



A Management Plan for Lake Shetek State Park

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nnesota Department of Natural Resources

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This document is a summary of the Lake Shetek 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 Department of Natural Resources Box 10E Centennial Office Building St. Paul, Minnesota 55155

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A Summary of the Lake Shetek State Park Management Plan Office of Planning Minnesota Department of Natural Resources

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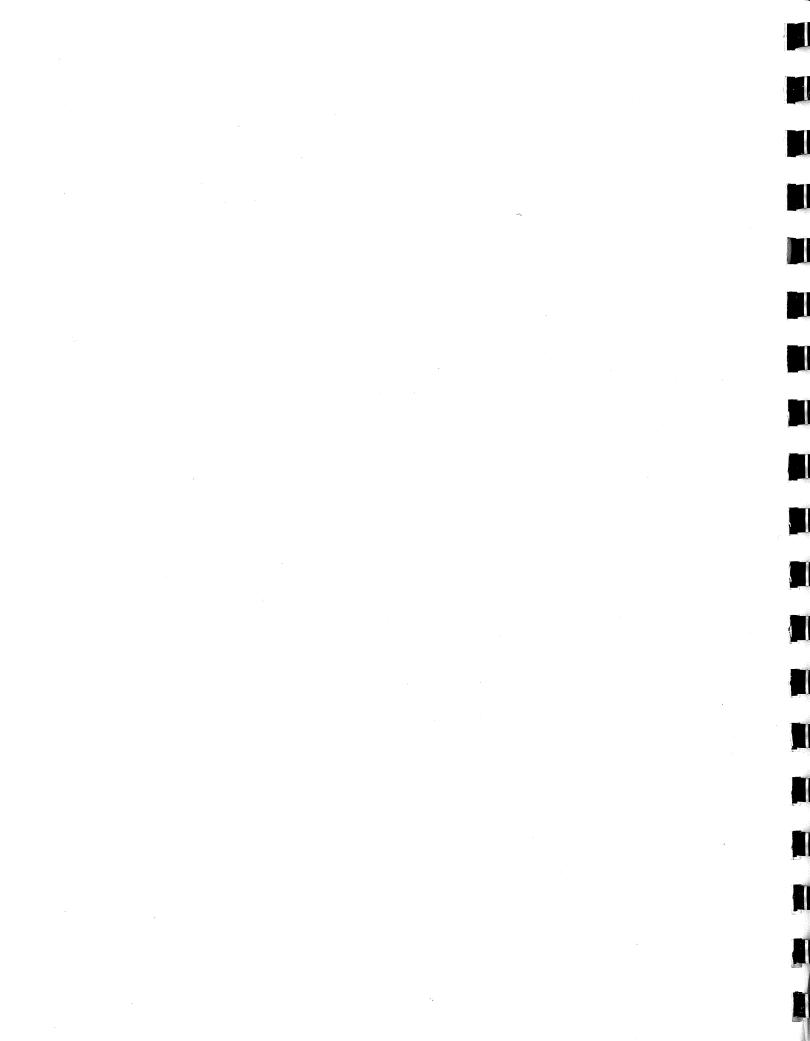
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Introduction

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OVERVIEW OF LAKE SHETEK STATE PARK

Lake Shetek State Park is located in north central Murray County in the southwestern part of the state. The nearest centers of population are Currie, 4 miles (6 km) to the south and Slayton, the county seat, 13 miles (21 km) to the southwest. Trunk Highway 30 (TH 30) provides access to Currie and from there, County State Aid Highway 38 (CSAH 38) provides access to the park.

The landscape in the vicinity of Shetek is gently rolling and dotted with marshes. It is the result of glacial activity which left several hundred feet of glacial till deposited over sandstone and a bedrock of Sioux quartzite.

The statutory boundary of the park includes almost 7 miles (11 km) of shoreline on Lake Shetek, some of which is in private ownership. The lakeshore and access to the lake provide a variety of high quality recreational opportunities for both day visitors and campers. Facilities include a picnic ground, a swimming beach, a modern campground with 88 sites, a primitive campground, a structured group camp with cabin and dining facilities, a primitive group camp, a boat launch, and 6 miles (10 km) of trails. Three and one half miles (6 km) of these trails are for snowmobiling during the winter and hiking during the summer. Two and one half miles (4 km) of trail are for hiking only. The interpretive center, located in the bathhouse, is operated from June to September.

The park was established in 1937 with a statutory boundary of 1,175 acres (476 hectares). A statutory boundary is established by the legislature. It identifies land which has outstanding resource and recreation value. The DNR has authority to acquire land for park purposes only from within this boundary. Approximately 190 acres (77 hectares) within the statutory boundary of Lake Shetek are privately owned. The remainder of the park acreage is state owned. A 66 acre (34 hectares) wildlife management area on the south end of the park is within the statutory boundary but is under custodial control of the DNR, Division of Fish and Wildlife. It is recommended that this parcel be deleted from the statutory

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boundary of the park. Private land within the statutory boundary can be purchased as it is made available by willing sellers. See Park Boundary, p 25 for further discussion.

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

The landscape region system divides the state into 18 regions (see map, p 9). These regions are differentiated according to the characteristic plant and animal life, landforms, and cultural patterns which existed before, during, and after European settlement. This system provides information which is valuable in planning Minnesota's state parks. Lake Shetek State Park is in the Coteau des Prairie 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 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.

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- 2. <u>Alternatives for park management and development are</u> <u>developed</u>. 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 reviewal period. (This management plan was approved in June 1981.)
- 6. <u>The plan is implemented by the DNR, Division of Parks and</u> Recreation.

A SUMMARY OF MANAGEMENT AND DEVELOPMENT PROPOSALS

Resource Management

- Maintain dead standing and down trees for wildlife.
- Plant native trees and shrubs in high use areas.
- Convert grass fields to native species.
- Prepare a fire management plan.
- Construct a water level control structure for Hanover Slough.
- Construct a rough fish barrier for Smith Lake.
- Study the feasibility of water quality improvement in Park Lake.
- Restore natural drainage behind the assistant manager's residence.
- Maintain the wildlife food plot.
- Study the area's deer population.
- Correct shoreline erosion.
- Conduct an archaeological survey of the park.
- Field check all proposed development sites for archaeological significance.
- Incorporate all archaeological findings into the park's interpretive program.

Camping and Picnicking

- Construct a new toilet building in the semi-modern campground.
- Remove the existing primitive campground and construct a new one on Smith Lake.
- Plant native trees in the semi-modern campground.
- Screen the drainage outlet in the campground with native vegetation.
- Remodel the toilet building in the group camp.
- Make all group camp buildings barrier-free.
- Construct a new picnic shelter.

Trails

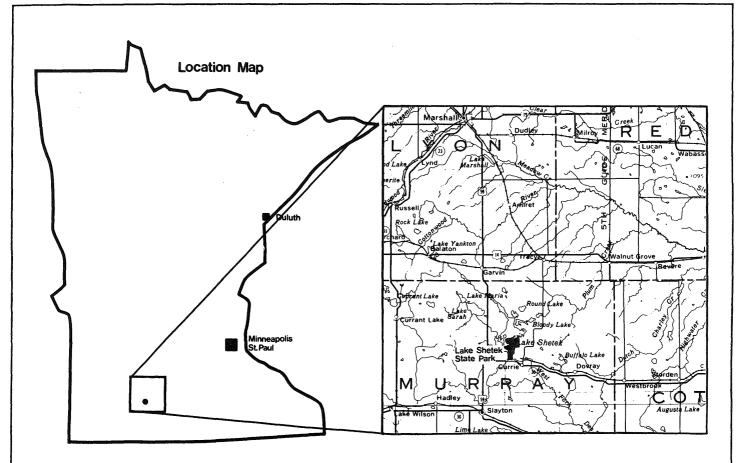
- Rehabilitate the park trail system.
- Construct a visitor/trail center.

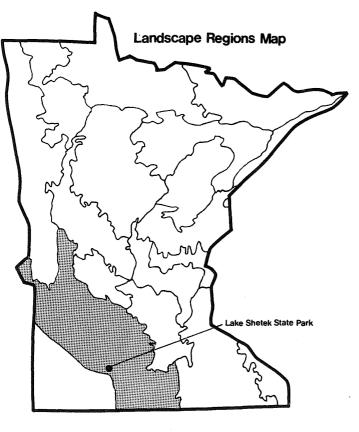
Water Activities

- Relocate the swimming beach.
- Remodel the bathhouse.
- Upgrade the boat launch.
- Provide shore fishing facilities.

Administrative/Support Facilities

- Construct a new contact station/park office.
- Realign the park road system.
- Develop a new service court.
- Construct a gas and oil storage building.
- Bury all utility lines.
- Relocate the electrical outlet in the amphitheater.

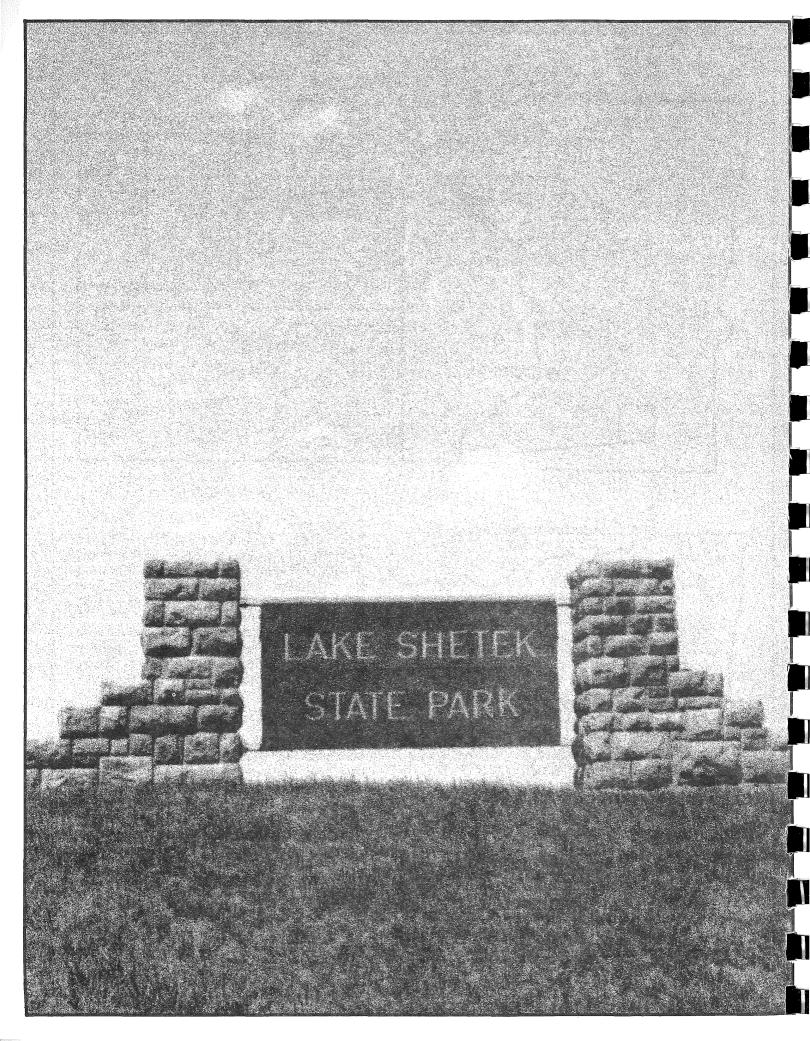




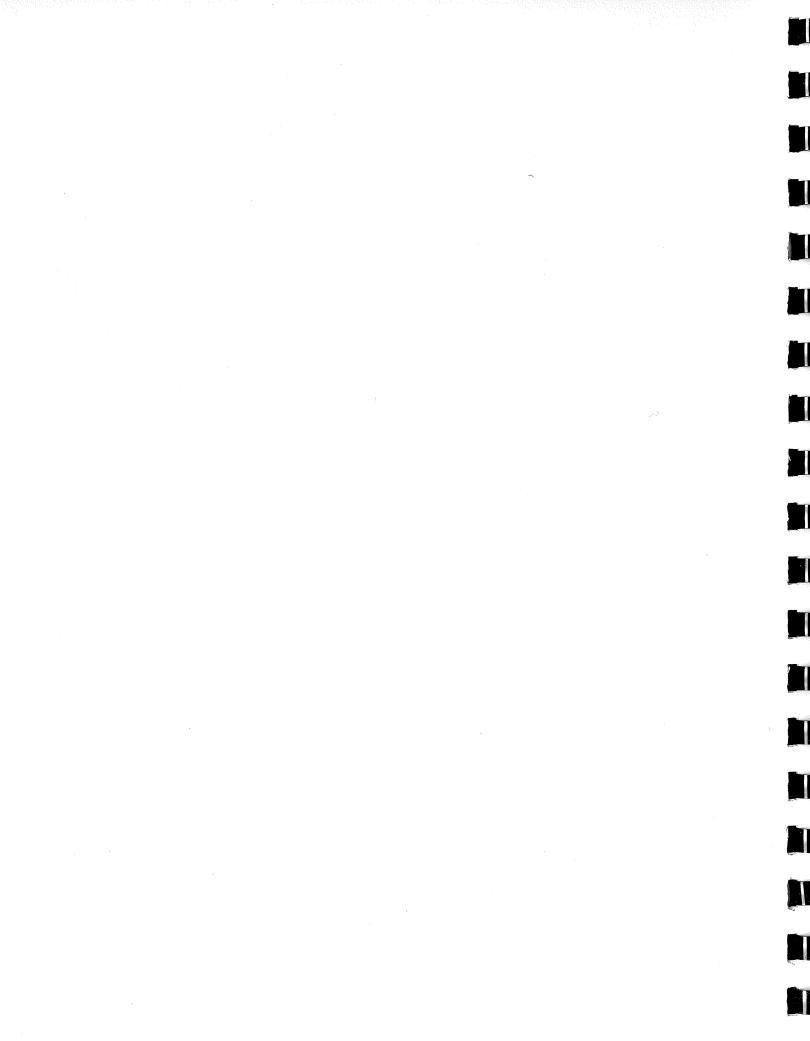
Coteau des Prairie

The coteau is a high prairie ridge of rolling hills which forms the drainage divide between waters of the Minnesota and Missouri rivers. It extends diagonally across the southwestern corner of Minnesota from the northwest to the southeast. Local relief is most prominent near the South Dakota border, where the elevation reaches almost 2,000 feet, nearly 400 feet higher than the wet prairie to the east. Near the Iowa state line, the ridge drops to 1,600 feet and merges with the wet prairie. The ridge core is composed of very old bedrock, but it has been capped by a glacially deposited clay moraine. Virtually all the region was covered by prairie vegeta-tion. A few major streams support floodplain hardwoods. Except in areas where rocky soils prevented cultivation, most of the original prairie vegetation is gone.

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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 this recreation/resource balance, the Minnesota State Legislature established, through the Outdoor Recreation Act of 1975 (ORA), a classification process 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 Recreational State Park Designation

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

"Possess natural resources, or artificial resources in a natural setting, with outstanding outdoor recreation potential.

"Provide outstanding outdoor recreational opportunities that will attract visitors from beyond the local area.

"Contain resources which permit intensive recreational use by large numbers of people and be of a size sufficient to provide for effective management and protection of the natural and/or artificial outdoor recreational resources, so that they will be available for both present and future generations.

"Be located in areas where they appropriately accommodate the outdoor recreational needs of the state populations, provided that they complement but are not in place of recreational service normally offered by local or regional units of government or the private sector."

Recommended Classification

Because Lake Shetek State Park substantially fulfills all of the above criteria, it is recommended that the park be classified as a recreational state park.

GOAL FOR THE PARK

The goal for Lake Shetek follows the overall goal for recreational state parks as stated in the DNR policy.

"It is the goal of the Department of Natural Resources in recreational state parks to:

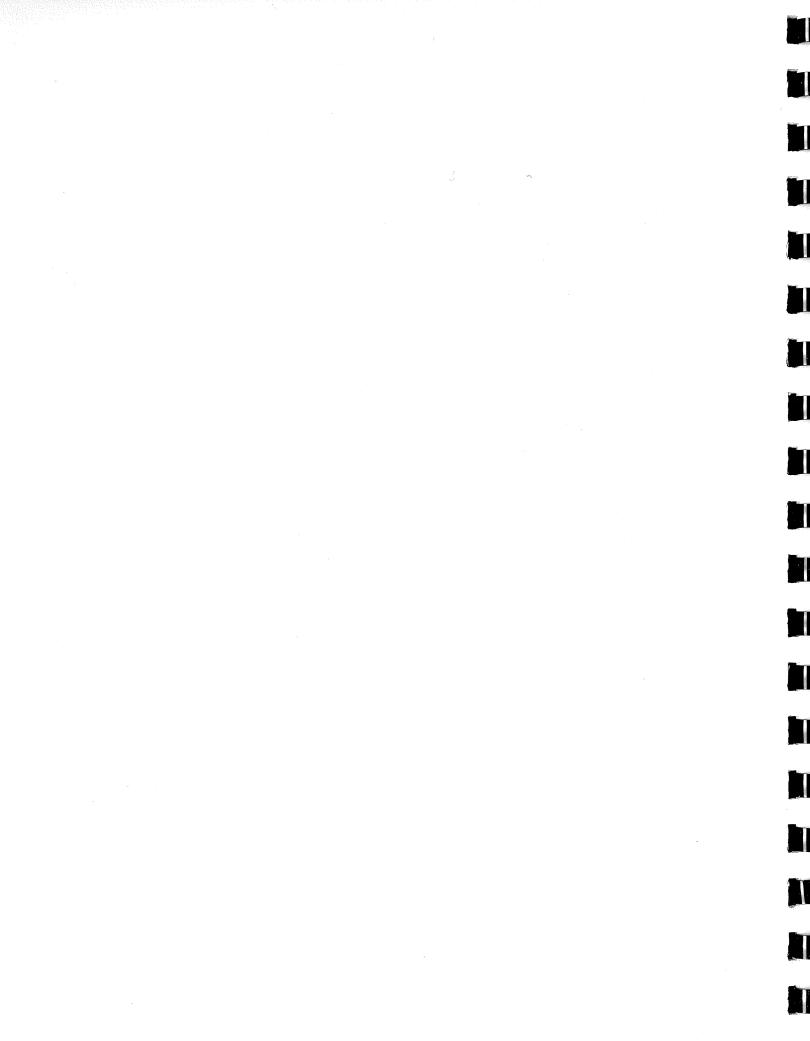
"Provide lands and waters which offer a broad selection of outdoor recreational activities in a natural setting and which may be used by large numbers of people."

Park Resources

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PARK RESOURCES

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<u>Vegetation and Wildlife</u>. The most extensive vegetative type in the park is grassland. These areas were once agricultural fields which have been seeded to brome grass. In recent years, there have been attempts to restore original prairie through planting a seed mixture including: Indiangrass, sideoats grama, switchgrass, and big and little bluestem. Four areas in the park are being actively cultivated. Two of these our wildlife foodplots and two others are in private ownership. Most of the lakeshore in the park is western Big Woods comprised of bur oak, basswood, green ash, and elm.

<u>Waters</u>. There are several water bodies in the park - Smith Lake, Park Lake, Webster Slough, and Hanover Slough. There are also two fish rearing ponds operated by the DNR, Division of Fish and Wildlife. There are seven miles (11 km) of Lake Shetek shoreline in the park. Shetek has sufficient water quality to permit all forms of recreation. It is classified as a warm water game fish lake. In 1925 the Game and Fish Department installed a water control structure on the lake at the outlet of the Des Moines River to improve fish habitat. An aeration system was installed in the lake in 1974 also to improve game fish habitat. Groundwater is sufficient in both quality and quantity.

<u>Fisheries</u>. None of the water bodies which lie completely within the park support year-round fish populations. Lake Shetek supports game fish such as: walleye and northern pike, largemouth bass, bluegill, crappie, and perch. The DNR, Section of Fisheries carries on active stocking and rough fish removal programs. The aeration system which was installed in 1974 has prevented winterkill and improved game fish habitat.

<u>Archaeology and History</u>. An archaeological survey of the park was undertaken in 1973. Two burial mounds first discovered in 1800 were still present. It is possible there is a habitation site in the park also. The cabin of Andrew Koch and his wife was restored and relocated in the park in 1962. This cabin and the Lake Shetek State Monument commemorate early settlers who were victims of the Dakota Indian attacks of 1862.

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.

RESOURCE MANAGEMENT

The following management recommendations will not require development funding from the LCMR. There is either no cost involved or they will be funded from the operational budget of the DNR, Division of Parks and Recreation.

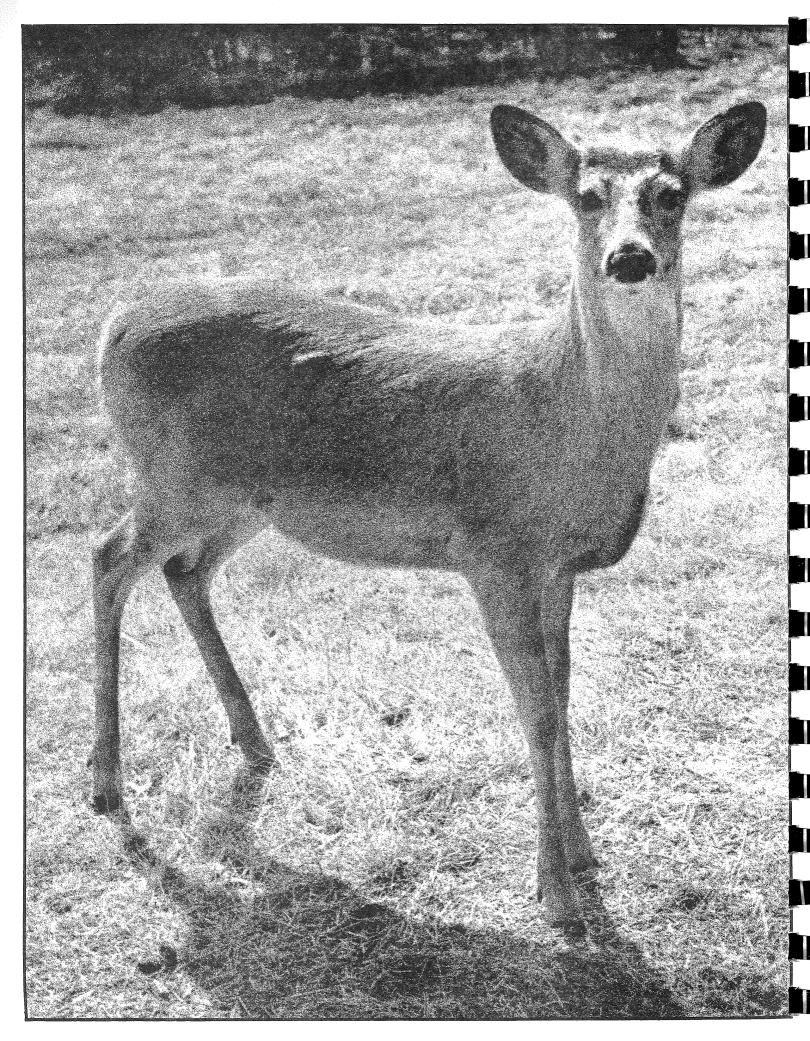
A maximum number of standing and fallen dead trees will be left for wildlife habitat. Native trees and shrubs will be planted in all high use areas of the park. (This cost is figured into the cost of each development project.) The tile behind the assistant manager's house will be plugged to restore natural drainage patterns. Wildlife food plots will be retained in the park. A study on the deer population in the park and surrounding area will be conducted cooperatively by the DNR, Division of Fish and Wildlife and the DNR, Division of Parks These divisions will also arrange for the and Recreation. construction of a rough fish barrier at the outlet of Smith Lake. The DNR, Division of Fish and Wildlife will investigate possible methods of improving the water quality of Park Lake.

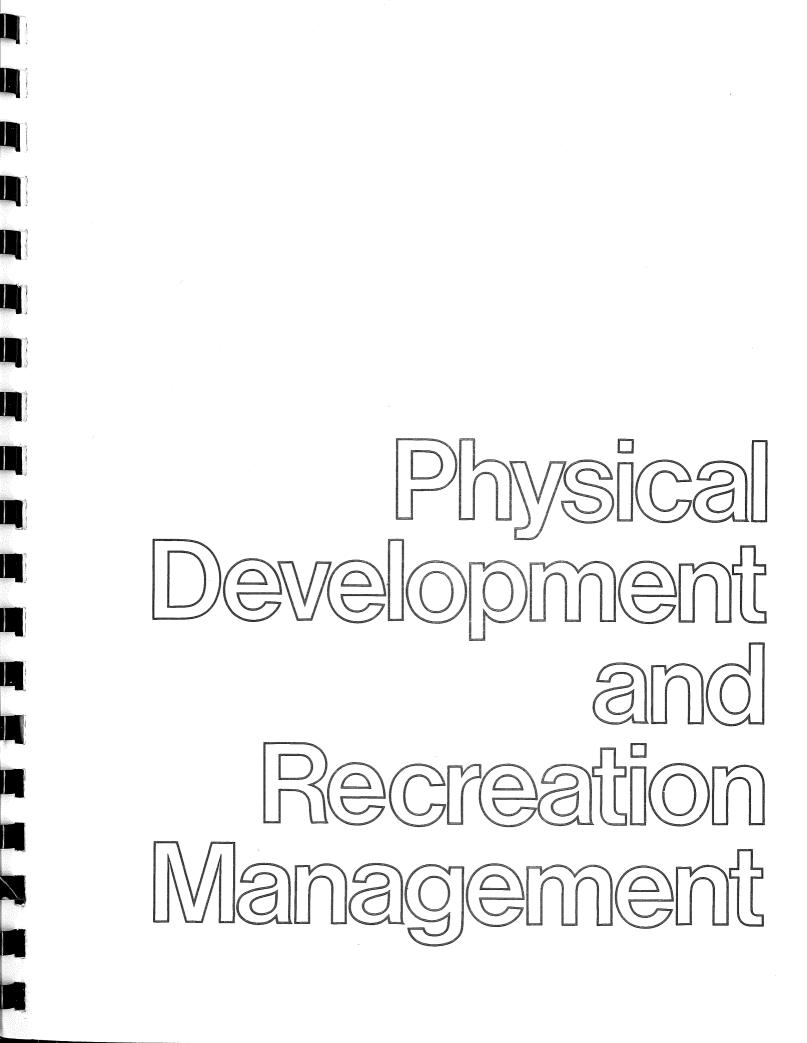
Management actions that will require development funds appropriated biennially by the LCMR as follows: (The costs were estimated in March 1981 and were based on current prices.)

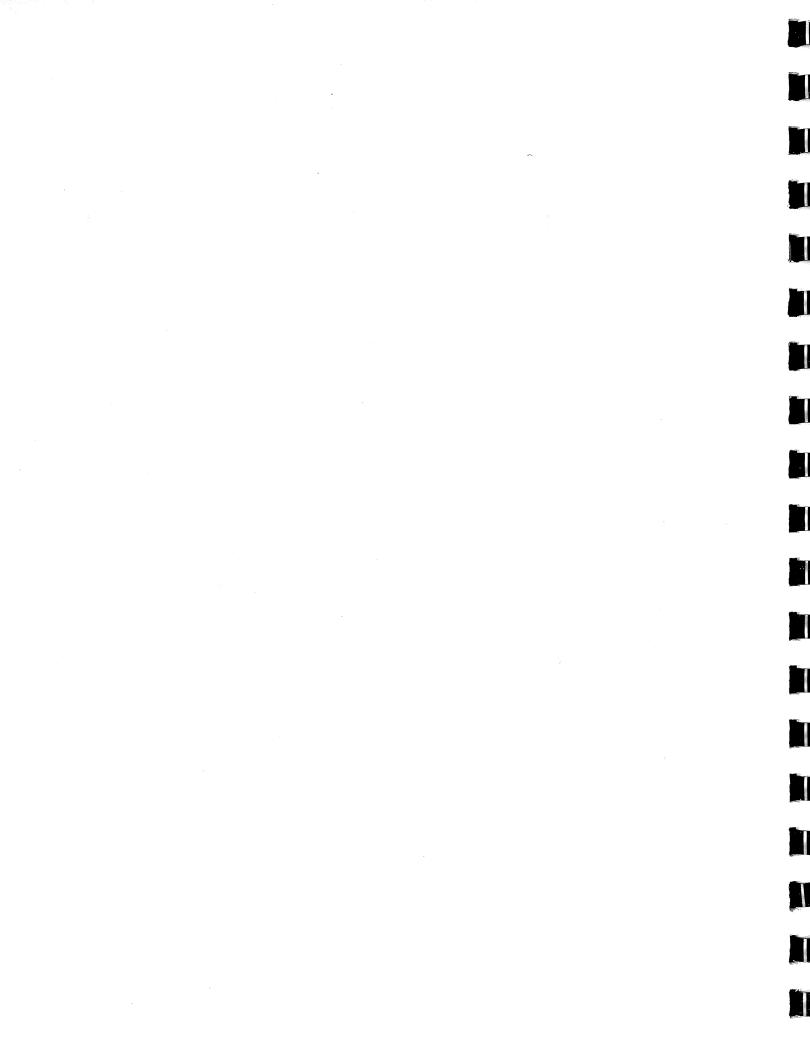
Action	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Total	_
1 Convert all grass fields to native grasslands.	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$30,000	
2 Prepare and implemen a fire management plan.	t 2,000	2,000	2,000	2,000	2,000	10,000	
3 Construct water control structure for Hannover Slough.	500					500	
4 Implement erosion con on shore of Lake She			5,000			15,000	
5 Conduct an archaeolog survey of the park.	gical	7,000				7,000	

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EXISTING DEVELOPMENT (see map, p 31) Campground 88 campsites (44 with electrical hook ups) 2 modern toilet buildings

Primitive Campground 20 rustic campsites Hand pump water supply Pit toilets

Structured Group Camp Mess hall (kitchen and dining room) Modern toilet building 3 barracks Craft building

Primitive Group Camp Faucet for water supply Pit toilets

Picnic Ground Picnic shelter Modern toilet building Picnic tables Gravel surfaced parking lot

Swimming Beach Bathhouse (changing rooms and toilets) Sand beach

Boat Launch Concrete launch ramp Gravel surfaced parking lot

Administrative/Support Facilities Contact station Manager's residence Assistant manager's residence Shop building Miscellaneous storage buildings

Trails

3.5 miles (6 km) snowmobile/hiking 2.5 miles (4 km) hiking only

Interpretive Program A small room in the bathhouse is used for interpretive programs.

RECREATION MANAGEMENT OBJECTIVES

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 ensure physical accessibility and program usability of new developments by special populations (i.e., persons with physical disabilities, the elderly, and the very young).

PROPOSED DEVELOPMENT (see map, p 35)

Specific management recommendations which will require no development funds include: the DNR, Engineering study of the sewage lagoon; screening the drainage outlet in the campground with vegetation; retaining the picnic ground toilet building; maintaining Loon Island Trail. Proposals which will require development funds have been scheduled as follows. (Figures are based on current prices in March 1981.)

Act	tion	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Total
Roa 1	ds Realign the interior park road system.			\$ 90,000			\$ 90,000
Carr T	ping Construct a new toilet building in the modern campground.		\$ 90,000				90,000
2	Remove the existing primitive campgound.			5,000			5,000
3	Construct a new primitive campground at Smith Lake.		70,000				70,000
4	Replant trees in the semi-modern campground.			1,500			1,500
5	Remodel the group camp toilet building.	\$64,000					64,000
6	Provide barrier-free access to group camp buildings.		· .	15,000			15,000
Pic T	nicking/Trails Construct a new picnic shelter.				\$ 20,000		20,000
2	Develop ski touring trails.		3,000				3,000

Act	tion	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Total
3	Realign snowmobile trails.		3,000				3,000
	er Activities Relocate swimming beach.		15,000				15,000
2	Remodel the bathhouse.		8,000				8,000
3	Upgrade the boat launch.		20,000				20,000
4	Provide shore fishing facilities.		10,000		10,000 \$	10,000	30,000
Adr T	ninistrative Facilities/Utiliti Construct a new contact station/park office.	es	\$100,000				\$100,000
2	Develop a new service court.			\$202,000			202,000
3	Construct a gas and oil storage building.			8,000			8,000
4	Bury all electrical lines.				\$ 30,000		30,000
Vis 1	sitor Services/Interpretive Prog Construct a visitor/ trail center.	gram		40,000			40,000
2	Upgrade facilities for Woodland Marsh Trail.		1,000				1,000
3	Develop new interpretive signage and a brochure for Loon Island.		2,000				2,000

PARK BOUNDARY

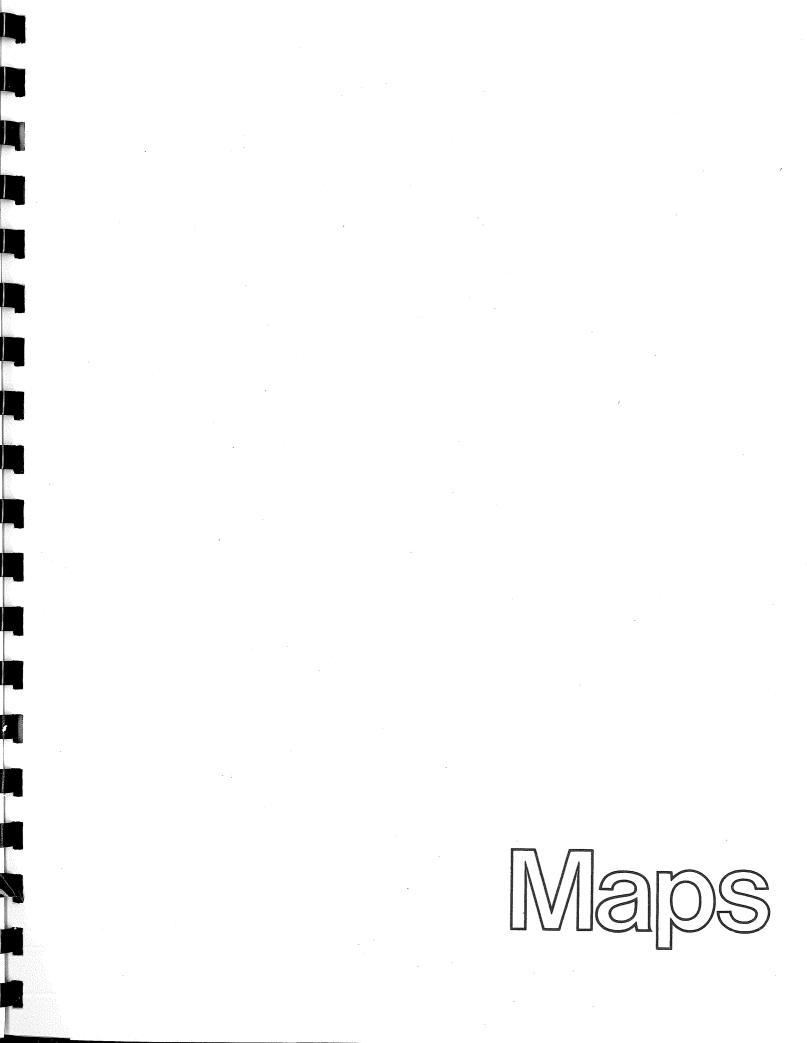
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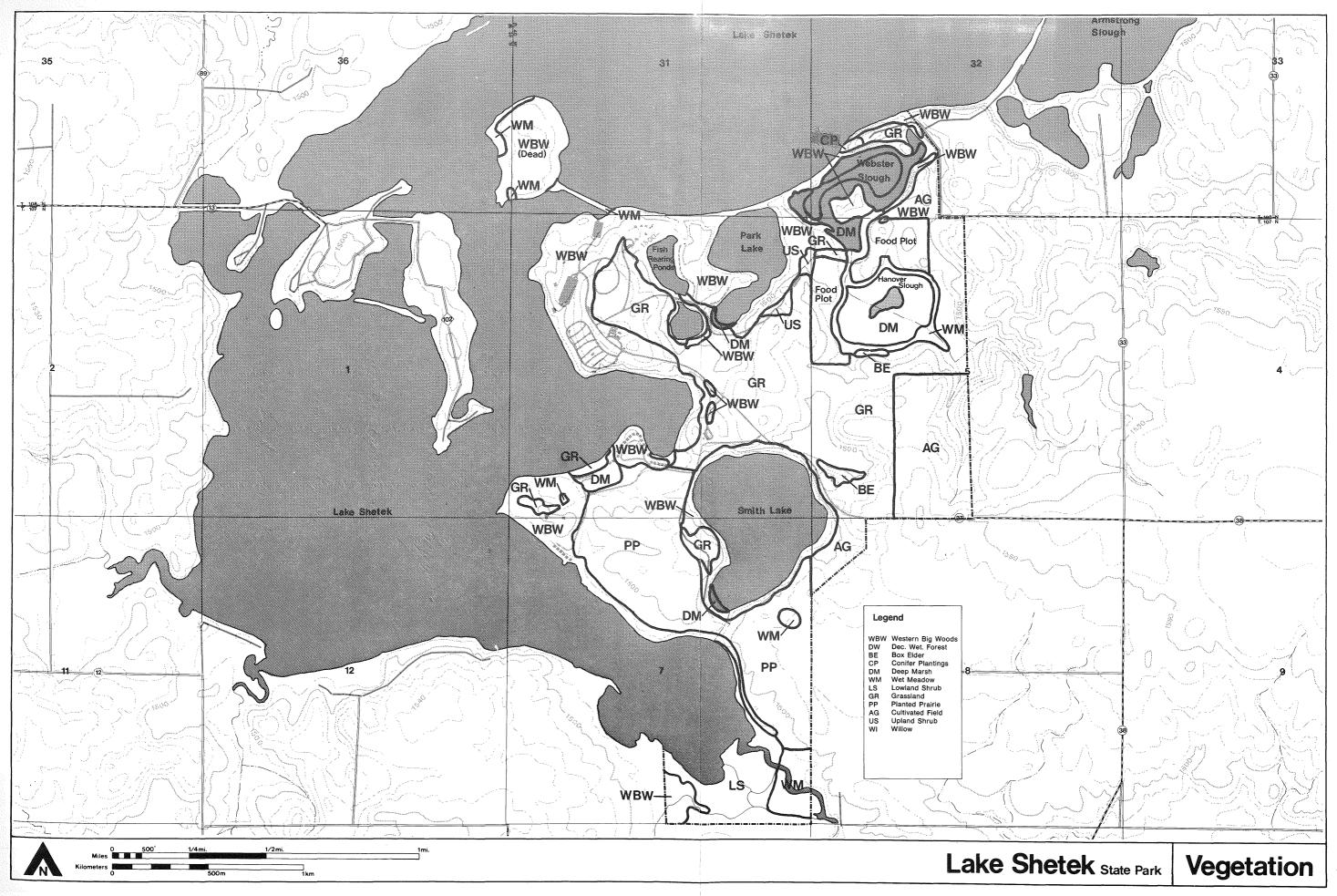
To provide sufficient park acreage to protect and perpetuate the natural resources and provide the needed recreational facilities to interpret and enjoy these resources

The map on p delineates the privately owned areage within the statutory boundary. Area 1 is approximately 29 acres (12 hectares) and has one year-round residence on it. Area 2, approximately 11 acres (4 hectares), has four summer homes on it. Area 3, approximately 13 acres (5 hectares), is used for crop production. Acquisition of these three areas is important for future expansion of the trail system. These areas will have priority for purchase when they are made available by willing sellers.

The other five parcels (numbers 4, 5, 6, 7, and 8) do not have a high priority for purchase. Area 4 is used as a group camp by the Boy Scouts of America. Area 5 is a public boat access on Lake Shetek. These uses are compatible with park use and should be retained within the park in their current ownership. Areas 6 and 7 have been divided into lots and have summer homes or permanent residences on them. Area 8 is used for crop production.

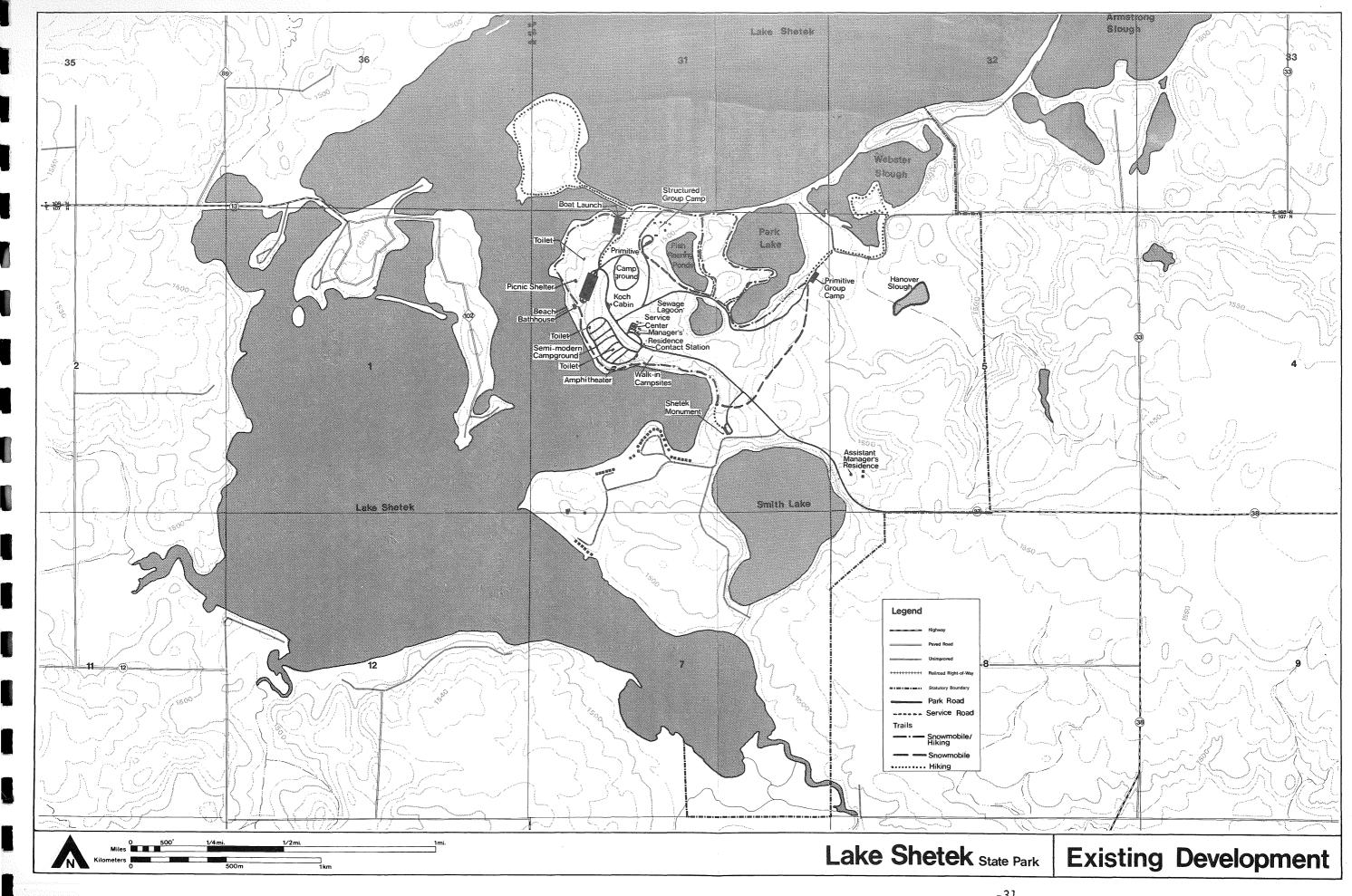
It is recommended that the wildlife management area in the southern end of the park be deleted from the statutory boundary.



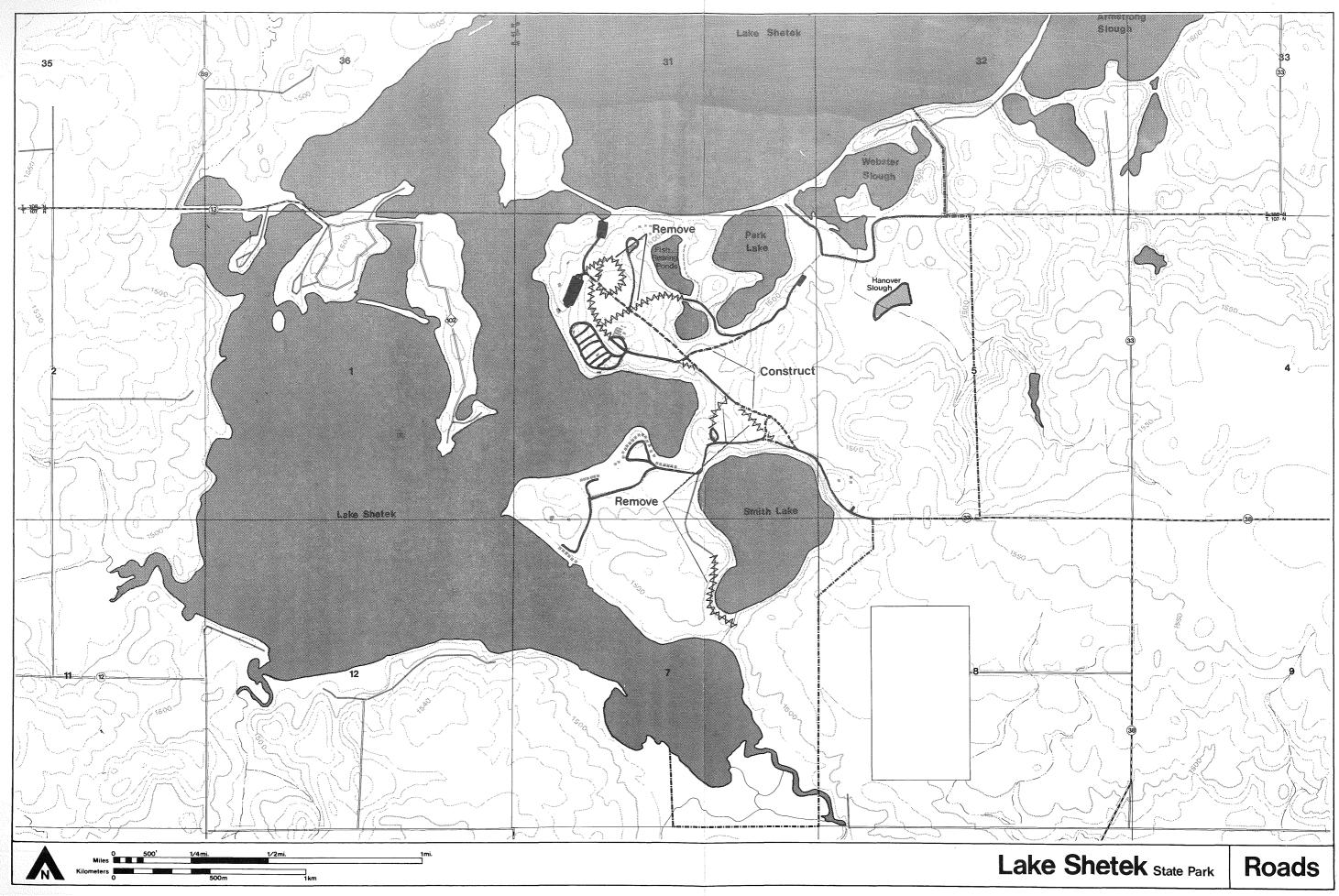






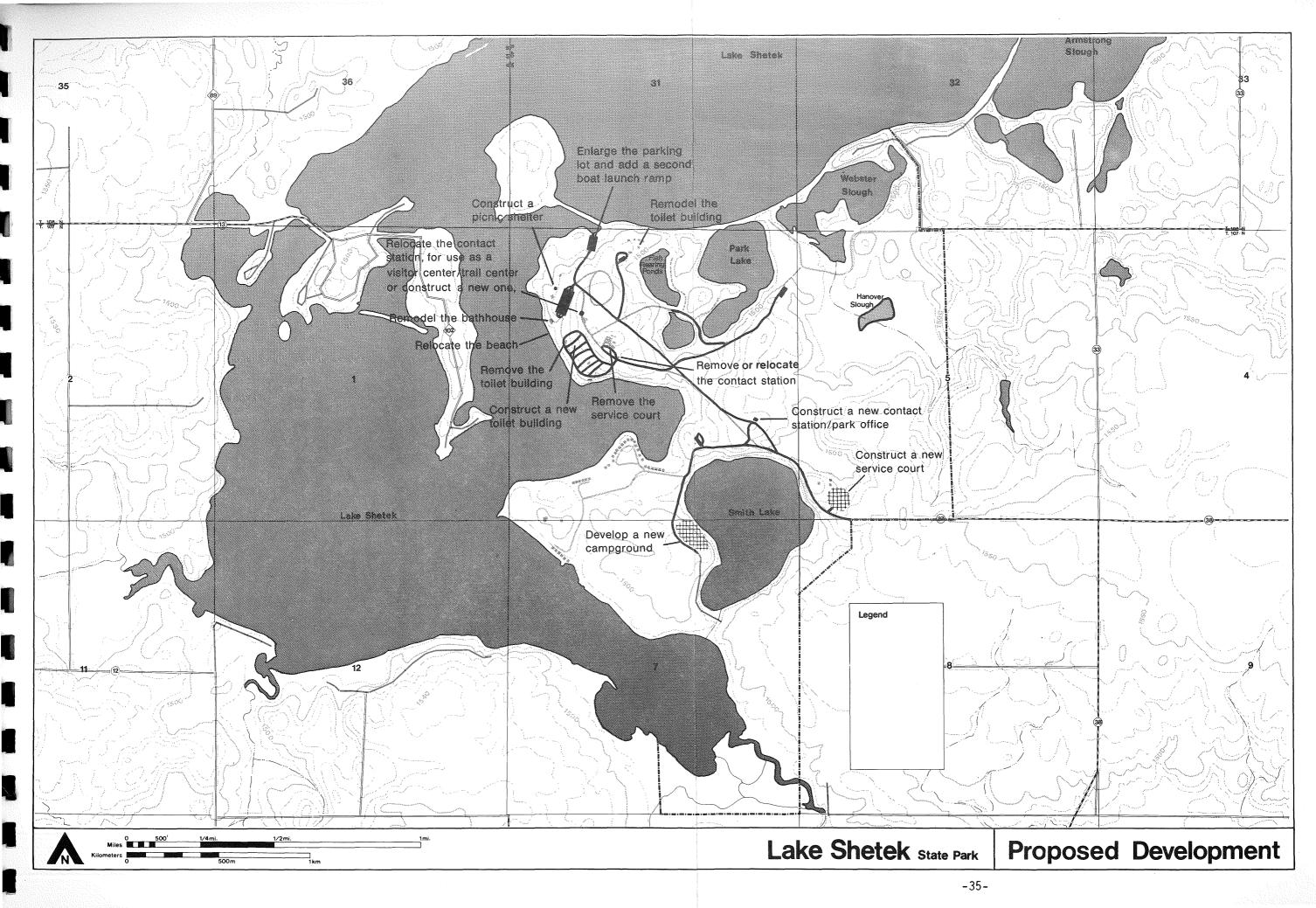






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