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# A Management Plan for **Tettegouche** State Park

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**Minnesota Department of Natural Resources**

This document is a summary of the Tettegouche State Park management plan. All recommendations, both resource management and physical development are included here. The detailed inventory data and specific instructions for implementation of resource management and facility development have been compiled into a comprehensive management plan with technical appendices. These documents are on file in the:

Office of Planning  
Section of Park Planning  
Department of Natural Resources  
Box 10E Centennial Office Building  
St. Paul, Minnesota 55155

A Summary of the  
**Tettegouche**

**State Park**  
Management Plan

Office of Planning  
Minnesota  
Department of Natural Resources

November 1981

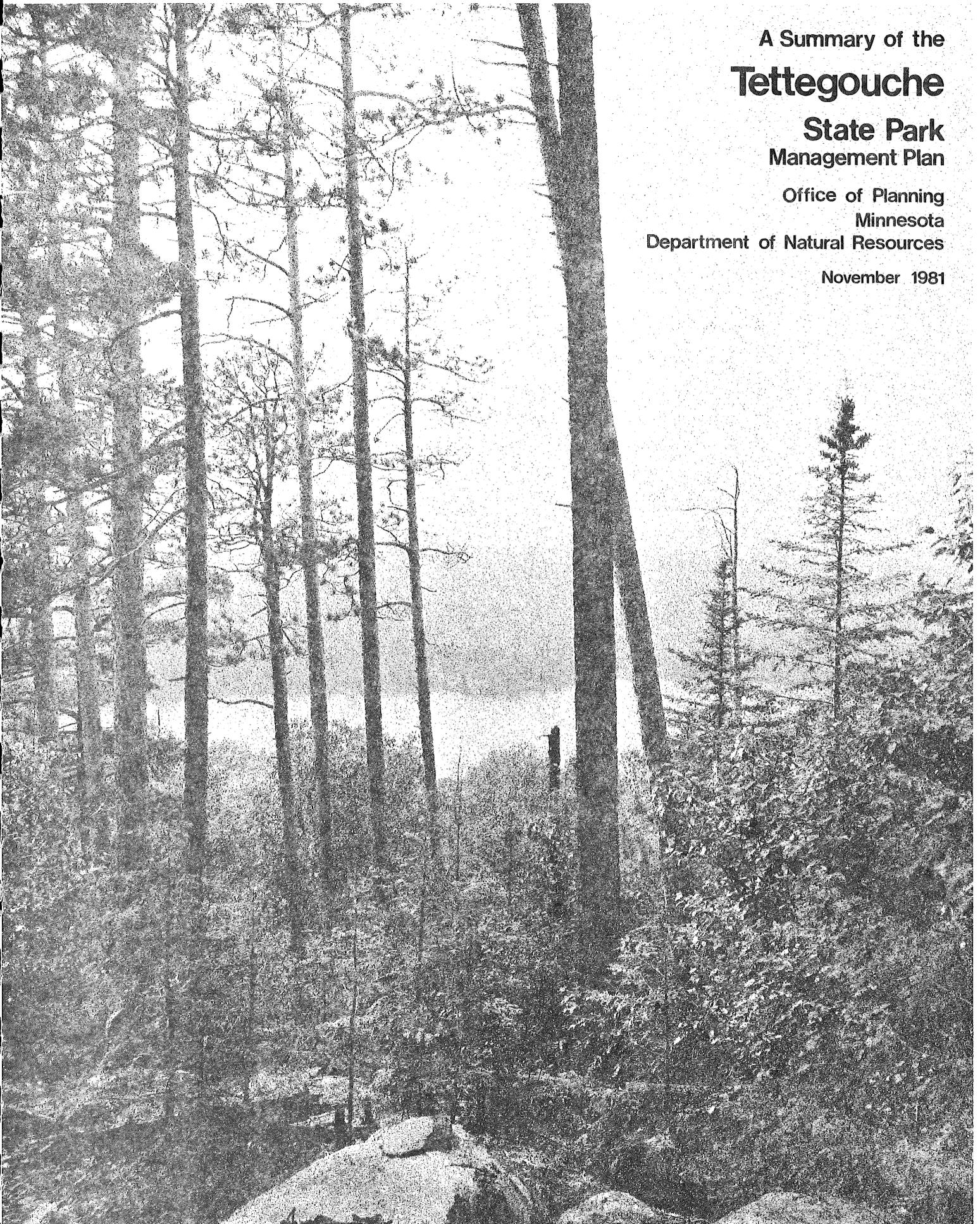
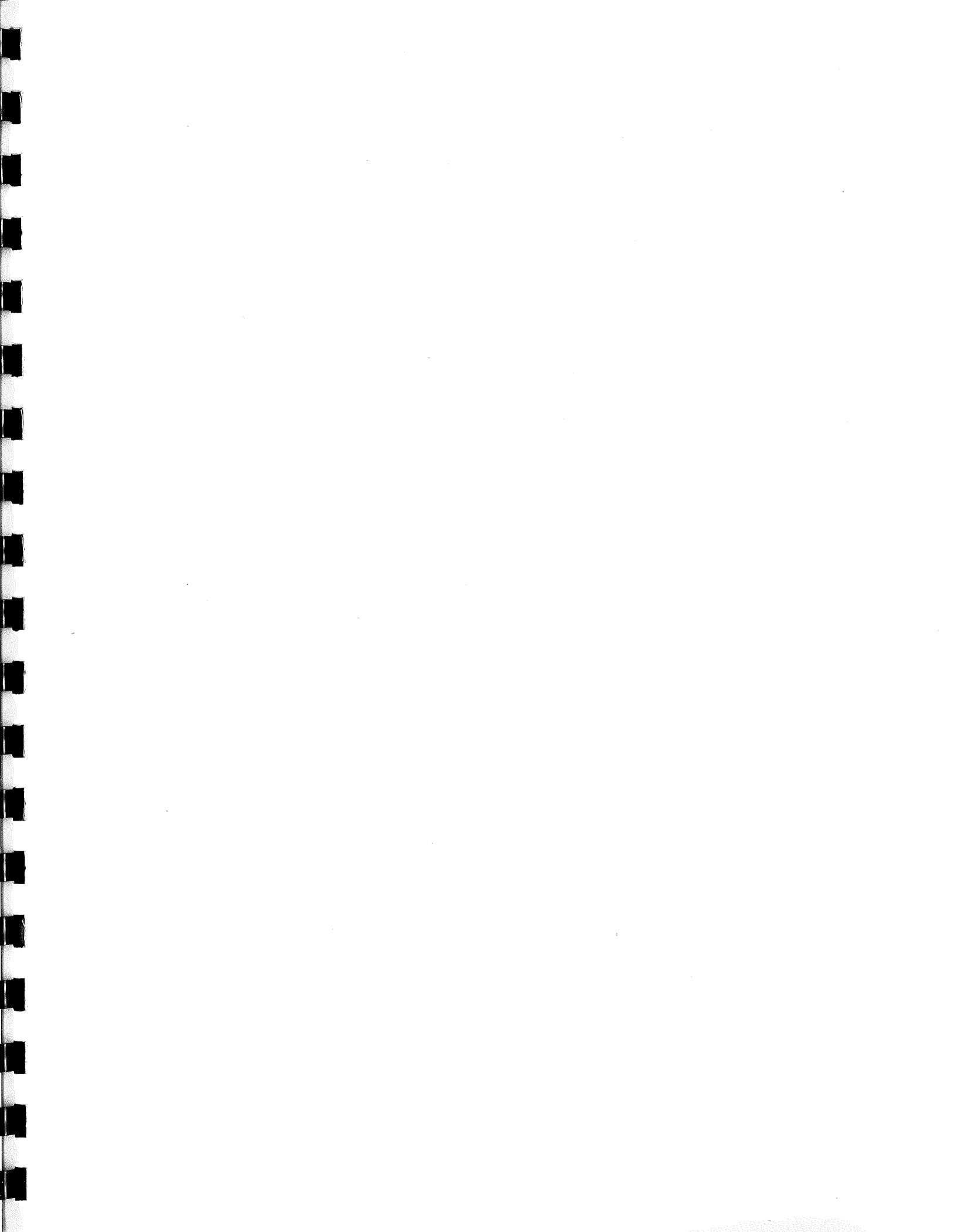


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# Introduction



## AN OVERVIEW OF TETTEGOUCHE STATE PARK

Tettegouche State Park is located in Lake County on the North Shore of Lake Superior. The park was established by an act of the Minnesota State Legislature in 1979 with a statutory boundary of 4,613 acres (1,867 hectares). The statutory boundary includes 706 acres (286 hectares) of the former Baptism River State Park, 600 acres (243 hectares) of tax-forfeited land, and 3,307 acres (1,338 hectares) of the former Tettegouche Camp.

Within the park are: four mountain-type lakes (Tettegouche, Mic Mac, Nipisiquit, and Nicado); one and one-half miles (2.4 km) of the Baptism River; and a mile (1.6 km) of Lake Superior shoreline. The four lakes in the park range in size from 13 to 121 acres (5.3 to 49 hectares). They are shallow, spring fed, and have very soft water. The Baptism River plunges approximately 300 ft (91 m) in less than a mile (1.2 km) through a spectacular gorge. High Falls, the highest waterfall totally within Minnesota, is located on this stretch of river. The river then cascades over Two Step Falls and Lower Falls through a rugged, rocky gorge before it enters Lake Superior. Tettegouche has much natural beauty with lakes, waterfalls, and rugged shoreline, but the most dramatic quality is its semi-mountainous topography. The elevation of the park ranges from 602 ft (184 m) at Lake Superior to over 1,620 ft (494 m) on Mount Baldy. The combination of topography, waters, and vegetation are unmatched along the North Shore.

Presettlement vegetation communities were very diverse, but contained a considerable amount of white and Norway pine interspersed with aspen-birch, spruce-fir, and cedar. Today, as a result of logging, forest fires, and subsequent fire suppression, vegetation is primarily aspen-birch. Only remnant stands of pine remain. The rugged landforms of the park with valleys, steep slopes, and rock outcrops result in an intricate combination of micro-climates. The micro-climates contribute to a very wide variety of small vegetation communities throughout

the park, ranging from hardwood vegetation on drier sites to northern, boreal forests.

Existing development in the park includes the Tettegouche Camp buildings for which the park was named, a parking area, a foot bridge near the mouth of the Baptism River, and several miles of primitive hiking trails.

The park is located just north of the city of Silver Bay, 55 miles (88 km) from Duluth and 202 miles (323 km) from the Minneapolis-St. Paul metropolitan area. Trunk Highway 61 (TH 61) is the primary access route from Duluth along the North Shore and TH 1 is the major access to Ely and Iron Range country. Tettegouche is just over an hour's drive from Duluth, the second largest population center in Minnesota and five hours from the Minneapolis-St. Paul metropolitan area. It is located along one of the major tourist routes in the state.

The relationship of Tettegouche to other recreational facilities and population centers was analyzed to assess the demand for particular recreational opportunities and to determine how the park should function in fulfilling this demand. The recommendations for development in this plan were based on this analysis. A complete discussion of the regional analysis is included in the comprehensive management plan.

The landscape region system divides the state into 18 regions. These regions are differentiated according to the characteristic plant and animal life, land forms, and cultural patterns which existed before, during, and after European settlement. The landscape region system is a framework which provides information which is valuable in the planning of Minnesota's state parks. Tettegouche State Park is in the North Shore Highlands Landscape Region.

## THE PLANNING PROCESS

In 1975 the Minnesota State Legislature passed the Outdoor Recreation Act (ORA). The intent of this legislation is to ensure, through long-range planning, the protection and perpetuation of Minnesota's outstanding resources. Also included in this legislation is the mandate to provide recreational facilities which are desired by the citizens of Minnesota but which do not compete with those provided by the private sector. The Park Planning Section of the DNR, Office of Planning was established to formulate long range resource management and recreation development plans for 82 state parks, recreation areas, and waysides. Funds for these plans are appropriated biennially by the Legislative Commission of Minnesota Resources (LCMR).

The park planning process consists of six steps:

1. An inventory of natural resources, visitor use, and existing facilities is compiled. Specialists from other DNR divisions and sections assist in collecting pertinent data. At this point the first public workshop is held.
2. Alternatives for park management and development are developed. A second public workshop may be held to review these alternatives and invite further public comment. These alternatives are then reviewed by the Park Planning staff and the DNR, Division of Parks and Recreation.
3. The recommendation for park classification is made, the park goal is developed, and the draft plan is written. This step culminates in the first interdepartmental review.
4. The draft plan is revised as the result of the interdepartmental review. The revised plan is made available to the public for a 30 day review period, after which the final public meeting is held.
5. The draft plan is revised according to information received from the public review. The plan is then sent to the Department of Energy, Planning, and Development for a 60 day review period. (This management plan was approved in July 1981.)
6. The plan is implemented by the DNR, Division of Parks and Recreation.

## A SUMMARY OF MANAGEMENT AND DEVELOPMENT PROPOSALS

### Resource Management

- Correct erosion on slopes adjacent to parking lot and Trunk Highway (TH) 61.
- Reestablish white and Norway pine.
- Increase browse for deer on the inland side of TH 61.
- Create and maintain wildlife openings.
- Rehabilitate the vegetation on the proposed campground site.
- Regenerate cedar.
- Enhance wildlife habitat.
- Allow hunting in a portion of the park.
- Inventory wildlife species in the park.
- Allow fishing in all the park lakes.
- Stock Tettegouche and Mic Mac lakes with yellow perch.

### Research

- Determine the disposition of Tettegouche Lodge. (In the meantime, use the complex as the administrative center.)
- Survey all proposed development sites for archaeological significance.
- Determine the supply, location, and quality of groundwater.
- Conduct a study of sewage system capabilities.

### Roads

- Construct a park road system.
- Construct turn lanes on TH 61 at the park entrance.
- Build a bridge over the drainage ravine in the NE 1/4 NW 1/4 of Section 15.

### Camping

- Develop a campground with approximately 40 sites. (When and if demand exists a modern sanitation building with flush toilets and showers will be added.)
- Develop a primitive campground with approximately 40 sites.
- Develop approximately 20 hike-in campsites.
- Develop a primitive group camp.

### Picnicking

- Develop picnic sites along the river.
- Construct a picnic shelter with flush toilets.
- Develop walk-in picnic sites on Nipisiquit Lake.

### Trails

- Construct a combination trail/interpretive center.
- Construct a snowmobile trail link to local grant-in-aid trails.
- Develop a signed, hiking/ski touring trail system.
- Provide fishing access to the Baptism River.
- Construct a bridge over the Baptism River above High Falls.
- Build eight small bridges over water courses throughout the park.
- Replace boardwalks in the marsh.

### Water Activities

- Discourage boating and canoeing on park lakes by requiring users to portage in watercraft.

### Administrative/Support Facilities

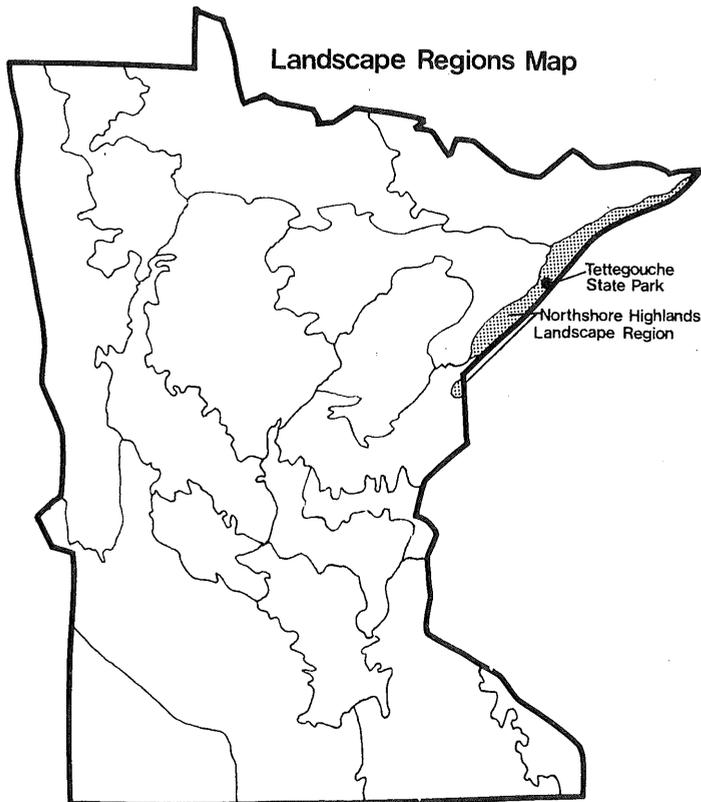
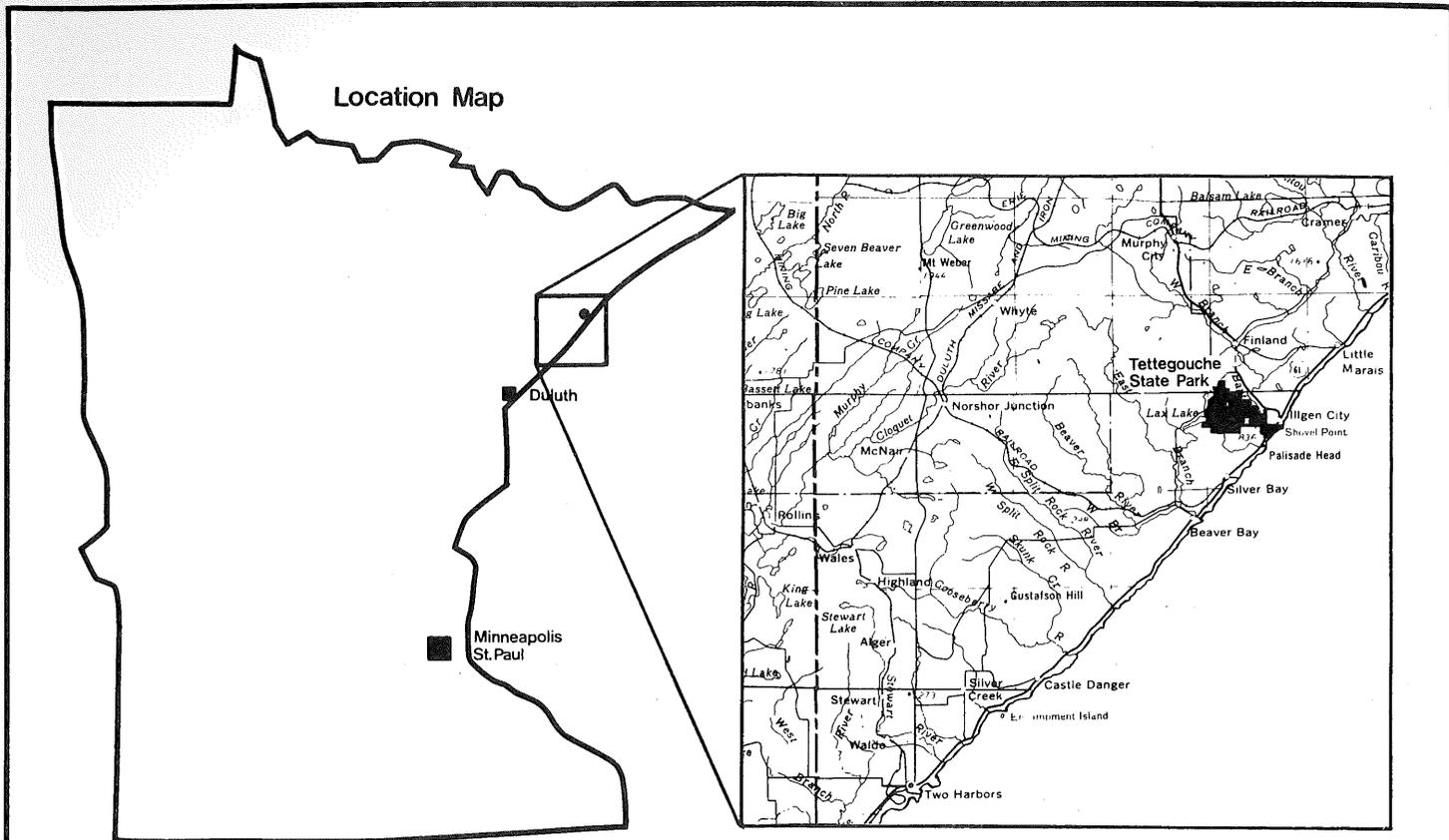
- Build a new manager's residence.
- Construct a new contact station/park office at the park entrance.
- Construct a service center with a paved courtyard.
- Install a waste treatment system.
- Bury all electric lines.

### Interpretive Program

- Develop an interpretive program.
- Install interpretive displays in the interpretive/trail center.
- Develop a self-guided interpretive trail system with accompanying brochure.

### Park Entrance and Boundary

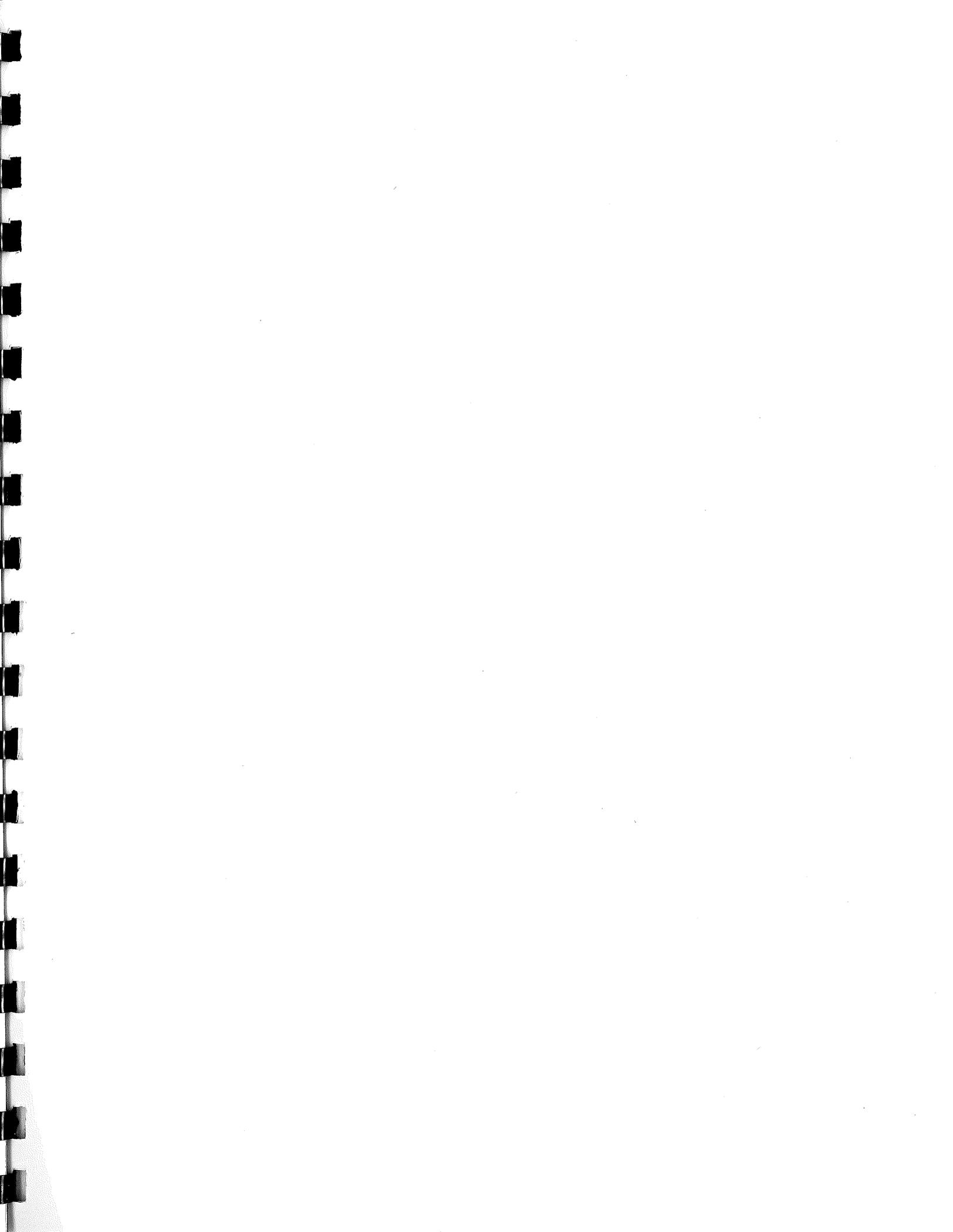
- Survey, clear, and post the park boundary.
- Landscape and sign the park entrance.



North Shore Highlands Landscape Region

This region is famous for its bare rock cliffs along the Lake Superior shore. During the Ice Age, the Lake Superior basin was scoured, the cliffs were sheared off, and parts of the upland areas were covered by glacial deposits. The shoreland escarpment of 500 to 1000 ft (152 to 305 m) is broken by numerous steep-walled valleys with cascading streams which flow into the lake. The northern half of the region was, at the time of European settlement, covered with spruce-fir forest. The southern half was covered by a mixture of pine and northern hardwoods. The dominant forest cover today is aspen-birch regrowth.

# Classification



There is a delicate balance which must be maintained when recreational facilities are provided for large numbers of people in areas of outstanding and often sensitive resources. Inappropriate development can result in irreparable damage to the resource. To help ensure that this recreation/resource balance is maintained, the Minnesota State Legislature established, through the Outdoor Recreation Act of 1975 (ORA '75), a classification system whereby each unit in the state recreation system can be identified as one (or more) component in the system. These components are: natural state park; recreational state park; state trail; state scientific and natural area; state wilderness area; state forest and state forest sub-area; state wildlife management area; state water access site; state wild, scenic, and recreational rivers; state historic site; and state rest area. Included in this legislation are general criteria for classifying, planning, and managing each of these components.

#### Criteria for a Natural State Park Designation

DNR policy identifies four criteria, based on ORA, which a park must substantially meet to qualify for classification as a natural state park. Tettegouche State Park meets these criteria.

"Depict major components characteristic of the landscape region, or contain a natural component(s) of statewide significance representing a feature of the presettlement Minnesota landscape.

"Contain natural resources sufficiently diverse and interesting to attract people from throughout the state.

"Be sufficiently large and durable so as to provide opportunities for enjoyment of their special natural qualities by significant numbers of people now and in the future."

"Be sufficiently large to provide for the maintenance of ecosystems and the protection of other natural features which give an area its special qualities."

ORA Criteria for State Rest Area Secondary Unit Designation

There is a class IV rest area operated by MnDOT near the mouth of the Baptism River within the boundary of Tettegouche. It is recommended that this rest area be upgraded to a class II and designated as a secondary unit within then park. It meets the following ORA criteria for a rest area.

"Is adjacent to or in near proximity to a trunk or inter-state highway;

"Is developed at appropriate intervals based on the type of road system, traffic and traffic projections and known or projected usage of the proposed development;

"May be near or associated with a place or area of natural, scientific, cultural, or historic interest."

Recommended Classification

Tettegouche State Park is recommended for classification as a natural state park with a state class II rest area secondary unit.

GOAL

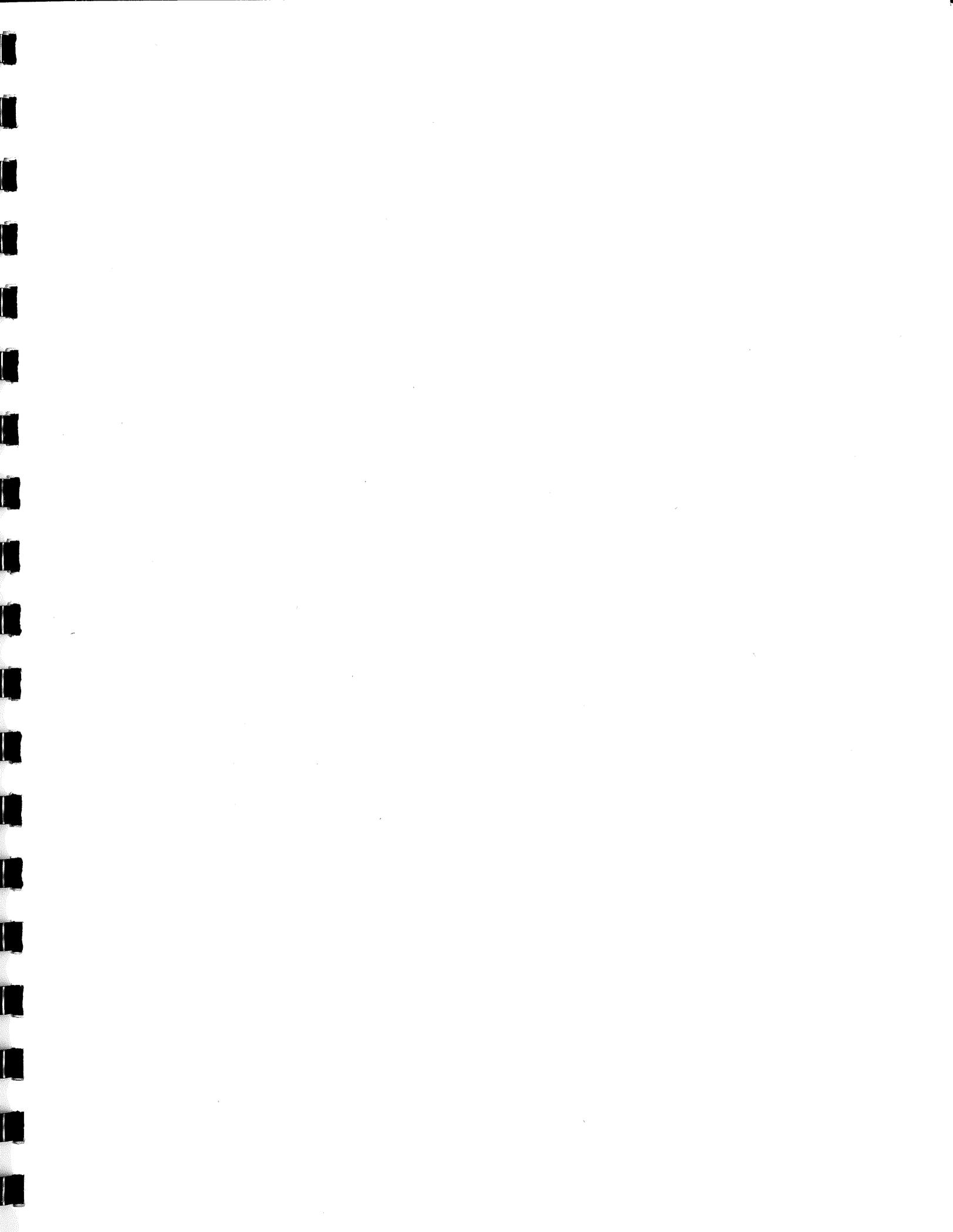
The goal for Tettegouche State Park is that of all natural state parks as stated in DNR policy, namely, to:

"...protect and perpetuate extensive areas of the state possessing resources which illustrate and exemplify Minnesota's natural phenomena, and provide for the use, enjoyment, and understanding of such resources without impairment, for the enjoyment and recreation of future generations."

The goal for all state rest areas is:

"...to promote a safe, pleasurable, and informative travel experience along Minnesota highways by providing areas and facilities at reasonable intervals for information, emergencies, for the rest and comfort of travelers."

# Park Resources



Soils. A detailed survey of park soils has not been completed. However, the major soil association is Barto-Mesaba. The next largest group is Ontonagon-Bergland and Hibbing clays. The limitations of these soils were carefully considered in selecting the location of proposed developments. On-site soil borings will be done on each site prior to construction. (The cost of these tests is included in the total cost of the development.) There are two known erosion problems in the park: portions of hiking trails and the back slope of the ditch adjacent to TH 61.

Vegetation. Fourteen vegetative types are currently found in Tettegouche. The most dominant is paper birch, followed by northern hardwoods consisting of a mixture of sugar and red maple, basswood, paper and yellow birch, aspen and oak. A comprehensive phase II forest inventory was begun on all state and county lands in Lake County in July 1980. When it is complete the inventory of Tettegouche will be added to the comprehensive management plan.

The primary problem with park vegetation at this time is over-maturity of cedar and balsam. Aspen and birch are also mature and will soon begin to die off.

Wildlife. Since Tettegouche is a recent addition to the state park system, its wildlife has not been inventoried. Available information indicates that at least 142 species of birds and 41 species of mammals inhabit or migrate through the park. There are few wildlife problems other than a declining deer population due to roadkills and loss of quality deer habitat.

Groundwater. Groundwater along the North Shore varies greatly in both quantity and quality, but it is generally inadequate. However, there is little that can be done to correct this problem, other than drilling very deep wells which is very costly. Most facilities in Tettegouche will only require a summer water supply.

Surface Waters. Park surface waters consist of Mic Mac, Nipisiquit, Tettegouche, and Nicado lakes; the Baptism River, and a few small streams. The park lies adjacent to Lake Superior and Lax Lake.

| Lake        | Size<br>acres (hect.) | Average depth<br>feet (meters) | Deepest point<br>feet (meters) |
|-------------|-----------------------|--------------------------------|--------------------------------|
| Mic Mac     | 121 (49)              | 4.5-6 (1.4-2)                  | 21 (6.4)                       |
| Tettegouche | 68 (27.5)             | 8-9 (2.4-2.7)                  | 20 (6.0)                       |
| Nipisiquit  | 50 (20)               | 16-19 (4.8-5.8)                | 22 (6.7)                       |
| Nicado      | 13.1 (5.3)            | 10 (3)                         | 19 (5.8)                       |

The Baptism River drains a total area of 140 square miles (363 sq km). Of its 26.5 mile (42 km) length, 1.8 miles (2.9 km) flow through the park. Only the portion from Lake Superior to Two Step Falls has been surveyed. This information is included in the comprehensive management plan.

Fisheries. The three park lakes and the Baptism River will all be open for fishing. The lakes are cold and rather unproductive. Developed access to these lakes will not be provided.

History and Archaeology. Tettegouche Lodge is the most prominent of the park's historical sites. It consists of a main lodge, four cabins, a garage, and a barn. The primary architectural style of the buildings is a Finnish vernacular style. Other buildings associated with the site include a sauna, a boat house, a shower building, and a dog kennel.

The DNR, Division of Parks and Recreation contracted the State Archaeologist's Office to do a records check of the area to locate any other sites of historic or prehistoric significance. The report of their findings is included in the comprehensive management plan.

The DNR, Youth Conservation Corps (YCC) used the lodge complex as a base camp during the summers of 1980 and 1981.

## RESOURCE MANAGEMENT OBJECTIVES

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

To utilize resource management techniques that will harmonize with the park's natural systems

To identify, evaluate, and preserve the park's archaeological and historical resources

To provide for visitor enjoyment without adversely affecting park resources

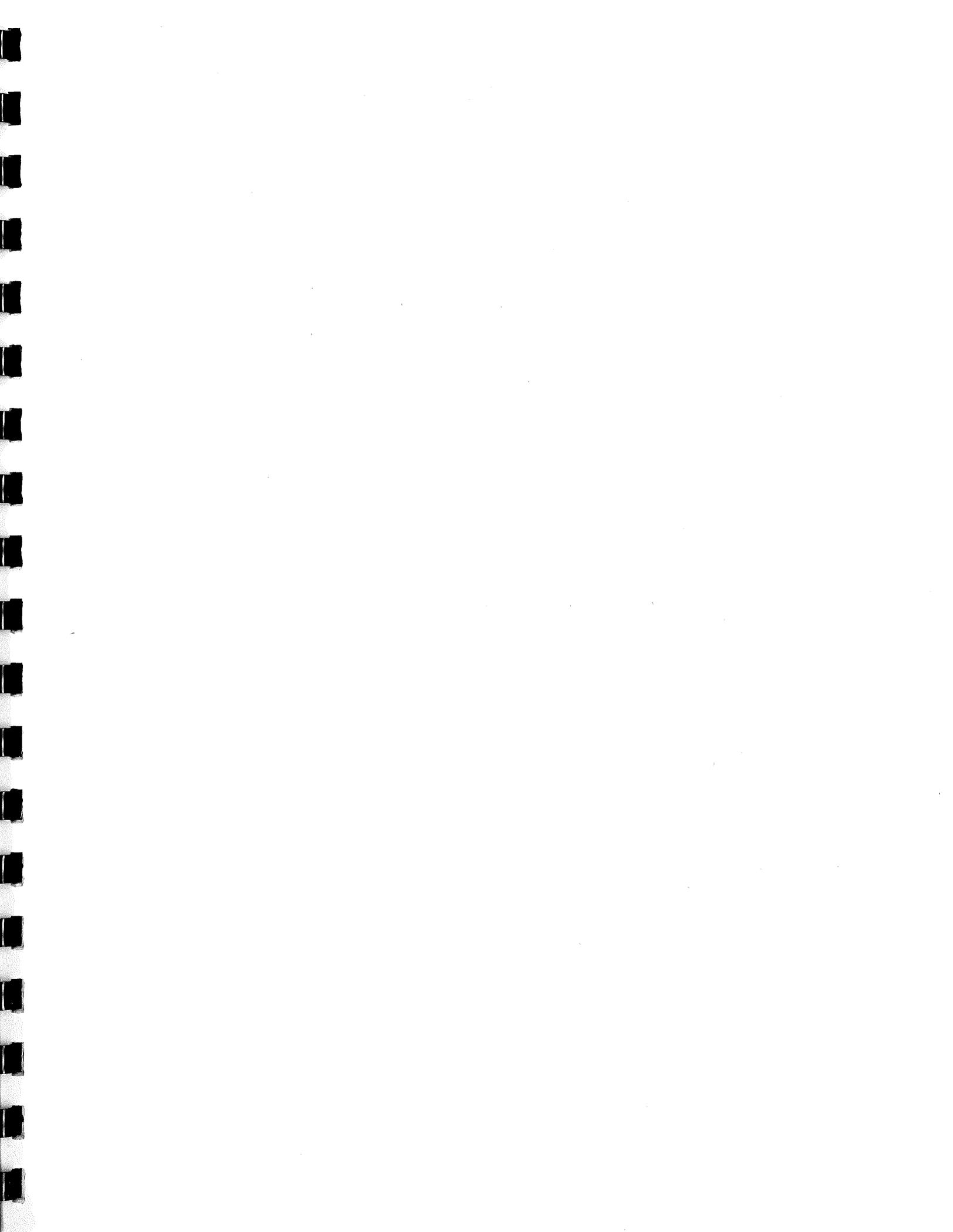
## RESOURCE MANAGEMENT

- The detailed survey of park soils will be completed.
- A detailed survey of park vegetation will be completed.
- An inventory of wildlife species in the park will be completed.
- Hunting will be allowed in some areas of the park.
- The effects of visitor use on wildlife will be monitored.
- Recreational use of an area will be limited if peregrine falcons are found.
- Park lakes, rivers, and streams will be managed to maintain their pristine, scenic qualities. (A canoe landing will be developed on Nipisiquit Lake.)
- Trails will be developed from all park facilities to the Baptism River to provide fishing access.
- Fishing will be allowed on park lakes.
- The DNR, Section of Fisheries will stock Tettegouche and Mic Mac lakes with yellow perch as a food supply for northern pike.
- The Tettegouche Lodge complex will be used as an administrative center for the park until a manager's residence and service court is constructed. At that time, the complex will be reevaluated to determine if there is a viable park use for the buildings. If so, the Minnesota Historical Society (MHS) will be requested to provide technical assistance in their restoration. If no use is found, the structures should be photographed and documented by the MHS and removed.

The following management actions will require development funds. They have been scheduled into five phases.

| Action  | Phase<br>1 | Phase<br>2 | Phase<br>3 | Phase<br>4 | Phase<br>5 | Total    |
|---|------------|------------|------------|------------|------------|----------|
| 1 Rehabilitate eroded slopes adjacent to TH 61.   |            | \$ 2,000   |            |            |            | \$ 2,000 |
| 2 Reestablish white and Norway pine stands.   |            | 10,000     | \$ 5,000   | \$ 5,000   | \$ 5,000   | 25,000   |
| 3 Increase deer browse on the inland side of TH 61.   |            | 5,000      | 1,000      |            |            | 6,000    |
| 4 Manage vegetation at proposed campground site.  |            | 7,000      |            |            |            | 7,000    |
| 5 Create and maintain permanent wildlife openings.  |            | 6,000      | 1,000      | 1,000      | 1,000      | 9,000    |
| 6 Regenerate cedar.   |            | 10,000     |            |            |            | 10,000   |
| 7 Plant native vegetation on trails to stabilize soils and provide food for wildlife.           | 1,000      |            |            |            |            | 1,000    |
| 8 Provide nesting structures for waterfowl and songbirds.                                       | 4,000      |            |            |            |            | 4,000    |
| 9 Conduct field surveys of proposed development sites to determine archaeological significance. |            | 3,500      |            |            |            | 3,500    |
| 10 Complete laboratory research on findings of field surveys.                                   | 3,500      |            |            |            |            | 3,500    |

Physical  
Development  
and  
Recreation  
Management



## RECREATION MANAGEMENT OBJECTIVES

To provide a broad selection of outdoor activities consistent with the purpose for establishment of Tettegouche as a natural state park

To provide only those facilities necessary for appropriate use and enjoyment of the resources

To enhance and promote the use and enjoyment of the resources of the area without adversely effecting them

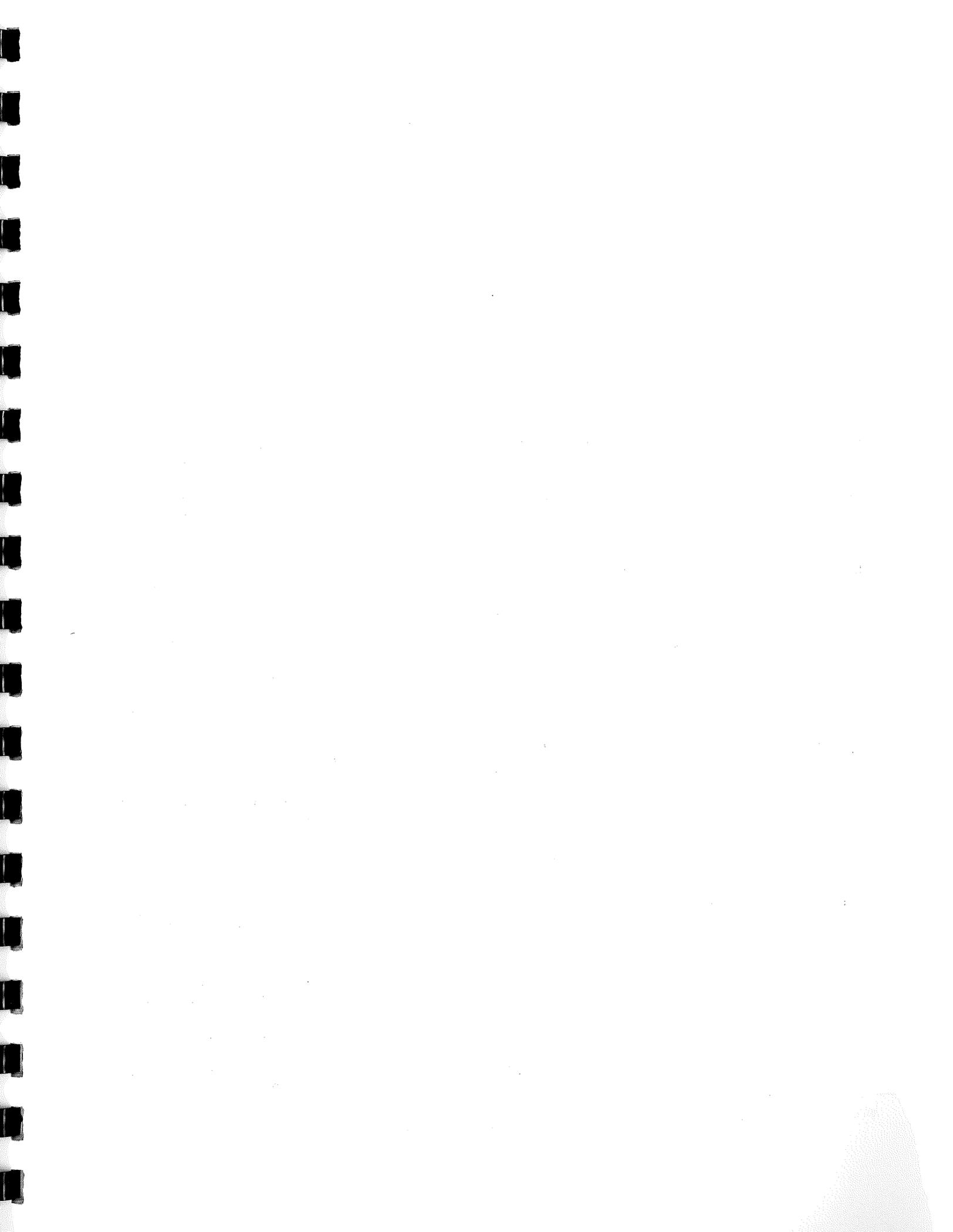
To ensure that park structures are located in areas that are not subject to flooding, and that they are visually compatible with each other and with the natural environment

### PROPOSED DEVELOPMENT (see map, p 37)

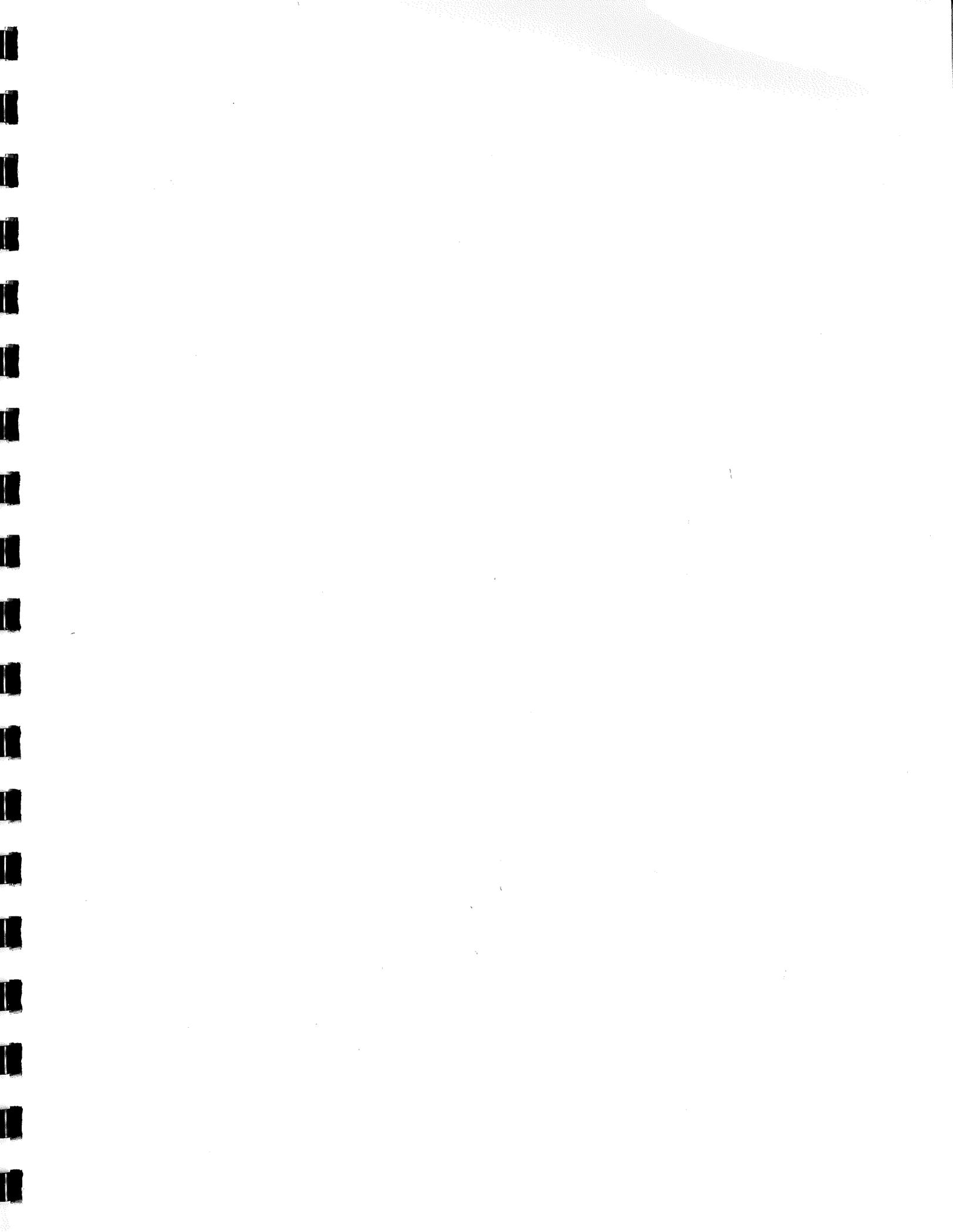
| Action   | Phase<br>1 | Phase<br>2 | Phase<br>3 | Phase<br>4 | Phase<br>5              | Total                             |
|--|------------|------------|------------|------------|-------------------------|-----------------------------------|
| <u>Research</u>  |            |            |            |            |                         |                                   |
| 1 Conduct a study to determine the location, supply, and quality of a water supply for park facilities.                  |            |            |            |            |                         | Funded from Professional Services |
| 2 Conduct a study to determine the most effective and efficient system for sewage treatment.                             |            |            |            |            |                         | Funded from Professional Services |
| 3 Prepare a prospectus for the park's interpretive program.  |            |            |            |            |                         | Funded from Professional Services |
| <u>Roads</u>   |            |            |            |            |                         |                                   |
| 1 Construct a park entrance road from TH 61 to all proposed park facilities.   |            |            | \$150,000  |            |                         | \$150,000                         |
| 2 Construct a road bridge over the drainage ravine just north of the proposed picnic parking areas.                      |            | 200,000    |            |            |                         | 200,000                           |
| <u>Camping</u>   |            |            |            |            |                         |                                   |
| 1 Develop a semi-modern campground with 40 sites (A winterized sanitation building will be constructed, if use warrants. |            |            | \$ 88,000  |            |                         | 88,000                            |
|  |            |            |            |            | (134,000 - Conditional) |                                   |
| 2 Develop a primitive camp ground with 40 sites.   |            |            | 82,000     |            |                         | 82,000                            |
| 3 Develop 20 walk-in campsites.  |            |            | 36,400     |            |                         | 36,400                            |

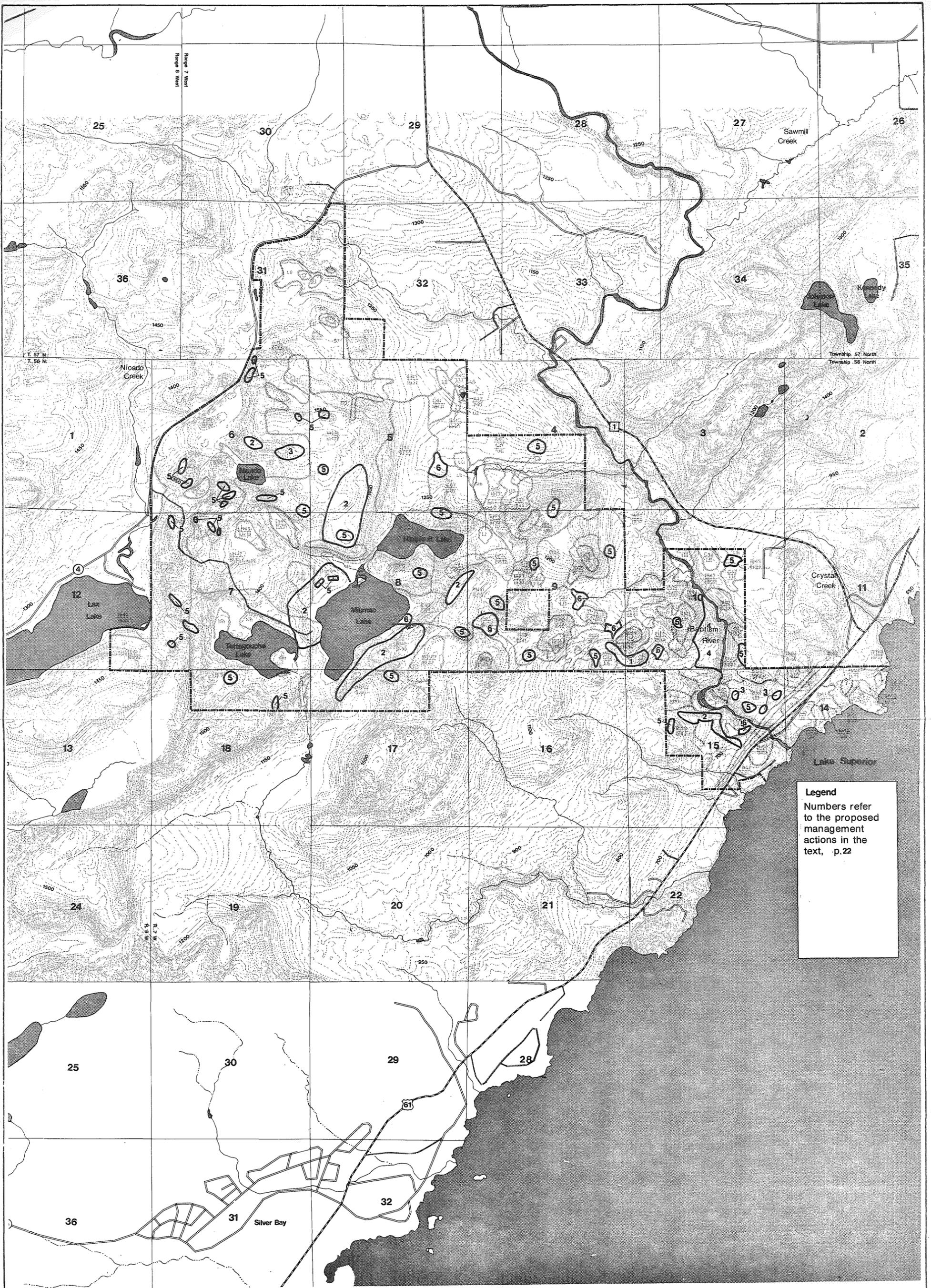
| Action   | Phase<br>1 | Phase<br>2           | Phase<br>3 | Phase<br>4 | Phase<br>5 | Total   |
|--|------------|----------------------|------------|------------|------------|---------|
| 4 Develop a primitive group camp near the proposed trail/interpretive center.                                |            | 32,800               |            |            |            | 32,800  |
| <u>Picnicking</u>  |            |                      |            |            |            |         |
| 1 Develop 40 picnic sites adjacent to the river.   | 40,000     |                      |            |            |            | 40,000  |
| 2 Construct a picnic shelter with toilet facilities.   | 160,000    |                      |            |            |            | 160,000 |
| 3 Develop 10-15 walk-in picnic sites near Nipisiquit Lake.   | 22,400     |                      |            |            |            | 22,400  |
| <u>Trails</u>  |            |                      |            |            |            |         |
| 1 Construct a trail/interpretive center.   |            |                      | \$300,000  |            |            | 300,000 |
| 2 Provide snowmobile and access from local grant-in-aid trails to the trail/interpretive center.             |            | No development funds |            |            |            |         |
| 3 Develop a hiking/ski touring trail system. (This system will provide fishing access to the Baptism River.) | 25,000     | 75,000               | 115,000    |            |            | 215,000 |
| 4 Sign the trail system.   |            | 10,000               |            |            |            | 10,000  |
| 5 Construct a bridge over the Baptism River above High Falls.  |            | 75,000               |            |            |            | 75,000  |
| 6 Construct 8 bridges over small water courses.  | 60,000     |                      |            |            |            | 60,000  |
| 7 Install boardwalks through the marshes north of Tettegouche and Mic Mac Lakes.                             |            | 40,000               |            |            |            | 40,000  |
| <u>Administrative and Support Facilities</u>   |            |                      |            |            |            |         |
| 1 Construct a manager's residence.   |            | 80,000               |            |            |            | 80,000  |

| Action  | Phase<br>1 | Phase<br>2 | Phase<br>3 | Phase<br>4 | Phase<br>5 | Total   |
|---|------------|------------|------------|------------|------------|---------|
| 2 Construct a contact station/park office.  |            | 100,000    |            |            |            | 100,000 |
| 3 Develop a service area with a shop and unheated storage facilities for equipment, wood, gas, and oil.   |            | 212,500    |            |            |            | 212,500 |
| 4 Pave the service court with asphalt.  |            |            |            | 25,000     |            | 25,000  |
| 5 Sign the park entrance and park road.   |            | 30,000     |            |            |            | 30,000  |
| 6 Install a sewage treatment system in accordance with the study results (see Research, Action #2, p 27). |            | 120,000    |            |            |            | 120,000 |
| <u>Interpretive Program</u>   |            |            |            |            |            |         |
| 1 Develop and install interpretive displays in the trail/interpretive center.                             |            |            |            | 10,000     |            | 10,000  |
| 2 Develop a self-guided interpretive system.  |            |            | 5,000      |            |            | 5,000   |
| <u>Park Boundary</u>  |            |            |            |            |            |         |
| 1 Survey the park boundary.   |            | 28,000     |            |            |            | 28,000  |
| 2 Clear and post the park boundary.   |            | 25,000     | 47,000     |            |            | 72,000  |

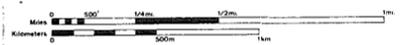


# Maps

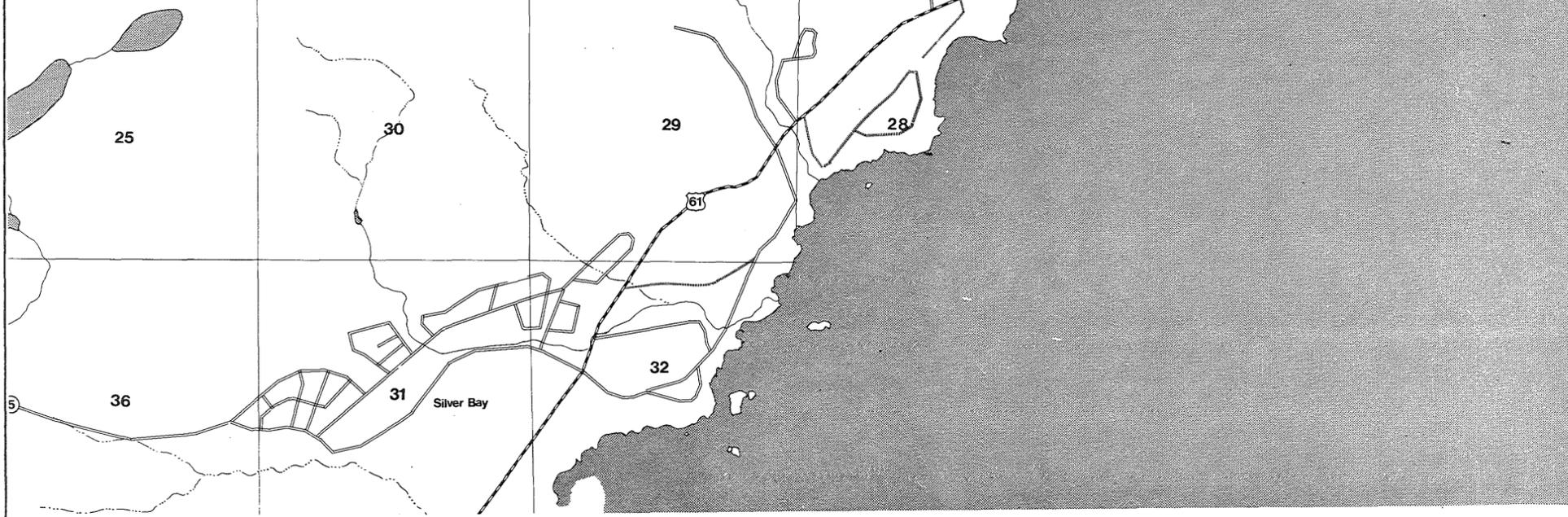




**Legend**  
 Numbers refer to the proposed management actions in the text, p.22



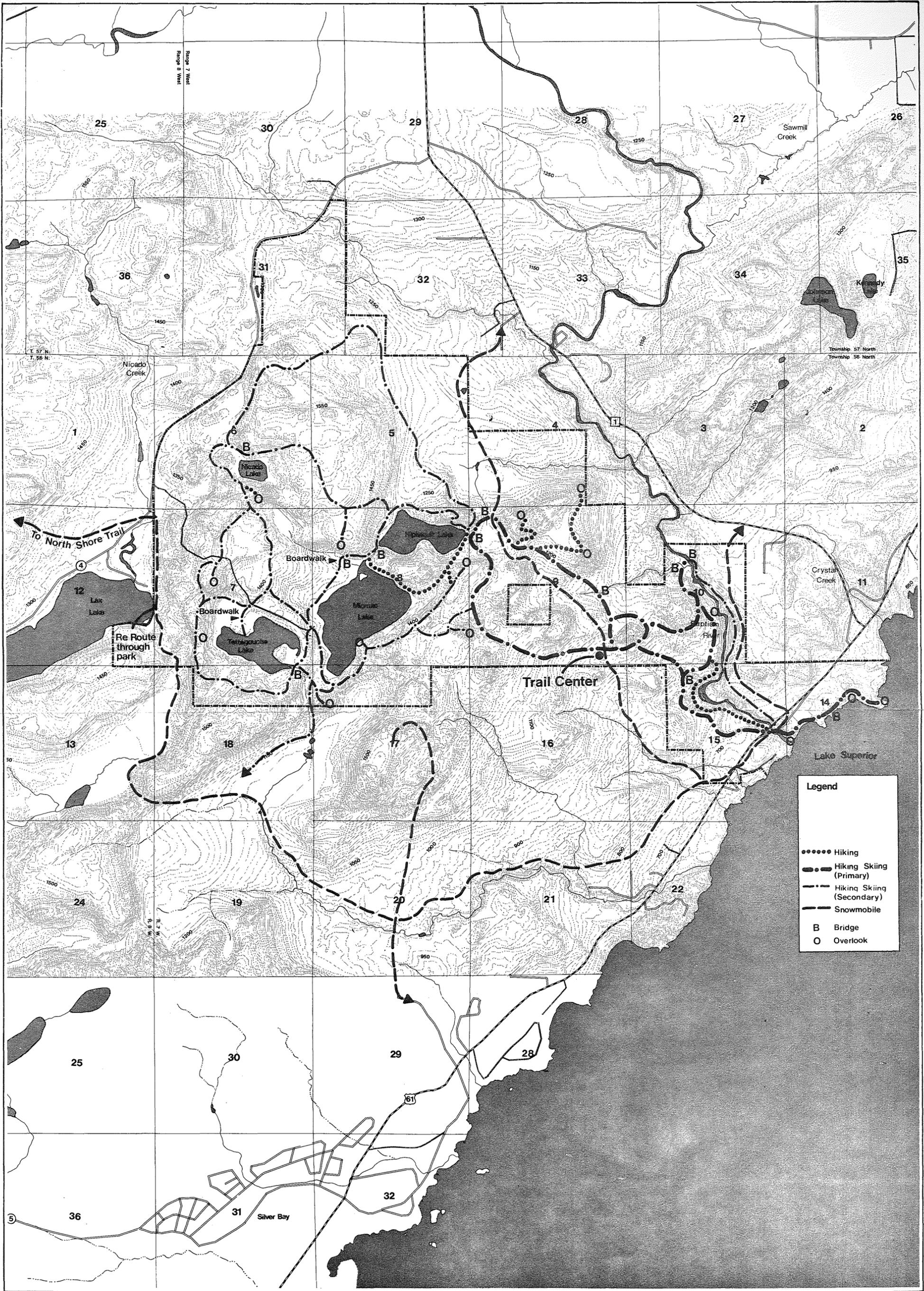




**Tettegouche State Park**

**Proposed Development**





**Legend**

- ..... Hiking
- - - - Hiking Skiing (Primary)
- · - · Hiking Skiing (Secondary)
- Snowmobile
- B Bridge
- O Overlook





