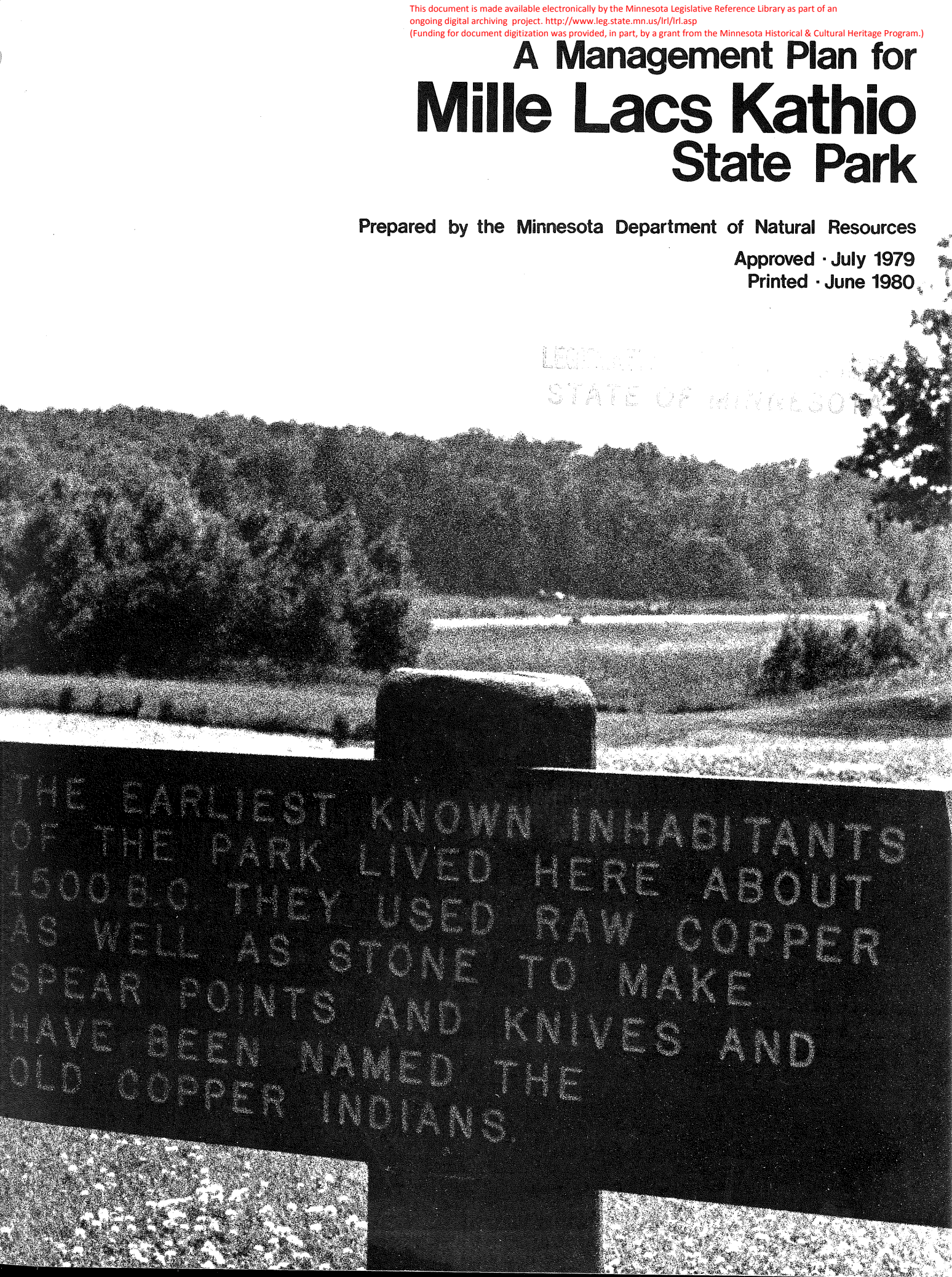
A Management Plan for Mille Lacs Kathio State Park

Minnesota Department of Natural Resources

A Management Plan for
Mille Lacs Kathio State Park

Prepared by the Minnesota Department of Natural Resources

Approved · July 1979
Printed · June 1980



CREDITS

Department of Natural Resources, St. Paul Staff:

Harry Roberts, Park Planner
Tom Polasik, Park Planner
Otto Christensen, Park Planning Supervisor
Merle DeBoer, Operations Specialist
Tom Danger, Trails Specialist
Linda Magozzi, Editor, Photographer
Gail Tracy, Word Processor Technician
Lori Anthonsen, Secretary, Back-Up Word Processor
Norm Holmberg, Graphic Specialist
Greg Rosenow, Graphic Specialist
Jeff Harmes, Assistant Editor, Para-Professional
Linda Watson, Assistant Editor
Lee Stedman, Regional Analyst
Ted Troolin, Para-Professional
Melanie Patton, Para-Professional
Doug Benson, Para-Professional
Mary McKeague, Clerk Typist

Department of Natural Resources, Field Staff:

Roger Lorenz, Region III Administrator
Clint Besonen, Region III Park Supervisor
Tim Browning, Region III Trails Coordinator
Michael Eliseuson, Region III Naturalist
Dave Hills, Region III Hydrologist
Dale Homuth, Region III Waters
Martin Torgerson, Region III Field Services Coordinator
Bromley Griffin, Mille Lacs Kathio Park Manager
Tony Tonga, Mille Lacs Kathio Assistant Park Manager
Bill Johnson, Aitkin Area Fisheries Manager
Dick Tyszynski, Cambridge Area Wildlife Manager
Dave Meineke, Division of Minerals, Hibbing
Jeff Haas, Onamia District Forester
Andy Holzemer, Onamia Forestry Technician
John Nelson, Cambridge Area Forester
Hank Hesse, Forest Inventory Inventory Supervisor
Scott Barger, Forest Inventory
Robert Fastelund, Forest Inventory
Barb Maeder, Forest Inventory
Dan Marshall, Forest Inventory
Dan McShane, Forest Inventory

Mille Lacs Kathio State Park Advisory Committee:

Ray Cash, Chairman
Andy Holzemer, Secretary
Less Anderson
Charlie Benzie
Houlten Benzie
Ervin Boser
Howard Dahlgren
Art Franzen
Art Gahbow
Louis Gravel
Pete Gravel
Sherman Holbert
Gus Lactoen
Doug Sam
Maggie Sam
Floyd Seagren
Bud Smith
Fr. Wm. J. Straka
Ervin Strelow
Francis Welty
Steven Wolff
Walt Young

Individuals, Agencies, or Divisions of DNR That Contributed Through Review or Other Means:

DNR, Bureau of Engineering
DNR, In-House Review Team
DNR, Regional Review Team
State Planning Agency
Minnesota Historical Society
Minnesota State Archaeologist's Office
Minnesota Department of Transportation
Mille Lacs County Board
Kathio Town Board
Doug Kerans, Brainerd Area Vo-Tech, Wildlife Survey Lists
Richard Larson, Mille County Engineer

All thouse individuals and groups who attended the meetings and/or sent in comments throughout the planning process.

TABLE OF CONTENTS

LIST OF MAPS

LIST OF ABBREVIATIONS

mi - miles
km - kilometers
in. - inches
cm - centimeters
ft - feet
m - meters
kg - kilogram
l - liter
cfs - cubic feet per second
cms - cubic meters per second
gmp - gallons per minute
l/m - liters per minute
mg/l - milligrams per liter
DNR - Department of Natural Resources
MHS - Minnesota Historical Society
Mn/DOT - Minnesota Department of Transportation
SPA - State Planning Agency
SCORP - Statewide Comprehensive Recreation Plan
GPMP - General Park Management Plan
MPD - Management Plan Details
ORA '75 - Outdoor Recreation Act of 1975
CSAH - County State Aid Highway
TH - Trunk Highway
I - Interstate
YACC - Young Adult Conservation Corps
YCC - Youth Conservation Corps

PREFACE

The primary concern in the development of the park management plan format for the 1978-79 biennium was the identification of the "audience." For whom are these plans to be written? Eight different audiences were identified.

1. DNR reviewers of the whole planning process
2. DNR reviewers whose main concern is one specific part to the plan
3. DNR regional administrators, supervisors, and park managers
4. SPA reviewers
5. The general public
6. Special interest groups
7. Reviewers of the environmental impacts of proposed actions
8. Legislators

The requirements of each of the audiences are different. All audiences require a document which includes some technical data, but the degree of detail as well as the manner of presentation varies. Some audiences require that specific topics be discussed in detail in all phases from inventory through recommended management. Other groups require a short, non-technical, yet comprehensive and logical management plan. A plan, obviously, cannot be both technical and non-technical nor can it be both long and short. It seemed logical then to produce two documents: 1) a short, comprehensive, non-technical document for the general public ("General Park Management Plan" GPMP), and 2) a detailed, technical document for specialists ("Management Plan Detail" MPD).

This document is the General Park Management Plan. All recommendations, both resource management and physical development, are included in this document. Detailed inventory data and specific instructions necessary for implementation of the plan are not included. This information has been compiled into technical appendices, which are available upon request from:

Park Planning
Department of Natural Resources
444 Lafayette
St. Paul, Minnesota 55101

Introduction

AN OVERVIEW OF MILLE LACS KATHIO STATE PARK

Mille Lacs Kathio State Park is located in the northwestern corner of Mille Lacs County, 5 mi (8 km) northwest of Onamia.

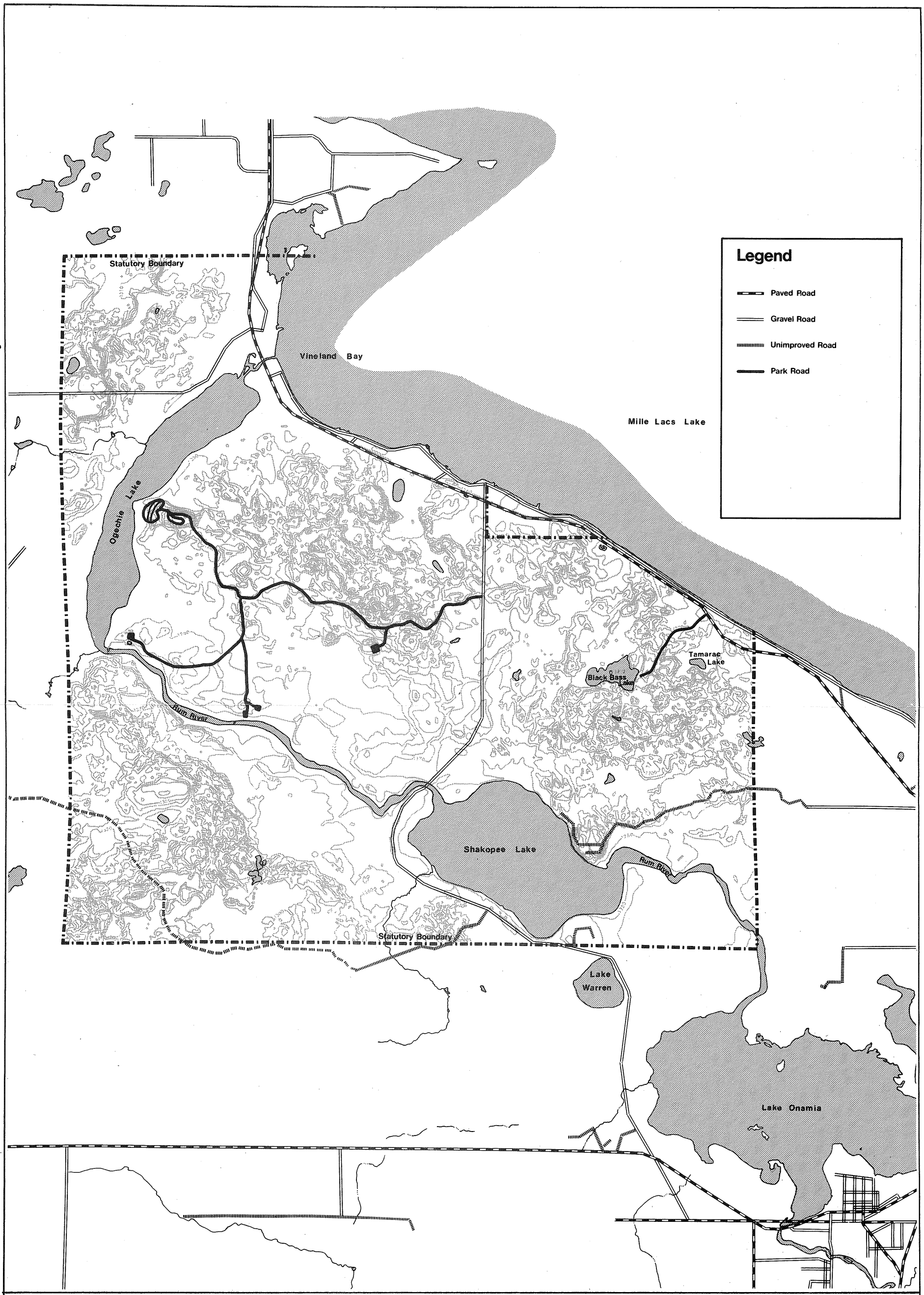
The park was established by an act of the Minnesota State Legislature in 1957, with a statutory boundary encompassing 10,747 acres (4,299 hectares).

Existing facilities include a 75-site campground, 50 picnic sites, a 12-site canoe picnic area, a swimming pond, a 4-site group/canoe camp, a trail center, an interpretive center, boat launching facilities on the Rum River, and more than 31 mi (50 km) of trails.

Annual visitor use has grown from less than 10,000 visitors in 1962, when the park was dedicated, to well over 50,000 in 1978.

The park is in the Mille Lacs Biocultural Region. It is situated on a terminal moraine on the southeast corner of Mille Lacs Lake. This type of moraine was formed by deposition of glacial materials at the point of farthest advance of the glacier. Moraines are composed of materials ranging from fine clay particles to boulders. The park's rolling, hilly terrain is pocketed with numerous lakes, ponds, and bogs.

The original vegetational cover consisted largely of pine interspersed with scattered hardwoods and some spruce-fir. Some of the pine has regenerated in the logged-off areas, but the primary vegetation types are now aspen and oak.



Mille Lacs Kathio State Park

THE PLANNING PROCESS

The variety of outstanding natural, cultural, and historical resources of Minnesota provide abundant opportunities for outdoor recreation and education. In order to ensure that present and future generations will have the opportunity to enjoy these resources, we must plan now to protect, perpetuate, and provide access to these resources. For this reason, the Minnesota Legislature passed the Outdoor Recreation Act of 1975 (ORA '75).

This act mandated that a comprehensive management plan be completed for each of the major units in the state recreation system. In the course of this planning process, each park will be classified in recognition of its resources and its role in the statewide system.

This plan sets the long range goals and objectives for resource management and recreational development which are appropriate for the park's classification. The actions that should be taken to move toward fulfilling these goals and objectives are then stated and scheduled.

The planning process consists of five steps:

1. Compilation of an inventory of natural resources and existing facilities. Task forces of specialists from other DNR divisions and sections are mobilized to assist in collecting pertinent data. At this point the first public workshop is held.

2. Identification of alternatives for park management and development. A second public workshop is held to review these alternatives and invite further public comment. These alternatives are then reviewed by the Division of Parks and Recreation.

3. Classification of park, development of park goal, and writing draft plan. This step culminates in the first interdepartmental review, followed by a 30 day public review. Within this 30 day period, the third public workshop is held.

4. Revision of the draft plan according to information received from public and interdepartmental reviews. Plan is then sent to the State Planning Agency for a 60 day reviewal period.

5. Implementation of development plan by the Division of Parks and Recreation.

SUMMARY

Mille Lacs Kathio State Park is recommended for classification as a natural state park. This classification directs the park's development and resource management toward perpetuating and reestablishing the resource conditions that existed prior to European settlement.

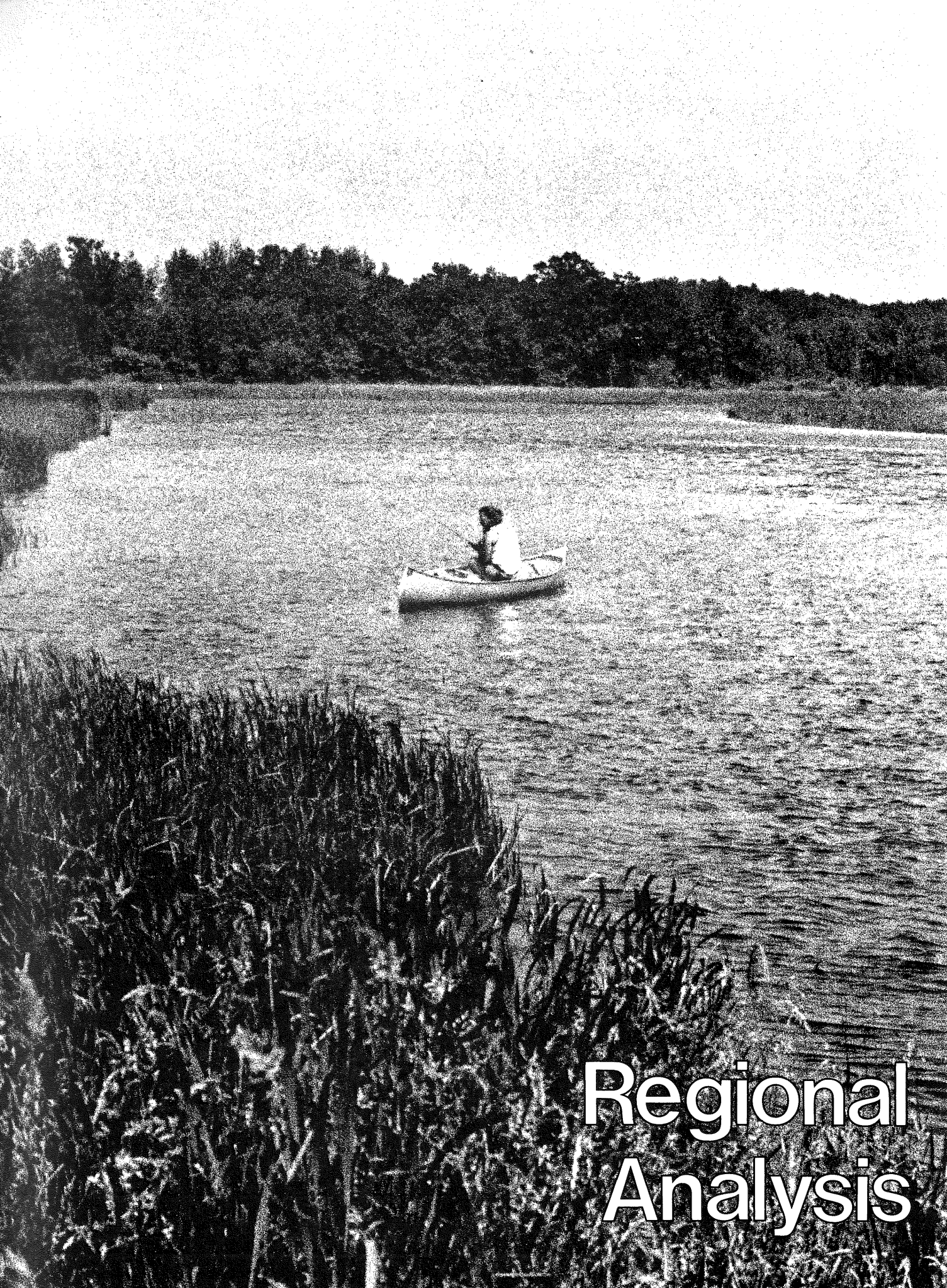
Resource management will be directed toward reestablishing pine stands, diversifing oak stands, and improving wildlife habitat. Wildlife management will concentrate on heron, eagle, osprey, and pileated woodpecker and other rare or unusual species which inhabit the park. Other wildlife populations will be monitored and attempts will be made to increase their visibility to visitors, especially along park trails.

Mille Lacs Kathio has a rich archaeological history. The Dakota Indian Cooper Village site will be restored. On-site interpretive signs will be posted at this site and at one or two other sites. Exhibits and programs will be available to the park visitor in the interpretive center.

The major development recommendations are:

- To move the majority of the campground to a new location near the picnic area;
- To rehabilitate and expand the trail system;
- To remodel and expand the trail center and interpretive center;
- To provide better beach house facilities and a picnic shelter;
- To construct an observation tower
- To improve park roads

Most of the park land between Trunk Highway 169 (TH 169) and Mille Lacs Lake will be deleted from the statutory boundary. Up to 40 acres (16.1 hectares) in Section 2, T42N R27W, at the junction of TH 169 and County State Aid Highway 26 (CSAH 26), will be added to the statutory boundary.



Regional Analysis

INTRODUCTION

In order to determine a park's role in protecting and perpetuating natural resources and fulfilling recreational needs, a state park analysis process has been initiated. The analysis is designed to look at a given park's interrelationship with:

the state park system

the biocultural region system

state park use patterns

regional influence/impact factors

Recognition of a state park's interrelationship with these components helps to ensure that park development will be planned to protect natural resources, meet appropriate recreational demands, and avoid undue competition with other recreation providers.

The State Park System

Minnesotans traditionally have a great appreciation for nature. The variety and everchanging beauty of our 65 state parks testify to the vast natural and historic wealth of our state. The goal of Minnesota's state park system is to protect and perpetuate these natural resources while offering the public a variety of recreational opportunities.

There is a delicate balance which must be maintained when recreational facilities are provided for large numbers of people in areas of outstanding, often sensitive resources. Generally, certain resources are best suited for particular types of recreation. To help ensure this recreation/resource balance, the Minnesota State Legislature outlined in the ORA '75 the components which comprise all state recreational lands. These components are: historic sites; state forests; water access sites; rest areas; state trails; wildlife management areas; scientific and natural areas; wild, scenic, and

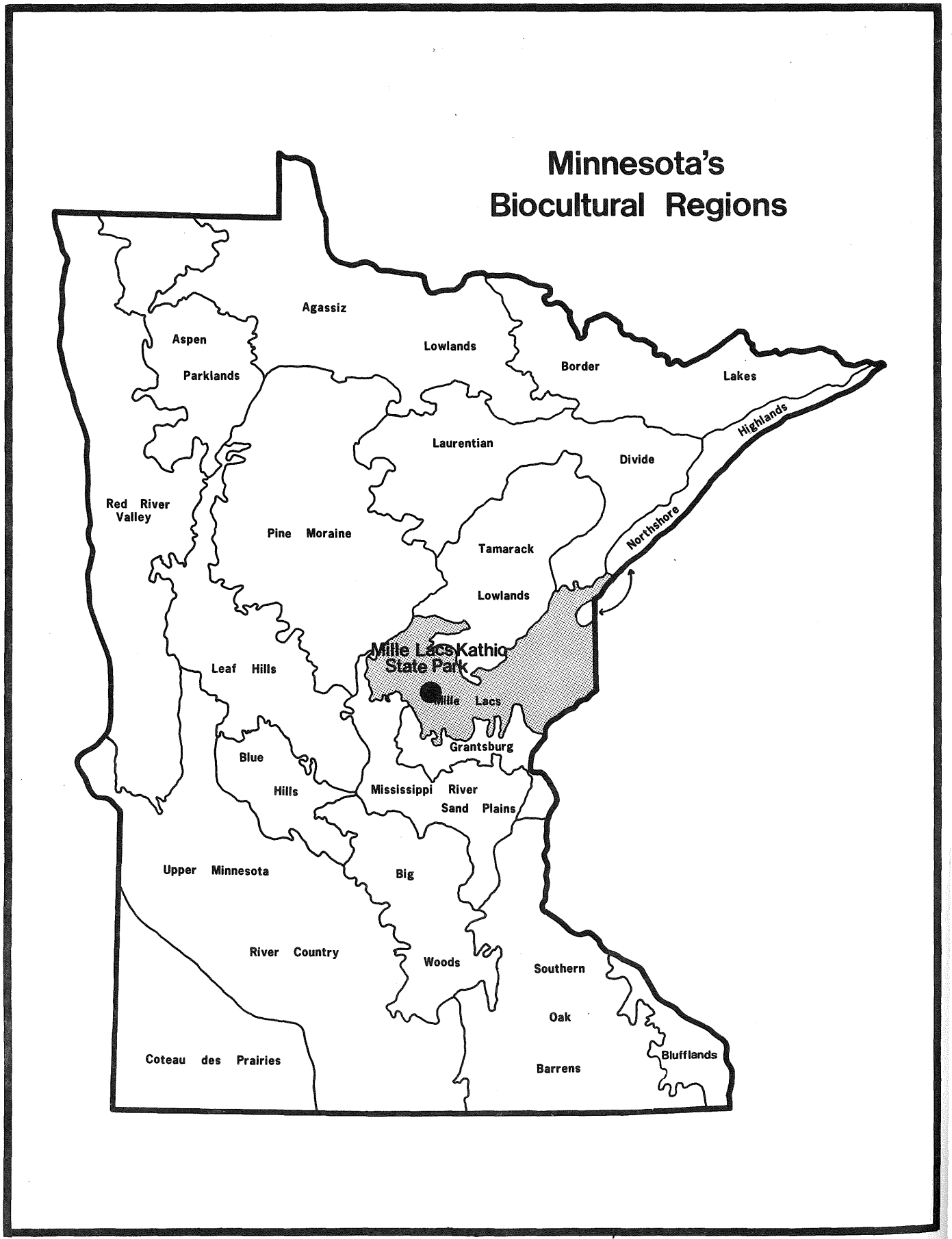
recreational rivers; wilderness areas; and state parks. Also included in this legislation is a classification system which identifies general criteria for planning and management direction. The two primary classifications for state parks are natural or recreational.

A natural state park classification places primary emphasis on perpetuation of the natural resources. Recreational state park classification, while not allowing major disruption of the natural resources, focuses on providing a variety of recreational facilities for large numbers of people. This classification determines each park's role as a unit in the statewide park system. (See Classification Section, pp 21-22 for further discussion.)

Mille Lacs Kathio is recommended for classification as a natural state park. The park is located in a part of Minnesota which has resources of statewide significance (including many prehistoric and historic sites, Mille Lacs Lake and numerous other lakes). It consistently draws large numbers of statewide and out-of-state tourists.

Biocultural Region System (Formerly Landscape Region System)

The ORA '75 defines a landscape region as "an identifiable geographic region with generally homogeneous natural characteristics which exemplify the natural processes which formed the geography, geology, topography, and biology of the state." Since 1975, it has become apparent that human impact on the landscape has not be included to a sufficient extent in this system. As a result, several studies have been directed toward amending the system to include the interrelationship of cultural, biological, and geological impacts on the environment. The system has been renamed the biocultural region system. This system divides the state into 18 regions which are differentiated according to the characteristic plant life, animal life, and landforms of presettlement times and the cultural impacts which have altered the landforms since settlement.


Minnesota's
Biocultural Regions
Agassiz
Aspen
Parklands
Lowlands
Border
Lakes
Highlands
Laurentian
Divide
Red River
Valley
Pine Moraine
Tamarack
Lowlands
Northshore
Mille Lacs Kathio
State Park
Mille Lacs
Leaf Hills
Grantsburg
Blue
Hills
Mississippi River
Sand Plains
Upper Minnesota
Big
River Country
Woods
Southern
Oak
Barrens
Blufflands
Coteau des Prairies

Mille Lacs Kathio State Park is located in the Mille Lacs Biocultural Region. This region is named for the large C-shaped terminal moraine which forms most of the west and south edges of the Mille Lacs Lake basin (see Geology, p 32). The region was once largely covered with white and Norway pine. Today, only a few remnant stands of these magnificant trees remain. The region is now comprised primarily of aspen-birch, mixed hardwoods conifer bogs, and swamps. The geological composition of the region is generally a mixture of glacial till and outwash plains.

State Park Use Patterns

State park users are often classified into two types -- destination and non-destination users. A comparison of the differences and simularities of these users groups will help to clarify the park's role in providing resource and recreation opportunities.

The Mille Lacs Kathio park manager estimates that the majority of Mille Lacs Kathio day users come to the park to picnic and swim. Ninety percent of these picnickers and swimmers come from within 50 mi (80 km) of the park. This demonstrates the park's resource and recreational attraction to area residents. The manager also estimates that the majority of midweek overnight visitors in Mille Lacs Kathio are non-destination travelers who come from out-of-state and use the park as a stopover point en route to a principle destination. Its close proximity to TH 169 establishes the park as a convenient and desirable camping facility for non-destination travelers. In addition, the park's clean, safe, and well-maintained facilities, as well as its diversified resource and recreational offerings, help to create a positive impression of Minnesota's state park system.

The majority (80 percent) of the overnight weekend visitors in Mille Lacs Kathio are destination travelers from major communities in the Twin Cities seven-county metropolitan area. This illustrates the short-stay vacation attraction of the park. Campers are likely to go elsewhere for longer vacations.

Regional Influence/Impact Factors

Recreation patterns in the region surrounding a state park must be analyzed in order to adequately plan a park. The basis of this analysis is the relationship between a particular facility and the expectation of the user. The user will visit a state park because of: natural resources, location, facilities, and the experience sought.

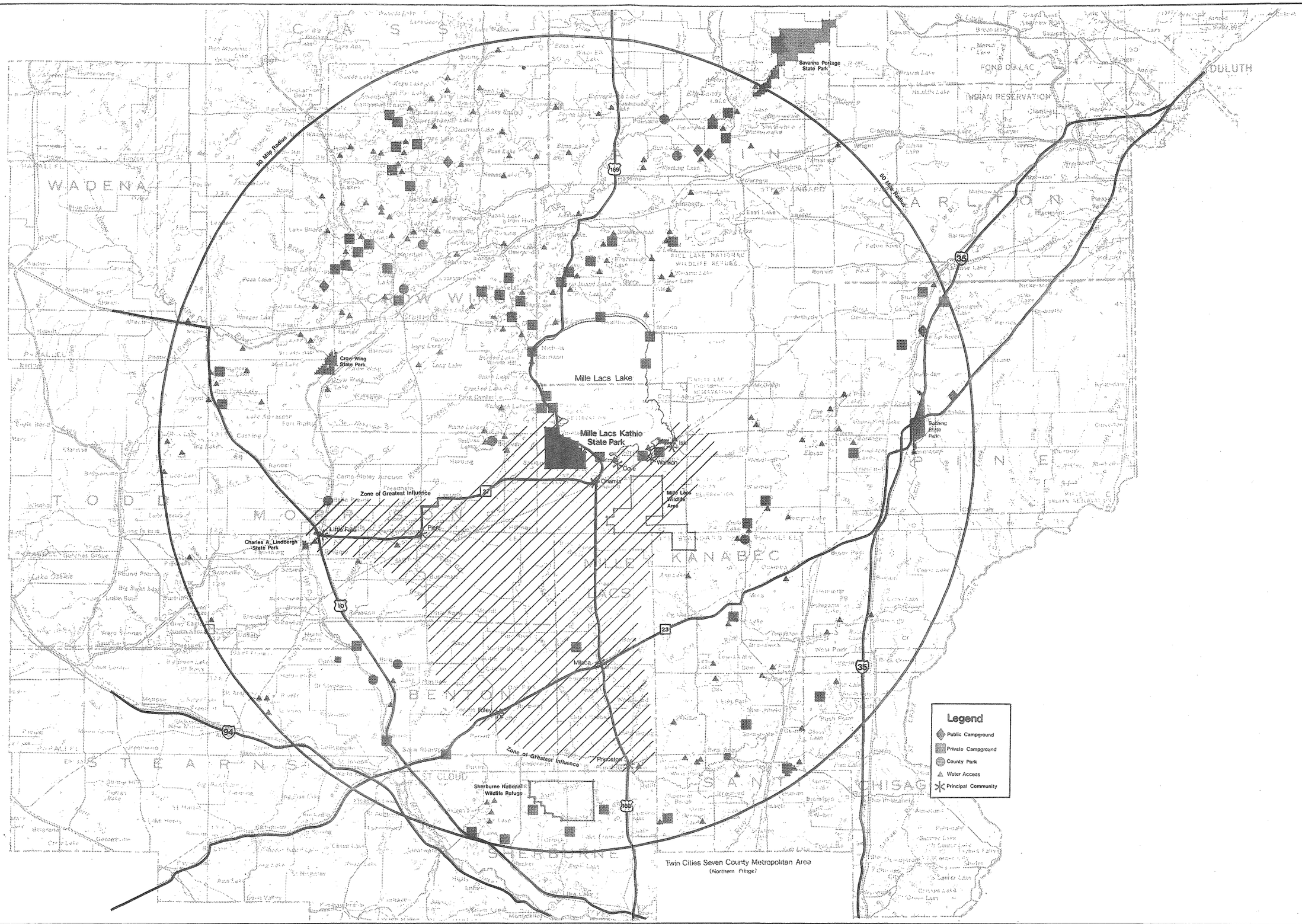
The park manager estimates that the influence zone shown on the Regional Analysis Map, p 13, best illustrates communities most likely to frequent the park on a regular basis. In addition, the map highlights recreational facilities in the influence zone which may complement and/or benefit from park facilities and services.

Recreational facilities within a park's influence zone may duplicate services. However, some people will consistently choose to frequent one area over another in the pursuit of a particular experience. For example, camping is a recreational facility which state parks provide. Municipal and county parks located within the vicinity of a state park may also have campsites. However, some people will consistently travel to the state park because of the overall type of experience it offers, namely, camping in a natural setting augmented by other recreational opportunities such as hiking and wildlife observation. Camping facilities may be duplicated elsewhere, but the total activity experience is not.

This interrelationship of desired activity and existing facility supply to experience is an integral part of the regional analysis process. The connection can best be analyzed according to the recreational activities available in a park, the experiences people seek by participating in these activities, and the identification of complementing facilities in the park's influence zone.

Activity/Facility Analysis

On the following chart, activities and experiences available in Mille Lacs Kathio State Park are analyzed on the left and influence zone complementing facilities are analyzed on the right.



Mille Lacs Kathio State Park | Regional Analysis

Activity/Experience	Complementing Facilities
Fishing	Fishing
The manager estimates that approximately 60 percent of Mille Lacs Kathio visitors come to the park to fish. People enjoy fishing in the park because the activity can be combined with other state park recreational opportunities, such as swimming and picnicking. Fishing enthusiasts come to Mille Lacs Kathio primarily from communities south and west of the park, such as Milaca, Princeton, Pierz, and Little Falls. Many residents of the Twin Cities seven-county metropolitan area also come to the park to fish.	The combined fishing activity/experience of Mille Lacs Kathio State Park is unique in the area. Father Hennepin State Park, located 10 mi (16 km) east of Mille Lacs Kathio on the southeast shore of Mille Lacs Lake, also provides opportunities for fishing. However, in the event of windy weather or large waves on the lake, fishermen often choose to fish the protected waters within Mille Lacs Kathio State Park.
Picnicking	Picnicking
The majority of weekend day users at Mille Lacs Kathio are picnickers. The park has 62 picnic sites. People enjoy picnicking at this park because the activity is complemented by the scenic environment. Other outdoor pursuits such as fishing, swimming, and interpretive programs enhance the picnicking experience.	There are several other picnic areas within the park's influence zone (approximately 180 sites). Father Hennepin State Park, which is in Mille Lacs Kathio's influence zone has 70 picnic sites. However, each of these parks offers a picnicking experience unique to its specific location. The combined activity/experience of Mille Lacs Kathio is not duplicated elsewhere in the influence zone.

Camping

Mille Lacs Kathio's close proximity to TH 169 establishes the park as a convenient and desirable stopover for non-destination campers en route to other recreation areas to the north. The park manager estimates that approximately 65 percent of the destination campers during major tourist season are from the Twin cities metro area.

In may when fishing is almost the exclusive activity draw in the park, virtually all midweek and 40 percent of the weekend destination camping is from a 35 mi (56 km) area south and west of the park.

Interpretation

The function of the interpretive program is to orient visitors to park facilities and resources and to display interpretive exhibits. People can enjoy the programs slide shows, naturalist talks, historic exhibits, and nature hikes. The center also has a collection of Indian artifacts.

Camping

There are private, municipal, county, and state camping facilities in the Mille Lacs Kathio influence zone. However, the unique camping experience of this park is not duplicated. Since Father Hennepin State Park is in this influence zone, it warrants special consideration. Father Hennepin provides 62 campsites; Mille Lacs Kathio provides 75 campsites. However, each park offers a camping experience unique ot its location.

Interpretation

Father Hennepin also has an interpretive program. Although there is some duplication in format, each facility presents an interpretive theme emphasizing resources unique to its specific location. Each center has its own appeal and complements the other in function.

Swimming

The park manager estimates that approximately 60 percent of the summer day-use visitors at Mille Lacs Kathio are swimmers. The park beach is used a great deal by local residents. The activity is enhanced by other state park facilities.

Swimming

Although there are other swimming facilities in the park's influence zone, Mille Lacs Kathio has the only public beach and in Mille Lacs County not located on Mille Lacs Lake. Because of the muddy or rocky bottom and cold water temperatures a swimming beach on Mille Lacs Lake within the park will not be developed.

Hiking

Many visitors enjoy the park's mixed hardwoods and pine forests, glacial moraines, and the Rum River. Hiking is often combined with other activities such as interpretation and picnicking.

Hiking

Hiking trails in the area are limited. Therefore, Mille Lacs Kathio's trails are an important recreational facility in the area.

Snowmobiling

In January, approximately 50 percent of the midweek and 60 percent of the weekend park users are snowmobilers. The park's 20 mi (32.1 km) snowmobile trail connects to the grant-in-aid Garrison Commercial Club Trail and offers a scenic ride and access to the park's trail center.

Snowmobiling

The state park trail system is connected to a network of 300 mi (483 km) of trails within 50 mi (80 km). Most of these are grant-in-aid trails maintained by the local snowmobile clubs. This system of trails is adequate as long as the grant-in-aid program continues. This program, however, is evaluated and funded on biennially and depends on the permission of many landowners and the cooperation of clubs who

maintain them. This makes grant-in-aid trails somewhat tenuous. Therefore, snowmobile trails will be kept in the park.

Ski Touring

The popularity of ski touring has grown rapidly in recent years. People come to this park to ski because of the varied terrain and lack of better skiing areas. The park currently has 6 mi (9.6 km) of ski touring trails. Because of supply and demand more ski trails will be developed in the park.

Ski Touring

Father Hennepin State Park 2 mi - 3.2 km), Wealthwood State Forest in Aitkin County (8 mi - 12.8 km), Rum River State Forest (6 mi - 9.6 km), and a few private trails are the major ski touring areas near the park. But the park activity/experience of park trails is not duplicated.

Surrounding Land Use

Surrounding land use may have a positive, a negative impact, or no impact on park lands. Understanding land use will help direct future development and landscape management. (See Surrounding Land Use Map, p 19.)

The north side of the park is bordered by private residences and seasonal resorts on Mille Lacs Lake. Private resort owners complement park services by offering boat access (for a fee) to Mille Lacs Lake, a service the park does not offer.

Approximately 50 percent of Kathio Township's taxes are derived from the privately owned property along Mille Lacs Lake in the northern part of the park. Therefore, it is recommended that these parcels be deleted from the statutory boundary (see Boundary

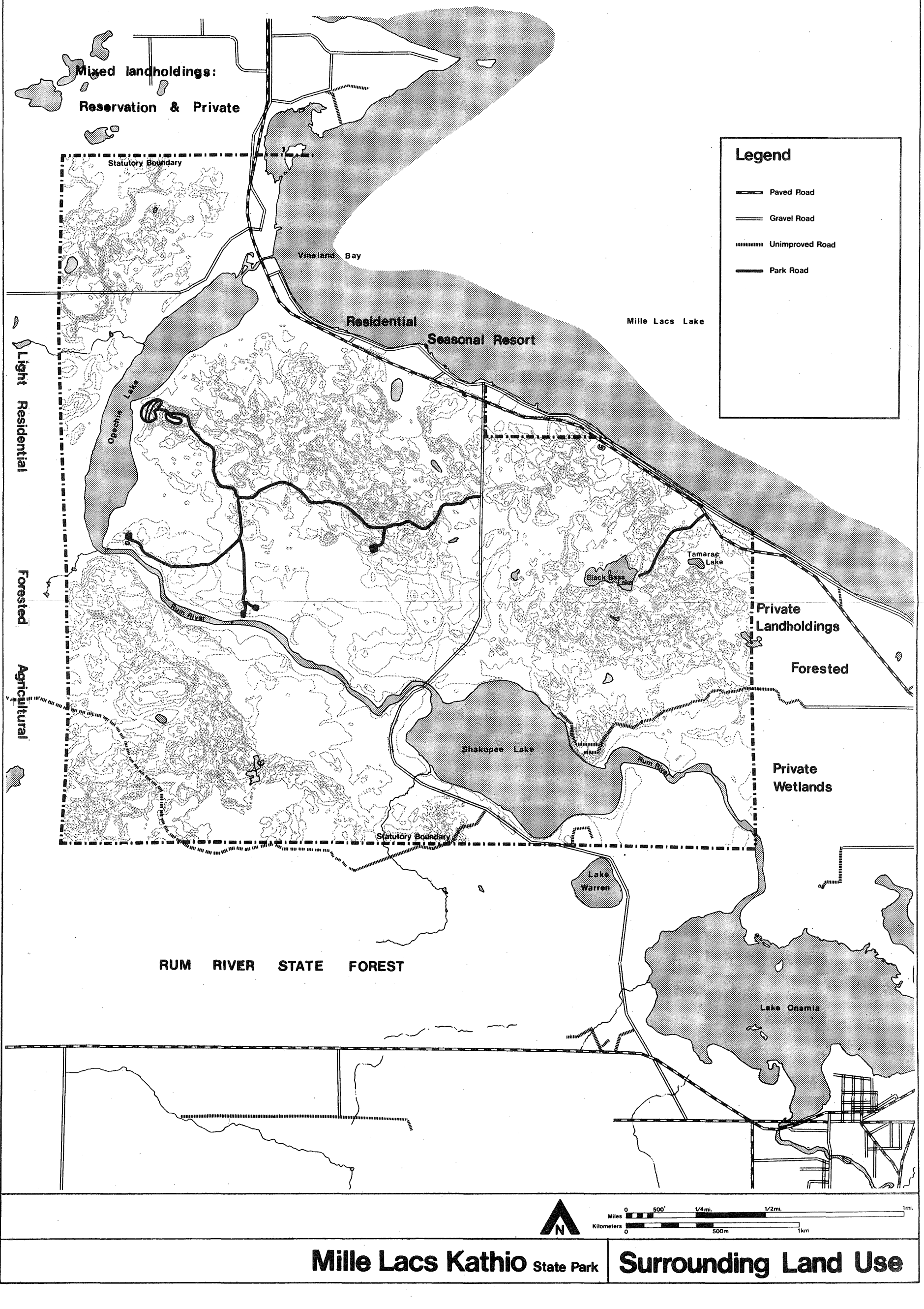
Modifications, pp 92- 98). TH 169 parallels Mille Lacs Lake just inside the north boundary. Even though the road has a negative visual impact, it provides excellent access to the park.

Adjacent land west of the park is predominantly agricultural. A recently constructed silo on the northwest side is a visual intrusion. The east side of the park is bordered by undeveloped, wooded land in private ownership.

The Rum River State Forest borders the park on the south. The forest complements the park in three ways: it provides an effective buffer from adverse development; resource management can be coordinated between the two units; and the forest provides a greater area for extended recreational facilities, particularly trails. The forest currently has a 6 mi (9.6 km) ski touring trail. The forest, though not an exceptional recreation resource, nonethless can provide added recreational opportunities in the area.

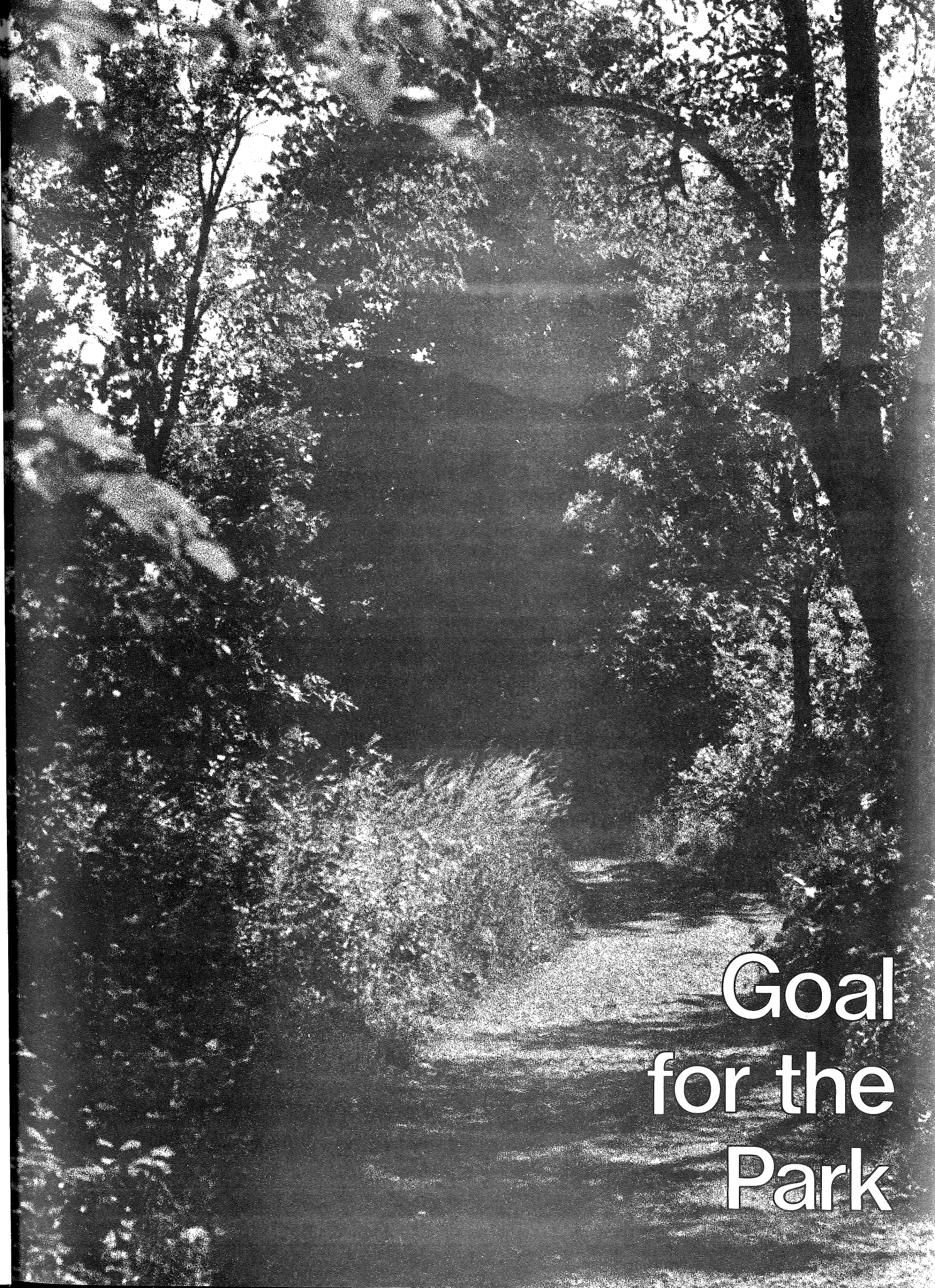
The central portion of Mille Lacs Lake, including several islands, is designated as the Mille Lacs National Wildlife Refuge. The refuge along with Black Bass Lake, which is a migratory resting area in the park, greatly increase the numbers of waterfowl in the area.

The Mille Lacs Museum run by the Minnesota Historical Society (MHS) is located on TH 169 about 1/4 mi (.4 km) north of the park. It contains displays on theDakota and Ojibway lifestyle. It also has ongoing programs in Ojibway crafts, customs, and seasonal activities. The park's restoration of the Cooper site, if funded, would concentrate on Woodland Dakota crafts and customs before their conflict with the Ojibway. The park's interpretive program and the museum can complement each other in telling the pre-European settlement story of the area.



Mille Lacs Kathio State Park

Surrounding Land Use



Goal for the Park

CLASSIFICATION

Purpose

The purpose of the classification process as stated in the ORA '75 is to establish "an outdoor recreation system which will (1) preserve an accurate representation of Minnesota's natural and historical heritage for public understanding and enjoyment and (2) provide an adequate supply of scenic, accessible, and usable lands and waters to accommodate the outdoor recreational needs of Minnesota's citizens."

Process

In accordance with the ORA '75, the park planning staff has reviewed the classification of each park under study this biennium. After the park resource inventory was completed for each unit, the planning staff determined:

A. Which of the 11 classifications from ORA '75 was most appropriate for the unit.
B. Whether sub-units (e.g., scientific and natural areas or other sub-units authorized in ORA '75) should be considered to deal with special areas within the unit.
C. Whether administration of the unit should be reassigned to other governmental bodies (e.g., other state agencies, county, or local governments).

Each park has been recommended for classification according to its resources and use potential and will be managed and developed according to the nature of those resources and their ability to tolerate visitor use.

The classification alternatives considered for Mille Lacs Kathio State Park were natural or recreational state park, with scientific and natural area and a historic site.

The extent to which Mille Lacs Kathio State Park fulfills the criteria, as defined by the ORA '75, is summarized below.

Natural State Park Alternative

ORA Criterion # 1

> "Exemplifies the natural characteristics of the major landscape regions of the state, as shown by accepted classifications, in an essentially unspoiled or restored condition or in a condition that will permit restoration in the foreseeable future; or contains essentially unspoiled natural resources of sufficient extent and importance to meaningfully contribute to the broad illustration of the state's natural phenomena."

The park exemplifies the Mille Lacs Biocultural Region. There is potential for restoration of the pine forests that once dominated the area. The Rum River, which has been designated as a Wild and Scenic River, flows through the park.

ORA Criterion # 2

> "Contains natural resources sufficiently diverse to attract people from throughout the state."

The park attracts people from throughout the state and from outside the state. Nearly 70 percent of the park users come from outside the local area, largely from St. Cloud and Minneapolis/St. Paul. Proposed development should increase use from metro areas. The park contains several historic and prehistoric sites which, when interpreted, could draw people from throughout the state.

ORA Criterion # 3

> "Is sufficiently large to permit protection of the plant and animal life and other natural resources which give the park its qualities and provide for a broad range of opportunities for human enjoyment of these qualities."

Encompasing 10,747 acres (4,299 hectares), Mille Lacs Kathio is large enough to provide recreational facilities in a natural setting and still protect its resources.

The park has many rare wildlife species living in it. Birds such as the bald eagle, osprey, common tern, double-crested cornorant, and Cooper's and marsh hawks are commonly found in Kathio. Most of these, particularly the first two, need large areas of reasonably secluded forest and water to successfully nest. Mille Lacs Kathio provides this habitat.

Recreational State Park Alternative

ORA Criterion # 1

> "Contains natural or artificial resources which provide outstanding outdoor recreational opportunities that will attract visitors from beyond the local area."

The relationship with Mille Lacs Lake, diverse vegetation, rolling terrain, and scenic Rum River attract people from beyond the local area.

ORA Criterion # 2

> "Contains resources which permit intensive recreational use by large numbers of people."

The park has generally stable, developable soils and hardy upland vegetation. However, its numerous lowlands have sensitive vegetation and soils. With proper resource analysis and facility location and design, sensitive areas can be avoided.

ORA Criterion # 3

> "May be located in areas which have serious deficiencies in public outdoor recreation facilities, provided that recreational state parks should not be provided in lieu of municipal, county, or regional facilities."

According to the State Comprehensive Outdoor Recreation Plan (SCORP '74), Mille Lacs Kathio is located in a region with a marked deficiency of recreational facilities (swimming, picnicking, camping, water access sites, and trails). There does not appear to be a move by the private sector toward developing such facilities in the area.

The whole park has the potential for designation as a historic site or a secondary unit can be designated within it. It satisfies the first, second and fourth criteria listed below for state historic sites:

1. "Is the site of or directly associated with a significant historical event; or

2. Is associated with persons whose lives and accomplishments are historically unique or important; or

3. Embodies the distinctive characteristics of an architectural style or method of construction which represents a particular and significant historical period, or the work of a master builder, designer, or architect; or

4. Has yielded, or is likely to yield, historical or archaeological artifacts, records, or other original data or information; or

5. Is a geographical feature of outstanding significance and includes, by way of example, the highest point in the state, the continental divide, and the source of the Mississippi River."

The entire park has been designated a National Historic Landmark. There are 15 known prehistoric and historic sites within the park. Four of these, the Cooper, Vineland Bay, Petaga Point, and Sawmill sites are listed in the National Register of Historic Places. The park includes the sites of many of the battles that established the Ojibway Indians' dominance in Minneosta. The Petaga Point site is severely disrupted, but the others are in good condition.

The Black Bass Lake area has the potential for classification as a scientific and natural area secondary unit. The scientific and natural area committee has recommended this area for designation to protect it as a migrating waterfowl resting area.

Recommended Classification

Mille Lacs Kathio portrays the glacially formed Mille Lacs Biocultural Region very well. It displays Mille Lacs the moraine's ruggedly rolling terrain in the form of a roughly parallel series of ridges. It contains 1.3 mi (2 km) of the shoreline of Mille Lacs Lake, which was created by the moraine. It also contains numerous streams, marshes, shallow ponds and lakes, as well as the Rum River. The 6 mi (9.6 km) of the Rum River that are in the park were recently designated as part of the Rum Wild and Scenic River. The park contains remnants of the original pine and mixed forests and has the potential for restoration of more pine forest, if correctly managed. The park consistently draws visitors from outside the local area. Consequently, Mille Lacs Kathio is recommended for classification as a natural state park.

Three of the park's archaeological sites (Cooper, Vineland Bay and Sawmill) are located by Lake Ogechie. The Cooper site at the present campground and the Vineland Bay site at the outlet of Mille Lacs are significant. Vineland Bay was a large village site and was also the second-day site of the decisive 1745 battle between the Ojibway and Dakota. The Cooper site is believed to have been one of the larget villages in the area and contains many burial mounds. The area around the northern portion of Lake Ogechie (see Secondary Units Map, p 91) is recommended for designation as a historic site.

The Black Bass Lake Area should be left as a solitude area. The road access and buildings will be closed or moved. No developments are proposed for the area except non-motorized use trails. The natural state park classification will provide adequate protection for the lake, therefore, it is not recommended for designation as a scientific and natural area.

THE GOAL

The natural state park goal is to protect and perpetuate areas of the state which best illustrates and exemplify Minnesota's natural phenomena and to provide, without resource impairment, for the use, enjoyment, and understanding of such resources by all citizens of Minnesota now and in the future.

The goal for Mille Lacs Kathio State Park is to protect and perpetuate the outstanding water, plant, and animal resources found in the park. In particular, the conifer vegetation, once so abundant in the area, should be restored in the park. Also important is to research and interpret the park's rich cultural heritage.

Resource Management

RESOURCE MANAGEMENT OBJECTIVES

The following general objectives are designed to give direction to the management of all the park's resources. To ensure consistent management throughout the state park system, comprehensive objectives have been formulated for all natural state parks.

They are:

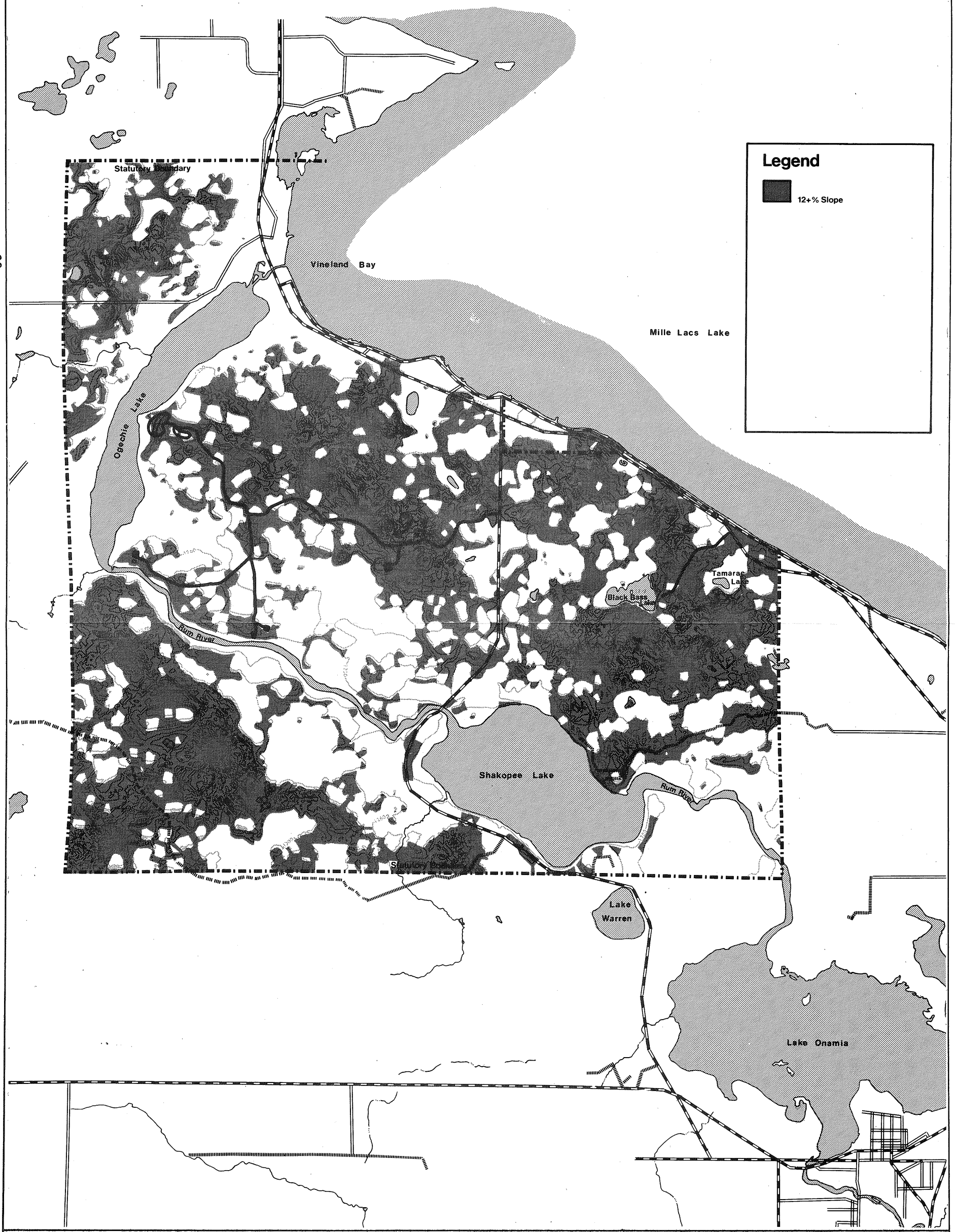
To maintain or reestablish plant and animal life which represent pre-European settlement biotic communities

To use resource management techniques that will harmonize with the park's natural system

ELEVATION AND SLOPE

The topography of Mille Lacs Kathio was formed by glacial deposition and erosion. The last glacier to cover the area deposited the terminal moraine upon which the park is located. The Rum River drained Glacial Lake Mille Lacs, cutting the valley through which the river flows today.

The elevation of the park ranges from 1,248 ft (374 m) to 1,370 ft (411 m) above sea level. Slopes up to 20 percent are found throughout the park. The Slope Map, p 30 delineates all slopes greater than 12 percent. Development on the steeper slopes should be limited to trails, and these should be located very carefully.



Mille Lacs Kathio State Park

Slope

CLIMATE

Mille Lacs Kathio State Park has a typical central Minnesota climate. Normal July temperatures range from 56°F to 80°F (13°C to 27°C) while normal January temperatures range from -2°F to 21°F (-20°C to -5 °C). The park area averages nine days a year above 90°F (32°C) and 48 days a year below 0°F (-18°C). The annual precipitation total is 26 in. (66 cm) with an annual snowfall of 40 to 45 in. (102 to 114 cm).

The only special microclimate area is in the north end of the park. Winds coming off Mille Lacs Lake lower the temperature in this area. These winds also affect the winter climate in the north end by creating windchill temperatures much colder than in the protected areas.

GEOLOGY

The bedrock underlying Mille Lacs Kathio State Park was formed between 2.6 and 1.7 billion years ago. A large inland sea then covered much of North America. Two million years ago was the beginning of the great Ice Age, during which four successive glaciers covered most of Minnesota and created the present terrain. The last of these glaciers, the Wisconsin, receded about 10,000 years ago. This glacier left the huge, C-shaped terminal moraine upon which the park is located.

This moraine is a huge dam which holds back Mille Lacs Lake. It ranges from 110 to 220 ft (33.5 to 67 m) thick in the park and consists mostly of reddish till. A thin layer of gray sedimentary cover was deposited on the lake side of the moraine by the larger glacial lake that preceded Mille Lacs Lake. The Rum River cuts through this C-shaped moraine and is the only outlet of Mille Lacs Lake. The moraine also contains many small lakes and potholes commonly found on terminal moraines, as well as drumlins, eskers, ice contact slopes, kettles, and outwash plains.

There is low potential for finding valuable minerals in the park. It is only remotely possible that copper and uranium deposits large enough to mine could be found in the park.

SOILS

Inventory

A complete soil survey of the Mille Lacs Kathio State Park area has never been done. The most accurate information to date is an aerial photo interpretation study done by the Soil Conservation Service's area soil scientist. Although this study provides a general picture of the soils in the park, a detailed survey should be done as soon as possible. In the meantime, soil borings should be taken in any area where development is proposed. The aerial photograph interpretation revealed two upland and two lowland, or wet, soil types in the park. The upland soils are Omega and Omega in a complex with a Duluth and a Milaca series. For most of the park, the Duluth-Milaca-Omega complex (DMO), contains 50 percent Duluth and Milaca series and 50 percent Omega series.

Both Duluth and Milaca soils are heavy loams with an impermeable or very slowly permeable layer about 20 in. (50.8 cm) below the surface. This layer causes subsurface runoff which can flood septic systems. It also results in bodies of standing water on flat ridge tops during the summer. This does not create a serious problem for minor developments, because the layer can be broken up sufficiently during construction to increase its permeability. Large projects, such as campground construction, should not be located in areas dominated by this soil type. Lane D in the existing campground is located on this soil type and extensive improvements were needed to keep the campsites dry.

The Omega series is, for the most part, an excellent soil for nearly any development. All recreational developments in this park should be located on Omega soils or areas of the DMO complex in which Omega is prominent.

The two lowland soil types found in the park are Newson sands and peat. The Newson series would normally be suitable for certain developments, but the water table in the area is very high, which keeps the soil wet. The peat is nearly always wet.

The west side of the ridge that runs through Section 5 T42N R27W, and Section 32 T43N R27W, (see Soil Limitations Map, p 36) contains a high percentage of gravel or sand. A few eroded areas on some of the trails and the erosion-prone campground lanes (A-C) are other soil problems in Mille Lacs Kathio.

Management

Objectives:

To provide current data on all soils

To correct existing erosion problems

To protect soils from future erosion

• Detailed Recommendations

The Soil Limitations Map, p 36 delineates limitations to development. The unshaded areas are good to excellent for all park development. The diagonally lined areas have moderate to severe limitations, generally with slopes greater than 12 percent. Trails can be developed nearly anywhere in these areas. The darker shaded areas have severe limitations, primarily because of wetness. Necessary trail crossings are the only suitable developments on these soils.

Action # 1. Conduct a detailed soils inventory of the park.

The soils inventory used in this plan was extrapolated from aerial photographs. More accurate data is necessary before exact development locations are chosen.

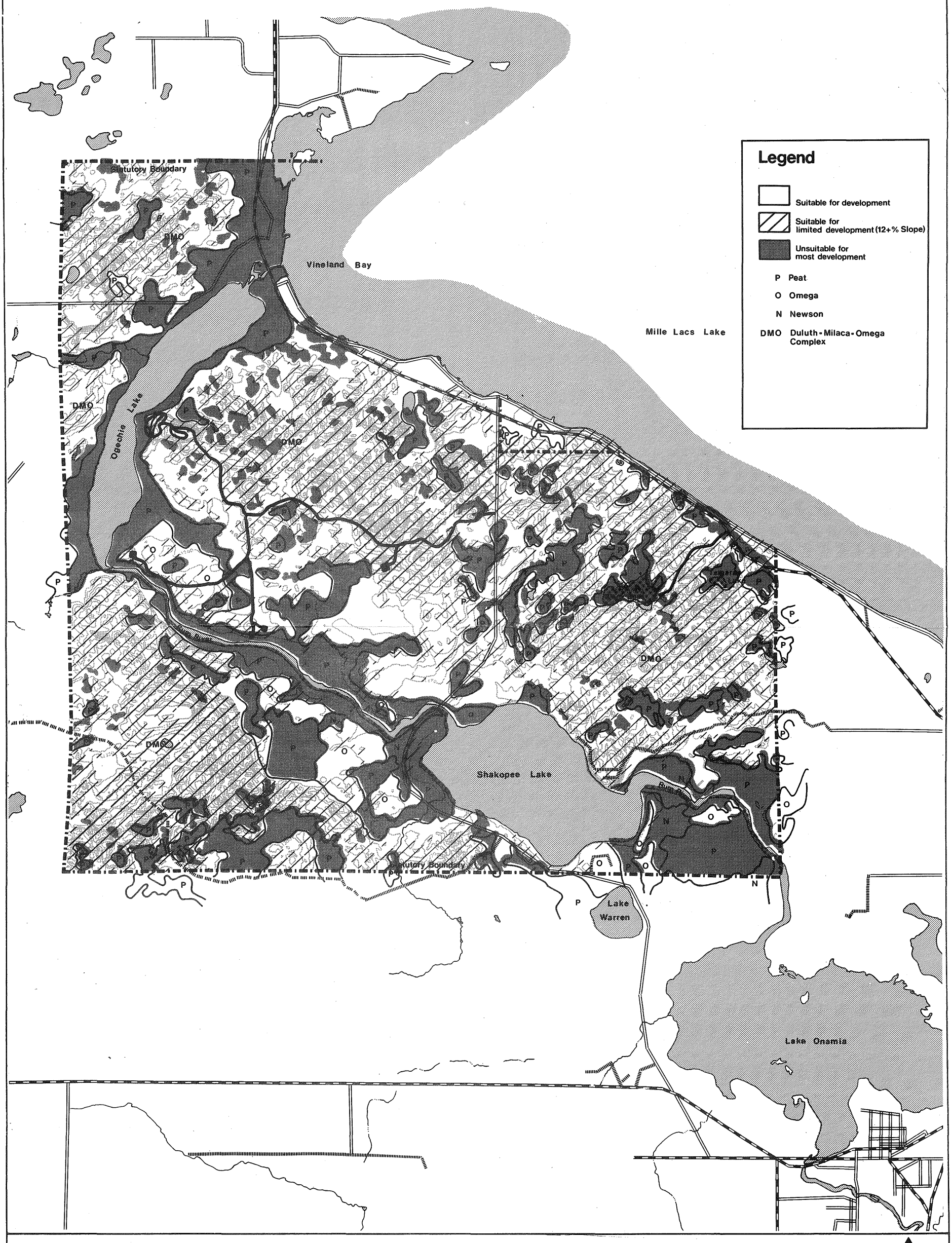
Because the Soils Conservation Service has a backlog of work, graduate students should be hired to survey the park, either for a summer project or on a work-study basis.

Cost. $7,500

Action # 2. Realign and grade existing trails to eliminate current or potential erosion problems.

Some trails have been developed on poor soils, causing erosion. Careful observation of soils characteristics will eliminate future problems.

Cost. Covered in Trails



Mille Lacs Kathio State Park

Soil Limitations

VEGETATION

Inventory

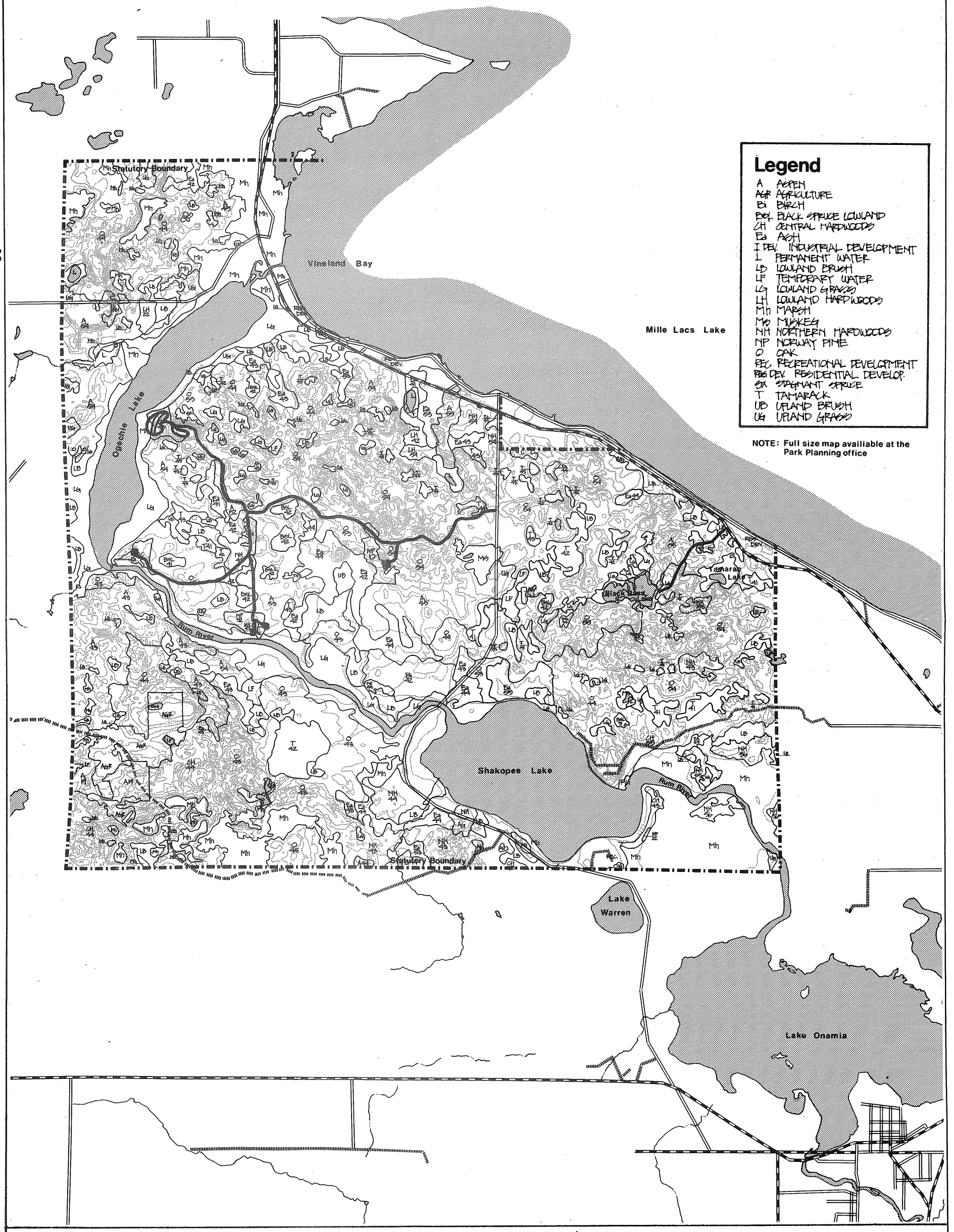
Mille Lacs Kathio's vegetation has undergone some changes over the past 200 years. The only major difference is the absence of the conifer forest, particularly white pine. These majestic trees were found throughout the park in pure stands and in stands mixed with Norway pine and hardwoods (oak, maple, basswood, and ash). The logging era of the early 20th century sent most of the pine down the Rum River.

Today, 18 vegetative and five non-vegetative types cover the park's landscape. Oak is the dominant type, covering nearly 40 percent of the park. The other major types are aspen - 15 percent and marsh - 9 percent. Lakes and streams, which cover 10 percent of the park, make up the only significant non-vegetative type.

The major vegetation problem in this park is the loss of trees during storms. Thousands of weakened, overmature aspen have been blown over or severely damaged by storms in recent years. Unfortunately, many oaks and other tree species have also gone down with the aspen.

The Existing Vegetation Map, p 38, outlines the park's vegetation by type. The types are shown in a letter code. The number code following the type code refers to the size and density of the trees in the type. For more detailed vegetation information see the Management Plan Details. (See p vii for information on the availability of this document.)

One type of vegetation not considered in the survey is wild rice. It grows in the lakes in the park and provides food both for wildlife and humans. The DNR has statewide regulations for harvesting wild rice which are available from the DNR, Enforcement Division or local conservation officers.



Legend

- A ASPEN
- AGR AGRICULTURE
- Bi BIRCH
- BSL BLACK SPRUCE LOWLAND
- CH CENTRAL HARDWOODS
- Ea ASH
- I.DEV. INDUSTRIAL DEVELOPMENT
- L PERMANENT WATER
- LB LOWLAND BRUSH
- LF TEMPORARY WATER
- LG LOWLAND GRASS
- LH LOWLAND HARDWOODS
- Mh MARSH
- MS MUSKEG
- NH NORTHERN HARDWOODS
- NP NORWAY PINE
- O OAK
- REC RECREATIONAL DEVELOPMENT
- RES DEV. RESIDENTIAL DEVELOP.
- SX STAGNANT SPRUCE
- T TAMARACK
- UB UPLAND BRUSH
- UG UPLAND GRASS

NOTE: Full size map availiable at the Park Planning office

N

0 500' 1/4mi. 1/2mi. 1mi.
Miles

0 500m 1km
Kilometers

Mille Lacs Kathio State Park

Existing Vegetation

Management

Objectives:

To reestablish the conifer forest

To improve the quality of the existing vegetation

To improve wildlife habitat through vegetation management

To demonstrate the difference between actively and passively managed forests

As in all other state parks, the majority of Kathio's vegetation will be allowed to continue naturally, without active management, for the following reasons:

- natural, self-sustaining type of vegetation
- inaccessibility
- not a vegetation type (i.e., lake, residential development, recreation)
- satisfactory present condition
- private ownership
- best management direction yet undetermined.

Only safety hazards such as trees leaning over a trail, dead trees next to the trail, and wildfires will be managed in these areas.

• Detailed Recommendations

Map codes refer to the Vegetation Management Map, p 42. Some codes are shown more than once where more than one action is recommended in the same area.

Action # 1. (Map codes 1a, 1b, and 8) Plant upland grass areas and old fields with the conifer and mixed spécies found in these areas before European settlement.

Cost. $34,600

Action # 2. (Map codes 2a, 2b, 2c, and 2d) Improve regeneration and diversify age of some of the ash stands.

Ash is normally a self-sustaining type. However, these stands are nearly equal in age without noticeable regeneration. Some of the mature overstory trees, with the exception of large cavity trees, must be removed to enhance natural regeneration. The resulting stand will be more diverse and will offer better wildlife habitat.

Cost. $53,100

Action # 3. (Map code 3) Accelerate regeneration and growth of maple and basswood.

Maple and basswood seedlings are common throughout the park. However, to improve their growth rate, part of the overstory, particularly trees other than maple and basswood, will be removed. Increased exposure to sunlight will enhance seedling growth. Some trees, especially large trees with cavities, should be left for wildlife. Some of the larger maples may be tapped for maple syrup (see Visitor Services, p 89).

Cost. $27,600

Action # 4. (Map codes 4 and 5c) Regenerate oak.

Oak does not maintain itself well without a great deal of sunlight and soil disruption. Four regeneration techniques will be tried on test plots in the park. The most successful technique will then be used for future oak management.

Cost. $65,000

Action # 5. (Map codes 5a and 5d) Reestablish areas damaged by wind storms.

Removal of down and damaged vegetation will open areas for regeneration. The Cooper site is in particularly poor condition. It will

be relandscaped in accordance with the restoration project. The other sites will be left for natural regeneration.

Cost. $220 - vegetation removal

The cost for the relandscaping will be included in the site restoration plan.

Action # 6. (Map codes 4, 5b, 5c, and 6) Create permanent grassy openings.

The edges of these openings provide excellent wildlife habitat. The openings will be created by removing timber, and if necessary, will be maintained through the use of chemical or mechanical means.

Cost. $28,775

Action # 7. (Map codes 6, 7a, and 7b) Maintain aspen and birch.

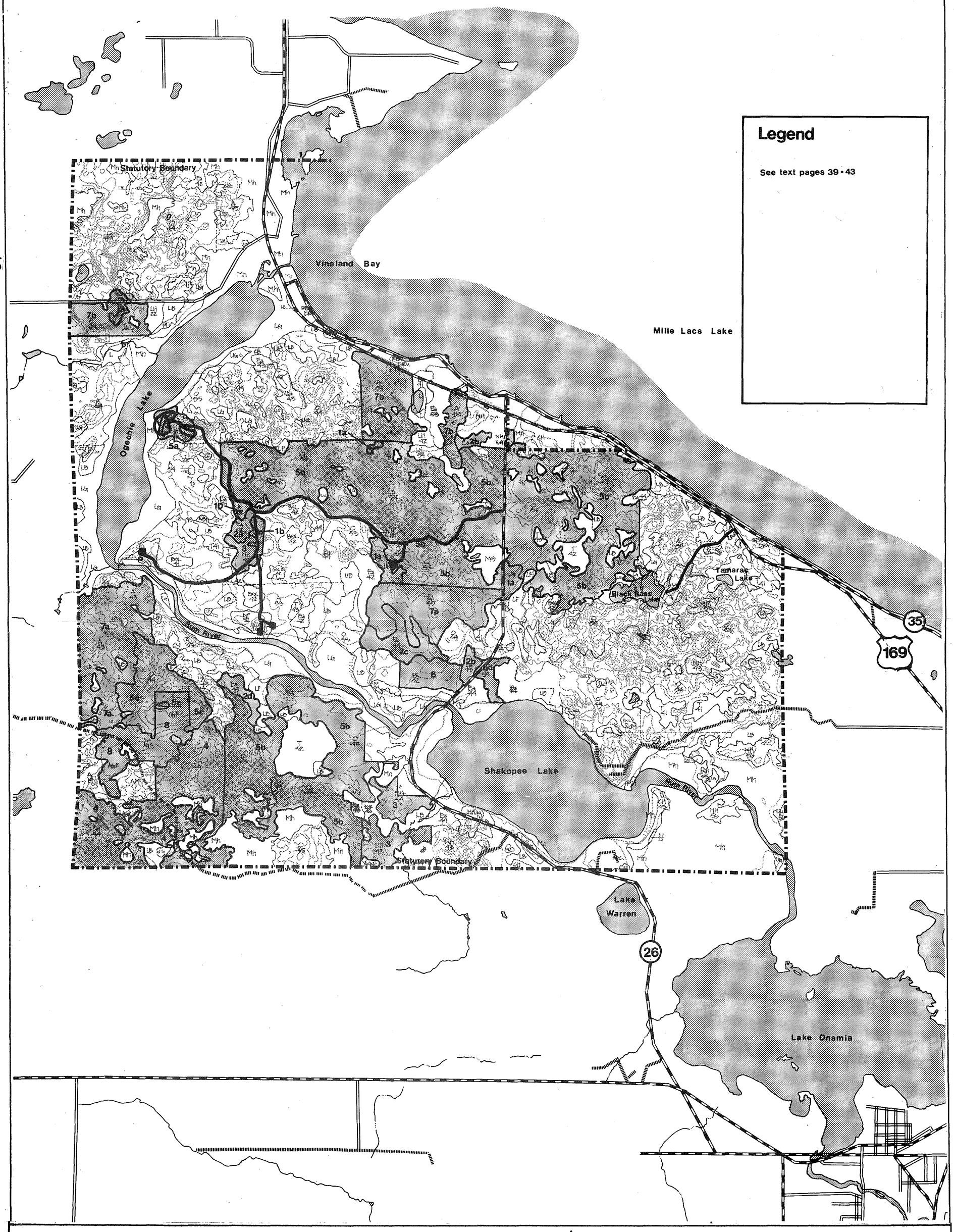
These two species grew among the pine before the logging era. When the pine was logged off, they expanded into the open areas. Now these trees are overmature and dying. Seedlings need a great deal of sunlight to regenerate. Small areas each year must be cleared of all standing vegetation to allow regeneration. Dead trees that would make den trees can be left. Regeneration will greatly benefit many species of wildlife.

Cost. $168,200

Action # 8. (Map code 10) Sign this area as a passively managed forest.

This stand is next to the fork in the park road, where park visitors can easily see it. It will be a graphic example of the difference between actively and passively managed forests.

Cost. $100



Mille Lacs Kathio State Park

Vegetation Management

The management techniques will be implemented primarily by the park manager, with direction from the area wildlife manager and district forester. The cost of implementing the recommended vegetation management as shown in this plan is that required for the most expensive method, namely: using park staff. Wherever possible, less expensive methods such as: issuance of firewood permits, special contracts, and timber sales should be used. Lack of funding should not be used as a rationale for failure to implement the vegetation management recommendations of this plan.

WILDLIFE

Inventory

According to available data and estimates by the area wildlife manager, park manager, and birders, there are 131 bird, 32 mammal, and 10 reptile or amphibian species in the park.

There is not an exceptionally wide variety of bird species in the park, however, there are large populations of several species which are quite rare in the state and/or nation. These include: the common tern, marsh hawk, eagle, and osprey. The habitat of these species should be protected.

Other bird species in the park which require special management or protection include the loon, great egret, great blue heron, and pileated woodpecker. The loon and woodpecker are both common and the heron is abundant. There is a heron rookery on a small lake just northwest of the contact station. The rookery has been active for years. It survived one relocation and should be protected. The pileated woodpecker and other cavity-nesting birds and mammals are common in Kathio. Their habitat must also be protected.

The presence of water birds in Kathio is attributable to the park's numerous water bodies. Both Ogechie and Shakopee lakes are classified as waterfowl-muskrat lakes and contain many plant species which are good waterfowl food.

There are no unusual mammal species in Kathio, but the presence of the coyote and the apparently increasing black bear population are significant. Two species, elk and eastern cougar, have been driven from the park area. It is not feasible to reestablish either species because of the development in the area.

The most troublesome species in the park is the beaver. Some colonies have been established near development areas and, in several locations, their ponds have flooded trails.

Vegetation management may result in an increase in the deer population. This could be detrimental to woody species which deer favor for browsing.

The Mille Lacs Reservation owns land inside the park boundary. The reservation sets its own hunting seasons on these lands. This practice has had no noticeable effect on wildlife in the park.

Management

Objectives:

To increase the size and diversity of the wildlife populations in the park without overpopulating it

To protect and enhance habitat, particularly for unusual and important species

To reestablish some species of wildlife which once inhabited the park

To increase the visibility of the park's wildlife

Much of the wildlife management is tied directly to habitat improvement through vegetation management. The conversion to a younger forest with more conifers will increase species diversity and numbers.

• Detailed Recommendations

Action # 1. Plant native food grass species, such as Dutch alsike clover, on all except the most heavily traveled trails.

Most of the trails need rehabilitation. When they are graded, low-growing, shade-tolerant grass species should be planted. Vegetation on new trails should be planted during construction. Wildlife will be attracted to trails planted with clover and grasses.

Cost. Covered in Trails

Action # 2. Survey the park for nests or dens of rare species.

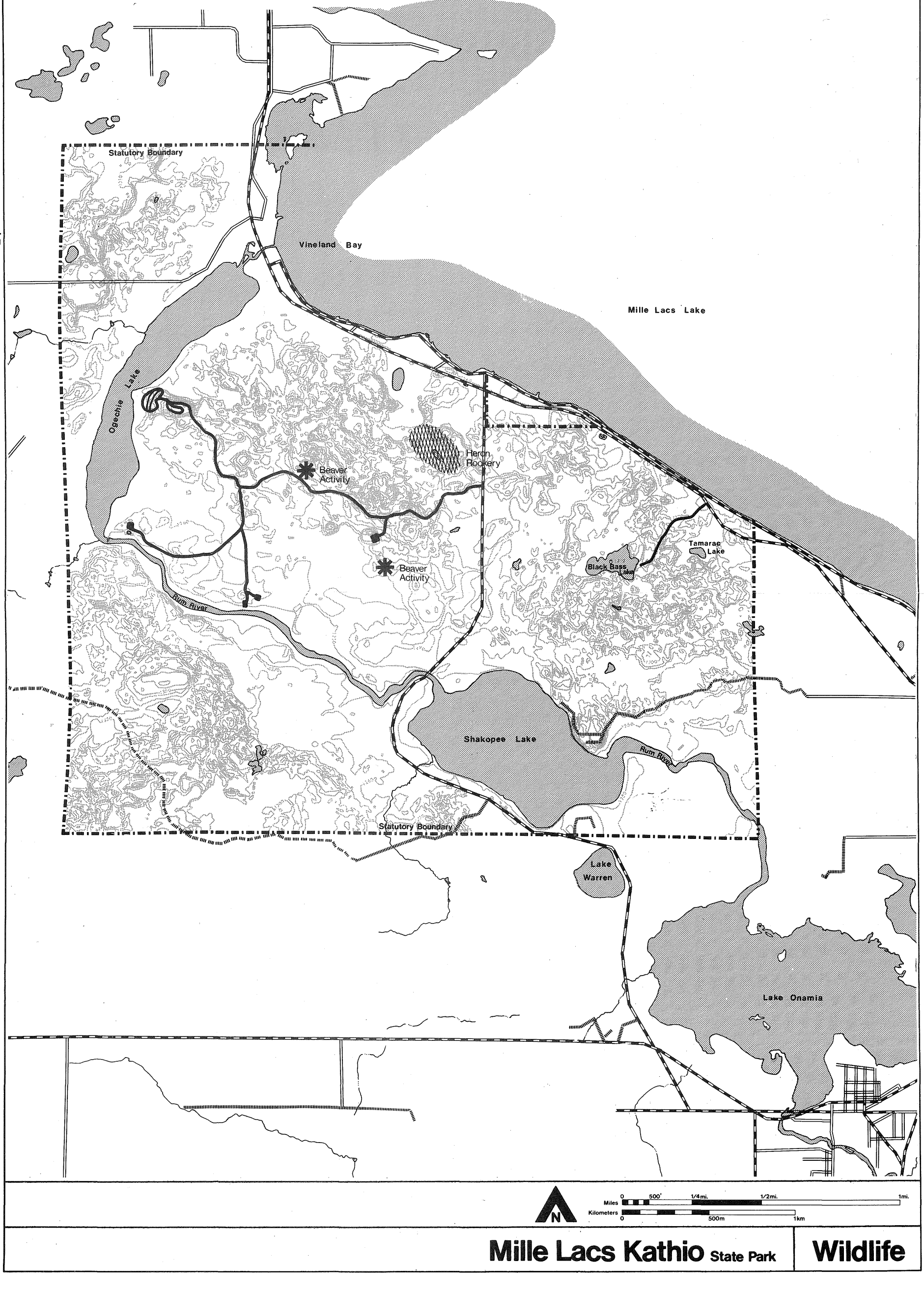
The park manager or naturalist should conduct the search. If any nests or dens are found along a trail, the trail should be temporarily closed or rerouted. Since great blue herons are sensitive to humans, the trail to the rookery should be studied. If it is shown that the trail has a negative impact on the birds, it should be rerouted farther from the lake with a spur to an observation blind. This will allow visitors to watch the birds without disturbing them. (See photo, p 27.)

Cost. $1,000

Action # 3. Monitor wildlife populations.

The park manager, in conjunction with the area wildlife manager and conservation officer, should monitor wildlife populations. If any of the four troublesome species (coyote, bear, deer, or beaver) become too numerous, population control management will be implemented.

Cost. Covered in normal operating budget



Mille Lacs Kathio State Park

Wildlife

Inventory

Mille Lacs Kathio has nearly every type of freshwater body within, adjacent to, or flowing through it. The park borders 4 mi (6.4 km), or 5 percent, of the shoreline of Mille Lacs Lake, the second largest lake in Minnesota. The Rum River, a designated State Wild and Scenic River, begins in the park. Ogechie, Shakopee, Black Bass, and Tamarack lakes are all within the park's statutory boundary, along with numerous small lakes, ponds, marshes, and streams.

There are two water resource problems affecting the park. One is the pollution of Mille Lacs Lake from inadequate sewer systems in surrounding developments. A needs determination study for Mille Lacs Lake Sanitary Sewer District disclosed elevated nitrate and coliform levels in the area of the lake adjacent to the park. Though the lake is still not seriously polluted, steps should be taken to maintain or improve the water quality. Therefore, it is recommended that the parties responsible for maintaining the quality of Mille Lacs Lake (the Minnesota Pollution Control Agency, the DNR, and the Mille Lacs Lake County Board) meet and set a course of action to eliminate the pollution.

The other problem is the water level on the chain of lakes connected by the Rum River. There are two dams in the chain. The Buckmoor Dam at the Ogechie Lake outlet is fixed at the level set by the Mille Lacs County Board in 1931. The Onamia Lake Dam is adjustable. The water level is controlled by the DNR, Division of Waters. Shakopee is a shallow lake in the middle without any direct control. The drought of 1976-1977 caused the waters to recede from Shakopee's shoreline, leaving beaches and docks far from the waterline. This brought demands from affected landowners for a dam at Shakopee's outlet. A feasibility study in the early 1970s ruled out a dam at the outlet because of the lack of elevational drop between Shakopee and Onamia lakes. The dam at Onamia should therefore regulate the depths of both lakes. A few boards were removed from the dam during the high-water periods of the early 1970s. This further aggravated the low-

water problem. Increasing the water level of Shakopee Lake would improve fish habitat and recreational value to the detriment of the wildlife habitat. However, the increased water level would only benefit the rough fish, and would severely decrease the waterfowl and fur-bearing mammal habitat. The DNR, Division of Waters and the DNR, Division of Fish and Wildlife reached an agreement during the summer of 1978 to maintain the Onamia Dam at the current level. The DNR, Division of Parks and Recreation and the Rivers Planning Section should meet with these two divisions to establish an operations policy for this dam.

Since changes in surface water levels and quality in this park are outside the jurisdiction of the DNR, Division of Parks and Recreation, only suggestions can be made in this plan.

GROUNDWATER

Inventory

The groundwater of Mille Lacs Kathio appears to be adequate for the needs of the park. There are six wells in the park. There is no information available on the well at the manager's residence, but data on the other five wells can be found in the MPD (see p vii).

The groundwater quality is generally good, with no unpleasant taste. Because of a large quantity of iron in the water, all the wells require iron filters. The wells were recently tested and all met public health standards.

Four of the five wells are drilled into drift aquifers which are recharged in the immediate area. The headquarters well is drilled into a bedrock aquifer which is either recharged in the immediate area or from an area where the bedrock is closer to the surface or exposed. The group camp well is not a good volume producer. It recharges well, but can be quickly pumped dry.

Management

Objectives:

To provide an adequate water supply to all park facilities

To eliminate the high iron content of park wells

- Detailed Recommendations

Action # 1. Replace the well in the group camp.

Cost. $10,000

Action # 2. Drill a well in the new vehicular campground.

Cost. $10,000

Action # 3. Provide a water supply for the new manager's residence.

There are two alternatives: drilling a new well or piping water from the headquarters well.

Cost. $10,000 (conditional)

Action # 4. Place iron filters on all unfiltered park wells.

Cost. $2,000
500 (conditional)

FISHERIES

Inventory

The primary fishing waters in the park are Mille Lacs and Shakopee lakes and the Rum River. Mille Lacs is considered by many to be the best walleye lake in Minnesota. Northern pike and muskies, as well as many other species of fish, are also found in the lake. The lake is passively managed for walleye and northern pike. Some spawning bed work and stocking of northern pike has been done and muskies are stocked by "Muskies Inc" under DNR permit.

Although Shakopee Lake offers good fishing, it is managed as a wildlife lake. It supports a variety of aquatic plants which are excellent waterfowl food. The lake contains both panfish and northern pike. In the past, lunker-size pike were commonly caught there. The Rum River is probably a spawning ground for the lake's game and rough fish populations. Low water levels in the lake in recent years have decreased the fish population.

The Rum River is known as one of Minnesota's outstanding warm-water streams. The stretch between Ogechie and Shakopee lakes is fished during high water. During the spring and early summer, fishing pressure is very heavy at Buckmoor Dam.

Ogechie Lake is so shallow that it is best suited for wildlife management.

Black Bass is a small, deep lake that is known to contain large panfish. The very light fishing pressure may account for the large size of the fish. The lake is pristine and remote. The park manager's residence is the only development in the area and it is scheduled for removal.

Management

Objectives:

To maintain or improve the fishing opportunities on Mille Lacs Lake

To provide opportunities to fish in a secluded, undeveloped area

The current levels of management should be continued on Mille Lacs and Black Bass lakes. Black Bass Lake will be established as a remote fishing lake by eliminating vehicular access. Access to the lake will be provided by signed trail from the parking lot near the contact station.

Shakopee and Ogechie lakes will continue to be managed primarily for wildlife.

Inventory

Mille Lacs Kathio is probably the most archaeologically significant state park in Minnesota. In the course of archaeological research in the park, 15 sites have been discovered. Artifacts found at one of the sites date back as far as 3000 BC. The sites are located primarily along the shores of Ogechie and Shakopee lakes.

Petaga Point, near the picnic area, is perhaps the most significant site. The site was first occupied by the Old Copper Culture (3000 - 1000 BC). These people made tools and weapons from copper mined on Isle Royale, the Upper Michigan peninsula, and near the Snake and Kettle rivers in Minnesota. The site was occupied again from around 800 to 1200 AD by people of the Woodland Tradition.

Another significant site is the Cooper site, near the campground. The site was a major village during the Woodland Tradition. It was also a major Dakota village before the Ojibway forced the Dakota out of the area. Today, the only visible signs of habitation are the burial mounds.

The other 13 sites found in the park were also occupied by the Woodland peoples from 500 AD through the more recent Dakota and Ojibway habitations.

The following is an excerpt from "Mille Lacs Kathio State Park," a paper written by John H. Martin.

> Mille Lacs Lake and the vast area surrounding it was the center of culture of the Dakota (Sioux) Indian nation for centuries prior to the white man's invasion of this region. Historians and archaeologists who have studied this area believe that all seven tribes of the Dakota nation at one time occupied village sites around Mille Lacs Lake. The fact that more than 1,000 of the 10,000 Indian mounds known to exist 75 years ago in Minnesota were located around Mille Lacs Lake

is proof of the concentration of Indian settlements in this region. It is regrettable that a great many of the Indian mounds were thoughtlessly destroyed by the rapid modernization of Minnesota. Those mounds which have been carefully excavated and examined, have revealed and proven much of the known history of the life and culture of the Indians prior to white man's written documents.

Du Luht (Duluth), the French explorer commissioned by the French government, was the first white man to explore the Mille Lacs Lake region according to documentary evidence. In 1679, Du Luht recorded three large Indian villages established around Mille Lacs. The largest of these villages was Kathio, or Izaty's located around the outlet stream from the Great Lake, now known as Rum River. It has been determined that Du Luht conducted a formal ceremony at Kathio on July 2, 1679. The Arms of the King of France were implanted in the soil and the great region surrounding Mille Lacs Lake was claimed for France by the right of discovery. The two other Indian villages recorded in the Du Luht exploration records are believed to have been the sties of repeated claim ceremonies. One of these two village sites has been determined to be on the west side of the Rum River where it enters Lake Onamia.

It has been established that the Indian Chief Aquipagetin captured Father Hennepin and brought him to this village, where he was held until Du Luht secured his release in 1680. Father Hennepin, in his records of exploration, also mentioned the three large Indian villages. The third village site has not been definitely located. The Indian village of Kathio was reportedly the largest and probably oldest of the three communities. This village was home of a succession of powerful Indian chiefs who ruled the tribes of the Dakota nation for centuries. This succession of Indian chiefs is called the Little Crow dynasty. The last direct descendent of this dynasty was Chief Little Crow, who led the last major Sioux Indian rebellion in 1862 and was killed in 1863. It is believed that such historically prominent Indian chiefs as Crazy Horse and Sitting Bull sprang from this same Little Crow family.

Prior to 1730, the Indians in this region enjoyed a long reign of peaceful living. The explorers of the 17th century were accepted without undue hostility, and Father Hennepin did not suffer any great physical torture while he was held captive. About 1730, Chippewa (Ojibway) tribes, who had invaded this region some years earlier in search of fur bearing animals for pelts and trade, created trouble. They had previously been peacefully accepted by the Dakota tribes and had even intermarried. Many conflicts arose between the Dakota and Chippewa tribes during the following 20-year period.

Around 1750, the battle of Kathio between the Sioux and the encroaching Chippewa tribes was fought around this village. This was the most decisive battle of the many vicious conflicts between the Chippewa and Sioux tribes in Minnesota. The Sioux were forced to leave this rich forest area and were pushed out in the great western plains.

Professor Wilford of the University of Minnesota Anthropology Department has made excavations at both the Kathio and Aquipagetin village sites. In both instances, excavations turned up many relics. Pottery, beads, weapons, and bones were removed.

The on-rush of modern settlement and development which began about 100 years after the Sioux were forced from their traditional village brought great changes in the physical character of this historic site. The great pine forests were laid low to satisfy the great building demands of the civilized settlements which were growing by leaps and bounds.

One of the early woodsmen engaged in the timber harvest in the Kathio area described the forest dramatically. Woodsmen at that time worked long hours each day, leaving their quarters before daylight and returning after dark. The density and size of the timber prompted the woodsmen to say that he 'never saw the sun from one day to the next while he worked in the forests.' Today the great pine forest is gone except for small

remnants which were too difficult to remove in the logging era. The greater portion of the area is covered with aspen, elm, and maple.

Here and there are clearings which resulted from unsuccessful agricultural developments which followed the removal of the original forest resources. Mute evidence of the logging era are a number of deadheads still stuck in the mire of the Rum River between Shakopee Lake and Ogechie Lake. It is reported that steamboats operated in this portion of the Rum River during the logging era. This is hard to visualize since the river is now very shallow and ingrown with water vegetation.

Mille Lacs Lake was one of the earliest resort and vacation areas of Minnesota. The shoreline is well developed with numerous private resorts and homesites which are well patronized. Lakeshore space from the casual tourist and weekend vacationers from the growing municipilities has dictated the need for a large public recreational area in the Mille Lacs Lake area. The Mille Lacs Kathio State Park area, with its rich historical background, is well suited to fill this great need. Trunk Highway 169, which extends from the Iron Range southward through the Twin Cities and Mankato into Iowa, has long been a famous route of tourists who visit our beautiful state.

Management

Objectives:

To protect known prehistoric and historic sites from damage

To find new sites

To study known sites

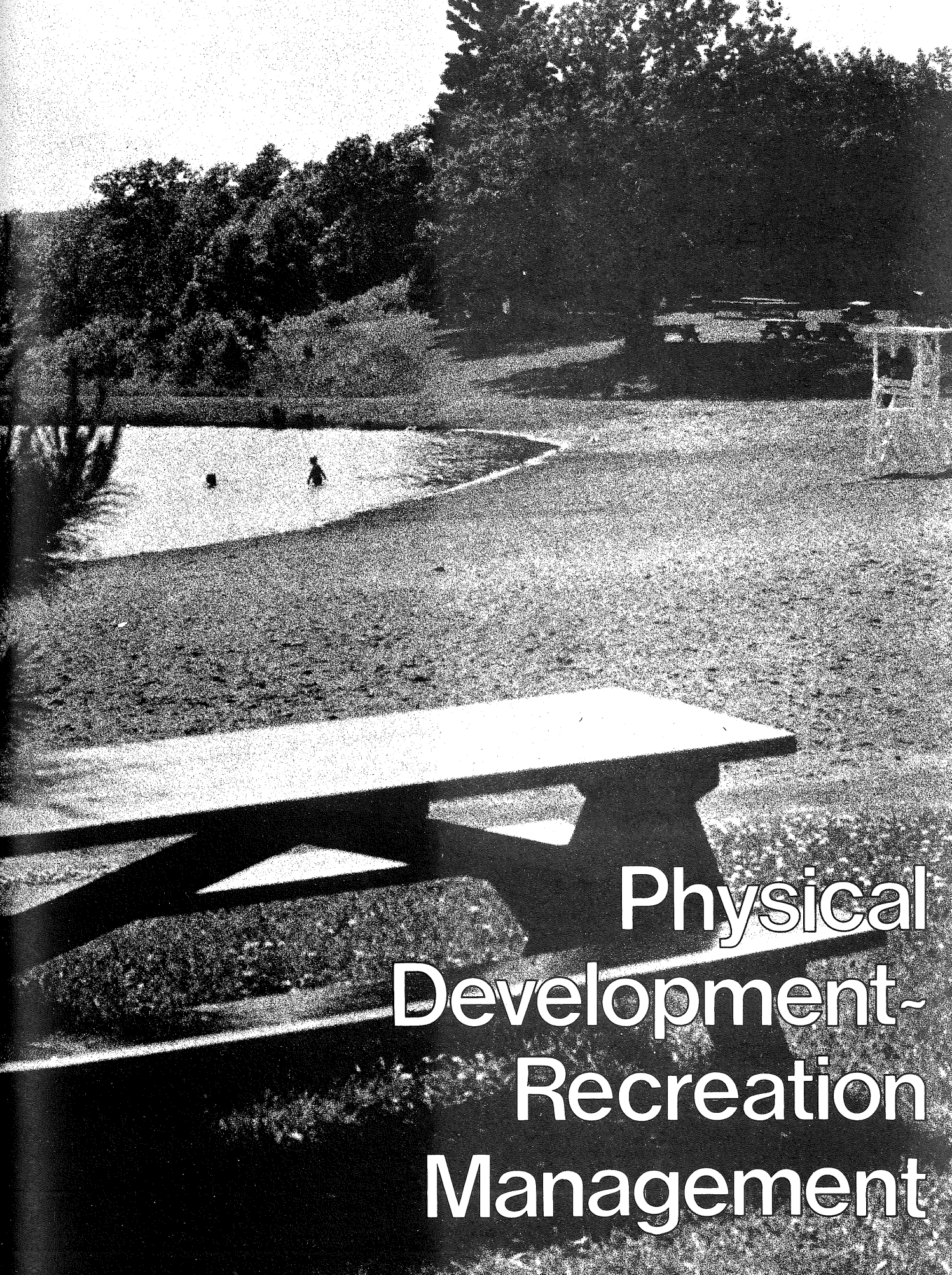
To interpret certain sites

• Detailed Recommendations

Action # 1. Request that the State Archaeologist and Minnesota Historical Society survey the entire park for additional archaeological and historical sites.

Cost. To be determined

The Mille Lacs Reservation land near the Cooper site also has archaeological sites. They are now protected and negotiations for exchange, purchase, or trail easements on this property should include provisions for total protection of these sites regardless of ownership.



Physical Development~ Recreation Management

RECREATION MANAGEMENT OBJECTIVES

These recreation management objectives are intended to guide the development of recreational facilities in all natural state parks:

To coordinate park development with private and other public facilities and resources in the vicinity

To limit park development to that which is necessary for efficient management, and for the public to experience, study, and enjoy the natural resources

To locate park development where it will have the least impact on sensitive natural or historic resources, will not detract from the enjoyment of other users, and will allow easy access to areas of high scenic or study value

To make facilities in the park accessible to special populations (i.e., persons with physical disabilities, the elderly, and the very young)

Administrative site - includes the contact station/office, an orientation center with parking for eight cars, and a service area consisting of one heated shop/garage and two unheated warehouse/garages.

Manager's residence - a single-story house with an attached double garage and an old metal garage.

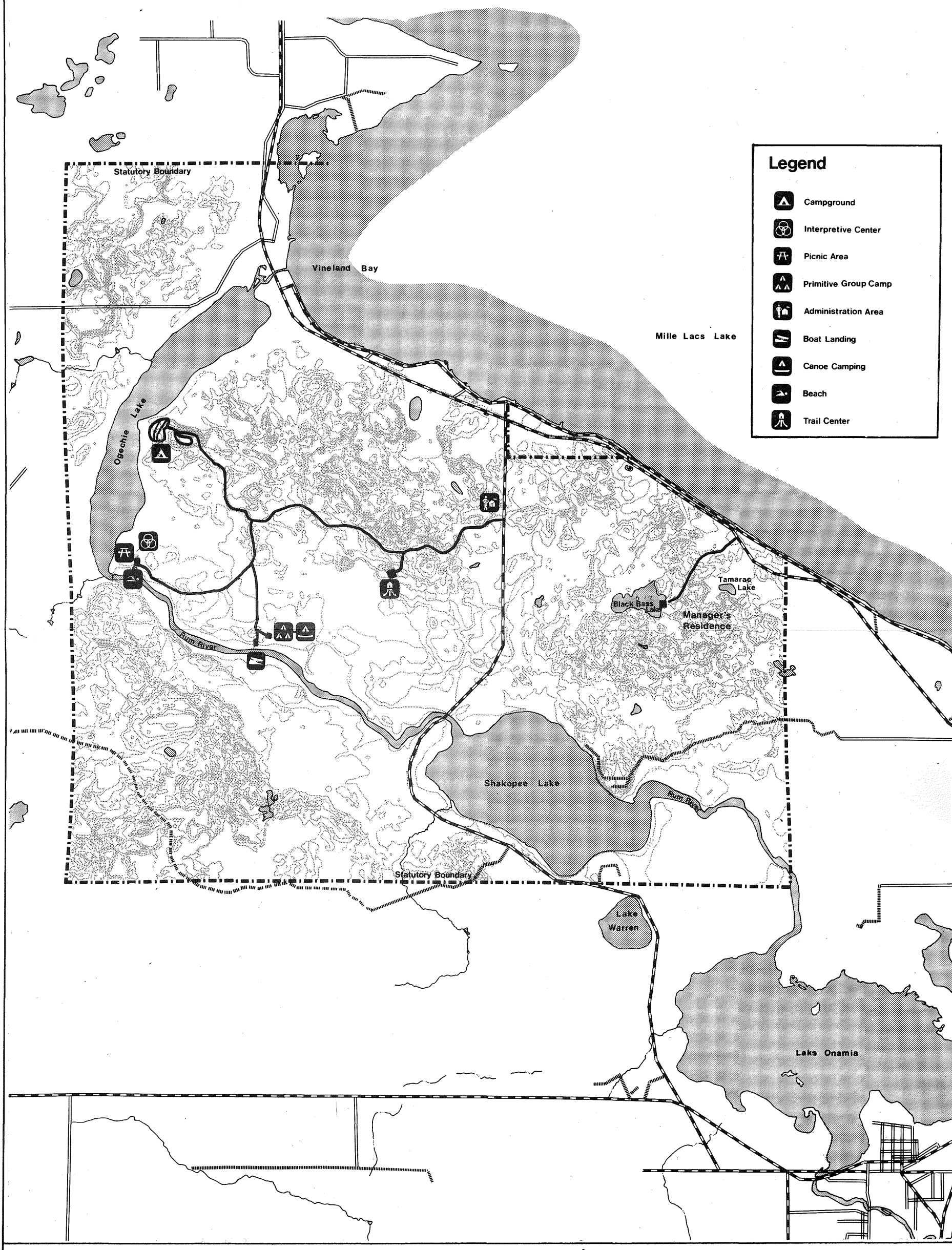
Trail center site - includes a one-room building with electricity and a wood fireplace, a parking lot for approximately 60 cars, a well with a hand pump, and a set of pit toilets. The parking area is also used as an overnight camping area for horseback riding groups.

Boat landing/primitive/group campground - includes a boat landing on the Rum River, a parking lot for 20 cars and boat trailers, four campsites for groups and canoeists, a well with a hand pump, two sets of pit toilets, and a picnic area with a dozen tables.

Day use area - includes a 50-table picnic area, a 120-car and 8-bus parking lot, a sanitation building with flush toilets, one set of pit toilets, an artificial swimming pond with a beach and clothes-changing cabanas, and an interpretive center with restrooms.

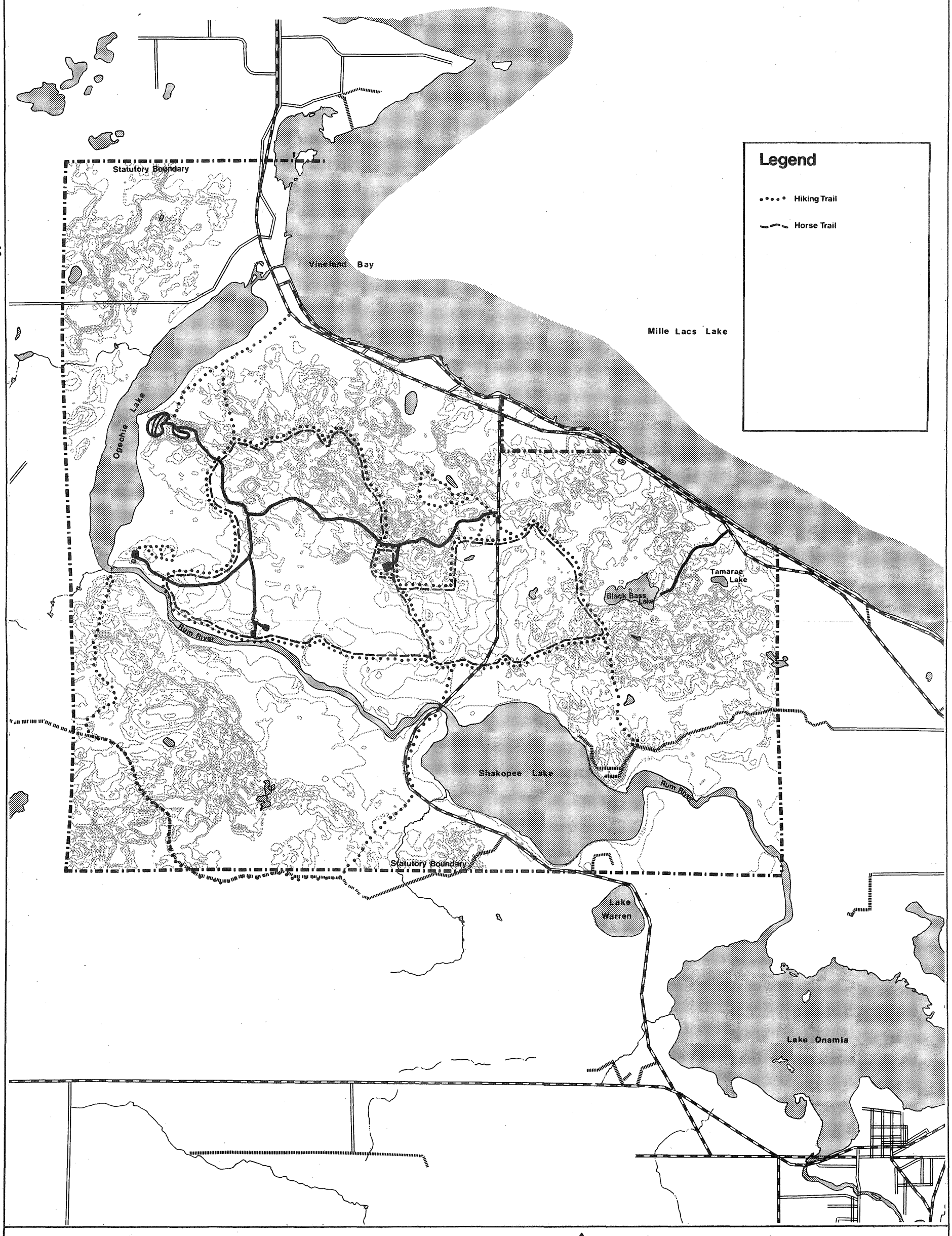
Vehicular campground - includes 71 camping spurs, a sanitation building with flush toilets, a trailer sanitation station, and a fish cleaning building.

Trail system - snowmobiling - 20 mi (32.1 km); ski touring - 6 mi (9.6 km); horseback riding - 10 mi (16 km); hiking - 26 mi (41.8 km); interpretive - 3.25 mi (5.2 km).



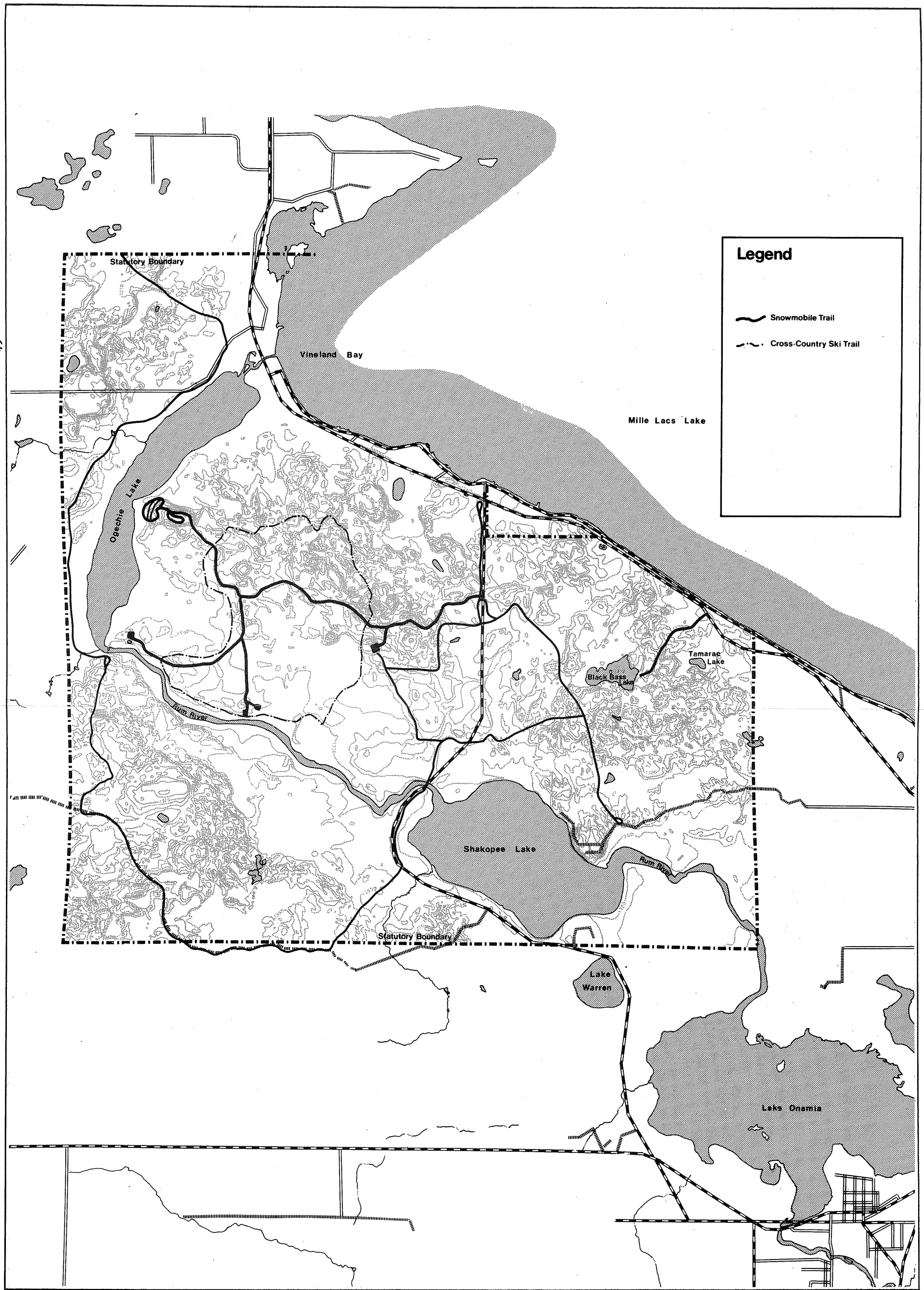
Mille Lacs Kathio State Park

Existing Development



Mille Lacs Kathio State Park

Existing Summer Trails



Mille Lacs Kathio State Park

Existing Winter Trails

PROPOSED DEVELOPMENT

All new development sites will undergo detailed archaeological studies before construction is started.

Roads and Visitor Contact

Objectives:

To improve the efficiency of the contact station's operation

To eliminate possible road hazards

To upgrade the two spurs off the main park road

Action # 1. Remodel the public entrance to the contact station and repair the roof.

There is only a tunnel view from behind the counter out to the entrance road. This makes it difficult for the staff to check approaching vehicles for park stickers. There is also a leak in the roof.

Cost. $30,000

The Kathio town board's efforts to abandon the section of the township road (Wulff Road) running from the Wulff farmstead west to CSAH 25 should be supported because it provides an unauthorized access to the park.

Action # 2. Remove the asphalt and grade the abandoned sections of CSAH 35 on either side of the Rum River near Vineland Bay.

These two sections are no longer open for traffic but the pavement remains. On occasion, vehicles get around or go through the barricades and drive down to the river. Since the state may be liable

for accidents, this section of the road should be removed. (The Division of Parks and Recreation should work with the county highway engineer to determine how the work should be completed.)

Cost. Mille Lacs County Highway Department

Action # 3. Upgrade the access roads to the trail center and to the boat landing.

Both roads will be receiving heavier traffic in the future. This will compound the existing dust problem. The boat landing road breaks up in the spring and the hill to the trail center is difficult to negotiate in the winter because of the steep grade. The road to the trail center and boat landing should be widened and paved. The steep hill on the trail center road must also be cut and filled to decrease the steep slope of the roadbed.

Cost. $45,000

Action # 4. Request Mn/DOT to construct a left-turn lane or a bypass lane on TH 169 at its junction with CSAH 26. Also inquire about the possibility of putting up a flashing light at the intersection.

The junction is along a straight segment of TH 169 where passing often occurs. There have been a number of accidents at this intersection involving cars which have pulled out to pass and cars turning left into the park.

Cost. $50,000 - left turn lane option (conditional)
$10,000 - bypass lane option (conditional)

Camping

Objectives:

To provide a wide variety of camping experiences

Statutory Boundary

Eradicate abandoned section of CSAH 35

Vineland Bay

Mille Lacs Lake

Ogechie Lake

Remove

35

Manager Residence

Observation Tower

To be improved

To be improved

Tamarac Lake

Black Bass Lake

Remove Manager's Residence

169

Rum River

To CSAH 25

Shakopee Lake

Statutory Boundary

Lake Warren

26

Lake Onamia

Legend

- Campground
- Interpretive Center
- Picnic Area
- Primitive Group Camp
- Administration Area
- Boat Landing
- Canoe Camping
- Beach
- Trail Center

Existing facilities shown in lighter tone

N

Miles 0 500' 1/4mi. 1/2mi. 1mi.

Kilometers 0 500m 1km

Mille Lacs Kathio State Park

Proposed Development

To improve the quality of the vehicular and tent camping

To eliminate conflicts between camping facilities and historical resources

- Vehicular Campground

Action # 1. Relocate lanes A-C of the existing campground to a site adjacent to the park road just east of the picnic area parking lot. (See Proposed Development Map, p 67.)

The number of campsites will be based on estimated demand at the time of development. Approximately 50 sites should be adequate. The driving lanes and spurs may be paved. Conifer stock trees and shrubs should be planted to provide screening as necessary. The fish cleaning house will be moved from its present site to the new campground. The trail through the new site may have to be relocated. However, it will be retained and paved to the day use area. The new campground will be designed so that parts of it may be opened during the winter, if demand dictates. A sanitation building with showers, approximately 18 x 32 ft (5.5 x 9.2 m), will be constructed.

The existing campground is situated on an Indian burial mound and village site. There has been some unauthorized camping on the mounds. The A-C lanes of the campground are on a hillside and some campsites wash out in heavy rains.

The existing campground is 2 mi (3.2 km) away from the day use area, requiring a car to get from the campground to the day use area. Lane D will be retained in its present location because it is not on the historic site. It has had some wet spots, but most of the sites have been modified so that moisture is no longer a major problem.

Cost. $190,000

• Group/Canoe Camp

Action # 2. Drill a new well in the group camp area.

The existing well does not produce enough water. A deeper well was drilled, but it failed to produce water. If the new well can be drilled near the existing well, the old one should be removed. If not, the old well should be retained to provide partial service to that area.

Cost. Covered in Groundwater, Action # 1, p 50.

Action # 3. Develop three or four additional campsites in the group camp.

The location of these sites will depend on the location of the new well. If possible, they should be located in the conifer plantation to offer a variety of camping environments. If a suitable site is not found close to the existing sites, a new parking lot will be developed.

The present sites are well worn. Additional sites will allow use to be spread out to minimize the impact on the resources. The parking areas and campsite access trails should remain unsurfaced unless mud or erosion problems develop.

Cost. $30,000

• Walk-in Campsites

Action #4. Develop six walk-in campsites in groups of two or three along the trails throughout the park. Each site should have a wilderness toilet, table, and fire ring. The pine plantation near the junction of CSAH 26 and the Rum River and south of the river are suggested for these sites. (See Proposed Development Map, p 67.)

There appears to be an increasing interest in backpack camping. There are only a few places in the state that now offer established walk-in campsites. Kathio has the size and resources to provide

such sites. If demand increases, nine additional sites will be developed. They will be operated on a carry in-carry out basis.

Cost. $600

Action # 5. Develop one canoe campsite on Shakopee Point.

This facility will allow canoeists to camp in relative solitude without having to travel a great distance from the park's boat access. In addition, canoeists arriving in the park on a Friday evening may depart from the boat landing immediately and reach the canoe camp before dark, rather than wait until Saturday morning to depart. Also, visitors could canoe down to the site, camp, and return the next day. This site will be developed only if it can be built without adversely affecting the archaeological sites in the area.

Cost. $3,000

Picnicking

Objectives:

To provide a sheltered area for picnicking

To improve parking facilities

Action # 1. Construct a shelter in the picnic area.

The building should be large enough for 10-15 tables. It should be located in a open area so that breezes circulate through it.

Cost. $80,000

Action # 2. Pave the unsurfaced portion of the picnic ground parking lot.

Surfacing would eliminate grading and graveling costs and mud problems in the spring.

Cost. $25,800

Action # 3. Expand the picnic area.

Present use does not justify any expansion. However, if there is sufficient demand in the future, it should be expanded to the west.

Cost. $3,000 (conditional)

Trails

Objectives:

To provide a safe, multiple use, year-round trail system

To provide a multi-purpose trail center

- Trail Center/Large Group Camp

Action # 1. Rehabilitate and expand the existing trail center.

The existing building often fills with smoke because of a faulty fireplace draft. The building is too small and the existing pit toilets will not be adequate if use increases as anticipated. The new facility will include flush toilets, a second fireplace and increased warm-up space. It should be partially visible from the parking lot and overlook the open meadow to the west.

Cost. $120,000

Action # 2. Redesign and expand the existing parking lot.

The area will provide trail center parking as well as a camping area for horseback riders and other large groups.

The existing area should be paved because it softens after heavy rains. In addition, the existing lot does not control traffic and was not designed for use by large groups. The lot must be divided to accommodate more than one large group.

Cost. $30,000

Action # 3. Conduct a search to determine whether anyone is interested in providing a horse rental concession in the park.

Necessary facilities such as a small temporary shed, corral, and water supply will be provided by the park if an interested vendor can be located.

Park user surveys have indicated that such a concession would be popular.

Cost. $6,000 (conditional)

- Trail Improvements/Additions

A system of trails will be developed in Mille Lacs Kathio, using the existing trails as a base. Most of the trails will be designed for more than one use. Winter use is expected to be dominant because of insect problems during the summer. The mileages shown for all the proposed trails are approximations. The exact mileage will depend on the on-site layout.

- Ski Touring Trails (13 mi - 20.8 km)

Action # 4. Rehabilitate 4 mi (6.4 km) of the existing 6 mi (9.6 km) trail and construct an additional 9 mi (14.4 km) of trail.

Because of low wet areas and steep slopes, minor rehabilitation work will be necessary. The new construction should be designed to avoid wetness and slope problems. However, when these areas cannot be avoided small bridges, boardwalks, culverts, or corduroy should be installed. The treadways will be seeded with grasses to attract wildlife to the trails for viewing (see Wildlife, p 45). The segment of the existing trail paralleling the campground road should be rerouted to follow the shoreline of Ogechie Lake. This is contingent on acquisition of the land by fee title or trail easement.

The existing trail attracted a considerable number of skiers during the winter of 1978-79, the first season it was open. The rolling, wooded terrain is excellent for skiing. Since Kathio is only two hours from the Twin Cities, it may see a large increase in demand for ski trails. New trails will provide secondary loops of varying lenghts and cut-offs from the primary trail. Approximately 2 mi (3.2 km) of the existing trail (from the picnic area to the trail center) will be converted back to snowmobile trail after the bridge over Buckmoor Dam is constructed. The segment of existing trail from the contact station to Black Bass Lake will remain a snowmobile trail until the proposed part of the ski trail around the lake is built.

Cost. $30,000

• Snowmobile Trails (33 mi - 53 km)

Action # 5. Rehabilitate the existing 21 mi (33.7 km) of snowmobile trails. Convert 2 mi (3.2 km) of ski trail to snowmobile trail. Construct an additional 10 mi (16 km) of ski touring trail, including three small bridges and an extension of the culverts at the CSAH 26 crossing of the Rum River.

State trails cannot cross lakes or rivers. They must bridge or skirt them. The present road/river crossing on CSAH 26 is legal, but a separate crossing would be much safer. The other rehabilitation work is needed to provide safe, high-quality, low-maintenance trails.

One major rerouting possibility is just south of the CSAH 26/Rum River crossing. If a trail easement can be negotiated with the landowner, the trail can be rerouted west of the road, eliminating two trail crossings of CSAH 26.

The additional miles of trail are being constructed because the park is large enough for multiple trail use without conflict. The new trail will replace mileage lost in recent years to other uses (skiing and roads).

Cost. $62,000 - Trails
$20,000 - Bridges and river/road crossing

Statutory Boundary

Vineland Bay

Mille Lacs Lake

Ogechie Lake

Rum River

Tamarac Lake

Black Bass Lake

Shakopee Lake

Rum River

Statutory Boundary

Lake Warren

Lake Onamia

Legend

- Snowshoe Trail
- Snowmobile Trail
- Cross-Country Ski Trail
- Bridge

N

Miles 0 500' 1/4mi. 1/2mi. 1mi.

Kilometers 0 500m 1km

Mille Lacs Kathio State Park

Proposed Winter Trails

• Snowshoeing Trail (1.75 mi - 3 km)

Action # 6. Realign and designate the Heron Rookery Trail and all interpretive trails for snowshoeing.

The Heron Rookery Trail begins behind the contact station. This brings the public into the service area, where there is no public parking. The trail will be rerouted to begin and end at the orientation center where there is a small parking lot. It will also be pulled back at least 250 ft (76 m) from the rookery (depending on study results, see Wildlife, p 47), except in one spot where a blind will be constructed to allow viewing. The pit toilet at the existing trail head should be moved to the new location.

The Heron Rookery Trail is isolated, only about 1 mi (1.6 km) in length, and would require modification for use as a ski trail. Since there are 15 mi (24 km) of ski trails proposed for the park, this trail is not needed for skiing.

Cost. $5,000

• Hiking Trails (43 mi - 69 km)

All of the trails in the park except for the snowmobile trail north from Buckmoor Dam and that part of the snowmobile trail which runs on the township road to the Shakopee Point area, are or will be designated as hiking trails.

Action # 7. Construct a single-span, rustic (Kor-ten steel) bridge across the Rum River over Buckmoor Dam.

The bridge will provide quick access to the trails south of the river, particularly from the picnic area and interpretive center. It can also be used for fishing. The bridge must be wide enough to accommodate both uses.

Cost. $65,000

Action # 8. Surface the shortest trail between the new campground and picnic area.

Surfacing will facilitate use by bicyclists and special populations. This trail will probably be the most heavily used trail in the park. Surfacing will increase durability without requiring additional maintenance.

Cost. $19,500

• Horseback Riding Trails (25 mi - 40 km)

Action # 9. Designate and sign 25 mi (40 km) of ski and snowmobile trails for horseback riding.

The soils are stable enough for horseback riding, especially on well-designed trails on the flatter slopes. Horses have used the trails in the past with no apparent damage. If a conflict develops between horseback riders and hikers on the same trails, some adjustments will be made to provide separate trail alignments.

Cost. None

• Interpretive Trails

Action # 10. Designate Heron Rookery Trail as a self-guided interpretive trail.

Trails near the interpretive center will be used for both self-guided and guided hikes, but the Heron Rookery Trail will be used primarily as a self-guided trail because it is so far away from the interpretive center.

Cost. None

• All Trails

Action # 11. Post "you are here" signs with degree of difficulty and other information at strategic places along all trails.

77

Legend

- Hiking Trail
- Horse Trail
- Bridge

Statutory Boundary

Vineland Bay

Mille Lacs Lake

Ogechie Lake

Rum River

Tamarac Lake

Black Bass Lake

Shakopee Lake

Rum River

Statutory Boundary

Lake Warren

Lake Onamia

N

Miles 0 500' 1/4mi. 1/2mi. 1mi.

Kilometers 0 500m 1km

Mille Lacs Kathio State Park

Proposed Summer Trails

Since the trail system has many potentially confusing intersections, signs are needed to help guide users. Difficulty indicators are needed, particularly on the ski trails, to ensure user safety.

Cost. $2,000

Water Activities

Objectives:

To improve and expand boat and canoe docking and portaging

To eliminate maintenance problems and expand and improve changing facilities at the swimming beach

To correct and control beach erosion

• Rum River - Shakopee Lake

Action # 1. Grade and pave the boat launch parking lot and rehabilitate the pad under the grate.

Upgrading the parking lot will improve drainage and eliminate mud problems during spring and after heavy rains. Use has eroded the pad under the launch grate. This must be corrected for the launch to function properly.

Cost. $20,000

• Ogechie Lake

Action # 2. Build a small dock on Ogechie Lake at Buckmoor Dam. When the bridge is put in over the dam, the fishing area below the dam should be regraveled to prevent erosion.

This facility would provide a put-in and take-out spot for those who wish to carry their boats from the picnic area parking lot. It would also facilitate portaging canoes and boats around the dam for those

putting in at the park's present landing or above Ogechie. The dock can also be used for fishing.

Cost. $200

• Black Bass Lake

Action # 3. Remove the dock, but keep a rental boat and canoe along the south lakeshore for use by those who want to walk to the lake. Designate it as a motorless boat lake.

The lake and surrounding forest will offer a quiet, remote fishing experience once the manager's residence is removed and the road is closed. The dock is not needed because the south shoreline has a few places where boats and canoes can easily be placed in the lake. The lake is so small (26 acres - 10.52 hectares) that a motor is not needed. Access will be by trail from the contact station area.

Cost. None

• Mille Lacs Lake Access

Action # 4. Construct a major public access on Mille Lacs Lake inside the park.

Four sites were considered for the access - Vineland Bay Resort, Drift Inn resort, New Lakeside Inn resort, and on the east shore of Ogechie Lake. The Vineland Bay Resort is the best location for an access. It already has a ramp, is close to TH 169, and is on the edge of the park where heavy use will not conflict with the other park facilities. One possible drawback is that the site may have significant archaeological value. If a parking area cannot be built on this site the Drift Inn and New Lakeside Inn sites will be considered. The access will consist of a ramp, parking lot (for approximately 50 cars), and pit or vault toilets.

Over the years, citizens from throughout Mille Lacs and Morrison counties have expressed the desire for public access on the southwest corner of Mille Lacs Lake. Concern has been expressed by local resort owners that a public launch would adversely affect their business. It is believed, however, that the increased draw to the area will increase business rather than reduce it.

Cost. $25,000 (conditional)

Action # 5. Provide a public access on Shakopee Lake.

Shakopee Lake is fished regularly and quite successfully. Currently there is no designated public access on the lake. The park ramp on the Rum River is used for access. However, during part of the year the river and/or culverts under CSAH 26 are impassable. An old resort and a site at the junction of CSAH 26 and the Rum River are also used for launching, but both are unimproved and unauthorized. By developing and designating one good access, existing problems will be eliminated. The exact location will depend on the acquisition of a private access now on the lake. If this parcel can be acquired within the next six years, the private access will simply be converted to public use. If the parcel is not acquired, the two other sites now being used will be considered. The site at the Rum River/CSAH 26 junction is the better, due to shallow water problems at the former resort. A small ramp and small (10 car) parking lot are all that is needed for this facility.

Cost. $2,000 (conditional)

- Swimming Pond/Beach

Action # 6. Replace the asphalt apron around the beach with a new apron and curb and landscape.

The current apron is in poor condition. The new apron and a curb will direct runoff around the beach slope, decreasing erosion.

Cost. $18,000

Action # 7. Develop an apparatus to enable the physically disabled to use the swimming pond.

Exact design of the appartus will be determined at a future date.

The disabled should be given the opportunity to swim in a state park setting. Since Kathio is centrally located in the state and has a good, stable, artificial beach, it would be an excellent place to provide such a facility.

Cost. $16,000

Action # 8. Construct new clothes-changing facilities with rinsing showers or faucets. The structure may be an addition to the sanitation building, a separate building, or simply new cabanas with rinsing faucets.

The existing cabanas have no rinsing facilities are are generally in need of repair. The restrooms have been used in the past for rinsing. The sand left as result has caused maintenance problems.

Cost. $50,000

Administrative/Support Facilities

Objectives:

To provide functional, comfortable quarters for the manager

To locate the manager's residence in a convenient area readily accessible to the administrative site

To provide a safe storage area for flammable materials

To improve the aesthetic quality of the park

To remove all non-park-related facilities from the park

To remove unauthorized entrances to the park

- Manager's Residence

Action # 1. Construct a residence near the administrative site.

The home should be energy-efficient, utilizing solar and/or earth-sheltered features, if economically feasible. It should contain approximately 2200 sq ft (2044 sq m) including the garage. The building should be screened from view from the park road, though a view from the residence to the contact station should be maintained. Landscaping should be included in the construction project.

The present home is not well insulated and is located as far from the administrative site that the manager has little control over it. The new location will provide the necessary control.

Cost. $80,000

Action # 2. Remove the present manager's residence, metal shed, and utilities and reintegrate the site into the natural surroundings.

There is no other use projected for this site, so all the facilities should be removed. This action will improve trail access to Black Bass Lake.

Cost. $5,000

- Service Area

Action # 3. Construct a separate building (approximately 120 sq ft - 11.1 sq m) for storing gas, oil, and other flammable materials.

Occupational Safety and Health Administration (OSHA) regulations require that flammable materials be stored in a separate building.

Cost. $6,000

• Utility Lines

Action # 4. Bury all overhead electrical lines, including the meter pole in the picnic area.

Overhead lines detract from the aesthetic appearance of the park.

Cost. $10,000

Action # 5. Remove all old fences, buildings, and other materials that are not necessary for the park's operation.

Old buildings and fences in a park tend to detract from a desirable experience. Buildings deteriorate rapidly when vacant and quickly become eyesores. They are also a safety hazard.

Cost. $36,800

Action # 6. Remove all old driveways and roads, including the access road to Black Bass Lake.

Numerous old driveways have been left along TH 169 and CSAH 26. These tempt people to drive up into areas of the park.

Cost. Covered under operational budget

ARCHITECTURAL THEME

The present buildings in Mille Lacs Kathio have six different architectural themes or styles, though there is some overlap between some of the styles. The last three buildings constructed: the interpretive center, the trail center, and the picnic sanitation building, have closely similar styles. These structures have steep, opposing roof lines and are made of mixed materials (wood and cement). It is recommended that this style be used for any new park user facilities and for any major remodeling work for an existing building.

The wooden portions of all new buildings should be stained the rich brown of the trail center. The buildings should provide views of the rolling terrain, mixed forest, and if possible, water bodies.

VISITOR SERVICES

Objectives:

To welcome and orient visitors to the park

To provide the facilities displays, and equipment needed for the park visitor to interpret the exceptional archaeological, historical, and physical phenomena found in Mille Lacs Kathio

To provide facilities for environmental education

Orientation

Visitor information and orientation will continue to be handled through the contact station and orientation center. The contact station will provide small maps, a large aerial photo, and staff to answer questions. The orientation center will provide visitor services when the contact station is closed. The center is a six-panel structure which provides the following information:

Panel 1: Orientation map of the area showing locations with phone numbers and addresses for essential services.

Panel 2: A large map of the park showing the facilities and trails. (Those relevant to the season should be highlighted.) A weatherproof container containing small handout maps of the park should be attached.

Panels 3 & 4: These panels deal with each of the park's two main interpretive themes - prehistoric and historic cultures and the geology/ecology of the Mille Lacs Moraine. Weatherproof boxes should be attached to these panels containing brochures for the self-guided trails.

Panel 5: A history of the park and area should be outlined.

Panel 6: A calender of events for the park and area will be posted, including the schedule of interpretive programs.

Interpretation

• Interpretive Facilities

Action # 1. Remodel and expand the interpretive center.

The existing building is not large enough to adequately develop the two interpretive themes. In addition, it is poorly insulated and ventilated. The remodeled building should have rooms or areas for displays of the Old Copper Culture and geological/ecological displays. It should also have audio-visual classroom capabilities and office/work space for the naturalists. The deck on the side of the building should be expanded so that more people can use it. It should be made accessible when the building is closed.

The proximity of the new campground, combined with a promotional campaign stressing the significant phenomena found in the park, could increase the use of this center considerably.

Cost. $70,000

Action # 2. Prepare a plan for the historic site.

A management plan for the whole historic site should be prepared. In addition, a site-specific plan for the Copper site should be undertaken. The University of Minnesota, Department of Anthropology, the State Archaeologist's Office, the Minnesota Historical Society, the Heritage Conservation and Recreation Services, the National Park Service, and the Mille Lacs Band of the Minnesota Chippewa Tribe will be invited to assist DNR in the preparation of the documents.

After completion of the plan, site restoration can begin on the Cooper Site. Campground lanes A-C should be closed during the 1984-85 biennium or as soon as the new campground is opened. The site restoration should begin shortly thereafter. The existing sanitation building will be retained for use by people visiting the site, unless the site plan recommends otherwise. Parking will be provided and, after restoration, the site will be appropriately landscaped. All roads and facilities not needed for the site will be

removed. The groups mentioned above should be brought together as soon as possible, after this plan is approved, to draw up guidelines and a timetable for the historic site plan.

Cost. $15,000 - For the plan preparation.
Site restoration cost subject to plan.

Action # 3. Interpret the Petaga Point Old Copper Culture site.

An interpretive sign should be placed at the site and a large display should be built for the expanded interpretive center. The display should include an actual dwelling, furnishings, and a scale model of the whole village site. The same committee involved in the Copper site restoration should determine the details of this display.

This site is significant in that both prehistoric and historic artifacts are found here. Interpretation of this site will complement the historic interpretation of the Copper site.

Cost. $2,500 - Sign only

Action # 4. Construct an observation tower near the trail center.

The park road and the major facilities are designed and built in such a way that the park appears to have a rather flat terrain. However, the terrain is really quite rugged and varied. The tower will provide park visitors with an opportunity to see the beauty of Kathio from above the trees. It will also provide the visitor with a view of Mille Lacs Lake and Rum River Valley. Finally, the tower will offer park visitors a special interpretive program, taking them through the different forest layers from the ground to the treetops.

Cost. $100,000

• Interpretive Programs

The extent and number of interpretive programs, like the facilities will depend to a considerable extent on the level of staffing and operational funding the park receives.

The present programs concentrate primarily on a geological/ecological theme with a self-guided trail to the heron rookery and guided hikes from the interpretive center and campground.

Action # 1. Revise and expand the geological/ecological theme programs.

Upgrade Heron Rookery Trail. Make the present interpretive trails self-guided. Revamp and add to the center's displays and develop a self-guided tour up the new observation tower.

Cost. Covered under operational budget

Action # 2. Develop the historical/archaeological theme as the primary theme for the park.

Major programs should be developed at the Cooper Site and the interpretive center on an ongoing basis. Special programs may be developed for some of the less distinguised sites.

Cost. Covered under operational budget

Environmental Education

Because of the seasonal staffing, environmental education has been limited to an occasional class in the fall.

Action # 1. Provide facilities for area schools to conduct environmental education programs.

If the park is allocated a nine-month or year-round naturalist position, this person will conduct training programs for school instructors so that they in turn can teach environmental programs. The park naturalist may also conduct environmental education programs.

Cost. Covered under operational budget

Action # 2. Provide an interpretive program in sugar bushing.

The park has many maple trees, and area schools and/or the general public could collect sap in the park. Arrangements could be made with two park neighbors to use their boilers in exchange for some of the collected sap. If a lot of syrup is made, the excess could be sold at the contact station.

Cost. Covered under operational budget

SECONDARY UNITS

Historic Site

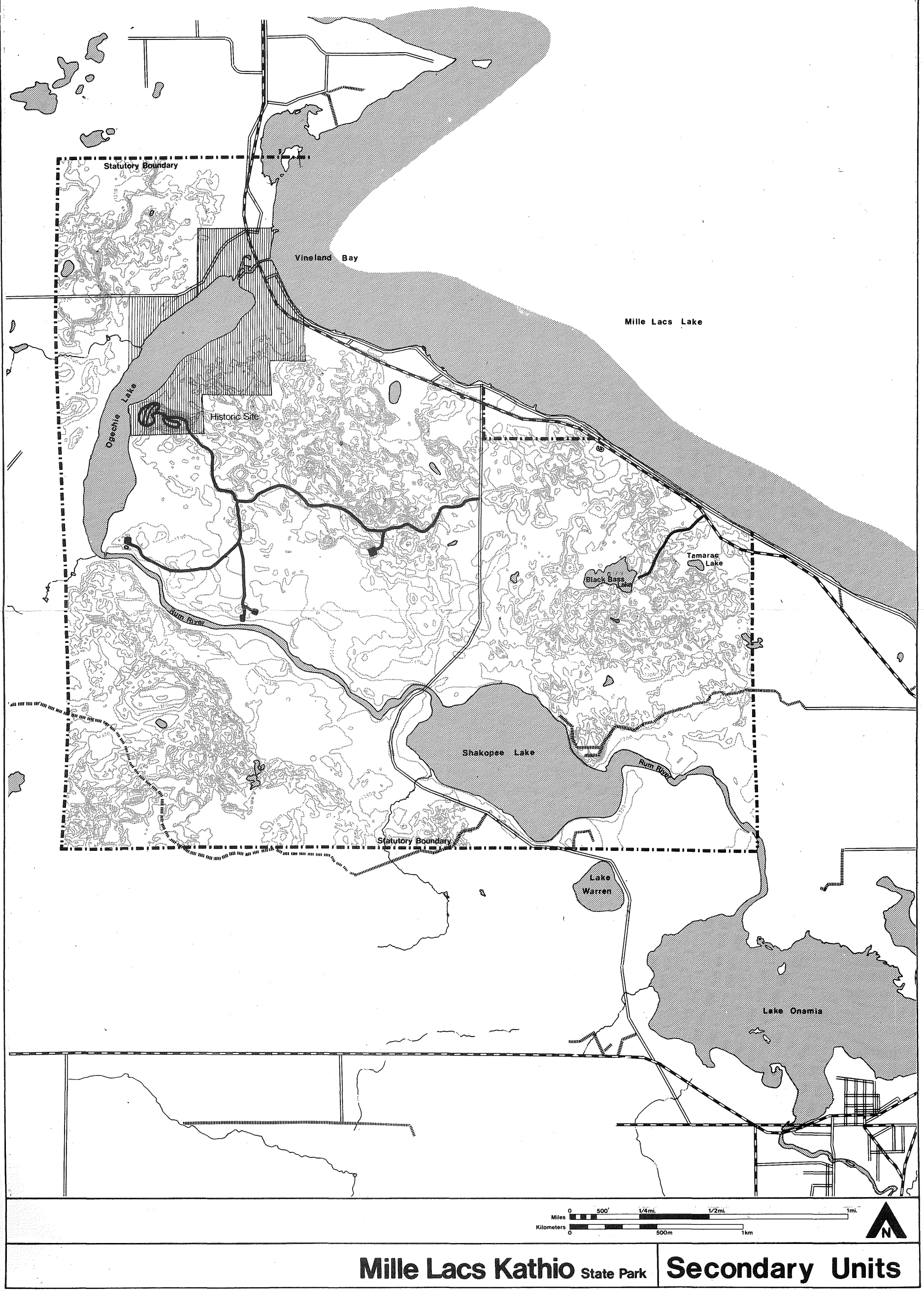
A strip of land along the eastern shore of Ogechie Lake from the southern boundary of Section 5, T42N R27W, to Mille Lacs Lake is recommended for classification as a historic site. The site will actually include an undetermined number of individual sites bounded on the north and south by known major sites. At the north end is the Vineland Bay site. This site is partially in private ownership, but negotiations are underway to obtain it. At the south end is the Cooper site, which is partially covered by the existing campground. This plan recommends that the Cooper site be restored for interpretive purposes (see pp 87-88).

The historic site will remain under DNR jurisdiction. The primary reasons for designating the unit are to call attention to the importance of the sites in it and to afford them additional protection. The Cooper site will be restored as outlined in this plan and will become a primary public use and interpretation site. The other sites may be signed and used as part of an interpretive hike from the Cooper site.

Scientific and Natural Area

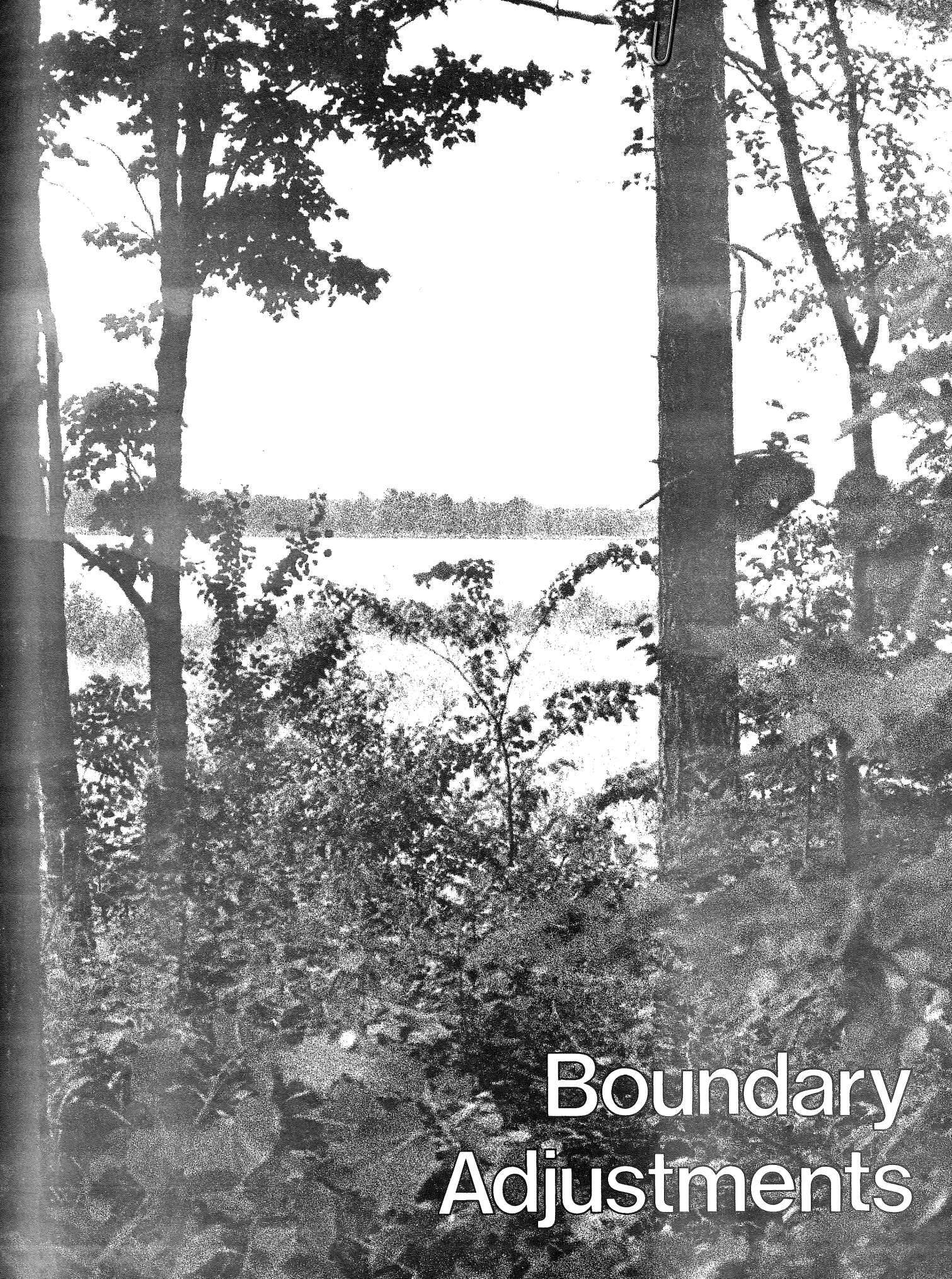
The Black Bass Lake watershed has been recommended for designation as a scientific and natural area (SNA) because it qualifies as a migrating waterfowl resting site. This plan recommends that the site be left in its natural state. The natural state park classification recommended for Kathio would provide this area with nearly the same level of protection. Therefore, the recommendation is to continue studying the site for another 5-10 years. The Division of Parks and Recreation and the scientific and natural area committee should then meet to determine whether or not the SNA designation is necessary.

If the area is recommended for SNA designation, there must be two exceptions to the SNA rules. These are: to allow fishing on the lake except during waterfowl migration periods and to allow a nonmotorized trail through the area.



Mille Lacs Kathio State Park

Secondary Units



Boundary Adjustments

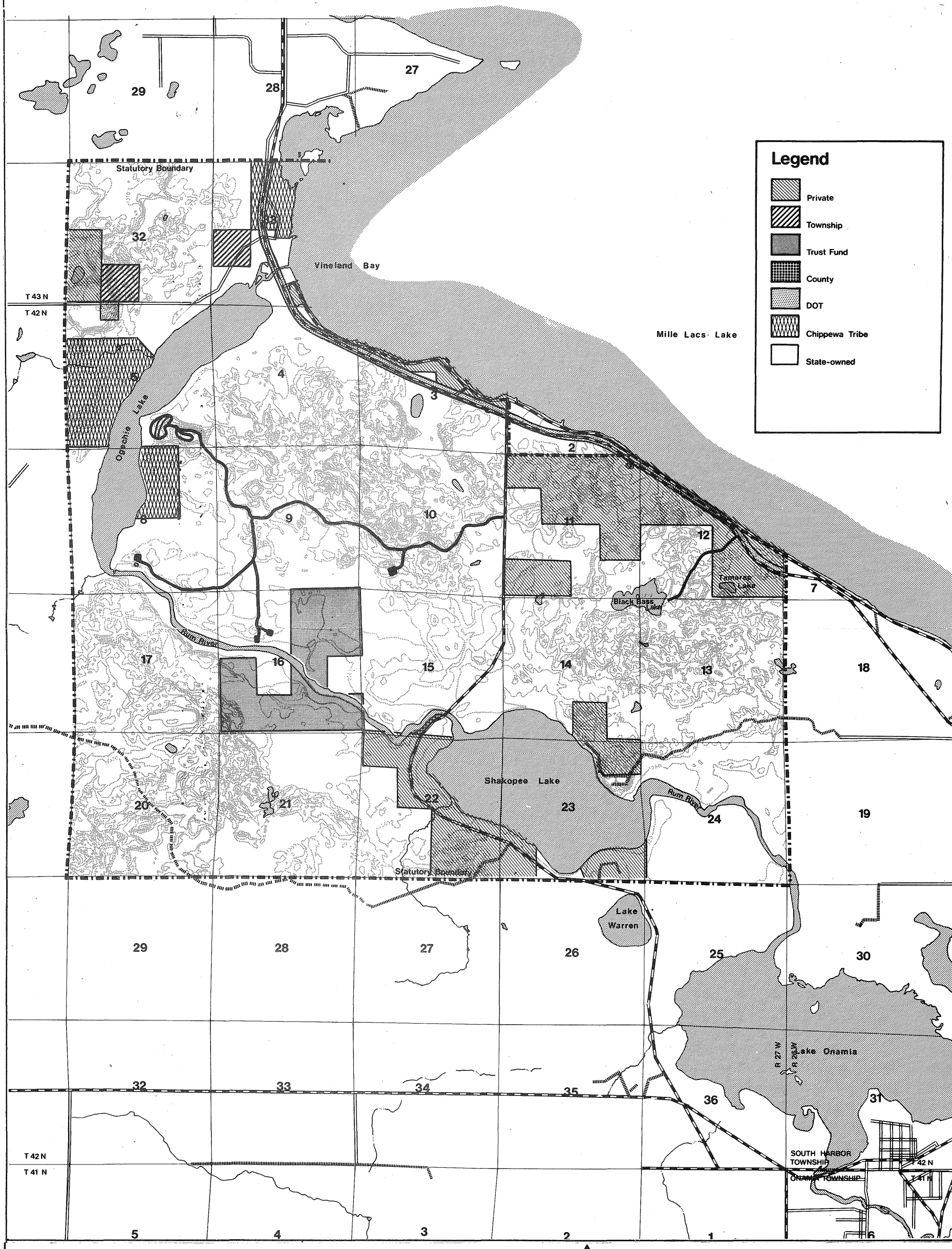
PARK BOUNDARY

Mille Lacs Kathio State Park contains 10,747 acres (4,299 hectares) within its statutory boundary. This boundary was established in 1957 by the state legislature. A group of Onamia area citizens conducted petition drives and pushed for the park's establishment. This group is still active today as the Mille Lacs Kathio State Park Advisory Council.

Most of the land (85 percent) within the park boundary is in public ownership. The DNR, Division of Parks and Recreation owns 79 percent of the land. The table and map show the present land ownership in the park.

	Acres	Hectares	Percent
Public Land			
State Park	8,528.5	3,411	79
Trust Fund	400	160	4
Mn/DOT	105	42	1
Mille Lacs County	2.5	1	-
Kathio Township	80	32	1
Indian Land	324	130	3
Private Land	1,307	523	12
TOTAL	10,747	4,299	100

Indian lands within the park's statutory boundary belong to the Mille Lacs Band of the Minnesota Chippewa Tribe. The use of this land is regulated by the Reservation Business Committee (RBC). Members of Mille Lacs Band may use these lands at any time without a park permit, upon request and with proper identification. However, a park permit is required for the use of park facilities.



Mille Lacs Kathio State Park

Ownership

BOUNDARY MODIFICATIONS

Objective:

To establish the most equitable, manageable boundary possible for the park

Deletions

Action # 1. Delete the following parcels from the statutory boundary (see Boundary Adjustments Map, p 97).

1) The land between TH 169 and Mille Lacs Lake, Section 4, T42N R27W, from the Section 3-Section 4 line west to the east or west boundary of the Reinardy property. The exact location of this line should be determined through negotiations with the landowners prior to its introduction to the legislature. The line, however, must remain in Section 4 and not be moved any further west.

2) Gov't Lot 1 (NE 1/4 NE 1/4), Section 11, T42N R27W, Gov't Lots 1 and 2 lying between TH 169 and Mille Lacs Lake, and the part of Gov't Lot 4 west of a line drawn perpendicular to the south line of said lot from the point where the south line of said lot meets TH 169.

3) Gov't Lots 1 and 2, Section 33, T43N R27W.

Parcels 1 and 2 consist of approximately 200 acres (80 hectares) owned by 83 landowners. These landowners pay nearly 50 percent of the taxes for Kathio township. Seven of these parcels are commercial businesses and the rest are lake front cabins or homes. Removing them from the park boundary increases the likelihood that the properties will remain on the tax rolls. Parcel 3 is an Indian burial ground and does not belong in a state park.

Action # 2. Dispose of state park-owned land which is included in the above deletion.

The Division of Parks and Recreation cannot own or administer land which is outside the statutory boundary of a park. The parcel of state-owned land on the Mille Lacs Lake shoreline (too small to be shown on the map) according to state law cannot be sold, but it can be exchanged for other lakeshore. Another state-owned parcel (4 on the map, p 97) was transferred to the state by the county because of its tax-forfeit status. This parcel may revert to the county, be offered to other state agencies, be offered for exchange with other landowners inside the park boundary, or be sold at an auction.

Additions

Action # 3. Add part or all of Gov't Lot 3, Section 2, T42N R27W, to the park entrance. At least a 100-200 ft (30-40 m) corridor along CASH 26 needs to be protected. The entire 40 acre parcel will be added and acquired only if the landowner requests it.

Acquisitions

Action # 4. Request Mn/DOT to transfer administrative title of the gravel pit in NW 1/4 NE 1/4 NW 1/4 of Section 5, T42N R27W, to the park after it is no longer needed.

Action # 5. Acquire title to the state trust fund land in the park.

Action # 6. Acquire remaining private land within the proposed statutory boundary as it becomes available.

One of the goals of the DNR is to acquire the non-state park-owned land in all state parks.

All tribal lands and sites within Mille Lacs Kathio State Park will be respected by the state as required by law and agreements. Any activities or proposals will be considered upon agreement between the state of Minnesota and the Reservation Business Committee.

Legend

- Proposed Expansion
- Proposed Deletion

Statutory Boundary

Vineland Bay

Mille Lacs Lake

Obonie Lake

Rum River

Shakopee Lake

Black Bass Lake

Tamarac Lake

Lake Warren

Lake Onamia

SOUTH HARBOR TOWNSHIP

ONAMIA TOWNSHIP

T 43 N
T 42 N
T 41 N

R 27 W
R 26 W

0 500' 1/4mi. 1/2mi. 1mi.
Miles
Kilometers
0 500m 1km

Mille Lacs Kathio State Park

Boundary Adjustments

Boundary Line Management

Action # 7. Survey, clear, and post the park boundary.

Many park regulations cannot be enforced unless the boundary of the park is legally posted.

Cost. $20,000
36,000 (conditional)

Operations and Staffing

OPERATIONS

Maintenance is an essential responsibility of the DNR, Division of Parks and Recreation. It is responsibility that often goes unnoticed by the park visitor in comparison with new developments. Yet, the park and the DNR are continually judged by the appearance of the park and its facilities.

The task of providing services to the public and security for park facilities and resources 24 hours a day, 12 months of the year is monumental. During the busy season, full-time operation is necessary 98 hours per week (8:00 to 10:00 p.m., seven days a week). The remaining hours are covered by the resident manager. During other seasons, there is only part-time operation 98 hours per week, however, maintenance, repair, and park security accounts for many extra work-hours. If these responsibilities are to be met, competent trained personnel is essential.

There are four basic aspects to maintenance and operations:

1. Maintaining resources
2. Maintaining facilities
3. Providing services to the park visitors
4. Enforcing rules and regulations which protect park visitors, resources, and facilities

One of the major maintenance problems of parks is the heavy impact of large numbers of people concentrated in specific locations. These areas include: campsites, trails, lakeshores, river banks, areas around buildings, and scenic points of interest. This overuse affects the groundcover and frequently exposes tree roots to damage from foot traffic. The eventual result may be erosion, slides, disfigured sites, and even danger to park visitors. A regular maintenance program with adequate personnel, supplies, and equipment controls damage, thereby, avoiding future reconstruction expenditures.

STAFFING

One of the staffing problems in all state parks is the heavy reliance on federally funded work programs, such as the Comprehensive Employment and Training Act (CETA), the Young Adult Conservation Corps (YACC), and Greenview. The low cost personnel provided by these programs makes it possible for parks to offer programs and services which would otherwise be impossible. However, these employees are hired on a short-term basis, usually 8 to 10 weeks and often do not have the training and experience necessary to provide needed services without constant supervision in already understaffed parks. To avoid these problems, funding should be made available to hire trained personnel for major public service and maintenance programs. Temporary employees should only be hired for minor maintenance and special projects.

The following chart summarizes the existing staff in Mille Lacs Kathio State Park. Because of the seasonal nature of park operations, the positions in each staffing category have been grouped into total "staff years." Staff years is a common denominator which reflects the amount of time spent in each area of park maintenance and operations.

Existing Staff	Staff Years (In Months)
Management	21
One full time park manager	
One 9 month park technician	
Interpretive Center	7
One 3 month naturalist*	
One 3 month work study naturalist*	
Two 5 month YACC workers**	
Maintenance	43
One 9 month laborer	
One 5 month laborer/watchman	
Three 5 month YACC workers**	
One 6 month Greenview worker**	
One 2 month Lakes and Pines worker**	
Six 5 month YCC worker**	
One 3 month trails laborer	
Contact Station	8
One 3 month park worker	
One 5 month park worker	
Beach	6
One 3 month lifeguard	
One 3 month part time lifeguard (shared with Father Hennepin State Park)	

*Salaries paid out of regional interpretive budget.

**Salaries paid by federal and other state program funds.

Future Staffing Needs

Some of the federal programs which fund part time positions in the park will be discontinued after this season. Additional staff will be needed to replace them. A small increase in longer term staff may prove to be more efficient than a shorter term, multiple program staff. The recommended management plan actions, along with the federal program cuts, will require staff changes in the following areas.

- Trails, Trail Center, Campground, Group/Canoe Camps, Picnic Area, and Interpretive Center

Trail length will nearly double in the future, requiring additional maintenance and grooming hours. The relocation of the campground will not require additional hours, however, maintaining lane D at the present location will add hours. The addition to the trail center and the remodeling and additional open hours of the interpretive center will require more maintenance staff. These facilities will require a total of one 12 month and four 6 month laborers.

- Public Access

The plan recommends development of a large public access on Mille Lacs Lake and a smaller access on Shakopee Lake. If these facilities are developed, one additional 6 month laborer will be needed.

- Interpretive Center

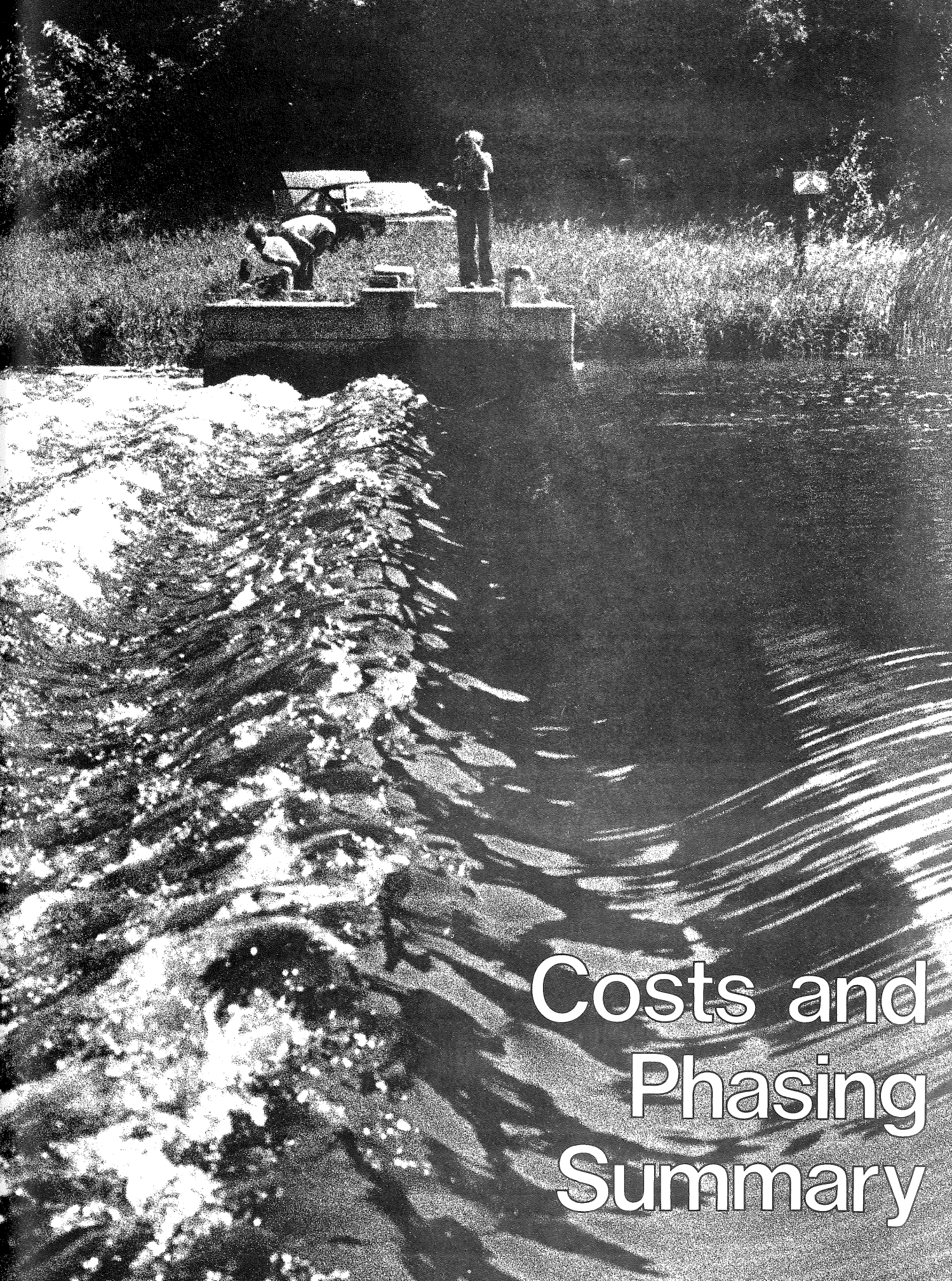
The plan calls for expanding, remodeling, and extending the hours of the interpretive center. This will require a 9 month and a 6 month naturalist.

- Contact Station

Trail expansion and an enlarged interpretive program will greatly increase off-season park use. This increased use will necessitate staffing the contact station on a part time basis during the off-season. This will require additional positions totaling 14 staff months.

- Management

The increased use and expanded facilities will require an increased level of professional management. The park manager position should be promoted to the specialist III level and the assistant manager should be promoted to the specialist I level.



Costs and Phasing Summary

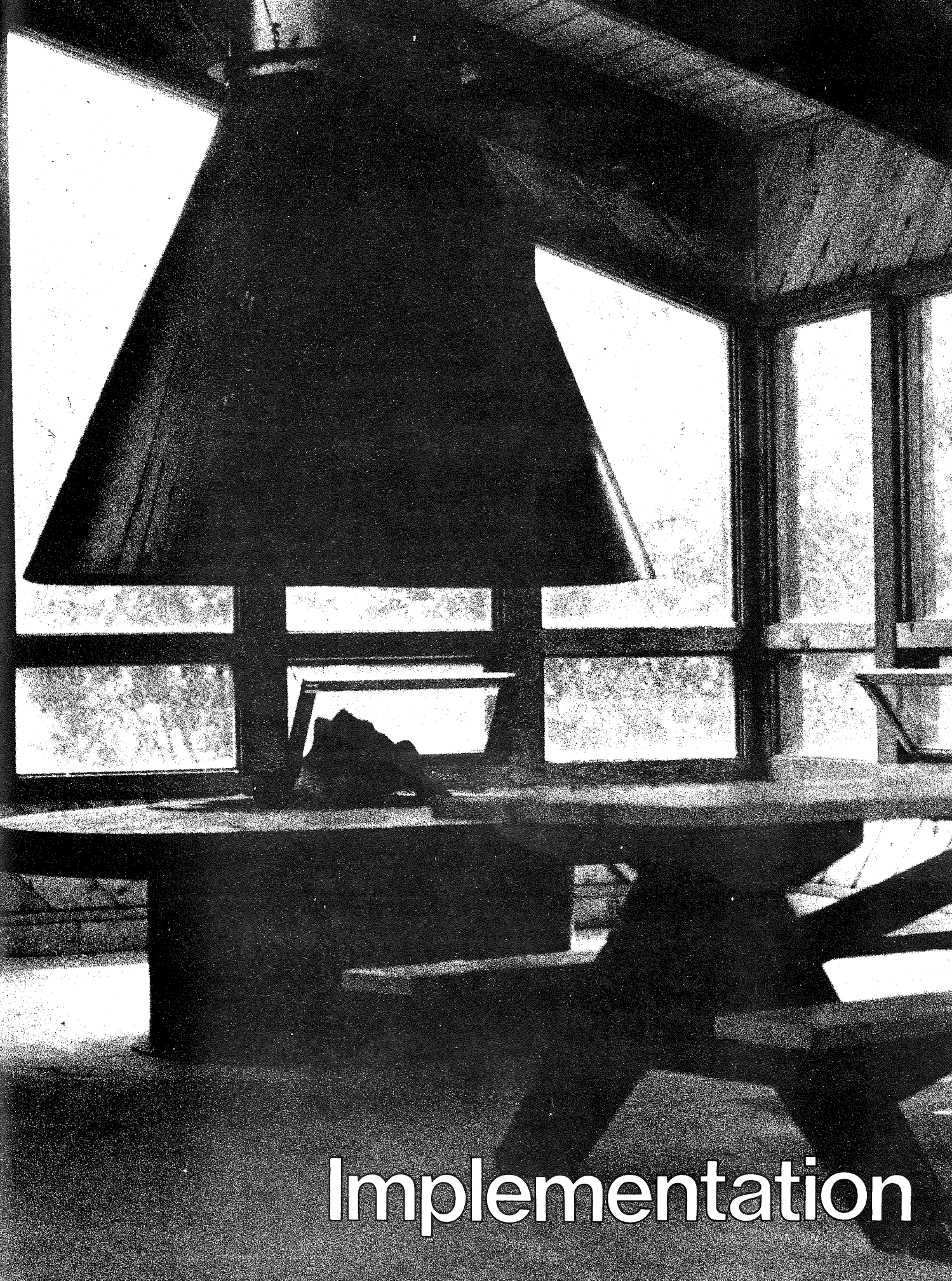
The following cost estimates were generated in January, 1979. These cost estimates are based on current prices and available information. As new information is made available and as new or modified programs are initiated, revised cost estimates will be prepared to more realistically represent costs at that time. This plan is intended to be implemented in 10 years. The phases noted suggest the level of funding to be requested each biennium. However, there is no guarantee that this amount of funding will be received from the Legislature. Therefore, some change to these phases can be expected.

Action	Phase / Biennium	1 80-81	2 82-83	3 84-85	4 86-87	5 88-89	Total	Conditional
SOILS								
Action #1	Soil Survey	$ 7,500					$ 7,500	
Action #2	Erosion Control	Covered in Recreation Management						
VEGETATION								
Action #1	Plant/Seed Conifers	9,640	$ 7,840	$ 5,060	$ 5,980	$ 6,080	34,600	
Action #2	Regenerate Ash	15,300	15,300	9,000	9,000	4,500	53,100	
Action #3	Accelerate Maple and Basswood Growth	9,200	2,300	4,600	6,900	4,600	27,600	
Action #4	Regenerate Oak	65,000					65,000	
Action #5	Reforest Storm-Damaged Areas		220				220	
Action #6	Create Wildlife Openings	14,100	125	14,100	225	225	28,775	
Action #7	Maintain Aspen and Birch	37,300	31,200	31,200	37,300	31,200	168,200	
Action #8	Sign Area of Passive Management	100					100	
WILDLIFE								
Action #1	Seed Grass on Trails	Covered in Trails						
Action #2	Observation Blind	1,000					1,000	
Action #3	Monitoring Wildlife	Covered in Operational Budget						

Action	Phase Biennium	1 80-81	2 82-83	3 84-85	4 86-87	5 88-89	Total	Conditional
WATERS								
Action #1	Drill New Well in Group Camp		10,000				10,000	
Action #2	Drill Well for New Campground			10,000			10,000	
Action #3	Provide Water to New Manager's Residence							10,000
Action #4	Place Iron Filters on all Unfiltered Wells		1,500	500			2,000	500
RECREATION MANAGEMENT								
Roads and Visitor Contact								
Action #1	Repair and Remodel Contact Station		30,000				30,000	
Action #2	Remove Pavement from Abandoned Segments of CSAH 35	Mille Lacs County						
Action #3	Pave Trail Center and Boat Landing Roads	45,000					45,000	
Action #4	Construct Left-turn or By-pass Lane on TH 169							10,000 50,000
Camping								
Action #1	New Campground		190,000				190,000	
Action #2	Group Camp Well	Covered in Water Resources						
Action #3	New Group Campsites			30,000			30,000	
Action #4	Walk-in Campsites		600				600	
Action #5	Canoe Campsite			3,000			3,000	

Action	Phase Biennium	1 80-81	2 82-83	3 84-85	4 86-87	5 88-89	Total	Conditional
Picnicking								
Action #1	Picnic Shelter	80,000					80,000	
Action #2	Pave Lot	25,800					25,800	
Action #3	Expand Picnic Area							3,000
Trails								
Action #1	Rehab. and Expand Trail Center	120,000					120,000	
Action #2	Redesign and Expand Parking Lot		30,000				30,000	
Action #3	Horse Concession Facilities							6,000
Action #4	Rehab. and Expand Ski Trails		20,000	10,000			30,000	
Action #5	Rehab. and Expand Snowmobile Trail		50,000	32,000			82,000	
Action #6	Realign Snowshoe Trail		5,000				5,000	
Action #7	Bridge Over Buckmoor Dam		65,000				65,000	
Action #8	Surface Campground to Bench Trail				19,500		19,500	
Action #9	Horse Trails	None						
Action #10	Interpretive Trails	None						
Action #11	Trail Signs		1,000	1,000			2,000	
Water Activities								
Action #1	Pave Boat Launch Parking Lot		20,000				20,000	
Action #2	Dock on Ogechie Lake		200				200	
Action #3	Remove Black Bass Lake Dock	None						
Action #4	Construct Boat Access on Mille Lacs							25,000
Action #5	Public Access on Shakopee Lake							2,000
Action #6	Replace Beach Apron			18,000			18,000	
Action #7	Handicapped Swimming Apparatus				16,000		16,000	
Action #8	Beachhouse Facility		50,000				50,000	

Action	Phase Biennium	1 80-81	2 82-83	3 84-85	4 86-87	5 88-89	Total	Conditional
Administrative/Support Facilities								
Action #1	New Manager's Residence	80,000					80,000	
Action #2	Remove Old Residence		5,000				5,000	
Action #3	Flammable Material Storage Building		6,000				6,000	
Action #4	Remove Non-Park Related Facilities	6,800	5,000	10,000	5,000	10,000	36,800	
Action #5	Bury Overhead Electric Lines					10,000	10,000	
VISITOR SERVICES								
Action #1	Remodel and Expand Interpretive Center			70,000			70,000	
Action #2	Restore Cooper Site		15,000				15,000	
Action #3	Interpretive Signs				2,500		2,500	
Action #4	Observation Tower					100,000	100,000	
BOUNDARY ADJUSTMENTS								
Action #1 - #6		Cost Not Determined						
Action #7		20,000					20,000	36,000
TOTAL DEVELOPMENT COSTS		$ 536,740	$ 561,285	$ 248,460	$ 102,405	$ 166,605	$1,615,495	$ 142,500



Implementation

Division of Parks and Recreation

Once a management plan has been completed and approved, it will become the responsibility of the director of the Division of Parks and Recreation (hereafter referred to as the director) to ensure proper implementation of the recommendations of the plan. As such, the director will act as the coordinator and liaison between the planning staff, regional staff, local officials, and the general public to ensure that the plan is implemented correctly.

In order to ensure the accomplishment of this cooperative planning and implementation effort, the following responsibilities have been established.

The director and staff will:

1) Coordinate and administer field operations as delegated by the deputy commissioner.
2) Develop and administer programs necessary to accomplish plan goals and objectives. Programs include those necessary to implement management plans and to maintain and operate parks and other programs assigned to the Division of Parks and Recreation (hereafter referred to as the division). Specific program responsibilities at this time are: acquisition, development, resource management, maintenance and service operations, interpretive services, and accessibility.
3) Prepare policies, guidelines, procedures, and standards necessary to implement programs established in this plan (e.g., responsibilities related to letting contracts and initiating force account projects).
4) Prepare legislation necessary to provide program funding, boundary changes, and operational authorities.
5) Review and approve all detailed plans, specifications, and project proposals prepared by the DNR, Bureau of Engineering (BOE) or field staff. Coordinate on-site field staking and site layouts with BOE and regional staff.

6) Coordinate divisional administrative functions with other DNR administrative offices.

7) Work with the DNR's federal grant specialists to obtain maximum federal funding (e.g., LAWCON) for all division programs.

8) Recommend modifications and provide information necessary to update the management plan. All major modifications to the recommendations of an approved plan will be processed through the Office of Planning. The director will submit requests for modifications in writing, stating justification for change and what impact the change would have on the overall management plan. If comments and rationale for opposing a proposed change are not received within 25 working days, agreement is implied. In the event that significant change in the direction of the plan is proposed (e.g., altering goals and/or objectives of the plan), it will be necessary to follow the same procedures established in developing the original plan. If the director and the Office of Planning cannot come to an agreement on the requested change, the director will then submit the request to the commissioner's Planning and Environmental Review Team (PERT) which will formulate the final recommendation to be submitted to the commissioner's executive council. If a recommended modification is minor and follows the intent of the plan, the director has the discretion to make the change without following these procedures, provided informal written agreement is reached with the Park Planning section.

9) Assign responsibilities and funding for implementation of the development program to BOE for letting contracts and to the regional staff for initiating force account projects. In addition, the director shall coordinate the implementation of resource management programs.

10) Make recommendations which will expedite the park planning process and evaluate progress toward the achievement of goals and objectives stated in the plan.

11) Forward BOE requisitions and field project proposals in summary form to the Office of Planning so that the progress of implementation can be monitored.

Regional Office

The regional park supervisor will supervise the physical implementation programs as recommended in this plan.

The regional park supervisor will:

1) Coordinate with the regional administrator and other discipline supervisors to obtain qualified staff to implement this management plan. The district forester, wildlife managers, and other specialists should be consulted on specific aspects of the resource management of the plan.
2) Supervise and direct the park manager to ensure that the management plan is implemented correctly.
3) Regularly field inspect all development in the park.
4) Submit written reports on the progress of development programs to the director with copies to the regional administrator.
5) Submit information to faciliate plan updates and changes. All recommendations for change will be submitted in writing to the director. Rationale and analyses of the impact a requested change might have on the plan must be included in this request.
6) Submit project proposals to the director for review and approval. The director and staff will review all project proposals verifying compliance with the intent of the plan.

The region may implement approved project proposals after detailed specifications have been prepared and funding has been provided.

Park Manager

It will be the responsibility of the park manager, under the direct supervision of the regional park supervisor, to coordinate the physical implementation of assigned sections of the management plan. The manager will inform the regional supervisor concerning the progress of the implementation through project proposals and written progress reports.

The park manager will:

1) Seek the assistance of the regional park supervisor in the resolution of any major implementation problems.
2) Consult with the regional park supervisor if there is uncertainity, concern, or opposition to a recommendation of this plan.
3) Assist and give direction to park field personnel.
4) Maintain records on the progress of development projects to ensure continuity and reference for future updating and revision.
5) Work with the regional park supervisor in initiating project proposals to be submitted to the director for review and approval.
6) Submit to the regional park supervisor information to aid in the updating and revision of the plan.

Office of Planning

The Office of Planning and Research will evaluate implementation of the management plan and make recommendations to the director if it appears revisions are necessary.

The Office of Planning will:

1) Review BOE requisitions.
2) Process all modifications to the approved management plan.
3) Provide additional information and justification for specific recommendations of this plan when requested by the division.
4) Maintain contact with the public, local officials, legislators, and DNR staff regarding the updating of the plan.

IMPLEMENTATION OF RESOURCE MANAGEMENT PROJECTS

There are two procedures for the division to follow in the implementation of resource management projects: contract and force account.

Contract

Director initiates a project by preparing the management program, in compliance with this plan.

Director distributes copies of the preliminary program and drawings to the regional staff for review.

Director approves project and initiates bidding process through the Department of Administration, Division of Procurement.

Director supervises and monitors the program.

Consultant or contractor, in coordination with divisional and regional staff, completes this project.

Director approves the completed project.

Force Account

Director initiates a project by preparing the management program, in compliance with this plan.

Director distributes copies of the preliminary program and drawings to regional staff for review.

Director assigns funds to the regional park supervisor.

Regional park supervisor and resource staff prepare a detailed resource management program.

Detailed resource management program is submitted to the director for approval.

Once approved, the regional park supervisor and resource manager may:

Assign the park manager and field personnel to implement the program

Prepare contracts to be let to local contractors or consultants

Regional staff supervises project.

Director and staff monitor the overall progress of the resource management program.

Regional park supervisor notifies the division that the project has been completed as planned.

IMPLEMENTATION OF DEVELOPMENT PROJECTS

There are two procedures for the division to follow in the implementation of development projects: contract and force accounts.

Contract

Director initiates project by preparing a development program which complies with this plan.

Director distributes copies of preliminary program and drawings to the regional staff for review.

Director requests BOE to prepare detailed drawings and specifications in accordance with the approved program.

BOE submits drawings and specifications to the director.

Director approves drawings and specifications, ensuring compliance with the objectives and goals of this plan.

Force Account

Director initiates a project by preparing a development program which complies with this management plan.

Director distributes copies of the preliminary program and drawings to regional staff for review.

Director assigns funds to the regional park supervisor.

Regional park supervisor may:

Request that BOE prepare detailed drawings and specifications for review by the director

BOE processes contract documents through the Department of Administration, Division of Procurement for bidding and contract award procedures.

BOE provides direction to the contractor and establishes site location and field staking.

BOE supervises construction and approves completed work according to contract documents.

Director and staff monitor the progress, funding, and necessary coordination between other state agencies and funding sources.

Assign the park manager to complete the project with field personnel

Assign park manager, in cooperation with the regional staff, to let bids to local contractors

Regional, divisional, or BOE staff will supervise the project depending on the complexity of the specific project.

Regional park supervisor will certify the director that the project has been completed as planned.

Director and staff will monitor the progress of the development program.

The division will provide the regional staff with necessary direction to maintain and operate state parks in a statewide system. Training courses and policy manuals will be prepared by the division on park operations, maintenance, enforcement, signing, and construction standards. If necessary, special operational orders will be prepared by the commissioner for specific problem areas.

General Procedures

The director, in cooperation with the deputy commissioner, will establish policies, guidelines, and statewide procedures for maintenance and operations of all state park facilities.

The regional park supervisors will follow the policies, guidelines, and statewide procedures of the division, as well as commissioner's orders.

The regional park supervisor will supervise and direct the park managers to ensure that park maintenance and operation policies, guidelines, and procedures are followed.

The park manager, under the supervision of the regional park supervisor, will maintain and operate all park facilities.

The director and staff will inspect and review operations of state parks on a regular basis to ensure that statewide procedures are being implemented and followed correctly.