow - Free flowing. Low dams, diversion works or other minor structures that do not inundate the natural riverbank may not bar consideration as wild. Future construction restricted.
2. Accessibility - Generally inaccessible by road. No roads in narrow, incised valley. If broad valley, no road within 1/4 mile of riverbank. One or two inconspicuous roads to the area may be permissible.
3. Shorelines - Shorelines essentially primitive. One or two inconspicuous dwellings, limited amount of domestic livestock, and land devoted to production of hay may be permitted. Watershed natural-like in appearance.
4. Water Quality - Water quality meets minimum criteria for primary contact recreation except where such criteria could be exceeded by natural background conditions and esthetics and capable of supporting propagation of aquatic life normally adapted to habitat of the stream.

SCENIC

1. Flow - Free flowing. Low dams, diversion works or other minor structures which do not inundate the natural riverbank may not bar consideration. Future construction restricted.
2. Accessibility - Accessible by roads which may occasionally bridge the river area. Short stretches of conspicuous and well-screened roads or railroads paralleling river area may be permitted, but consider type of road use.

3. Shoreline - Shoreline and immediate river environs still have overall natural character. Small communities limited to short reaches of total area. Agricultural practices which do not adversely affect river area may be permitted. This could include unobtrusive row crops and timber harvest.
4. Water Quality - Water quality should meet minimum criteria for desired types of recreation except where such criteria would be exceeded by natural background conditions and esthetics and capable of supporting propagation of aquatic life normally adapted to habitat of the stream, or is capable of and is being restored to that quality.

RECREATIONAL

1. Flow - May have undergone some impoundment or diversion in the past. Water should not have characteristics of an impoundment for any significant distance. Future construction restricted.
2. Accessibility - Readily accessible, with likelihood of paralleling roads or railroads along riverbanks and bridge crossings.
3. Shoreline - Some shoreline development. May include all agricultural uses, small communities, or dispersed or clustered residential.
4. Water Quality - Should meet minimum criteria for desired types of recreation except where such criteria would be exceeded by natural background conditions and esthetics and capable of supporting propagation of aquatic life normally adapted to habitat of the stream, or is capable of and is being restored to that quality.

NO CLASSIFICATION

Segment does not meet minimum general characteristics and one or more specific criteria described in the evaluation guidelines.

TABLE IV. -- Summary of Classification for Study
River Segments

<u>Segment</u>	<u>Miles</u>	<u>River Classification</u>
Mainstream		
I. Source to I-75	15	Not Eligible
II. I-75 to Mio Pond FPC Boundary	35	Recreation
III. Mio Pond FPC Boundary to Alcona Pond FPC Boundary	23	Scenic
IV. Alcona Pond FPC Boundary to Loud Pond FPC Boundary	7	Not Eligible
V. Foote Pond FPC Boundary to Oscoda	12	Not Eligible
South Branch		
VI. Source to Chase Bridge	21	Not Eligible
VII. Chase Bridge to Mainstream	16	Scenic
North Branch		
VIII. Source to Lovell Bridge	19	Not Eligible
IX. Lovell Bridge to Mainstream	<u>17</u>	Scenic
	165	

Summary of Attributes and Classification Eligibility
for River Segments

Segment I - Mainstream-Source to I-75.

1. Major Attributes

Flow - Small stream. Three impoundments.
Insufficient flow for easy canoeing.

Accessibility - Easy access. Six bridge
crossings. Runs through towns of
Grayling and Frederick.

Shoreline - Narrow winding stream course through
swamp and marsh. Scenic, but typical
marsh-swamp landscape. Development at
bridge crossings, towns, and Power Pond.

Water Quality - Generally clear - no pollution
sources. Quality sufficient for recrea-
tion and propagation of aquatic life
normally adapted to habitat of stream.
Water temperature high for quality trout
fishery.

2. Most protective classification for which segment
is eligible based on existing conditions.

No designation. Ineligible for inclusion in
system; because of impounded waters, lacks out-
standing remarkable values, and is a common
small stream condition in Michigan.

3. Other classifications considered by study team:

None, because of ineligibility.

Segment II - I-75 to Mio Pond FPC Boundary.

1. Major Attributes

Flow - Free flowing, moderately fast-variable,
several easy riffles, sharp bends.
Shoreline log jams. Safe for novice
canoeists. Moderate flow permits appre-
ciation of outstanding scenery and river
bottom.

Accessibility - Easy public access at 16 different points, including 6 bridge crossings. Bridge crossings are all major roads. Numerous private residential accesses.

Shoreline - Heavily developed with approximately 438 residential structures. Numerous docks and walkways. Most structures are unobtrusive and overall shoreline is natural-appearing and highly scenic. Powerlines, camp-access sites, and bridges detract from natural river setting. Early logging and fishing activity of significant historical interest.

Water Quality - Clear, no pollution sources.
Very high quality, cold water fishery.

2. Most protective classification for which segment is eligible based on existing conditions.

Recreation.

3. Other classifications considered by study team:

No designation.

Segment III - Mio Pond FPC Boundary to Alcona Pond FPC Boundary

1. Major Attributes

Flow - Free flowing, moderately fast, several fast riffles, wide, gently twisting channel with no obstructions. Flow permits appreciation of outstanding scenery. Relatively unchallenging water. Highly attractive river bottom.

Accessibility - Moderate. Major developed access at Mio (outside of boundary). Undeveloped access at Comins Flats, and McKinley and Au Sable River Bridges. Well-screened North River Road parallels the river for 10 miles. Occasional road noise. Frequent undeveloped access on Consumers Power land.

Shoreline - Attractive contrasts of bottom land hardwoods and conifers, high banks, and stands of white birch, aspen, and white pine. Highly obtrusive subdivision occupies both riverbanks for 1.9 miles - no other development. Two bridges and powerline crossings. Large subdivisions immediately outside river corridor.

Water Quality - Generally clear with no known pollution sources, although subdivisions should be suspect. High quality cold water fishery.

2. Most protective classification for which segment is eligible, based on existing conditions:

Scenic.

3. Other classifications considered by study team.

Recreation and no designation.

Segment IV - Alcona Pond FPC Boundary to Loud Pond
FPC Boundary

1. Major Attributes

Flow - Moderately fast but varies from hydro-power generation. Water level rises 3-4 feet. No significant riffles or challenge, but occasional logs and debris make interesting canoeing. High water from drawdown may be hazardous.

Accessibility - No public access within river corridor. Occasional undeveloped access over Consumers Power Company land and at Curtisville Road Bridge. No bridges or paralleling roads.

Shoreline - Heavily forested with many high, partially eroded banks. Scenic quality is moderately high and characteristic of the river - a very natural river setting.

Water Quality - No pollution sources. Quality sufficient for recreation and propagation of aquatic life normally adapted to habitat of stream. Warmer water from Alcona Pond and fluctuating water level from drawdown affects aquatic biota.

2. Most protective classification for which segment is eligible:

No designation due to short length (isolated from other segments (See Appendix B)) and lack of outstandingly remarkable values.

The river or river unit must be long enough to provide a meaningful experience. Generally, any unit included in the system should be at least 25 miles long. However, a shorter river or segment that possesses outstanding qualifications may be included in the system.

3. Other classifications considered by study team:

None, because of ineligibility.

Segment V - Foote Pond FPC Boundary to Oscoda

1. Major Attributes

Flow - Same as Segment IV.

Accessibility - No public access or developed sites within river corridor. Occasional non-public access over Consumers Power land. South River Road closely parallels the river at two points.

Shoreline - A very natural setting of lowland hardwoods with occasional low banks and no development. Frequent evidence of early logging era of outstanding historical interest. Noise from Wurtsmith Air Base is a significant intrusion. Scenic, but typical undeveloped shoreline.

Water Quality - Same as Segment IV except
Segment IV has an outstanding anadromous
fishery.

2. Most protective classification for which segment is eligible:

No designation due to short length and isolation from other segments by Alcona, Loud, 5 Channels, and Foote Ponds. (See Appendix B)

3. Other classifications considered by study team:

None, because of ineligibility.

Segment VI - South Branch - Source to Chase Bridge

1. Major Attributes

Flow - Small stream with difficult canoeing above Roscommon.

Accessibility - Infrequent access above Roscommon. Numerous public and private accesses through Roscommon to Chase Bridge.

Shoreline - Narrow winding course through swamp and marsh. Scenic natural setting, but typical marsh-swamp landscape above Roscommon. Heavily developed through Roscommon to Chase Bridge.

Water Quality - Quality sufficient for recreation and propagation of aquatic life normally adapted to stream habitat. No significant pollution sources but Roscommon development does affect water quality. Low quality warm water fishery.

2. Most protective classification for which segment is eligible based on existing conditions:

No designation. Ineligible for inclusion in system because it lacks outstandingly remarkable values, and is a common small stream condition in Michigan.

3. Other classifications considered by study team:
None, because of ineligibility.

Segment VII - South Branch - Chase Bridge to
Mainstream

1. Major Attributes

Flow - Small river, sufficient flow for canoeing. Many bends, short riffles, and sweepers. Moderate flow rate permits appreciation of outstanding scenery. Safe for novice canoeists.

Accessibility - Access at 5 different points - 2 undeveloped. Three public and one private road bridges span segment. Four miles of well-screened, parallel roads.

Shoreline - Outstanding natural riverscape with relatively insignificant development. High scenic value. One subdivision immediately above Smith Bridge. Forty residential structures below Smith Bridge are well spaced and relatively unobtrusive.

Water Quality - High water quality supports outstanding, cold water fishery.

2. Most protective classification for which segment is eligible based on existing conditions:

Scenic.

3. Other classifications considered by study team:
Recreation and no designation.

Segment VIII - North Branch - Source to Lovell Bridge

1. Major Attributes

Flow - Small stream becomes wide and shallow near Lovell. Two small impoundments. Insufficient flow for canoeing.

Accessibility - Access limited to four developed sites and two road bridges.

Shoreline - While the natural undeveloped shoreline is highly attractive, it is typical marsh landscape. Moderate development near Lovell.

Water Quality - Quality sufficient for recreation and propagation of aquatic life normally adapted to stream habitat. Good trout fishery and habitat conditions.

2. Most protective classification for which segment is eligible based on existing conditions:

No designation. Ineligible for inclusion in system: impounded and lacks outstandingly remarkable values, common small stream condition for Michigan.

3. Other classifications considered by study team:
None, because of ineligibility.

Segment IX - North Branch - Lovell to Mainstream

1. Major Attributes

Flow - Small stream. No impoundments. A few riffles, challenging bends and obstacles. Safe for novice canoeists.

Accessibility - One developed access point, two major road bridges and an undeveloped access at Dam 4. Three miles of well-screened road parallel the river.

Shoreline - Outstandingly scenic riverscape. Large subdivision - 60 homes - at Lovell Bridge and 77 homes in the lower 6 miles. Sixteen power distribution line crossings. Periodic noise pollution from artillery range.

Water Quality - Same as Segment VI-A; excellent trout fishery.

2. Most protective classification for which segment is eligible based on existing conditions:

Scenic.

3. Other classifications considered by study team:

Recreation and no designation.

CAPSULE SUMMARY OF ELIGIBILITY, AUSABLE RIVER
RIVER SEGMENTS

TABLE V

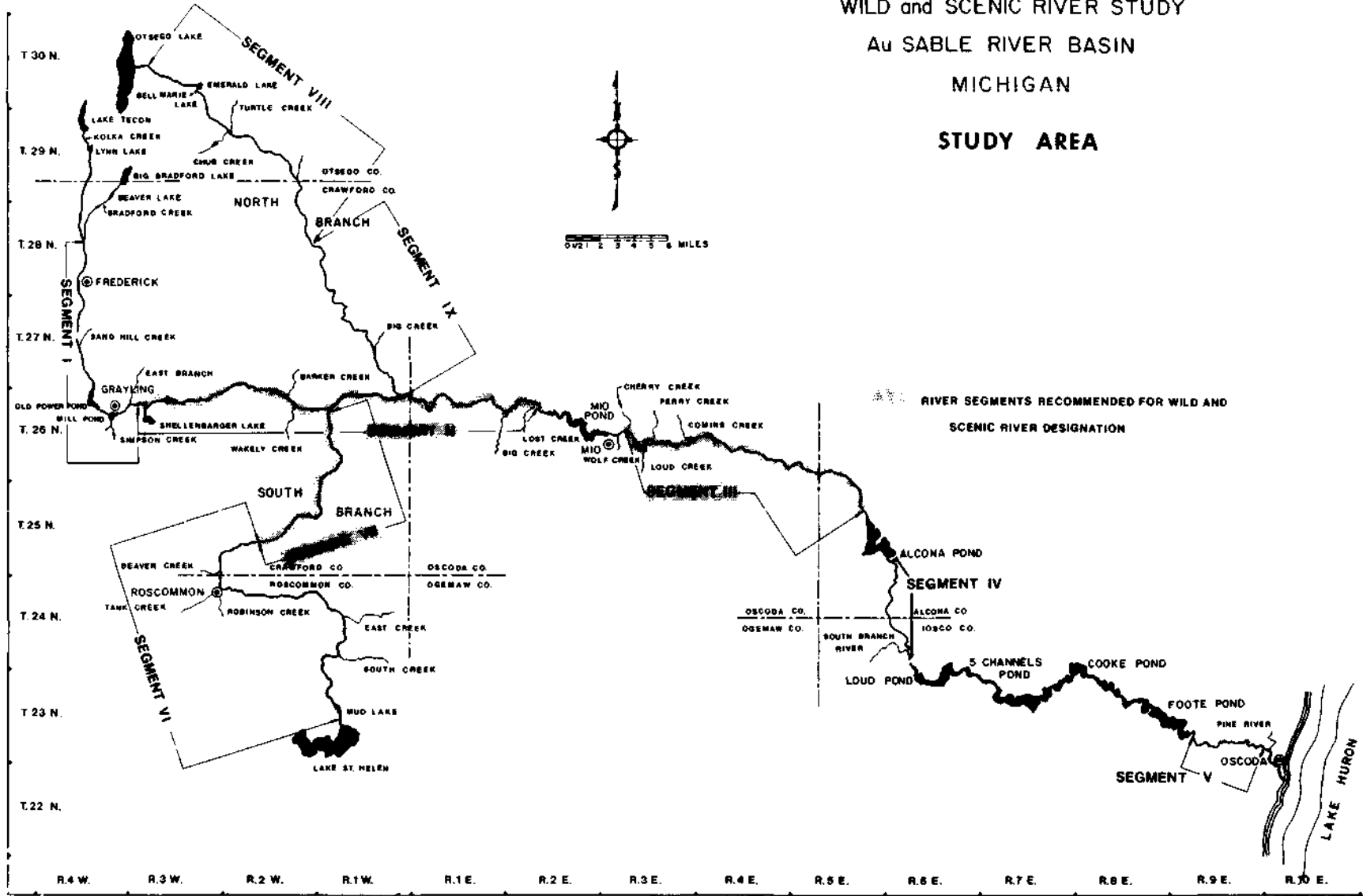
SEGMENTS	MAINSTEM					SOUTH BRANCH		NORTH BRANCH	
	I Source to I-75	II I-75 to Mio Pond	III Mio Pond to Alcona Pond	IV Alcona Pond to Loud Pond	V Foote Pond to Oscoda	VI Source to Chase Bridge	VII Chase Bridge to Mainstem	VIII Source to Lovell	IX Lovell to Mainstem
Free flowing nature affected by*									
Impoundments	3	None	None	None	None	None	None	2	None
Diversions	None	None	None	None	None	None	None	None	None
Length *	15	35	23	7	12	21	16	19	17
Water Quality *									
Meets Criteria for:*									
Primary contact recreation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Secondary contact recreation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water esthetics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fish aquatic life propagation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Outstandingly Remarkable**									
Scenic values	No	Yes	Yes	No	No	No	Yes	No	Yes
Recreation values	No	Yes	No	No	No	No	Yes	No	No
Geologic values	No	No	No	No	No	No	No	No	No
Fish and wildlife values	No	Yes	Yes	No	Yes	No	Yes	No	No
Historic values	No	Yes	Yes	No	Yes	No	No	No	No
Cultural values	No	No	No	No	No	No	No	No	No
Eligibility for National Wild and Scenic Rivers System	Not Eligible	Eligible	Eligible	Not Eligible	Not Eligible	Not Eligible	Eligible	Not Eligible	Eligible

*Must meet all the criteria to be eligible

**Must meet one or more of the criteria to be eligible

CHAPTER V - ANALYSIS OF ALTERNATIVES

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



CHAPTER V

Analysis of Alternatives

Preface

The Water Resources Council developed and tested an analytical procedure for weighing costs and benefits of alternative water and land resource development plans in 1971. The process was modified and adopted by executive order as the "Principles and Standards for Planning Water and Related Land Resources" (Federal Register Volume 38, No. 174, September 10, 1973). Appendix C. The procedure is mandatory for wild and scenic river studies. This section describes the results of such analysis of six alternative plans for the Au Sable River segments found eligible for inclusion in the National Wild and Scenic Rivers System.

Purpose

This analysis provides a basis for recommendations of inclusion or exclusion of eligible Au Sable River segments into the National Wild and Scenic Rivers System. This section describes and quantifies, to the extent possible, the costs and benefits of each alternative plan. A total of six alternative plans are analyzed. Alternatives 4, 5 and 6 describe various environmentally oriented wild and scenic river options. Two alternatives, 2 and 3, are concerned with economic development and alternative 1, "No Action," reflects a continuation of current land and water use and management. Each plan is compared to the No Action Plan and the additional impacts, as well as the total effects, are given for these alternatives. It is important to note that the economic plans have some positive environmental effects just as the environmental quality plans have some positive economic effects. Neither is completely one-sided.

The principles and standards procedure specifies that each alternative be evaluated within the framework of a four account system. These accounts are National Economic Development, Environmental Quality, Regional Development, and Social Well-being. Each plan is discussed within this framework. The appendix also includes a series of tables that display the effect of each plan on each account in greater detail. In the final analysis, each alternative plan is measured against certain evaluation criteria found in Appendix C-25. A preferred alternative is selected which succeeds in satisfying most of those criteria.

ALTERNATIVE PLANS

ALTERNATIVE 1

No Action Plan - Continue Current Management

This plan involves State, Federal, and local agencies. It is based on continued application of current management authorities to protect scenic, recreation, geologic, fish and wildlife, archeologic, and other values. It also assumes that current trends in the use and development of resources will continue and that no new action will be taken as a result of this study.

The four eligible segments within this river corridor contain 24,360 acres. Within the river corridor approximately 9,000 acres, or 40 percent are privately owned by Consumers Power Company. An additional 40 percent is held by small private owners. The State of Michigan owns and administers 4,160 acres or 19 percent, while the Forest Service manages 200 acres or 1 percent. If ongoing negotiations with Consumers Power Company result in acquisition of all Consumers Power land within the river area, the two public agencies would then administer 13,410 acres, or 60 percent of the corridor. (see K. Landownership and Uses - page 80 and Appendix G.) Private lands would be subject to county land use regulations.

Environmental and Land Use Impacts

No changes in the types of land use would be expected within the foreseeable future. Recreation, residential and commercial development, and timber production would continue to be the predominant uses along the Au Sable River and its tributaries. The intensity of some uses, especially recreation and subdivision for homes, would be expected to increase substantially on private lands. Local governments would continue to maintain some control on private land development through zoning. State and Federal control and administration of these uses would continue on public lands within the corridor. The Forest Service and State of Michigan would utilize the full range of their management authorities on public land to protect and preserve scenic, recreation, fish, and wildlife, and other values of the river and corridor.

State and Federal agencies are currently improving river quality by assisting local communities in developing centralized waste water treatment facilities.

Local regulations would provide limited protection from residential sources of water pollution.

State regulations would provide a means to locate and eliminate point sources of pollution. Both State and Federal safeguards would concentrate on preventing erosion and other adverse effects of timber management and petroleum exploration and development.

Continuing land acquisition by state and federal governments would continue within state and federal forest boundaries and major portions of the river segments would eventually be in public ownership after acquisition of Consumers Power land. There would be no significant threat to the natural values of those public lands.

Most existing residential development occurs on the mainstream between I-75 and Wakely Bridge and on the North Branch between Kellogg Bridge and the mainstream. A very high potential for additional residential development exists, particularly on the North Branch. Additional residential development would likely reduce the natural values of private land within the river corridor.

The heaviest recreation use occurs on the section between I-75 and Mio, and on the South Branch. Heavier use on these sections could result in user conflicts, environmental damage, and lower quality experience. Recreational use, particularly canoeing, on the remaining river segments has not developed to its full potential. Under this plan, there are no existing means of managing river use.

Economic and Regional Development Impacts

Present yields from agricultural and timber lands would be maintained. Agricultural production remains an insignificant use in the river corridor. Sustained yield from corridor timber land is capable of producing 857.1 thousand board feet annually with an approximate value of \$44,050. (See Appendix G.)

Consumers Power Company owns approximately 95 percent of the mineral rights on their lands. Mineral rights on State and Federal lands are owned by those agencies. The mineral rights on private lands are owned by various individuals and companies. Oil and gas, where present within the corridor would continue to be an important part of the local economy. The two projected oil wells that may occur within the river corridor could produce an average of 152 barrels per day and have an average value of \$14.00 per barrel. The total value of an average well might be \$2.51 million. 1/ Minerals on public lands would be available under appropriate mining laws and mineral leasing laws would be operative.

Overall, recreation use may be expected to increase by 9.8 percent during the next 10 years. Most increased use would occur on the river and developed public facilities. No additional recreation facilities are planned for public lands. However, reconstruction and improvement of existing sites may occur. By 1990, approximately 555,287 people are expected to participate annually in recreation activities within the river corridor. The annual value of this use is estimated to be \$5,211,118 (1976). (See Appendix G.)

Social Impacts

The No Action Plan would have considerable impact on individuals in the Au Sable River area. Very little change in land use is expected, but growth of existing uses could be rapid. Residential development for summer and retirement homes would likely increase and recreation use growth would continue. User conflicts would accentuate as each user vies for his share of the river resource.

Historic and archeologic sites on private land would not receive state and/or federal protection and could be degraded. Rare and endangered species could be adversely affected by larger concentrations of people within their range.

1/ Economic Impact of Designation of the Au Sable and Manistee Rivers under the Wild and Scenic Rivers Act, Commonwealth Associates, Inc.

NATIONAL ECONOMIC DEVELOPMENT PLANS

The basis of a National Economic Development Plan (NED) is the increased output of goods and services or the increased economic efficiency in the output of goods and services.

Realistically, there is little that State and Federal governments can do to promote rapid or maximum development within the study area. The local economy is based on light manufacturing, recreation, and forest products and is likely to remain so, even under stimulated conditions. Thus, the distinction between a NED Plan and the No Action Plan is one of degree rather than kind.

In the formulation of alternative plans, one must arrange the component needs that are essentially complementary. For example, the satisfaction of one component need does not preclude satisfaction of, or add to, the cost of other needs. "NED Plan A" is essentially a plan which generates maximum recreational benefits. "NED Plan B" is a plan which maximizes timber and mineral development and output. It was the assumption of the study team that the satisfaction of timber-mineral needs inhibited, not precluded, the satisfaction of fishing, canoeing, camping, picnicking, hunting, and hiking component needs.

Neither plan wholly precludes environmental quality objectives; however, satisfaction of environmental quality is reduced.

ALTERNATIVE 2

NATIONAL ECONOMIC DEVELOPMENT PLAN A

Increased Recreation Development

There is a national need for such commodities as canoeing, fishing, camping, hiking, hunting, off-road vehicle (ORV) use, and commercial residential development associated with recreation use. (Michigan State Recreation Plan - 1970) The goal of this NED plan is to maximize the output and efficient production of these commodities. This would be done on 58 miles of the Au Sable Mainstream and 33 miles of the tributaries.

Environmental and Land Use Impacts

If selected, this alternative would develop recreation on public and private lands to a level above what is considered consistent with maintaining a high quality environment. Development of facilities and structures for recreation under this plan is physically possible and economically beneficial. However, the density of recreation use could cause some loss of diversity and density of wildlife, soil erosion, disturbance of vegetative cover, vandalism, litter, and loss of auditory and visual qualities due to overcrowding. There would be a general reduction of those qualities which make the Au Sable River a valuable addition to the National Wild and Scenic Rivers System.

Development of public land for other uses under this plan would have to be kept at a minimum to allow for recreation development and use. Environmental controls would have to be placed on timber and oil-gas production. These controls would reduce timber incomes by \$16,294 annually and increase initial hydrocarbon extraction costs by \$75,000.

Conservation/Recreation Costs and Trends

If selected, this plan would result in development of 70 camping units, 4 access sites, 91 miles of trail, and 131 picnic units. Recreation development would cost approximately \$595,400. Operation and maintenance costs for these developments would require about \$157,000 annually. In addition, management and operation expenses for plan administration would be approximately \$83,980 annually.

Under existing circumstances and development, an estimated 736,527 recreation days would occur annually on public recreation facilities within the area by 1990. With the developments proposed by this plan, a total of 922,876 recreation days would be generated annually by 1990. This would consist primarily of increases in fishing, camping, hiking, and canoeing. The annual value is estimated to be an additional \$1,893,952, spent by river visitors for gas, food, lodging, supplies and services. (See Appendix G.)

Energy Impacts

Hydroelectric sites on the Au Sable River are either presently being utilized or were deemed unfeasible for development by Consumers Power Company. This plan would not effect present levels of hydroelectric power production. It could increase exploration and drilling costs for possible petroleum sources by requiring directional drilling. The additional drilling costs would be approximately \$75,000.

Economic and Regional Development Impacts

There are no adverse economic effects other than those discussed in Conservation/Recreation Costs and Trends and Energy Impacts. However, an estimated 922,876 recreation users would be expected to spend an additional \$655,230 annually in the basin by 1990, than they would without this plan. This would generate seasonal employment, bring tourists dollars to the area, and increase local incomes. There would be no foreseeable effect on the tax base.

Social Impacts

Although recreation use would increase substantially under this plan, there would be significant degradation in the quality of experience. User conflicts between river landowners, canoeists, anglers and canoe livery businesses would be significant. Additionally, destruction and some vandalism of private and public property and cultural sites could increase if this plan is selected.

ALTERNATIVE 3

NATIONAL ECONOMIC DEVELOPMENT PLAN B

Increased Timber and Mineral Development

The eligible portions of the Au Sable River seen area contain approximately .001 percent of Michigan's commercial forest land. It has a potential yield of approximately 2,247 thousand board feet each year, valued at \$115,496 per year.

Oil and gas production may be possible from two wells projected to occur within the river corridor. Each well could be valued at approximately \$2.51 million and produce approximately 152 barrels of oil per day. An average well under similar conditions costs approximately \$80,000 to drill. Although the probability of them occurring is remote, the increased scarcity of oil and gas and selection of this plan could make exploration and extraction feasible.

If this plan is selected, it could increase production of timber, and possibly minerals. Access roads and minimum environmental controls could probably be implemented in the area by State and Federal governments. However, the production would have to be increased without an adverse effect on production in other areas to fall within the criteria for a NED plan.

Environmental and Land Use Impacts

Under this plan, adverse environmental impacts would increase significantly. Much of the scenic, recreation, and wildlife qualities which make the affected areas valuable for inclusion in the National Wild and Scenic Rivers System would be lost.

There would be no major changes in present land uses. However, forest land would be subjected to more intensive timber and mineral management to increase production.

Conservation/Recreation Costs and Trends

Adverse effects of this plan on recreation would be two-fold. First, the quality and value of a recreation experience would decrease. Secondly, the number of recreationists using the area could level off or decline because of quality deterioration.

Energy Impacts

This plan would reduce the cost of oil-gas extraction, if development becomes feasible, and make oil and gas more readily available to the Nation.

Economic and Regional Development Impacts

This plan would improve the economy in the area by providing jobs, more stable employment and increased income to area residents. The local tax base would be unaffected, but returns to the counties from timber and mineral production would increase.

Social Impacts

If selected, this plan would have adverse social impacts. It would include the loss of recreational opportunities and cause conflicts between private homeowners, recreationists, timber companies, and government agencies. Positive social impacts of this alternative would include improved living standards for some local residents. This plan would place 5.5 million annually in the regional economy and largely benefit those involved in the planned activity.

ENVIRONMENTAL QUALITY RIVER PLANS

Preservation of the Au Sable River systems values may be accomplished either through federal or state river designation of scenic and recreation river segments. In comparison, state designation can offer significant protection to an entire river system and federal designation offers greater statutory protection and protection to a wider river corridor of selected segments.

The river's length and outstanding values permit consideration of a variety of protection options, depending upon the extent of environmental protection desired and the degree of accommodation with incompatible resource uses. Although formulated to satisfy the environmental quality objective, each plan has economic benefits. Three feasible alternatives with various classification options are evaluated and discussed.

ALTERNATIVE 4

STATE NATURAL RIVER PLAN

Adoption of this plan would involve state, federal, and local agencies with administrative responsibilities held by state and local governments. Zoning ordinances adopted by local government or rules promulgated by the State of Michigan, existing laws and memorandum of understandings with the Forest Service would provide for protection of the river and its related resources.

Ordinances or rules effective under this plan would limit or prohibit placement of structures or designate their location in relation to the water's edge and may limit the subdivision of lands for platting purposes. It may control the location and design of highways, roads, and utility lines. It also may limit the cutting of vegetation within 100 feet of the river. Rules promulgated by the State would not control land uses beyond 400 feet of the river. The State Natural River Act of 1970 is found in Appendix B.

Land ownership patterns would remain largely unchanged. State, Federal, and private land exchanges would proceed under existing policies and remain largely unaffected by this plan.

Environmental and Land Use Impacts

This alternative offers less statutory protection of the Au Sable River than either Wild and Scenic River Plan A or B. However, this plan may extend protection to tributaries and river segments not normally protected under Federal designation and therefore offers a lower level of protection over a greater river length.

This plan and enforcement of State and local regulations would assure water quality protection comparable to other plans but long range deterioration of water quality is possible because of increased development. Scenic qualities would be protected and maintained with a possible loss in the primitive appearance of shoreline areas.

Adoption of this plan could lessen conflicts between recreation interests users and the owners of the many private holdings scattered along approximately one-half

of the river if State watercraft regulations are in effect. Adoption of the State plan would require that existing water quality standards be maintained or enhanced.

Conservation/Recreation Costs and Trends

This plan would require little transfer of land from private to public holdings or acquisition of partial interests. Development of additional facilities would occur as needed under a management plan developed for this alternative.

Recreation use generally would remain unchanged by this plan and be comparable to use in Wild and Scenic River Plan A. However, additional hiking and picnicking facilities would probably not be provided and there would be 59,912 less recreation days under this plan in 1990. By 1990, about 555,287 recreation days are expected to occur annually. The value of this use is estimated to be \$6,335,824.

Social Impacts

The State Natural River Plan would have less negative impact on private land owners than other Wild and Scenic River Plans. Outdoor recreational opportunities will stay at approximately the same level, as additional facilities would probably not be provided. The quality of recreational experience could be expected to be enhanced if controls on the numbers, timing, and behavior of river users were enacted. Such controls would also serve to lessen existing conflicts between differing types of river users. Important historic and archeologic sites on private land would not receive additional protection and could be degraded.

ALTERNATIVE 5

Federal Wild and Scenic River Plan A

<u>Eligible Segments</u>	<u>Qualifies for Federal Designation</u>	<u>Proposed Federal Classification</u>
II. I-75 to Mio Pond FPC Boundary	Yes	Recreation
III. Mio Pond FPC Boundary to Alcona Pond FPC Boundary	Yes	Scenic
VII. South Branch - Chase Bridge to Mainstream	Yes	Scenic

This alternative is a modified version of Alternative 5 as presented in the draft proposal. The major differences between this, the final proposal, and the draft are the North Branch, Segment IX, has been deleted and trail mileage has been reduced from 91 miles down to 14 miles. Other changes such as reduced use, and lower costs are a direct result of deleting Segment IX. These modifications are in response to public comment during the review period.

The authority to condemn for fee title, normally provided by the Wild and Scenic River Act, has been annulled by existing public land ownership. Adjustments in land ownership status were necessary due to deletion of the North Branch and progress in the sale of Consumers Power Company land to State and Federal governments and private leaseholders.

Alternative 5 would protect 74 miles of river under the Federal Wild and Scenic Rivers Act and include the 3 most highly qualified river segments. It would include 58 miles of the mainstream and 16 miles of the South Branch.

Wild and scenic rivers designation would assure resource protection primarily through acquisition of partial interests and local zoning. Up to an average of 100 acres per mile on both sides of the river may be acquired to supplement protection where local zoning and partial interests are ineffective.

If this plan were implemented, a river corridor of approximately 20,060 acres would be protected. After the sale of 6024 acres of Consumers Power Company land to

State and Federal governments and 1780 acres to lease holders, approximately 7640 acres of private land would be protected by local zoning and partial interests. A total of 10,423 acres would be in public ownership. Consumers Power would retain ownership of 1997 acres. (K. Landownership and Use, and Appendix G.)

Environmental And Land Use Impacts

This alternative offers strong statutory protection to the included river corridor but affects less land and water area than alternative 6. It would protect approximately 992 acres of cold water fish habitat and ensure protection for 3 eligible river segments at the highest classification for which those segments are suited. This alternative includes approximately 80% of the highest quality trout fishery for which the Au Sable is famous.

Management would allow vegetative removal and manipulation to meet visual quality and wildlife objectives and provide for watershed protection. Land use and development would be limited within bald eagle nesting territories. Environmental constraints on logging could cost the industry approximately \$15,280 annually. There would be no impact on oil exploration and drilling because no wells are expected to occur within the segments evaluated in this alternative. Existing development would continue to exert varying impacts on the visual quality, natural environment, and water quality of the river. Impacts from potentially incompatible development could be minimized by local zoning and acquisition of scenic easements. Amounts and distribution of recreation use could be controlled where necessary to protect wild and scenic river values. Appropriate education of the river user and strict enforcement of regulations would be necessary to reduce user conflicts and damage to the resource.

Conservation/Recreation Costs and Trends

Development of public recreational facilities could offer a "Semi-Primitive Motorized" opportunity on "scenic" designated segments and a "Roaded Natural Appearing" opportunity on the "recreation" designated segment - see Appendix H. Development or reconstruction of facilities would include 11 miles of hiking-access trail, 19 picnic units to be located at existing sites, and reconstruction of 3 fishing-canoeing access sites in segment III. Two additional fishing access sites may be developed in segment VII by the state of Michigan.

Camping would continue at existing developed camp areas within the corridor but no new developed camp areas would be constructed. However some camp areas may be removed, relocated or improved. Recreation developments would cost approximately \$325,660. Operation and maintenance for new and existing development would be approximately \$134,440 annually. Approximately \$27,000 annually would be needed for cooperative law enforcement agreements. Additional law enforcement needs are included in operation and maintenance costs. No costs for clearing or processing mineral claims would be incurred. Partial interest costs, if needed, are estimated to be \$10,026,000 - 1980 dollars (page 154). This plan would require no foreseeable transfers of private land to public ownership.

Based on river corridor capacity and planned management, an estimated 615199 recreation days would occur annually on public recreation facilities by 1990. Fishing use would increase from 59,000 recreation days in 1976 to 119840 in 1990; hiking from 768 to 2525; and hunting from 6396 to 8074. 1/ Canoeing use would be reduced from the 1976 level of 212,221 recreation days per year to 185,799 recreation days. Camping use within the corridor would be held at 1976 levels. Picnic use would remain unchanged but would occur at developed picnic facilities rather than private land and unprotected sites. The increased use and impacts normally associated with wild and scenic river designation would not occur on the Au Sable because use would be limited to acceptable levels.

Energy Impacts

There are no hydroelectric sites with economic potential on the river segments considered, so this plan would have no effect on that energy source. It is also expected to have no significant impact on fossil fuel energy sources.

1/ Fishing, hunting, and hiking use would increase at normal projected rates of increase determined by the Michigan Recreation Plan, except that hiking use would also be increased because of additional hiking trails. Hiking use was determined from actual use on 4 miles of Michigan Shore to Shore Hiking and Riding Trail in Segment II. Use of shoreline access trails by fishermen is unknown but estimated to be very heavy.

Economic and Regional Development Impacts

Adoption of this plan could result in a slight increase in regional tourism. The primary economic benefit would result by maintaining a river resource that could continue indefinitely to attract tourist interest and dollars to the region.

Another primary impact could result from the reduction of canoe use and its affect on employment - see Appendix H. Reducing canoe use to satisfactory levels for recreation and scenic rivers could affect length of work season and work days of approximately 69 jobs because additional driving time and longer work hours and seasons could be necessary.

Social Impacts

The quality and variety of outdoor recreation available within the plan's boundaries would be protected and enhanced. The cultural and historical resources of the area would be surveyed, protected, and possibly receive visitor interpretation for public benefit.

In addition, there could be personal satisfaction in knowing that the river is nationally recognized and protected for individual use and enjoyment.

ALTERNATIVE 6

FEDERAL WILD AND SCENIC RIVER PLAN B

Plan Summary Table

<u>Eligible Segments</u>	<u>Qualifies for Federal Designation</u>	<u>Proposed Federal Classification</u>
II. I-75 to Mio Pond FPC Boundary	Yes	Recreation
III. Mio Pond FPC Boundary to Alcona Pond FPC Boundary	Yes	Recreation
VII. South Branch - Chase Bridge to Mainstream	Yes	Recreation
IX. North Branch - Lovell Bridge to Mainstream	Yes	Recreation

This alternative offers a lower level of protection to less river area than the other wild and scenic river plan. It would include the 91 miles of the Au Sable River that were found eligible for classification, but the "scenic" segments in Plan A and the North Branch would be classified "recreation."

Environmental and Land Use Impacts

Resource protection from mineral extraction and timber production would be the same as that offered under Plan A. This plan would allow new and more intensive private, public, and commercial development. It would permit heavier recreation use on segments III, VI, and IX with less emphasis on a quality experience and use distribution. However, protection of river values at a lower standard would remain high priority.

Classification of the entire river as "recreation" would allow more intensive activity with some environmental degradation expected than under Plan A.

Construction/Recreation Costs and Trends

Recreation use and development would be increased slightly in the segments III, VI, and IX. By 1990, there would be about 880,995 annual recreation days, 23,209 days over what could occur without a designation. This degree of increase would occur largely by allowing heavier use per day on two river segments. This use would require an additional 31 picnic units and 58 camp units.

Initial costs associated with this development would be about \$558,900. The annual operation and maintenance costs would be approximately \$158,538. As with Plan A, there would be no relocation costs and no displacement of current landowners.

Energy Impacts

As in Plan A, there are no expected energy impacts.

Economic and Regional Development Impacts

More favorable economic impacts could result from a "recreation" classification of the "scenic" sections proposed in Plan A. These would result largely from an increase in activities associated with recreation use. Annual expenditures could reach about \$1,279,600 over those that occur under Plan A.

A primary impact would result from an increase in canoe use as compared with the No Action Plan. Canoe use could increase from 212,221 recreation days under the No Action Plan to 235,430 recreation days in this plan.

Social Impacts

Social impacts under this plan would be similar to those under Plan A. However, by allowing more recreation use on the segments previously classed as "scenic", more recreation could be provided at the expense of lowering the quality of the experience. User conflicts are also expected to increase substantially between land-owners, canoeists, and anglers if this plan is adopted.

SUMMARY AND COMPARISON OF EFFECTS OF ALTERNATIVE PLANS

TABLE VI		NATIONAL ECONOMIC DEVELOPMENT PLANS			ENVIRONMENTAL QUALITY PLANS		
		1	2	3	4	5	6
Alternative	Unit	No Action	NED A	NED B	State Natural River	W&S River Plan A	W&S River Plan B
Acres Managed for the Scenic Resource	Acre	10,201	24,360	3,393	13,594	20,060	24,360
Free Flowing River Preserved	Miles	None Guaranteed	None	None	None Guaranteed	74	91
Canoeing	RD	212,221	271,251	212,221	212,221	185,799	235,430
Fishing	RD	144,134	168,534	144,134	144,134	119,841	168,534
Hiking	RD	1,235	120,796	1,235	1,235	2,525	120,796
Camping	RD	163,620	198,970	163,620	163,620	157,560	192,910
Picnicking	RD	24,272*	153,520	24,272*	24,272*	141,400	153,520
Hunting	RD	9,805	9,805	9,805	9,805	8,074	9,805
Annual Recreation Use	RD	555,287	922,876	555,287	555,287	615,199	880,995
Camp Units	Number	169	239	169	169	169	169
Picnic Units	Number	21	152	21	21	140	152
Hiking-Walking Trail	Miles	3	92	3	3	14	92
Access Sites (Developed)	Number	20	24	20	20	22	24
Recreation Development Costs	\$1,000	None	595	None	None	325	559
Petroleum Products	1,000 bbls.	1,000	Same as No Action	1,000	1,000	None Expected	Same as no action
Annual Timber Production	MBM	542	225	1932	518	186	225
Scenic River Area	Miles	0	0	0	56	56	0
Recreation River Area	Miles	0	0	0	36	36	92

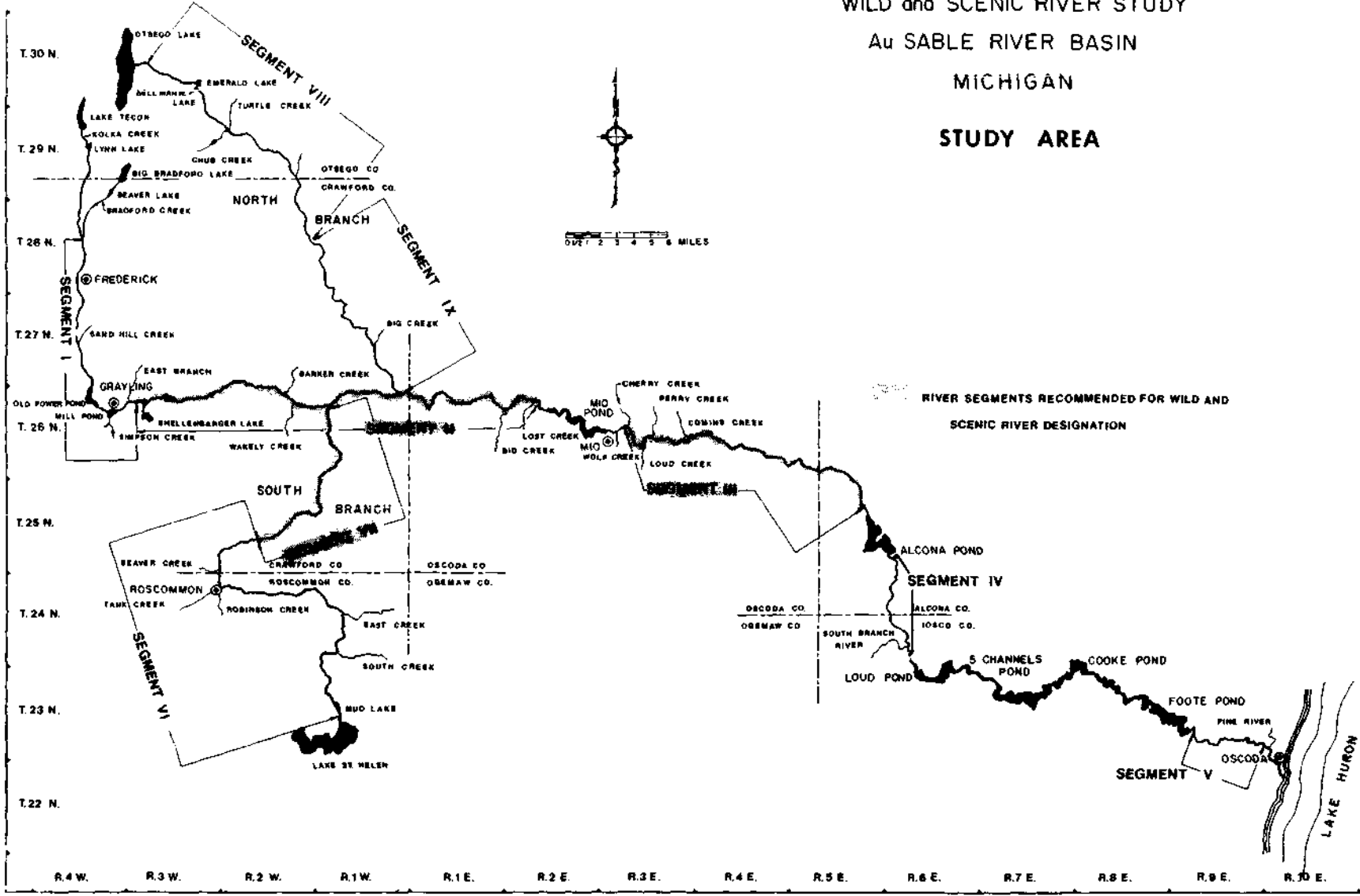
*Indicates use only on existing developed sites - does not account for unrecorded use known to occur on private land and undeveloped sites.

TABLE VI (Continued)

		NATIONAL ECONOMIC DEVELOPMENT PLANS			ENVIRONMENTAL QUALITY PLANS		
Alternative		1	2	3	4	5	6
Measurement of Effect	Unit	No Action	NED A	NED B	State Natural River	W&S River Plan A	W&S River Plan B
Archeologic & Historic	Sites	None on private land, some degradation may occur on public land.	None on private land some degradation will occur on public land.	None on private land, degradation may occur on public land.	None on private land, sites protected on public land.	All sites protected.	All sites protected but some degradation may occur.
Preservation of Threatened or Endangered Species	Wildlife Vegetation	None on private land.	None on private land, some disturbance.	None on private land, some disturbance on public land.	None on private land.	Habitat protected.	Habitat protected, some disturbance may occur.
Freedom of Choice	Qualitative	Many options reserved.	Options on developed sites are lost.	Options on timber harvest areas are lost.	Many options preserved.	Options for river values preserved, development choices are lost.	Same as MSR-A
Regional Income Generated	\$1,000 (1980 \$)	5437	7944	5474	5437	4469	7537
Property tax loss to counties by public acquisition of:							
Land	Dollars	None	None	None	None	None Expected	None Expected
Partial Interests	Dollars	None	None	None	None	None	None
Educational Cultural and Recreational Opportunities		Diversity of recreation is enhanced.	Educational and cultural opportunities may be reduced.	Opportunities loss.	Diversity of recreation is enhanced	Diversity may be loss.	Educational and cultural opportunities may be reduced.
Employment Generated by activities in the corridor	Man years.	791	1019	79	790	750	921
Visual Quality Objectives	Acres						
Retention	-	-	16525	-	-	16525	16525
Partial retention	-	-	6053	-	-	6053	6053
Modification	-	-	1647	-	-	1647	1647
Maximum modification	-	-	135	-	-	135	135

CHAPTER VI - CONCLUSION AND RECOMMENDED MANAGEMENT

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



CHAPTER VI

Conclusion and Recommended Management

Conclusions

The conclusion of this study is that approximately 74 miles of the Au Sable River system be included in the National Wild and Scenic River System. This conclusion identifies the river segments and classifications found in Alternative 5 (Wild and Scenic River Plan A) as the recommended alternative. As a result of this conclusion, the following recommended management was formulated to reflect the recommended alternative through these guides to final management planning.

Boundary

The river corridor boundary for the proposed Au Sable Wild and Scenic River is delineated in Appendix D. The acreage included in the boundary averages approximately 268 acres per river mile on both sides of the river. This boundary location was chosen because of the direction given in Section 3(b) and 10(a) of PL 90-542. The boundary was drawn to include, but not be limited to, the "seen area" from the river during leaf off. In formulating the boundary, attention was generally given to protecting the natural qualities of the river area. In most cases, the topographic break or ridge line is the seen area boundary. In areas where private land was involved the boundary was adjusted to follow property lines or legal descriptions. Detailed boundaries will be refined during development of a coordinated management plan.

Recommended Management

This recommended management is an interpretation of the direction given by Congress in the Wild and Scenic Rivers Act and the guidelines prepared by the Secretaries of Agriculture and Interior (Appendix B). It serves two purposes: first, it has been used to better identify the impacts that would occur if the river were classified. Second, it is intended to be a guide for future planning efforts. It should not be construed as being the final management plan. The Forest Service will continue to refine the guides, if the river is designated and tailor them to meet the needs of the people and river. Active coordination with the State would be sought in the development of future plans.

Section 10(a) of the Wild and Scenic Rivers Act provides the direction under which these guides were developed.

The guides give separate management direction for "recreation" and "scenic" classified river segments. Segments classified as "recreation" tend to allow more use and development than those classified "scenic". Therefore, all management direction given for "recreation" segments also applies to the "scenic" segments. Additional guides for "scenic" segments are also given in this section.

Administration

It is recommended that administration of the Au Sable Wild and Scenic River be under the U.S. Department of Agriculture-Forest Service in close cooperation with the State of Michigan and local governments.

The following guides have been developed on the basis of the "recreation" and "scenic" river segments:

Recreational River Segment

1. Recreation

a. Watercraft

Watercraft use will be limited to a level which will protect river values, reduce user conflict and provide satisfying recreation experiences. Controls on numbers, timing and/or location would be necessary.

Use of motorized vessels would be prohibited above Wakely Bridge.

Rest areas would be provided at existing access areas and at other appropriate points along major watercraft routes when necessary to reduce user conflicts and protect river values.

Boating facilities would be redesigned and located where they are not visually evident ... (see "Retention" - Appendix E).

b. Camping

The number of camping facilities will be directly related to the carrying capacity of the river corridor.

Camping would be permitted only at designated camping areas. (See Appendix E, Visual Resource.)

Camping areas would be maintained and/or improved to be visually inevent from the river. (See "Retention" - Appendix E).

c. Picnicking

Picnic facilities would be provided at access points and rest areas for anglers and canoeists.

d. Fish and Wildlife

Emphasis would be given to management that protects existing fish and wildlife values. Habitat enhancement measures would be encouraged when necessary for protection of existing species.

Fishing, trapping and hunting would continue under existing State laws.

Rare or endangered species would be protected according to approved management plans. Special programs would be instituted as necessary.

e. Hiking

Foot access trails for anglers and hiking would be provided where needed and would be consistent with fisheries managment, streambank protection and other progams. Access across private land should be avoided.

2. Public Access

Selected vehicle access sites would be improved but no new vehicle access sites would be provided.

Some existing vehicle access sites would be modified to permit foot traffic only.

Additional commercial access sites would not be permitted.

3. Motor Vehicles and Horses

Motor vehicles and horses would be prohibited in the river management zone except:

- a. On developed public roads and horse trails and road portions of developed facilities;
- b. For owner access grazing or lodging on private land;
- c. On facilities of the Shore-to-Shore Foot and Horse Trail designed specifically for horse and foot use;
- d. In conjunction with resource management and protection activities, agricultural and emergency use.

4. Vegetation and Timber

Vegetation would be managed to meet wildlife, visual quality, and watershed protection objectives with primary emphasis given to protecting aesthetic, scenic, historic, archeologic, and scientific features. These objectives might be met through timber harvest but protection of river values would be paramount.

Where feasible, a screen of native vegetation would be maintained between structures and the river bank. Residents would be encouraged to screen existing structures with vegetation.

Use of pesticides and hazardous chemicals would be prohibited within the river zone except when authorized by the administering agency.

Trees could be removed for safety purposes in developed areas. River debris and trees would not be removed without approval of the administering agency.

5. Improvements

New structures would be required to meet the visual quality standard established in the Visual Management System found in Appendix E.

Owners would be encouraged to screen existing structures with natural vegetation and use harmonious colors. Natural materials would also be used where possible in construction of recreation facilities, streambank stabilization and other structures.

Advertising signs would not be permitted within the seen area of the river.

6. Minerals

Generally extraction of minerals would not be permitted within the river corridor. However, extraction of oil and gas would be permitted by directional drilling from outside the corridor.

7. Utilities

New utility lines would be permitted, providing existing routes were utilized or that new routes meet the visual quality standard and Forest Service standards for underground lines on National Forest lands.

8. Fire

Fire suppression methods would be modified within management constraints to minimize ground disturbance, and chemicals that would effect river values. Damaged areas would be restored to minimize erosion and visible scars.

9. Water

- a. Water quality monitoring would be continued in cooperation with the State of Michigan.
- b. State of Michigan standards for total body contact recreation and cold water fisheries would be maintained.
- c. The State of Michigan would maintain jurisdiction over enforcement of water quality standards, water uses, and submerged lands regulations.

- d. Proposals for water and related land use and development projects that would have an adverse effect on the river's unique qualities would not be authorized or assisted by any State or Federal Agency. All such proposals would be subject to specific review and approval.

10. Visitor Information and Interpretive Programs

- a. Special emphasis would be given to scientific study and interpretation of geological, archaeological, historical, and ecological areas of special significance.
- b. Special emphasis would be given to developing a "river use ethic" among river users to increase their concern for river values, riparian land owners, and each other.
- c. Interpretive programs would be instituted for areas of special significance.

11. Zoning by Local Governments

Local governments would be encouraged to enact and administer zoning regulations that will protect scenic and other resource values of the river zone. Local zoning regulations could be written and enforced to provide the same degree of protection as scenic easements.

12. Law Enforcement

Emphasis would be placed on law enforcement. Federal regulations would be enforced on National forest lands and scenic easements located within the river zone. State and local regulations would be enforced by local law enforcement officials. SISK funding would be acquired for cooperative law enforcement assistance.

13. User Limitations

Controls on numbers, timing and/or location of river users may be necessary. Controls would be implemented through the use of canoe reservation systems, special use permits, law enforcement, State water use regulations and/or facility design limitations.

Scenic River Segment

Direction from the recreation river segment guides also applies to the scenic river segments with the following additional guides:

1. Recreation

a. Boating

Use of motorized vessels would be prohibited on the South Branch.

Existing boat access sites would be evaluated to determine future needs and either maintained, improved, or removed. No new vehicular access sites would be provided.

b. Camping

Camping use would be limited to a level commensurate with river corridor carrying capacity. Vehicle access camping areas might be moved outside the river corridor or effectively screened from river users.

2. Improvements

New structures would not be permitted within the seen area other than those associated with existing structures. Additions that were permitted would have to meet the visual quality objective for that area.

Construction of new residences and other buildings would be permitted outside the seen area but would have to meet the visual quality objective for that area.

New gas, utilities and powerlines of less than 35,000 volts would be placed underground.

Only those signs necessary for (1) direction, (2) interpretation of special interest areas, (3) safety, and (4) regulation of use would be permitted.

Repair, maintenance, and replacement of existing bridges would be permitted where river values are not significantly affected. Consideration of public safety will be paramount.

Replacement of McKinley Bridge would not significantly affect wild and scenic river values. However, replacement should be dependent on proven transportation needs and a concern for maintaining the integrity of a scenic and relatively natural appearing river. Bridge design must emphasize the use of natural appearing materials, subdued colors and a low profile. Access to the river is needed at the bridge site; coordinating access and location with the need for a bridge would be a secondary consideration. Another consideration would be determination of the existing bridge's historical value.

Land Use Control and Protection

Inclusion of the Au Sable in the National Wild and Scenic River System would require that immediate steps be taken to insure protection of the river and its unique resources. Of primary importance is the prevention and/or correction of land uses that are not compatible with wild and scenic rivers management objectives.

There are three options for land use control and protection of the river area:

1. The first involves application of local zoning ordinances designed to meet the objectives of this proposal. The ordinances would be enacted and applied by local governments along with existing county, State, and Federal regulations to provide for river protection. Applicable flood plain and wetland regulations would apply.
2. The second would be an acquisition of partial interests. A partial interest would give the Federal Government the right to control use of private land for the purpose of protecting river values. The landowner would be compensated monetarily for the property rights granted the Government. The cost would be dependent upon values of rights obtained and other considerations. Until a partial interest is purchased, the Federal Government does not have

any control on the use of private land. In addition, any regular use exercised prior to acquisition of an interest would not be affected without consent of the landowners. Under the Wild and Scenic Rivers Act, partial interests could be acquired through condemnation.

3. The third option involves fee-title acquisition of land. It includes outright purchase, exchange, and donations. Under the Wild and Scenic Rivers Act, the Federal Government may acquire in fee title by those methods a total acreage averaging up to 100 acres per mile on both sides of the river. However, Federal fee title acquisition by condemnation is prohibited if 50 percent or more of the entire acreage within a federally administered wild and scenic river area is publicly owned.

The condemnation authority normally provided by the Wild and Scenic Rivers Act has been annulled by existing public land ownership. The authority to condemn for fee title is limited to river corridors having less than 50% of the total land area in public ownership. The total land area encompassed by the proposed boundary is 20,060 acres. Total public ownership equals 10,423 acres - 52 percent of the river corridor area. However, the authority to condemn for partial interest or rights-of-way would remain unaffected by the amount of public ownership.

Protection of scenic river values and other land management needs will be accomplished by utilizing local zoning, partial interests, and fee title acquisition as follows:

1. Give priority to local zoning and existing state and federal regulations for protection of river values.
2. Acquire partial interest where local zoning is not in effect 12 months after completion of a management plan or is proven ineffective.
3. The Federal Government would continue its land acquisition program on a willing buyer-willing seller basis as those lands become available or where local zoning and/or partial interests do not adequately provide for protection of river values and specific recreation needs.

4. It may be necessary in some cases to use condemnation for partial interests to correct incompatible land uses and protect special interest areas.

State and federal governments should seek acquisition of land offered by Consumers Power Company. Fee title acquisition would best assure lasting protection of Au Sable wild and scenic river values, reduce dependency on local zoning, and eliminate the high costs of administering scenic easements.

The ultimate objective of the acquisition program would be to have the entire river management zone protected from degradation through zoning, partial interest, or fee title ownership.

A brief summary of the rights that would and would not be affected by zoning and partial interests are identified below. These controls are general and subject to variations, depending on river area and individual properties. Generally, restrictions will be more limiting in scenic river areas than in recreation river areas.

Zoning and partial interests would be sought to:

1. Exclude industrial and commercial activity, except for prior established uses.
2. Require the area be kept in a neat orderly condition with no garbage, trash, or other unsightly material allowed to accumulate.
3. Require topography to be maintained in its present state unless changes are approved by the administering agency.
4. Prevent unattractive or incompatible structures from being built, used, or moved into the river area.
5. Allow timber harvesting provided approval is obtained from the administrative agency and the cutting practices meet the visual quality objective. Dead and/or hazard trees could be cut.
6. Prohibit signs other than those necessary for direction, interpretation, safety, and regulation.
7. Require that construction, erection, or placement of new or additional building structures or facilities be approved by the administering agency.

8. Prevent boat access from private land other than those used by owners and their immediate family.
9. Regulate use of unapproved pesticides and hazardous chemicals.
10. Encourage establishment and maintenance of natural vegetative screening.
11. Require directional drilling from outside the river zone for extraction of oil and gas. Prohibit extraction of all other minerals.
12. Require protection of existing and potential historical-archeological sites.
13. Limit additional structures within the river flood plain and in wetland areas.

Partial Interests would not:

1. Give the public the right to enter upon private property for any purpose.
2. Deny the right of the landowner to use the area for general crop production, livestock farming, or gardening.
3. Affect any regular use exercised prior to the acquisition of the easement without the owner's consent.
4. Affect the right of landowners to sell their land or the right of their heirs to inherit the land.
5. Affect the right of the landowner to perform maintenance on all existing roads, structures, and buildings; or the right to replace or rebuild any roads, buildings, or structure now existing with similar construction in substantially the same locations.

Recreation Facilities

The conceptual recreation facility plan is directed at protecting and preserving the Au Sable River while providing suitable recreational facilities for appropriate use. The developments are identified to provide a basis for estimating the cost of development and maintenance, should the Au Sable be included in the Wild and Scenic Rivers System. This plan expresses the best judgement as to recreational development at this point; however, it should be used only as a guide for the managing agency. More detailed planning is needed before actual development takes place.

Presently, there are adequate recreational facilities in the river corridor for all existing uses except picnic/rest areas. However, many facilities are heavily used and require redesigning and reconstruction to better withstand use and protect river values. Therefore, recreational development proposed by this plan is largely replacing existing facilities with a better one in the same vicinity.

Recreation facilities in the "scenic" river corridor would be rustic, and mostly provide for resource protection with some modification of the natural environment. In the "recreation" corridor, facilities would require some modification of the natural environment and provide almost equally for resource protection and user comfort/safety.

Recreation planning will seek to provide maximum privacy for present property owners. Particular attention will be given when planning fishermen access trails and picnic areas to avoid nearby private land.

Access

All 74 miles of the Au Sable proposed for designation are accessible by road. No expansion of this road system is planned.

There is a need to redesign and reconstruct three access points. This development would occur at existing access points where improvement is needed to avoid site degradation, provide for user control, and reduce visitors' impact on river aesthetics. Sites to be considered for improvement are Comins Landing, McKinley Bridge, and River Road Bridge on the mainstream. The mainstream sites should provide picnic units, toilets, parking, and canoe access. Site capacity would be based on the level of use planned for the river segment served by each facility.

Foot Trails

The need for developing approximately 14 miles of fishing access-hiking trail appears valid from a recreation use standpoint. Trails may be needed primarily on the South Branch and lower mainstream and include 3 miles of existing trail and 1 mile of trail proposed by the Michigan DNR on the South Branch. Wading anglers need access in and out of water at various points on a foot trail. The planned foot trails would connect with existing vehicle access points. The access trails would also benefit hikers by providing short easy routes for viewing scenery and wildlife. The feasibility of developing the trails should be investigated. They would be well screened, run parallel with the river, avoid private land where possible and reduce wildfire risks. Trails may be needed primarily on the South Branch and lower mainstream.

Picnic Areas

Developed picnic sites would tend to reduce trespass and indiscriminate use of private land and protect undeveloped areas throughout the river corridor. The feasibility of developing the picnic facilities only at access and camp areas should be considered. Although picnic site location at access points is preferable, there may be a need for rest stops (tables, toilets, and trash cans) at midpoint of some heavily used canoe routes. Their distribution would depend on levels of use and location.

Camp Areas

Existing camp facilities are considered adequate for planned levels of use but would be examined and considered for improvement. Particular emphasis will be given to locating sites outside the seen area.

FIVE YEAR ESTIMATED PROGRAM COSTS

First Year

Acquisition <u>1/</u>	\$2,085,600
Partial Interest Administration <u>1/</u>	\$ 4,550
Development Costs	
Recreation Management Planning	\$ 22,100
Develop Information & Education Plan	\$ 16,900
Total Development Costs	\$ 39,000
Administration and Maintenance <u>2/</u>	\$ 70,428
Land Line Location Costs	\$ 132,200
Archeological Survey	\$ 31,000
First Year Total	\$2,362,778

Second Year

Acquisition <u>1/</u>	\$2,085,600
Partial Interest Administration <u>1/</u>	\$ 9,100
Development Costs	
Design and Reconstruct Access Sites (Mainstream)	\$ 107,250
Develop Picnic Units (Mainstream)	\$ 91,150
Implement Information & Education Plan	\$ 20,000
Total Development Costs	\$ 218,400
Administration and Maintenance Costs <u>2/</u>	\$ 86,400
Land Line Location Costs	132,200
Second Year Total	\$2,531,700

Third Year

Acquisition <u>1/</u>	\$2,085,600
Partial Interest Administration <u>1/</u>	\$ 18,200
Development Costs	
Revise and Update Plans	\$ 13,000
Develop Picnic Units (Mainstream)	\$ 91,150
Total Development Costs	\$ 104,150
Administration & Maintenance Costs <u>2/</u>	\$ 102,000
Third Year Total	\$2,309,950

Fourth Year

Acquisition <u>1/</u>	\$2,085,600
Partial Interest Administration <u>1/</u>	\$ 36,400
Development Costs	
Develop Picnic Sites	\$ 24,800
Develop Fishing Access Trails	\$ 7,400
Total Development Costs	\$ 32,200
Administration and Maintenance Costs <u>2/</u>	\$ 118,000
Fourth Year Total	\$2,272,200

Fifth Year

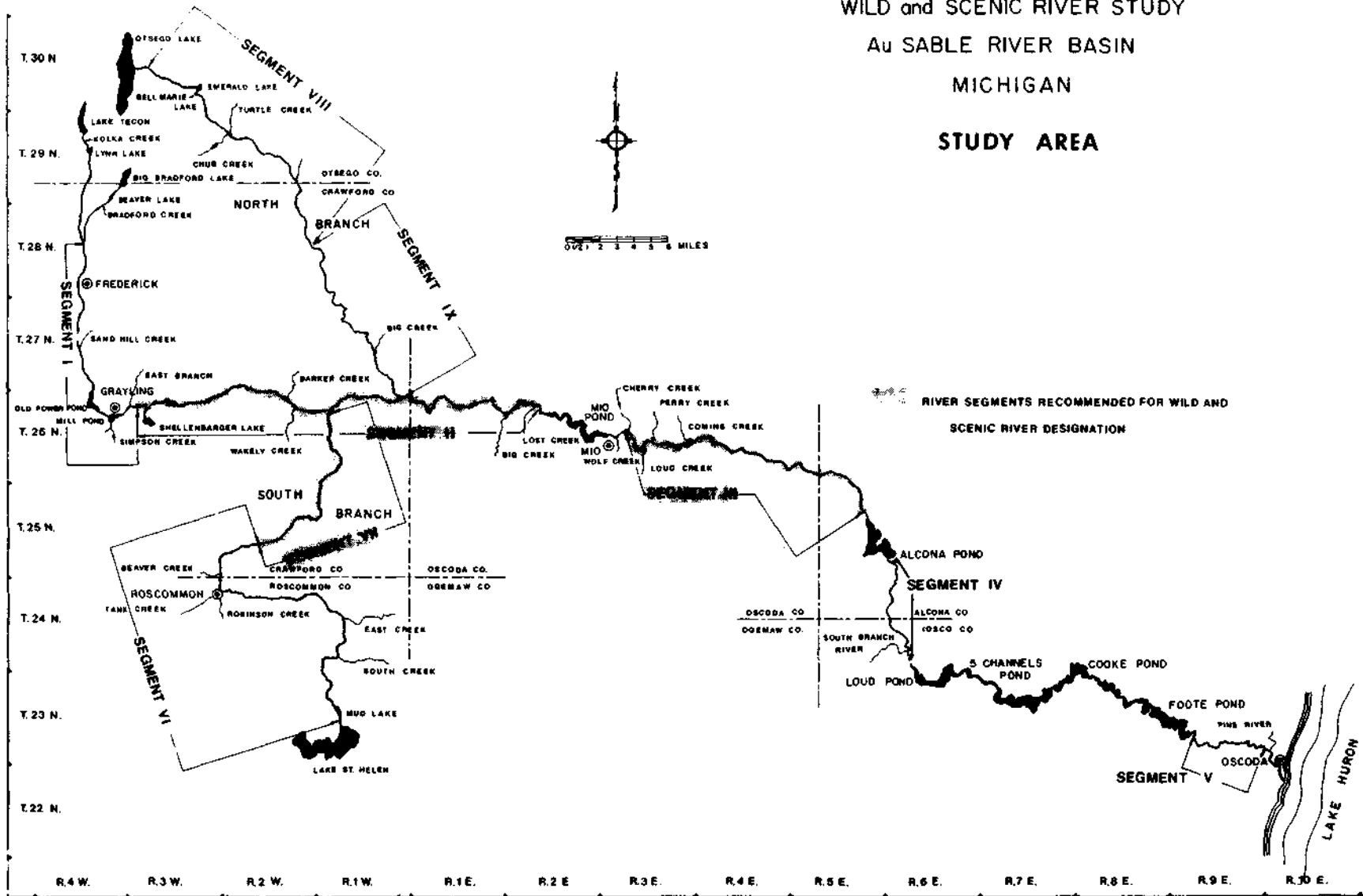
Acquisition <u>1/</u>	\$2,085,600
Partial Interest Administration <u>1/</u>	\$ 72,800
Development Costs	
Recreation Management Planning	\$ 40,000
Construct Hiking Trail	\$ 3,900
Total Development Costs	\$ 43,900
Administration and Maintenance Costs <u>2/</u>	\$ 134,000
Fifth Year Total	\$2,336,300
Total Five Year Cost	\$11,812,928

1/ This cost represents total 1980 dollar costs of \$10,026,000 for acquisition of partial interests, if necessary, on approximately 9,076 acres of Consumers Power Company and small parcels of private land. It assumes 7,973 acres of Consumers Power Company land will be acquired by the U.S. Forest Service, State of Michigan and leaseholders within the near future. Costs are likely to increase at current rates of inflation and acquisition costs must be adjusted to reflect current conditions. Overhead costs have been included in the above estimates.

2/ Includes Forest Service law enforcement costs.

APPENDIX A - ENVIRONMENTAL IMPACT STATEMENT

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



FINAL ENVIRONMENTAL IMPACT STATEMENT

AU SABLE WILD AND SCENIC RIVER PROPOSAL
Crawford, Oscoda, and Alcona Counties, Michigan

Lead Agency: USDA - Forest Service

Cooperating Agencies:

Michigan Department of Natural Resources
Mason Building
Lansing, Michigan 48926

USDA Soil Conservation Service
1405 South Harrison Road
East Lansing, Michigan 48823

USDI - Fish and Wildlife Service
1405 South Harrison Road
East Lansing, Michigan 48823

USDI - Heritage, Conservation and Recreation Service
Ann Arbor Federal Building
Ann Arbor, Michigan 48104

Great Lakes Basin Commissions
3475 Plymouth Road, P.O. Box 999
Ann Arbor, Michigan 48106

Responsible Official: Max Peterson, Chief
USDA Forest Service

For further information contact: Carl F. Gebhardt
River Planner
Huron-Manistee National
Forests
421 S. Mitchell Street
Cadillac, Michigan 49601
616-775-2421

Abstract:

This final Environmental Impact Statement describes six alternatives regarding management of Au Sable River's four segments which qualify for inclusion in the Wild and Scenic River System. The statement discusses the estimated effects of implementing each alternative. Alternative 5 Wild and Scenic River Plan A has been identified as the preferred alternative. The rationale for this identification is shown in the final Environmental Impact Statement.

TABLE OF CONTENTS

Summary Sheet.....	A-3
Description	A-7
Environmental Impacts	A-9
Adverse and Unavoidable Impacts of Preferred Alternative.....	A-2
Relationship Between Short Term Uses and Long Term Productivity.....	A-2
Irreversible and Irretrievable Commitment of Resources.....	A-2
Description of Alternatives.....	A-2
Consultation with Others (summary of public response).....	A-3

SUMMARY

Final Environmental Impact Statement
Administrative () Legislative (X)

Responsible Federal Agency: USDA Forest Service

Responsible Official: Max Peterson, Chief
 U.S. Forest Service
 12th and Independence Avenue
 Washington, D. C. 20013

For information contact: Carl F. Gebhardt, River Planner
 Huron-Manistee National Forest
 421 South Mitchell Street
 Cadillac, Michigan 49601

Date of Transmission to EPA and the public:

 Draft (June 29, 1979)
 Final (_____)

Summary

- I. Brief description of action: It is recommended that 74 miles of the Au Sable River be added to the National Wild and Scenic Rivers System. The recommendation is to classify the river in the following manner:

	<u>Segments of the Au Sable River</u>	<u>Classification</u>	<u>Miles</u>
II.	I-75 Bridge downstream to Mio Pond Federal Power Commission (FPC) Boundary	Recreation	35
III.	Mio Pond FPC Boundary downstream to Alcona Pond FPC Boundary	Scenic	23
VII.	Chase Bridge downstream to the Mainstream	Scenic	16

The Michigan Department of Natural Resources supports designation of the North Branch segment IX as proposed in Alternative 5 of the Draft Environmental Impact Statement.

The recommended river segments are located in Crawford, Oscoda, and Alcona Counties. Approximately 70 miles of those segments qualified for designation lie within the Huron National Forest.

II. The following alternatives were considered:

- A. Classify none of the river (No Action-alternative 1).
- B. Classify none of the river and maximize recreational benefits (NED A-alternative 2).
- C. Classify none of the river and maximize timber and mineral benefits (NED B-alternative 3).
- D. Designate the river as a State Natural River (SNR-alternative 4).

E. PREFERRED ALTERNATIVE

Designate segments II, III, and VII as a National Wild and Scenic River and classify as scenic and recreation (Wild and Scenic River A-alternative 5).

- F. Designate all eligible segments as a National Wild and Scenic River and classify as recreation (Wild and Scenic River B alternative 6).

III. Summary of Environmental Impacts and Adverse Environmental Effects: The main intent of the action is protection of associated river values for the benefit and enjoyment of present and future generations. These associated river values include the scenery, high water quality, cold water fishery, historic-archeologic sites, recreational opportunities, and plant and wildlife species.

Social and economic factors will also be affected by classifying the river. Canoeing opportunities will be reduced and residential development of river shorelines will be limited. The dollars that could be expended on acquiring scenic easements, administration and development will not be available for use elsewhere.

IV. Distribution of the Draft: Distribution of the Draft Environmental Impact Statement was made to the following

individuals, organizations and agencies. Copies were also made available at libraries in the area as well as at the Huron-Manistee National Forest Supervisor and District Ranger Offices. Notices were placed in newspapers and public offices that copies are available upon request.

Federal

U.S. Congressmen from Michigan
U.S. Senators from Michigan
Advisory Council on Historic Preservation
Department of Agriculture:
 Agricultural Stabilization and Conservation Service
 Office of Equal Opportunity
 Soil Conservation Service
Department of Commerce:
 Economic Development Administration
 Environmental Affairs
Department of Defense:
 Army Corps of Engineers
Department of Health, Education and Welfare
Department of Interior:
 Bureau of Land Management
 Heritage, Conservation and Recreation Service
 Bureau of Reclamation
 Fish and Wildlife Service
 Geological Survey
 Office of Land Use and Water Planning
 National Park Service
Environmental Protection Agency
Federal Energy Administration
Federal Highway Administration
Federal Power Commission
Great Lakes Basin Commission
National Aeronautics and Space Administration
Water Resources Council

State

Governor, State of Michigan
Michigan Natural Resources Commission
Department of Agriculture
Department of Commerce
Department of Public Health
Department of Management and Budget
Department of Military Affairs
Department of Natural Resources
Department of State Highways and Transportation
Department of State

County and local governments

County Commissioners - Alcona, Crawford and
Oscoda Counties

City of Frederick
City of Gaylord
City of Grayling
City of Mio
City of Roscommon
City of Tawas
City of Oscoda

Organizations

American Rivers Conservation Council
Audubon Society
Au Sable Property Owners Association
Central Michigan University
East Michigan Tourist Association
East Michigan Environmental Action Council
Friends of the Earth
Frederick Township Committee
Great Lakes Camp and Trail Association
Kalamazoo Nature Center
Industrial Forestry Association
International Snowmobiles Association
Izaak Walton League
McKinley Civic Organization
Michigan Chamber of Commerce
Michigan Congress of River Associations
Michigan Nature Association
Michigan State University
Michigan Trailfinders Club
Michigan United Conservation Clubs
National Wildlife Federation
Northern Environmental Council
Northern Students for a Better Environment
Society of American Foresters
Sierra Club
The Nature Conservancy
Thunder Bay Environmental Council
Trout Unlimited
Upper Manistee River Association
United Auto Workers
West Michigan Environmental Action Council
West Michigan Tourist Association
Wilderness Society
Wilderness Watch
Wildlife Management Institute

Public involvement was a continuing activity throughout the study and environmental impact statement process. A chronological summary of meetings and other public contacts is found in Appendix L-1.

DESCRIPTION

On October 8, 1968, Congress passed Public Law 90-542, the "Wild and Scenic Rivers Act". The purpose of the Act is to protect selected rivers of the Nation in a natural, free-flowing condition. Congress declared that the established national policy of dams and other river construction needed a complimentary policy that would allow for the preservation of other selected rivers, or sections thereof, in a free-flowing condition.

When Congress amended the Act on January 3, 1975, (P.L. 93-621), it named an additional 29 rivers to be studied for possible inclusion into the Wild and Scenic Rivers System. The Au Sable in central lower Michigan was one of these. This statement determines the impacts of designation of the Au Sable River.

PROPOSED ACTION

Classification

The proposed action is to include 74 miles of the Au Sable River and its corridor in the National Wild and Scenic Rivers System. This proposal is the result of a study authorized by Section 5(a) of the Wild and Scenic Rivers Act. The following segments of river are eligible for inclusion in the system and it is recommended that they be classified as:

<u>Segments of AuSable River</u>	<u>Classification</u>	<u>Miles</u>
II. Interstate 75 to Mio Pond FPC Boundary	Recreation	35
III. Mio Pond FPC Boundary to Alcona Pond FPC Boundary	Scenic	23
VII. South Branch - Chase Bridge to Mainstream	Scenic	16

Segments III, VII, and 17 miles of shoreline in Segment II proposed for inclusion are within the Huron National Forest boundary. The boundary of the classified area would include the area seen from the river and those additional areas considered necessary for protecting river values. The corridor would be approximately 1/4 miles on either side of the river. The map, Appendix D, illustrates the proposed boundary.

The Au Sable proposal includes approximately 20,060 acres of land. Small private ownership occupies 7,640 acres and is largely developed for residential use. Another 1,997 acres of private land are owned by Consumers Power Company and have been offered for sale to State and Federal agencies.

Table 14.--Acreage distribution under the preferred alternative.

<u>River Classification</u>	<u>Acres</u>			<u>Total</u>
	<u>Public</u>	<u>Private</u>	<u>Consumers Power Co.</u>	
Recreational	1,853	6,520	1,327	9,700
Scenic	8,570	1,120	670	10,360
Total	10,423	7,640	1,997	20,060

Additional information concerning the proposed action is located in the "Summary of Recommendations" section of the study report, page I. Also, the description of the present environmental, social, and economic situation is found in Chapters II and III of the study report.

ENVIRONMENTAL IMPACTS

This environmental impact statement identifies the effects of including those segments shown on page A-7 in the Wild and Scenic Rivers System. The impacts caused by classifying the Au Sable a wild and scenic river would be varied. Some activities and uses would be adversely affected while others would benefit, depending on the type of activity. The degree of impact depends on whether the activity falls within a "scenic" or "recreational" river class.

Federal lands within the boundary would be managed to meet the objectives of the Wild and Scenic Rivers System. Management normally associated with National Forest lands would be limited to meet those objectives.

Control of activities on private land within the boundary would be accomplished through local zoning and/or the purchase of partial interests. Local governments would be encouraged to enact and administer zoning regulations compatible with Wild and Scenic River objectives. Partial interests would be negotiated where local zoning was ineffective. The landowner would be compensated for any use taken through partial interests; however, those uses existing prior to the acquisition of an easement could not be purchased without the owner's consent. Zoning and partial interests would be implemented to protect the values for which the river was included in the Wild and Scenic Rivers System.

The proposed disposition of Consumers Power Company (C.P.C.) lands would have various environmental effects. If C.P.C. lands were sold to private interests, zoning and partial interests would protect those lands from additional development within the segments classified as "scenic". Within "recreational" segments, zoning and partial interests would also be needed but generally be less restrictive. Additional development of Consumers Power Company lands could result in degradation of water quality, vegetation, scenery, and wildlife.

Consumers Power Company has offered to sell up to 10 acres of the leased land to each of the 178 lease holders within the river corridor. The terms of sale require acceptance of certain deed restrictions intended to protect the river area. The deed restrictions will, in effect, retain those land areas in their present condition and prevent future changes that would adversely affect river values. However,

the land sale to leaseholders will assure permanent residents within the river corridor and continued threats of water pollution, erosion, loss of vegetation and disturbance of wildlife. Scenery would be affected by vegetative disturbance, water quality, and the presence of conflicting human developments. The presence of leased properties would also increase cost and difficulty of administering scenic easements on a wild and scenic river.

State lands within the boundary would be managed by the State in a manner similar to Federal lands. A cooperative agreement would be negotiated with the Michigan Department of Natural Resources to assure management consistent with wild and scenic river objectives.

River classification would assure that river values would receive optimum consideration and be maintained in their natural condition.

Water Resource

The Wild and Scenic Rivers Act states that water quality should be protected on selected rivers (Sec. 1(b)). Section 13(d) states that the jurisdiction of the State over waters shall be exercised without impairing the purpose of wild and scenic rivers. In addition, the administering agency is directed to cooperate with the State to eliminate or diminish pollution of the river water.

Lands within the boundary of the wild and scenic river would be managed under the proposed action in such a manner as to give priority to protecting water quality. Activities that have a significant adverse impact on water quality and/or affect streamflow would not be permitted. Therefore, maintenance of high water quality would be assured through this proposal.

Continued cooperation with Consumers Power Company and the State of Michigan would be sought to retain near normal streamflow, as well as maintain and improve water quality for fishery and recreational purposes below Mio Pond. This action could reduce the availability of water for electric power generation at Mio Dam located outside the river boundary.

Vegetation

Activities that would destroy particular botanical values of the vegetation would not be allowed by the proposed action. Undue trampling of vegetation by recreationists would be controlled by limiting the number of users and/or restricting the areas of use, and/or distributing use over time and space.

Vegetative manipulation would be allowed to meet visual quality and wildlife objectives and provide watershed protection, providing it could be accomplished without having an adverse impact on other river values.

There are no known threatened or endangered plant species within the river corridor.

Fish and Aquatic Life

The proposed action would place priority on protection of cold water fishery values and assure protection of aquatic ecosystems. Priority would be given to management that protects streamflow and water quality, particularly by maintaining low water temperatures and avoiding pollutants. If stable streamflow and low water temperature is maintained, the fish habitat below Mio, Grayling, and Roscommon would be enhanced. Removal of gravel, that adversely affects habitat would be prohibited.

Wildlife

Wildlife habitat would be managed to protect existing species with emphasis on critical species. Old growth conditions would be predominant. Control of natural and man-made fires occurring within the river corridor would continue. The role of fire in setting back forest succession would be minimal and less habitat would be available to those species that utilize early successional stages. This would benefit those wildlife species dependent upon old growth and/or snags such as the pileated woodpecker, wild turkey, and northern bald eagle. The black bear and bobcat would also benefit if the river is classified, as they are dependent on areas offering solitude. Limitations on heavy use and additional residential development would reduce harassment of threatened and endangered wildlife species.

Scenic Qualities

The proposed action would provide a high level of protection to the natural scenic qualities of the Au Sable River by applying the National Forest Visual Management System to the manipulation of vegetation and developments. ^{1/} Visual quality objectives would be applied to all national forest lands. On private lands within the wild and Scenic river boundary, visual quality objectives would be met through local zoning and scenic easements. Approximately 14,140 acres of foreground area will be protected with a visual quality objective (VQO) of retention and 20 acres with a VQO of partial retention. Background areas within the corridor but not visible from the river will be protected under the following VQO's - partial retention - 4,700 acres, modification - 1,120 acres, maximum modification - 100 acres.

Protecting scenic values would enhance associated activities, such as recreation, but it would also require foregoing, or modifying other activities such as certain timber management practices, residential development, oil drilling, and road building.



^{1/} National Forest Landscape Management, Volume 2, U.S.D.A. Handbook Number 462; Appendix E.

SOCIO-ECONOMIC FACTORS

Impact on Landownership and Use

Table 15.

Landownership Within Proposed Au Sable Wild and Scenic River

<u>County</u>	<u>Acres Within Proposed Boundary</u>	<u>Acres of Private Land in Proposed Boundary</u>	<u>Number of Land- owners</u>	<u>Approx. No. of Acres In Tax Base</u>	<u>Percent of Tax Base Which Could be Affected</u>
Alcona	1,170	0	1	424,830	<.1
Crawford	11,074	7,397	498	166,294	4.4
Oscoda	7,816	2,240	340	163,555	1.4
Total	20,060	9,637	839	754,679	1.3

The proposed action would utilize local zoning and partial interests for river protection. Neither zoning nor acquisition of partial interests remove land from the tax base. The above Table 15 summarizes the acres of private land within the proposed river boundary. If partial interests were acquired, property use would remain unchanged and the value and tax base remain unaffected.

The proposal does not anticipate acquisition of private land unless it is offered on a willing seller/willing buyer basis. With the interest and protection given designated river areas, property values can be expected to remain stable, therefore, assuring stable or increased returns to local governments. Since partial interests and zoning do not affect existing and prior uses, the values of private properties would probably not decrease and, therefore, have no adverse affect on existing tax returns. Generally, designation protects existing values and enhances many of those qualities river land owners are seeking. Therefore, developed property values may have a higher rate of increase. The eventual disposition of Consumers Power Company land would occur regardless of this proposal and therefore cannot be considered an impact of designation.

The impact of the proposed action and the extent of local zoning and/or scenic easements would depend on land ownership within the boundary. Fifty-two percent of the river corridor is now public land. If all Consumers Power

Company land within the river boundary were acquired by public agencies, total public ownership would equal 62 percent. (See K. Land-ownership and Uses, Chapter III, Wild and Scenic River Report and Appendix G-1)

If the remaining 1997 acres of Consumers Power Company (C.P.C.) land were not acquired by public agencies, either local zoning or acquisition of partial interests would be necessary to protect river values. The estimated cost of acquiring partial interests on 1997 acres of C.P.C. land is \$598,449 (1980 dollars). Land acquired for C.P.C. by leaseholders will be protected by deed restrictions similar to those acquired in partial interest acquisition. Costs for acquiring partial interest on 5,740 acres of small private ownerships not protected by deed restrictions would be approximately \$9,428,400. Administration of partial interest agreements will cost approximately \$73,000 annually.

It is anticipated that acquisition of all or part of Consumers Power Company land offered to State and Federal governments would occur even if the river is not designated. Therefore, the resulting loss of tax base from that acquisition cannot be considered an impact of this proposal although the acquisition would further protect river values. However, the eventual disposition of C.P.C. land would affect the local tax base. Estimated 1977 taxes on 9,800 acres of C.P.C. land were \$58,303 ^{1/}. The State would make a payment in lieu of taxes on acquired land at the ad valorem rate - i.e. an amount comparable to what a private owner would pay on similar land. The Federal Government would make a payment in lieu of taxes at \$.75 per acre and return 25% of National Forest receipts to the individual counties.

When determining the impact of the proposed action on land use, an assumption has to be made that future land use will follow county zoning presently in effect. The impact of classifying the river is the difference that appears between managing lands to meet the wild and scenic river objectives and what would be permitted under normal zoning stipulations.

Present zoning does not adequately meet wild and scenic river objectives. National designation would request local zoning to place greater limitations on future

1/ Economic Impact of Designation of the Manistee and AuSable Rivers Under the Wild and Scenic Rivers Act - Table 3.1c.

subdivision, building construction, commercial, industrial and mining activity, landscape modifications, vegetative management, archeological-historical activities, and water craft launchings. National designation and existing state regulations would also limit residential development on river flood plains and wetland areas.

Existing land use exercised prior to acquisition of partial interests would not be affected without the owner's consent. A description of the limitations is given in the "Summary of Recommendations", pages I through III, and in the Conceptual River Plan (page 139). Approximately 9,637 acres are involved.

Impact on Archeology

The river corridor lacks a thorough survey of archeological and historic sites. However, evidence indicates they do exist and have significant value. Unidentified archeological sites, evidence of early logging, and early structures associated with the Au Sable's culture and famous fishery are of particular value.

Wild and scenic river classification would provide additional protection for historic and archeological sites located within the boundary. Restrictions on development and earth disturbing land management activities on national forest and State lands would reduce potential adverse impacts on cultural resources. This protection would be extended to sites on private lands through local zoning and/or purchase of partial interests. There would be an opportunity to study, preserve, and interpret cultural resources in their natural river setting. Potential indirect adverse impacts on historic and archeological sites due to recreation use could be identified and mitigated as needed. (Ref. to State Historical Officer Comments, in Appendix K.)

Measures to identify and protect historic-archeological values would be addressed in the management plan.

Impact on Population, Employment, and Culture

No significant impact on the distribution of population is anticipated within the general area by the proposed action. However, an increase in seasonal and retirement home development can be expected to continue on private land within the "recreation" segments, although at a lower density than on a non-designated river. The designation would limit new development within the segments classified "scenic".

An indirect adverse effect could be attributed to classifying the river. By reducing available resources or by causing a greater cost to be incurred in making those resources available, a greater expense would be incurred in obtaining the end product. This type of action could affect low income groups.

Classifying the river would benefit some of the rural residents along the river. Landowners would be monetarily compensated for retaining existing natural qualities.

The proposed action provides the least income to the regional area because all other alternatives include economic benefits from the North Branch Segment IX and hiking. As compared to Alternative 6, exclusion of Segment IX and reduction of hiking in the proposed action would reduce regional income by \$967,300.

The proposed action would divert 26,422 canoe recreation days to the less crowded segments such as nearby middle Manistee River and lower segments of the Au Sable River. The diversion of canoe use will not have a significant economic impact on the local area because Grayling and Mio will remain the center for recreation services.

Employment would be affected in a similar manner. Region-wide the shift of canoe use could lengthen working hours and seasons of 66 people. This will be primarily in the area of gasoline sales, lodging, food service, and equipment. It is estimated that 3 additional recreation-oriented jobs would be gained and 3 timber-oriented jobs shifted by the proposed action.

Classifying the river would maintain the cultural values presently associated with it. These values include such items as solitude, outdoor recreation, and the spiritual value of self sufficiency in a primitive environment.

Land values and subsequent tax receipts from subject properties would remain unchanged with local zoning and acquisition of partial interests. Although landowner rights would be partially acquired, the value is viewed as unchanged because in most situations, the land use would remain unchanged.

Impact on Agriculture

Agricultural use within the boundary is insignificant and consists largely of small pastures. Classification would tend to retain this use. There are no known prime or unique farmlands within the river corridor.

Impact on Timber Production

The proposed action would allow tree removal and vegetative manipulation to meet visual quality and wildlife objectives and provide for watershed protection. This could be accomplished by commercial timber harvest but protection of river values would be paramount.

The Huron National Forest is presently developing a visual management system. Whether the river is classified or not, implementation of the system would put very similar visual restraints on timber harvest from public land within the visual area of the river. However, since timber production would be affected either way, the proposal cannot be directly responsible for a production loss on national forests.

The proposal would not have a significant impact on timber harvest from private lands. Small private ownerships are managed for uses other than timber production and Consumers Power Company limits harvest within water influence zones. It is estimated that classification would reduce timber harvesting from 184,500 board feet annually to 89,040 on all private lands.

Impact on Transportation

Within the segments classified as "scenic", new roads and bridges would be permitted except when needed for public recreation use. Maintenance and replacement of existing bridges would be permitted where river values are not significantly affected. However, additional roads would be permitted for residential development outside the seen area. Some existing forest roads would be converted to foot trails, eliminating access by auto. Cross-country travel by off-road vehicles (ORV's) would not be permitted within the river corridor except on public roads or designated trails. Use of motorized vessels would be discouraged on the South Branch and the Mio to Alcona segment.

Within the segment classified as "recreation", new roads would be permitted to serve residential development and recreation use. Some existing forest roads may be converted to foot trails. Cross-country travel by ORV's would be permitted on public roads and designated trails. Use of motorized vessels above Wakely Bridge would be discouraged.

The location of future transportation routes within the corridor would be designed to meet the visual quality standards of each river segment.

Impact on Recreation

Recreation use would be limited to a level consistent with protection of river values, reducing user conflict, and providing satisfactory recreation experiences. Use would be limited by special use permits, user reservation systems, state water use regulations and/or facility design. This would require reducing canoe use on all river segments below 1976 levels. Recreation use would be limited through a use reservation system administered by the Forest Service and/or Michigan State Water Use Regulations.

The overall effect of user limitations would be greater protection of river values and higher quality experiences for all river uses. Residents, canoeists, anglers, and campers would benefit through less frequent encounters with each other resulting in more enjoyable experiences. Law enforcement and litter problems would be reduced. There would be a decrease in pollutants entering the water, destruction of shoreline vegetation, and harassment of wildlife.

Existing recreation facilities aside from picnicking and access trails are considered adequate on all river segments but some reconstruction would be necessary.

In the "scenic" river areas, the opportunity for personal challenge and the enjoyment of unspoiled natural scenery is paramount. Management of this area would be directed toward perpetuating these "scenic river" characteristics. The overall goal would be to provide an opportunity in which people's impact remains unnoticeable or subordinate to the natural river character.

Management of the "recreational" river area would allow more intensive recreation use and recreation-residential development than on a scenic portion. The overall goal in the "recreational" river area would be to provide satisfying recreation experiences without significantly degrading other river values.

Impact on Fire

The risk of people-caused fires would decrease as use was transferred to developed sites rather than indiscriminate use of undeveloped areas and private land. Developed sites would provide safe fire conditions and be readily accessible for fire suppression efforts. Fire fighting methods would

become more complex outside of developed areas as they would be designed to minimize negative effects on the river and its associated values.

Impact on Soils

Future streambank stabilization needed for improving fish habitat and erosion control would be planned and accomplished to minimize the negative affect on free flowing and scenic values.

Reconstruction of existing recreation facilities and limits on recreational use would reduce soil compaction and erosion. Healthier conditions for vegetation in developed areas and maintenance of fish habitat and high water quality would result.

Impact on Hydroelectric Power Production

Six potential hydroelectric sites were identified by Consumers Power Company in 1964 but were considered economically unfeasible for development. Development of the sites would also be politically unpopular in view of the heavy recreation and residential use. The potential sites are located within the proposed boundary and would not be permitted if the river were under the proposed action. The sites have a potential average annual electrical output of 156,900,000 kilowatt hours. Since the projects are not considered feasible, there is no tangible impact.

Present power production from Mio Pond would be unaffected because the facility is generating on streamflow. However, storage and release of water from Mio Pond could be prohibited if the action would reduce wildlife or aesthetic values associated with streamflow.

The proposed action would not directly effect any of the eight water storage ponds (reservoirs). Indirectly, the wild and scenic river designation could effect quality requirements of water released from the ponds as well as prohibit any action that would reduce the aesthetic value associated with streamflow.

Classifying the river as scenic and recreational would not preclude the future use of potential hydroelectric sites should Congress determine that hydropower is more important than a free-flowing river.

Impact on Minerals

The impact of the proposed action on hydrocarbon extraction cannot be specifically stated at this time because the location and value of all potential wells is not known. However, the location and patterns of existing wells indicate no wells are expected to occur within the recommended river area.

Gravel and sand extraction would not be permitted within the river corridor. However, this is not considered a significant impact because ample supplies are available outside the corridor. Presently there is no commercial extraction of either product.

Impact on Air

No impact on air quality will result from the proposed action.



SUMMARY OF PROBABLE ADVERSE ENVIRONMENTAL
EFFECTS WHICH CANNOT BE AVOIDED

The Wild and Scenic Rivers Act states:

".....certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations."

Few adverse environmental effects are anticipated for the portion of river proposed for classification. Those which are conceivable are likely to be the result of natural occurrences. For instance, severe erosion could develop on some of the easily erodable high banks, a forest fire could destroy some scenic value, or a safety hazard could develop that would affect recreation use. Classification would not preclude an agency taking action to overcome this type of problem, however, the constraints and restrictions placed on this action could add complications and possibly cost.

Adverse environmental effects could occur because the proposed action does not include the upper portions of the Au Sable mainstream and upper portions of the North and South Branches. These effects would be related mostly to water quality, land use values, and scenic values. Although these areas were found to be ineligible for classification, development in these areas could conflict with protection of wild and scenic river values. Presently, local zoning does not provide adequate protection of wild and scenic river values and by not classifying the upper river, incompatible use could increase. Zone changes or variances that would allow conflicting use also could occur. Enforcement of Michigan's Inland Lakes and Streams Act and water quality standards may not adequately protect water from residential septic tank seepage. The demand for developable sites and recreation use outside the proposed boundary also may increase as a result of limitations placed on river use inside the boundary. Generally, with more development allowed along the river, a greater potential for water pollution exists.

Adverse effects on the cold water fishery would also be possible by not classifying upper portions of the river and branches. Water pollution and removal of streamside vegetation could adversely affect water quality and are, in part, a direct result of human encroachment.

If the 6 hydroelectric sites, identified by the Federal Power Commission and presently considered economically unfeasible for development, were later found to have potential, they would be dedicated to public recreation and conservation purposes rather than hydroelectric power production. The 6 sites have a total potential capacity of 56,700 kilowatts. If developed those sites would contribute to the Michigan power system grid - a system open to all bulk power suppliers in the State of Michigan. Adoption of the proposed action would mean that the 56,700 kilowatts of potential energy within the proposed area would be unavailable for development to help meet anticipated demand.

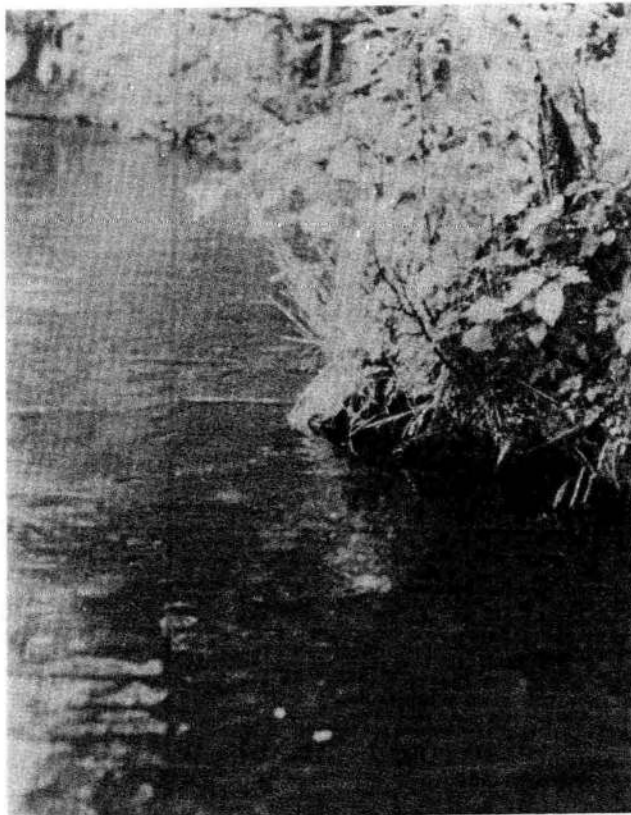
RELATIONSHIP BETWEEN LOCAL SHORT TERM USES OR MAN'S
ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF
LONG TERM PRODUCTIVITY

Classifying the Au Sable as a wild and scenic river would preserve and protect for present and future generations the free flowing qualities of the river, the natural scenic qualities, the cold water fishery, water based recreation values, archeologic and historic values, the existing wildlife habitat, and the botanical communities associated with the river. It would also reduce conflicts between incompatible river use. On the other hand, the proposed action would affect the use of some resources along the Au Sable River. The production of electrical energy would be foregone from potential sites that could in the future be considered feasible for development. Timber would not be managed for maximum production of wood fiber and full use of all the river's recreation potential might not be realized. Loss of some sites for additional residential development would also be foregone.

Timber and mineral productivity of the area would be reduced, yet the potential would remain intact - if the people and Congress found reason to rescind the Act and increase productivity from the proposed area. With this in mind, long term productivity would be favored by implementing the proposed action.

IRREVERSIBLE AND IRRETRIEVABLE
COMMITMENT OF RESOURCES

Whether the proposed action would cause an irreversible or irretrievable commitment can be viewed two different ways. Such activity as timber harvest, dam building, and development would be curtailed as long as the river is classified. Some may view this as an irreversible commitment, and this would be true as long as the river is managed for "scenic and recreational" river objectives as we know them today. It is conceivable, however, that Congress could change management direction, make exceptions, or remove the wild and scenic classification of the river if the need, priorities, or goals of the Nation warrant. The irreversible and irretrievable commitments would be those uses of the resource during which time the river is classified. This would involve the loss of wood fiber (i.e., timber growth lost from less intensive management will never be regained) and opportunities for canoe and motorized vessel use and residential development. Production of those wildlife species utilizing early successional vegetative stages would be reduced.



ALTERNATIVES

One of the main objectives of the study is to provide a broad range of alternatives for presentation to the public. As information and data was gathered and compiled during the course of the study, certain alternatives began to appear logical. The alternatives that were developed are a result of river and environmental conditions, concerns and objectives expressed by people through meetings and correspondence, comment from other agencies, and requirements established by the Water Resources Council and the National Environmental Policy Act.

Following are the major objectives and concerns that were expressed:

1. Protect the river in its natural condition.
2. Reduce user conflicts between landowners, canoeists, and anglers.
3. Maintain the private land base.
4. Protect and maintain the cold water fishery.
5. Maintain water quality.
6. Reduce canoe use to socially acceptable levels.
7. Provide adequate law enforcement to protect private and public property and provide for user safety and welfare.

Six alternatives were developed and analyzed to determine the effects of classifying the river as a component of the National Wild and Scenic Rivers System. These were presented to the public for comment and review in the draft environmental statement. Following public review, the draft was modified to become this final environmental statement.

The objectives, direction, and impacts of the alternatives are spoken to in the alternative description found in the Study Report, Chapter V, "Analysis of Alternatives". Additional accounts of each alternative are in the following pages, Table XI, page A-30 and Appendix C.

The preferred alternative (alternative 5) is a modified version of Alternative 5 as presented in the draft

environmental statement. The preferred alternative was designed to satisfy public concerns summarized in IV. Consultation With Others and certain evaluation criteria are found in Appendix C-12.

NO ACTION ALTERNATIVE

The No Action Alternative evaluates feasible growth under current management. It also assumes that current trends in the use and development of resources would continue and that no new action would be taken as a result of this study. Federal, State, and county level government citizen groups would continue to be involved.

Under this alternative none of the Au Sable would be classified as a National Wild and Scenic River.

Rationale for Not Selecting this Alternative

This alternative is not recommended because it provides no assurance of environmental protection of the river and adjacent lands. The possibility of losing the intrinsic value of a free flowing stream, natural river scenic values, the cold water fishery and recreation values were the strongest reasons for rejecting this alternative. Conflicts between users would intensify and recreation experience quality would decrease.

NATIONAL ECONOMIC DEVELOPMENT PLAN A AND B ALTERNATIVES

The basis of a National Economic Development Plan (NED) is the increased output of goods and services or the increased economic efficiency in the output of goods and services. Realistically, there is little that State and Federal governments can do to promote rapid or maximum development within the study area. The local economy is based on light manufacturing, recreation, and forest products and is likely to remain so, even under stimulated conditions. Thus, the distinction between a NED Plan and the No Action Plan is one of degree rather than kind.

In the formulation of alternative plans, it is important to arrange the component needs that are essentially complementary. For example, the satisfaction of one component need does not preclude satisfaction of, or add to, the cost of other needs. NED Plan A is essentially a plan that generates maximum recreational

benefits. NED Plan B is a plan that maximizes timber and mineral development and output. The study team assumed that the satisfaction of timber-mineral needs inhibited, not precluded, the satisfaction of fishing, canoeing, camping, picnicking, hunting, and hiking component needs.

Neither plan wholly precludes environmental quality objectives; however, satisfaction of environmental quality is reduced.

Rationale for Not Selecting this Alternative

This alternative is not recommended because the economic objectives it favored would reduce environmental quality. The possibility of losing the value of a free-flowing stream and the relatively low level of protection for environmental objectives compared to the relatively high cost of obtaining economic objectives were the strongest reasons for rejecting these alternatives.

STATE NATURAL RIVER PLAN ALTERNATIVE

This plan would be dependent on local public support and initiative. The plan would involve State, Federal, and local agencies with administrative responsibilities held by State and local governments. Zoning ordinances adopted by local government or State rules would be the primary means of protecting the river and its related resources. Costs of protecting river values would be borne by state and local governments.

Ordinances or rules affective under this plan would limit or prohibit placement of structures or designate their location in relation to the water's edge and may limit the subdivision of lands. It might control the location and design of highways, roads, and utility lines. It also might limit the cutting of vegetation within 100 feet of the river. The State would not have control of lands beyond 400 feet of the river.

Land ownership patterns would remain largely unchanged. State, Federal, and private land exchanges would proceed under existing policies and remain unaffected by this plan.

Rationale for Not Selecting this Alternative

This alternative is not recommended because optimum protection of the river can not be assured. The State Natural Rivers Act objectives guarantee less protection of shoreline because its reliance on local zoning provides less assurance of river value protection than the selected alternative. The added environmental protection of the preferred alternative is desirable.

WILD AND SCENIC RIVER PLAN A - PREFERRED ALTERNATIVE

This wild and scenic river option would protect 74 miles of river to be classified as:

<u>Segments</u>	<u>Federal Designation</u>	<u>Proposed Classification</u>
II. Interstate 75 to Mio Pond FPC Boundary	Yes	Recreation
III. Mio Pond FPC Boundary to Alcona Pond FPC Boundary	Yes	Scenic
VII. South Branch - Chase Bridge to Mainstream	Yes	Scenic

This alternative is a modification of alternative 5, as presented in the Draft proposal, from which Segment IX has been deleted and trail mileage reduced. Segment IX was deleted because it was less well qualified than other segments considered; lacked local support for designation; and added protection by State and local governments is assured. Trail construction as recommended in the Draft EIS was strongly opposed by the public. The alternative provides more statutory protection for Segments III and VII than any other alternative discussed and assures protection of Segments II, III, VII at the highest level for which they are suitable.

Rationale for Selecting this Alternative

This alternative is recommended because it provides the highest level of protection to river values with relatively little impact on private landowners. The alternative assures protection of scenic, recreational, water quality, fishery, and free flow values. Over development and over use would also be avoided. It offers the highest quality recreation experience of any other alternative considered. The costs of protecting

those values would be borne by the Federal, rather than State and local governments.

Protection of river values would be assured through reduction of recreational use and stabilized residential development.

This alternative, the environmentally preferred alternative, provides the highest degree of protection to environmental qualities at the least amount of cost to National Economic Development objectives.

WILD AND SCENIC RIVER PLAN B - ALTERNATIVE

This wild and scenic river option would protect 91 miles of river, but at a less protective classification than Wild and Scenic River plan A. The river would be classified as follows:

<u>Segments</u>	<u>Federal Designation</u>	<u>Proposed Classification</u>
II. Interstate 75 to Mio Pond FPC Boundary	Yes	Recreation
III. Mio Pond FPC Boundary to Alcona Pond FPC Boundary	Yes	Recreation
VII. South Branch - Chase Bridge to Mainstream	Yes	Recreation
IX. North Branch - Lovell Bridge to Mainstream	Yes	Recreation

Rationale for Not Selecting this Alternative

This alternative is not recommended because it would encourage heavier recreation use and development that would result in greater user conflict and degradation of river values. Although this alternative represents nearly the same costs and benefits of the proposed action it, offers less environmental protection. The added protection of the preferred alternative is desirable.

ANALYSIS OF ALTERNATIVES

NATIONAL ECONOMIC
DEVELOPMENT ALTERNATIVES

ENVIRONMENTAL QUALITY ALTERNATIVES

VALUES	NATIONAL ECONOMIC DEVELOPMENT ALTERNATIVES			ENVIRONMENTAL QUALITY ALTERNATIVES		
	NO ACTION	N.E.D. A	N.E.D. B	STATE NATURAL RIVER	PROPOSED ACTION WILD SCENIC RIVER A	WILD SCENIC RIVER B
<u>PRESENT CONDITIONS</u>						
OUTDOOR RECREATION						
CANOEING (Annual Days)	212221	271251	212221	212221	185799	235430
FISHING (Annual Days)	144134	168534	144134	144134	119841	168534
HIKING (Annual Days)	1235	120796	1235	1235	2525	120796
CAMPING (Annual Days)	163620	198970	163620	163620	157560	192910
PICNICKING (Annual Days)	24272*	153520	24272*	24272*	141400	153520
HUNTING (Annual Days)	9805	9805	9805	9805	8074	9805
Total Annual Benefits	\$1340942	\$2351883	\$1340942	\$1340942	\$1537388	\$1924346
Total Annual Costs	\$ 43636	388073	43636	\$ 43636	\$ 63846	\$ 77372
Net Annual Benefits	\$1297206	\$1963810	\$1297206	\$1297206	\$1473542	\$1846974
TIMBER PRODUCTION: Average annual yield of timber produced by each alternative from all lands.	541981 bd.ft.	225,000 bd. ft.	1,931,916 bd. ft.	517,754 bd. ft.	186,000 bd. ft.	225,000 bd. ft.
FLOOD CONTROL: Flood damage rarely occurs. Although there are no existing structures within the flood plain, state and local regulations prohibit new construction within this zone.	There are no structures developed solely for flood control within the river zone and none are anticipated. Residential development will occur within the river zone to the extent allowed by state and local regulations.			Flood control dams could not be constructed on classified portions of the river. Projects on tributary streams would probably be unaffected unless the Wild and Scenic River values are affected. Incompatible development in the flood plain within the Wild and Scenic River boundary could be controlled by partial interest acquisition, thus precluding or reducing future increases in flood damage.		
HYDROCARBON PRODUCTION: There is a possibility of two wells occurring within the river corridor, based on the location and occurrence of nearby producing wells.	Oil well drilling would be affected by state regulation.			Not permitted within 300 feet.	Oil well drilling restricted within a Wild and Scenic River boundary. Directional drilling from outside the boundary could cost an additional \$48,750 per well.	
	1,000,000 bbls.	1,000,000 bbls.	1,000,000 bbls.	1,000,000 bbls.	None Expected	1,000,000 bbls.
Scenic easement acquisition cost Management Cost (Annual)	Costs incurred only if local zoning were not effective:				10,026,000 73,000	10,026,000 73,000

*Indicates use only on existing developed sites - does not include unrecorded use known to occur on private land and undeveloped sites.

ANALYSIS OF ALTERNATIVES (Cont.)

VALUES	NO ACTION	N.E.D. ALTERNATIVES		E O ALTERNATIVES		
		N.E.D. A	N.E.D. B	S.N.R.	W.&S.R. A	W.&S.R. B
<p>HYDROELECTRIC POWER PRODUCTION: There are no hydropower dams within the proposed boundary. Potential sites inside the boundary are considered unfeasible for development. Two power dams do exist upstream from proposed classified segments.</p>	<p>Option to develop potential sites, should they become feasible, would remain open to Federal Power Commission. Discharge from Mio Dam controlled by agreement between Consumers Power Company and State of Michigan.</p>				<p>Option to develop power dams would be foregone. Discharge from Mio Pond could be limited if Wild and Scenic River values were affected.</p>	
<p>ADMINISTRATIVE COSTS: Costs are incurred by the state and local government for land management. Additional costs are anticipated for the public owned lands and for administering easements on private land if the river is classified.</p>	<p>No costs associated with Wild and Scenic Rivers.</p> <p>Anticipated management and administration costs would be:</p>				<p>The Federal government would incur costs to acquire and administer scenic easements and to manage the Wild and Scenic River System.</p>	
	\$99,600.	\$177,100	\$ 99,600	\$ 99,600	\$134,400	\$151,660
<p>PRESERVATION OF AREAS OF NATURAL BEAUTY</p>	<p>Natural beauty would be protected on 3552 acres of public land under multiple use management. An additional 5746 acres is protected by Consumers Power Co. Beauty may be impaired by intensive development on 9540 acres of private land.</p>	<p>Natural beauty would be preserved on 14820 acres of public and Consumers Power land. Land under multiple use management would be given less protection.</p>	<p>Scenic values would be degraded on 24360 acres of public and private land by intensive timber management and petroleum development.</p>	<p>Scenic value protected on 3455 acres of public land and 10139 acres of private land. Private land values would be protected by local zoning.</p>	<p>National Wild and Scenic River designation will preserve beauty on public and private land, through local zoning and/or partial interests acquisition.</p> <p>20,060 acres protected 24,360 acres protected</p>	
<p>PRESERVATION OF FISH AND WILDLIFE HABITAT: Degradation of water quality and pressure from heavy use represent the greatest threats to fish and wildlife.</p>	<p>Habitat may be degraded by heavy use and could be affected by degradation of water quality.</p>	<p>Habitat would be degraded by heavy use and degradation of water quality would occur.</p>	<p>Habitat would be disturbed by timber harvest and mineral activity.</p>	<p>Habitat could be disturbed by heavy recreation use.</p>	<p>Habitat would be protected.</p>	<p>Habitat could be disturbed by heavy use.</p>
<p>FISHERY: The AuSable has been known for its excellent cold-water fishery - approximately 26 species of fish inhabit the AuSable of which Brown, Brook and Rainbow trout have the highest recreational value. The fishery is largely dependent on maintaining high quality water and habitat.</p>	<p>Resident fishery conditions would be degraded by heavy use and could be affected by degradation of water quality.</p>	<p>May deteriorate from loss of water quality and heavy use.</p>	<p>Water quality may deteriorate from increased timber harvest and mineral activity.</p>	<p>Present management.</p>	<p>Cold water fishery values would be protected and maintained. Values would be enhanced to the extent water quality and habitat can be improved and acceptable use levels established. Resident fishery values would not change from existing conditions.</p>	

ANALYSIS OF ALTERNATIVES

VALUES	N.E.D. ALTERNATIVES			E.O. ALTERNATIVES		
	NO ACTION	N.E.D. A	N.E.D. B	S.N.R.	W.&S.R. A	W.&S.R. B
PRESERVATION OF FREE FLOWING STREAM	None	None	None	None	74 Miles	91 Miles
PRESERVATION OF HISTORIC AND CULTURAL RESOURCES	Federal & State laws protect sites - some damage to areas on private land could occur.	Development and Recreation site construction and higher levels of use could cause damage to sites and artifacts on private land. On public lands adverse impacts would require mitigation.	Timber harvest and mineral activity is likely to damage or destroy sites or artifacts. On public lands adverse impacts would require mitigation.	Federal & State laws protect sites - some damage to areas on private land could occur.	Federal and State laws protect sites - sites on private land would be protected by partial interest, and/or zoning.	
PROTECTION OF ENDANGERED AND THREATENED SPECIES: WILDLIFE	Bald eagles and Kirtland's Warbler will be protected and habitat preserved. Harassment could occur from recreation use.	Eagles and Warblers will be protected and habitat preserved. Harassment will occur from increased recreation use.	Timber harvest and mineral activity would disturb birds and habitat.	Same as No Action.	Eagles & Warblers will be protected and habitat preserved - less harassing will occur due to limitations on recreation use.	Eagles and Warblers will be protected and habitat preserved - harassment will occur from increased recreation use.
VEGETATION	None known.	None known.	None known.	None known.	None known.	None known.
PRESERVATION OF AIR QUALITY	High quality maintained.	High quality maintained.	High quality maintained.	High quality maintained.	High quality maintained.	High quality maintained.
PRESERVATION OF WATER QUALITY: Although some pollution exists, water quality meets, and in most cases exceeds the standards set by the Environmental Protection Agency. The most critical problems are high water temperatures which result from lakes, impoundments, and areas with little shoreline vegetation.	State standards will be met but some local degradation could occur.	State standards met but some local degradation could occur.	State standards met but degradation would occur.	State standards will be met but some local degradation could occur.	State standards will be met.	State standards will be met but local degradation could occur.
EROSION CONTROL: The major portion of bank erosion occurs on the main stem and directly affects water quality and fish habitat. Existing bank stabilization projects are relatively minor and consist of work accomplished largely for fish habitat improvement.	Eroding banks could be stabilized using any feasible method. It is not likely all actively eroding river banks would ever be stabilized.	Erosion could be accelerated by heavier recreation use and development.	Additional erosion may occur.	Stabilization projects could be carried out in a manner which would not destroy the free flowing and scenic qualities of the river. Fish habitat improvement structures, rip rapping, and revegetating stabilized banks would be acceptable if accomplished in a reasonable manner.		Priority would be given to projects under these alternatives.

ANALYSIS OF ALTERNATIVES

VALUES	N.E.D. ALTERNATIVES			E.O. ALTERNATIVES		
	NO ACTION	N.E.D. A	N.E.D. B	S.N.R.	W.&S.R. A	W.&S.R. B
PRESERVATION OF FREEDOM OF CHOICE:	Scenic, wild-life, and water quality options could be lost.	Options on developed sites lost.	Options on timber harvest are lost.	Some scenic and wildlife options are lost.	Maintain scenic, wildlife and recreation options - some development choices lost.	Maintain scenic and recreation options - some development choices and wild-life options could be lost.
AVOID IRREVERSIBLE OR IRRETRIEVABLE EFFECTS:	Some loss of scenic, wildlife, and recreation values on private land.	Loss of scenic and wildlife values on developed sites and private land.	Timber harvest and mineral activity would affect scenic recreation and wildlife values.	Some loss of scenic and wild-life options are lost.		
				-----Some loss of wood fiber-----		
LAND USE: Use of land is currently affected by county zoning restrictions and public land management policy. Existing land use is largely recreation resident development on private land and forest resource on public and quasi-public land.	Development will increase on private land to the extent permitted by local zoning. Public & quasi-public land would continue to be managed for forest resources.	Development would increase and land uses would change necessary to meet NED objectives.	increase and land to the degree NED objectives.	Development would increase to extent allowed by local zoning and Michigan Natural River Regulations. Public and quasi-public land would conform with those regulations and be managed for forest recreation resource.	Wild & Scenic River designation would put limitations on some public and private land uses. Landowners would be compensated for rights taken under Wild & Scenic River management of private lands.	
REGIONAL INCOME GENERATED: (Annual)						
Hydrocarbon Extraction	\$ 410,000	\$ 415,000	\$ 410,000	\$ 410,000	\$ --	\$ 415,000
Forest Products	14,130	5,870	50,380	13,500	4,798	5,870
Services (Recreation & Tourism)	5,012,570	7,522,730	5,013,220	5,013,300	4,464,600	7,116,430
TOTAL	\$5,436,700	\$7,943,600	\$5,473,600	\$5,436,800	\$4,469,398	\$7,537,300
EMPLOYMENT - Man Years						
Hydrocarbon Extraction	15	15	15	15	--	15
Forest Products	3	1	9	1	1	1
Services (Recreation & Tourism)	773.5	970	774	774	697	875
TOTAL	791.5	986	798	790	698	891
EDUCATION, CULTURAL & RECREATIONAL OPPORTUNITIES	Diversity of opportunities are maintained, quality may be lost.	Diversity of opportunities are enhanced, quality may be lost.	Diversity would be limited but activities shown in NED. The alternative will provide some opportunity.	Diversity of existing activities would be maintained.	Diversity and amount of recreation activity would be limited but quality of experience would be enhanced. Educational and cultural opportunities enhanced by preservation of archaeological and historic sites.	

ANALYSIS OF ALTERNATIVES

VALUES	N.E.D. ALTERNATIVES			E.O. ALTERNATIVES	
	NO ACTION	N.E.D. A	N.E.D. B	S.W.R.	W.&S.R. A
ARCHAEOLOGIC & HISTORIC SITES: Potential sites have not been identified and surveyed but their existence is highly probable.	Potential sites on private land would be susceptible to desires of present and future landowners, known sites on public land would be protected.			Land zoning and/or partial interest acquisition would be used to protect and preserve any sites which may exist within the proposed boundary. Sites on public land would be protected.	
LIFE, HEALTH & SAFETY	-----All plans are neutral for this component. -----				
INCOME DISTRIBUTION: Hydrocarbon Extraction Forest Products Services (Recreation & Tourism)	-----There is insufficient data to assess the income distribution effects of alternative plans -----				
EMERGENCY PREPAREDNESS	Supplies of limited (gas and oil will be available).	Supplies of limited fuels will be less available due to slightly higher production costs.	Supplies of limited fuels will be available.	Supplies of limited fuel will be less available due to slightly higher production costs.	
MANAGEMENT: Control of private land is basically by county zoning. Public lands are managed according to law and policies for multiple use and sustained yield.	Existing county, state & federal laws & regulations would remain in effect.	Existing county, state & federal laws and regulations would remain in effect. Some modification of existing laws and regulations could be necessary to meet objectives in the above NED accounts.	Existing county zoning regulations would be modified to meet higher standards required by the Michigan Natural Rivers Act. Public land management would follow those standards.	Control would be acquired by either local zoning or partial interests. Local zoning would conform with Wild & Scenic River standards. The United States could place additional controls on private land thru acquisition of partial interests. The degree of control sought would depend on the river classification. Federal agencies would be given added direction to protect river values on public lands.	
FREEDOM OF TRAVEL	No restrictions on regional transportation system.	No restriction on regional transportation system. Access may be improved.	No restrictions on regional transportation. Access to and across river will be limited.	No restrictions on regional transportation. Access to and across river will be limited.	No restrictions on regional transportation. Moderate limitations on access to and across river.

ANALYSIS OF ALTERNATIVES (Cont.)

VALUES	NO ACTION	N.E.D. ALTERNATIVES		E Q ALTERNATIVES		
		N.E.D. A	N.E.D. B	S.N.R.	W.&S.R. A	W.&S.R. B
<p>TAX BASE: Much of Crawford and Oscoda County are presently in federal and other public ownership. Federal lands are not taxable, however, payments in lieu of taxes are made to the counties for those federal lands. Counties are reimbursed for state land by a payment-in lieu of taxes at the ad valorem rate.</p>	<p>Tax base would not be affected.</p>	<p>Tax base would not be affected.</p>	<p>Tax base would not be affected.</p>	<p>Tax base would not be affected.</p>	<p>Tax base would not be reduced through purchase of partial interests on river property. Acquisition or partial interest does not remove property from tax base.</p>	<p>Value of private land could increase because protection offered by this plan make these river values more scarce and desirable.</p>
<p>RECREATION: Historically, recreation use has been very heavy on the AuSable River and has increased rapidly during the past 10 years. Canoe use is extremely heavy above Mio and on the South Branch. High quality fishing experience is available on the AuSable. The heavy use has resulted in many user conflicts between fishermen, canoeists, and landowners.</p>	<p>Recreation use would increase gradually with population but may soon level off as many river areas reach their capacity. Conflicts will continue to occur and public access on private land areas would likely decrease. Recreation experience quality will decrease. No additional facilities or improvement would be assured.</p>	<p>A full range of recreation development could occur and use would increase dramatically providing people were willing to accept a lower quality experience.</p>	<p>Same as "No Action" but experience level may decrease from visual impact of timber harvest and hydrocarbon extraction.</p>	<p>Same as "No Action". Interest and river use may increase from Michigan Natural River designation.</p>	<p>National designation would increase demand and use on the AuSable without use limitations. User limitations would protect river values and user experiences and reduce conflicts. River development would consist largely of improving existing development. Additional hiking and picnic facilities would be provided. Minor reductions in access would occur.</p>	
<p>CIVIL RIGHTS</p>	<p>A decrease in the number of low income individuals has occurred in recent years. The numbers of individuals will likely level off in the future.</p>				<p>All individuals would receive monetary compensation for maintaining their property in a natural state. No adverse impact on minorities or low income groups are evident. There would be a minor or no affect on low income groups outside the corridor because of a reduction of available resources.</p>	

V. Consultation with others: An aggressive program was initiated to provide all individuals, organized groups, private businesses, and governmental agencies with (1) the opportunity to learn about the AuSable River study; and (2) the opportunity to participate in the study process by communicating with the lead agency - USDA, Forest Service.

The general public was informed of the study by several different means. The public throughout the State and Midwest was contacted in 1976 through 600 individual mailings and the news media to comment on river issues. In 1977, approximately 350 individuals, organizations, and news media in the same general area were contacted and asked to evaluate river sections and assist in determining eligibility. Approximately 1,400 individuals, organizations, and all river land owners were notified in 1978 that the draft would be available upon request. Approximately 400 respondents requested copies of the draft report.

News features totaling over ten minutes of air time were broadcast over regional television stations. Although no estimate of radio coverage is available, it surely equaled television coverage. Members of the study team met with organizations at 80 different times and various locations to discuss the study. Numerous personal contacts were also made on a one-to-one basis.

Copies of the Draft Environmental Impact Statement on this proposal were transmitted to the Environmental Protection Agency on June 29, 1979. At that time, copies of the statement and study report were also distributed to over 50 Federal, State, and local government agencies, 40 businesses and organizations, and approximately 540 landowners and individuals which had expressed interest in the study. Brochures summarizing the proposal were printed and given public distribution. Comments were accepted on the proposal until September 20, 1979.

The public was given two different methods of responding to the proposal. Three public hearings were held to accept verbal testimony and written responses were accepted until September 20, 1979. A transcript of the hearings was made and is available in the office of the responsible official. Hearings were held in Grand Rapids, Michigan from 7:30 to 9:00

p.m. on July 18, 1979; Farmington, Michigan from 7:30 to 11:00 p.m. on July 19, 1979; and in Grayling, Michigan from 7:30 to 11:30 p.m. A total of 440 people attended the hearings.

Response to the study was divided into two groups; those favoring protection of the AuSable River and its tributaries under some form of Wild and Scenic Rivers Status, and those opposed to any additional protection.

Those in opposition to additional protection for the AuSable and its tributaries generally reside in or own land within the proposal area. Approximately 89% of the individual responses specifically opposed additional protection for the North Branch of the AuSable. Many opposed designation because it could usurp some of their property rights, increase river recreation use and degrade river values, increase vandalism, litter and noise, and reduce property values. Many people felt the local tax base would be adversely affected, the cost of protection was too high and the Federal government was unable to protect the area. Additional recreation facility development and Federal intervention were strongly opposed. Riparians strongly opposed hiking trails because they felt loss of privacy, environmental damage and loss of property rights would occur. Most people felt past protection and existing regulations were providing adequate river protection.

Those favoring designation of the proposed river segments indicated designation would protect wildlife, historic, water quality, and unique river values and protection from over development would be assured. Greater protection from heavy recreation use and reduction of user conflicts would also be obtained through designation. Existing local government protection was considered inadequate and strong law enforcement was needed.

Generally, landowners and local governments within the study area were most opposed to designation. Most responses from governmental agencies, environmental groups, and individuals outside the study area favored designation.

There were 115 written comments on the study/draft environmental impact statement, 48 oral statements at the public hearings, and 127 form letters. Many of the comments were addressed solely to the study proposal and did not deal with the draft statement. Several comments were addressed to the study report and provided new or more accurate data; these were incorporated into the final study report. A summary of the response and agency comment is given to the following:

National Elected Officials

<u>Response Code Number and Name</u>	<u>Subject Number</u>
20 Representative Bob Davis	3,6,10,12
48 Representative Don Young	6,11
49 Representative Steve Symms	3,7
50 Representative Bob Traxler	3,7,14

Federal Agencies

165 Environmental Protection Agency	20,21
173 U.S. Department of Energy	22
174 Federal Energy Regulatory Commission	22,28,21
175 U.S. Department of Housing and Urban Development	27
176 U.S. Department of Interior	21,22
177 Rural Electrification Administration	21,22
178 Department of the Army	

State Agencies

47 Department of Natural Resources	2,21,26,29,30
162 Department of Transportation	21,24
163 Department of Military Affairs	21

County Governments

39 Lovells Township Board	3
68 Big Creek Township Board	3,6
25 Grayling Township Board	2,3,10,13,14,19

Private Organizations

2 West Michigan Environmental Action Council	12,15,2,19
11 East Michigan Environmental Action Council	8,2,21
32 Warbler Hideway	2,3,4,6,14
34 North Branch Area Association	1,2,3,4,5,6,7,11, 12,14,20
36 Michigan United Conservation Clubs	2,8,15,16,17, 25,26
37 AuSable River Property Owners Association	21
81 Detroit Free Press	15,2,19
109 Bay City Times	7
129 Lovells Hook & Trigger Club	2,3,5,6,14
170 Grayling Regional Chamber of Commerce	

Private Individuals

<u>Response Code</u> <u>Number and Name</u>	<u>Subject Number</u>	<u>Response Code</u> <u>Number and Name</u>	<u>Subject Number</u>
1 H. Stuhldreher	1,5,7,8,2,14	57 M. Ferguson	2,11
3 D. Peterson	1,2,3,5,6,7,8, 10,11,14,19, 20	58 R. Hirshfield	3,5,8,10,13
4 R. Grooters	15,16,17,19,23	60 D. Keller	15,2
5 C. Kuenzel	2,3,5	61 N. Wheeker	2,3,10,11,14
6 D. Alstott	2,5,6,8,11,14, 21,22	62 W. Cannon	2,7,12
7 S. Alstott	1,2,4,6,7,8, 10,13,14,15,16	63 C. Jackson	2,3,7,14,20
8 A. Binard	2,7,12,14,21	64 T. Cafferty	2
9 E. Carlson	2,12,15,21	65 R. Rehman	27
10 C. Charest	5,21	66 R. Curtis	2
12 M. Phillips	22,28	69 D. Inman	3,12,2,21
13 E. McGlynn	2,20,24	70 N. Fischer	3
14 D. Offenbecher	12,14,21	71 G. Gardner	10,12,14
15 N. Peterson	1,5	72 L. Mitchell	11
16 F. Scott	3,10,14,21	73 C. Raches	3,14,24
17 M. Toby	3,10	74 J. Seefried	15,2
18 A. Barron	2,3,	75 M. Simpson	3,5,14
21 J. Butler	8,12,14,17	76 R. Schmid	2,14
22 R. Durham	11,12,2,19	77 S. Cohen	2,3,8,12
23 C. Fellows	2,14,16	78 W. Averill	5
24 D. Ferguson	19	79 F. Allen	5,2
17 H. Goodhue	3,7,10,14,15	80 R. Roberts	15,16,2,19
28 B. Gregory	2,3,7,8,10,12, 14,21	82 R. McCurg	2,11,13
29 A. Harvey	2,3,5,6,14	83 M. Simpson	2,5,14
31 A. Lesko	2,12,15,17	84 W. Palmer	3
33 J. McLennan	3,6,7,11,14, 20,21	85 A. West	8
40 S. Sorenson	2,5,8,11	86 M. Peterson	1,2,3
41 N. Stephan	3,10	87 H. Koernke	2,3,10
42 S. Ferguson	2,3,5,7,10	88 W. Pulgini	1
43 R. Bontekoe	12,16,19	89 C. Mott	2,3
44 N. Noel	12,14,15,2	90 J. Webb	10
45 K. Cavanaugh	6	91 J. Hudson	2,3,7,11,14,20
46 B. Greenwood	12	92 D. Bedell	2
51 C. Lively	3,6,11,14	93 C. Gardner	6
52 J. Schafer	14	94 M. Beauchamp	15,16
53 R. Rieder	1,2,3,5,6,7	95 H. Sorenson	5,8
54 R. Tupes	1,2,4,10	96 D. Schafer	5,8
55 F.&D.Schatte	2,3,5,6,8,10,12	97 J. Schotte	19,20,21
56 J. Butler	2,6,10,11,20	98 W. Freese	2,10
		99 H. Schafer	3,6,8,2,10,14
		100 D&E Paddon	2,3,6,14,20
		101 H&M Hill	3
		102 D&S Murray	5,11
		103 M. Camburn	3
		104 G. Shaw	2
		105 K. Symons	1,3,8

Private Individuals (cont.)

<u>Response Code</u> <u>Number and Name</u>	<u>Subject Number</u>	<u>Response Code</u> <u>Number and Name</u>	<u>Subject Number</u>
106 R. Steffe	3,10	136 D. Collins	2,6,14
107 A. Meyer	1	137 F. Gibas	1,2,3,7,14
108 T. Bateman	5,11,12,19	138 M. Sharp	2,7
110 L. (Mrs) Smith	2	139 K. Davies	2
112 D. Whecker	2	140 H. Johnston	3
113 A. Kuenzel	3,6	142 C. Townsend	5
114 J. Read	2	143 J. Devries	2
115 V. Kapagian	2	146 A. (Mrs.) Meyer	1,3,7
117 J&W Halliday	2,3,5,14	147 T. (Mrs.) Meyer	3,7,11
118 E. Staehling	2	149 J. Lilly	2,12
119 A. Moss	3,11	150 C. Walker	2,3,6
120 C. Konen	2,14	151 F. Kuenzel	2,5,6,10
121 E. Young	3,8,2,12,14	152 D. Kimball	2,5
122 A. Wilson	1,2,3,6,11,15	153 E. Miller	1,2,4,6,8, 14,20
123 B. Wilson	3,5,6,8,2,11	154 D. Eaton	1,3,8
124 L. Dulude	2,3	155 A. Wakely	3,7
125 H. Snyder	2,6,13,14	156 B. Radunzel	1,2,3,5,14
126 S. Hartwick	6,2,14	158 G. Kingball	1,14,16
127 T. (Mrs) Lamphier	3,14	159 L. Schenck	15
128 C. Caple	2,14	161 W. Scharffe	2,3,5,11,14
130 J. Ludeman	3,10,14	164 E. Millard	3,5
131 F&K Tom	2,6,7,11,14	166 T. Crawford	8
132 K. Zimmerman	3,21	167 M. DeLp	15
133 W. Griffin	3,7	168 J. Woodford	14
134 M. Sharp	2,5,8	169 J. Robison	2,3,7,8,12 14,19,21
135 W. Willing	2,3,11		

Complete copies of these responses are located in the office of the Forest Supervisor, Huron-Manistee National Forests, 421 South Mitchell Street, Cadillac, Michigan 49601. Responses from elected officials, interested organizations and governmental agencies were included in Appendix O because they are believed to represent individual interests.

In many cases, a single response would speak to a number of different subjects. Rather than deal with each response as a separate entity, responses were categorized into various subject areas and treated collectively. The treatment of these responses and their effect upon the final environmental impact statement follows.

Subject Number and
Summary of Response

Agency Comments

Subject - Eligibility

20. River headwaters should be designated to assure protection of water quality.

Evaluation of headwater areas indicated they could be adequately protected if existing State and local regulations are enforced. Public Law 90-542 directed Federal agencies to withhold assistance to any water resource projects which would adversely impact designated river areas. Headwater areas also do not meet eligibility criteria for national designation - see Chapter IV.

1. Low water levels and noise render the North Branch Segment IX ineligible for designation.

Water levels meet eligibility criteria which require sufficient water during normal years to permit full enjoyment of water-related activities generally associated with comparable rivers. Noise does not appear to have reduced the river's high esteem among river users or unreasonably diminished river values. Overall impressions desired for user enjoyment and therefore river eligibility are apparently unaffected. See Appendix B 15-33.

24. Classification of Segment II should be changed from "Recreation" to more protective "Scenic" classification.

River areas are classified in accordance with criteria established in the Wild and Scenic Rivers Act which are based on existing levels of development. Segment II was classified at the most protective level for which it qualified. See Chapter IV.

Subject - River Protection

15. Public response indicates desire to protect and maintain existing river values.

Noted - may be accomplished through inclusion in Wild and Scenic Rivers System.

Subject - River Protection

2. River values are degraded by heavy recreation use - particularly canoeing. Vandalism, litter, noise, damage to vegetation and loss of high quality recreational experiences result from heavy use.

Continuing overuse is considered a major threat to the river environment and protection of river values, through limiting use where necessary is a primary objective of national designation. See Summary of Recommendation, Chapter VI and Appendix A-18.

16. Need to protect river area from overdevelopment.

Designation would limit new development within the seen area except for that associated with existing development on segments classified as "scenic."

On "recreational" classified segments, administering agencies are not obligated to provide more facilities and allow more people than on a "scenic" river. See Chapter VI.

17. Need to protect recreation opportunities for future generations

The purpose of the Wild and Scenic Rivers Act is to protect the river and its immediate environment for the benefit and enjoyment of present and future generations. Designation would seek to accomplish that objective.

8. River values will be threatened by development of new recreation facilities - particularly by use of hiking trails.

Proposed development will provide facilities to a level of use consistent with protecting the natural features of the river. The present recreation plan is conceptual and may vary during final planning and construction. See Chapter VI - Recreation Facilities.

Trail mileage has been reduced from 91 to 14 miles and the text revised accordingly.

Subject Number and
Summary of Response

Agency Comments

Subject - Management

7. Forest Service will be unable to effectively manage and protect designated rivers.

Coordinated protection and management of designated rivers by local, state, and federal governments has provided a higher level of protection than was possible without designation for 15 existing national rivers.

3. Adequate protection has been provided by past and present owners.

Statement of opinion noted, this is true in many cases.

12. Greater emphasis should be placed on enforcement of new and existing regulations.

The special attention and federal commitment assigned designated rivers increases the level of law enforcement and allows the use of SISK funding for cooperative law enforcement.

Text has been revised accordingly to further emphasize law enforcement.

Subject - Federal Involvement

10. Federal involvement on a designated river would duplicate the efforts of other governmental units.

Federal involvement would assist and encourage other agencies and provide protection in areas where those agencies have no jurisdiction. P.L. 90-542 (section 13) specifically indicates those state rights and authorities which remain unaffected and within state control. In addition, section 10 encourages cooperation in planning and administration of designated rivers through local zoning ordinances. See Appendix B.

27. Designation will assure protection of river and recreation opportunity for present and future generations.

Agreed

Subject - Federal Involvement

5. Designation would result in loss of private property rights. Maximum privacy for present property owners should be maintained

Existing and prior property uses would not be affected without consent of the owner. Future uses of private property could be curtailed by local or state zoning or acquisition of partial interests. The property owner would be paid for property rights granted the Federal Government. See text pages 146 through 149. Noted in chapter VI for future use as facilities are planned.

6. Designation would have an adverse effect on the local tax base.

The tax base would be affected only through fee title acquisition of land and the proposal does not recommend land acquisition unless it is offered on a willing seller - willing buyer basis.

Text has been revised accordingly - see page A-13.

13. Designation would adversely affect property values.

See text page A-13

19. Existing state and local regulations provide adequate river protection.

Agreed. Although existing regulations provide adequate protection in many situations, they lack authority in certain other areas, are subject to change and variance, and their enforcement is dependent on local commitment and available funds.

Subject - Land Adjustment

11. Landowner rights are threatened by acquisition of private land - particularly through the use of condemnation.

The proposal recommends acquisition of land only on a willing buyer - willing seller basis. The condemnation authority normally provided by P.L. 90-542 has been annulled as it applies to this river proposal. See text page 147.

Subject Number and
Summary of Response

Agency Comments

Subject - Land Adjustment

14. Estimated costs for plan operation and acquisition of partial interests appear too high.

Proposed operation and acquisition is in line with Wild and Scenic River objectives. Those costs were based on existing conditions on other similar Wild and Scenic Rivers. The cost/benefit analysis indicates project benefits far exceed the cost (see page A-29).

26. Strong state - local protection supplemented with limited acquisition of partial interests and fee title lands is desirable for protecting the river area.

Agreed - see Chapter VI - Land Use Control and Protection.

Subject - Wildfire

4. Designation would increase wildfire within the river corridor because of higher use - particularly on trails.

Actual recreation use on all lands will decrease under the proposed alternative and developed sites easily accessible for fire suppression will be available for picnickers, campers and hikers. See Appendix A-18.

Text has been amended to reduce trail mileage - see page 151.

Subject - Future Energy Sources

22. The report does not indicate the location of 6 potential hydroelectric sites or indicate why they were considered unfeasible for development.

Text revised accordingly. See page 68, Appendix A - Impact on Hydroelectric Power Production and Summary of Probable Adverse Effects which cannot be avoided.

22. The value of future hydroelectric potential should be related to power needs in the market area.

Text revised accordingly. See Appendix A - Summary of Probable Adverse Effects Which Cannot Be Avoided.

22. The possibility of changes in water flow resulting from new petroleum wells should be discussed.

Since well production requires less water than the average home, there is no measurable affect on river water volume or hydroelectric development.

Subject Number and
Summary of Response

Agency Comments

Subject - Transportation

31. The impact statement should indicate the impact of designation on expansion or replacement of the M-72 bridge across the South Branch.

Repair, maintenance, and replacement of existing bridges would be permitted where river values are not significantly affected. Text has been revised accordingly.

Subject - Clarification (This section contains explanations to responses and questions from various individuals and organizations)

21. Final EIS should assess potential adverse impacts from land use changes on undesignated upstream segments.

See Appendix A - Summary of Probable Adverse Environmental Effects Which Cannot be Avoided.

21. A final management plan should be developed concurrently with the final EIS.

The present plan is conceptual and has been used to identify impacts from the proposed action and provide direction for future planning. The role of this report and environmental statement is to make a recommendation, assess impacts and identify tradeoffs. It cannot provide a comprehensive management plan until a river has been designated and time and money have been allocated.

21. The 12 month period allowed for local governments to enact zoning ordinances is not reasonable.

Agreed - text has been revised accordingly. See study report page 147.

21. Present zoning should be compared with national standards to determine where local zoning is inadequate

Chapter VI gives an indication of controls to be sought through local zoning. Detailed standards and a thorough comparison would be completed during final management planning.

21. Administrative costs for state, local, and federal governments should be specified.

Costs are expressed in general terms and would be broken down through cooperative agreements between the agencies involved. Generally those

Subject Number and
Summary of Response

Agency Comments

Subject - Clarification

- agencies would bear the cost of administering their normal areas of authority. The added cost of managing to wild and scenic river standards would be borne by the federal government.
21. Trees and logs lying on river bottomlands belong to the riparian owner and their removal must be approved by the landowner. Agreed - The administering agency would limit removal either through zoning or acquisition of partial interest
21. There is no indication of which visual quality objectives would be utilized. An acreage allocation for visual quality objectives is given in Appendix E-9. Site specific visual quality objectives would be determined during final management planning.
21. It is not shown whether carrying capacities relate to physical or psychological parameters and how they are established. Capacity is a functional local condition interacting in such a way that the affects of man's use fall within acceptable social and physical limits. An accurate determination of capacity will be made during final management planning.
21. Controlling overuse and managing for a quality experience needs stronger presentation as a top priority item for management. Agreed, text revised accordingly
21. Report should acknowledge that state action to control river use will be necessary under any alternative. Since state authority has not been clearly defined by state court, the report assumes at this time only federal action will control river use.
21. Recreation development in NED Plan A and the preferred alternative are very similar. Major difference is the level of use allowed and experience level provided. NED Plan A would permit heavier use and a lower quality experience at basically the same facilities.

Subject - Clarification

21. Alternative plans should address only actions that can be taken under the authority of P.L. 90-542.
- The NED alternatives describe likely futures if the river were not designated and are not intended as alternatives to designation. Their consideration complies with Water Resource Planning Act requirements and offers a basis for comparison.
21. Alternative 6 is not a viable alternative and should be deleted from the report.
- Alternatives describe conditions for which river segments qualify and any segment meeting "Scenic" criteria would also meet or exceed "Recreation" classification criteria. There is also no direction indicating a river must be classified at the highest level for which it qualifies.
21. The terms activity day and recreation visitor day should be replaced by the correct term "recreation day."
- Agreed - text revised accordingly.
21. Report must evaluate impact of Consumers Power land acquisition.
- Agreed - text revised. See pages 146, 147, 148, A-9 and A-14.
21. Clarify authority to condemn for easements across private land.
- The Wild and Scenic Rivers Act Section 6(b) authorizes condemnation for clearing title and acquiring scenic and other easements which are "reasonably necessary" for providing public access to a river system. See pages 146 and 147.

Subject Number and
Summary of Response

Agency Comments

Subject - Cooperative Agreement

29. The final study report should contain the following:

A proposed cooperative agreement between the United States Forest Service and the Michigan Department of Natural Resources which outlines the following:

The state's program must be given the first opportunity to protect the river system.

Federal acquisition must not be employed except if, a) it can be proven that the state program is not meeting scenic river objectives, or b) lands or easements are required to provide facilities to reduce user conflicts or to protect critical environmental areas as identified in the state's management plan.

An agreement that the United States Forest Service will manage their lands adjacent to state designated tributaries commensurate with the state's natural river plan.

A memorandum of understanding, similar to that developed for the Pere Marquette Scenic River, will be developed following designation. See Appendix M.

Subject Number and
Summary of Response

Agency Comments

Subject - Finance Assistance

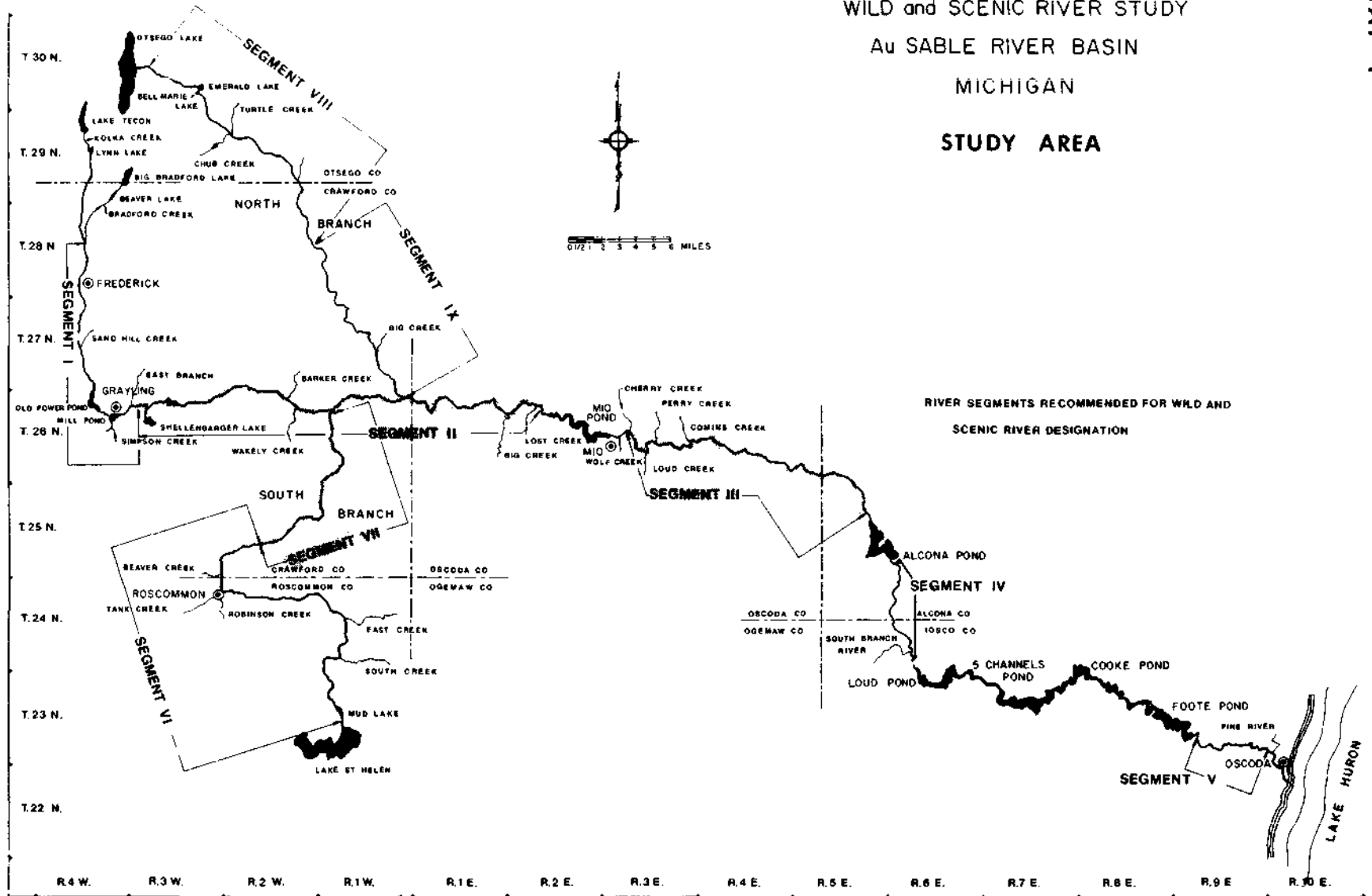
30. The final report
should include:

See Appendix N.

An analysis of federal assistance available to state and local governments for their roles in management of the scenic river area, and where appropriate, includes a statement of support for such assistance.

APPENDIX B - WILD AND SCENIC RIVERS ACT

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA





Public Law 90-542
 90th Congress, S. 119
 October 2, 1968

An Act

To provide for a National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) this Act may be cited as the "Wild and Scenic Rivers Act".

Wild and Scenic
 Rivers Act.

(b) It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

(c) The purpose of this Act is to implement this policy by instituting a national wild and scenic rivers system, by designating the initial components of that system, and by prescribing the methods by which and standards according to which additional components may be added to the system from time to time.

Sec. 2. (a) The national wild and scenic rivers system shall comprise rivers (i) that are authorized for inclusion therein by Act of Congress, or (ii) that are designated as wild, scenic or recreational rivers by or pursuant to an act of the legislature of the State or States through which they flow, that are to be permanently administered as wild, scenic or recreational rivers by an agency or political subdivision of the State or States concerned without expense to the United States, that are found by the Secretary of the Interior, upon application of the Governor of the State or the Governors of the States concerned, or a person or persons thereunto duly appointed by him or them, to meet the criteria established in this Act and such criteria supplementary thereto as he may prescribe, and that are approved by him for inclusion in the system, including, upon application of the Governor of the State concerned, the Allagash Wilderness Waterway, Maine, and that segment of the Wolf River, Wisconsin, which flows through Langlade County.

National wild
 and scenic
 rivers system.

82 STAT. 906
 82 STAT. 907

(b) A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in section 1, subsection (b) of this Act. Every wild, scenic or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the national wild and scenic rivers system and, if included, shall be classified, designated, and administered as one of the following:

Eligibility
 for inclusion.

(1) Wild river areas—Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

(2) Scenic river areas—Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

(3) Recreational river areas—Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some

National wild
and scenic
rivers.

development along their shorelines, and that may have undergone some impoundment or diversion in the past.

SEC. 3 (a) The following rivers and the land adjacent thereto are hereby designated as components of the national wild and scenic rivers system:

(1) CLEARWATER, MIDDLE FORK, IDAHO.—The Middle Fork from the town of Kooskia upstream to the town of Lowell; the Lochsa River from its junction with the Selway at Lowell forming the Middle Fork, upstream to the Powell Ranger Station; and the Selway River from Lowell upstream to its origin; to be administered by the Secretary of Agriculture.

(2) ELEVEN POINT, MISSOURI.—The segment of the river extending downstream from Thomasville to State Highway 142; to be administered by the Secretary of Agriculture.

(3) FEATHER, CALIFORNIA.—The entire Middle Fork; to be administered by the Secretary of Agriculture.

(4) RIO GRANDE, NEW MEXICO.—The segment extending from the Colorado State line downstream to the State Highway 96 crossing, and the lower four miles of the Red River; to be administered by the Secretary of the Interior.

82 STAT. 907
82 STAT. 908.

(5) ROGUE, OREGON.—The segment of the river extending from the mouth of the Applegate River downstream to the Lobster Creek Bridge; to be administered by agencies of the Departments of the Interior or Agriculture as agreed upon by the Secretaries of said Departments or as directed by the President.

(6) SAINT CROIX, MINNESOTA AND WISCONSIN.—The segment between the dam near Taylors Falls, Minnesota, and the dam near Gordon, Wisconsin, and its tributary, the Namekagon, from Lake Namekagon downstream to its confluence with the Saint Croix; to be administered by the Secretary of the Interior: *Provided*, That except as may be required in connection with items (a) and (b) of this paragraph, no funds available to carry out the provisions of this Act may be expended for the acquisition or development of lands in connection with, or for administration under this Act of, that portion of the Saint Croix River between the dam near Taylors Falls, Minnesota, and the upstream end of Big Island in Wisconsin, until sixty days after the date on which the Secretary has transmitted to the President of the Senate and Speaker of the House of Representatives a proposed cooperative agreement between the Northern States Power Company and the United States (a) whereby the company agrees to convey to the United States, without charge, appropriate interests in certain of its lands between the dam near Taylors Falls, Minnesota, and the upstream end of Big Island in Wisconsin, including the company's right, title, and interest to approximately one hundred acres per mile, and (b) providing for the use and development of other lands and interests in land retained by the company between said points adjacent to the river in a manner which shall complement and not be inconsistent with the purposes for which the lands and interests in land donated by the company are administered under this Act. Said agreement may also include provision for State or local governmental participation as authorized under subsection (e) of section 10 of this Act.

(7) SALMON, MIDDLE FORK, IDAHO.—From its origin to its confluence with the main Salmon River; to be administered by the Secretary of Agriculture.

(8) WOLF, WISCONSIN.—From the Langlade-Menominee County line downstream to Keshena Falls; to be administered by the Secretary of the Interior.

(b) The agency charged with the administration of each component of the national wild and scenic rivers system designated by subsection

(a) of this section shall, within one year from the date of this Act, establish detailed boundaries therefor (which boundaries shall include an average of not more than three hundred and twenty acres per mile on both sides of the river); determine which of the classes outlined in section 2, subsection (b), of this Act best fit the river or its various segments; and prepare a plan for necessary developments in connection with its administration in accordance with such classification. Said boundaries, classification, and development plans shall be published in the Federal Register and shall not become effective until ninety days after they have been forwarded to the President of the Senate and the Speaker of the House of Representatives.

Publication in
Federal Register.

82 STAT. 908

82 STAT. 909

SEC. 4. (a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture or, in appropriate cases, the two Secretaries jointly shall study and from time to time submit to the President and the Congress proposals for the addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system; which, in his or their judgment, fall within one or more of the classes set out in section 2, subsection (b), of this Act; and which are proposed to be administered, wholly or partially, by an agency of the United States. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.).

Each proposal shall be accompanied by a report, including maps and illustrations, showing among other things the area included within the proposal; the characteristics which make the area a worthy addition to the system; the current status of landownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which it is proposed the area be administered; the extent to which it is proposed that administration, including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary lands and interests in land and of administering the area as a component of the system. Each such report shall be printed as a Senate or House document.

Report, maps,
etc.

Printing as
Senate or
House document.

(b) Before submitting any such report to the President and the Congress, copies of the proposed report shall, unless it was prepared jointly by the Secretary of the Interior and the Secretary of Agriculture, be submitted by the Secretary of the Interior to the Secretary of Agriculture or by the Secretary of Agriculture to the Secretary of the Interior, as the case may be, and to the Secretary of the Army, the Chairman of the Federal Power Commission, the head of any other affected Federal department or agency and, unless the lands proposed to be included in the area are already owned by the United States or have already been authorized for acquisition by Act of Congress, the Governor of the State or States in which they are located or an officer designated by the Governor to receive the same. Any recommendations or comments on the proposal which the said officials furnish the Secretary or Secretaries who prepared the report within ninety days of the date on which the report is submitted to them, together with the Secretary's or Secretaries' comments thereon, shall be included with the transmittal to the President and the Congress. No river or portion of any river shall be added to the national wild and scenic rivers system subsequent to enactment of this Act until the close of the next full session of the State legislature, or legislatures in case more than one

State is involved, which begins following the submission of any recommendation to the President with respect to such addition as herein provided.

(c) Before approving or disapproving for inclusion in the national wild and scenic rivers system any river designated as a wild, scenic or recreational river by or pursuant to an act of a State legislature, the Secretary of the Interior shall submit the proposal to the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Federal Power Commission, and the head of any other affected Federal department or agency and shall evaluate and give due weight to any recommendations or comments which the said officials furnish him within ninety days of the date on which it is submitted to them. If he approves the proposed inclusion, he shall publish notice thereof in the Federal Register.

Publication in
Federal Register.

Potential
additions.
Designation.

Sec. 5. (a) The following rivers are hereby designated for potential addition to the national wild and scenic rivers system:

- (1) Allegheny, Pennsylvania: The segment from its mouth to the town of East Brady, Pennsylvania.
- (2) Bruneau, Idaho: The entire main stem.
- (3) Buffalo, Tennessee: The entire river.
- (4) Chattooga, North Carolina, South Carolina, and Georgia: The entire river.
- (5) Clarion, Pennsylvania: The segment between Ridgway and its confluence with the Allegheny River.
- (6) Delaware, Pennsylvania and New York: The segment from Hancock, New York, to Matamoras, Pennsylvania.
- (7) Flathead, Montana: The North Fork from the Canadian border downstream to its confluence with the Middle Fork; the Middle Fork from its headwaters to its confluence with the South Fork; and the South Fork from its origin to Hungry Horse Reservoir.
- (8) Gasconade, Missouri: The entire river.
- (9) Illinois, Oregon: The entire river.
- (10) Little Beaver, Ohio: The segment of the North and Middle Forks of the Little Beaver River in Columbiana County from a point in the vicinity of Negly and Elkton, Ohio, downstream to a point in the vicinity of East Liverpool, Ohio.
- (11) Little Miami, Ohio: That segment of the main stem of the river, exclusive of its tributaries, from a point at the Warren-Clermont County line at Loveland, Ohio, upstream to the sources of Little Miami including North Fork.
- (12) Maumee, Ohio and Indiana: The main stem from Perrysburg, Ohio, to Fort Wayne, Indiana, exclusive of its tributaries in Ohio and inclusive of its tributaries in Indiana.
- (13) Missouri, Montana: The segment between Fort Benton and Ryan Island.
- (14) Moyie, Idaho: The segment from the Canadian border to its confluence with the Kootenai River.
- (15) Obed, Tennessee: The entire river and its tributaries, Clear Creek and Daddys Creek.
- (16) Penobscot, Maine: Its east and west branches.
- (17) Pere Marquette, Michigan: The entire river.
- (18) Pine Creek, Pennsylvania: The segment from Ansonia to Waterville.
- (19) Priest, Idaho: The entire main stem.
- (20) Rio Grande, Texas: The portion of the river between the west boundary of Hudspeth County and the east boundary of Terrell County on the United States side of the river: *Provided*, That before undertaking any study of this potential scenic river, the Secretary of the Interior shall determine, through the channels of appropriate

executive agencies, that Mexico has no objection to its being included among the studies authorized by this Act.

(21) Saint Croix, Minnesota and Wisconsin: The segment between the dam near Taylors Falls and its confluence with the Mississippi River.

(22) Saint Joe, Idaho: The entire main stem.

(23) Salmon, Idaho: The segment from the town of North Fork to its confluence with the Snake River.

(24) Skagit, Washington: The segment from the town of Mount Vernon to and including the mouth of Bacon Creek; the Cascade River between its mouth and the junction of its North and South Forks; the South Fork to the boundary of the Glacier Peak Wilderness Area; the Suiattle River from its mouth to the Glacier Peak Wilderness Area boundary at Milk Creek; the Sauk River from its mouth to its junction with Elliott Creek; the North Fork of the Sauk River from its junction with the South Fork of the Sauk to the Glacier Peak Wilderness Area boundary.

(25) Suwannee, Georgia and Florida: The entire river from its source in the Okefenokee Swamp in Georgia to the gulf and the outlying Ichetucknee Springs, Florida.

(26) Upper Iowa, Iowa: The entire river.

(27) Youghiogheny, Maryland and Pennsylvania: The segment from Oakland, Maryland, to the Youghiogheny Reservoir, and from the Youghiogheny Dam downstream to the town of Connellsville, Pennsylvania.

(b) The Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture shall proceed as expeditiously as possible to study each of the rivers named in subsection (a) of this section in order to determine whether it should be included in the national wild and scenic rivers system. Such studies shall be completed and reports made thereon to the President and the Congress, as provided in section 4 of this Act, within ten years from the date of this Act: *Provided, however*, That with respect to the Suwannee River, Georgia and Florida, and the Upper Iowa River, Iowa, such study shall be completed and reports made thereon to the President and the Congress, as provided in section 4 of this Act, within two years from the date of enactment of this Act. In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers with respect to which there is the greatest likelihood of developments which, if undertaken, would render them unsuitable for inclusion in the national wild and scenic rivers system. Studies.

(c) The study of any of said rivers shall be pursued in as close cooperation with appropriate agencies of the affected State and its political subdivisions as possible, shall be carried on jointly with such agencies if request for such joint study is made by the State, and shall include a determination of the degree to which the State or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national wild and scenic rivers system.

(d) In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potentials. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all Federal agencies as potential alternative uses of the water and related land resources involved.

Land acquisition. SEC. 6. (a) The Secretary of the Interior and the Secretary of Agriculture are each authorized to acquire lands and interests in land within the authorized boundaries of any component of the national wild and scenic rivers system designated in section 3 of this Act, or hereafter designated for inclusion in the system by Act of Congress, which is administered by him, but he shall not acquire fee title to an average of more than 100 acres per mile on both sides of the river. Lands owned by a State may be acquired only by donation, and lands owned by an Indian tribe or a political subdivision of a State may not be acquired without the consent of the appropriate governing body thereof as long as the Indian tribe or political subdivision is following a plan for management and protection of the lands which the Secretary finds protects the land and assures its use for purposes consistent with this Act. Money appropriated for Federal purposes from the land and water conservation fund shall, without prejudice to the use of appropriations from other sources, be available to Federal departments and agencies for the acquisition of property for the purposes of this Act.

(b) If 50 per centum or more of the entire acreage within a federally administered wild, scenic or recreational river area is owned by the United States, by the State or States within which it lies, or by political subdivisions of those States, neither Secretary shall acquire fee title to any lands by condemnation under authority of this Act. Nothing contained in this section, however, shall preclude the use of condemnation when necessary to clear title or to acquire scenic easements or such other easements as are reasonably necessary to give the public access to the river and to permit its members to traverse the length of the area or of selected segments thereof.

(c) Neither the Secretary of the Interior nor the Secretary of Agriculture may acquire lands by condemnation, for the purpose of including such lands in any national wild, scenic or recreational river area, if such lands are located within any incorporated city, village, or borough which has in force and applicable to such lands a duly adopted, valid zoning ordinance that conforms with the purposes of this Act. In order to carry out the provisions of this subsection the appropriate Secretary shall issue guidelines, specifying standards for local zoning ordinances, which are consistent with the purposes of this Act. The standards specified in such guidelines shall have the object of (A) prohibiting new commercial or industrial uses other than commercial or industrial uses which are consistent with the purposes of this Act, and (B) the protection of the bank lands by means of acreage, frontage, and setback requirements on development.

(d) The appropriate Secretary is authorized to accept title to non-Federal property within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress and, in exchange therefor, convey to the grantor any federally owned property which is under his jurisdiction within the State in which the component lies and which he classifies as suitable for exchange or other disposal. The values of the properties so exchanged either shall be approximately equal or, if they are not approximately equal, shall be equalized by the payment of cash to the grantor or to the Secretary as the circumstances require.

(e) The head of any Federal department or agency having administrative jurisdiction over any lands or interests in land within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress is authorized to transfer to the appropriate secretary jurisdic-

tion over such lands for administration in accordance with the provisions of this Act. Lands acquired by or transferred to the Secretary of Agriculture for the purposes of this Act within or adjacent to a national forest shall upon such acquisition or transfer become national forest lands.

(f) The appropriate Secretary is authorized to accept donations of lands and interests in land, funds, and other property for use in connection with his administration of the national wild and scenic rivers system.

(g)(1) Any owner or owners (hereinafter in this subsection referred to as "owner") of improved property on the date of its acquisition, may retain for themselves and their successors or assigns a right of use and occupancy of the improved property for noncommercial residential purposes for a definite term not to exceed twenty-five years or, in lieu thereof, for a term ending at the death of the owner, or the death of his spouse, or the death of either or both of them. The owner shall elect the term to be reserved. The appropriate Secretary shall pay to the owner the fair market value of the property on the date of such acquisition less the fair market value on such date of the right retained by the owner.

Right of use and occupancy.

(2) A right of use and occupancy retained pursuant to this subsection shall be subject to termination whenever the appropriate Secretary is given reasonable cause to find that such use and occupancy is being exercised in a manner which conflicts with the purposes of this Act. In the event of such a finding, the Secretary shall tender to the holder of that right an amount equal to the fair market value of that portion of the right which remains unexpired on the date of termination. Such right of use or occupancy shall terminate by operation of law upon tender of the fair market price.

(3) The term "improved property", as used in this Act, means a detached, one-family dwelling (hereinafter referred to as "dwelling"), the construction of which was begun before January 1, 1967, together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the appropriate Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures accessory to the dwelling which are situated on the land so designated.

"Improved property."

Sec. 7. (a) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791a et seq.), on or directly affecting any river which is designated in section 3 of this Act as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of approval of this Act. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration, or request appropriations to begin

Water resources projects. Restrictions

construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior or the Secretary of Agriculture, as the case may be, in writing of its intention so to do at least sixty days in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would affect the component and the values to be protected by it under this Act.

(b) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is listed in section 5, subsection (a), of this Act, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river might be designated, as determined by the Secretary responsible for its study or approval—

(i) during the five-year period following enactment of this Act unless, prior to the expiration of said period, the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, on the basis of study, conclude that such river should not be included in the national wild and scenic rivers system and publish notice to that effect in the Federal Register, and

(ii) during such additional period thereafter as, in the case of any river which is recommended to the President and the Congress for inclusion in the national wild and scenic rivers system, is necessary for congressional consideration thereof or, in the case of any river recommended to the Secretary of the Interior for inclusion in the national wild and scenic rivers system under section 2(a)(ii) of this Act, is necessary for the Secretary's consideration thereof, which additional period, however, shall not exceed three years in the first case and one year in the second.

Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a potential wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or diminish the scenic, recreational, and fish and wildlife values present in the potential wild, scenic or recreational river area on the date of approval of this Act. No department or agency of the United States shall, during the periods hereinbefore specified, recommend authorization of any water resources project on any such river or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture in writing of its intention so to do at least sixty days in advance of doing so and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would affect the component and the values to be protected by it under this Act.

(c) The Federal Power Commission and all other Federal agencies shall, promptly upon enactment of this Act, inform the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, of any proceedings, studies, or other activities within their jurisdiction which are now in progress and which affect or may affect any of the rivers specified in section 5, subsection (a), of this Act. They shall likewise inform him of any such proceedings, studies, or other activities which are hereafter commenced or resumed before they are commenced or resumed.

49 Stat. 863.
16 USC 791a.

Publication
in Federal
Register.

(d) Nothing in this section with respect to the making of a loan or grant shall apply to grants made under the Land and Water Conservation Fund Act of 1965 (78 Stat. 897; 16 U.S.C. 4601-5 et seq.).

Sec. 8. (a) All public lands within the authorized boundaries of any component of the national wild and scenic rivers system which is designated in section 3 of this Act or which is hereafter designated for inclusion in that system are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States.

(b) All public lands which constitute the bed or bank, or are within one-quarter mile of the bank, of any river which is listed in section 5, subsection (a), of this Act are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States for the periods specified in section 7, subsection (b), of this Act.

Sec. 9. (a) Nothing in this Act shall affect the applicability of the United States mining and mineral leasing laws within components of the national wild and scenic rivers system except that--

Mining and
mineral leasing
laws.

(i) all prospecting, mining operations, and other activities on mining claims which, in the case of a component of the system designated in section 3 of this Act, have not heretofore been perfected or which, in the case of a component hereafter designated pursuant to this Act or any other Act of Congress, are not perfected before its inclusion in the system and all mining operations and other activities under a mineral lease, license, or permit issued or renewed after inclusion of a component in the system shall be subject to such regulations as the Secretary of the Interior or, in the case of national forest lands, the Secretary of Agriculture may prescribe to effectuate the purposes of this Act;

(ii) subject to valid existing rights, the perfection of, or issuance of a patent to, any mining claim affecting lands within the system shall confer or convey a right or title only to the mineral deposits and such rights only to the use of the surface and the surface resources as are reasonably required to carrying on prospecting or mining operations and are consistent with such regulations as may be prescribed by the Secretary of the Interior or, in the case of national forest lands, by the Secretary of Agriculture; and

(iii) subject to valid existing rights, the minerals in Federal lands which are part of the system and constitute the bed or bank or are situated within one-quarter mile of the bank of any river designated a wild river under this Act or any subsequent Act are hereby withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto.

Regulations issued pursuant to paragraphs (i) and (ii) of this subsection shall, among other things, provide safeguards against pollution of the river involved and unnecessary impairment of the scenery within the component in question.

(b) The minerals in any Federal lands which constitute the bed or bank or are situated within one-quarter mile of the bank of any river which is listed in section 5, subsection (a) of this Act are hereby withdrawn from all forms of appropriation under the mining laws during the periods specified in section 7, subsection (b) of this Act. Nothing contained in this subsection shall be construed to forbid prospecting or the issuance or leases, licenses, and permits under the mineral leasing laws subject to such conditions as the Secretary of the Interior and, in the case of national forest lands, the Secretary of Agriculture find appropriate to safeguard the area in the event it is subsequently included in the system.

Administration.

Sec. 10. (a) Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

16 USC 1131
note.

(b) Any portion of a component of the national wild and scenic rivers system that is within the national wilderness preservation system, as established by or pursuant to the Act of September 3, 1964 (78 Stat. 890; 16 U.S.C., ch. 23), shall be subject to the provisions of both the Wilderness Act and this Act with respect to preservation of such river and its immediate environment, and in case of conflict between the provisions of these Acts the more restrictive provisions shall apply.

(c) Any component of the national wild and scenic rivers system that is administered by the Secretary of the Interior through the National Park Service shall become a part of the national park system, and any such component that is administered by the Secretary through the Fish and Wildlife Service shall become a part of the national wildlife refuge system. The lands involved shall be subject to the provisions of this Act and the Acts under which the national park system or national wildlife system, as the case may be, is administered, and in case of conflict between the provisions of these Acts, the more restrictive provisions shall apply. The Secretary of the Interior, in his administration of any component of the national wild and scenic rivers system, may utilize such general statutory authorities relating to areas of the national park system and such general statutory authorities otherwise available to him for recreation and preservation purposes and for the conservation and management of natural resources as he deems appropriate to carry out the purposes of this Act.

Cooperative
agreements with
State or local
governments.

(d) The Secretary of Agriculture, in his administration of any component of the national wild and scenic rivers system area, may utilize the general statutory authorities relating to the national forests in such manner as he deems appropriate to carry out the purposes of this Act.

(e) The Federal agency charged with the administration of any component of the national wild and scenic rivers system may enter into written cooperative agreements with the Governor of a State, the head of any State agency, or the appropriate official of a political subdivision of a State for State or local governmental participation in the administration of the component. The States and their political subdivisions shall be encouraged to cooperate in the planning and administration of components of the system which include or adjoin State- or county-owned lands.

Assistance in
financing State
and local proj-
ects.

16 USC 4601-4
note.

16 USC 4601-
4601-3.

Sec. 11. (a) The Secretary of the Interior shall encourage and assist the States to consider, in formulating and carrying out their comprehensive statewide outdoor recreation plans and proposals for financing assistance for State and local projects submitted pursuant to the Land and Water Conservation Fund Act of 1965 (78 Stat. 897), needs and opportunities for establishing State and local wild, scenic and recreational river areas. He shall also, in accordance with the authority contained in the Act of May 28, 1963 (77 Stat. 49), provide technical assistance and advice to, and cooperate with, States, political subdivisions, and private interests, including nonprofit organizations, with respect to establishing such wild, scenic and recreational river areas.

(b) The Secretaries of Agriculture and of Health, Education, and Welfare shall likewise, in accordance with the authority vested in them, assist, advise, and cooperate with State and local agencies and private interests with respect to establishing such wild, scenic and recreational river areas.

Sec. 12. (a) The Secretary of the Interior, the Secretary of Agriculture, and heads of other Federal agencies shall review administrative and management policies, regulations, contracts, and plans affecting lands under their respective jurisdictions which include, border upon, or are adjacent to the rivers listed in subsection (a) of section 5 of this Act in order to determine what actions should be taken to protect such rivers during the period they are being considered for potential addition to the national wild and scenic rivers system. Particular attention shall be given to scheduled timber harvesting, road construction, and similar activities which might be contrary to the purposes of this Act.

Administration and management policies. Review.

(b) Nothing in this section shall be construed to abrogate any existing rights, privileges, or contracts affecting Federal lands held by any private party without the consent of said party

(c) The head of any agency administering a component of the national wild and scenic rivers system shall cooperate with the Secretary of the Interior and with the appropriate State water pollution control agencies for the purpose of eliminating or diminishing the pollution of waters of the river.

Sec. 13. (a) Nothing in this Act shall affect the jurisdiction or responsibilities of the States with respect to fish and wildlife. Hunting and fishing shall be permitted on lands and waters administered as parts of the system under applicable State and Federal laws and regulations unless, in the case of hunting, those lands or waters are within a national park or monument. The administering Secretary may, however, designate zones where, and establish periods when, no hunting is permitted for reasons of public safety, administration, or public use and enjoyment and shall issue appropriate regulations after consultation with the wildlife agency of the State or States affected.

Fish and wildlife. Jurisdiction under State and Federal laws.

(b) The jurisdiction of the States and the United States over waters of any stream included in a national wild, scenic or recreational river area shall be determined by established principles of law. Under the provisions of this Act, any taking by the United States of a water right which is vested under either State or Federal law at the time such river is included in the national wild and scenic rivers system shall entitle the owner thereof to just compensation. Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

Compensation for water rights.

(c) Designation of any stream or portion thereof as a national wild, scenic or recreational river area shall not be construed as a reservation of the waters of such streams for purposes other than those specified in this Act, or in quantities greater than necessary to accomplish these purposes.

(d) The jurisdiction of the States over waters of any stream included in a national wild, scenic or recreational river area shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purposes of this Act or its administration.

82 STAT. 917

(e) Nothing contained in this Act shall be construed to alter, amend, repeal, interpret, modify, or be in conflict with any interstate compact made by any States which contain any portion of the national wild and scenic rivers system.

82 STAT. 918

(f) Nothing in this Act shall affect existing rights of any State, including the right of access, with respect to the beds of navigable streams, tributaries, or rivers (or segments thereof) located in a national wild, scenic or recreational river area.

Easements and rights-of-way. (g) The Secretary of the Interior or the Secretary of Agriculture, as the case may be, may grant easements and rights-of-way upon, over, under, across, or through any component of the national wild and scenic rivers system in accordance with the laws applicable to the national park system and the national forest system, respectively: *Provided*, That any conditions precedent to granting such easements and rights-of-way shall be related to the policy and purpose of this Act.

Claim and allowance as charitable contribution or gift. 76 Stat. 1034. 68A Stat. 410. SEC. 14. The claim and allowance of the value of an easement as a charitable contribution under section 170 of title 26, United States Code, or as a gift under section 2522 of said title shall constitute an agreement by the donor on behalf of himself, his heirs, and assigns that, if the terms of the instrument creating the easement are violated, the donee or the United States may acquire the servient estate at its fair market value as of the time the easement was donated minus the value of the easement claimed and allowed as a charitable contribution or gift.

Definitions. SEC. 15. As used in this Act, the term—
 (a) "River" means a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes.
 (b) "Free-flowing", as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: *Provided*, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.
 (c) "Scenic easement" means the right to control the use of land (including the air space above such land) for the purpose of protecting the scenic view from the river, but such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement.

Appropriations. SEC. 16. There are hereby authorized to be appropriated such sums as may be necessary, but not more than \$17,000,000, for the acquisition of lands and interests in land under the provisions of this Act.

Approved October 2, 1968.

LEGISLATIVE HISTORY:

HOUSE REPORTS: No. 1623 accompanying H. R. 18260 (Comm. on Interior & Insular Affairs) and No. 1917 (Comm. of Conference).

SENATE REPORT No. 491 (Comm. on Interior & Insular Affairs).

CONGRESSIONAL RECORD:
 Vol. 113 (1967): Aug. 8, considered and passed Senate.
 Vol. 114 (1968): July 15, Sept. 12, considered and passed House, amended, in lieu of H. R. 18260.
 Sept. 25, House agreed to conference report.
 Sept. 26, Senate agreed to conference report.



Public Law 93-279
 93rd Congress, H. R. 9492
 May 10, 1974

An Act

88 STAT. 122

To amend the Wild and Scenic Rivers Act by designating the Chattooga River, North Carolina, South Carolina, and Georgia as a component of the National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Wild and Scenic Rivers Act (82 Stat. 905; 16 U.S.C. 1274 et seq.), as amended, is further amended as follows:

Wild and Scenic
 Rivers Act,
 amendments.
 16 USC 1271 note.
 86 Stat. 1174.
 16 USC 1274.

(a) In section 3(a) after paragraph (9) insert the following new paragraph:

“(10) CHATTOOGA, NORTH CAROLINA, SOUTH CAROLINA, GEORGIA.— The Segment from 0.8 mile below Cashiers Lake in North Carolina to Tugalo Reservoir, and the West Fork Chattooga River from its junction with Chattooga upstream 7.3 miles, as generally depicted on the boundary map entitled ‘Proposed Wild and Scenic Chattooga River and Corridor Boundary’, dated August 1973; to be administered by the Secretary of Agriculture: *Provided*, That the Secretary of Agriculture shall take such action as is provided for under subsection (b) of this section within one year from the date of enactment of this paragraph (10): *Provided further*, That for the purposes of this river, there are authorized to be appropriated not more than \$2,000,000 for the acquisition of lands and interests in lands and not more than \$800,000 for development.”

Appropriation.

(b) (1) In section 4 delete subsection (a) and insert in lieu thereof the following:

16 USC 1275.

“Sec. 4. (a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture or, in appropriate cases, the two Secretaries jointly shall study and submit to the President reports on the suitability or unsuitability for addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system. The President shall report to the Congress his recommendations and proposals with respect to the designation of each such river or section thereof under this Act. Such studies shall be completed and such reports shall be made to the Congress with respect to all rivers named in subparagraphs 5(a) (1) through (27) of this Act no later than October 2, 1978. In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers with respect to which there is the greatest likelihood of developments which, if undertaken, would render the rivers unsuitable for inclusion in the national wild and scenic rivers system. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.).

Studies, sub-
 mittal to Presi-
 dent.

Report to Con-
 gress.

16 USC 1276.

“Each report, including maps and illustrations, shall show among other things the area included within the report; the characteristics which do or do not make the area a worthy addition to the system; the current status of land ownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which it is proposed the area, should it be added to the system, be administered; the extent to which it is proposed that such administration, including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary lands and interests in

Contents.

Printing as
Senate or House
document.
82 Stat. 910.
16 USC 1276.
16 USC 1278.

Notification to
congressional
committees.
Publication in
Federal Register.

16 USC 1286.

Appropriation.
15 USC 1287.

Arts, p. 122.

Expiration
date.

land and of administering the area, should it be added to the system. Each such report shall be printed as a Senate or House document."

(2) In section 5 delete subsection (b) and reletter subsections (c) and (d) as (b) and (c), respectively.

(3) In section 7(b) delete clause (i) and insert in lieu thereof the following:

"(i) during the ten-year period following enactment of this Act or for a three complete fiscal year period following any Act of Congress designating any river for potential addition to the national wild and scenic rivers system, whichever is later, unless, prior to the expiration of the relevant period, the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, on the basis of study, determine that such river should not be included in the national wild and scenic rivers system and notify the Committees on Interior and Insular Affairs of the United States Congress, in writing, including a copy of the study upon which the determination was made, at least one hundred and eighty days while Congress is in session prior to publishing notice to that effect in the Federal Register, and".

(4) In section 7(b) (ii) delete "which is recommended", insert in lieu thereof "the report for which is submitted", and delete "for inclusion in the national wild and scenic rivers system".

(c) In section 15(c) delete "for the purpose of protecting the scenic view from the river," and insert in lieu thereof "within the authorized boundaries of a component of the wild and scenic rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area,".

(d) Delete section 16 and insert in lieu thereof:

"Sec. 16. (a) There are hereby authorized to be appropriated, including such sums as have heretofore been appropriated, the following amounts for land acquisition for each of the rivers described in section 3(a) of this Act:

Clearwater, Middle Fork, Idaho, \$2,909,800;

Eleven Point, Missouri, \$1,906,500;

Feather, Middle Fork, California, \$3,935,700;

Rio Grande, New Mexico, \$253,000;

Rogue, Oregon, \$12,447,200;

St. Croix, Minnesota and Wisconsin, \$11,768,550;

Sabnon, Middle Fork, Idaho, \$1,237,100; and

Wolf, Wisconsin, \$142,150.

"(b) The authority to make the appropriations authorized in this section shall expire on June 30, 1979."

Approved May 10, 1974.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 93-675 (Comm. on Interior and Insular Affairs).

SENATE REPORT No. 93-738 (Comm. on Interior and Insular Affairs).

CONGRESSIONAL RECORD:

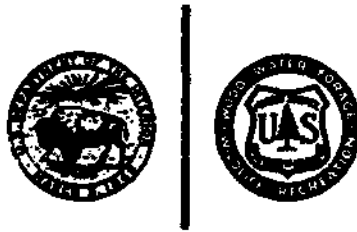
Vol. 119 (1973): Dec. 3, considered and passed House.

Vol. 120 (1974): Mar. 22, considered and passed Senate, amended.

Apr. 10, House concurred in Senate amendment with an amendment.

Apr. 23, Senate agreed to House amendment with amendments.

Apr. 25, House concurred in Senate amendments.



GUIDELINES FOR EVALUATING WILD,
SCENIC AND RECREATIONAL RIVER
AREAS PROPOSED FOR INCLUSION IN
THE NATIONAL WILD AND SCENIC
RIVERS SYSTEM UNDER SECTION 2,
PUBLIC LAW 90-542.

February 1970

PURPOSE

The following criteria supplement those listed in Section 2 of the Wild and Scenic Rivers Act, which states that rivers included in the National Wild and Scenic Rivers System shall be free-flowing streams which possess outstandingly remarkable scenic, recreational, geological, fish and wildlife, historic, cultural and other similar values.

These guidelines are intended to define minimum criteria for the classification and management of free-flowing river areas proposed for inclusion in the national system by the Secretary of the Interior or the Secretary of Agriculture, and for State rivers included in the system by the Secretary of the Interior.

In reading these guidelines and in applying them to real situations of land and water it is important to bear one important qualification in mind. There is no way for these statements of criteria to be written so as to mechanically or automatically indicate which rivers are eligible and what class they must be. It is important to understand each criterion; but it is perhaps even more important to understand their collective intent. The investigator has to exercise his judgment, not only on the specific criteria as they apply to a particular river, but on the river as a whole, and on their relative weights. For this reason, these guidelines are not absolutes. There may be extenuating circumstances which would lead the appropriate Secretary to recommend, or approve pursuant to Section 2(a)(ii), a river area for inclusion in the system because it is exceptional in character and outstandingly remarkable even though it does not meet each of the criteria set forth in these guidelines. However, exceptions to these criteria should be recognized only in rare instances and for compelling reasons.

The three classes of river areas described in Section 2(b) of the Wild and Scenic Rivers Act are as follows:

- "(1) Wild river areas--Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive

and waters unpolluted. These represent vestiges of primitive America.

"(2) Scenic river areas--Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

"(3) Recreational river areas--Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past."

GENERAL CHARACTERISTICS

The Wild and Scenic Rivers Act, Section 10(a), states that, "Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area."

In order to qualify for inclusion in the national system, a State free-flowing river area must be designated as a wild, scenic, or recreational river by act of the State legislature, with land areas wholly and permanently administered in a manner consistent with the designation by any agency or political subdivision of the State at no cost to the Federal Government, and be approved by the Secretary of the Interior as meeting the criteria established by the Wild and Scenic Rivers Act and the guidelines contained herein. A river or related lands owned by an Indian tribe cannot be added to the national system without the consent of the appropriate governing body.

In evaluating a river for possible inclusion in the system or for determining its classification, the river and its immediate land area should be considered as a unit, with primary emphasis upon the quality of the experience and overall impressions of the recreationist using the river or the adjacent riverbank. Although a free-flowing river or river unit frequently will have more than one classified area, each wild, scenic, or recreational area must be long enough to provide a meaningful experience. The number of different classified areas within a unit should be kept to a minimum.

Any activity, use, or development which is acceptable for a wild river is also acceptable for scenic and recreational river areas, and that which is acceptable for a scenic river is acceptable for a recreation river area. Activity and development limitations discussed below should not necessarily be interpreted as the desired level to which development or management activity should be planned. Hunting and fishing will be permitted, subject to appropriate State and Federal laws.

● The Wild and Scenic Rivers Act provides that rivers must be in a free-flowing natural condition, i.e., a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes which are without impoundment, diversion, straightening, rip-rapping or other modification of the waterway. However, low dams, diversion works, and other minor structures will not automatically preclude the river unit from being included in the National Wild and Scenic Rivers System, providing such structures do not unreasonably diminish the free-flowing nature of the stream and the scenic, scientific, geological, historical, cultural, recreational, and fish and wildlife values present in the area.

● The river or river unit must be long enough to provide a meaningful experience. Generally, any unit included in the system should be at least 25 miles long. However, a shorter river or segment that possesses outstanding qualifications may be included in the system.

● There should be sufficient volume of water during normal years to permit, during the recreation season, full enjoyment of water-related outdoor recreation activities general-

ly associated with comparable rivers. In the event the existing supply of water is inadequate, it would be necessary to show that additional water can be provided reasonably and economically without unreasonably diminishing the scenic, recreational, and fish and wildlife values of the area.

●The river and its environment should be outstandingly remarkable and, although they may reflect substantial evidence of man's activity, should be generally pleasing to the eye.

●The river should be of high quality water or susceptible of restoration to that condition. A concept of nondegradation whereby existing high water quality will be maintained to the maximum extent feasible will be followed in all river areas included in the national system.

All rivers included in the national system should meet the "Aesthetics--General Criteria" as defined by the National Technical Advisory Committee on Water Quality in the Federal Water Pollution Control Administration's Water Quality Criteria, April 1, 1968. Water quality should meet the criteria for fish, other aquatic life, and wildlife, as defined in that document, so as to support the propagation of those forms of life which normally would be adapted to the habitat of the stream. Where no standards exist or where existing standards will not meet the objectives of these criteria, standards should be developed or raised to achieve those objectives. Wild river areas can be included in the national system only if they also meet the minimum criteria for primary contact recreation, except as these criteria might be exceeded by natural background conditions. Scenic or recreation river areas which qualify for inclusion in the system in all respects except for water quality may be added to the system provided adequate and reasonable assurance is given by the appropriate Federal or State authority that the water quality can and will be upgraded to the prescribed level for the desired types of recreation, and support aquatic life which normally would be adapted to the habitat of the stream at the prescribed level of water quality. At such time as water quality fully meets the criteria, it may be desirable to change the classification of a river.

●New public utility transmission lines, gas lines, water

lines, etc., in river areas being considered for inclusion in the national system are discouraged. However, where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are indicated, the scenic, recreational, and fish and wildlife values must be evaluated in the selection of the site in accordance with the general guidelines described in the Report of the Working Committee on Utilities prepared for the President's Council on Recreation and Natural Beauty, December 1968.

● Mineral activity subject to regulations under the Act must be conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment. Specific controls will be developed as a part of each management plan.

CRITERIA FOR RIVER DESIGNATION

The following criteria for classification, designation, and administration of river areas are prescribed by the Act. These criteria are not absolutes, nor can they readily be defined quantitatively. In a given river, a departure from these standards might be more than compensated by other qualities. However, if several "exceptions" are necessary in order for a river to be classified as wild, it probably should be classified as scenic. If several "exceptions" are necessary in order for a river to be classified as scenic, it probably should be classified as recreational.

Wild River Areas

The Wild and Scenic Rivers Act states that "these represent vestiges of primitive America," and they possess these attributes:

1. "Free of impoundments"
2. "Generally inaccessible except by trail"
3. "Watersheds or shorelines essentially primitive"
4. "Waters unpolluted"

● Classification criteria.

Despite some obvious similarities, the "wildness" associated with a wild river area is not synonymous with the "wildness"

involved in wilderness classification under the Wilderness Act of 1964. One major distinction, in contrast to wilderness, is that a wild river area also may contain recreation facilities for the convenience of the user in keeping with the primitive setting.

1. An "impoundment" is a slack water pool formed by any man-made structure. Except in rare instances in which esthetic and recreational characteristics are of such outstanding quality as to counterbalance the disruptive nature of an impoundment, such features will not be allowed on wild river areas. Future construction of such structures that would have a direct and adverse effect on the values for which that river area was included in the national system, as determined by the Secretary charged with the administration of the area, would not be permitted. In the case of rivers added to the national system pursuant to Sec.2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system.
2. "Generally inaccessible" means there are no roads or other provisions for overland motorized travel within a narrow, incised river valley, or if the river valley is broad, within 1/4 mile of the riverbank. The presence, however, of one or two inconspicuous roads leading to the river area will not necessarily bar wild river classification.
3. "Essentially primitive" means the shorelines are free of habitation and other substantial evidence of man's intrusion. This would include such things as diversions, straightening, rip-rapping, and other modifications of the waterway. These would not be permitted except in instances where such developments would not have a direct and adverse effect on the values for which that river area was included in the national system as determined by the Secretary charged with the administration of the area. In the case of rivers added to the national system pursuant to Section 2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system. With respect to watersheds, "essentially primitive" means that the portion of the watershed within the boundaries has a natural-like appearance. As with shorelines, developments within the boundaries should emphasize a natural-

like appearance so that the entire river area remains a vestige of primitive America. For the purposes of this Act, a limited amount of domestic livestock grazing and pasture land and cropland devoted to the production of hay may be considered "essentially primitive." One or two inconspicuous dwellings need not necessarily bar wild river classification.

4. "Unpolluted" means the water quality of the river at least meets the minimum criteria for primary contact recreation, except where exceeded by natural background conditions, and esthetics as interpreted in the Federal Water Pollution Control Administration's Water Quality Criteria, April 1, 1968. In addition, the water presently must be capable of supporting the propagation of aquatic life, including fish, which normally would be adapted to the habitat of the stream. Where no standards exist or where existing standards will not meet the objectives of these criteria, standards should be developed or raised to achieve those objectives.

● Management objectives.

The administration of a wild river area shall give primary emphasis to protecting the values which make it outstandingly remarkable while providing river-related outdoor recreation opportunities in a primitive setting.

To achieve these objectives in wild river areas, it will be necessary to:

1. Restrict or prohibit motorized land travel, except where such uses are not in conflict with the purposes of the Act.
2. Acquire and remove detracting habitations and other non-harmonious improvements.
3. Locate major public-use areas, such as large campgrounds, interpretive centers or administrative headquarters, outside the wild river area. Simple comfort and convenience facilities, such as fireplaces, shelters, and toilets, may be provided for recreation users as necessary to provide an enjoyable experience, protect popular sites, and meet the management objectives. Such facilities will be of a design and

location which harmonize with the surroundings.

4. Prohibit improvements or new structures unless they are clearly in keeping with the overall objectives of the wild river area classification and management. The design for any permitted construction must be in conformance with the approved management plan for that area. Additional habitations or substantial additions to existing habitations will not be permitted.

5. Implement management practices which might include construction of minor structures for such purposes as improvement of fish and game habitat; grazing; protection from fire, insects, or disease; rehabilitation or stabilization of damaged resources, provided the area will remain natural appearing and the practices or structures will harmonize with the environment. Such things as trail bridges, an occasional fence, natural-appearing water diversions, ditches, flow measurement or other water management devices, and similar facilities may be permitted if they are unobtrusive and do not have a significant direct and adverse effect on the natural character of the area.

Scenic River Areas

The Wild and Scenic Rivers Act states that scenic rivers:

1. Are "free of impoundments"
2. Are "accessible in places by road"
3. Have "shorelines or watersheds still largely primitive and shorelines largely undeveloped"

● Classification criteria.

1. An "impoundment" is a slack water pool formed by any man-made structure. Except in rare instances in which esthetic and recreational characteristics are of such outstanding quality as to counterbalance the disruptive nature of an impoundment, such features will not be allowed on scenic river areas. Future construction of such structures that would have a direct and adverse effect on the values for which that river area was included in the national system as determined by the Secretary charged with the administration of the area, would not be permitted. In the case of rivers added to the national

system pursuant to Section 2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system.

2. "Accessible in places by road" means that roads may occasionally bridge the river area. Scenic river areas will not include long stretches of conspicuous and well-traveled roads closely paralleling the riverbank. The presence, however, of short stretches of conspicuous or longer stretches of inconspicuous and well-screened roads or screened railroads will not necessarily preclude scenic river designation. In addition to the physical and scenic relationship of the free-flowing river area to roads, consideration should be given to the type of use for which such roads were constructed and the type of use which would occur within the proposed scenic river area.

3. "Largely primitive" means that the shorelines and the immediate river environment still present an overall natural character, but that in places, land may be developed for agricultural purposes. A modest amount of diversion, straightening, rip-rapping, and other modification of the waterway would not preclude a river from being considered for classification as a scenic river. Future construction of such structures would not be permitted except in instances where such developments would not have a direct and adverse effect on the values for which that river area was included in the national system as determined by the Secretary charged with the administration of the area.

In the case of rivers added to the national system pursuant to Section 2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system. "Largely primitive" with respect to watersheds means that the portion of the watershed within the boundaries of the scenic river area should be scenic, with a minimum of easily discernible development. Row crops would be considered as meeting the test of "largely primitive," as would timber harvest and other resource use, providing such activity is accomplished without a substantially adverse effect on the natural-like appearance of the river or its immediate environment.

4. "Largely undeveloped" means that small communities or any concentration of habitations must be limited to relatively short reaches of the total area under consideration for designation as a scenic river area.

●Management objectives.

A scenic river area should be managed so as to maintain and provide outdoor recreation opportunities in a near natural setting. The basic distinctions between a "wild" and a "scenic" river area are degree of development, type of land use, and road accessibility. In general, a wide range of agricultural, water management, silvicultural and other practices could be compatible with the primary objectives of a scenic river area, providing such practices are carried on in such a way that there is no substantial adverse effect on the river and its immediate environment.

The same considerations enumerated for wild river areas should be considered, except that motorized vehicle use may in some cases be appropriate and that development of larger scale public-use facilities within the river area, such as moderate size campgrounds, public information centers, and administrative headquarters, would be compatible if such structures were screened from the river.

Modest facilities, such as unobtrusive marinas, also would be possible if such structures were consistent with the management plans for that area.

Recreational River Areas

The Wild and Scenic Rivers Act states that recreational rivers:

1. Are "readily accessible by road or railroad"
2. "May have some development along their shoreline"
3. May have "undergone some impoundment or diversion in the past"

●Classification criteria.

1. "Readily accessible" means the likelihood of paralleling roads or railroads on one or both banks of the river, with the possibility of several bridge crossings and numerous

river access points.

2. "Some development along their shorelines" means that lands may be developed for the full range of agricultural uses and could include small communities as well as dispersed or cluster residential developments.

3. "Undergone some impoundment or diversion in the past" means that there may be water resources developments and diversions having an environmental impact greater than that described for wild and scenic river areas. However, the degree of such development should not be to the extent that the water has the characteristics of an impoundment for any significant distance.

Future construction of impoundments, diversions, straightening, rip-rapping, and other modification of the waterway or adjacent lands would not be permitted except in instances where such developments would not have a direct and adverse effect on the values for which that river area was included in the national system as determined by the Secretary charged with the administration of the area. In the case of rivers added to the national system pursuant to Section 2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system.

● Management objectives.

Management of recreational river areas should be designed to protect and enhance existing recreational values. The primary objectives will be to provide opportunities for engaging in recreation activities dependent on or enhanced by the largely free-flowing nature of the river.

Campgrounds and picnic areas may be established in close proximity to the river, although recreational river classification does not require extensive recreational developments. Recreational facilities may still be kept to a minimum, with visitor services provided outside the river area.

Adopted:

Harrison Loesch 2-2-70
Department of the Interior (Date)

Charles P. Cliff 2-3-70
Department of Agriculture (Date)

SUMMARY ^{1/}
 Attributes and management objectives of the three river classifications for
 inclusion in the National Wild and Scenic River System

	Wild	Scenic	Recreation
Attributes	<p>1. Free-flowing. Low dams, diversion works or other minor structures which do not inundate the natural riverbank may not bar consideration as wild. Future construction restricted.</p> <p>2. Generally inaccessible by road. One or two inconspicuous roads to the area may be permissible.</p> <p>3. Shorelines essentially primitive. One or two inconspicuous dwellings and land devoted to production of hay may be permitted. Watershed natural-like in appearance.</p> <p>4. Water quality meets minimum criteria for primary contact recreation except where such criteria would be exceeded by natural background conditions and esthetics ^{2/} and capable of supporting propagation of aquatic life normally adapted to habitat of the stream.</p>	<p>1. Free-flowing. Low dams, diversion works or other minor structures which do not inundate the natural riverbank may not bar consideration. Future construction restricted.</p> <p>2. Accessible by roads which may occasionally bridge the river area. Short stretches of conspicuous or longer stretches of inconspicuous and well-screened roads or railroads paralleling river area may be permitted.</p> <p>3. Shoreline largely primitive. Small communities limited to short reaches of total area. Agricultural practices which do not adversely affect river area may be permitted.</p> <p>4. Water quality should meet minimum criteria for desired types of recreation except where such criteria would be exceeded by natural background conditions and esthetics ^{2/} and capable of supporting propagation of aquatic life normally adapted to habitat of the stream, or is capable of and is being restored to that quality.</p>	<p>1. May have undergone some impoundment or diversion in the past. Water should not have characteristics of an impoundment for any significant distance. Future construction restricted.</p> <p>2. Readily accessible, with likelihood of paralleling roads or railroads along river banks and bridge crossings.</p> <p>3. Shoreline may be extensively developed.</p> <p>4. Water quality should meet minimum criteria for desired types of recreation except where such criteria would be exceeded by natural background conditions and esthetics ^{2/} and capable of supporting propagation of aquatic life normally adapted to habitat of the stream or is capable of and is being restored to that quality.</p>
Management objectives	<p>1. Limited motorized land travel in area.</p> <p>2. Nonharmonious or new habitations or improvements permitted.</p> <p>3. Only primitive-type public use provided.</p> <p>4. New structures and improvement of old ones prohibited if not in keeping with overall objectives.</p> <p>5. Unobtrusive fences, gauging stations and other management facilities may be permitted if no significant adverse effect on natural character of area.</p> <p>6. Limited range of agriculture and other resource uses permitted.</p>	<p>1. Motorized vehicles allowed on land area.</p> <p>2. Nonharmonious improvements and few habitations permitted.</p> <p>3. Limited modern screened public use facilities permitted, i. e. campgrounds, visitor centers, etc.</p> <p>4. Some new facilities allowed, such as unobtrusive marinas.</p> <p>5. Unobtrusive fences, gauging stations and other management facilities may be permitted if no significant adverse effect on natural character of area.</p> <p>6. Wide range of agriculture and other resource uses may be permitted.</p>	<p>1. Optimum accessibility by motorized vehicle.</p> <p>2. May be densely settled in places.</p> <p>3. Public use areas may be in close proximity to river.</p> <p>4. New structures allowed for both habitation and for intensive recreation use.</p> <p>5. Management practice facilities permitted.</p> <p>6. Full range of agriculture and other resource uses may be permitted.</p>

^{1/} To be used only in conjunction with the text.

^{2/} Federal Water Pollution Control Administration's Water Quality Criteria, April 1, 1968.

February 1970

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NATURAL RIVER ACT OF 1970

(Act 231 of 1970)



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The Michigan Compiled Laws

Division of Land Resource Programs
DEPARTMENT OF NATURAL RESOURCES

NATURAL RIVER ACT OF 1970

Act 231, 1970, p. 622; Eff. Apr. 1, 1971.

AN ACT to authorize the establishment of a system of designated wild, scenic and recreational rivers; to prescribe the powers and duties of the natural resources commission with respect thereto; to fund necessary study and comprehensive planning for the establishment of the system; to provide for planning, zoning and cooperation with local units of government; to authorize the protection of designated river frontage by acquisition, lease, easement or other means; to authorize local units of government and the commission to establish zoning districts in which certain uses of rivers and related lands may be encouraged, regulated or prohibited; to provide for limitations on uses of land and their natural resources, and on the platting of land; and to provide that assessing officers shall take cognizance of the effect of zoning on true cash value.

The People of the State of Michigan enact:

281.761 Natural river act; short title.

Sec. 1. This act shall be known and may be cited as the "natural river act of 1970".

HISTORY: New 1970, p. 622, Act 231, Eff. Apr. 1, 1971.

281.762 Natural river act; definitions.

Sec. 2. As used in this act:

(a) "Commission" means the natural resources commission.

(b) "River" means a flowing body of water or a portion or tributary thereof, including streams, creeks or impoundments and small lakes thereon.

(c) "Free flowing" means existing or flowing in natural condition without impoundment, diversion, straightening, riprapping or other modification.

(d) "Person" means an individual, partnership, firm, corporation, association or other entity.

(e) "System" means all of those rivers or portions thereof designated under this act.

(f) "Natural river" means a river which has been designated by the commission for inclusion in the wild, scenic and recreational rivers system.

HISTORY: New 1970, p. 622, Act 231, Eff. Apr. 1, 1971.

281.763 Natural river; designation, purpose; long range plans; publicity; cooperation.

Sec. 3. The commission, in the interest of the people of the state and future generations, may designate a river or portion thereof, as a natural river area for the purpose of preserving and enhancing its values for water conservation, its free flowing condition and its fish, wildlife, boating, scenic, aesthetic, flood plain, ecologic, historic and recreational values and uses. The area shall include adjoining or related lands as appropriate to the purposes of the designation. The commission shall prepare and adopt a long range comprehensive plan for a designated natural river area which shall set forth the purposes of the designation, proposed uses of lands and waters, and management measures designed to accomplish the purposes. State land within the designated area shall be administered and managed in accordance with the plan, and state management of fisheries, streams, waters, wildlife and boating shall take cognizance of the plan. The commission shall publicize and inform private and public landowners or agencies as to the plan and its purposes, so as to encourage their cooperation in the management and use of their land in a manner consistent with the plan, and the pur-

poses of the designation. The commission shall cooperate with federal agencies administering any federal program concerning natural river areas, and with any watershed council established under Act No. 253 of the Public Acts of 1964, being sections 323.301 to 323.320 of the Compiled Laws of 1948, when such cooperation will further the interest of the state.

HISTORY: New 1970, p. 622, Act 231, Eff. Apr. 1, 1971.

281.764 Qualifications for designation; categories of rivers.

Sec. 4. A river qualifying for designation as a natural river area shall possess 1 or more of the natural or outstanding existing values cited in section 3 and shall be permanently managed for the preservation or enhancement of such values. Categories of natural rivers shall be defined and established by the commission, based on the characteristics of the waters and the adjoining lands and their uses, both as existing and as proposed, including such categories as wild, scenic and recreational. The categories shall be specified in the designation and the long range comprehensive plan.

HISTORY: New 1970, p. 623, Act 231, Eff. Apr. 1, 1971.

281.765 Land acquisition; purpose; interest acquired; consent.

Sec. 5. The commission may acquire lands or interests in lands adjacent to a designated natural river for the purpose of maintaining or improving the river and its environment in conformance with the purposes of the designation and the plan. Interests which may be acquired include, but are not limited to, easements designed to provide for preservation and to limit development, without providing public access and use. Lands or interests in lands shall be acquired under this act only with consent of the owner.

HISTORY: New 1970, p. 623, Act 231, Eff. Apr. 1, 1971.

281.766 Federal financial assistance programs; leases; expenditures, purposes.

Sec. 6. (1) The commission may administer federal financial assistance programs for natural river areas.

(2) The commission may enter into a lease or agreement with any person or political subdivision to administer all or part of their lands in a natural river area.

(3) The commission may expend funds for works designed to preserve and enhance the values and uses of a natural river area and for construction, management, maintenance and administration of facilities in a natural river area conforming to the purposes of the designation, when the funds are so appropriated by the legislature.

HISTORY: New 1970, p. 623, Act 231, Eff. Apr. 1, 1971.

281.767 Public hearings; notice.

Sec. 7. Before designating a river as a natural river area, the commission shall conduct public hearings in the county seat of any county in which a portion of the designated natural river area is located. Notices of the hearings shall be advertised at least twice, not less than 30 days before the hearing, in a newspaper having general circulation in each such county and in at least 1 newspaper having general circulation in the state and 1 newspaper published in the Upper Peninsula.

HISTORY: New 1970, p. 623, Act 231, Eff. Apr. 1, 1971.

281.768 Land uses; zoning; local ordinances; state rule.

Sec. 8. After designation of a river or portion of a river as a natural river area and following the preparation of the long range comprehensive plan, the commission may determine that the uses of land along the river, except within the limits of an incorporated municipality, shall be controlled by zoning contributing to accomplishment of

the purposes of this act and the natural river plan. County and township governments are encouraged to establish these zoning controls and such additional controls as may be appropriate, including but not limited to building and subdivision controls. The commission may provide advisory, planning and cooperative assistance in the drafting of ordinances to establish such controls. If the local unit does not, within 1 year after notice from the commission, have in full force and effect a zoning ordinance or interim zoning ordinance established under authority of the acts cited in section 11, the commission, on its own motion, may promulgate a zoning rule in accordance with section 13. A zoning rule may also be promulgated if the commission finds that an adopted or existing zoning ordinance fails to meet adequately guidelines consistent with this act as provided by the commission and transmitted to the local units concerned, does not take full cognizance of the purposes and objectives of this act or is not in accord with the purposes of designation of the river as established by the commission.

HISTORY: New 1970, p. 623, Act 231, Eff. Apr. 1, 1971.

281.769 Zoning ordinance or rule; purpose.

Sec. 9. A zoning ordinance adopted by a local unit of government or a zoning rule promulgated by the commission shall provide for the protection of the river and its related land resources consistent with the preservation and enhancement of their values and the objectives set forth in section 3. The ordinance or rule shall protect the interest of the people of the state as a whole. It shall take cognizance of the characteristics of the land and water concerned, surrounding development and existing uses and provide for conservation of soil, water, stream bed and banks, flood plains and adjoining uplands.

HISTORY: New 1970, p. 624, Act 231, Eff. Apr. 1, 1971.

281.770 Zoning ordinance or rule; districts establishment; powers, distance.

Sec. 10. The ordinance or rule shall establish zoning districts within which such uses of land as for agriculture, forestry, recreation, residence, industry, commerce and additional uses may be encouraged, regulated or prohibited. It may limit or prohibit the placement of structures of any class or designate their location with relation to the water's edge, to property or subdivision lines and to flood flows and may limit the subdivision of lands for platting purposes. It may control the location and design of highways and roads and of public utility transmission and distribution lines except on lands or other interests in real property owned by the utility on January 1, 1971. It may prohibit or limit the cutting of trees or other vegetation but such limits shall not apply for a distance of more than 100 feet from the river's edge. It may specifically prohibit or limit mining and drilling for oil and gas but such limits shall not apply for a distance of more than 300 feet from the river's edge. It may contain other provisions necessary to accomplish the objectives of this act. A zoning rule promulgated by the commission shall not control lands more than 400 feet from the river's edge.

HISTORY: New 1970, p. 624, Act 231, Eff. Apr. 1, 1971.

281.771 Local ordinance; applicable law; construction.

Sec. 11. A local unit of government in establishing a zoning ordinance, in addition to the authority and requirements of this act, shall conform to Act No. 184 of the Public Acts of 1943, as amended, being sections 125.271 to 125.301 of the Compiled Laws of 1948, or Act No. 183 of the Public Acts of 1943, as amended, being sections 125.201 to 125.232 of the Compiled Laws of 1948. Any conflict shall be resolved in favor of the provisions of this act. The powers herein granted shall be liberally construed in favor of the local unit or the commission exercising them, in such manner as to promote the

orderly preservation or enhancement of the values of the rivers and related land resources and their use in accordance with a long range comprehensive general plan to insure the greatest benefit to the state as a whole.

HISTORY: New 1970, p. 624, Act 231, Eff. Apr. 1, 1971.

281.772 Districts; valuation for tax purposes.

Sec. 12. Upon adoption of a zoning ordinance or rule, certified copies of the maps showing districts shall be filed with the local tax assessing officer and the state tax commission. In establishing true cash value of property within the districts zoned, the assessing officer shall take cognizance of the effect of limits on use established by the ordinance or rule.

HISTORY: New 1970, p. 624, Act 231, Eff. Apr. 1, 1971.

281.773 Rules; enforcement; promulgation, existing use.

Sec. 13. (1) The commission shall prescribe such administrative procedures and rules and provide such personnel as it may deem necessary for the enforcement of a zoning ordinance or rule enacted in accordance herewith. A circuit court, upon petition and a showing by the commission that there exists a violation of a rule properly promulgated under this act, shall issue any necessary order to the defendant to correct the violation or to restrain the defendant from further violation of the rule.

(2) A zoning rule of the commission shall be promulgated in accordance with and subject to the provisions of Act No. 306 of the Public Acts of 1969, as amended, being sections 24.201 to 24.315 of the Compiled Laws of 1948. The rule shall include procedures for receiving and acting upon applications from local units of government or landowners for change of boundaries or change in permitted uses in accordance with sections 71 to 87 of Act No. 306 of the Public Acts of 1969. An aggrieved party may seek judicial review in accordance with and subject to the provisions of sections 101 to 106 of Act No. 306 of the Public Acts of 1969.

(3) The lawful use of any building or structure and of any land or premise as existing and lawful at the time of enactment of a zoning ordinance or rule or of an amendment thereof may be continued although such use does not conform with the provisions of the ordinance, rule or amendment. The ordinance or rule shall provide for the completion, restoration, reconstruction, extension or substitution of nonconforming uses upon such reasonable terms as may be set forth in the zoning ordinance or rule.

HISTORY: New 1970, p. 624, Act 231, Eff. Apr. 1, 1971.

281.774 National wild and scenic river system; administration.

Sec. 14. Nothing in this act shall preclude a component of the system from becoming a part of the national wild and scenic river system under the federal wild and scenic rivers act, Public Law 90-542, approved October 2, 1968. The commission may enter into written cooperative agreements for joint federal-state administration of rivers which may be designated under Public Law 90-542.

HISTORY: New 1970, p. 625, Act 231, Eff. Apr. 1, 1971.

281.775 Area plans; approval; rules.

Sec. 15. The commission shall approve preliminary and final plans for site or route location, construction or enlargement of utility transmission lines, publicly provided recreation facilities, access sites, highways, roads, bridges or other structures and for publicly developed water management projects, within a designated natural river area, except within the limits of a city or incorporated village. It may require any measure necessary to control damaging erosion or flow alteration during or in conse-

quence of construction. Rules concerning such approvals and requirements shall be promulgated under the provisions of Act No. 306 of the Public Acts of 1969, as amended.

HISTORY: New 1970, p. 625, Act 231, Eff. Apr. 1, 1971.

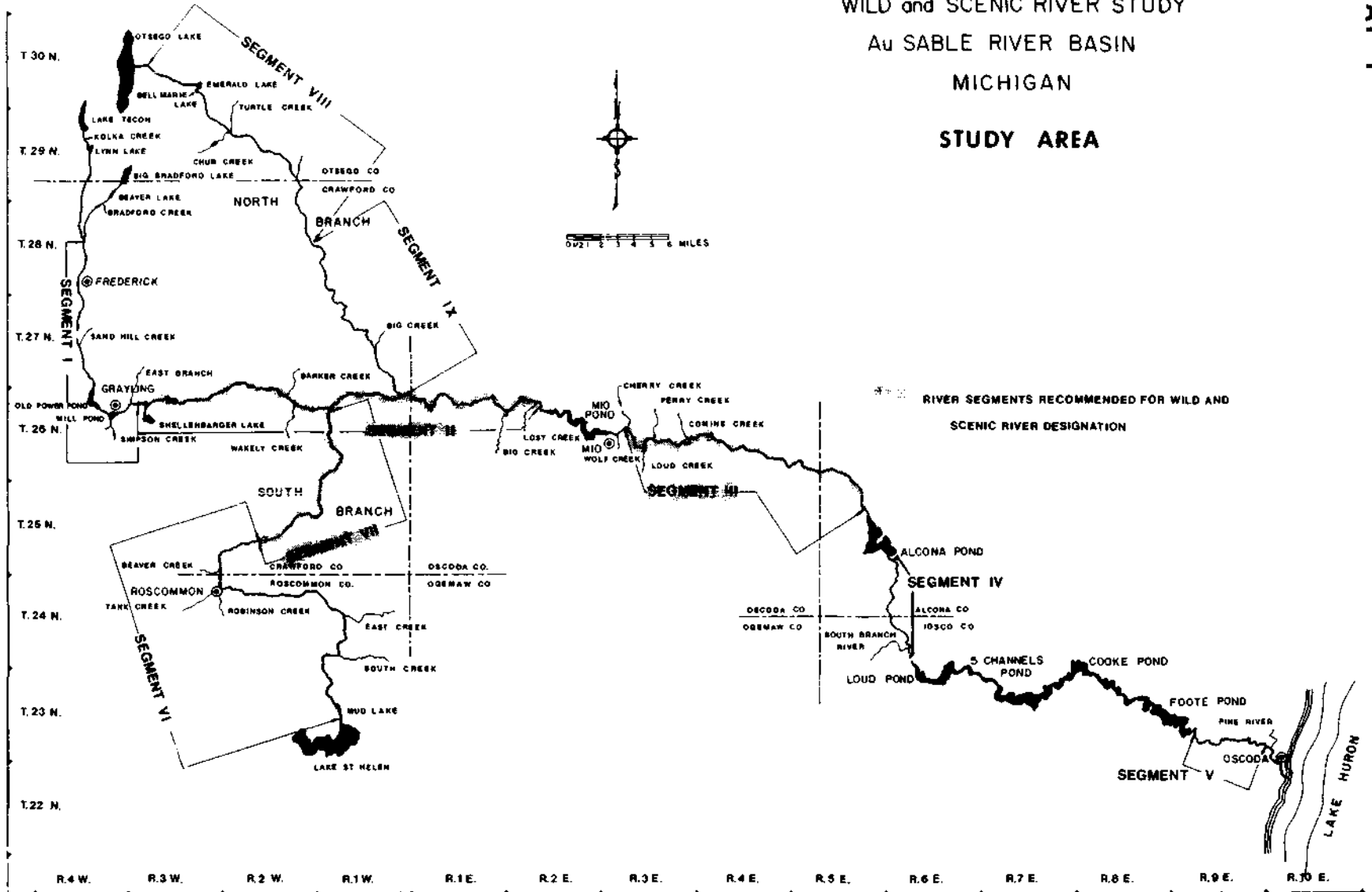
281.776 Construction of act.

Sec. 16. This act may not be construed to prohibit a reasonable and lawful use of any other natural resource which will benefit the general welfare of the people of this state and which is not inconsistent with the purpose of this act.

HISTORY: New 1970, p. 625, Act 231, Eff. Apr. 1, 1971.

APPENDIX C - PRINCIPLES AND STANDARDS PROCEDURES

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



APPENDIX C

Outline and Application of Principles and Standards Procedures to Alternative Actions

INTRODUCTION

According to the Principles and Standards, planning for the use and development of the Nation's resources is undertaken to serve two major, co-equal objectives: National Economic Development (NED) and Environmental Quality (EQ). In most cases the objectives can be served by complementary actions; however, in some cases trade offs which allow less than maximum satisfaction of goals must be made. Because of these aspects, a number of alternatives must be developed, analyzed, evaluated, and tested. Both objectives are equal in importance and are treated with equal weight in the analysis. Each alternative is measured in terms of satisfaction of the objective for which it was formulated and its effects on the other objective. Additionally, the beneficial and adverse effects of each alternative are compared in a system of accounts which includes national economic development, environmental quality, regional development, and social well-being.

APPLICATION OF WRC PLANNING PROCESS

Specification of Objectives - The first step in the process is identification of the components of the major objectives. The components must be of concern to the Nation, and they should be related to the use and management of the resources in the planning setting. In addition, they have to be defined so that the type, quantity, and quality of effect are evident. Finally, the components should be those which can be substantially influenced through the management and development alternatives available to the planners.

National Economic Development Components -- The NED objective can be served in two basic ways: (1) increasing economic values by increasing output or production of goods and services, and (2) increasing economic efficiency in the production of goods and services.

The description of the Au Sable River Basin in Chapter II established that economically, the basin is partly resource oriented. Major goods and services produced in the area are forest products, outdoor recreation, petroleum, retail trade, and manufacturing. Retail trade and manufacturing are interrelated with other goods and services provided. National Economic Development can be served by increasing production of

any of these components, provided that the share of national demand allocated to the Au Sable exceeds the current or projected production.

The components of NED identified in the Au Sable Basin are increased or more efficient:

1. Output of outdoor recreation services and uses.
 - a. canoeing and boating
 - b. fishing
 - c. hiking and walking for pleasure
 - d. camping
 - e. picnicking
 - f. hunting
2. Production of timber.
3. Production of mineral resources.

Environmental Quality Components - The components of EQ identified in the Au Sable River basin are:

1. Preserve and protect 23 miles of scenic river characteristics from Mio Pond FPC Boundary to Alcona Pond FPC Boundary; 16 miles of scenic river characteristics from Chase Bridge to the mainstream; and 17 miles of scenic river characteristics from Lovell Bridge to the mainstream.
2. Preserve and protect 36 miles of recreation river characteristics from Interstate 75 Bridge to Mio Pond FPC Boundary.
3. Identify and protect archeologic and historic artifacts and sites in the river corridor.
4. Preservation of free flowing stream.
5. Preserve or enhance water quality.
6. Avoid irreversible and irretrievable commitment of resources and preserve freedom of choice on 92 miles of the Au Sable River eligible for inclusion in the National Wild and Scenic Rivers System.
7. Preserve and protect habitat of endangered or threatened wildlife or vegetation.

AUSABLE RIVER CORRIDOR

Demand, Supply, and Need for Components of NED
Objectives*

	1976			1980			1990			UNITS
	Demand	Supply	Need	Demand	Supply	Need	Demand	Supply	Need	
Canoeing	212221	212221	--	256500	212221	44279	310500	212221	98279	AD
Fishing(all-kinds)	144270	72067	72203	158697	144134	14563	188849	144134	44715	AD
Hiking-Walking	226530	768	225762	237856	120796	117060	255979	120796	135183	AD
Camping	13965	163520	--	14747	170892	--	15573	170892	--	AD
Picnicking	70740	21210	49490	153520	153520	--	153520	153520	--	AD
Hunting	8127	8127	--	8942	8942	--	9805	9805	--	AD
Timber	2247	2247	--	2247	2247	--	2247	2247	--	MBM
Commercial Development	Unquant.	Presently Some	Unknown	Unquant.	Presently Some	Unknown	Unquant.	Presently Some	Unknown	
Residential Development	Unquant	Unknown	Unknown	Unquant.	Unknown	Unknown	Unquant.	Unknown	Unknown	
Petroleum	None	None	None	1,000	1,000	--	--	Unknown	1,000	Barrels

*See following pages - Assumptions for Component Need Specification -

ASSUMPTIONS FOR COMPONENT NEED SPECIFICATION

1. Assumptions related to derivation of demand and supply for NED components are:

(a) Canoeing demand is based on extrapolation of current 1975 usage. Canoeing demand has reached and possibly exceeded allowable capacity. Capacity or supply was computed on the assumption that present use is at capacity and it would be equally distributed over an entire use season (101 days). Canoeing average number of hours or participation per recreation day (AHP/RD) is 2.3.

(b) Fishing demand was computed on an extrapolation of Michigan Department of Natural Resource data. Supply was computed on the hours of fishing provided during which anglers may expect to catch one fish or more per 4 hours of fishing activity. Supply projections were based on the assumption that supply could double in that visitors will remain satisfied at a lower success rate. Fishing AHP/RD is 4.4 hours.

(c) Hiking and walking demand was extrapolated from the Michigan Recreation Plan. Supply is based on present use of existing trails and the assumption of additional trails that would equal the river segments in length. Hiking AHP/RD is 2 hours.

(d) Camping demand is based on historic use data from the Michigan Department of Natural Resources. Supply is computed from the capacity of existing developed public sites. Supply exceeds demand because present site development is intended to provide for peak use periods. Supply would be increased by development below Mio - an area without any camping facilities. Camping AHP/AD is 12 hours.

(e) Picnicking demand was based on demands of the largest single user group. It was assumed that use levels of that group would be maintained at capacity for that activity and river segment and canoeing is the single largest use group. Picnicking AHP/RD is 1.6 hours.

(f) Hunting demand was computed from current use within the river corridor. Supply was derived from the Michigan Recreation Plan projections and based upon the assumption that hunting participation would continue to rise disproportionately to success rates. In this respect, demand would equal supply. Hunting AHP/RD is 4.4 hours.

(g) Motorcycle use is restricted to public roads and trails. Off-road use is limited on State, Federal, and private land to scheduled events. Public road use would increase with an increased number of vehicles registered and cannot be considered an activity normally associated with a river resource. Motorcycle AHP/RD is 4 hours.

(h) The demand for timber is based on its present supply within the river corridor and projected using current growth rates. The supply was derived from field and aerial photo data. It is assumed that in the river corridor, the demand for this resource is equal to or greater than the supply.

(i) Supply and demand for commercial development are unknown but do exist and are assumed to increase as demand for other resources increases. It is assumed that commercial development in the corridor would serve the needs of other resource users.

(j) Supply and demand for residential development is unquantified. Supply is based on existing residential land development and its increase, depending on the number of suitable building sites available. The availability of marginal land for development would be affected by local zoning ordinances and centralized waste water treatment systems.

(k) Petroleum products based on current supplies are presently nonexistent. Projections based on extrapolation of data from surrounding areas indicate a potential supply in 1980. It is assumed that in the corridor the demand for this resource is equal to or greater than the supply.

Formulation of Alternatives and Options - Alternative plans are developed by arranging component needs that are essentially complementary - that is, the satisfaction of one component need does not preclude satisfaction of, or add to, the cost of other needs. Actions to satisfy the complementary needs are the nucleus of an alternative plan.

Table 2 is the array for NED component needs with relevant means of meeting each. Table 3 is the array and relevant means for satisfying EQ component needs.

Using this array of complementary components, a range of alternative plans was developed. The NO-Action Plan - which visualized continuation of current types and rates of use - is the base for all comparisons.

COMPLEMENTARY COMPONENT NEEDS AND MEANS - EQ OBJECTIVES

<u>Component Need</u>	<u>Unit</u>	<u>Means of Meeting Need</u>	<u>Complementary Array A - Wild and Scenic River Designation</u>	<u>Complementary Array B - No Designation</u>
Preserve and Protect Scenic Segments	Miles	Designate 56 miles as scenic - Provide appropriate facilities.	Designate scenic segments. Develop for appropriate use.	May be incompatible with protection - preservation of archaeological-historic sites and endangered species.
Preserve and Protect Recreation River Segments.	Miles	Designate 35 miles as recreation - provide appropriate facilities.	Designate Recreation segments - Provide for appropriate use.	May be incompatible with protection - preservation of archaeological sites and endangered species.
Identify and Protect Archaeological and Historical artifacts Sites	Sites	Inventory and manage sites.	May conflict with Historic Archaeological Site Preservation - Protection.	Identify and protect all sites.
Preservation of Free-Flowing stream	Miles	Designate National Wild and Scenic River.	Protect free-flow.	May conflict with preservation of free-flowing stream.
Preserve Water Quality		Enforce State Water Quality Regulations.	Maintain water quality.	Maintain water quality.
Preserve Freedom of Choice on Eligible Segments	Miles	Include 91 miles in National Wild & Scenic River System.	Designate as Scenic or Recreation as appropriate	May be incompatible with Protection-Preservation of Archaeological-Historic sites and endangered species.
Preserve and Protect Endangered Species		Inventory and Manage Habitat.	May conflict with Endangered Species Protection and Preservation.	Identify and manage all Endangered Species Habitat.

COMPLEMENTARY COMPONENT NEEDS AND MEANS - NED OBJECTIVES

Component Need	Unit	Means of Meeting Need	Complementary Array A	Complementary Array B
			<u>Recreation Development</u>	<u>Timber - Minerals</u>
			Extreme	Development Extreme
Canoeing	AD	Develop Facility - Distribute Use	Develop Canoeing	Added Development Non Complementary
Fishing	AD	Maintain Stream Quality and Aesthetics	Develop Fishing	Added Development Non Complementary
Hiking- Walking	AD	Develop and Maintain Trails	Develop Hiking	Added Development Non Complementary
Camping	RVD	Maintain Status Quo	Provide Camping	Non Complementary
Picnicking	AD	Develop & Maintain Sites	Develop Picnicking	Added Development Non Complementary
Hunting	AD	Maintain Quality Habitat and Aesthetics	Provide Hunting Opportunities	Non Complementary
Timber	MBM	Intensify Management - Improve Efficiency	Added Development Non Complementary	Develop Timber Pro- duction
Petroleum	Barrels	Prospect and Drill for Oil	Added Development Non Complementary	Provide Petroleum
Natural Gas	1000/ cu.ft.	Prospect and Drill for Gas	Added Development Non Complementary	Provide Natural Gas

TABLE 1

COMPONENT NEEDS SATISFIED WITHOUT A PLAN AND BENEFICIAL AND ADVERSE EFFECTS OF ALTERNATIVES

		INTERSTATE 75 to MLO FPC BOUNDARY																
Component Need	Unit	No Action Plan			Effect of National Economic Development Plan A			Effect of National Economic Development Plan B			Effects of Wild & Scenic River Plan A			Effects of State Natural River Plan				
		Amount	Annual Value - \$	Annual Cost - \$	Amount	Annual Value - \$	Annual Cost - \$	Amount	Annual Value - \$	Annual Cost - \$	Amount	Annual Value - \$	Annual Cost - \$	Amount	Annual Value - \$	Annual Cost - \$		
1. NED Component																		
Canoeing	AD	113,176	1,355,732	5,187	133,176	135,579	5,187	133,176	1,355,732	5,187	11,352	129,526	6,916	133,176	1,519,538	6,916		
Fishing	AD	68,597	692,144	1,729	80,209	809,309	2,924	68,597	629,144	1,729	68,597	692,143	4,420	68,579	692,143	4,420		
Hiking	AD	-	-	-	47,231	476,561	3,600	-	-	-	17,982	205,175	3,600	-	-	-		
Camping	AD	105,040	721,625	35,212	105,040	721,625	35,212	105,040	721,625	35,212	105,040	721,625	35,020	105,040	721,625	35,020		
Picnicking	AD	24,272	276,944	3,666	67,670	772,115	11,486	24,272	276,944	3,666	88,880	1,014,121	14,960	21,210	242,006	3,570		
Hunting	AD	3,904	72,185	-	3,904	72,185	-	3,904	72,185	-	3,904	72,185	-	3,904	72,185	-		
Timber	MBM	341	17,527	8,784	90	4,626	2,318	895	46,003	23,029	90	4,625	2,318	332	17,065	8,552		
Minerals Oil & Gas	Dollars	-	41,550	80,000	-	41,550	117,200	-	41,550	80,000	-	41,550	117,200	-	41,550	80,000		
Component Needs		Amount Satisfied Without a Plan			Beneficial		Adverse		Beneficial		Adverse		Beneficial		Adverse			
2. NQ Components																		
Preserve recreational river area	Miles	None			None	None designation will not assure free-flowing stream, high water quality and preservation of scenic and long term stream protection. Private land values likely to be degraded by development. Development would reduce diversity of flora and fauna populations. Probable alteration of ecosystem. Largely primitive value is lost.		None	Same as NED A. Additional degradation may occur from mineral extraction and timber harvest. Greater loss of primitive values.		Maintain and protect 36 miles of free-flowing river and preserve and enhance values and recreation use.		None	Maintain and protect some flow, high water quality and recreation values.		Will not assure flow, high water quality and recreation resource protection.		
Preserve scenic river area	Miles	None			Not Applicable		Not Applicable		Not present in this segment.		Not Applicable		Not Applicable					
Protect historic and archaeological area	Sites	Vandalism may occur as use increases.			None	Developments are likely to destroy sites, buildings and artifacts. Increased recreation use will probably damage sites and artifacts.		None	Same as NED A. Mineral extraction logging, may cause additional damage.		Sites would be surveyed and protected.		None	None		No protection on private land. Vandalism may occur as use increases.		
Preserve freedom of choice		None			None	Long term preservation of freedom of choice is not assured. Largely primitive values will be lost if development occurs.		Wood and mineral extraction will reserve options for other material use.	Logging will result in greater loss of freedom of choice to future users.		Maintain present river values. Avoids irretrievable commitments in river area.		Restricts immediate use of resources.		Allows immediate use of resources.		Loss of some options through development on private land.	
Preserve and protect endangered species	Sites	None on private land.			None	Additional development and activity may disturb species and destroy habitat.		None	Logging and mineral extraction will disturb and destroy habitat.		Habitat protected - some protection from harassment.		None	None		Increased use and development may cause harassment and loss of habitat.		

TABLE 2

COMPONENT NEEDS SATISFIED WITHOUT A PLAN AND BENEFICIAL AND ADVERSE EFFECTS OF ALTERNATIVES

MED FORD FPC BOUNDARY TO ALCOMA FORD FPC BOUNDARY

Component Need	Unit	No Action Plan			National Economic Development Plan A			National Economic Development Plan B			Effects of State Natural River Plan			Effects of Wild & Scenic River Plan A			Effects of Wild and Scenic River Plan B			
		Amount	Annual Cost - \$	Annual Value - \$	Amount	Annual Cost - \$	Annual Value - \$	Amount	Annual Cost - \$	Annual Value - \$	Amount	Annual Cost - \$	Annual Value - \$	Amount	Annual Cost - \$	Annual Value - \$	Amount	Annual Cost - \$	Annual Value - \$	
1. NSD Components																				
Canoeing	AD	28,886	1064	289987	87,516	1,596	890,913	28,886	1,064	289,987	28,886	532	325025	43905	1596	500956	73174	4903	634915	
Fishing	AD	43827	1064	442212	51,246	1,596	43,827	43,827	1,064	442,214	43,827	340	442214	43827	1020	442214	51246	1020	517072	
Hiking	AD	1235	268	14091	30,199	2,300	344,570	1,235	268	14,091	1235	268	14,091	11889	1541	131089	30199	2300	344571	
Camping	AD	-	-	-	29,290	30,856	201,222	-	-	-	-	-	-	-	-	-	29290	19720	201222	
Picnicking	AD	-	-	-	19,190	3,326	218,958	-	-	-	-	-	-	19190	3230	218958	19190	3230	218958	
Hunting	AD	2499	-	46207	2,499	-	46,207	2,499	-	46,207	2500	-	46225	2500	-	46225	2500	-	46225	
Timber	NRM	218	5580	11205	57	1,459	2,930	573	14,669	29,452	212	5461	10897	57	1468	2949024	57	1468	2930	
Minerals Oil & Gas	Dollars	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2. NR Components																				
Component Needs	Unit	Amount Satisfied Without a Plan			Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse
Preserve recreation Miles river use.	Miles	None			None	Non designation will not assure free flowing stream, high water quality and recreation value through long term stream protection. Private land values likely to be degraded by development. Development would reduce diversity of flora and fauna populations. Probable alteration of ecosystem. Largely primitive value is lost.	None	Same as NED A. Additional degradation may occur from timber harvest. Greater loss of primitive values.	None	Same as NED A.	None	Same as above.	Maintain and protect some river values.	Will not assure free-flowing, high water quality and rec. resource protection.	Maintain and protect 23 miles of free-flowing river and preserve and enhance value and recreation use.	None	None	Same as MSR Plan A.	Maintain and protect 23 miles of free flowing river and use preserve and enhance value and recreation use.	Loss of scenic river qualities and use experience.
Preserve scenic river use.	Miles	None			None	Same as above with additional loss of scenic characteristics	None	Same as above.	None	Same as above.	None	Same as above.	Maintain and protect some river values.	Will not assure free-flowing, high water quality and rec. resource protection.	Maintain and protect 23 miles of free-flowing river and preserve and enhance value and recreation use.	None	None	Same as MSR Plan A.	Vandalism may occur from increased use.	
Protect historic & archaeological sites.	Sites	Vandalism may occur as use increases.			None	Developments are likely to destroy sites, buildings and artifacts. Increased recreation use will probably damage sites and artifacts.	None	Same as NED A. Logging may cause additional damage.	None	Same as NED A.	None	Same as above.	None	Vandalism may occur as use increases.	Sites would be surveyed and protected.	None	None	Same as MSR Plan A.	Vandalism may occur from increased use.	
Preserve freedom of choice.		None			None	Long term preservation of freedom of choice is not assured. Largely primitive values will be lost if development occurs.	None	Wood and mineral extraction will result in greater loss of freedom of choice to future users.	None	Same as NED A.	None	Same as above.	Allow immediate use of resources.	Loss of some options through timber harvest private land use.	Maintain present river values. Avoid irrefragable commitments in river area.	Restricts immediate use of resources.	None	None	Same as MSR Plan A	-
Preserve & protect endangered species.	Sites	None on private land.			None	Additional development and activity may disturb species and destroy habitat.	None	Logging will disturb and destroy habitat.	None	Same as NED A.	None	Same as above.	None	Some harassment and loss of habitat may occur from increased use and development.	Habitat protected from harassment.	None	None	Same as MSR Plan A.	Some harassment may occur from increased use.	

TABLE 3

COMPONENT NEEDS SATISFIED WITHOUT A PLAN AND BENEFICIAL AND ADVERSE EFFECTS OF ALTERNATIVES

NORTH BRANCH - LOVELL BRIDGE TO MAINSTEM

Component Needs	Unit	No Action Plan			National Economic Development Plan A			National Economic Development Plan B			Effects of State Natural River Plan			Effects of Wild and Scenic River Plan A			Effects of Wild and Scenic River Plan B				
		Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$		
1. NRD Components																					
Canoing	AD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fishing	AD	24503	1064	247235	28,651	2,128	289,089	24,530	1,064	247,235	24503	1360	247235	24503	1360	247235	28651	1360	289089		
Hiking	AD	-	-	-	22,347	1,700	254,979	-	-	-	-	-	-	8942	1139	96894	22321	1700	254683		
Camping	AD	6606	4080	41632	12,120	8,160	83,264	6,606	4,080	41,632	6060	4080	41632	6060	4080	41632	6060	4080	41632		
Picnicking	AD	-	-	-	33,330	2,136	380,795	-	-	-	-	-	-	-	-	-	12120	2040	138289		
Hunting	AD	1731	-	32006	1,731	-	32,006	1,731	-	32,006	1731	-	32006	1731	-	32006	1731	-	32006		
Timber	MBW	151	3890	7761	40	1,030	2,056	397	10,227	20,406	147	3787	7556	40	1030	2056	40	1030	2056		
Minerals Oil & Gas	Dollars	-	6444	557777	-	138,844	557,777	-	64,444	577,777	-	6444	557777	-	72778	557777	-	72778	557777		
Component Need	Unit	Amount Satisfied Without a Plan			Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	
2. SR Component																					
Designate National Recreation River	Miles	None			None	Non designation will not assure free flowing stream, high water quality and recreation values through long term stream protection. Private land values likely to be degraded by development. Development would reduce diversity of flora and fauna populations. Probable alternation of ecosystem. Largely primitive value is lost.	None	Same as NED A. Additional degradation may occur from mineral extraction and timber harvest. Greater loss of primitive values.	None	Same as NED A. Additional degradation may occur from mineral extraction and timber harvest. Greater loss of primitive values.	None	Same as NED A. Additional degradation may occur from mineral extraction and timber harvest. Greater loss of primitive values.	None	Same as NED A. Additional degradation may occur from mineral extraction and timber harvest. Greater loss of primitive values.	None	Same as NED A. Additional degradation may occur from mineral extraction and timber harvest. Greater loss of primitive values.	None	Same as NED A. Additional degradation may occur from mineral extraction and timber harvest. Greater loss of primitive values.	Maintain and protect 17 miles of free-flowing river and preserve and enhance values and rec. use.	Loss of scenic river qualities and use experiences.	
Preserve scenic river area	Miles	None			None	Same as above with additional loss of scenic characteristics.	None	Same as above.	None	Same as above.	Maintain and protect some river values.	Will not assure free flow. High water quality. Rec. resource protection.	Maintain and protect 17 miles of free-flowing river and preserve and enhance values and recreation use.	None	None	None	None	None	None	Not a feature of WSR Plan B.	
Protect historic & archaeological sites	Sites	Wandalism may occur as use increases.			None	Developments are likely to destroy sites, buildings, and artifacts. Increased recreation use will probably damage sites and artifacts.	None	Same as NED A. Logging and mineral extraction may cause additional damage.	None	Same as NED A. Logging and mineral extraction may cause additional damage.	None	Vandalism may occur as use increases.	Sites would be surveyed and protected.	None	None	None	None	None	None	Same as WSR Plan A.	Vandalism may occur from increased use.
Preserve Freedom of Choice		None			None	Long term preservation of freedom of choice is not assured. Largely primitive values will be lost if development occurs.	Wood and mineral extraction will reserve options for other material use.	Logging will result in greater loss of freedom of choice to future uses.	None	Logging will result in greater loss of freedom of choice to future uses.	Allow immediate use of resources.	Loss of some options through timber harvest and private land development.	Maintain present river values. Avoids irrevocable commitments in river area.	Restricts immediate use of resources.	None	None	None	None	None	Same as WSR Plan A.	Same as WSR Plan A.
Preserve and Protect Endangered Species	Sites	None on private land.			None	Additional development and activity may disturb species and destroy habitat.	None	Logging and mineral extraction will disturb and destroy habitat.	None	Logging and mineral extraction will disturb and destroy habitat.	None	Some harassment	Habitat protected, some protection from harassment.	None	None	None	None	None	None	Same as WSR Plan A.	Some harassment may occur from increased use.

C10

TABLE 4

COMPONENT NEEDS SATISFIED WITHOUT A PLAN AND BENEFICIAL AND ADVERSE EFFECTS OF ALTERNATIVES

SOUTH BRANCH - CHASE BRIDGE TO MAINSTEM

Component Need	Unit	No Action Plan			National Economic Development Plan A			National Economic Development Plan B			Effects of State Natural River Plan			Effects of Wild & Scenic River Plan A			Effects of Wild and Scenic River Plan B		
		Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$	Amount	Annual Cost-\$	Annual Value-\$
1. NED Components																			
Canoeing	AD	50559	1596	514,690	50,559	1,596	514,690	50,559	1,596	514,690	50559	1596	5576878	30512	1596	348484	50904	1596	580635
Fishing	AD	7207	1020	72719	8,428	1,020	85,039	7,207	1,020	72,719	7207	1020	72719	7207	1020	72719	8427	1020	85028
Hiking	AD	1235	268	14,091	21,019	1,600	239,827	1,235	268	14,091	-	-	-	7992	1501	91189	21008	1600	239701
Camping	AD	52520	18360	360812	52,520	18,360	360,812	52,520	18,360	360,812	52520	18360	360812	52520	18360	360812	52520	18360	360812
Picnicking	AD	-	-	-	12,120	8,778	138,289	-	-	-	-	-	-	33330	5610	380295	33330	5610	380295
Hunting	AD	1670	-	30878	1,670	-	30,878	1,670	-	30,878	1670	-	30878	1670	-	30878	1670	-	30878
Timber	NRM	146	3760	750440	38	979	1,953	383	9,866	19,686	142	3658	7299	38	979	1,953	38	979	1,953
Minerals Oil & Gas	Dollars	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Component Need	Unit	Amount Satisfied Without a Plan			Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	Beneficial	Adverse	
2. EQ Component																			
Designate National Recreational River	Miles	None			None	None designation will not assure free flowing stream, high water quality and recreation values through long term stream protection. Private land values likely to be degraded by development. Development would reduce diversity of flora and fauna populations. Probable alteration of ecosystem. Largely primitive value is lost.	None	Same as NED A. Additional degradation may occur from timber harvest. Greater loss of primitive values.	None	Same as NED A.	None	Not a Feature of SNR Plan	None	Not a Feature of WSR Plan A	None	Maintain and protect 16 miles of free-flowing river and preserve and enhance value and recreation use.	None	Loss of Scenic River qualities and use experience.	
Designate National Scenic River	Miles	None			None	Same as above with additional loss of scenic characteristics.	None	Same as above.	None	Same as above.	None	Maintain and protect some river values.	None	Will not assure free flow. High water quality. Rec. resource protection.	Maintain and protect 16 miles of free-flowing river and preserve and enhance values and recreation use.	None	Not a feature of EQ Plan B	None	Not a feature of WSR Plan B.
Protect Historic and Archaeological Areas	Sites	None on private land.			None	Developments are likely to destroy sites, buildings, and artifacts. Increased recreation use will probably damage sites and artifacts.	None	Same as NED A. Logging may cause additional damage.	None	Same as NED A.	None	None	None	Vandalism may occur as use increases.	Sites would be surveyed and protected.	None	Same as WSR Plan A.	None	Vandalism may occur from increased use.
Preserve Freedom of Choice		None			None	Long term preservation of freedom of choice is not assured. Largely primitive values will be lost if development occurs.	None	Timber harvest will reserve options for other material use.	None	Logging will result in greater loss of freedom of choice to future users.	None	Allows immediate use of resources.	None	Loss of some options through-out timber harvest and private land development.	Maintain present river values. Avoids irretrievable commitments in river area.	None	Restricts immediate use of resources.	None	Same as WSR Plan A.
Preserve and Protect Endangered Species	Sites	None on private land.			None	Additional development and activity may disturb species and destroy habitat.	None	None	None	Logging will disturb and destroy habitat.	None	None	None	Some harassment and loss of habitat may occur from increased use and development.	Habitat protected from harassment.	None	Same as WSR Plan A.	None	Some harassment may occur from increased use.

C11

FACTORS USED FOR FINAL ANALYSIS OF ALTERNATIVES

Standards for evaluating alternatives reflect two overriding concepts; (1) that the purpose of the Wild and Scenic Rivers Act is to preserve those rivers which possess outstanding characteristics of national merit, and (2) that major adverse impacts to local, regional and national populations should be avoided.

Evaluation Criteria

Outdoor Recreation - Provides additional supply of public recreation opportunities and provides a high level experience.

Wildlife - Provides stable or improved habitat conditions for existing species:

Hydrocarbon Production - Allows removal of future locatable minerals.

Hydroelectric Power - Avoids foreclosing future development opportunities.

Scenic Quality - Acts to maintain study area in its present condition.

Fish - Precludes potential for future detriment while permitting enhancement.

Cultural Resources - Offers protection of cultural values.

Land Use Planning - Offers positive program to assist in control of future development along rivers.

Timber Management - Avoids significant reduction in national timber supply.

Regional Income - Avoids significant reduction in regional incomes.

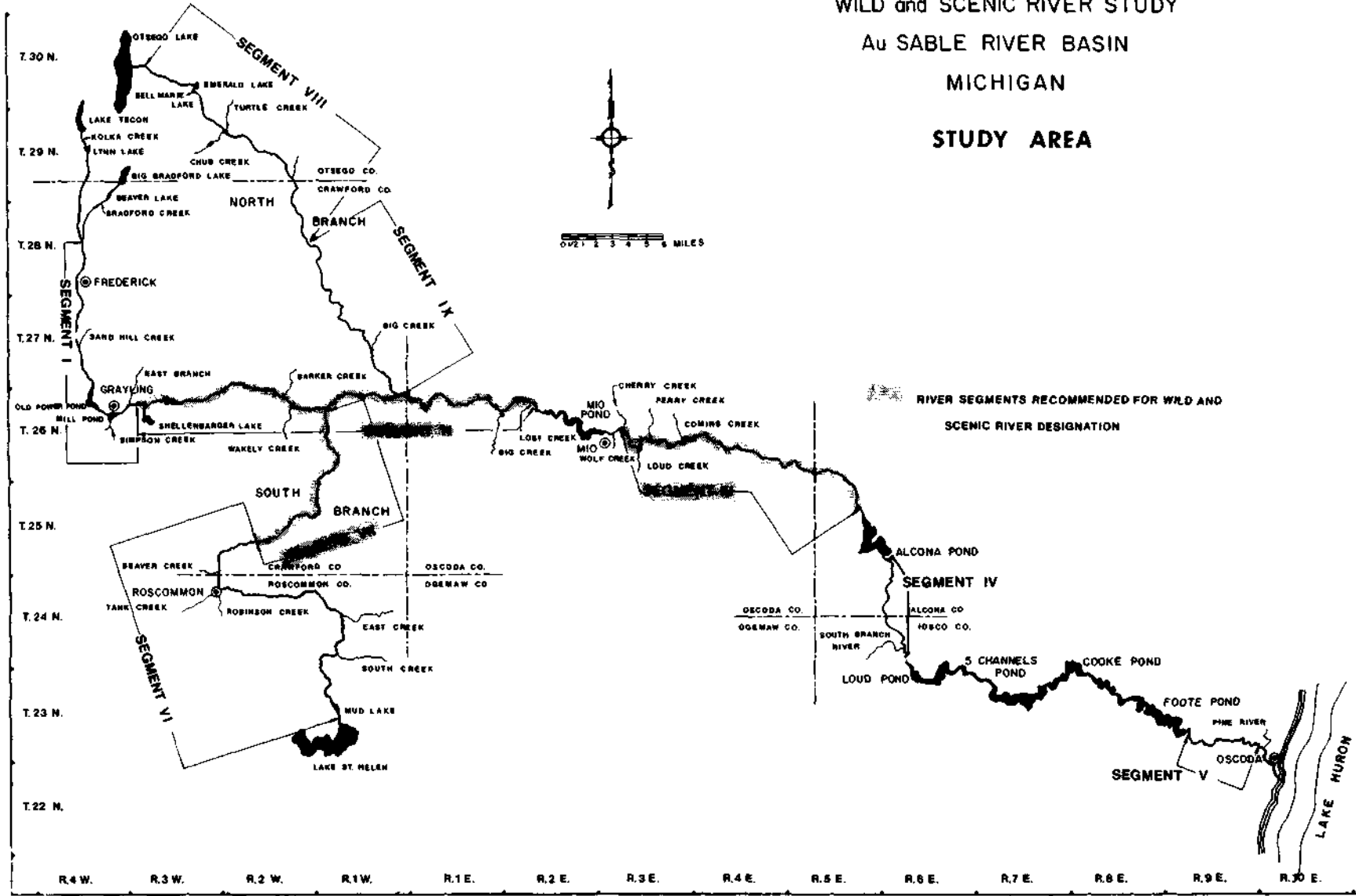
Wild and Scenic Rivers - Includes major portions of eligible Rivers in National System.

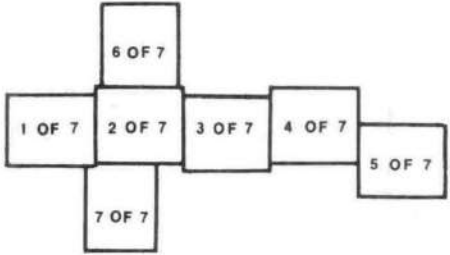
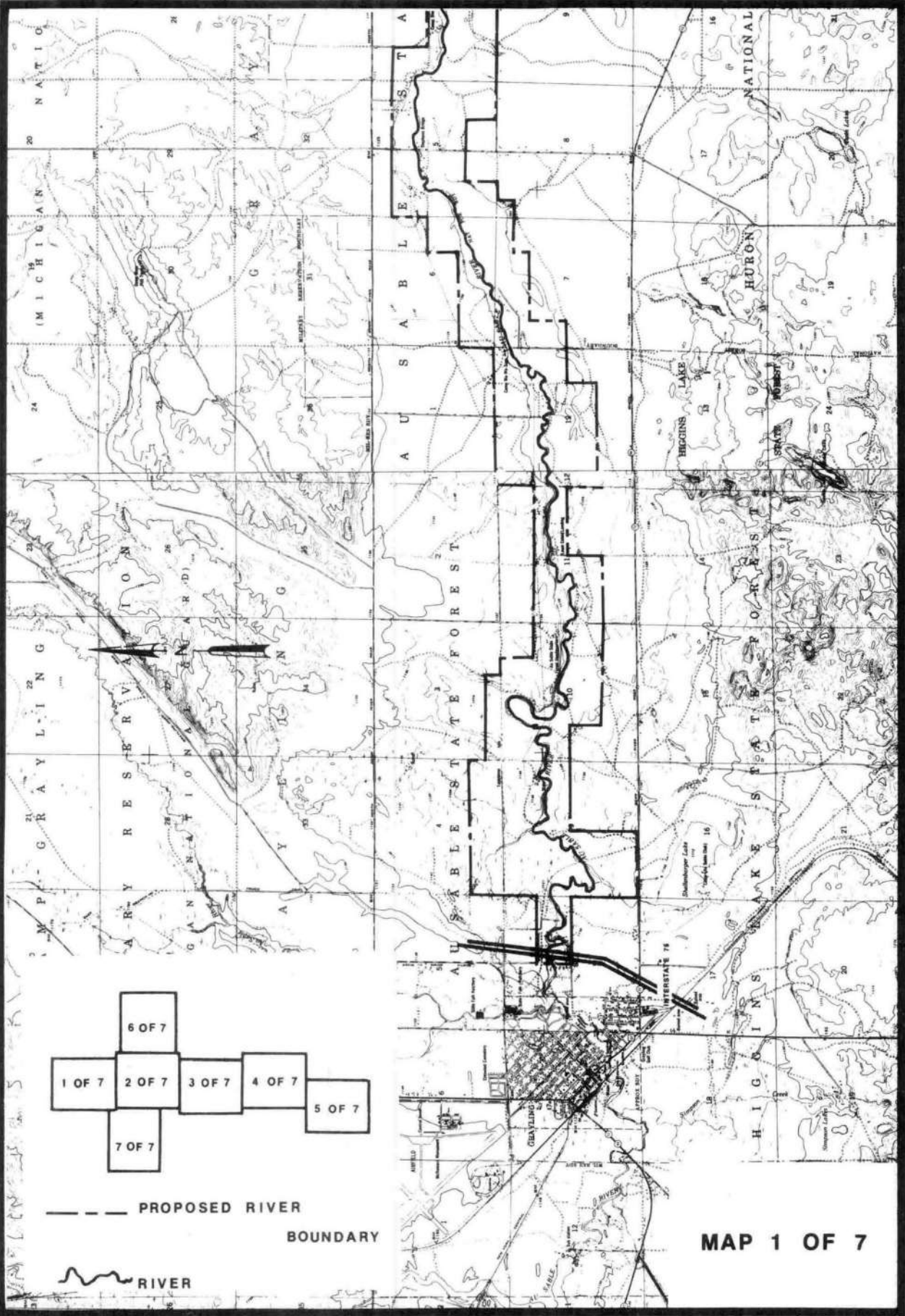
Irreversible Commitments - Avoids irreversible or irretrievable commitments of physical or biological resources.

Cost-Benefit - Offers reasonable public benefit from program investment.

APPENDIX D - PROPOSED RIVER BOUNDARY MAPS

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA

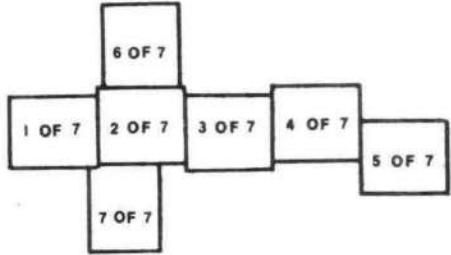
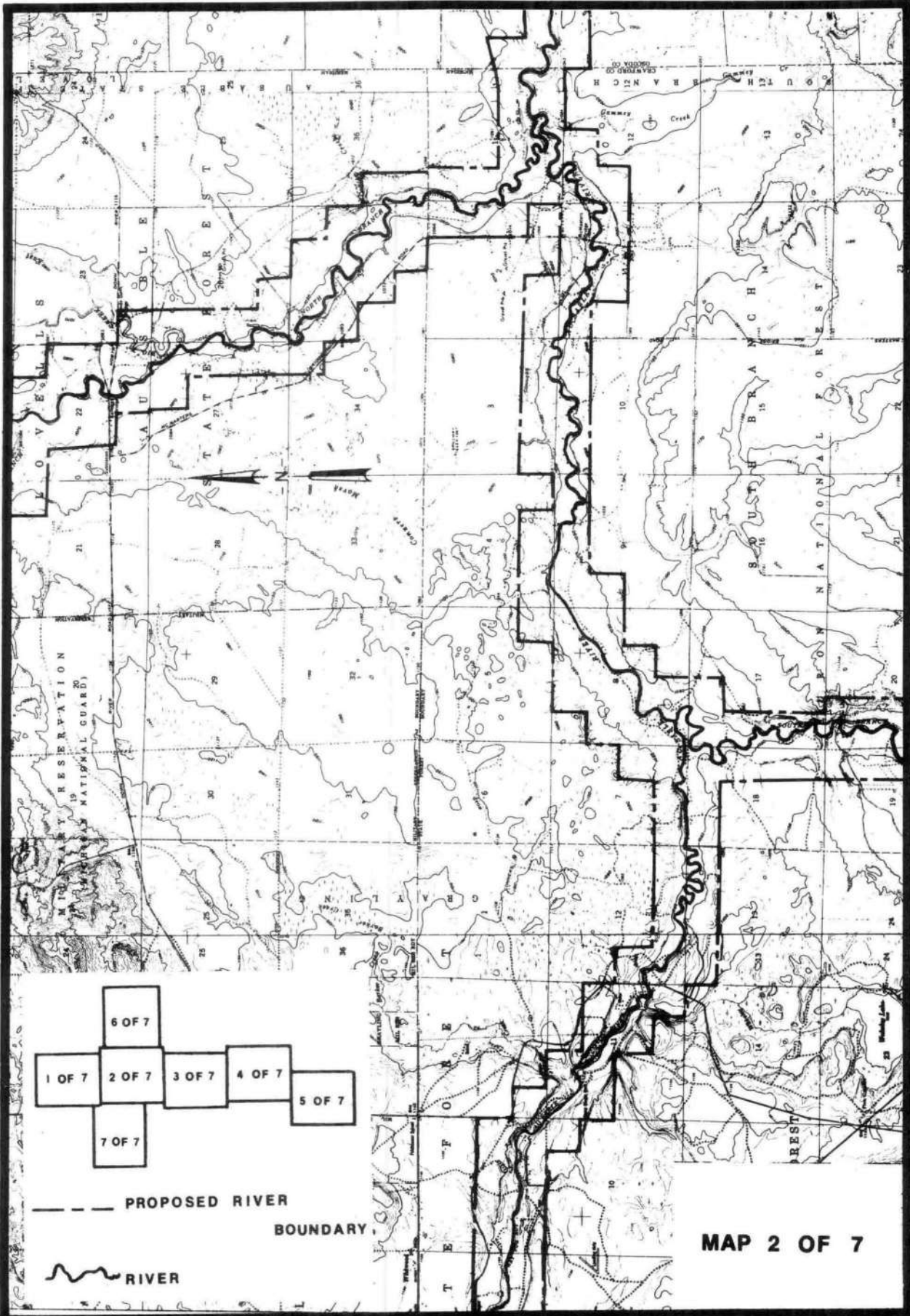




--- PROPOSED RIVER
BOUNDARY

~~~~~ RIVER

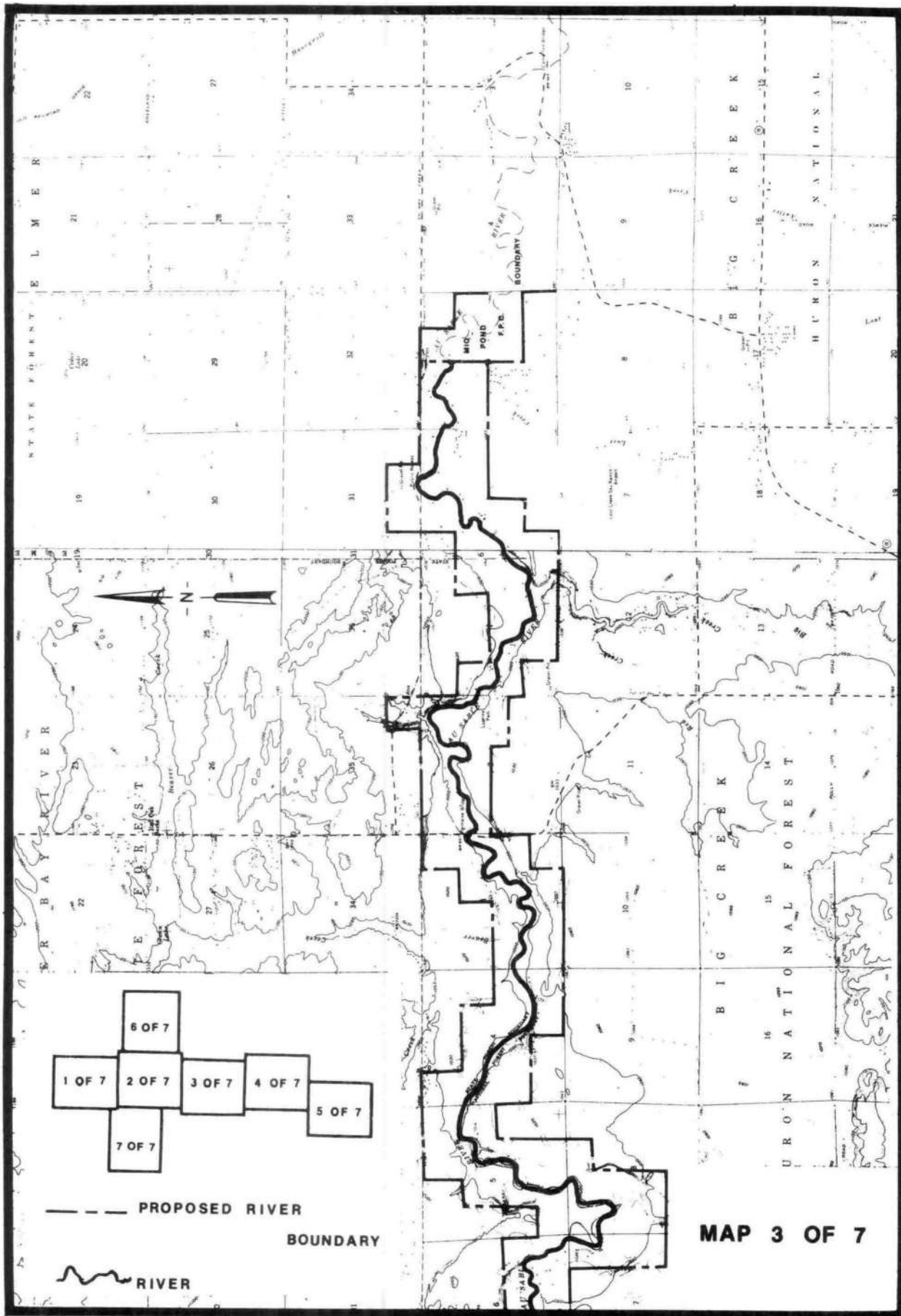
MAP 1 OF 7

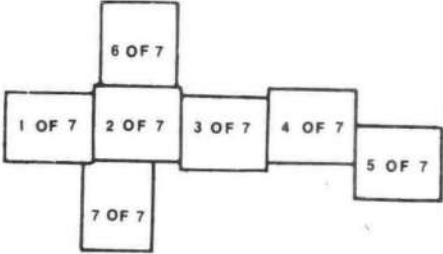
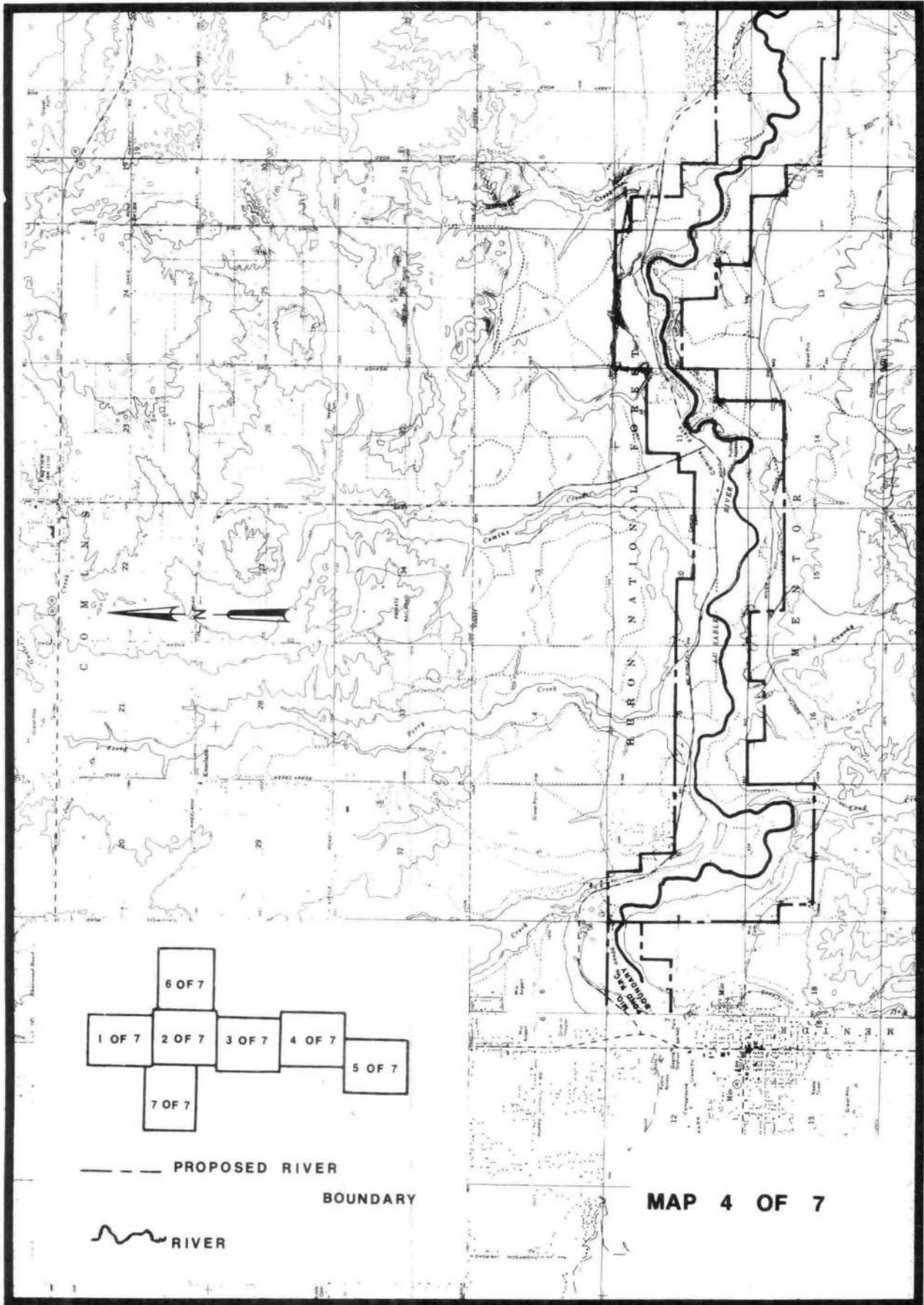


--- PROPOSED RIVER  
BOUNDARY

~~~~~ RIVER

MAP 2 OF 7

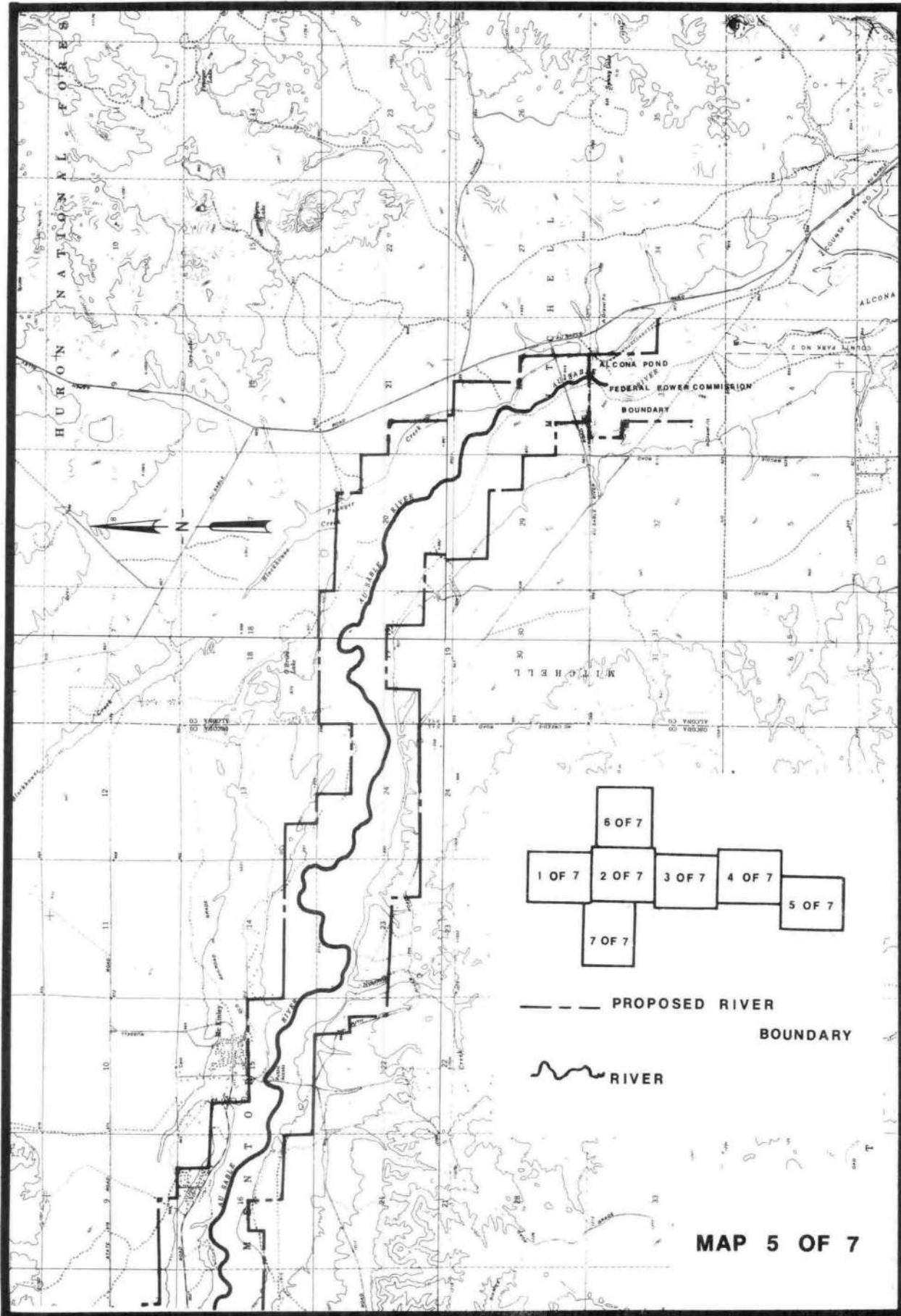




--- PROPOSED RIVER
BOUNDARY

~~~~~ RIVER

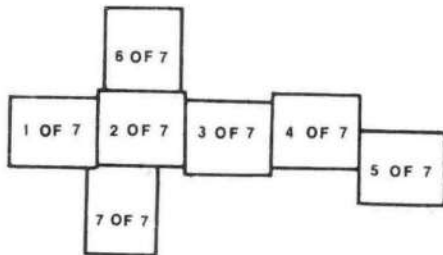
MAP 4 OF 7



HURON NATIONAL FOREST

ALCONA POND  
FEDERAL EOWER COMMISSION  
BOUNDARY

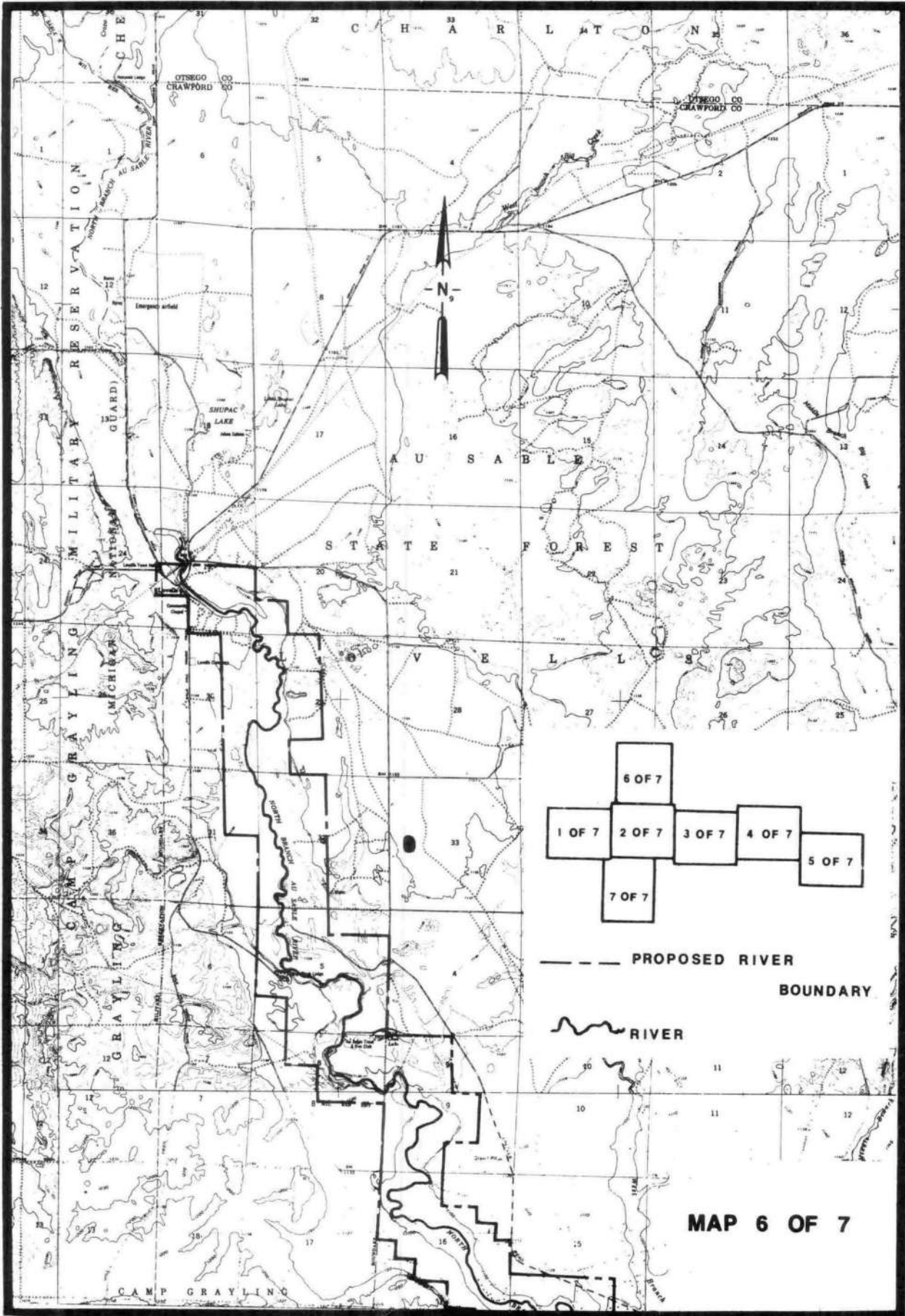
M. T. GHELL



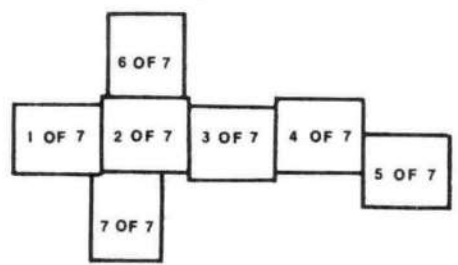
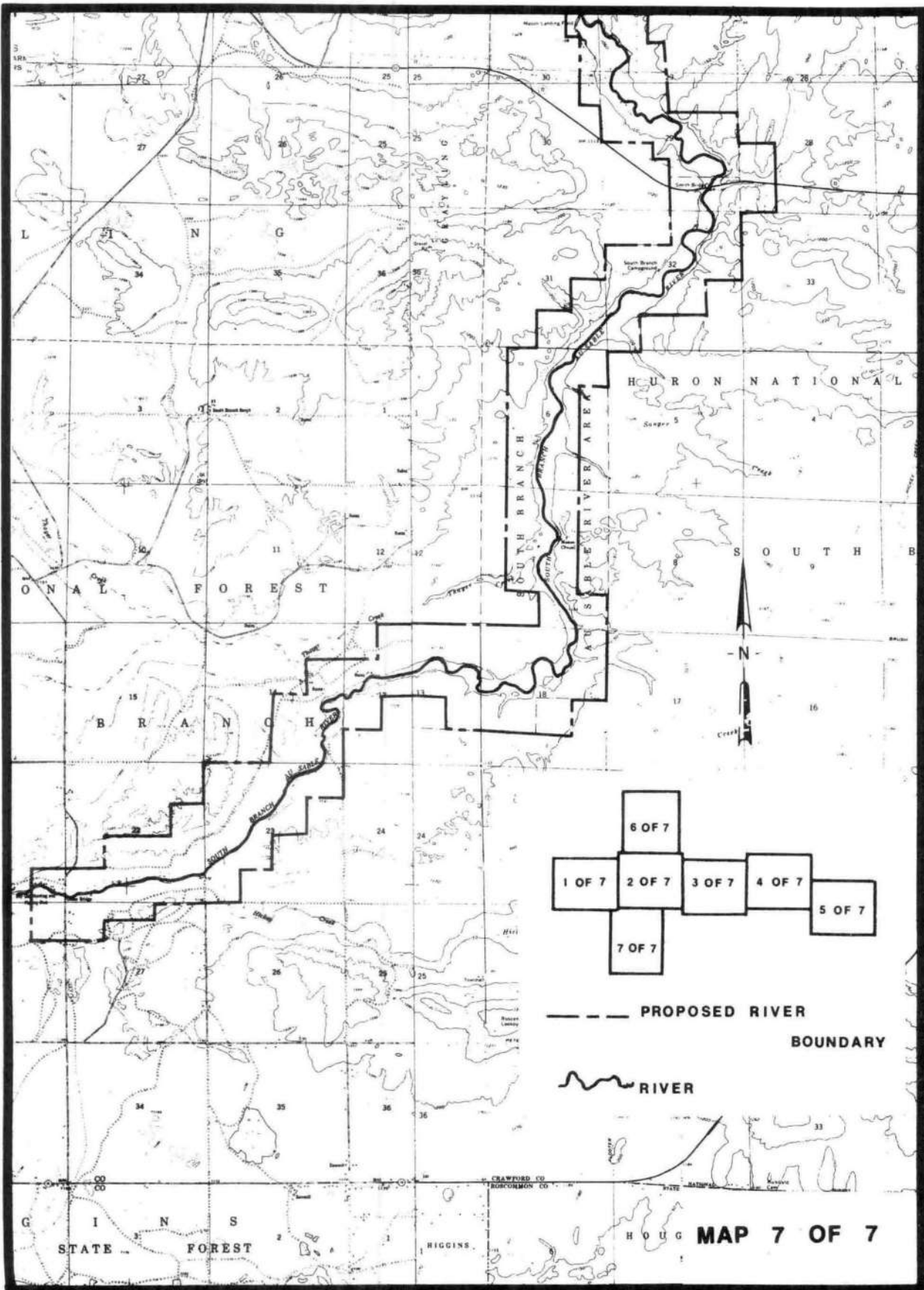
--- PROPOSED RIVER BOUNDARY


~~~~~ RIVER

MAP 5 OF 7



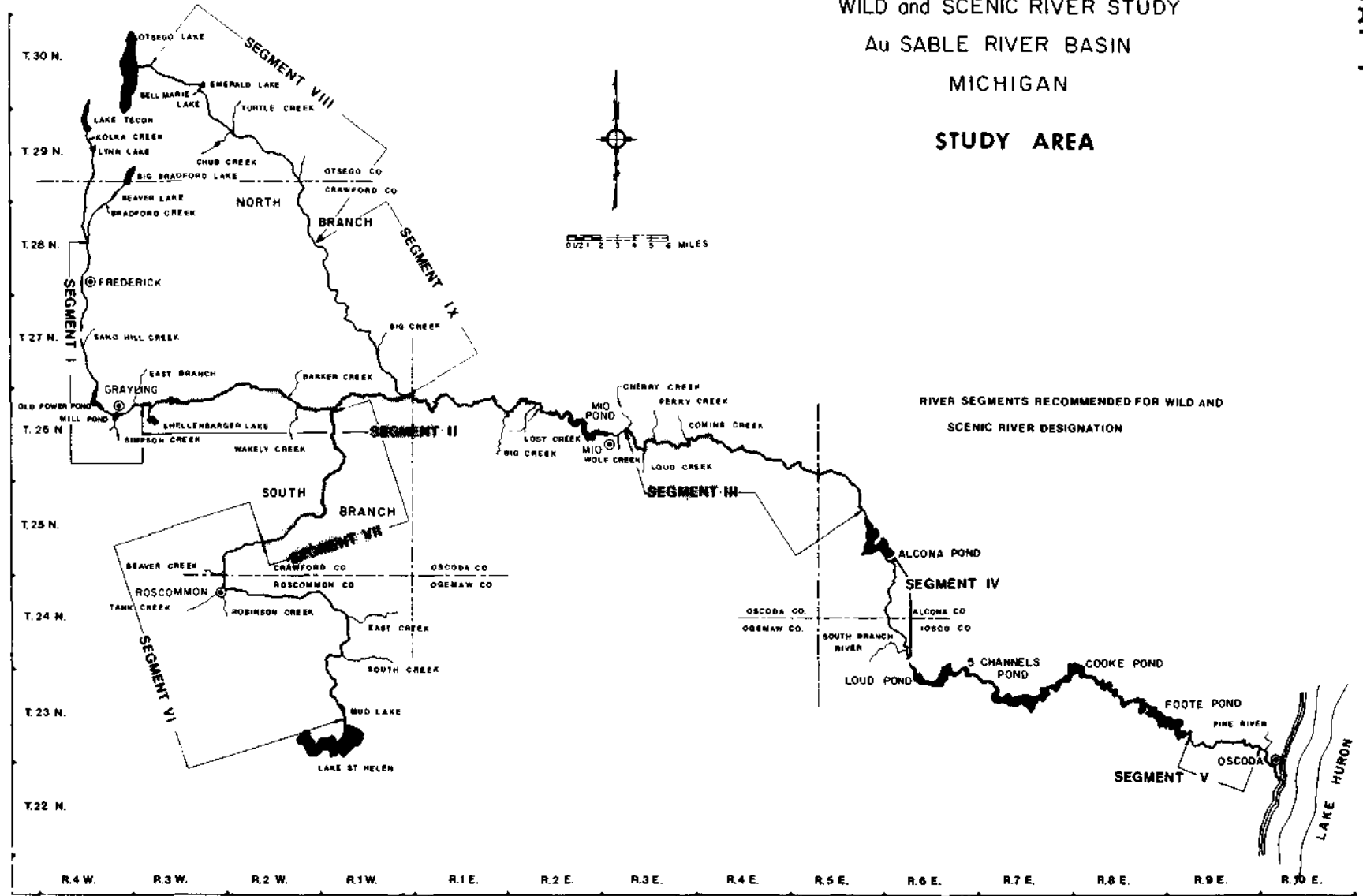
MAP 6 OF 7



- - - - - PROPOSED RIVER
 BOUNDARY
 RIVER

APPENDIX E - VISUAL MANAGEMENT SYSTEM

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



The River Environment And Its Ability To Accept Change

The character of the river basin is - a broad, flat, often monotonous sand plain where glacial pattern is frequently evident by large areas of rolling ground moraines. Swamps, scattered lakes and the rivers add variety to the landscape. The vegetation is characterized by dense stands of pine, aspen, birch, oak and occasional northern hardwood and lowland conifer.



The broad landscape type is further subdivided into easily recognizable environments - urban, pastoral; and primitive. The transition is often sharp and easily recognized - from the developed urban areas in the upper river, out into the semi-residential heavily forested pastoral areas and merging into primitive undeveloped public and power company lands.

The three landscape environments can be defined as:

Urban - Characteristic of a city or town.

Pastoral - Mixed forest and small opening with single and clustered residential development which appears simple, peaceful, and "rustic".

Primitive - Land largely without man made developments - the forest predominates.

These three landscape environments occur throughout the river basin but in this section will be limited to their occurrence within the "seen area". The seen area is that portion of landscape visible from the river and its tributaries - a visual corridor perceived from any number of points along the river surface and immediate shoreline.

The river traveler is in a different world, perceptually. Although the river banks and morainal hills are still present and very important visually during leaf-off seasons, the vegetation along the river channel confines vision to such a limited degree that river travel is perceived as mostly a back country experience. An occasional opening, bridges - frequent clusters of modest homes, and powerline crossings are obvious but occur only on limited river sections and are often obscured from the low vantage point of the river.

The river experience, then, is one of seclusion.

The following photos of the river environments display the realm of the seen area or visual corridor. They show foreground and middleground. They show both man-made and natural environments. The intensive use area is often on the river fringe. The extensive use area is on the high ground beyond the river.

URBAN ENVIRONMENT

Its Present Character.....

The Urban Environment includes the towns of Grayling, Mio, and McKinley and small densely developed subdivisions on their outskirts. The urban environ presents visually, those things one would expect to see in a city or town - intensive dense use of available land in a built-up environment. The natural environment is entirely subdued or modified beyond recognition. The river is rigidly contained between homes, commercial businesses, and revetments. Docks, walkways, and carefully manicured lawns are common. Vision is dominated by buildings, bridges, and residential paraphernalia. The resulting effect is one of a controlled landscape; one that is highly organized for human use and benefit.

The urban environment occupies a very small segment of the total study area - approximately 10 river miles.



.....and Ability to Withstand Change

The gradual sprawl of the urban environment into both the pastoral and primitive environs is apparent and inevitable where private land is available. A certain amount of this expansion can be contained within the boundaries of the existing urban environment. Beyond this point, the urban environment must expand into rural areas for additional space.

Although much of the developed river area is within the 100 year flood plain, it is rarely threatened with flooding. Therefore, two factors affect expansion of development: the availability of private land, and zoning ordinances restricting development on high water-table sites. Under the study recommendation future urban expansion in the river corridor would be affected.

It should be recognized that within the proposed river corridor the infiltration of urban densities and structures on the pastoral and primitive environments should be resisted.

Within the existing boundaries of the urban environment additional development is generally acceptable so long as it does not infringe on other less developed, more fragile environments.

PASTORAL ENVIRONMENT

Its Present Character.....

The word "pastoral" defines a feeling of idealized simplicity, peacefulness, and apartness from the rest of the world. In the AuSable basin, this atmosphere exists below Kellogg Bridge on the North Branch; below Smith Bridge on the South Branch; and from Interstate 75 to Mio Pond on the mainstem. The intensity of urban development gives way to well-spaced, vegetatively screened homes, tracts of woods and dense forest and a conspicuous decrease in landscape modifications. This countryside evokes reactions of peace, harmony and simplicity. Man is still present but his activity no longer dominates the entire landscape.

The important visual feature of this landscape is the dominant presence of forest land with intermingled homes and the river. There are approximately 45 miles of river in the pastoral environment.



.....and Ability to Withstand Change

The pastoral environment contains a mixture of forest land and homes. It is triply fragile because three different kinds of change could affect it; it could be extensively cut and managed for timber production; it could be intensively developed for human habitation and recreation and approach urban densities; or it could be turned entirely back to timber land. Then, of course, it could be kept the way it is now.

Visually, this environment can accept a great diversity of uses without apparent change. Its capacity to accept change is due to the large proportion of vegetative screening. Consequently, change - accomplished in harmony with the forest - would be generally acceptable.

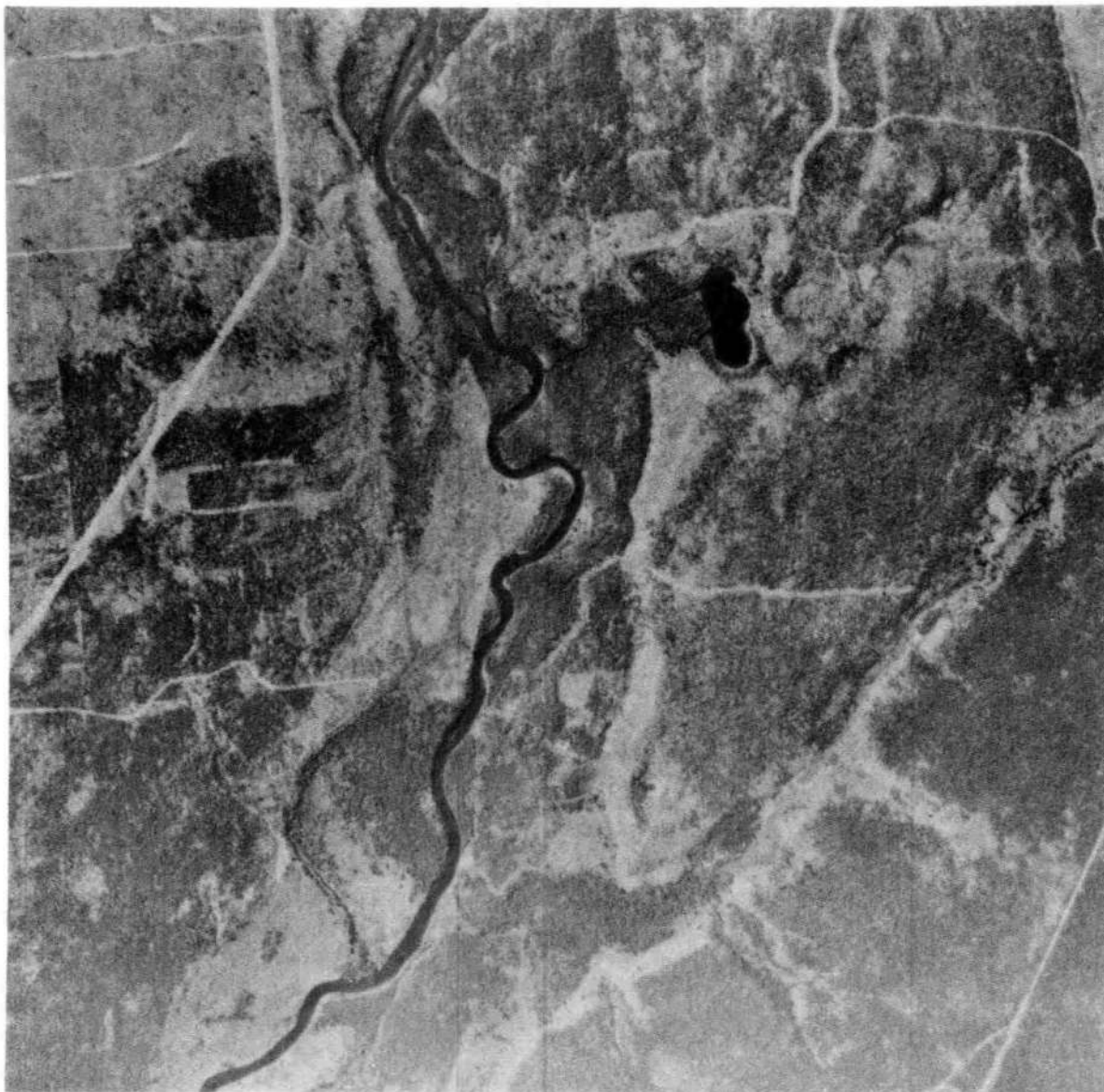
This environment is visually suited for medium density uses in the forest areas. Here an incongruent cottage, cabin, camper, or community can impart a drastic negative visual impression. The pastoral environment is not the place for clusters of homes within view of the river. Such clusters may be acceptable provided they can be effectively screened.

PRIMITIVE ENVIRONMENT

Its Present Character.....

The natural appearing landscape of the primitive environment is dominant along approximately 110 miles of study river. Except for a few settlements, summer homes and public recreation sites, this environment is only sparsely modified. Occasional summer cabins and gravel roads heavily travelled by hunters, campers, canoeists, loggers, and local residents represent the chief modification of the landscape.

The roads are generally found upon the terrace away from the river and well-screened by vegetation. Scattered modest value dwellings are isolated and placed barely in view of the river. Without the roads and occasional structures this country could be perceived as something close to wilderness.



.....and Ability to Withstand Change

This environment is essentially unchanged from its natural state except for the presence of roads and occasional dwellings.

Changes in land use in this environment are immediately and dramatically obvious. New roads, powerlines, logging activity or residential development on a large scale all require the removal of dense forest cover - presenting an obvious visual impact.

Fortunately, it is possible to modify the extent, shape, and design of planned developments to harmonize with the natural patterns of the forest cover, fitting the scenery and minimizing their visual impact. When these mitigations cannot or will not be employed, serious conflicts will arise and threaten the integrity of this, the most fragile of the environmental landscapes within the river corridor.

ACREAGE ALLOCATION FOR VISUAL QUALITY OBJECTIVES

| <u>VARIETY CLASS</u> | <u>SENSITIVITY LEVEL</u> | | | |
|----------------------|--------------------------|-------------|--------------|------------|
| | | <u>Fg1*</u> | | <u>3*</u> |
| | <u>Acres</u> | <u>VQO</u> | <u>ACRES</u> | <u>VQO</u> |
| Distinctive - A | 9,036 | R | 4,671 | PR |
| Common - B | 5,103 | R | 1,125 | M |
| Minimal - C | 23 | PR | 102 | MM |
| Total Acres | 14,162 | | 5,898 | |

*Note: Foreground Sensitivity Level 1 (Fg1) refers to that portion of the river corridor that lies within the "seen area." Three (3) refers to areas within the river corridor that lie outside the "seen area."

Determination of Seen Area Boundary in the AuSable River Corridor

River Corridor Boundary - The corridor boundary would enclose the seen area and land areas necessary for protection and management of wild and scenic river values. The boundary would include those areas on which existing or future land uses would adversely affect values such as water quality, scenery, air quality, quietude, recreation experience, and unique natural, historical, geological, or wildlife areas associated with the river.

Seen Area Boundary - The seen area boundary would include those areas visible from the river during leaf off seasons or periods following severe modification of vegetative cover. Severe modification of vegetative cover might result from wild fire, insects and disease, or past land use practices. The seen area boundary will generally be established at a primary topographic break within 1/4 mile of the river's edge, beyond which physical features cannot be clearly distinguished.

Visual Management System -- U.S.D.A. Ag. Handbook 462

Quality Objectives

Preservation P

This visual quality objective allows ecological changes only. Management activities, except for very low visual-impact recreation facilities, are prohibited.

This objective applies to Wilderness areas, primitive areas, other special classified areas, areas awaiting classification and some unique management units which do not justify special classification.

Retention R

This visual quality objective provides for management activities which are *not visually evident*.

Under Retention activities may only repeat form, line, color, and texture which are frequently found in the characteristic landscape. Changes in their qualities of size, amount, intensity, direction, pattern, etc., should not be evident.

Duration of Visual Impact

Immediate reduction in form, line, color, and texture contrast in order to meet Retention should be accomplished either during operation or immediately after. It may be done by such means as seeding vegetative clearings and cut-or-fill slopes, hand planting of large stock, painting structures, etc.

Partial Retention PR Modification M

Management activities remain *visually subordinate* to the characteristic landscape when managed according to the partial retention visual quality objective.

Activities may repeat form, line, color, or texture common to the characteristic landscape but changes in their qualities of size, amount, intensity, direction, pattern, etc., remain visually subordinate to the characteristic landscape.

Activities may also introduce form, line, color, or texture which are found infrequently or not at all in the characteristic landscape, but they should remain subordinate to the visual strength of the characteristic landscape.

Duration of Visual Impact

Reduction in form, line, color, and texture to meet partial retention should be accomplished as soon after project completion as possible or at a minimum within the first year.

Maximum Modification MM

Management activities of vegetative and landform alterations may dominate the characteristic landscape. However, when viewed as background, the visual characteristics must be those of natural occurrences within the surrounding area or character type. When viewed as foreground or middle ground, they may not appear to completely borrow from naturally established form, line, color, or texture. Alterations may also be out of scale or contain detail which is incongruent with natural occurrences as seen in foreground or middle ground.

Introduction of additional parts of these activities such as structures, roads, slash, and root wads must remain visually subordinate to the proposed composition as viewed in background.

Duration of Visual Impact

Reduction of contrast should be accomplished within five years.

Under the modification visual quality objective management activities may visually dominate the original characteristic landscape. However, activities of vegetative and land form alteration must borrow from naturally established form, line, color, or texture so completely and at such a scale that its visual characteristics are those of natural occurrences within the surrounding area or character type. Additional parts of these activities such as structures, roads, slash, root wads, etc., must remain visually subordinate to the proposed composition.

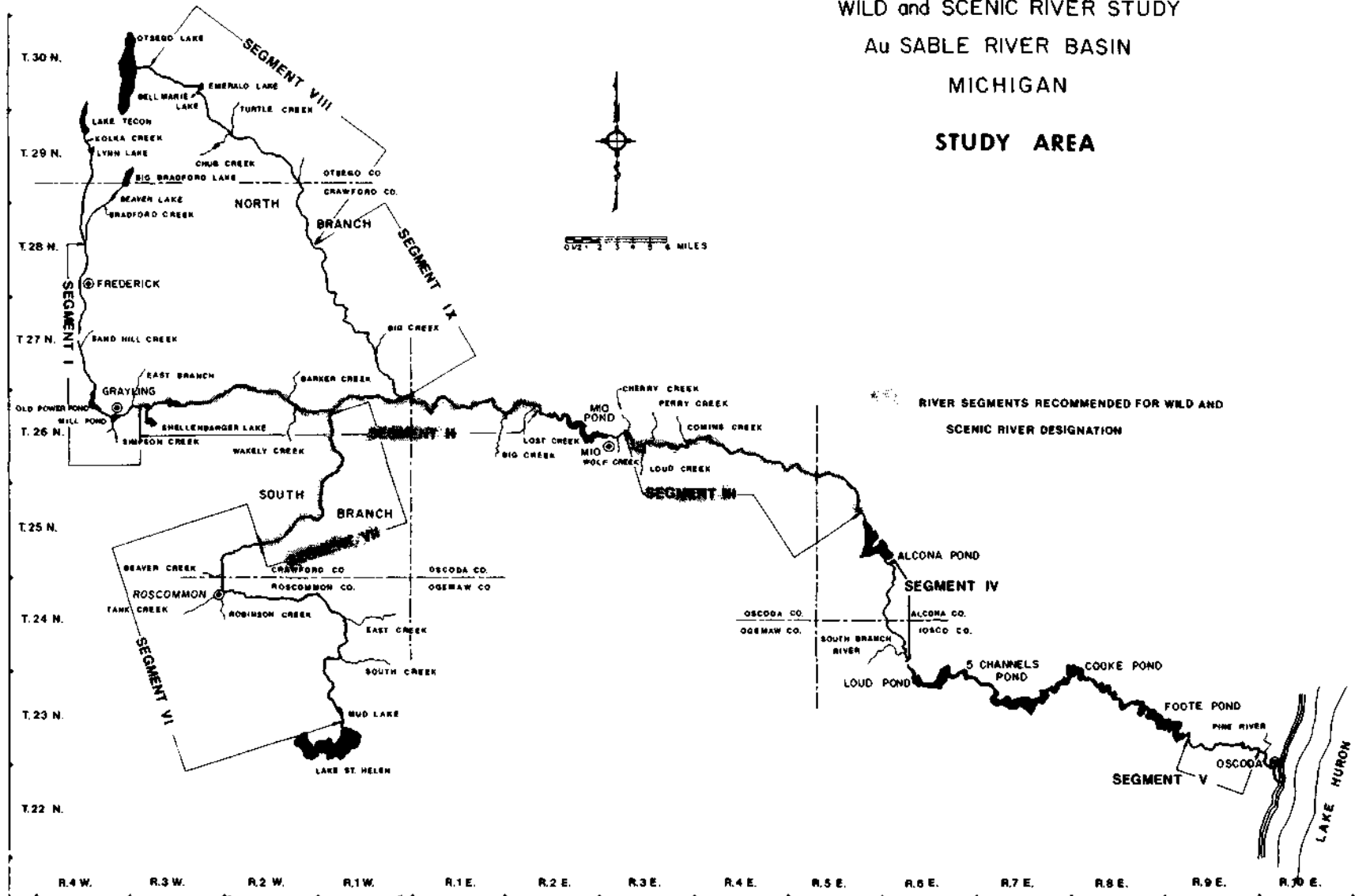
Activities which are predominately introduction of facilities such as buildings, signs, roads, etc., should borrow naturally established form, line, color and texture so completely and at such scale that its visual characteristics are compatible with the natural surroundings.

Duration of Visual Impact

Reduction in form, line, color, and texture should be accomplished in the first year or at a minimum should meet existing regional guidelines.

APPENDIX F - FISH AND WILDLIFE

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



AUSABLE RIVER - FISH, HABITAT, POTENTIAL

| <u>Fish Population</u> | <u>Fish Habitat</u> | <u>Potential</u> | <u>Remarks</u> |
|---|---|---|---|
| 612 Road to Highway 27 | Brown trout populations low. Brook trout good in upper area | Marginal water temperature due to (impoundments) lack of spawning gravel. Lowland swamp with very little ground water. Sand bottom. | Lightly fished. Impoundments at Grayling degrade trout habitat below. |
| Highway 27 to Stephan's Bridge | Low brown trout population. More large trout. Warm water fish come from ponds. | Good water but upper half may be too warm due to impoundments. Gravel-rubble bottom. | Middle of this section considered the beginning of good trout fishing. Quality fishing area from Burton's landing to Stephan Bridge. Habitat work completed in 1970's. Heavy canoe use restricts fishing. |
| McMaster's Bridge to Mio Pond FPC Boundary | Good Brown Trout populations, but low density | Vital source of ground water below McMaster's Bridge. Deeper water-high quality water, bottom and fish cover. Sand, gravel-rubble bottom. | Lightly fished due to poor access and difficult water to wade. |
| Mio 33-72 Bridge to AuSable River Road Bridge | Good population of large Brown Trout. | High quality water, bottom and fish cover. Gravel-rubble bottom. Deeper water. | Anadromous (steel-head) potential in future. "Trophy trout area". Good access-heavily fished only by local people. "Quality fishing area" from Commins Flat to McKinley Bridge. Heavy canoe use becoming a problem. |
| Alcona Dam to Loud Dam FPC Boundary | No survey data. Probably good population of large brown trout, walleye and northern pike. | Sand-gravel bottom. Water level fluctuates 2-3 ft. from Alcona Dam drawdown. | Anadromous (steel-head) potential in future. Fished largely by local people. Difficult fishing due to deep and fluctuating water. |

AUSABLE RIVER FISH, HABITAT, POTENTIAL (continued)

| <u>Fish Populations</u> | <u>Fish Habitat</u> | <u>Potential</u> | <u>Remarks</u> |
|---|---|--|--|
| Foote Dam to Oscoda | Very high population of steelhead-salmon during seasonal runs. Marginal to low trout population. Migratory warm water fish in summer. | Water level fluctuates from Foote Dam. Higher water temperatures. Sand bottom. | Very high for anadromous fishery. Anadromous carp present in summer. |
| South Branch Roscommon to Chase Bridge | Brown trout-marginal to big fish water going to Chase Bridge. | Sand bottom. Water quality and bottom improves toward Chase with added groundwater inflow. | Upper half trout populations are largely migratory. |
| Chase Bridge to Mainstem | Good populations of large brown trout. Fish production unchanged over past 10 years. | Excellent water, bottom, and cover. | Quality fishing area. Large average size. Rated higher for large brown trout than Upper Mainstem. Heavy canoe use restricts fishing. |
| Lovell Bridge to Mainstem. (Same all the way up into Otsego County) | High brook trout populations. Lower populations of larger fish below Kellogg Bridge. Excellent brown trout populations. | Good trout fishery. Excellent water, bottom and cover. | "Quality Fishing Area" from Sheep Ranch to mainstem. Habitat work completed in the 1970's. |

AUSABLE RIVER - FISH, HABITAT, POTENTIAL

| <u>Fish Population</u> | <u>Fish Habitat</u> | <u>Potential</u> | <u>Remarks</u> |
|---|---|---|---|
| 612 Road to Highway 27 | Brown trout populations low. Brook trout good in upper area | Marginal water temperature due to (impoundments) lack of spawning gravel. Lowland swamp with very little ground water. Sand bottom. | Lightly fished. Impoundments at Grayling degrade trout habitat below. |
| Highway 27 to Stephan's Bridge | Low brown trout population. More large trout. Warm water fish come from ponds. | Good water but upper half may be too warm due to impoundments. Gravel-rubble bottom. | Middle of this section considered the beginning of good trout fishing. Quality fishing area from Burton's landing to Stephan Bridge. Habitat work completed in 1970's. Heavy canoe use restricts fishing. |
| McMaster's Bridge to Mio Pond FPC Boundary | Good Brown Trout populations, but low density | Vital source of ground water below McMaster's Bridge. Deeper water-high quality water, bottom and fish cover. Sand, gravel-rubble bottom. | Lightly fished due to poor access and difficult water to wade. |
| Mio 33-72 Bridge to AuSable River Road Bridge | Good population of large Brown Trout. | High quality water, bottom and fish cover. Gravel-rubble bottom. Deeper water. | Anadromous (steel-head) potential in future. "Trophy trout area". Good access-heavily fished only by local people. "Quality fishing area" from Commins Flat to McKinley Bridge. Heavy canoe use becoming a problem. |
| Alcona Dam to Loud Dam FPC Boundary | No survey data. Probably good population of large brown trout, walleye and northern pike. | Sand-gravel bottom. Water level fluctuates 2-3 ft. from Alcona Dam drawdown. | Anadromous (steel-head) potential in future. Fished largely by local people. Difficult fishing due to deep and fluctuating water. |

AUSABLE RIVER FISH, HABITAT, POTENTIAL (continued)

| | <u>Fish Populations</u> | <u>Fish Habitat</u> | <u>Potential</u> | <u>Remarks</u> |
|---|---|--|-----------------------------------|--|
| Foote Dam to Oscoda | Very high population of steelhead-salmon during seasonal runs. Marginal to low trout population. Migratory warm water fish in summer. | Water level fluctuates from Foote Dam. Higher water temperatures. Sand bottom. | Very high for anadromous fishery. | Anadromous carp present in summer. |
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AUSABLE RIVER - FISH, HABITAT, POTENTIAL

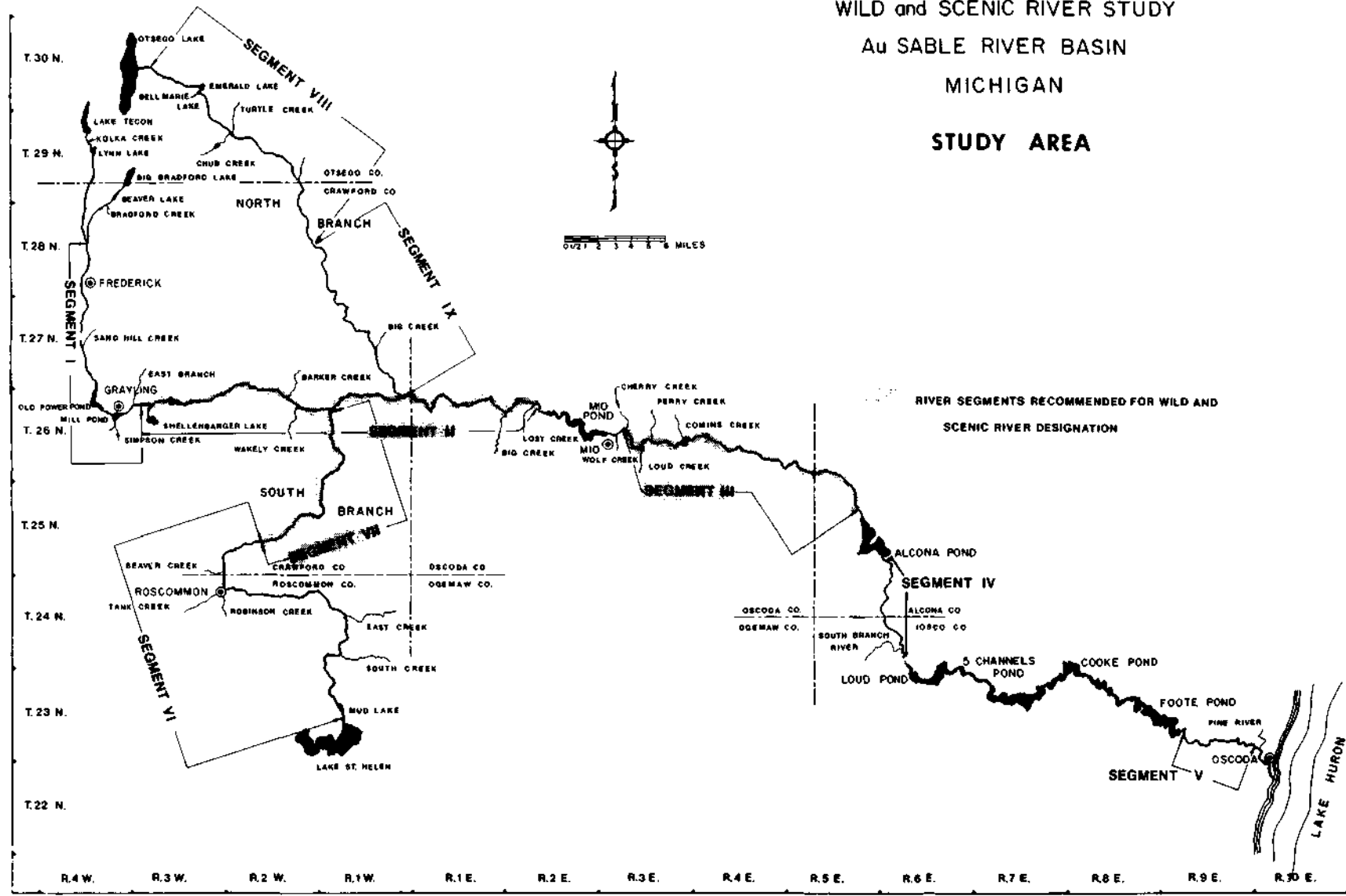
| <u>Fish Population</u> | <u>Fish Habitat</u> | <u>Potential</u> | <u>Remarks</u> |
|---|---|---|---|
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| McMaster's Bridge to Mio Pond FPC Boundary | Good Brown Trout populations, but low density | Vital source of ground water below McMaster's Bridge. Deeper water-high quality water, bottom and fish cover. Sand, gravel-rubble bottom. | Lightly fished due to poor access and difficult water to wade. |
| Mio 33-72 Bridge to AuSable River Road Bridge | Good population of large Brown Trout. | High quality water, bottom and fish cover. Gravel-rubble bottom. Deeper water. | Anadromous (steel-head) potential in future. "Trophy trout area". Good access-heavily fished only by local people. "Quality fishing area" from Commins Flat to McKinley Bridge. Heavy canoe use becoming a problem. |
| Alcona Dam to Loud Dam FPC Boundary | No survey data. Probably good population of large brown trout, walleye and northern pike. | Sand-gravel bottom. Water level fluctuates 2-3 ft. from Alcona Dam drawdown. | Anadromous (steel-head) potential in future. Fished largely by local people. Difficult fishing due to deep and fluctuating water. |

AUSABLE RIVER FISH, HABITAT, POTENTIAL (continued)

| | <u>Fish Populations</u> | <u>Fish Habitat</u> | <u>Potential</u> | <u>Remarks</u> |
|---|---|--|-----------------------------------|--|
| Footc Dam to Oscoda | Very high population of steelhead-salmon during seasonal runs. Marginal to low trout population. Migratory warm water fish in summer. | Water level fluctuates from Footc Dam. Higher water temperatures. Sand bottom. | Very high for anadromous fishery. | Anadromous carp present in summer. |
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APPENDIX G - DATA SOURCES

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



AU SABLE RIVER CORRIDOR LAND OWNERSHIP (ACRES - 1980)*

| | <u>MAINSTEM</u> | <u>PRIVATE</u> | <u>STATE</u> | <u>FEDERAL</u> | <u>CONSUMERS
POWER</u> | <u>TOTAL</u> |
|-------------------------|-----------------------|----------------|--------------|----------------|----------------------------|--------------|
| I. | Source - I-75 | 2,920 | 520 | - | - | 3,440 |
| II. | I-75 - Mio FPC | 6,520 | 1,813 | 40 | 1,327 | 9,700 |
| III. | Mio FPC - Alcona FPC | 430 | 792 | 4,818 | 170 | 6,210 |
| IV. | Alcona - Loud FPC | 80 | - | 1,680 | - | 1,760 |
| V. | Foote FPC - Oscoda | 80 | 160 | 1,440 | - | 1,680 |
| | Total | 10,030 | 3,285 | 7,978 | 1,497 | 22,790 |
|
<u>SOUTH BRANCH</u> | | | | | | |
| VI. | St. Helen - Roscommon | 1,960 | 2,200 | - | - | 4,160 |
| VI. | Roscommon - Chase | 1,480 | - | 40 | - | 1,520 |
| VII. | Chase - Mainstem | 690 | 2,600 | 360 | 500 | 4,150 |
| | Total | 4,130 | 4,800 | 400 | 500 | 9,830 |
|
<u>NORTH BRANCH</u> | | | | | | |
| VIII. | Source - Lovell | 3,280 | 1,320 | - | - | 4,600 |
| IX. | Lovell - Mainstem | 3,680 | 620 | - | - | 4,300 |
| | Total | 6,960 | 1,940 | - | - | 8,900 |
| | PROPOSED CORRIDOR | 7,640 | 5,205 | 5,218 | 1,997 | 20,060 |
| | Total | 21,120 | 10,025 | 8,378 | 1,997 | 41,520 |

*The final report/EIS assumes acquisition of 11,043 acres of Consumers Power Company land optioned by State and Federal Governments and private lease holders. Those lands were optioned during 1979-80. Acquisition by the State of Michigan is expected by November 1980, and Department of Agriculture-Forest Service by June 1981.

REGIONAL INCOME GENERATED 1/

| ACTIVITY | ALTERNATIVE PLANS | | | | | |
|---------------------------------------|-----------------------|--------|--------|--------|--------|--------|
| | (1,000 Dollars -1980) | | | | | |
| | No Act. | NED A | NED B | SNR | WSR A | WSR B |
| Canoeing | 2160.1 | 2761.1 | 2160.1 | 2160.1 | 1891.4 | 2396.7 |
| Fishing | 1454.3 | 1700.5 | 1454.3 | 1454.3 | 1209.2 | 1700.5 |
| Hiking | 14.1 | 1378.3 | 14.1 | 14.1 | 28.8 | 1378.3 |
| Camping | 1124.1 | 1366.9 | 1124.1 | 1124.1 | 1082.4 | 1319.8 |
| Picnicking | - | - | - | - | - | - |
| Hunting | 181.3 | 181.3 | 181.3 | 181.3 | 149.3 | 181.3 |
| Total | 4933.9 | 7388.1 | 4933.9 | 4933.9 | 4361.1 | 6976.6 |
| Operation & Maintenance of: | | | | | | |
| Camp Units | 57.5 | 81.3 | 57.5 | 57.5 | 53.4 | 77.2 |
| Picnic Units | 5.6 | 25.8 | 5.6 | 5.6 | 23.8 | 25.8 |
| Trails | .3 | 6.2 | .3 | .3 | 1.0 | 6.2 |
| Access Sites | 10.6 | 12.8 | 10.6 | 10.6 | 11.7 | 12.8 |
| Total | 79.4 | 126.1 | 79.4 | 79.4 | 89.9 | 122.0 |
| Hydrocarbon
Production | 410 | 415 | 410 | 410 | - | 415 |
| Timber Production | 14.1 | 5.9 | 50.4 | 13.5 | 4.8 | 5.9 |
| Recreation Facility
Reconstruction | - | 19.1 | - | - | 13.6 | 17.9 |
| Total | 5436.7 | 7943.6 | 5473.6 | 5436.8 | 4469.4 | 7537.3 |

1/Regional Area would include States of Michigan and Northern half of Ohio, Indiana, Illinois

Source: Economic Impact of Designation of the Manistee and Au Sable Rivers Under the Wild and Scenic Rivers Act, 1976, Commonwealth Associates, Jackson, MI.

EMPLOYMENT GENERATED BY CORRIDOR ACTIVITIES-AU SABLE

| Expenditure
per
Activity Day
in Dollars <u>1/</u> | Activity | A L T E R N A T I V E P L A N S | | | | | |
|--|----------|---|-------|-------|-----|-------|-------|
| | | Man years of Employment at Minimum Wage | | | | | |
| | | No Act | NED A | NED B | SNR | WSR A | WSR B |
| 9.46 <u>2/</u> | Canoeing | 554 | 708 | 554 | 554 | 485 | 614 |
| 6.21 <u>3/</u> | | | | | | | |
| 5.65 | Fishing | 148 | 172 | 148 | 148 | 123 | 172 |
| | Hiking | - | - | - | - | - | - |
| 1.79 | Camping | 53 | 65 | 53 | 53 | 51 | 65 |
| | Picnic | - | - | - | - | - | - |
| 5.14 | Hunting | 9 | 9 | 9 | 9 | 8 | 9 |

Operation & Maintenance (O&M) or Recreation Facilities:

Annual O&M
Cost Per Unit

| | | | | | | | |
|-------|-------------------------------------|------|------|------|------|-----|------|
| \$250 | Camping | 8 | 11 | 8 | 8 | 7 | 10 |
| 126 | Picnicking | .5 | 3 | .5 | .5 | 3 | 3 |
| 66 | Hiking (trail) | - | 1 | - | - | 1 | 1 |
| 323 | Access | 1 | 1 | 1 | 1 | 1 | 1 |
| | Hydrocarbon Production | 14.8 | 14.8 | 14.8 | 14.8 | - | 14.8 |
| | Timber Production | 3 | 1 | 9 | 1 | 1 | 1 |
| | Recreation Facility
Construction | - | 33 | - | - | 18 | 31 |
| | Total | 791 | 1019 | 795 | 790 | 698 | 921 |

1/Primary Level Expenditures in Regional Area

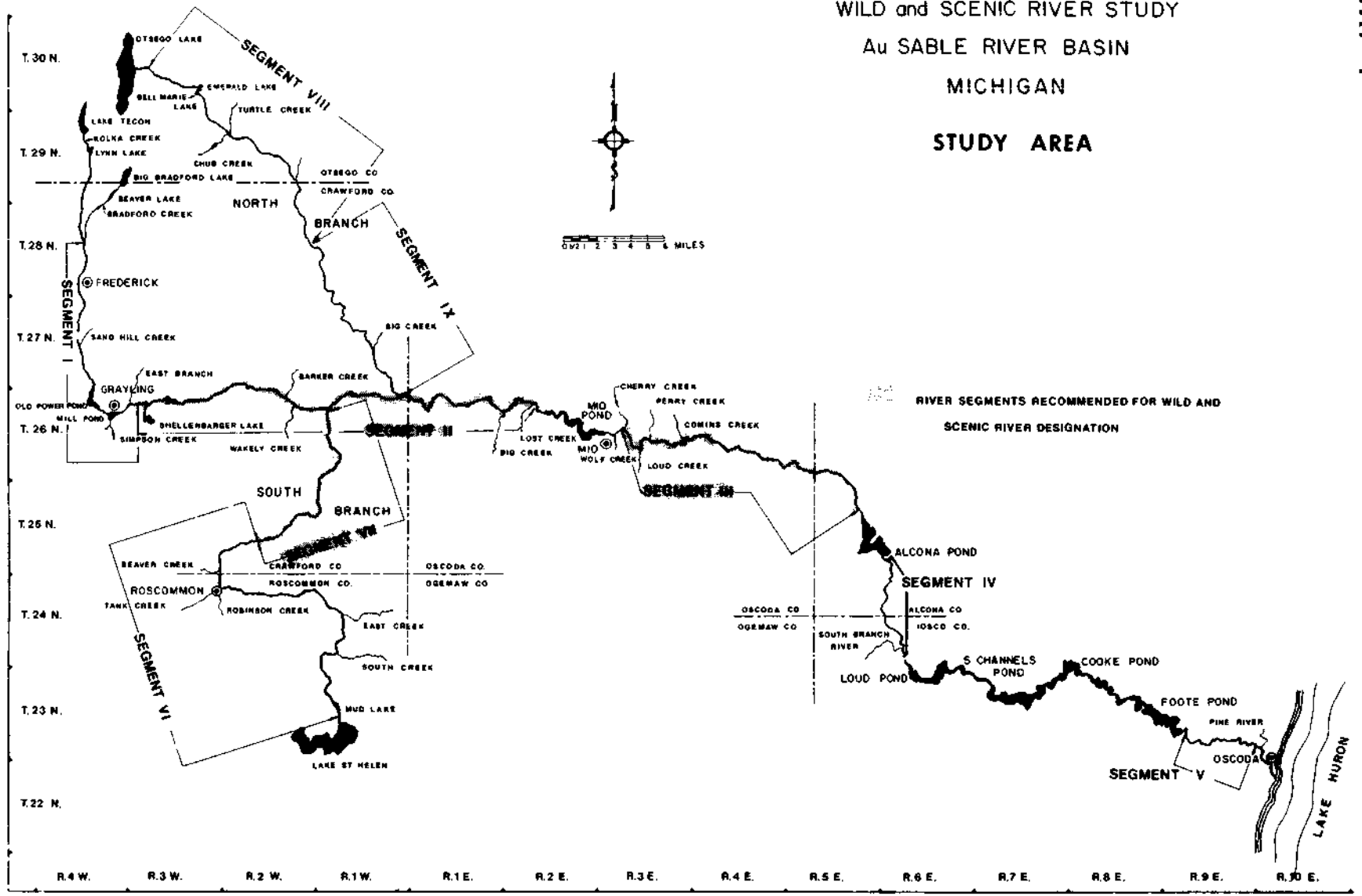
2/Rental Canoe - AD expenditures

3/Self owned canoes - Activity Day (AD) expenditure

Source: Economic Impact of Designation of the Manistee and Au Sable Rivers
Under the Wild and Scenic Rivers Act, Commonwealth Associates

APPENDIX H - ACCESS, CAPACITY, EXPERIENCE CRITERIA

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



RIVER SEGMENTS RECOMMENDED FOR WILD AND SCENIC RIVER DESIGNATION

Criteria for Determining Accessibility to River Areas

- I. Criteria for measuring accessibility on river sections to be classified wild, scenic, or recreation.

Access is defined by the following situations:

1. Undeveloped loading-unloading ramps on public land accessible by maintained public roads.
2. Developed access sites on public land or land leased by a public agency.
3. Public road bridge crossings.
4. Public roads on public land that pass within a negotiable distance of the river, have vehicular parking space and receive moderate use.

These situations do not constitute access:

1. Public roads across quasi-public land (Consumers Power Company) that approach or pass near the shoreline.
2. Non-public roads across quasi-public land that approach or pass near the river shoreline.

- II. These conditions relating to access can be expected to prevail under the following river classifications:

Recreation

1. Access will be more frequent and easily reached.
2. Frequent access sites will generally attract heavier recreation use.
3. Frequent access at shorter intervals of 4 hours floating time or less will generally attract users seeking social, challenge, or physical type experiences.
4. Reducing or closing access points may be difficult for the public to accept.

Scenic

1. Access will be less frequent and more difficult to reach.
2. More time (up to 6 hours) may be required by users in this section to satisfy need and therefore greater distance between accesses will be acceptable.
3. Users of this section will generally seek satisfaction of needs for solitude and enjoyment of outdoor environs.

Source: Wild and Scenic River Study Team.

Canoeing - Use Limitation

Canoe use appears to have exceeded capacity on certain portions of the AuSable during heavy use seasons. This became increasingly evident after discussions with landowner groups, service organizations, environmentalists, and groups of anglers. Studies conducted by Bassett, Driver, and Shreyer of the University of Michigan in 1972 indicated extremely heavy use and severe conflicts between the various users. The Michigan DNR has also acknowledged this condition and attempted to apply regulations that would reduce canoe use. Law enforcement problems, litter and severe recreation site deterioration are also indirect results of overuse.

The canoe use limitation presented in this proposal would reduce many problems resulting from overuse. It was derived from Forest Service experience level selection criteria and data in the Lake States Area Guide and adapted to the physical characteristics of the AuSable. The basis of this system was reduction of canoe visual encounters with anglers and landowners by limiting the number of canoes on each mile of river. The system would allow 9 to 15 canoes per mile on recreation classed segments and 6 to 9 canoes per mile on "scenic" classified segments. This use limitation would reduce group size and total numbers of canoes. There would be fewer encounters with other users and therefore less friction. The experience quality of all users would increase considerably.

Canoeing - Production Coefficient by Zone and River Classification - Wild and Scenic Rivers

Recreation Classified Segments: Recreation Opportunity Spectrums

Road Natural Appearing (RN) - Interaction between users may be low to moderate, but with evidence of other users prevalent.

Rural (R) - Sights and sounds of man are readily evident, and the interaction between users is often high to moderate.

Assume: Moderate opportunity to interact with other users can be maintained with two or less canoes and one other similar group within a distinguishable distance (200 yards) - three to four canoes will be intervisible at all times.

Scenic Classified Segments: Recreation Opportunity Spectrums.

Semi-Primitive Motorized (SPM) - Concentration of users is low, but there is often evidence of other users.

Assume: Evidence of other users will occur often with encounters of two or less other canoes. Therefore, no more than two canoes may be within sight at one time - two to three canoes may be intervisible at all times.

Relationship of Production Coefficient, Zone, and Opportunity Level:

| <u>River Classification</u> | <u>Range of CL/SL*</u> | <u>Opportunity Level 3/</u> | <u>Management Zone 4/</u> | <u>Production Coefficient Canoes/Mile</u> |
|-----------------------------|------------------------|-----------------------------|---------------------------|---|
| Recreation | 1.13-2.26 (1.70) | RN-R | I | 9-15 (12) <u>2/</u> |
| Scenic | 1.17-1.54 | SPM-RN | II | 6-9 (7) <u>1/</u> |
| | 2.08-2.74 | SPM-RN | | |
| | 1.17-2.74 (1.95) | | | |
| Wild | - | - | III | - |

*Ratio of curvilinear distance and straight line distance.

1/ $2.04 \div 38 \times 1.95 = 36 \div 2 \ \& \ 3 =$ capacity range of 6-9 canoes/mile

2/ $1.70 \times 36 \div 1.74 = 35 \div 3 \ \& \ 4 =$ range of 9-12 canoes

$45 \times 1.70 \div 1.74 = 45 \div 3 \ \& \ 4 =$ range of 11-15 canoes

3/ Outdoor Recreation Opportunity Spectrum

4/ Lake States Area Guide

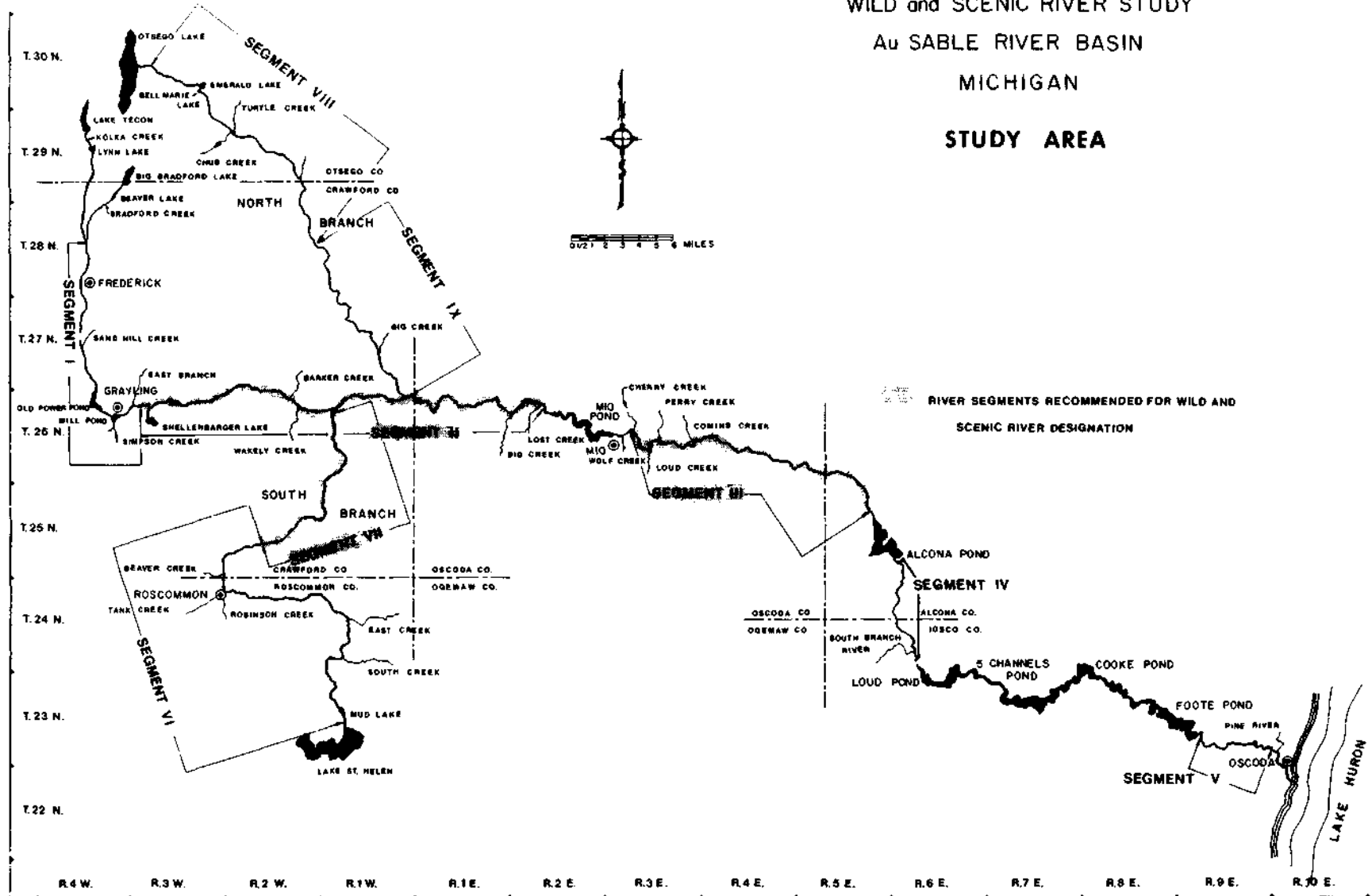
RECREATION OPPORTUNITY SPECTRUM

The associated activity opportunities, recreational setting requirements, and experience opportunities that are highly probable for each Recreation Opportunity Spectrum class. There may be specific activity exceptions to these general characteristics. (This table is for illustrative purposes only. Use the six Recreation Opportunity Spectrum class definition criteria to identify actual areas.)

| Spectrum Class | Primitive (P) | Semi-primitive non-motorized (SPNW) | Semi-primitive motorized (SPM) | Roaded Natural Appearing (RN) | Rural (R) | Modern-urban (MU) |
|--------------------------|---|---|--|---|---|---|
| Activity Opportunities | <p>Viewing Outstanding Scenery
Enjoying Unique and/or Unusual Environments
Hiking
Cross-country ski touring and snowshoeing
Horseback Riding
Canoeing
Sailing
Other, nonmotorized watercraft use
Swimming
Diving (Skin or Scuba)
Fishing
Photography
Camping
Smoochlay
Hunting (big, small game, upland birds and waterfowl)
Nature Study
Acquiring General Knowledge/Understanding
Unguided Hiking
General Information</p> | <p>Viewing Outstanding Scenery
Enjoying Unique and/or Unusual Environments
Hiking
Cross-country ski touring and snowshoeing
Horseback Riding
Canoeing
Sailing
Other, nonmotorized watercraft use
Swimming
Diving (Skin or Scuba)
Fishing
Photography
Camping
Smoochlay
Hunting (big, small game, upland birds and waterfowl)
Nature Study
Acquiring General Knowledge/Understanding
Unguided Hiking
General Information
Motor-driven ice and snowcraft
Off-road touring
Power boating</p> | <p>Viewing Outstanding Scenery
Enjoying Unique and/or Unusual Environments
Hiking
Cross-country ski touring and snowshoeing
Horseback Riding
Canoeing
Sailing
Other, nonmotorized watercraft use
Swimming
Diving (Skin or Scuba)
Fishing
Photography
Camping
Smoochlay
Hunting (big, small game, upland birds and waterfowl)
Nature Study
Acquiring General Knowledge/Understanding
Unguided Hiking
General Information
Motor-driven ice and snowcraft
Off-road touring
Power boating
Picnicking
Bathing Forest Products
Auto Touring
Water Skiing & Other Water Sports
Automobile Camping
Trailer Camping
Viewing Interpretive Signs
Organization Camping
Lodges
Resort-Commercial Public Services
Resort-Lodging</p> | <p>Viewing Outstanding Scenery
Enjoying Unique and/or Unusual Environments
Hiking
Cross-country ski touring and snowshoeing
Horseback Riding
Canoeing
Sailing
Other, nonmotorized watercraft use
Swimming
Diving (Skin or Scuba)
Fishing
Photography
Camping
Smoochlay
Hunting (big, small game, upland birds and waterfowl)
Nature Study
Acquiring General Knowledge/Understanding
Unguided Hiking
General Information
Motor-driven ice and snowcraft
Off-road touring
Power boating
Picnicking
Bathing Forest Products
Auto Touring
Water Skiing & Other Water Sports
Automobile Camping
Trailer Camping
Viewing Interpretive Signs
Organization Camping
Lodges
Resort-Commercial Public Services
Resort-Lodging
Competition Games
Ice Skating
Sawtooth-Motorcycle Use
Bicycling
Spectator Sports
Jogging
Passive use of developed parks and open space
Picnicking
Outdoor Concerts</p> | <p>Viewing Outstanding Scenery
Enjoying Unique and/or Unusual Environments
Hiking
Cross-country ski touring and snowshoeing
Horseback Riding
Canoeing
Sailing
Other, nonmotorized watercraft use
Swimming
Diving (Skin or Scuba)
Fishing
Photography
Camping
Smoochlay
Hunting (big, small game, upland birds and waterfowl)
Nature Study
Acquiring General Knowledge/Understanding
Unguided Hiking
General Information
Motor-driven ice and snowcraft
Off-road touring
Power boating
Picnicking
Bathing Forest Products
Auto Touring
Water Skiing & Other Water Sports
Automobile Camping
Trailer Camping
Viewing Interpretive Signs
Organization Camping
Lodges
Resort-Commercial Public Services
Resort-Lodging
Competition Games
Ice Skating
Sawtooth-Motorcycle Use
Bicycling
Spectator Sports
Jogging
Passive use of developed parks and open space
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Outdoor Concerts</p> | <p>Viewing Outstanding Scenery
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Competition Games
Ice Skating
Sawtooth-Motorcycle Use
Bicycling
Spectator Sports
Jogging
Passive use of developed parks and open space
Picnicking
Outdoor Concerts</p> |
| Recreational Settings | <p>Area is characterized by essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other area users is minimal. The area is managed to be essentially free from evidence of man-induced restrictions and controls. Motorized use within the area is not permitted.</p> | <p>Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted.</p> | <p>Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted.</p> | <p>Area is characterized by predominantly natural appearing environments with moderate evidence of the sights and sounds of man. Such evidence is usually harmonious with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.</p> | <p>Area is characterized by substantially modified natural environment. Resource modification and utilization practices are primarily to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of man are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided for many developed sites. Facilities for intensified motorized use and parking are available.</p> | <p>Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Resource modification and utilization practices are to enhance specific recreation activities. Vegetative cover is often sparse and manicured. Sights and sounds of man, on-site, are predominant. Large numbers of users can be expected, both on-site and in nearby areas. Facilities for highly intensified motor use and parking are available with many transit options available to carry people throughout the site.</p> |
| Experience Opportunities | <p>Extremely high probability of experiencing considerable isolation from the sights and sounds of man, independence, closeness to nature, tranquility, and self-reliance through the application of wilderness skills in an environment that offers a high degree of challenge and risk.</p> | <p>High, but not extremely high, probability of experiencing the above listed natural environment elements.</p> | <p>Moderate probability of experiencing the above listed natural environment elements, except that there is a high degree of interaction with the natural environment. Opportunity is available to use motorized equipment while in the area.</p> | <p>About equal probability to experience affiliation with other user groups and for isolation from sights and sounds of man. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities associated with more primitive type of recreation are not very important. Practice and testing of outdoor skills might be important. Opportunities for both motorized and non-motorized forms of recreation are possible.</p> | <p>Probability for experiencing affiliation with individuals and groups is prevalent as is the convenience of sites and opportunities. These factors are generally more important than the setting of the physical environment. Opportunities for wilderness challenges, risk-taking, and testing of outdoor skills are generally unimportant except for specific activities like downhill skiing, for which challenge and risk-taking are important elements.</p> | <p>Probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. Experiencing natural environments, having challenges and risks afforded by the natural environment, and the use of outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive use of highly manicured parks and open spaces are common.</p> |

APPENDIX I - GLOSSARY

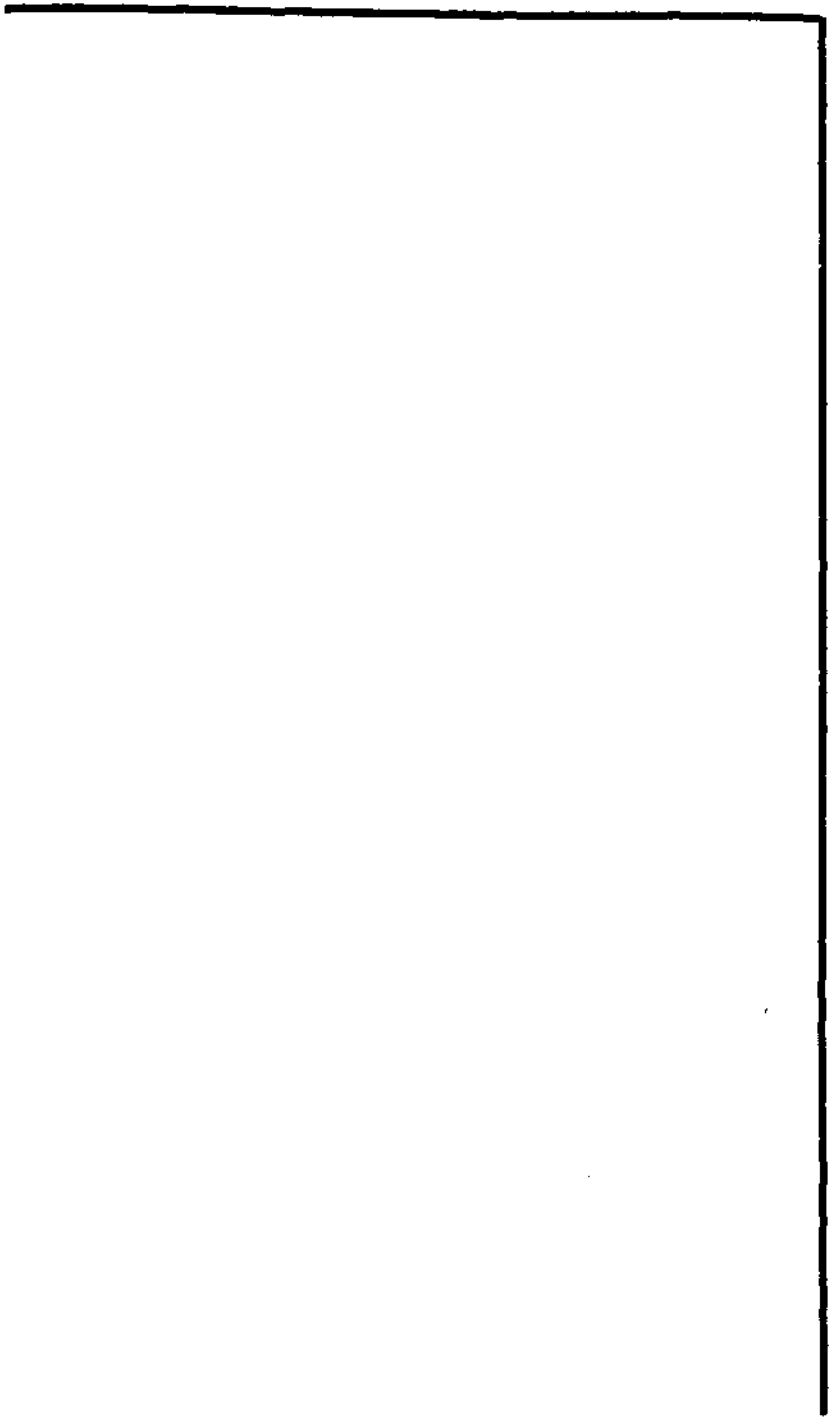
WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



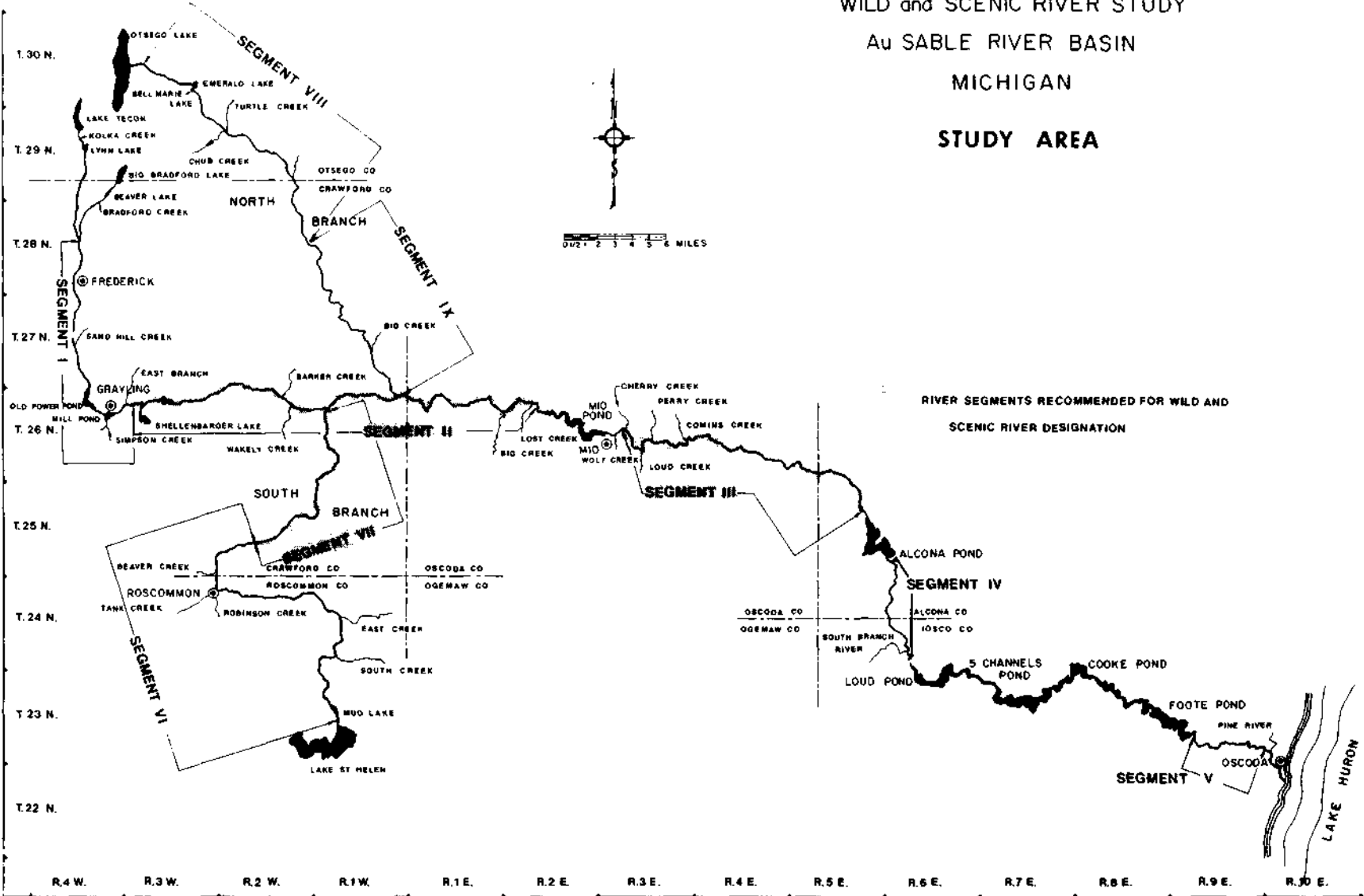
A Glossary of Common Environmental Terms Used
in This Report and Impact Statement

- Designated Camp Areas - an overnight camp area specifically designed, constructed and/or indicated for camping.
- Access Site - a developed or undeveloped area providing legal entry to the water. Site may be served by road or trail.
- Rest Area - a day-use area only; usually providing sanitary facilities and frequently trash cans and picnic tables. Accessible by river and administrative use trail only.
- Outstandingly Remarkable - for the purposes of river classification - values that are comparatively rated far greater than similar values on other rivers within the same regional area.
- Characteristic Landscape - the naturally established landscape within a scene or scenes being viewed.
- Recreation Experience Levels - the extent to which various classes of outdoor recreation experiences provide opportunities for satisfying some of the basic needs of individuals - such as isolation or self-fulfillment, etc.
- Seen Area - the area visible from two feet above the water surface to the topographical break. Generally including all foreground and middleground area during leafoff seasons.
- Activity Day (AD) - a visit of one person for a specific recreation activity.
- Recreation - a standard unit of use consisting of a visit by one individual to a recreation development or area for recreation purposes during any reasonable portion or all of a 24-hour period.
- AHP/AD - average hours of participation per recreation activity day.
- MBM - thousand board feet of lumber.

APPENDIX J



WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



Nearby Rivers Offering Similar Recreational Opportunities

The following series of sketches is included to provide comparative information on recreational opportunities offered by rivers within a 150 mile radius of the Au Sable and Manistee Rivers. Emphasis is on scenic and recreation qualities.

Jordan River - Charlevoix and Antrim Counties - The Jordan was designated a Michigan Natural River and is well known for its exceptionally high water quality. It also offers excellent fishing and has high scenic values.

Betsie River - Manistee and Benzie Counties - The upper section of this 50 mile river is very scenic and undisturbed. The Betsie is also a Michigan Natural River and particularly well known for its scenic qualities and steelhead fishing.

Black River - Cheboygan County - This 45 mile river is being considered for inclusion in the Michigan Natural Rivers System. It is a river for experts and is particularly well known for its fishing, scenery and undisturbed shoreline.

Boardman River - Grand Traverse County - The 23 mile Boardman is being considered for State Natural River designation and required moderate to expert canoeing skills. The river has excellent coldwater fishing.

Little Manistee River - Lake, Mason, and Manistee Counties - The Little Manistee is being considered for State Natural River designation. It is a fast "sporty" canoeing river and offers the highest quality steelhead fishing in Michigan.

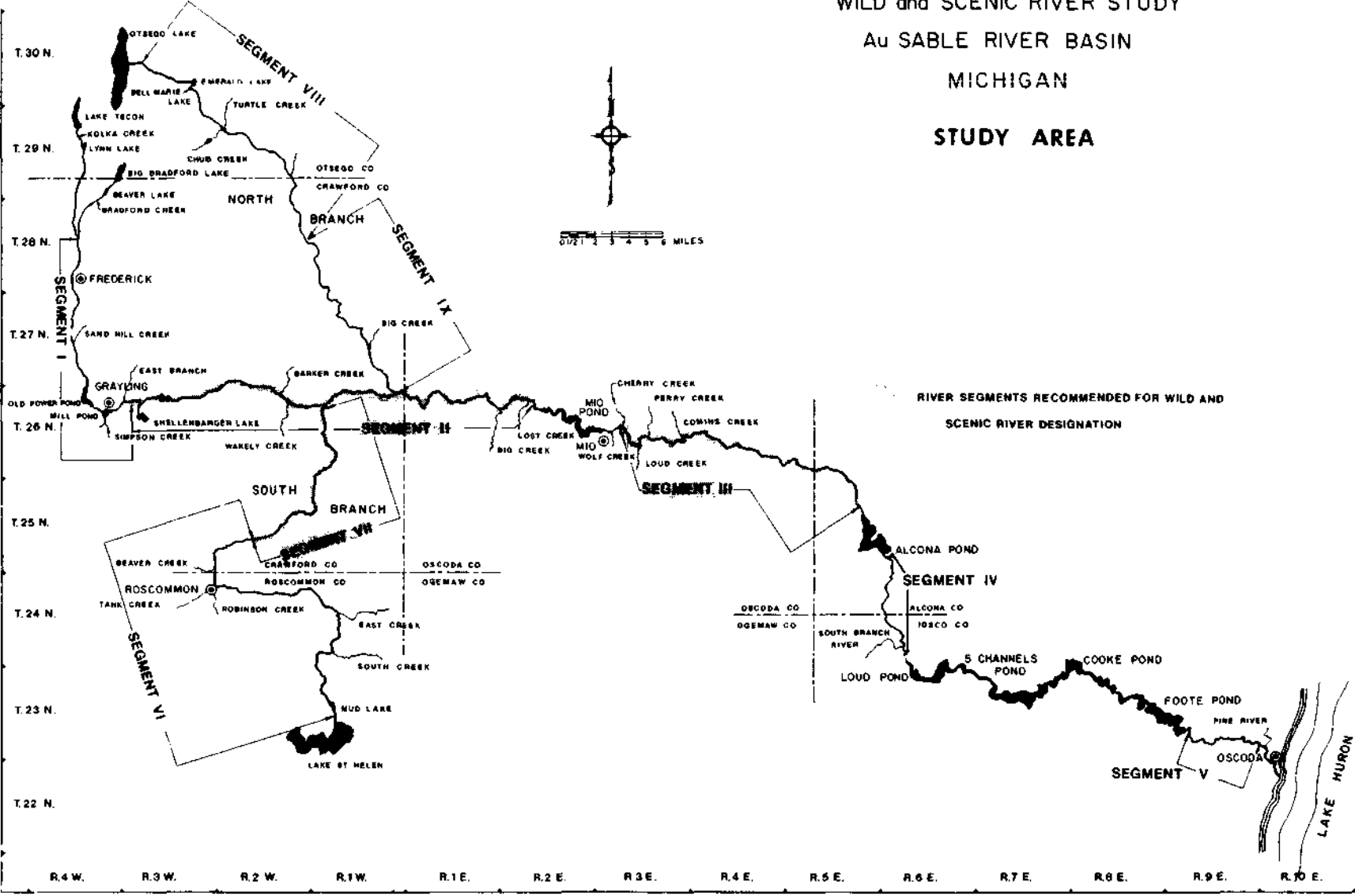
Indian River - Schoolcraft County - The Indian offers 50 miles of excellent canoeing, although there is no fast water. The river was proposed as a study river for inclusion in the Michigan Natural River System.

Rifle River - Ogemaw and Aranac Counties - The Rifle offers 90 miles of clear, fast water with some boulders and occasional rocky bottom. It is heavily canoed.

Pere Marquette River - Mason and Lake Counties - The Pere Marquette is a Michigan Natural River and a component of the National Wild and Scenic River System. It offers 66 miles of outstanding scenery, fishing and canoeing. There are some rapids, log jams and sharp turns.

APPENDIX K CULTURAL RESOURCES

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



MICHIGAN DEPARTMENT OF STATE
RICHARD H. AUSTIN SECRETARY OF STATE



LANSING
MICHIGAN 48918

November 8, 1978

MICHIGAN HISTORY DIVISION
ADMINISTRATION, ARCHIVES,
HISTORIC SITES, AND PUBLICATIONS
3423 N. Logan Street
517-373-0510
STATE MUSEUM
605 N. Washington Avenue
517-373-0515

Mr. Carl Gebhardt
Huron-Manistee National Forest
421 S. Mitchell
Cadillac, Michigan 49607

Dear Mr. Gebhardt:

Our staff has reviewed the Au Sable Wild and Scenic River Draft Study and Environmental Impact Statement and finds it remarkably aware of the goals and problems faced in the management and preservation of cultural resources. We believe that these goals and problems are most effectively addressed in Wild and Scenic River Plan A.

We agree that after a comprehensive survey of the cultural resources of the Au Sable has been accomplished, these should be given special emphasis in any interpretative programs. This would also complement the planned emphasis of developing a "river use ethic."

Recognition and preservation of the river's cultural resources supports the overall development plans in several ways. First, it recognizes another variety of resource that could add a new dimension of interest for the user of the Au Sable. Second, historic preservation and interpretation would result in a complementary land use in this sensitive natural area. Third, points of historic interest would claim their share of the ever-increasing number of users and might lessen the load on other activity areas. Fourth, historic highlights may be of interest to both the "quiet" and the "noisy" users of the river, thus providing them with common ground where their interests would not be at odds.

Although the concomitant concerns of protecting the identified cultural resources, marking them with appropriate yet inviting signs and keeping them from being overused must be addressed, Wild and Scenic River Plan A could be developed as a good link between the conservation of natural and cultural resources.

Mr. Carl Gebhardt

2

November 8, 1978

Thank you for inviting our comments on this draft study and environmental impact statement.

Sincerely,

Martha M. Bigelow
Director, Michigan History Division
and
State Historic Preservation Officer

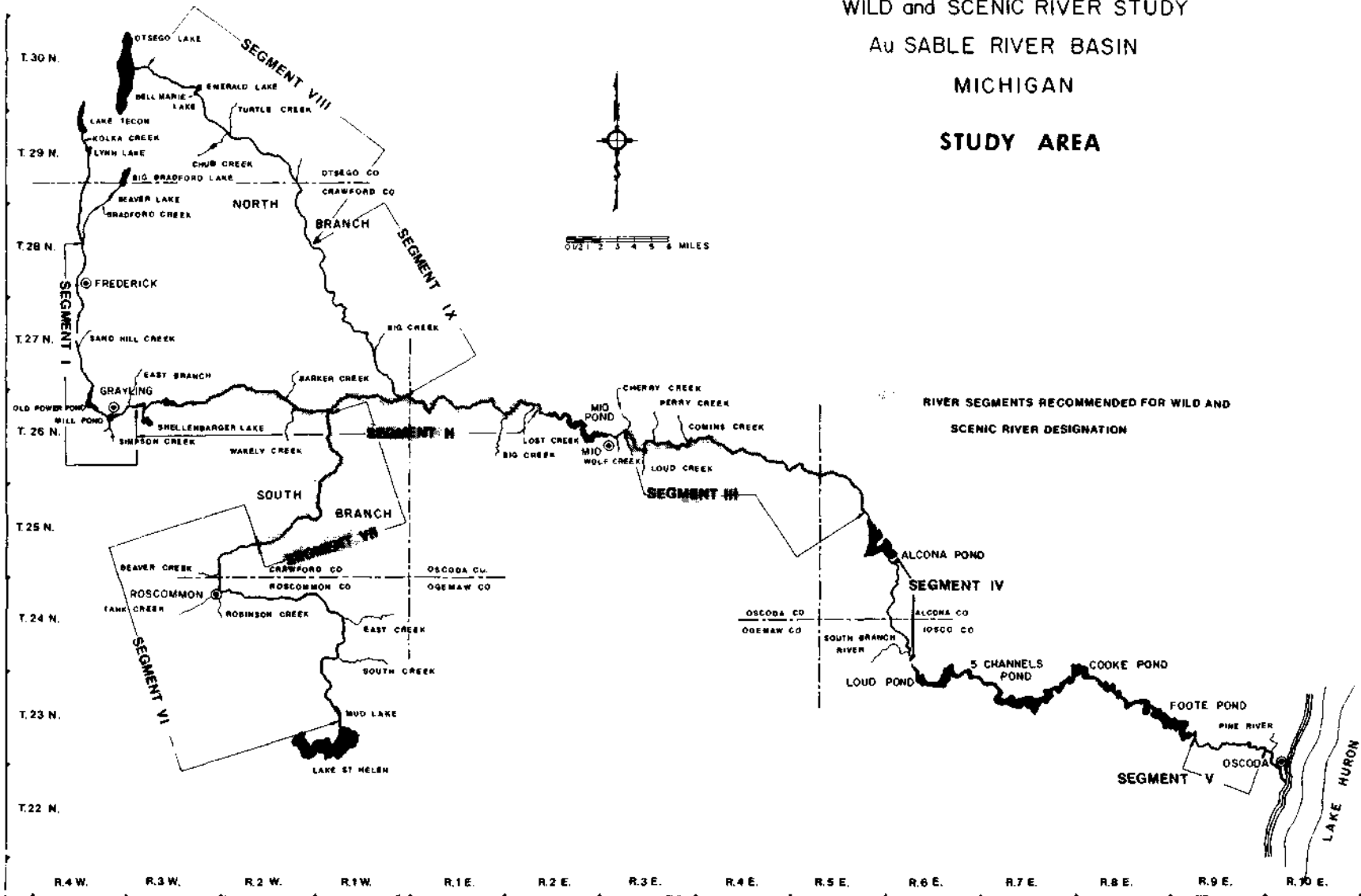


By: Michael J. Washo
Deputy State Historic Preservation Officer

MJW/JRH:tj

APPENDIX L - PUBLIC INVOLVEMENT

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



APPENDIX L

SUMMARY OF PUBLIC INVOLVEMENT

Contact and communication with private individuals and organizations was a continuing activity throughout the study process. There were also numerous personal contacts with interested persons, property owners and river users in addition to those listed below:

1975

November - Press release announcing AuSable and Manistee River studies.

Letter contact with all study team agencies to invite them to participate.

1976

February - Presentation to Michigan Forestry and Parks Association.

Meeting of interested agencies and formation of study team.

Meeting with Oscoda County Road Commission to discuss future of McKinley Bridge.

News release inviting public comment on preliminary issues.

Letter to 600 people and organizations inviting public comment on preliminary issues.

March - Meeting with Northwest Michigan Regional Planning Commission to preview Wild and Scenic River Studies.

Meeting with Manistee Chamber of Commerce to discuss Wild and Scenic River Studies.

April - Meeting with East Tawas Kiwanis Club to explain river study.

Radio interview with WIOS (East Tawas).

Meeting with Tawas City Lions Club to explain river study.

Meeting with Tawas City Chamber of Commerce to discuss river study.

Meeting with Tawas City Rotary Club to explain river studies.

Radio interview with station WDBT (East Tawas).

May - Meeting with Trout Unlimited in Grayling.

Meeting with Pine River Association to explain intent of river study.

- June - Meeting with Oscoda Kiwanis Club to explain river study.
- July - Meeting with Youth Conservation Corps to explain objectives of Wild and Scenic Rivers Act.
- September- Meeting with AuSable Property Owners Association (Board of Directors) to discuss intent of River Studies.
- Meeting with River Study team (9/14).
- Meeting with River Study team (9/14).
- Meeting (Field trip with Department of Natural Resources and Heritage Conservation and Recreation Service) to inventory river area.
- October - Meeting with River Study team.
- Meeting with Cadillac Kiwanis Club to discuss intent of Wild and Scenic Rivers Act.
- November - Meeting with River Study team.
- December - Meeting with River Study team.

1977

- January - Meeting with Cadillac Rotary Club to explain intent of Wild and Scenic Rivers Act.
- Meeting with Wexford County Soil Conservation District to discuss river study.
- February - Norman Township Zoning Board - presented information on possible effects of river designation.
- Frederick Township Landowners Association - meeting to discuss intent and effects of river designation.
- News Release inviting comments on qualifying segments of study rivers.
- Letter to approximately 700 individuals and organizations to invite comments on qualifying segments of Study rivers.
- Radio WGRY (Grayling) panel discussion involving effects of river designation.
- Meeting with Missaukee County Soil Conservation District to explain river studies.
- Meeting with Grayling Rotary Club to explain intent of river studies.

Manistee County Planning Commission-invited to explain intent of river studies.

March - Meeting with Oscoda County Road Commission to discuss McKinley Bridge.

Interview by Northwoods Call Newspaper to obtain information on river study process.

Meeting with Onekema Lions Club to explain intent of Wild and Scenic River Act.

Meeting with AuSable River Watershed study Council to discuss effects of study recommendations.

Meeting with River Study team.

Grayling Township Planning Commission - explained river study recommendations and possible effects.

Meeting with Pine River Association President to discuss study recommendations and effects.

Upper Manistee River Association - meeting to discuss effects of designation and obtain comments.

June - Field trip with study team members on AuSable River.

July - Meeting with Youth Conservation Corps to explain objectives of Wild and Scenic Rivers System.

September- Field trip with Heritage Conservation and Recreation Service on Pine River.

October - AuSable Property owners Association requested to explain study proposal and effects and obtain comments.

Meeting with Cadillac Lions Club to explain intent of Wild and Scenic Rivers Act.

November - Meeting with Pine River Association to discuss study proposal and obtain comment.

1978

February - Meeting with river study team.

April - Meeting with Oscoda County Road Commission to discuss McKinley Bridge.

Meeting with Cadillac American Businessman's Club to explain river studies.

Meeting with Upper Manistee River Association to discuss study proposal and obtain comments.

- May - Lovells Township Board Meeting to discuss study proposal and get landowner comments.
- Meeting with Pine River Association to explain study proposal and obtain comments.
- June - Meeting with Grayling Township Board to discuss study proposal and effects.
- July - Meeting with AuSable Property Owners Association to explain proposal and obtain comments.
- Invited to discuss intent of Wild and Scenic Rivers Act to Youth Conservation Corps.
- Meeting with AuSable Watershed Study Council to discuss study proposal and effects.
- Meeting with Frederick Township Association to discuss study proposal and effects.
- August - Meeting with North Branch AuSable Property Owners to discuss study proposal and effect.
- Meeting with Rural Conservation and Development Commission to discuss intent of river studies.
- September - Meeting with Michigan Fly Fishing Federation to discuss intent of Wild and Scenic Rivers Act.
- Great Lakes Outdoor Writers Association - explained study proposals and discussed effects.
- October - Meeting with river study team.
- Meeting with Warbler's Hideaway landowners to discuss study proposal and effects.

1979

- January - Meeting with Ray Rustem, MUCC, to discuss river study proposals.
- Meeting with Baptist Men's Brotherhood to discuss intent of Wild and Scenic Rivers Act.
- March - Meeting with Michigan United Conservation Clubs to discuss river study proposal.
- Meeting with North Branch Property Owners to discuss intent of river designation and discuss effects.

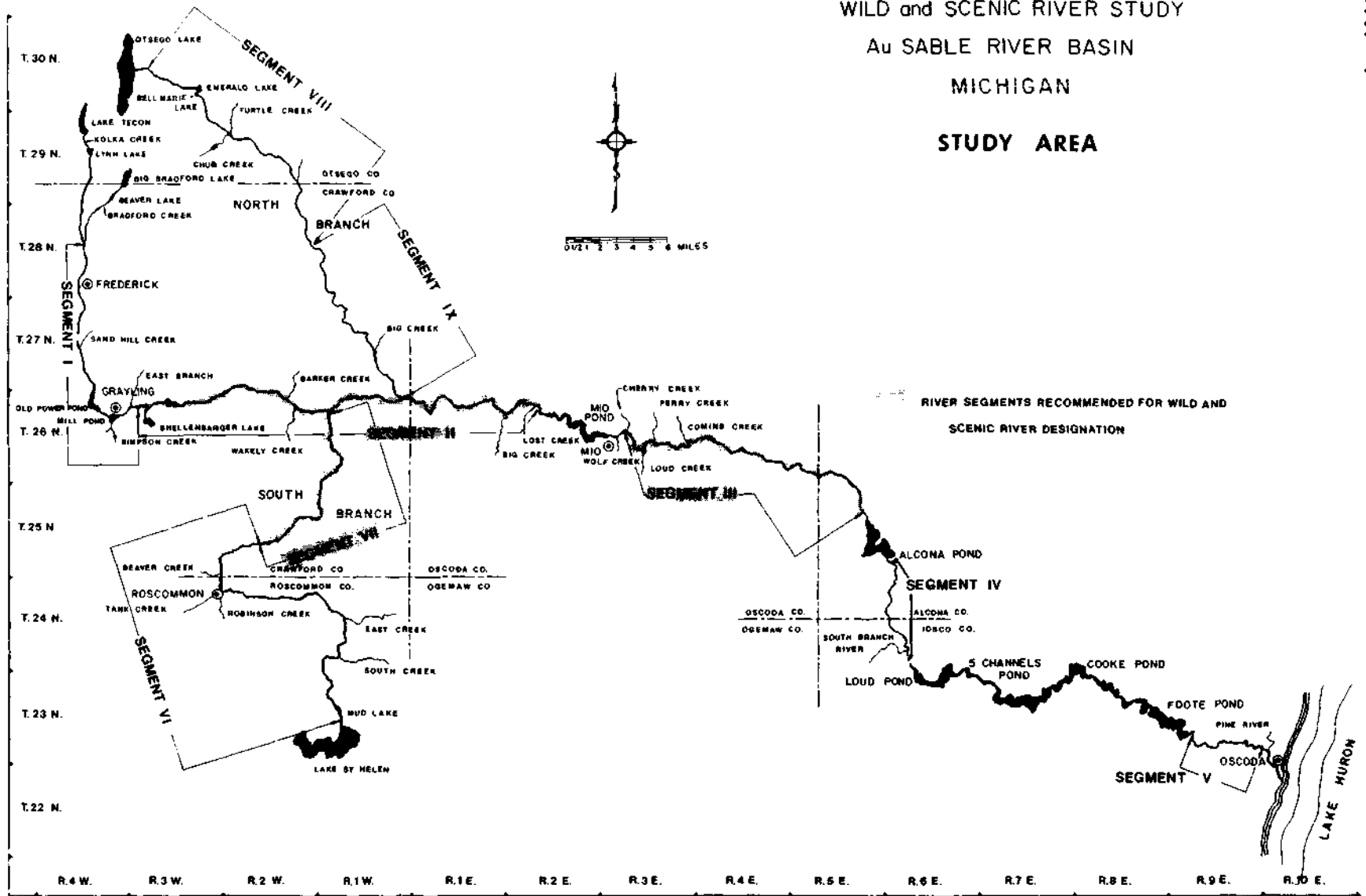
- April - Met with Rotary in Manton to explain study process and results.
- June - Met with Manistee County Planning Coordinator to discuss study proposal
- July - Meeting with MUCC committee to discuss study proposal.
- Public hearings for AuSable River Proposal:
- July 18 - Grand Rapids, Michigan
 July 19 - Farmington, Michigan
 July 20 - Grayling, Michigan
- November - Public Hearings for Manistee River Proposal:
- November 7 - Grand Rapids, Michigan
 November 8 - Farmington, Michigan
 November 9 - Wellston, Michigan
 November 10 - Kalkaska, Michigan
- December - Met with Audubon Society - Big Rapids Chapter - to discuss river study proposal.
- Met with Trout Unlimited in Gaylord to discuss study proposal.

1980

- January - Meeting with Kalkaska County Commissioners and public to discuss study proposal and impacts.
- February - Meeting with Methodist Church Adult Group (Cadillac) to explain study proposal.

APPENDIX M - MEMORANDUM OF UNDERSTANDING

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



GENERAL MEMORANDUM OF UNDERSTANDING
BETWEEN THE STATE OF MICHIGAN,
DEPARTMENT OF NATURAL RESOURCES AND THE
FOREST SERVICE, UNITED STATES
DEPARTMENT OF AGRICULTURE CONCERNING
PLAN PREPARATION AND MANAGEMENT OF THE
PERE MARQUETTE NATIONAL SCENIC RIVER AREA

The Pere Marquette River in Michigan was designated a component of the National Wild and Scenic Rivers System on November 10, 1978. The responsibility for developing and implementing the federal river management plan was given to the United States Forest Service with the intent that it be accomplished after consultation with State and local governments and the interested public.

On July 13, 1978, the Pere Marquette River, including many of its significant tributaries, was designated as a State Wild-Scenic River under authority of Michigan's Natural River Act. As a component of both Federal and State Scenic River Systems, planning for and management of the river corridor is of deep concern to both the State of Michigan and the Forest Service. Therefore, the Director of the Michigan Department of Natural Resources and the Forest Supervisor of the Huron-Manistee National Forests mutually agree to the following concerning preparation of the federal river management plan and administration of the Pere Marquette National Scenic River Area:

1. The Department of Natural Resources will participate in the following steps of the management planning process:
 - identification of issues, concerns, and demands affecting the National Scenic River Area
 - determination of data needed and the inherent capability of the natural resource base
 - development of management alternatives for each issue and concern
 - review and assessment of each alternative
 - selection of preferred alternative
2. The Michigan Department of Natural Resources and the Forest Service shall strive for general concurrence on the provisions of the Federal River Management Plan which may impact state-owned property or affect state regulated activities prior to submission of the plan to the Regional Office of the Forest Service for approval.
3. The Forest Service and Michigan Department of Natural Resources will strive for general concurrence on any amendments or changes in either the State or Federal river plan which would affect the management or authority of either agency.

2.

4. The Forest Service acknowledges that traditional areas of State jurisdiction, together with existing State-owned interests, State river bed and water surface rights together with access rights thereto, and State interests in river tributaries located within the National Scenic River Zone will be generally unaffected by the federal river zone management to the extent that such jurisdiction or rights are or may be exercised without impairing the purposes of the National Wild and Scenic Rivers Act or its administration, [Pub. L. 90-542 § 13(d); 16 U.S.C. 1284(d)]. Within the above referenced parameters, the Michigan Department of Natural Resources agrees to take an active role in the management of the National Scenic River Zone as follows:
 - a. The Department of Natural Resources will continue its legislated role in management of private and State-owned lands, fisheries, wildlife, water quality, conservation, law enforcement, submerged lands, watercraft, and other recreational uses of the water. Federal involvement in such management may be specifically authorized by separate written agreement between the two agencies.
 - b. The Department of Natural Resources is committed to manage the natural resources in conformance with the Pere Marquette Natural River Plan, as adopted by the Michigan Natural Resources Commission on July 13, 1978. It is acknowledged that such management will protect and enhance the broad range of natural, aesthetic, and recreational values of the Pere Marquette National Scenic River Area.
5. The United States Forest Service recognizes the value of Michigan's Natural River Act in protecting and enhancing the broad range of values of the Pere Marquette River system. The Forest Service further acknowledges that land and water management along and within the streams tributary to the Pere Marquette, can greatly impact upon the quality of the Pere Marquette Scenic River Area. Therefore, the Forest Service agrees that, where feasible and compatible with its general land use planning and management concepts and goals, management of Forest Service lands and programs, located along or related to the Scenic River's tributaries, shall follow as closely as possible the provisions of the State's Pere Marquette River Natural River Plan, as adopted by the Natural Resources Commission on July 13, 1978.

- 3.
6. In preparing the federal river plan, the following priority sequence will be evaluated for their effectiveness in protecting river values:
- (1) Local zoning by townships and/or counties
 - (2) State administered zoning authorized under Act 231, PA 170
 - (3) Scenic easements
 - (4) Fee title ownership
7. Preparation of the federal river plan will include a general analysis of Federal financial assistance programs available to State and local governments for their roles in management of the National Scenic River Area. Where deemed appropriate and consistent with the purposes of the National Wild and Scenic Rivers Act, the federal plan will include statements of support for such assistance.
8. The individual in charge of Michigan's Natural Rivers program in the Department of Natural Resources, will serve as the Department's contact with the USDA, Forest Service, in this planning effort. He will be responsible for soliciting input from, and coordinating responses of, the following Department divisions: Water Management, Fisheries, Wildlife, Waterways, Law Enforcement, Land Resource Programs, Forest Management, Water Quality, Environmental Enforcement, Geology, Lands and Resource Recovery. Differences of opinion between divisions will be resolved by the appropriate Deputy Directors.
9. The Recreation Staff Officer of the Huron-Manistee National Forests will serve as contact with the Michigan Department of Natural Resources.
10. Those individuals identified in items 8 and 9 shall meet annually to discuss and seek agreement on all matters which may affect management and protection of the Pere Marquette River area as either a component of Michigan's Natural River System or the National Wild and Scenic River System.

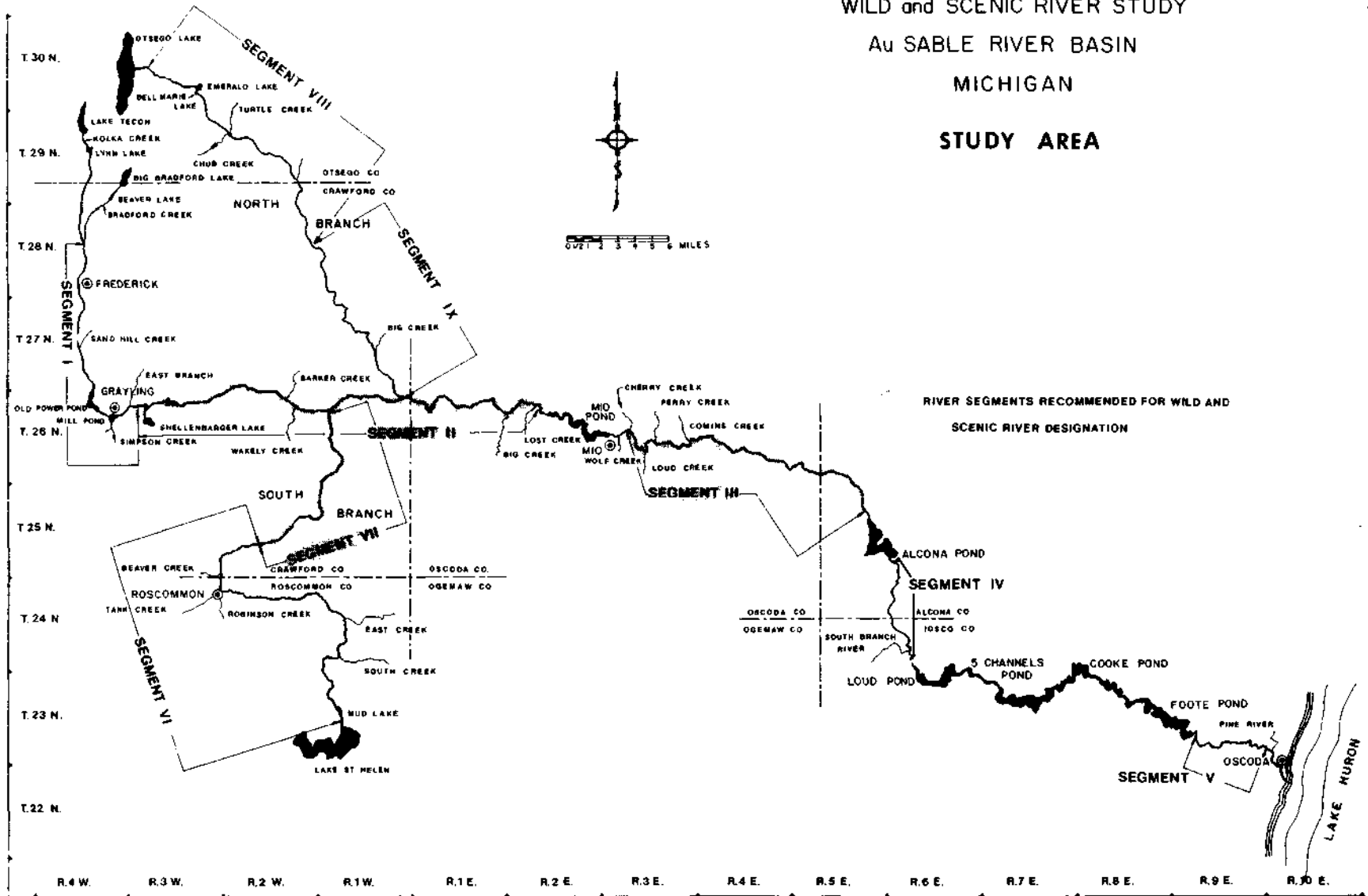
DATE: June 17, 1980

BY: Howard A. Tanner
HOWARD A. TANNER, Director
Michigan Department of
Natural Resources

Wayne K. Mann
WAYNE K. MANN
Forest Supervisor
Huron-Manistee National Forests

APPENDIX N - FINANCIAL ASSISTANCE

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



Financial and Technical Assistance Programs Available to State and Local Governments and Private Landowners

This is a summary of assistance programs available in the region to assist in managing and protecting designated Wild and Scenic Rivers. It outlines programs available primarily for water quality management and planning through section 208 of the Federal Water Pollution Control Act. Detailed information regarding these programs can be obtained through the Tri-County Regional Planning Commission, 2722 East Michigan Avenue, Lansing, Michigan 48912.

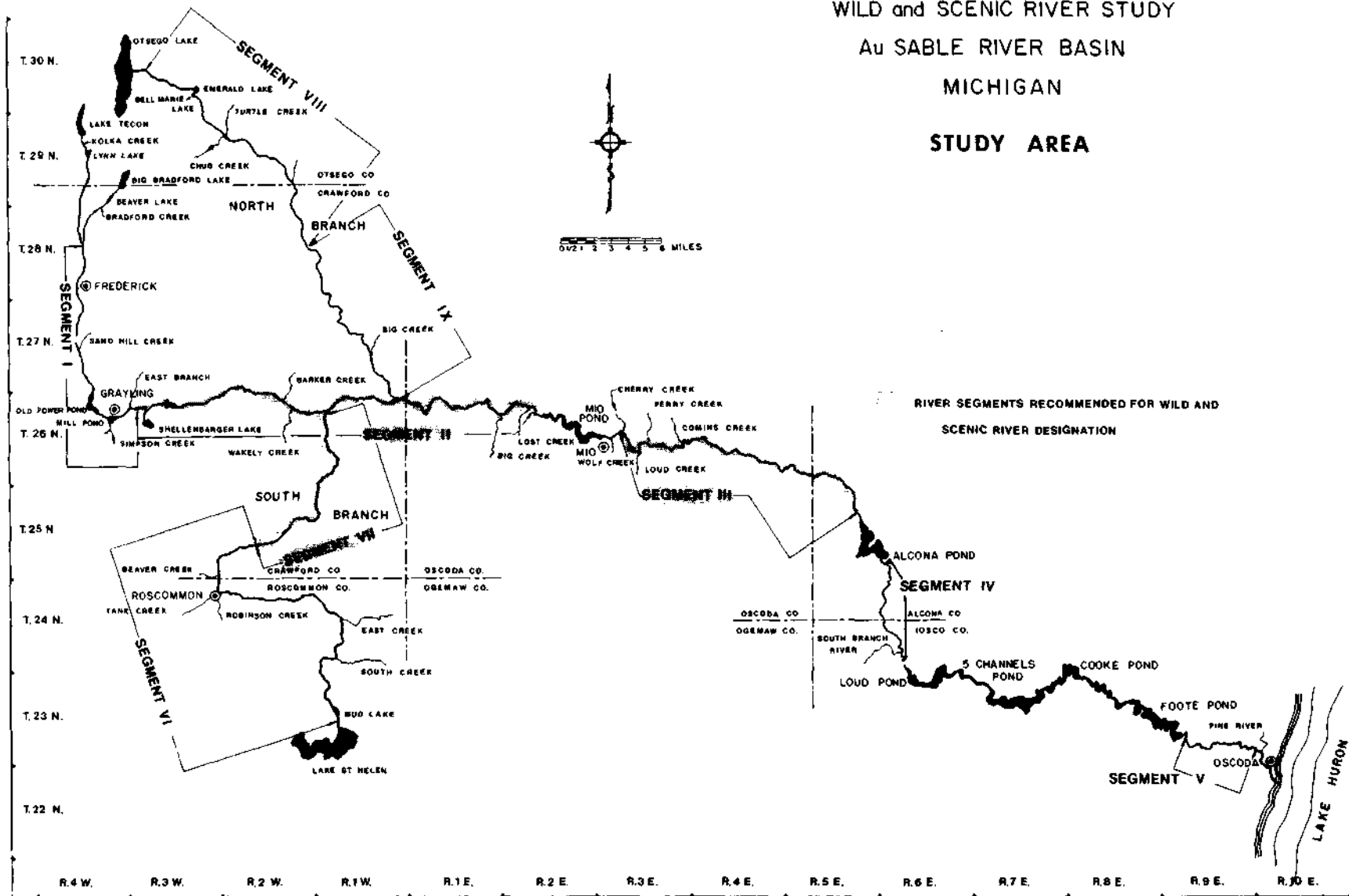
| <u>Agency/Subagency</u> | <u>Program Name</u> | <u>Federal Assistance Program Number</u> |
|---|---|--|
| U.S. ENVIRONMENTAL PROTECTION AGENCY | "201" Construction Grants for Wastewater Works | 66.418 |
| | "201" Loan Guarantees | 66.603 |
| | "208" Areawide Water Quality Management Planning | 66.426 |
| U.S. DEPARTMENT OF AGRICULTURE | | |
| AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE | Water Bank Program | 10.062 |
| | Agricultural Conservation Program | 10.063 |
| | Forestry Incentives Program | 10.064 |
| FARMERS HOME ADMINISTRATION | Irrigation, Drainage, & Other Soil & Water Conservation Loans | 10.409 |
| | Resource Conservation & Development Loans | 10.414 |
| | Soil & Water Loans | 10.416 |
| | Watershed Protection & Flood Prevention Loan | 10.419 |
| | Community Facilities Loans | 10.423 |

2.

| <u>Agency/Subagency</u> | <u>Program Name</u> | <u>Federal Assistance
Program Number</u> |
|--|--|--|
| U.S. FOREST SERVICE | Cooperative Forestry Assistance | 10.664 |
| SOIL CONSERVATION SERVICE | Resource Conservation & Development | 10.901 |
| | Soil & Water Conservation | 10.902 |
| | Watershed Protection & Flood Prevention | 10.904 |
| | Plant Materials for Conservation | 10.905 |
| | Resource Appraisal & Program Development | 10.909 |
| DEPARTMENT OF HOUSING & URBAN DEVELOPMENT | "701" Comprehensive Planning Assistance | 14.203 |
| U.S. DEPARTMENT OF THE INTERIOR | | |
| HISTORIC CONSERVATION & RECREATION SERVICE | Land & Water Conservation Fund Grants | 15.402 |
| | Outdoor Recreation-Technical Assistance | 15.402 |
| U.S. FISH & WILDLIFE SERVICE | Environmental Contaminant Evaluation | 15.607 |
| U.S. GEOLOGICAL SURVEY | Water Resources Investigations | 15.804 |
| SMALL BUSINESS ADMINISTRATION | Water Pollution Control Loans | 59.024 |
| | Small Business Pollution Control Financing Guarantee | 59.031 |
| DEPARTMENT OF JUSTICE | Cooperative Law Enforcement (Sisk Fund) | |

APPENDIX O - RESPONSE TO DRAFT REPORT

WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



STATEMENT OF CONGRESSMAN ROBERT W. DAVIS

Public Hearing on Wild and Scenic Rivers Designation for the AuSable River

Grayling, Michigan
July 20, 1979

When the U. S. Forest Service announced its RARE II* recommendations earlier this year, there was a strong public reaction against any further restrictions on the use of our Federally owned lands in Northern Michigan. Now, just a few months later, our region is faced with still another attempt at Federal land use controls, and, in many respects, it is even more disquieting than RARE II because this latest government proposal involves encroachment upon the rights of private property owners.

In 1975, Congress enacted Public Law 93-621, authorizing a study of the AuSable and several other rivers for possible inclusion in the National Wild and Scenic Rivers System. The initial study phase has now been completed, and the Forest Service has indicated that it plans to recommend that 91 miles of the AuSable be added to the National System.

I have always supported the conservation of our priceless natural resources. In the case of the AuSable, however, local units of government have already begun taking the necessary steps to protect the River's unique qualities and I therefore question the wisdom of duplicative Federal action.

For example, when the need for safeguarding the AuSable was first recognized several years ago, local units of government in Crawford County set in motion a procedure for developing controls in accordance with Federal guidelines. Since that time, local officials have worked closely with all affected jurisdictions including their regional planning body, NEMCOG, the

*Roadless Area Review and Evaluation

Michigan Department of Natural Resources, and the U. S. Forest Service staff at Cadillac. The result of their efforts has been the adoption and enforcement of strong County and Township zoning ordinances with greenbelt provisions and other necessary land management requirements. In spite of responsible actions on the part of local government, however, Federal controls are still being pushed, apparently because of misguided assumptions that all nonwilderness areas become over-developed if not afforded Federal protection.

The Forest Service contends that Wild and Scenic Rivers designation for the AuSable, with its accompanying system of acquisition and scenic easements, will provide the highest level of protection to River qualities with relatively little impact on private landowners and national economic development objectives. Frankly, I am skeptical of their assurances that Federal designation will involve little interference with private use and no foreseeable exercise of their condemnation authority. A review of past experience with the Wild and Scenic Rivers program reveals widespread alienation of property owners and the frequent need for condemnations because of unrealistic appraisals.

In addition to my general misgivings about growing Federal intervention in all aspects of our daily lives, I am specifically concerned about the steady erosion of local tax base and increased regulation of land use throughout Northern Michigan. Of the 24,360 acres recommended for Wild and Scenic Rivers designation, only 20% is currently owned by state and Federal interests. However, negotiations are under way for the purchase of some 9,000 acres of Consumers Power Company land, and if that major purchase is completed, government ownership could increase to 60%, with

a resulting loss of tax revenues and valuations in Crawford, Oscoda and Alcona Counties, and inevitable restrictions on the future use of the newly acquired lands. I therefore find it indefensible to consider subjecting the limited remaining private acreage to Federal constraints -- is it any wonder that our citizens are beginning to ask if we are ever going to decide how much is enough?

As I stated during the earlier RARE II debate, I am against any further wilderness set-asides in Northern Michigan, particularly as they apply to the control of privately owned lands. Our people are fully aware of the unique character of their environment and they, too, want to insure their ability to retain this special quality of life. However, we are already doing far more than our share to provide a legacy for future generations of Americans, and we resent being told that we should sacrifice still more of our resources for those few who periodically desire a "meaningful experience" in the great outdoors.

The legislative history of the Wild and Scenic Rivers Act clearly indicates that Congress intended to minimize land acquisition in fee or scenic easement, and that local governments should be involved in the process since local regulations can provide the same degree of protection as scenic easements. Yet the Federal administering agencies have not relied to any significant degree on state and local governments, even though a 1977 evaluation of the Wild and Scenic Rivers program by the U. S. General Accounting Office showed that Federal acquisition of land and easements as a preservation strategy was proving to be controversial, time consuming and costly.

For the reasons stated above, I oppose Wild and Scenic Rivers

designation for the AuSable, and I will work to defeat the current Forest Service proposal if it is accepted by President Carter and submitted to Congress for final legislative approval.

* * * * *

DON YOUNG
 CONGRESSMAN FOR ALL ALASKA

COMMITTEES:
 INTERIOR AND INSULAR
 AFFAIRS

MERCHANT MARINE AND
 FISHERIES

Congress of the United States
House of Representatives
 Washington, D.C. 20515
 August 31, 1979

48 / LT
 WASHINGTON OFFICE
 1210 LONGWORTH BUILDING
 TELEPHONE 202/225-5765

DISTRICT OFFICES
 115 U.S. FEDERAL BUILDING
 ANCHORAGE, ALASKA 99501
 TELEPHONE 907/279-1587

202 U.S. FEDERAL BUILDING
 FAIRBANKS, ALASKA 99701
 TELEPHONE 907/456-6949

Mr. Wayne Mann
 Forest Supervisor
 Huron Manistee National Forest
 421 South Mitchell
 Cadillac, MI 49601

Dear Mr. Mann:

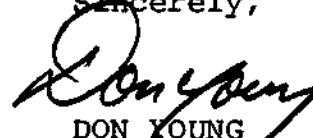
It has come to my attention that the U.S. Forest Service is currently considering the designation of portions of the Au Sable River as Wild and/or Scenic, pursuant to the Wild and Scenic Rivers Act.

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- C&M H _____
- C&M M _____

While I am not personally familiar with the Au Sable River and its surroundings, I am aware that designation under WSRA is opposed by a large number of property owners in the area and by Congressman Robert Davis, who represents the District encompassing the North Branch of the Au Sable. Further, while 72% of Crawford County is already under federal control, only 13% of the North Branch area is not in private hands. Given the opposition of local residents, who would have to pay the burden of designation through higher taxes, increased visitor use, reduction in holdings due to the need for scenic easements, etc., and the already large percentage of federal land control, I do not think that designation of the North Branch of the Au Sable should be contemplated. At this time, I would expect to vote against formal designation if it were brought before the Congress.

I would appreciate your making this letter part of the formal record dealing with the Au Sable proposal.

Sincerely,



DON YOUNG
 Congressman for all Alaska

DY: rhm

49/LT

STEVEN D. SYMMS
1ST DISTRICT, IDAHO

WASHINGTON OFFICE:
2244 RAYBURN BUILDING
WASHINGTON, D.C. 20515
202-225-6611

COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS
COMMITTEE ON AGRICULTURE

Congress of the United States

House of Representatives

Washington, D.C. 20515

September 4, 1979

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BOISE, IDAHO 83701
208-384-1776
305 FEDERAL BUILDING
COEUR D'ALENE, IDAHO 83814
208-664-8490
LEWIS-CLARK HOTEL
LEWISTON, IDAHO 83501
208-743-1492
ROOM #6, MARK IV MOTOR INN
POST OFFICE Box 8858
MOSCOW, IDAHO 83843
208-682-5560

Mr. Wayne Mann
Forest Supervisor
Huron Manistee National Forest
421 South Mitchell
Cadillac, Michigan 49601

NO RECD _____
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F. I&E _____
Hydrogst _____
Soils _____
TM _____
Sales _____
Silv _____
Surv _____
Wildf _____
ENGR _____
Rec. _____
RECRTN _____
L. Arch _____
LUP _____
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Geolgst _____
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ADS _____
B&F _____
Pers _____
Resc _____
RGRS _____
C&M H _____
C&M M _____

Dear Mr. Mann,

I have been informed by Mrs. F. C. Kuenzel that you are considering Federal Wild and Scenic River designation of the Au Sable River in Michigan.

I would like to share with you some concerns I have regarding this ill-conceived classification. There is, to date, no evidence that the classification has improved the scenic and ecologic quality of Idaho rivers which have been so designated.

I believe the primary issue to be considered here is the permanence of Congressional decisions. I have known of no Federally classified single-use land or rivers that have been reversed, although the dysfunctions of such designations certainly exist and even haunt the decisions of Congress. There still is, in my opinion, no decision of this nature that can be made statutorily by Congress. I much prefer instead, the results of multiple-use decisions that may include the equivalent of wilderness designations. Only in this way can the wilderness classification be tailored to the area of impact with maximum public input and flexibility integrated into the administrative decision.

Thank you for permitting me to comment in opposition to this classification. My opposition comes from a regard and concern for our environment and resources as well as experience with the problems of Federal lock-up of land that should be governed locally.

Yours for a free society,

Steve Symms
Member of Congress

SS:wđ:bk
cc Mrs. Kuenzel

BOB TRAXLER
8TH DISTRICT, MICHIGAN

COMMITTEE ON
APPROPRIATIONS

WASHINGTON OFFICE:
2448 RAYBURN HOUSE
OFFICE BUILDING
WASHINGTON, D.C. 20518
202/225-2806

50/LT
CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515

September 14, 1979

DISTRICT OFFICES:
SAGINAW OFFICE:
ROOM 62, NEW FEDERAL BUILDING
100 SOUTH WARREN STREET
SAGINAW, MICHIGAN 48601
517-753-6444
BAY CITY OFFICE:
ROOM 317, FEDERAL BUILDING
1000 WASHINGTON AVENUE
BAY CITY, MICHIGAN 48706
517-894-2906
LAPEER OFFICE:
210 WHITE BUILDING
350 NORTH COURT STREET
LAPEER, MICHIGAN 48446
313-664-5622

Wan

Mr. John R. McGuire, Chief
U.S. Forest Service
U.S. Department of Agriculture
3008 South Agriculture Building
Washington, D.C. 20250

'Dear Mr. McGuire:

- NO. RECD _____
- SUPV _____
- D. SUPV _____
- F. I&E _____
- Hydrigst _____
- Soils _____
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- RGRS _____
- C&M H _____
- C&M M _____

I would like to take this opportunity to advise you that I am completely opposed to proposals to include the northern portions of the Au Sable River, located in the State of Michigan, in the Wild and Scenic Rivers Program. Public opinion demands that the Forest Service halt its plans for inclusion of this River in the System, and as the Representative of several people who would be affected by such inclusion, I am forced to agree. ✓

When Congress passed the Wild and Scenic Rivers Act, it did so in order to protect our most valuable resource, our natural environment. The legislation did not propose that the only method of protecting this environment would be to have the Federal government take over every single foot of scenic area. It specifically recognized that private, State and local interests could do much to protect scenic areas. ✓

Such local and State protective efforts are employed on the Au Sable River. Landowners in the area are proud to keep up the area. Local units of government in Crawford, Oscoda and Alcona Counties have worked in accordance with Federal guidelines and with local units of the U.S. Forest Service to maintain the area. All of this has been done without the problems that accompany any Federal project.

The current proposal would have the Federal government take over much of the land in the area, and would estimate a cost of \$25 million for the operation of the proposal over a five year period. Since it is a matter of record that the Federal Government erred in its cost estimate of easements around the Rogue River in Oregon by over 550%, this figure of \$25 million for the Au Sable is, understandably, quite suspect. As a member of the House Appropriations Committee, I can tell you that I would certainly oppose such flagrant cost overruns in a project that virtually nobody wants. ✓

The key question that you must answer for me and the public that would be affected by the inclusion of the Au Sable in the Wild and Scenic system will be what do we gain by such inclusion? The area is already well maintained. No one has denied that. There is ample recreational use of the area, and any increased use would be counter to your proposal to minimize area development. The area is treated in accordance with Federal regulations, which I presume would not change if you took over. ✓

Mr. John R. McGuire
September 14, 1979
Page 2.

In substance, I can see no single advantage to a Federal take-over of the Au Sable area, and I can see only the potential cost problems of spending more than \$25 million of Federal funds for what is already being done by private citizens who are totally opposed to your proposal. ✓

The public has little faith in the value of your proposal, and is doubtful as to how responsive you will be to the comments provided in this proceeding. I am enclosing articles from the Bay City Times that point to the sentiment that the public has on this project. ✓

Should you maintain the recommendation to include the Au Sable in the Wild and Scenic System under Federal control, I want you to know in advance that I will work in the Congress to have approval for that effort denied. ✓

I ask that this letter and the enclosed news articles be made part of the public record in this proceeding, and that you keep me advised of any further action in this matter.

With warm regards, I am

Sincerely,



BOB TRAXLER
Member of Congress

BT:rs
Enclosures

cc: Mr. Wayne Mann ✓



UNITED STATES
 ENVIRONMENTAL PROTECTION AGENCY
 REGION V
 230 SOUTH DEARBORN ST
 CHICAGO, ILLINOIS 60604

SEP 12 1979

Mr. Wayne K. Mann, Forest Supervisor
 U.S. Department of Agriculture
 Forest Service
 Huron-Manistee National Forests
 421 S. Mitchell Street
 Cadillac, Michigan 49601

RE: 79-048-22

Dear Mr. Mann:

We have completed our review of the Draft Environmental Impact Statement (EIS) for the proposed designation of the Au Sable River, Michigan, as a Wild and Scenic River. Of the alternatives studied, the recommended alternative proposes Wild and Scenic River designation for river segments II, III, VII, and IX. Segment II would be classified as recreational and the remaining segments as scenic. This plan designates 91 miles of the Au Sable River for inclusion in the Wild and Scenic Rivers System as authorized under Public Law 93-621.

Projects of this nature generally have favorable environmental impacts. While this generalization applies here as well, we have two comments that should be addressed in the Final EIS. The first concerns potential adverse impacts that may result from land use changes on undesignated upstream segments, and the second concerns the management plan for the designated segments for the river.

Under the Federal Wild and Scenic River Plans A and B (alternatives 5 and 6), upstream river segments and tributaries not designated would remain unprotected from future changes in land use patterns. Left unprotected, the area could undergo changes in land use patterns which could potentially destroy important habitat and degrade water quality. The upper reaches of streams are generally highly productive and essential components of stream ecosystems. If significant changes occur in these areas, the character of the entire stream may change. This would conflict with the maintenance of Wild and Scenic River values. The Final EIS should include an assessment of the potential for changes in upstream land use patterns and a discussion of the impacts these changes may have on downstream Wild and Scenic River values.

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 C&M M

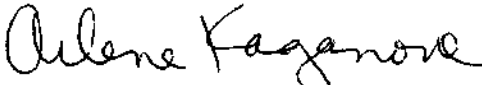
Stevenson

Chapter VI presents a recommended management plan for the preferred alternative (alternative 5); however, the management plan is only a guide for the development of a final management plan. Ideally, a final management plan should be developed concurrently with the development of the Final EIS and should include specific details concerning public facilities and the limits to be put on their use. This would help in identifying specific impacts expected from the recommended alternative.

Our comments are classified as LO-I. This means we have no objections regarding the impacts of the project, and sufficient information is provided to evaluate the proposed action and alternatives. In accordance with U.S. EPA procedures, the date and classification of our comments will be published in the Federal Register.

We appreciate the opportunity to review and comment on the Draft EIS. Please send us two copies of the Final EIS when it is filed with U.S. EPA in Washington, D.C. Should you have any questions concerning our comments, please contact Mr. Jim Hooper of the Office of Federal Activities at 312/353-2307.

Sincerely yours,



for
Barbara J. Taylor, Chief
Environmental Impact Review Staff
Office of Federal Activities



Department of Energy
Washington, D.C. 20585

October 11, 1979

472549
79 OCT 18 P12.16
feprog
ENERGY INFORMATION RECORD

Honorable Bob Bergland
Secretary of Agriculture
Washington, D.C. 20250

Dear Mr. Secretary:

This is in reply to your letter transmitting for comment a report and draft environmental impact statement on the proposed designation of the Au Sable River as a Wild and Scenic River. We have reviewed this report and offer the enclosed comments for your consideration. We understand that the Federal Energy Regulatory Commission is separately reviewing this report and may be commenting directly to you.

Sincerely,

John C. Sawhill
Deputy Secretary

Enclosure

DOE Comments on Proposed Wild and Scenic
Designation of the Au Sable River

1. Page 73 indicates a potential for six new hydroelectric projects in the study area that could provide an additional 57 Megawatts (MW) of power, essentially doubling the present hydroelectric capacity. The report does not appear to identify the specific sites involved and should do so. In addition, pages 126 and A-19 also indicate that these potential sites have been found infeasible by Consumers Power Company. The report does not indicate whether this is due to economics, engineering or other difficulties. It would be desirable to indicate whether these evaluations reflect recent large increases in the price of delivered electric energy that might influence decisions on feasibility of power opportunities that would be foreclosed by the proposed designation. If a reevaluation were to indicate feasibility, the report should discuss specific effects of installing future hydroelectric stations.

2. The value of future hydroelectric potential should also be explicitly related to the need for power in the market area supplied. For example, pages C-4 and 5 indicate various needs for timber, recreation, petroleum, etc., but do not mention projected electric power needs for both base and peak load.

3. The potential for use of either low-head run-of-river or conventional hydropower or for installation of additional turbines in existing dams should be discussed. The potential for run-of-river plants in preserving stream flow characteristics should not be overlooked.

4. Page 84 indicates a high probability that relatively shallow and/or deep (page 13) petroleum wells might be developed in or near the study area. Elsewhere it is implied (e.g., page A-20) that directional drilling would permit development of the two wells thought to be possible in the study area and which would be excluded by the proposed designation. If several wells are developed, the possibility of any long term subsidence or change in water flow to the river (particularly since the Au Sable is primarily fed by groundwater) should be discussed, particularly if it might reduce the potential for hydroelectric development.

THOMAS S. DAVIS

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, D.C. 20426

SEP 27 1979

Director _____
Dep. Dir. _____
Assoc. _____
A.A.E. _____
Valentia _____

In Reply Refer To:

OEPR-DRB
Cooperative Studies
Draft Environmental Statement
and Wild and Scenic River Study
AuSable River

SEP 25 1979

John R. McGuire, Chief
U.S. Forest Service
12th & Independence Avenue
Washington, D.C. 20013

Dear Mr. McGuire:

This is in response to your letter of May 26, 1979, requesting our review on the wild and scenic river draft study report and environmental statement for the AuSable River, Michigan, pursuant to the provisions of the Wild and Scenic Rivers Act (P.L. 90-542), amendatory legislation (P.L. 93-621), and National Environmental Policy Act of 1969.

The recommended action described in your Department's study is to include 91 miles of the AuSable River in Crawford, Oscoda, and Alcona Counties, Michigan in the National Wild and Scenic Rivers System. Approximately 70 miles of those segments lie within the Huron National Forest and 21 miles lie within the Michigan State Forest boundaries.

The Commission's principal concern with proposals affecting land and water resources is the possible effect of such proposals on bulk electric power facilities, including potential and existing hydroelectric developments, and on natural gas pipeline facilities.

Existing Hydroelectric Resources

The subject report indicates that there are six existing hydroelectric plants in the AuSable River basin, all owned by the Consumers Power Company of Jackson, Michigan, and licensed by the Federal Energy

Regulatory Commission (FERC). These existing projects are not located on segments of the AuSable River included in the Wild and Scenic Rivers Act. However, storage and release of water from the existing Mio Pond project that would reduce wildlife or esthetic values associated with streamflow downstream could be prohibited by the proposed action according to the report. The Mio Pond project is under license by the FERC as Project No. 2448.

Any change in operation of the Mio Pond project's operating level or minimum flow requirements could reduce energy generation at the project and at other power projects downstream from Mio Pond. Any such changes should be carefully considered from the standpoint of our National energy objectives and supported by detailed hydropower system and economic studies. Furthermore, such changes may require amendments to Articles 33 and 34 of the license.

Potential Hydroelectric Resources

There are six potential hydroelectric power developments and one possible addition to an existing project (Loud) in the AuSable River basin. The projects, all located on the mainstem of the AuSable River, would have a total estimated capacity of 58,700 kilowatts and an average annual energy output of about 163,900,000 kilowatt-hours.

Basic project data are listed in the following table. As shown in the last column of the table, the last four projects listed would be directly affected by the proposed wild and scenic river designation.

| <u>Project Name</u> | <u>River</u> | <u>Drainage Area (Sq miles)</u> | <u>Gross Head Ft.</u> | <u>Potential Capacity (kW)</u> | <u>Average Annual Energy (MWh)</u> | <u>River Segment Classification</u> |
|---------------------|--------------|---------------------------------|-----------------------|--------------------------------|------------------------------------|--|
| Loud | AuSable | 1,602 | 26 | 2,000 | 7,000 | excluded, addition to existing project |
| Oscoda | AuSable | 1,674 | 16 | 4,500 | 14,000 | Segment V, Not Eligible |
| Thompson | AuSable | 1,588 | 48 | 12,000 | 36,500 | Segment IV, Not Eligible |
| Upper Flat Rock | AuSable | 1,415 | 107 | 25,000 | 68,000 | Segment III, Scenic |
| State Road | AuSable | 1,189 | 23 | 4,700 | 14,400 | Segment II, Recreation |
| Baker Bridge | AuSable | 1,045 | 32 | 5,500 | 13,300 | Segment II, Recreation |
| Baton | AuSable | 642 | 48 | 5,000 | 10,700 | Segment II, Recreation |
| | | Total | | 58,700 | 163,900 | |

Our cursory review of potential hydroelectric projects indicates that based on traditional procedures, current power values, and costs, the single-purpose hydroelectric power projects do not appear economically feasible. We are not aware of any hydroelectric projects in the basin under active consideration.

Natural Gas Considerations

Natural gas pipeline maps indicate that an 8-inch pipeline owned by the Michigan Consolidated Gas Company, a FERC jurisdictional company, crosses the AuSable River about 1 mile east of Grayling, Michigan.

This is in Segment II of the study area, which would be classified as a Recreational River Area. The Michigan Consolidated Gas Company also owns a 6-inch and a 12-inch pipeline crossing the AuSable River in the eastern Segment V, which the study determined not eligible for inclusion in the National Wild and Scenic Rivers System.

Four segments of approximately one-half mile wide river corridor, comprising about 24,360 acres, were recommended in the study for inclusion in the National Wild and Scenic Rivers System. These segments lie within a broad structural basin, parts of which are undergoing exploration, development, and petroleum producing activities, according to the Forest Service study. Because the designated boundaries are narrow, they would permit oil and gas development by directional drilling if further exploration should define productive horizons underneath the AuSable River.

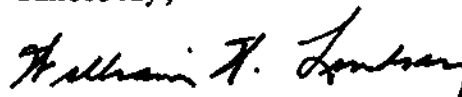
General Comments

The first sentence on page 73 of the subject report states that hydroelectric power production represents a "substantial use" of water. The term "use" should be clarified to reflect that hydroelectric power is a non-consumptive and instream use of water that is still available downstream for other purposes such as municipal, industrial, environmental, and recreational uses.

Page 137 of the report states that the proposed plan is expected to "have no significant impact on fossil-fuel energy sources." There is a potential indirect effect, however, in that the potential annual energy generation precluded by the proposed action is approximately equivalent to that power which could be generated by using about 180,000 barrels of oil per year. The potential for flow curtailment of generation at the existing Mio Pond project during peaking periods would add to this impact.

Based on consideration of the draft report, draft environmental statement, and our review, we conclude that the proposed wild and scenic river designations of 91 miles of the AuSable River would conflict with the possible future development of up to 60,000 kilowatts of hydroelectric capacity and could conflict with the operation of the existing Mio Pond project under license of this Commission. The possible power benefits foregone should be carefully considered in deciding whether to include this reach of the river in the National Wild and Scenic Rivers System.

Sincerely,



William W. Lindsay, Director
Office of Electric Power Regulation



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
REGIONAL OFFICE
300 SOUTH WACKER DRIVE, CHICAGO, ILLINOIS 60606

REGION V

ADVISORY BOARD & REC.

Cancelled
SEP 21 1979

IN REPLY REFER TO:

Honorable Bob Bergland
Secretary of Department of Agriculture
Office of the Secretary
Washington, D.C. 20250

79 SEP 27 P 2. 58
for info

Dear Mr. Secretary:

The Wild and Scenic River Draft Study Report and Environmental Statement submitted under cover of your letter addressed to Patricia Roberts Harris, then Secretary of Department of Housing and Urban Development, dated June 25, 1979 has been referred to me for reply.

We have reviewed the proposal to include certain segments of the Au Sable River, Michigan, in the National Wild and Scenic River System, more specifically described as Plan A, and endorse its adoption.

In development of the management plan we ask that opportunity for the use and enjoyment of the river by elderly, handicapped and low income segments of our society be considered in the program.

We appreciate the opportunity to comment on this proposal.

[Handwritten signature]
Ron Gatton
Regional Administrator

no response necessary fit.



United States Department of the Interior

OFFICE OF THE SECRETARY
NORTH CENTRAL REGION
175 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

ER 79/622

September 18, 1979

Mr. R. Max Peterson, Chief
U. S. Forest Service
Department of Agriculture
P. O. Box 2417
Washington, D. C. 20013

Dear Mr. Peterson:

This is in response to the request for the Department of the Interior's comments on the draft environmental statement and study report for Au Sable Wild and Scenic River, Oscoda, Alcona, and Crawford Counties, Michigan.

GENERAL COMMENTS

The river and its main tributaries appear to have been segmented appropriately for study purposes. The document supports the finding of eligibility for segments II, III, VII, and IX, and we have no problem with the proposed classification. There is, however, some confusion in the formulation of alternatives. Alternatives 2 and 3 are not valid alternatives to designation of the river under P.L. 90-542, the Wild and Scenic Rivers Act. Alternative plans should address only actions that can be taken under the authority of P.L. 90-542; designation of a river or segments thereof. The NED proposals, Alternative 2 (increased recreation development) and Alternative 3 (increased timber and mineral development), are not valid alternatives under the authority of the Act.

Alternatives 2 and 3 are valid NO ACTION alternative situations under the guidelines for Principles and Standards pursuant to Section 103 of the Water Resources Planning Act of 1965, P.L. 89-80. In complying with the requirements of the Principles and Standards in river reports, a likely future is selected for display for comparison purposes. Usually, it is the likely future which maximizes attainment of the NED objective and, most often, the no action situation and the likely future with the greatest short-term monetary benefit is used. The most likely NED proposal should be selected for Principles and Standards analysis. Alternatives 2 and 3 should not be considered as alternatives to designation, but the one selected as the most likely future should remain in the Principles and Standards analysis.

Also, alternative 6 is not a viable alternative and should be deleted from the report. Although the report finds that Segments III, VI, and IX qualify for a scenic classification, alternative 6 would classify these segments as recreational. Rivers are to be classified in accordance with criteria established in the Wild and Scenic Rivers Act and laid down in the Guidelines for Evaluating Wild, Scenic and Recreational Rivers. Classification is determined by existing levels of development, not past condition or future potential. Also, we do not agree that construction/recreation costs and trends necessarily have to be greater for a recreation river than a scenic river. Administering agencies are not obligated to provide more facilities and allow more people on a recreational river than a scenic river. Segments III, VI, and IX qualify as scenic segments and should be recommended for designation as such.

In discussing recreation, the term "activity day" is often used. "Activity Day" and "Recreation Visitor Day" are defined in the Glossary. We suggest these references be replaced by "recreation day" as defined in Supplement 1 to Senate Document 97 and used by the Water Resources Council in Principles and Standards analysis. A recreation day is a standard unit of use consisting of a visit by one individual to a recreation development or area for recreation purposes during any reasonable portion or all of a 24-hour period.

There are a number of references to county land use regulations in the report. These are described very sketchily and there is no assessment of their effectiveness. A more in-depth discussion of existing regulations and effects should be provided.

SPECIFIC COMMENTS

There are two concerns regarding the section on Threatened and Endangered Species: (1) The last sentence of the second paragraph on page 12 which begins, "Some of the jack pine stands on suitable sites . . ." should be revised. These sites are only currently being considered and have not been selected for management as "critical habitat." Until selection occurs, the term "essential habitat" should be used. (2) The final statement should be expanded to include a discussion of Endangered or Threatened plant species in the study area. If necessary, Dr. Sylvia M. Taylor, Coordinator, Endangered Species Program, Department of Natural Resources, Steven T. Mason Building, Box 30028, Lansing, Michigan 48909, should be consulted regarding this subject.

Table III on page 81 combines ownership figures for segments I and II, VI and VII, and VIII and IX. These figures are broken down in Appendix G, however, and it would be appropriate to refer the reviewer there by use of a footnote, or use the chart from Appendix G in Table III.

Since segments I, VI, and VIII are not recommended for designation, the reader must refer to the breakdown in Appendix G to determine the ownership for three of the four segments recommended for designation. Incidentally, there is a discrepancy in State and total ownership for segments I and II between Table III and Appendix G.

The oil and gas potentials within the study area are recognized on page 84. These potentials should be fully considered in delineating the final river corridor boundaries and management plans for those segments to be designated as part of the National Wild and Scenic Rivers System. Areas of Federal lands considered prospectively valuable for the occurrence of oil and gas are shown on Enclosure 2. Directional drilling for extracting oil and gas is to be permitted from outside the corridor according to item 7, Minerals, on page 143. In defining the final corridor boundary, it should be borne in mind that 1/4 mile is the approximate maximum horizontal distance that anticipated well depths of 5000 to 8000 feet can be offset in this area. Mitigation measures could be developed to alleviate impacts on the river environs and its users by extraction operations located that distance from the river.

Under Alternative 1 on page 122 it states, "Continuing land acquisition by State and Federal governments would continue . . . and major portions of the river segments would eventually be in public ownership." The past rate of acquisition should be indicated to help establish the time frame for "eventual" public ownership. Unless an extremely active acquisition program is pursued, it is doubtful that major portions of the river segments would be publicly owned. This is supported by the scenario presented in the very next paragraph and the third paragraph on page 121.

The report asserts, on page 122, that, "Recreational use, particularly canoeing, on the remaining river segments has not developed to its full potential." To this point in the report there has been no quantification of the river's recreation potential. We suggest that a discussion of that potential be included in Chapter III M.

The degree of impact on ground-water resources, particularly on the quality of ground water, should be included in the comparison of effects of alternatives (Table VI, page 137).

We suggest the following revisions be made to Item No. 3, top of page 147, under Land Use Control and Protection. The third sentence of the first paragraph should be deleted and the following substituted: "Under the Wild and Scenic Rivers Act, the Federal Government may acquire in fee title by those methods a total acreage averaging up to 100 acres per mile on both sides of the river. However, Federal fee title acquisition by condemnation is prohibited if 50 percent or more of the entire acreage within a federally administered wild and scenic river area is publicly

owned." Similarly, the fourth sentence of the second paragraph should be revised to read: "The Wild and Scenic Rivers Act would permit fee title acquisition of approximately 9,100 acres (100 acres per mile on both sides of the river)."

Specific suggested word changes and typographical corrections are shown in Enclosure 1.

SUMMARY COMMENTS

We support the preferred alternative--Alternative 5 (Wild and Scenic River Plan A).

Sincerely,

A handwritten signature in black ink that reads "David L. Jervis". The signature is written in a cursive style with a large, prominent initial "D".

David L. Jervis
Regional Environmental Officer

Enclosures

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL ELECTRIFICATION ADMINISTRATION
WASHINGTON, D.C. 20250

JUL 6 1979

SUBJECT: Draft Environmental Impact Statement
Wild and Scenic Rivers, Au Sable
River Michigan

MT/LT

TO: Thomas L. Burgum
Assistant to the Administrator

Our staff has reviewed the referenced impact statement and offers the following comments:

1. The cumulative impact of this scenic designation associated with other existing, as well as proposed designations should be addressed. On page 6, the combination of the Pere Marquette Scenic River (already designated), the Au Sable Study River (present proposal) and the Manistee Study River (under study) will effectively have produced a channel in which intrastate corridors (transmission utility, etc.) must be aligned. If other land use parameters prevent these corridor locations, then the impact of the proposal could be to effectively isolate the northern and southern parts of the state electrically as well as for other utilities.

2. What impact will the proposal have on existing utility distribution systems already in existence within the project area?

3. On page 73 it is mentioned that there are six potential hydroelectric projects with total installed capacity of 56,700 kilowatts. Please address what effect on future development of these projects will the proposed scenic river designation have.

4. Please address more specifically the restrictions on the placement of the transmission lines on existing routes and Forest Service's standards for underground lines (page 143-145). The restriction of 35,000 volts for underground facilities should be better addressed. REA has adopted specifications for underground power cables up to 25 kV. However, due to the disadvantages of difficulty in repair, environmental damage and exorbitant cost, the use of underground cables is recommended as a last resort. Please address the difference in requiring a maximum of 35 kV versus 25 kV for underground facilities.

Should you have any questions, please contact this office.



JOSEPH R. BINDER
Director
Environmental and Energy
Requirements Division



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY, CORN. & REC.
WASHINGTON, D.C. 20310

LMP 06-437999
FS
faprog

79 SEP 4 P 5: 28
28 AUG 1979

178/LT

Honorable Bob Bergland
Secretary of Agriculture
Washington, D. C. 20250

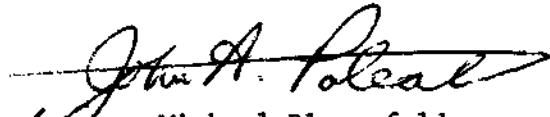
Dear Mr. Secretary:

This is in response to your recent letter requesting views of the Department of the Army on your proposed report and draft EIS on the Au Sable River, Michigan, Wild and Scenic Rivers Study.

Inclusion of this stream in the National Wild and Scenic Rivers System would not adversely impact any authorized projects or water resources investigation. However, the U. S. Army Corps of Engineers regulates development and discharges in waters of the United States under provisions of the Rivers and Harbors Act of 1899 and the Clean Water Act. Any development activities in or adjacent to the stream could require a permit from the Corps.

The opportunity to review this report is appreciated and I hope these comments will be of assistance to you in perfecting your report.

Sincerely,

for 
Michael Blumenfeld
Assistant Secretary of the Army
(Civil Works)

Enclosure

STATE OF MICHIGAN



WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING, BOX 30028, LANSING, MICHIGAN 48909
HOWARD A. TANNER, Director

LMP

NATURAL RESOURCES COMMISSION

- CARL T. JOHNSON
- E. M. LAITALA
- DEAN PRIDGEON
- HILARY F. SNELL
- HARRY H. WHITELEY
- JOAN L. WOLFE
- CHARLES G. YOUNGLOVE

September 25, 1979

06-457001
 FS
 EXEC. LIAISON & REC
Janney
 79 SEP 28 P 3: 14

Mr. Robert Bergland, Secretary
 United States Department of Agriculture
 Office of the Secretary
 Washington, D.C. 20250

Dear Mr. Secretary:

Governor Milliken has asked the Michigan Department of Natural Resources to review the AuSable River Wild and Scenic River Draft Study and Environmental Statement, and to convey to you the Department's position on this proposal.

First, let me state that Michigan is extremely proud to have a river with the outstanding natural, aesthetic and recreational qualities, and the national recognition, of the AuSable River. The AuSable has long been high on the list of the state's most important natural resources, and truly deserves the highest level of protection which can be afforded to its many values.

The Department of Natural Resources has reviewed your agency's proposal in light of the impending purchase of Consumers Power Company lands along the river, both by the United States Forest Service and this Department, and this state's own Natural Rivers Program as authorized by the Michigan Legislature through Act No. 231 of the Public Acts of 1970.

Initiated in 1970, Michigan's Natural Rivers Program has objectives very similar to the Federal Wild and Scenic Rivers Program. Since that time eight of the state's outstanding streams have been designated under this program and are now being protected via a combination of state and local authorities.

A major provision of the state law is the protection of the natural and aesthetic qualities of a stream corridor through the use of zoning and various departmental policies and programs to control land uses and developments on adjacent lands. The state is authorized to adopt administrative rules where local zoning is not adopted, is not adequate to protect the resource, or is improperly enforced. We feel that these protective



September 25, 1979
Mr. Robert Bergland, Secretary
Page 2

authorities on designated natural rivers are strong, and are doing the job of protecting these outstanding streams. Further, the state program allows for the designation and protection of tributaries, which are not included under the existing federal program. The Department feels strongly that these areas are the building blocks to a river's mainstream character and deserve such special management.

At the same time, the Department notes the positive opportunities which federal designation of the recommended 91 miles of river present to the state. Limited acquisition of scenic easements and fee title lands could serve to supplement strong state-local protection of the resource, and federal monies, if made available for recreational development, administration and enforcement, could further natural river objectives.

The Department of Natural Resources has therefore concluded that concurrent designation of the 91 miles of AuSable River on the mainstream, the South Branch and North Branch, under both state and federal laws could provide the greatest level of protection available to this outstanding resource. State designation of other portions of the AuSable River system could help to ensure that a heritage of immense natural splendor will be protected for all citizens.

As such, I am directing Department staff to begin immediately the preparation of a state natural river plan for the AuSable River system, including the 91 miles of stream recommended for federal Wild and Scenic River designation.

The Department of Natural Resources can therefore support federal designation of the 91 miles of stream presently recommended for inclusion in the federal program, with specific qualifications. These qualifications are designed to ensure that state and local control is not abridged, while maximizing protection to this unique natural resource. Support for federal designation of any portion of the AuSable River is thus conditioned on the Final Study Report containing the following:

- A statement that protection against recreational overuse of designated segments, and the objective of managing for a quality recreational experience, will be a priority item in federal management.
- A proposed cooperative agreement between the United States Forest Service and the Michigan Department of Natural Resources which outlines the following:

The state's program must be given the first opportunity to protect the river system;

Federal acquisition must not be employed except if, a) it can be proven that the state program is not meeting scenic river

September 25, 1979
Mr. Robert Bergland, Secretary
Page 3

objectives, or b) lands or easements are acquired only when offered voluntarily, or proven necessary to provide facilities to reduce user conflicts or to protect critical environmental areas as identified in the state's management plan.

An agreement that the United States Forest Service will manage their lands adjacent to state designated tributaries commensurate with the state's natural river plan.

An analysis of federal financial assistance available to state and local governments for their roles in management of the scenic river area, and where appropriate include a statement of support for such assistance.

Thank you for the opportunity to review this proposal. I am certain that this Department and the United States Forest Service can continue our close cooperation in the future.

Sincerely,

A handwritten signature in black ink, appearing to read "Howard A. Tanner". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Howard A. Tanner
Director

cc: Governor's Office
Natural Resources Commissioners
Dr. Tody

STATE OF MICHIGAN



WILLIAM G. MILLIKEN, GOVERNOR
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION BUILDING, 425 WEST OTTAWA PHONE 517-373-2090
POST OFFICE BOX 30050, LANSING, MICHIGAN 48909

JOHN P. WOODFORD, DIRECTOR

July 25, 1979

Mr. Wayne K. Mann, Forest Supervisor
Huron-Manistee National Forest
421 S. Mitchell Street
Cadillac, Michigan 49601

Dear Mr. Mann:

The Environmental and Community Factors Division has reviewed the Draft Study Report and Environmental Statement for the proposed inclusion of a portion of the AuSable River in the National Wild and Scenic Rivers System, and would like to offer the following comments:

- NO. RECD _____
- ~~COPIES~~ _____
- D. SUPV _____
- F. I&E _____
- Hydrigst _____
- Soils _____
- TM _____
- Sales _____
- Siv _____
- Sury _____
- Wild _____
- ENGR _____
- Proj Eng _____
- Fleet _____
- RECR TN _____
- L. Arch _____
- LUP _____
- Rvr Plnr *CPG*
- LANDS _____
- Asst #1 _____
- Asst #2 _____
- Asst #3 _____
- Geolgst _____
- AO _____
- ADS _____
- B&F _____
- Pers _____
- Resc _____
- RGRS _____
- C&M H _____
- C&M M _____

1. The recommendation to designate Segment II for "Recreation" and Segments III, VII and IX as "Scenic" is, in our opinion, consistent with the criteria established in the Wildlife and Scenic Rivers Act. However, we would suggest that the portion of Segment VI from below the M-18 bridge in Roscommon to Chase Bridge be considered for a special (less than 25-mile length) "Recreation" designation.
2. Our review of this proposal shows that highways I-75 and M-72 currently cross Segments II and VII, which are recommended to be designated "Recreation" and "Scenic", respectively. The Draft Environmental Impact Statement, under Impacts on Transportation (page A-17), states that "within the segments classified as 'scenic', new roads and bridges would not normally be permitted, except when needed for public recreation use." We believe that the Final Environmental Impact Statement should clearly state that the recommended "Scenic" designation for Segment VII would not affect any necessary replacement or expansion of the existing M-72 bridge over the South Branch AuSable River.

Sincerely,

G. Robert Adams
G. Robert Adams, Administrator
Environmental and Community
Factors Division



An Equal Opportunity Employer



WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF MILITARY AFFAIRS

2500 S. WASHINGTON AVE., LANSING, MI 48913

MAJOR GENERAL JOHN A. JOHNSTON, Director

12 July 1979

Mr. Wayne K. Mann
Forest Supervisor
Huron-Manistee National Forests
421 South Mitchell Street
Cadillac, MI 49601

Dear Mr. Mann:

Thank you for permitting the Department to review "A Proposal: Ausable River Wild and Scenic River Draft Study Report and Environmental Statement."

The four proposed segments of the AuSable River are all off the Camp Grayling Military Reservation. A possible corridor boundary encroachment is noted near the Lovells area where the proposed river corridor takes in military land. See map at D-6. We do not see this as significant as we do not actively train military forces that near populated areas.

Thank you again for keeping us apprised of the situation.

Most sincerely,

[Signature]
MICHAEL H. JOHNSON
CPT, INF, MI ARNG
Administrative Assistant
to the Adjutant General

NO. RECD
[Administrative routing stamp with various departmental checkboxes and lines]

Frederick Schaibly, Schaibly.

39/137

FREDERICK SCHAIBLY: I'm Frederick Schaibly, I am representing--I'm--Box 3577, Route 3, Grayling, Michigan. I am here representing the Lovell's Township Board, which has passed a resolution opposing the Wild and Scenic Rivers Act.

And seeing that the County did not have representation

here this evening I think I'll take it upon myself to tell these people that the County also passed a resolution opposing this matter.

This evening I've heard local government, local planning and local zoning and it all comes back to local government. If the local government has put this River in the shape it is today, designating it Wild and Scenic River, I think the local government can take the job and finish it from now on out.

Thank you.

HEARING OFFICER ERL: Thank you very much, Mr. Schaibly

Big Creek Township

68/LT

Clerk
Kathleen Mitchell

P.O. Box 68
Luzerne, Michigan 48636
August 2, 1979

Mr. Wayne K. Mann
Forest Supervisor
Cadillac, Mich.

Dear Mr. Mann;

At our last Township Board meeting, the Forest Service plan to include the AuSable River into the Wild & Scenic River system was discussed, and the Big Creek Township Board would like to strongly voice our disapproval of this idea. We have yet to see any government agency manage property as well as the private property owner can, and would like to see the AuSable River frontage left in the hands of those who now own it. The property owners have brought the AuSable back from the devastated state it was left in by the lumbermen, and have proved they are very capable of preserving the river. We find it hard to believe that any hiker or backpacker could possibly share the same feeling of protectiveness felt by the landowner as a deer passes over their property, or an eagle flies overhead. To open this property up to continual public access would only invite molestation of our wildlife.

As for the Forest Service's ideas of buying up as much of the property as possible along the river, we have only to say that to do so would more than likely bankrupt any township which borders the river. To remove this property from the tax rolls would drive the tax rate up so high for those remaining in these sparsely populated townships that very few could afford to own property. Or is this possibly what was in mind when the plan was drawn up in the first place?

The Big Creek Township Board, Oscoda County, favors the "NO ACTION" plan!

- NO. RECD _____
- ~~Supv~~ _____
- D. SUPV _____
- F. I&E _____
- Hydriget _____
- Soils _____
- TM _____
- Sales _____
- Stiv _____
- Surv _____
- Wildf _____
- ENGR _____
- Proj Eng _____
- Fleet _____
- RECORN _____
- L. Arch _____
- LUP _____
- Rvr Pthr _____
- LANDS _____
- Asst #1 _____
- Asst #2 _____
- Asst #3 _____
- Geolgst _____
- AO _____
- ADS _____
- B&F _____
- Pers _____
- Resc _____
- RGRS _____
- C&M H _____
- C&M inl _____

Sincerely,

Kathi Mitchell
Big Creek Township Clerk

GRAYLING TOWNSHIP

PHONE 348-4361

P. O. BOX 521

GRAYLING, MICHIGAN 49738

July 20, 1979

Presentation on the AuSable River Wild and Scenic River Draft Study Report and Environmental Statement.

Mr. Chairman:

My name is Bernard J. Fowler. I am Supervisor of Grayling Township Crawford County, Michigan. I am now serving my 19th year in that office. I am here tonight representing the Township Board. On July 10, 1979, the Township Board took action placing it on record as opposed to the AuSable River Wild and Scenic River Draft Study Report. This action was taken with considerable knowledge of the contents of the report. As indicated in Appendix L of the report, the Township of Grayling did take the opportunity on a number of occasions to meet with Mr. Carl Gebhardt during the development of this report. I can best relate to you the reasons for Grayling Township's opposition to the report by telling you a few things about the Township, its history, its accomplishments and its goals.

Grayling Township is the largest Township in land area in the lower peninsula. It is a zoned community. We view this proposal by the U.S. Department of Agriculture, acting on behalf of the Federal Government, as a move to take away the right of people at the local level to control their own areas in the way they determine. It is one more step in moving government farther away from the people. True, the proposal does indicate there would be close cooperation with local government and local zoning will be emphasized for protecting river values. What the report fails to say is that the zoning regulations would be under a local ordinance but as dictated by the Federal Government.

Once again we are hearing that all too familiar statement that the Federal Government is going to set up a super agency, whose insight into problems far surpasses that of the local people who live where the problem is. The implication is if one listens to these higher levels of government, we would realize the answers to our problems are there and waiting if only we agree to transfer this authority to them.

The official records of Grayling Township show its officials and people have been aware of the problems involving our natural resources. The records will show that in 1963 positive action was taken to become involved in "Planning". In June of 1966 hearings were conducted by Grayling Township for adoption of a Zoning Ordinance. The Ordinance became effective in August of 1966. In August of 1967 action was taken for the formation of the AuSable River Watershed Study Council. This council was charged with the responsibility of studying the problems of the river and recommending possible solutions. One of the first recommendations was a proposal for "Green Belt Zoning" to safeguard the shorelines of our rivers and lakes and control the amount of development within such zones. Green Belt Zoning became a part of the Grayling Township Ordinance in August of 1968.

In July of 1968 Grayling Township petitioned the Department of Natural Resources for Special Local Watercraft Controls on portions of the AuSable. These controls were to prohibit the use of power driven craft. After public hearing, which in our opinion indicated favorable support of such regulations, the request was denied. A year or so later a similar request was made by the Crawford County Board of Commissioners and again the request was denied. It is interesting to note that on page 140 of the proposal just such a recommendation is being made; something the Township wanted to do years ago but was denied the opportunity.

July 20, 1979

In 1969 the Township financed a study in cooperation with Michigan State University to determine the extent of contamination of the AuSable by sewage disposal systems. In 1971 action was taken by local government to obtain funding for a study which was conducted by the North East Michigan Economic Development District.

Items such as these certainly are proof that Grayling Township, through its actions, has shown a great concern for the future of its natural resources.

We do not believe the proposal offers any more guarantee in resolving problems on the AuSable than can be accomplished by local control. The proposed recreation designation of the AuSable in Grayling Township very likely will increase the pressure for use of the river.

As a property appraiser it is my opinion that the result of this report being approved with its scenic easements, condemnation, etc., will greatly decrease property values. Such a decrease will certainly result in a lessening of the ability of local government to finance programs needed to resolve its problems.

At a time when our entire country seems to be in the midst of serious problems, in part due to inflation, the proposed expenditures to carry out this proposal are certainly far out of line.

We believe that zoning and land use can best be handled at the local level of government. I like to quote former State of Michigan Treasurer, D. Hale Brake, who often said, "Government Services should be provided by the smallest unity of government that can do it reasonably well. You will note I did not say best. If we must give up some efficiency in order to keep the government close to the people, then we should do so." I believe that quote

carries a very important message. We believe that Grayling Township has taken that message to heart and has accepted the responsibility of preservation of the AuSable River. We will agree that perhaps further regulations should be enacted to strengthen our present zoning ordinances but we are confident of the ability of local government to effectively carry out the task.

In closing I am greatly concerned about our government in general, for on this issue I have read into the attitude of the people the feeling that once again we are about to have something shoved down our throats whether we like it or not. I hope I am proven wrong.

A handwritten signature in cursive script, appearing to read "R. J. Fowler". The signature is written in black ink on a white background.

170(Ex.9)/GzHT



GRAYLING *Regional Chamber of Commerce*

"Heart of the North"

• P. O. BOX 406 • GRAYLING CITY BUILDING • GRAYLING, MICHIGAN 49738
PHONE (517) 348-3336

RESOLUTION IN OPPOSITION TO THE PROPOSAL OF THE
FOREST SERVICE U. S. DEPARTMENT OF AGRICULTURE
TO CLASSIFY AREAS OF THE AUSABLE RIVER AS
RECREATION AND WILD AND SCENIC

RESOLVED, that at a regular meeting of the Board of Directors of the Grayling Regional Chamber of Commerce of Grayling, Michigan held on the 12th day of July, 1979, that the recommendations made by the Forest Service U. S. Department of Agriculture to classify certain areas of the AuSable River study area "Wild and Scenic" was unanimously by a vote on a motion duly made and supported, opposed; the same not being in the best interest of the property owners and the community and the area served by said Chamber.

BILL STOUGH

2/11/62

WEST MICHIGAN ENVIRONMENTAL

ACTION COUNCIL

My name is Bill Stough. That's spelled
S-t-o-u-g-h. My address is 1776 Warwick, W-a-r-w-i-c-k,
Southeast, Grand Rapids, Michigan -- East Grand Rapids,
Michigan.

I'm a member of the Board of Directors
of the West Michigan Environmental Action Council in
Grand Rapids, and I'm speaking on behalf of the West

Michigan Environmental Action Council Public Lands Committee, of which I am Chairman.

The Public Lands Committee of the West Michigan Environmental Action Council supports alternative five of the Federal Wild and Scenic Plan A as proposed.

The Wild and Scenic draft study report states that the physiography of the AuSable Corridor offers many unique qualities.

The AuSable's outstanding scenery is presented by constantly changing topography.

Each land form offers an attractive and varying display of geologic and vegetative conditions.

In fact, vegetation is the basis to the AuSable's outstanding scenic values.

The great diversity of trees, shrubs, ferns, flowering plants, lichens, mosses and mushrooms found in the Water Shed offer distinctive diversity not typical to the surrounding areas.

The AuSable offers the nation twenty-six species of fish, forty-one species of reptiles and amphibians, fifty species of mammals and over a hundred species of birds and water fowl.

The Water Shed is also the home of three rare and four threatened species of life.

The highly stable water flow and the very high quality water is the single most significant trait of the AuSable River.

Dissolved oxygen readings for the proposed segments, which is an important indicator of quality of the water, for the proposed segments, range from six to thirteen milligrams per liter.

That more than exceeds the minimum standards.

Nitrogen and phosphorus are well within guidelines, even though non-point sources of contamination occur.

pH levels, temperature and fecal coliform from readings (phonetic) all attest to the extreme high quality water in the AuSable Corridor.

These qualities are all present today in the AuSable Water Shed.

And if there were no threat to these values we hold in such high esteem, there would be most likely no incentive to designate the AuSable into the National Wild and Scenic River System.

However, as stated in the draft study report, degradation to the purity, diversity and productivity of the Water Shed is already occurring.

In segment two, existing development at

Frederick and Power Pond (phonetic) outside Grayling present high levels of nitrate, nitrogen, posing a threat to existing water quality.

Below Grayling, the increased number of cottages and year round development constitutes a significant threat to habitat quality because of nutrient seepage stimulates aquatic plant growth.

In segment three, contributions of nutrient matter to the river from the Village of Mio is occurring due to contaminated ground water aquifers.

These result from residential septic systems which enter the river through natural ground water seepage.

It is also known that protection from local government is inadequate.

Greenbelt ordinances have offered a very limited degree of protection from over development.

Almost half the counties in the River basin have, to this date, failed to incorporate greenbelt zoning into county regulations.

Public opinion surveys have shown that area residents believe certain portions of the river are already over crowded.

And the conflicts concerning river usage will continue to intensify in the future.

The proposed alternative five, the Federal Wild and Scenic Plan A, will protect, to the highest possible level of designation allowed under the Natural Wild and Scenic Rivers Act, ninety-one miles of free flowing river in four segments.

It will assure resource protection through zoning and scenic easements.

As reported in the environmental impact statement, involved lands would be managed in such a manner to give priority to protecting water quality.

Activities that would destroy particular botanical values of vegetation would be prohibited.

The proposed action would also place priority on protection of cold water fishery values and assure protection of aquatic ecosystems.

Wildlife habitat would be managed to protect existing species with emphasis on critical and endangered species.

Old growth content -- old growth conditions would be predominant.

In addition, scenic and recreational classification will protect values by reducing user conflicts, designing camping facilities to stay within area carrying capacities.

Vegetation manipulations would be limited

to meet wildlife visual quality and Water Shed protection values.

Use of unapproved pesticides and hazardous chemicals would be prohibited.

Mineral extraction would not be prohibited within the river corridor.

It would prohibit new construction within flood plains or wet land areas, and establish and maintain natural vegetation along the corridor.

Present zoning does not adequately meet wild and scenic river objectives.

National designation would -- would require local zoning to place greater limitations on future subdivisions, building construction, commercial, industrial and mining activities, that are presently being allowed to infringe on the natural qualities so scarce in today's chaotic lifestyle.

For these reasons, and the prime reason being that, the need for protection is to protect the basic qualities but insure unpolluted resources.

The West Michigan Environmental Action Council Public Lands Committee strongly supports the proposed designation of the AuSable River as the best possible protection of a scarce resource.

Thank you.

MR. ERL: Are there any questions?

(No response.)

MR. ERL: Thank you, Mr. Stough.

The next speaker will be Duane Peterson.

11-HH-FAR.

10 The next speaker is Elizabeth Harris.

11 MS. HARRIS: My name is Elizabeth Harris,
12 H-a-r-r-i-s. Address is 3883 Mill Spring, Bloomfield Hills,
13 48013.

14 I have spent more than ten years on the
15 Au Sable, on the south branch. My parents have leased prop-
16 erty for that time from Consumers Power. In addition, I am
17 a volunteer attorney for the East Michigan Environmental
18 Council.

19 Like the speaker who preceded me, I
20 have questions regarding the proposal which I would like to
21 present to begin with. One is a simple, I believe, question
22 of clarification from Mr. Gebhardt.

23 On page 131, the south branch to Chase
24 Bridge to mainstream segment, I believe, is designated ✓
25 Segment 6. According to the maps, is that not Segment 7 or

1 isn't that relevent. I just wanted to make sure it's not a
2 mistake.

3 HEARING OFFICER ERL: You may answer
4 that, Mr. Gebhardt.

5 MR. GEBHARDT: I may have an error.
6 There is an error, yes.

7 HEARING OFFICER ERL: Let the record re-
8 flect that the speaker is referring to the exhibit marked
9 Exhibit No. 4, page 131 and the map, green map, between
10 pages 119 and 120.

11 MS. HARRIS: My second question may
12 be related to one that has been asked but I want to state
13 my interest and concern in the increase in the number of
14 hiking activity days from 768 to 45,955 as compared with
15 the decrease in canoeing activity days from 212,221 to
16 185,799. I would prefer to emphasize a decrease in the num- ✓
17 ber of canoeing days.

18 I believe, as has been stated by other ✓
19 speakers, the basic threat to the river is in the use of the
20 river by canoeists in the summer and I don't believe that
21 this proposal addresses that problem.

22 Conversely, increasing the hiking ac-
23 tivity days raises the problems mentioned before of extreme ✓
24 littering, obvious pollution of the river since that's where
25 people's garbage will go.

1 I also wonder if hiking trails -- I'm
2 not sure what is envisioned by hiking trails -- might not
3 possibly become more snowmobile trails.

4 I wonder if it is possible to have a
5 clarification of what the intentions are concerning those
6 two proposed parts of the plan.

7 MR. GEBHARDT: The hiking trails pro-
8 posed in the study report are largely fisherman's access
9 trails that might lead to existing access points a mile and
10 a half up and down those access points giving fishermen
11 access to the river.

12 MS. HARRIS: My related question is
13 would they go over private property?

14 MR. GEBHARDT: It's possible they
15 could, but we have emphasized that we will avoid private
16 property as much as possible.

17 MS. HARRIS: My position is then, and
18 I speak also for the East Michigan Environmental Council,
19 is that I am very strongly in favor of the Wild and Scenic
20 River Designation if it curtails canoe use at least twice
21 as much as suggested by this report and does not include
22 the increase in hiking days to anything like the 45,000 days
23 that are envisioned here.

24 On that basis, I would support the
25 proposal; but without those changes, I would oppose it at

17 This Hearing is reconvened at 10:07 P.M. The next
18 speaker will be Larry Lupinski. 32/HT-GRAY.

19 LARRY LUPINSKI: My name is Lawrence Lupinski, my
20 address is G5157 Mill Wheel Drive, Flint, Michigan, 48507.

21 I'm on the Board of Directors of Warbler's Hideaway,
22 and I serve as Vice President of the Property Owner's Associa-
23 tion.

24 Warbler's Hideaway is a non-profit association con-
25 sisting of over eight hundred property owners. Our development

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1 is located in Lovells Township of Crawford County. As a repre-
2 sentative of the Association membership, I wish to go on
3 record for them as being firmly opposed to the inclusion of
4 the AuSable River into the National Wild and Scenic River
5 Systems as authorized by Congress in Public Law 93621 dated
6 1965.

7 Our reasons for this opposition are as follows: Num-
8 ber one; State and Federal land in Crawford County, presently
9 consists of two hundred and nine thousand, two hundred and
10 twelve acres, which is 58 percent of the total County. Federal
11 acquisition of more land would be detrimental to every tax- ✓
12 payer in the county. The Federal Study Report states that the
13 Federal Government would continue its' land acquisition pro-
14 gram on a "willing-buyer, willing-seller" basis, as those
15 lands become available or where local zoning and/or scenic
16 easements do not adequately provide for protection of river
17 values and specific recreation needs.

18 When you put severe restrictions on property it will
19 become less attractive to the private sector. Resulting in
20 only one willing buyer, that being the Federal Government. The
21 Study also states that the ultimate objective of the acquisi-
22 tion program would be to have the entire management zone pro-
23 tected from degradation through zoning, scenic easement or
24 fee title ownership including condemnation. In this respect
25 the report is in error. Classification will have a very defi-

1 nite effect on the tax base in Crawford County.

2 As Federal Government payments to counties in lieu
3 of taxes on federally owned property amounts to only \$1.00 per
4 acre, acquisition of more Federal property places an undue
5 financial hardship to each and every property owner in the
6 County.

7 Number two: The modification of fire suppression
8 methods to minimize ground disturbance and chemicals that
9 would affect river values is totally unacceptable. We quote
10 from the draft environments--environmental statement. "The ✓
11 risk of people caused fires would increase with increased use
12 of hiking trails. As this risk increases, fire prevention
13 detection, and suppression efforts would be increased. Fire
14 fighting methods would become 'more complex' and I repeat "more
15 complex as they would be designed to minimize negative effects
16 on the river and its associated values."

17 Several years ago a forest fire was started and not
18 properly extinguished on the Michigan National Guard Reserva-
19 tion and it burned out of control destroying many acres of
20 timber. Our property at Warblers Hideaway was saved when the
21 wind changed direction only one mile away. If another fire is
22 allowed to catch hold and burn out of control, the results
23 would be disastrous.

24 Number three: The Government Accounting Office (GAO)
25 Report released to Congress on May 22, 1978 states, "Visitors

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1 use increased substantially on the Snake River in Wyoming
2 following its designation as a potential Wild and Scenic River
3 in 1968. The Forest Study Team recorded a recreational use
4 increase of 27 percent annually from 1974 to 1977. The in-
5 creased popularity as well as lack of facilities along the ✓
6 Snake has resulted in littering, and disruption of wildlife.
7 All of which the law was supposed to cover. Many areas of the
8 AuSable System are already too popular, and increased use
9 would be detrimental.

10 Number four: The Study shows need for approximately
11 88 miles of fishing access - hiking trails. These planned
12 foot trails would connect with existing vehicle access points.
13 The access trails would benefit hikers by providing easy routes
14 as the draft states, for viewing scenery and wildlife, but it ✓
15 fails to mention that these trails will also contribute to in-
16 creased vandalism, theft, littering and soil erosion.

17 Number five: The upper portions of the North, South,
18 and AuSable Mainstream do not meet the criteria for classifi-
19 cation, so were not included in the study. The Environmental
20 Draft states that the adverse effects could occur because the
21 demand for developable sites and recreation use, outside of ✓
22 the proposed boundary, in these areas, will increase as a re-
23 sult of limitations placed on river use inside of the boundaries.
24 Adverse effects on the cold water fishery will not only be
25 possible but probable.

1 Number six: The five year land acquisition and ad-
2 ministration cost of \$22,777,000. expressed in 1977 tax dollars
3 is grossly inaccurate as stated due to previous, present and
4 future inflation rates. Tax dollars in these amounts would be
5 put to more beneficial use in solving the country's energy
6 problems.

7 Number seven: Crawford County presently has in
8 force a zoning ordinance which incorporates among other items,
9 a Greenbelt Law section, the purpose of which is to protect and
10 preserve the natural beauty and fine water quality of all
11 waterways within the County for the benefit of all, without
12 encroaching unnecessarily upon the constitutional rights of
13 the individual property owners.

14 For these stated reasons, we the members of Warbler's
15 Hideaway Association strongly recommend selection of the
16 Alternative Plan labeled--No Action.

17 Now, after our members of the Association were in-
18 formed of this Study they returned, by mail, 127 letters, to
19 me to present at this meeting. It is note worthy that not one
20 letter was received in favor of the AuSable Classification. I
21 would at this time like to enter into the public record, these
22 letters along with a copy of my presentation as being in oppo-
23 sition to your recommendation for classification of the
24 AuSable River System into the Wild and Scenic Rivers Act.

25 Thank you.

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The Au Sable North Branch Area Association

Position Statement on the Proposed
Inclusion of the AuSable River into
The National Wild and Scenic Rivers
Act of 1968

We, the members of the AuSable North Branch Area Association, officially oppose the proposed designation of the AuSable River into the National Wild and Scenic Rivers System.

We generally oppose designation for the entire AuSable River system and specifically oppose the designation for the North Branch. We ask for the North Branch to be withdrawn from further consideration.

The Federal study by the Forest Service shows that river values (water quality, fishing, scenery, recreational opportunities and plant and animal life) are of high quality. This is proof that the landowners, county governing agencies, township governing boards and zoning ordinances have been, are and will be more than adequate to protect the river and its environs. We do not need federal government control to do what we are already doing.

We believe that Federal designation would lead to loss of property rights, loss of privacy and eventual degradation of the river corridor.

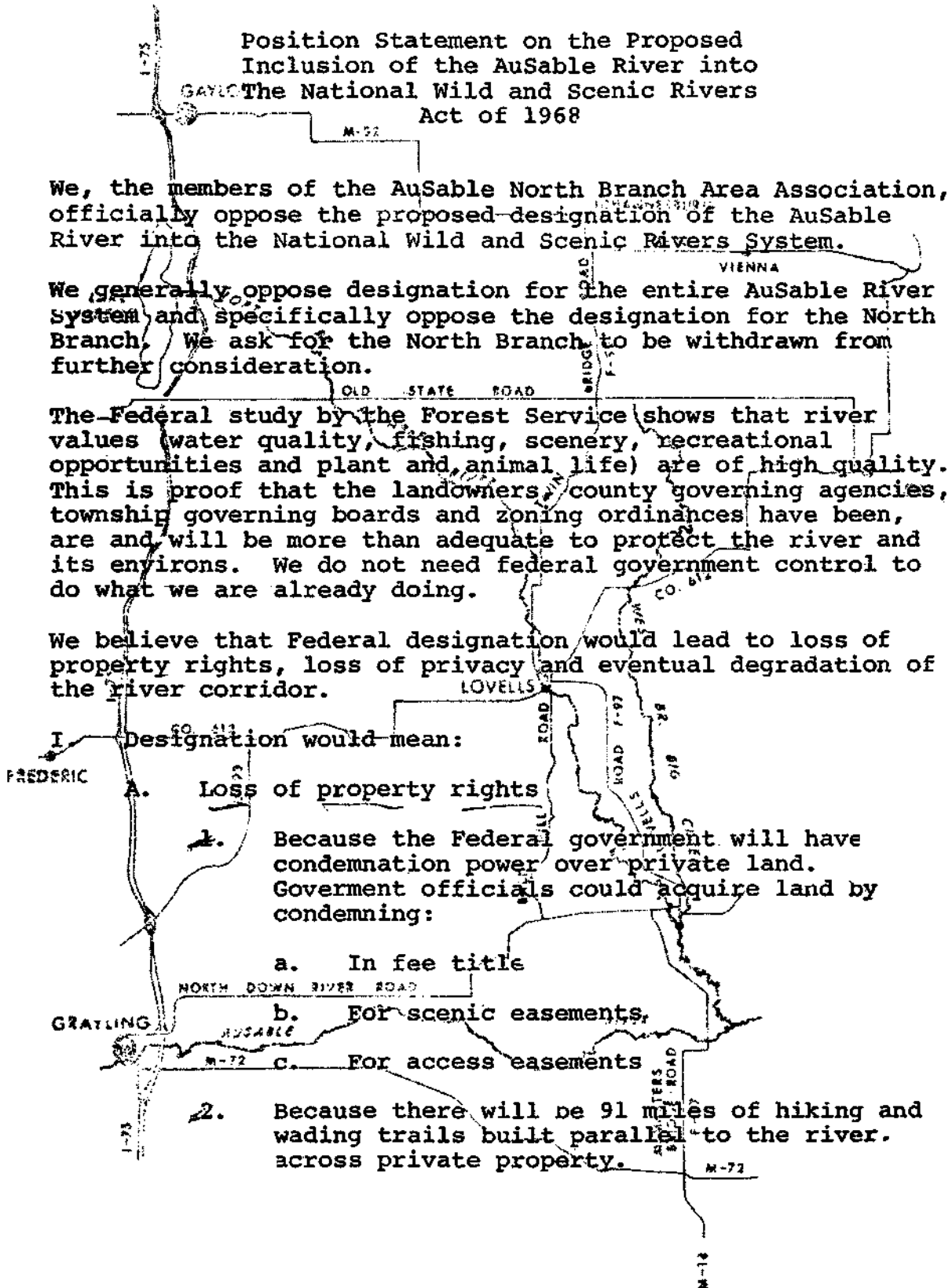
I. Designation would mean:

A. Loss of property rights

1. Because the Federal government will have condemnation power over private land. Government officials could acquire land by condemning:

- a. In fee title
- b. For scenic easements
- c. For access easements

2. Because there will be 91 miles of hiking and wading trails built parallel to the river across private property.



- a. The "seen area" definition takes in a huge number of acres on either side of the river (over 1/4 mile on either side) because it is based on a topographic definition which emphasizes a seen area during leaf-off.
- b. The "management area" would add to this "overkill" by adding many more acres to government control beyond the "seen area". In many instances, this incorporates all the land of river corridor property owners. The North Branch segment totals 4,300 acres for inclusion; of this, 3,680 acres are privately owned.
- c. "Seen and management areas" boundaries are described via property boundaries of private owners but public lands use a topographic definition. This is clear indication of intent to acquire land through condemnation.
- d. Building new structures is prohibited in the seen area and adding to existing structures must conform to government regulations.
- e. Vegetative and timber use would be regulated.

B. Designation would mean Loss of Privacy

1. Because the 91 miles of hiking and wading trails would cause intrusion of people on private land
 - a. This would create user conflict; not reduce it!
 - b. This would debilitate private land owner's reasons for maintaining the river.
2. Because Federal designation will lead to overuse and abuse of the river (see G.A.O. Report CED-78-76) the result will be littering, vandalism, fire outbreaks and damage to wildlife.

- C. Designation would mean lack of management control
1. Because the proposed North Branch (Segment IX) and the South Branch (Segment VII) cannot be effectively managed without the control of the headwaters segments (Segments VIII and VI respectively) which are excluded from the proposal. Therefore, Segments IX and VII should be excluded from the proposed designation.
 2. The report does not provide for adequate funding for enforcement.
- D. Designation would mean high costs and taxation problems
1. Because the cost of acquiring scenic easements is based on 1977 dollars, the current costs are prohibitive.
 - a. Scenic easements in 1977 dollars will cost \$22,700,000 not including easements costs if Consumers Power Company land is not acquired.
 - b. Operating costs and maintenance costs will be \$112,000 per year (1977 dollars).
 - c. Recreational development costs are estimated to be \$352,000 (1977 dollars).
 2. This inflationary program of land acquisition is documented in G.A.O. Report CED 78-96 and does not follow the intent of Congress which was to minimize this inflationary effect.
 3. Appropriations of public funds will not keep pace with program requirements due to changing federal priorities. The effected areas will languish in "limbo" similar to the "Sleeping Bear Dunes" and "Pictured Rocks Project" (See "E" below). Meanwhile, private property owners will be left with devalued property.
 4. Crawford County now has 72% of its land under public ownership. Continued depletion of private land holdings will result in placing oppressive tax burdens on remaining land-owners.

5. The Federal Government is negotiating with Consumers Power Company to take over 9,800 acres it owns in the river corridor. The cost will be \$14,000,000 (1977 dollars). If these lands are not acquired, scenic easements will be necessary at a cost of \$11,500,000 in excess of the original \$22,700,000 originally planned for scenic easements (all figures based on 1977 dollars).
6. If the Consumers Power Company does sell to the government, this land will be removed from the tax rolls. The tax burden will be moved to the private landholder.

E. Designation means government misrepresentation and mismanagement - because Federal programs do not follow the intent of Congress and because funding is not adequate. Examples of this mismanagement and misrepresentation are as follows:

1. Pictured Rocks National Lakeshore Act. This Act was misrepresented to the people by deleting a promised access road after the Act was passed. The federal agency then proceeded to close off other access roads except to hikers.
2. The "Mason Tract" is degraded completely due to lack of promised government protection (see "The North Woods Call", February 7th, 1979, Page 3).
3. The "Sleeping Bear Dunes National Lakeshore" sanitary facilities have been grossly neglected and have deteriorated because of lack of promised funding by the Executive Branch of the Government (see "The North Woods Call", May 16, 1979, Page 11).
4. Citizens along 117 miles of the Wild and Scenic, Minnesota River protested to a legislative hearing regarding land use restrictions over their private property (see "Ann Arbor News", June 10, 1979, Section D, Front Page).

II. The North Branch Area does not meet the Criteria for Designation.

- A. The majority of the stream is impassable because of shallow water and acute river bends, therefore, a true river experience is not possible for canoeists. Despite the report content, actual experience has shown that it is very difficult for novice canoeists to navigate this segment.
- B. The noise pollution is severe:
 - 1. From low flying military jet and helicopter aircraft (often at tree top level).
 - 2. Military artillery fire at all times of the day and night.
 - 3. Small arms and automatic weapons fire during military combat simulation maneuvers from Lovells Bridge to Kelloggs Bridge.
 - 4. Forest fire danger and resulting air pollution caused by military parachute flares and tracer bullets. Loss of approximately 6,000 acres occurred because of this in May, 1975.

III Conclusion:


- A. The proposed Federal Wild and Scenic Rivers program represents a costly and ineffective duplication of effort. The 24,360 acres that are proposed will not be protected anymore effectively by the Federal Government than by the State and/or Local Agencies.
- B. It is clear that the 17 mile North Branch segment should be excluded from the proposed designation based on:
 - 1. No user conflicts (such as canoeists vs. anglers) exist.
 - 2. Most of the segment is privately owned; 86% compared to lesser amounts in other river systems.
 - 3. Superior local zoning.
 - 4. Excellent historical record of residents maintaining protection of the river.
 - 5. A strong North Branch Area Association of land owners who will continue to protect the river values.

6. Noise pollution does not allow a true river experience.
7. No control of the headwater segments, therefore, no control of the rest of the North Branch segment.
8. The high cost of federal involvement.
9. The potential tax burden to area residents.
10. Government mismanagement in other government operated forest service programs.

IV. Recommendation:

The AuSable North Branch Area Association strongly recommends the "No Action Alternative".

Very truly yours,


Duane E. Peterson, President
The AuSable North Branch
Area Association

9 RAYMOND RUSTEM: Not all of them.

10 I--well, my name is Raymond Rustem. I'm the Northern
11 Michigan Field Representative for Michigan United Conservation
12 Clubs.

13 HEARING OFFICER ERL: Pardon me, you have eight and
14 one half minutes.

15 RAYMOND RUSTEM: Oh, thank you, that will be fine.

16 MUCC would like to thank the Forest Service for the
17 opportunity to comment on the AuSable Wild and Scenic Rivers
18 Designation Proposal.

19 As one who reads many of these types of reports, I
20 know the work that goes on behind the scenes to get one of
21 these out. So first of all we would like to comment on the
22 excellent job the Forest Service did on the Proposal and we
23 would like to personally thank Carl Gebhart for the time he
24 spent speaking to myself, to our MUCC Committee and the indi-
25 vidual MUCC members. Never have we seen a public servant that

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1 has been so available or interested with our questions.

2 You know it's ironic and unfortunate that those
3 qualities that make Michigan's shorelines, lakes and streams
4 so desirable for recreation have also caused so much destruc-
5 tion to these resources. Destruction from overuse, overdevelop-
6 ment and in short, you might even call it, over love.

7 Michigan is noted for it's fine rivers which provide
8 recreation opportunities for fisherman, hunters, canoeists,
9 hikers and many others. It is only recently that we have re-
10 cognized the value of these river systems and have begun to
11 offer some type of protection to them. The AuSable is espe-
12 cially endowed with not only the varied recreational opportu-
13 nities. For conformation of that you only need to look at the
14 figures which were given in the Proposal here of nearly half
15 a million people which use it every year.

16 But it is also rich in the history of the early
17 years of Michigan, and the early explorations of the trappers ✓
18 through the glory days of the lumber camps. The AuSable is a
19 rare gem indeed. This is why MUCC, at it's April board meeting
20 held in Lewiston, Michigan, supported the inclusion of 91 miles
21 of the AuSable River under the Wild and Scenic Rivers Act.
22 This decision is consistant with other MUCC positions support-
23 ing protection for our environmentally fragile areas.

24 MUCC, in the past, has supported the Inner Lakes
25 and Streams Act, the Shorelands Protection Act, the State

1 Natural Rivers Act and we are now engaged in trying to put
2 through the State Senate and House a wetlands bill. MUCC has
3 also supported last year, the inclusion of Perre-Marquette
4 under both the Wild and Scenic Rivers Act and the State Natural
5 Rivers Act.

6 MUCC can support the Forest Service Proposal which
7 emphasizes first; local zoning ordinances. I'd like to stress ✓
8 that point, local zoning ordinances. And secondly, scenic
9 easements to protect the quality of the AuSable River. Two
10 points that we would like to make about the plan which were
11 concerns expressed by our Committee; first of all on page 141
12 under the conclusions and recommended management, the section
13 dealing with the fish and wildlife emphasizes a, emphasis
14 would be given to management that protects existing fish and
15 wildlife values, habitat enhancement measures and would be en-
16 couraged when necessary, for protection of a species. This
17 management recommendation seems to be a reaction management
18 technique rather than a preventative measure.

19 MUCC would rather have a continuous management plan
20 occurring in the wild and scenic corridor to enhance wildlife
21 species. With the recommended green belt in tact along the
22 river we see no reason why management practice cannot be
23 carried on within the corridor.

24 Secondly, under the Wild and Scenic Rivers Act
25 itself, under Section 13A, a provision is included giving the

1 administering secretary the authority to designate zones where,
2 and establish periods when, no hunting is permitted for reasons
3 of public safety, administration or public use or enjoyment.

4 Needless to say, this provision has raised a few
5 eyebrows with some of our members. MUCC acknowledges the rea-
6 son for this provision being there, but we would like to make
7 it clear that we will allow no regulations which unreasonably
8 prevents sportsmen in Michigan from hunting in the corridor
9 area. We hope the Forest Service will use this provision only
10 in the spirit which it was intended.

11 I'd like to make a few comments on some of the other
12 comments that I have heard tonight.

13 The acquisition costs which were talked about this
14 evening, if you take a look at the proposal, the costs of our
15 acquisition were for scenic easements, not for fee purchases
16 of land. The proposal talks about willing-buyer, willing-
17 seller, willing-buyer; we believe that the Forest Service will
18 hold to their word in this proposal here. The Wild and Scenic
19 Rivers Designation in no way will close any part of this River
20 to canoe use to fishing use.

21 I guess one of the better points that was made to-
22 night was a gentlemen who was up here and asked what happens
23 when all of the owners who are here now are gone. Can you
24 guarantee that the AuSable will remain as it is when you have
25 left. We feel that this proposal can do that for perpetuity.

1 Another gentlemen discussed tonight that the river
2 quality in many parts of the AuSable is at a point where--
3 and this is why it's been included in the Wild and Scenic
4 Rivers Study. Then he asked "Why should it be dedicated if
5 the water quality is so good?" I ask, is there a better time--
6 to dedicate this river since the water quality is high at a
7 time that we can do something about keeping the water quality at
8 its' present point. Keeping the fishing quality at its' pre-
9 sent point.

10 The tax base, erosion of the tax base. There's a
11 point, counterpoint to this also. We feel it would be advan-
12 tageous to many people to own property along a wild and scenic ✓
13 river. No matter where it is. We feel that this could have
14 an improvement on raising the tax base in this County.

15 Increased used. Some point was made about the in-
16 crease of over 200,000 recreation days or whatever. We talked
17 to Mr--a--I brought this up to Carl Gebhart personally because
18 we were concerned about that. A major portion of this, if you
19 will look, is due to picnicking. About 130,000 person increase
20 in picnicking. He told me this was due because right now there
21 are only a few established picnic areas along the AuSable and
22 those are the only ones that they can count. Through this ✓
23 Proposal the picnic areas will be increased and this is where
24 that 130,000 will be increased because they will be counting
25 those people who are right now stopping along the banks

1 anywhere they want, stopping on private parcels and picnicking,
2 This is where that increase comes.

3 I guess in conclusion I'd like to read an introduc-
4 tion. Introduction is on page one of the Wild and Scenic
5 Rivers Act.

6 HEARING OFFICER ERL: Two minutes.

7 RAYMOND RUSTEM: It's purpose is to preserve certain
8 selected rivers that possess outstandingly remarkable scenic,
9 recreational, geologic, fish and wildlife, historical, cultural
10 or other similar values in their free flowing condition for
11 the benefit, enjoyment of present and future generations. I
12 think Governor Milliken put it best in expressing our feelings
13 when he said "We have not inherited this land from our fathers,
14 we have borrowed it from our children."

15 MUCC feels this is the best way to save this river
16 for the next generations. the beauty that is the AuSable.

17 Thank you very much.

37/HT Ge

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JAMES KUENZEL: Thank you.

HEARING OFFICER ERL: Mr. James Robison, Robison.

JAMES ROBISON: Correct the first time.

James Robison, 3831 Surrey Road, Toledo, Ohio. I'm here on behalf of the AuSable River Property Owner's Association, which at the moment has 345 paid up members; to express the firm opposition of that Association to this recommendation.

I have a ten minute speech on the subject, everything in it has been said except a couple of points.

It has been mentioned but not stressed, that if, in fact the State of Michigan and the United States Government acquire the Consumers Power property, approximately 60% of the acres, within this plan, will be publicly held. To reach that 60% you have to throw in the acreage owned by Trout Unlimited, which doesn't need protection.

On the South Branch, 9 miles of the 16 miles are already in the Mason Tract, publicly held. The next 7 miles below Smith Bridge are almost all Consumers Power property. So if the Consumers Power property is acquired, there is no need for you people to monkey around with the South Branch.

As to the mainstream, the report says most of the development is above Wakeley Bridge, where most of the problems are. From Wakeley Bridge down, most of it's Consumers Power property, so there's no need for em to monkey with the mainstream from Wakeley down.

1 As for the mainstream from I-75 to Wakeley the Report
2 says this is already the most heavily developed area, they
3 can't do anything about that so there's no need for them to
4 monkey with that.

5 That leaves the North Branch and the northbranchers
6 have been luciferous(sic) in their opposition. I don't think
7 it is the Congressional intent, the Congressional mandate,
8 under this Wild and Scenic River Act, to protect and preserve fra
9 flowing rivers, to extend that concept to conservation, in
10 which we're all in favor, to public recreation, to permit
11 these people to make a public playground out of the North
12 Branch. That's part of the AuSable River Property Owner's
13 Association position.

14 So, gentlemen, I urge you when you formulate your
15 final plan to state specifically how your recommendations
16 will be altered if the Consumers Power property is acquired
17 by State and Federal Government.

18 Now, I'm no longer speaking for the Association, I am
19 speaking for myself. I was terribly disappointed tonight to
20 have such pessimism from some of the people, expressing the
21 view that the Forest Service has already finally made up it's
22 mind. I can't believe that these people haven't been listen-
23 ing to us tonight. I can't believe that with this opposition
24 we aren't going to get some place. I do know one thing, even
25 if these people, if not the people in the Congress, the people

Charlotte L. Sullivan
COURT RECORDER
ROUTE 1 BOX 380-C
HOUGHTON LAKE, MICHIGAN 49629

1 who review this report, don't pay one bit of attention to this
2 transcript of the proceedings here tonight, and I hope they
3 will, they will read the Report in it's final form.

4 Now, that Report must, in my judgement, do what I've
5 asked be incorporated in it. An evaluation of what happens if ✓
6 the Consumers Power property is acquired.

7 Number two; this is a point lacking in the Report.
8 They haven't explained how if there's public land here and
9 public land here and my property is here they can have a
10 hiking trail to get from this point to this point. I think
11 they think they have the power to condemn an easement across
12 my property for their hiking trail. I think they think they
13 have the power to condemn an easement across my property for ✓
14 fisherman's access. They don't say a word about that in the
15 Report, they say scenic easements cannot be used by the public.
16 I want the whole truth in that Report, that's point two.

17 Point three, and this I was kinda bored with all the
18 questions you were asking this MUCC guy because there's one
19 answer to this business about the picnicking. If you take a
20 look at all the ridiculous arithmetic on page 137 in this Re-
21 port, add up the number of canoers under Plan A and add up the ✓
22 number of hikers under Plan A, then, you've got a much bigger
23 number than the number of picnickers. They don't even know
24 where the people eat.

25 Finally, this is the last thing; I do wish to stress

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1 the importance in the final form of this Report to an accurate
2 synopsis, a summary of the views expressed by the public at ✓
3 these hearings. I want to congratulate you all on your patience
4 you've done a good job, Mr. Hearing Officer. Thank you.

5 HEARING OFFICER ERL: Thank you, Mr. Robison. r. 084



LOVELLS HOOK & TRIGGER CLUB

STAR ROUTE, GRAYLING, MICHIGAN 49738

September 12, 1979

Mr. Wayne Mann, Forest Supervisor
Huron-Manistee National Forest
421 South Mitchell Street
Cadillac, Michigan 49601

129/LS
WMM

- NO. REC'D
- SUPV
- F. I&E
- Hydrilat
- Soils
- WM
- Sales
- Silv
- Survy
- Wildl
- ENGR
- Proj Eng
- Fleet
- RECBRTN
- L. Arch
- LUP
- Rvr Plnr
- F. ANDS
- Asst #1
- Asst #2
- Asst #3
- Geolgst
- ADS
- B&F
- Pers
- Resc
- TIGRS
- C&H

Dear Mr. Mann:

The residents and property owners of Lovells Township, Crawford County, Michigan are very concerned with the proposed Federal designation of the North Branch of the AuSable River as a part of the National Wild and Scenic Rivers System. This has been demonstrated by the overwhelming opposition to the proposal at the public hearings conducted July 18, 19, 20, 1979 and by the numbers of letters which have been written by individuals and organizations.

Of the approximate 19 miles of the North Branch proposed for Federal designation, 17 miles of the stream is located in Lovells Township. 86% of the property along its banks is in private ownership. The Township Zoning Ordinance has "Green Belt" provisions which protect the purity of the stream, its banks and vegetation, and its scenic beauty for a distance of 400 feet on both sides of the river. This Ordinance is rigidly enforced by all of the community.

Federal designation, which provides for increased use of the river, would create all of the problems of overuse, and restrictions would be more difficult to enforce. Several public access sites along the river already provide for the fisherman and others who may wish to float the stream. The North Branch of the AuSable River does not need Federal designation to preserve its scenic beauty to be enjoyed by those who appreciate our natural resources.

The Lovells Hook & Trigger Club is a non-profit organization dedicated to conservation, to the protection and feeding of our wildlife and to the promotion of good relations with the visitors who find our community a desirable place for recreation. Our membership is unanimously opposed to the inclusion of the North Branch in the National Wild and Scenic Rivers System. Federal designation would lead to loss of property rights, loss of






LOVELLS HOOK & TRIGGER CLUB

STAR ROUTE, GRAYLING, MICHIGAN 49738

privacy, and to the eventual degradation of the river corridor from overuse. Further, there would be high costs and taxation problems, lack of funding for enforcement of restrictions, and possible government mismanagement. It was not the intent of Congress to create these problems in an attempt to preserve and protect our natural resources.

It is strongly urged that the North Branch of the AuSable River be withdrawn from any further consideration for Federal designation in the National Wild and Scenic Rivers System.

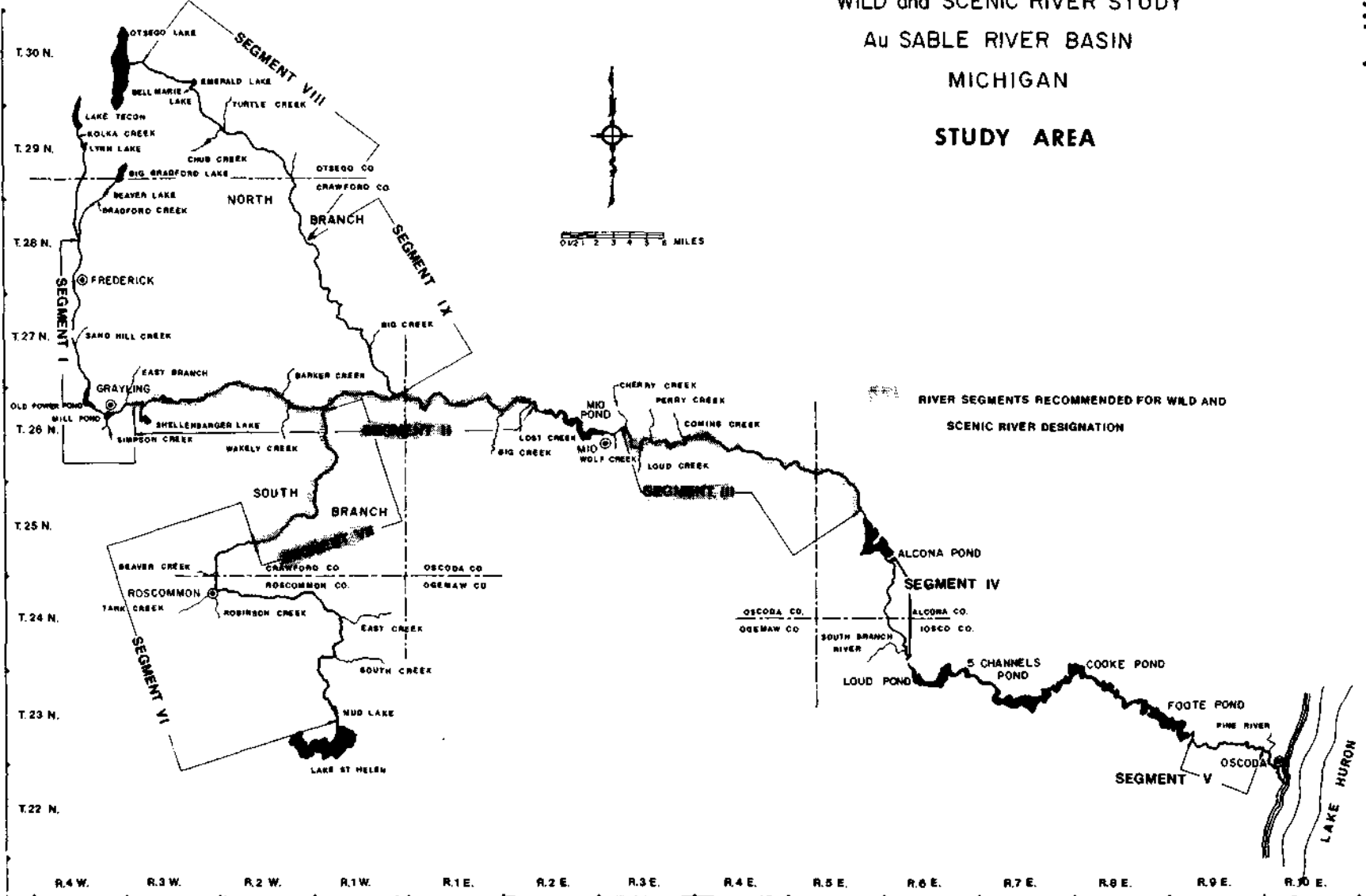
Sincerely,


Wm. C. McGowan, President
Lovells Hook & Trigger Club

APPENDIX P



WILD and SCENIC RIVER STUDY
Au SABLE RIVER BASIN
MICHIGAN
STUDY AREA



The Michigan Council of Trout Unlimited believes that the AuSable and Manistee Rivers are among the most important cold water resources in the State of Michigan as well as the Nation. At present the rivers are threatened with overuse and potential overdevelopment which could endanger the resource and diminish the quality fishing and environmental experience now available. We therefore adopt the position that the AuSable and Manistee river systems should receive some measure of increased protection.

We believe that none of the six alternative plans set forth in the Forest Service AuSable and Manistee Draft Study Reports represents the optimum protection for the rivers or those using the resources. We opposed federal designation as the method for protection of the Pere Marquette, and we oppose this method as set forth in the Forest Service proposals for the AuSable and the Manistee.

We recommend that both river systems, including the headwater sections excluded in the Forest Service proposals, downstream to the downstream limits proposed by the Forest Service, be designated under both the Wild and Scenic Rivers Act and the Michigan Natural Rivers Act of 1970, but only under a cooperative agreement between the Department of Natural Resources and the Forest Service and subject to local zoning. The cooperative agreement must provide that the Department of Natural Resources shall be the managing agency for a period of three years after federal funding and shall continue as the managing agency thereafter unless the Forest Service can establish by clear and convincing evidence that DNR has failed satisfactorily to pursue the objectives of the designations. Our recommendation is further subject to the agreement of the Forest Service to include in its reports to be submitted to the President and the Congress and to incorporate in its Management Plans the following:

- (1) Canoe traffic shall be substantially reduced from levels indicated in the Draft Study Reports.
- (2) The term "carrying capacity" must be defined in relation to camping. The present number of campsites shall not be increased.
- (3) Federal involvement in any way shall in no way have an effect on or interfere with the fisheries management of the streams by the Michigan DNR.
- (4) No hiking trails shall be constructed.
- (5) Limited fishing access trails may be constructed to provide access only at points not less than three miles (measured along the river) from the nearest existing public access point, to relieve trespass problems and spread fishing pressure.

- (6) The Shore-to-Shore Horse Trail now fords the Manistee. All rivers crossing by horses must be made on bridges.
- (7) Common, uniform and rigid zoning and land use controls shall be adopted which will protect water quality and ensure natural aesthetic surroundings.
- (8) The issue of "scenic" versus "recreation" classification shall be carefully re-examined, because elimination of new structures on "scenic" stretches could create an imbalance which would concentrate and overdevelop "recreation" portions of the stream.
- (9) The key to any regulation, including current fishing regulations, is enforcement. The cooperative agreement shall provide for the employment of "river-keepers" with appropriate law enforcement powers, on both rivers, to enforce fishing regulations and to prevent littering, rowdyism, zoning violations, etc.

We urge that the acquisition by state and federal government of the Consumers Power lands be completed promptly.

DNR and local authorities should take immediate steps to eliminate ORV abuse on the upper stretches of the Manistee.

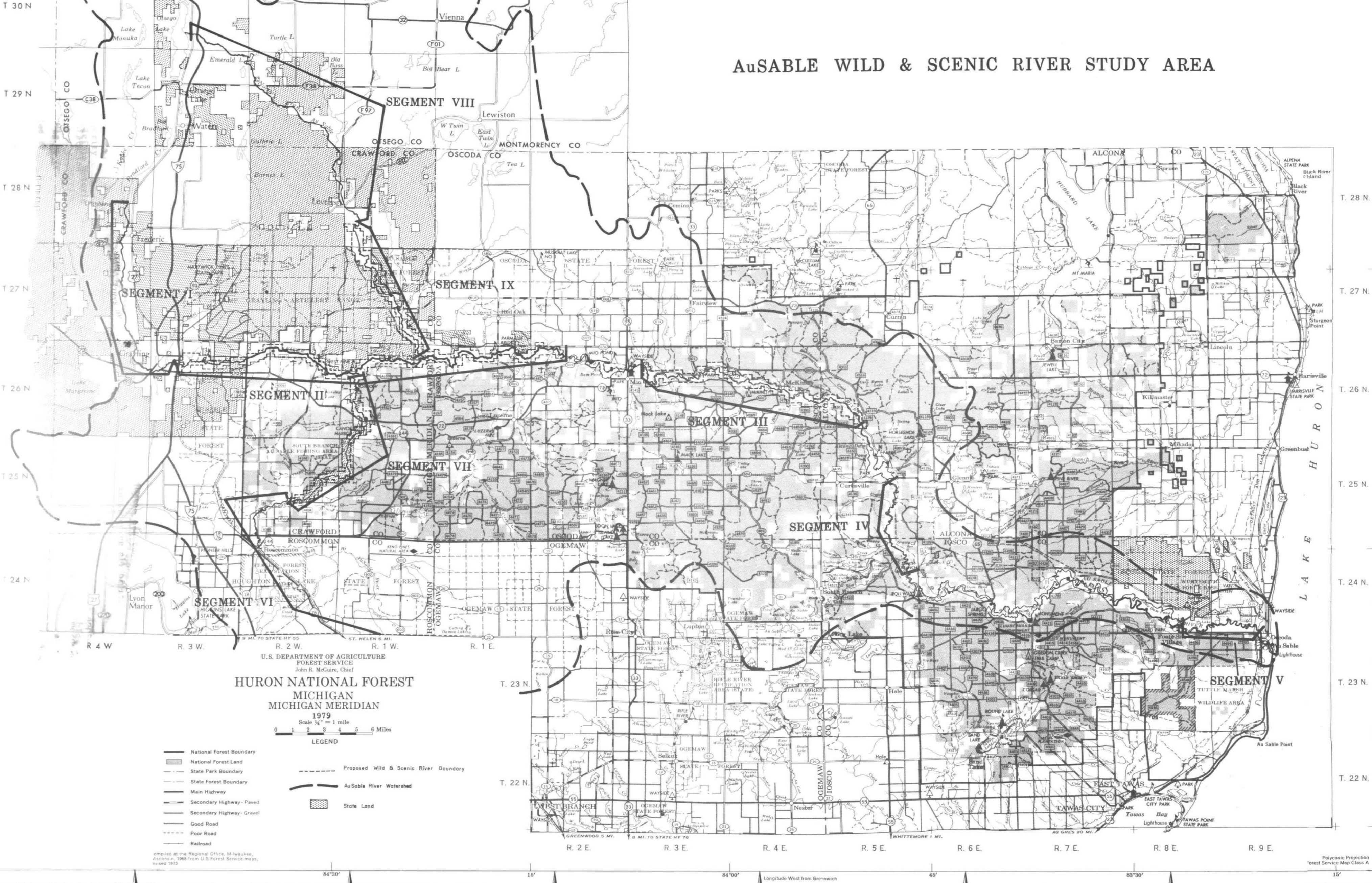
We support the River Use Rules promulgated by DNR and urge the prompt assignment for trial of the case now pending in the Circuit Court of Lake County relating to those rules.

We concur in and endorse the conditions for support of federal designation listed by DNR Director Tanner in his letter of September 25, 1979 to Secretary of Agriculture Bergland.

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
AU SABLE RIVER SYSTEM PROPERTY OWNERS ASSOCIATION
ADOPTED MAY 24, 1980

RESOLVED, that the Association continue to support the adoption of the proposed amendment to the Lovells Township Zoning Ordinance; that upon adoption by Lovells Township, the Association urge the adoption of similar amendments in all townships through which the River and any of its tributaries run, east to the headwaters of the Mio pond; and that the Association support the designation of the River, including its tributaries, under the Michigan Natural Rivers Act.

AUSABLE WILD & SCENIC RIVER STUDY AREA



U.S. DEPARTMENT OF AGRICULTURE
 FOREST SERVICE
 John R. McGuire, Chief
HURON NATIONAL FOREST
 MICHIGAN
 MICHIGAN MERIDIAN
 1979
 Scale 1/4" = 1 mile

- LEGEND**
- National Forest Boundary
 - National Forest Land
 - State Park Boundary
 - State Forest Boundary
 - Main Highway
 - Secondary Highway - Paved
 - Secondary Highway - Gravel
 - Good Road
 - Poor Road
 - Railroad
 - Proposed Wild & Scenic River Boundary
 - AuSable River Watershed
 - State Land

Compiled at the Regional Office, Milwaukee, Wisconsin, 1968 from U.S. Forest Service maps, revised 1973

Polycyclic Projection
 Forest Service Map Class A