A Management Plan for Banning State Park

Minnesota Department of Natural Resources

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Banning
State Park

Minnesota Department of Natural Resources
Office of Planning

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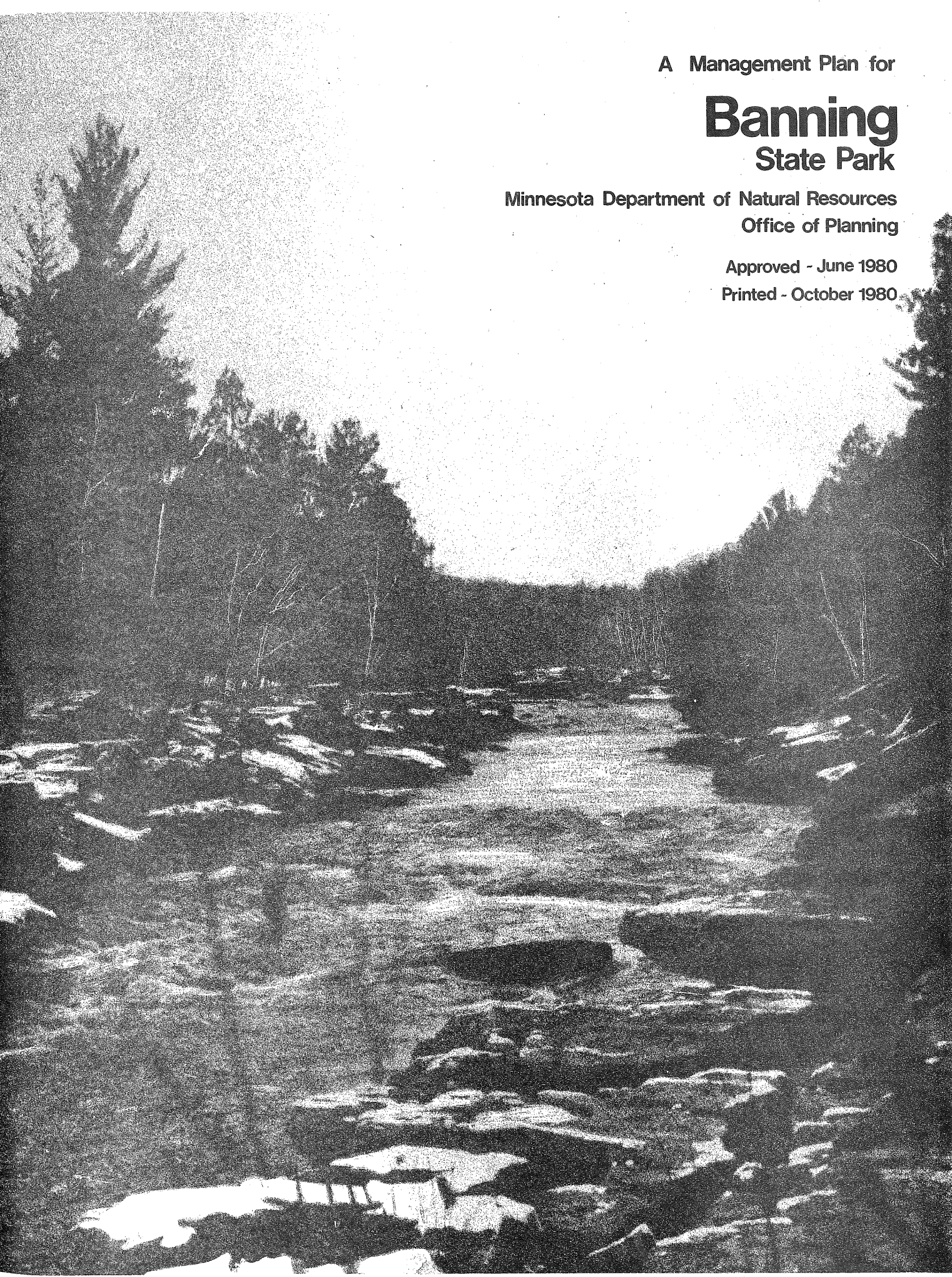

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LIST OF ABBREVIATIONS

ORA '75 - Outdoor Recreation Act of 1975
DNR - Minnesota Department of Natural Resources
SPA - Minnesota State Planning Agency
MHS - Minnesota Historical Society
MPD - Management Plan Details
GPMP - General Park Management Plan
CETA - Comprehensive Employment Training Act
YACC - Young Adult Conservation Corp
SNA - Scientific and Natural Area
CSAH - County State Aid Highway
TH - Trunk Highway
I - Interstate
MP&L - Minnesota Power and Light Company
mi - mile
km - kilometer
sq mi - square mile
sq km - square kilometer
ft - foot/feet
m - meter
in. - inch
cm - centimeter
kg - kilogram
cfs - cubic feet per second
ppm - parts per million
ROW - right-of-way
msl - mean sea level
gpm - gallons per minute
lpm - liters per minute
F - Fahrenheit
C - Centigrade
p - page
pp - pages

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 of 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 BANNING STATE PARK

Banning State Park is located in Pine County in east central Minnesota, north and east of the city of Sandstone. The park was established by an act of the Minnesota State Legislature in 1963, with a statutory boundary of 5,246 acres (2,098 hectares). A 1971 expansion increased the park's size to its present 5,899 acres (2,360 hectares).

The park encompasses a 10 mi (16 km) stretch of the Kettle River. In the central portion of the park, the river valley narrows to a deep gorge incised into the sandstone forming a spectacular series of rapids. These rapids consist of five segments: Blueberry Slide, Mother's Delight, Dragon's Tooth, Little Banning, and finally Hell's Gate where sheer cliffs, 40 ft (12 m) high, rise above the swirling water. The whole series of rapids is commonly referred to as Hell's Gate. Beyond the rapids, the valley again widens and the river flows through topography ranging from level to gently rolling glacial till plain.

Original vegetation communities were comprised primarily of Norway and white pine interspersed with aspen and birch. Today, as a result of logging, forest fires, and subsequent fire suppression, vegetation is predominantly aspen and birch. Only remnant stands of pine remain.

Within the park is the abandoned Banning townsite for which the park was named. Only the ruins of the quarry around which Banning was built are still evident along the river. When the quarry closed, the town died.

Existing development in the park includes a 31 site primitive campground, 2 canoe campsites, a 20 site picnic area, 6.5 mi (10.4 km) of hiking trails, 4.5 mi (7.2 km) of snowmobile trails, and 5.5 mi (8.8 km) of ski touring trails. There is also a canoe access off Trunk Highway (TH) 23, just above the rapids, which is used mainly by whitewater canoeists and occasionally by fishermen.

Use has increased from 1,275 visitors in 1966 when the park first opened to over 35,000 visitors in 1978.

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.

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

Banning State Park, located in the Mille Lacs Biocultural Region, is recommended for classification as a natural state park.

Resource management in the park will focus on the following areas:

Soils - completion of a soil survey of the park

Vegetation - thinning the overstory; encouraging reproduction of Norway pine, spruce, fir, oak, and apsen; maintaining areas of oak savanna; and improving wildlife habitat

Wildlife - studying the feasibility of reestablishing beaver colonies and inventorying and monitoring wildlife populations

Groundwater - installing iron filters on all park wells

Surface Waters- studying the feasibility of removing the old hydroelectric dam on the Kettle River

Three specialized management areas have been identified: area 1 will be managed for recreational development; area 2 will be protected as a historic site; and area 3 will be maintained as a remote area with no recreational development, including trails.

Recreational management will include:

Roads - realigning the entrance road, rehabilitating all park roads, and closing all unauthorized access routes into the park

Picnicking - expanding the picnic area and developing four small picnic shelters

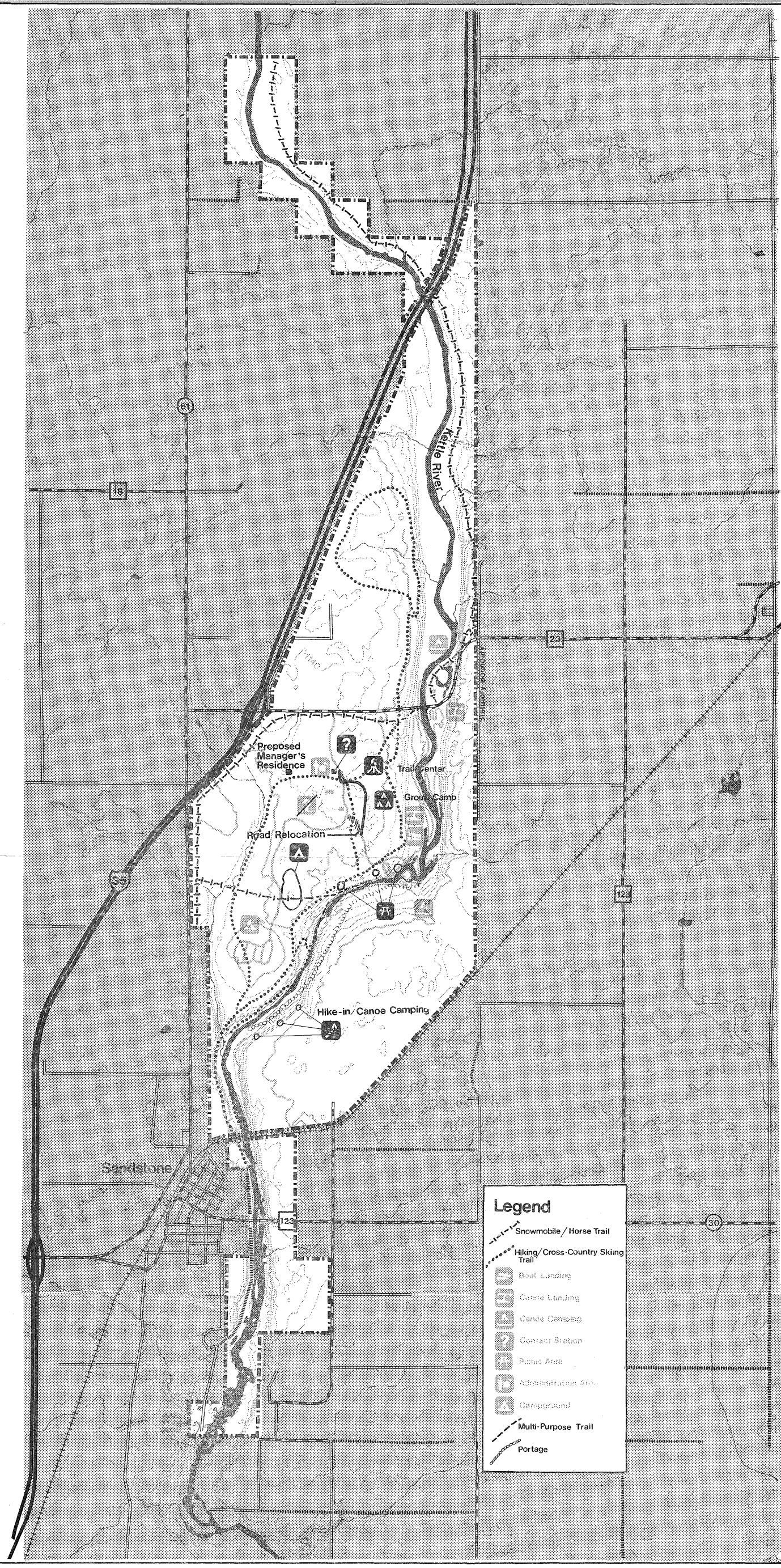
Camping - redesigning and expanding the existing campground and developing a semi-modern family campground, a group camp, and three hike-in/canoe campsites

Trails - developing a through-park snowmobile/horseback riding trail, a hiking/ski-touring trail system, and a trail/interpretive center

Water Activities - retaining the canoe and small boat river accesses

Administrative and Support Facilities - constructing a new manager's residence, a contact station/park office, and a service center and burying all overhead electric lines

The only boundary modification will be exclusion from the park of some platted land which has been developed with private residences.



Banning State Park

Composite Development

Regional Analysis

In order to determine a park's potential role in 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 will help to ensure that park development will be planned to protect natural and historic resources, meet appropriate recreational demands, and avoid undue competition with other recreation providers.

The State Park System

Minnesotan's traditionally have had a great appreciation for nature. This tradition has been honored by setting aside recreational lands which exemplify the state's outstanding natural and scenic resources. It is the management goal for all state recreational lands (of which the state park system is a part) to protect and perpetuate these resources for use and enjoyment by the citizens of Minnesota.

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 legislature outlined, in the Outdoor Recreation Act of 1975 (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. 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.

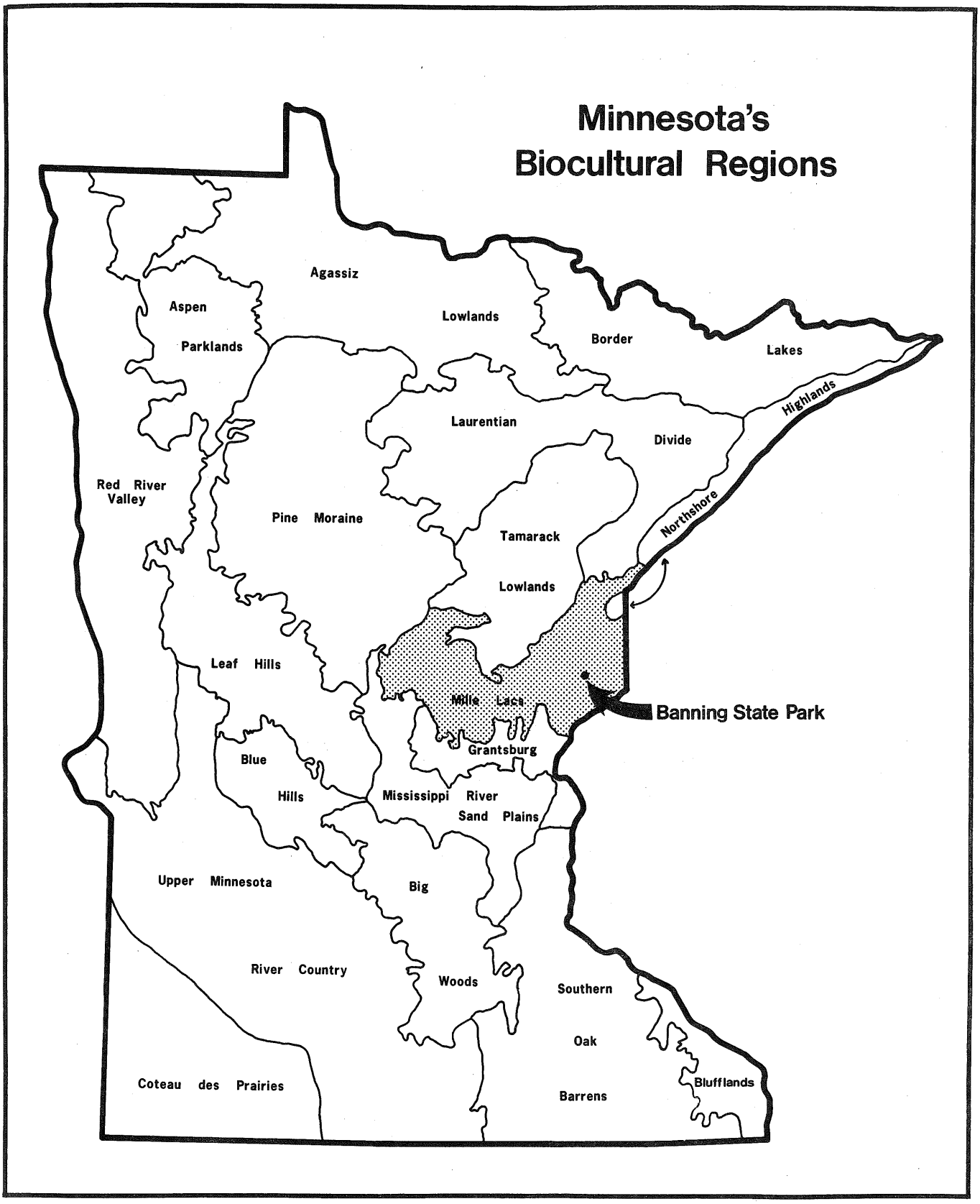
A natural state park classification places primary emphasis on perpetuation of the natural resources. Recreational state park classification, while not allowing major disruption of the natural resources, focuses on providing a variety of recreational facilities for large numbers of people. This classification determines each park's role as a unit in the statewide park system. (See Classification Section, p 27 , for further discussion.)

Biocultural Region System

The biocultural region system divides the state into 18 regions. (See map, p 17.) These regions are differentiated according to the characteristic vegetation, animal life, landforms, and cultural patterns which existed before, during, and after European settlement. Because state parks tend to be some of the most outstanding, scenic lands in the state, they tend to reflect the quality and diversity of the biocultural regions. The biocultural region system is a framework which provides valuable biological and cultural information useful in the planning of Minnesota's state parks.

Banning 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. The region was once largely covered with white and Norway pine. Today it is characterized by five vegetation types, aspen-birch (conifer), mixed hardwoods and pine, white and Norway pine, white pine, and conifer bog and swamp.

The region encompasses 3,014 sq mi (8,374 sq km), or 3.8 percent of Minnesota. The northern boundary is marked by the southern limit of the Automba Drumlin area, the western limit by the western edge of the Brainerd-Pierz Drumlin area, the southern limit by the deciduous forest border, and the eastern limit by the Wisconsin border.


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

In places, the morainic tracts are replaced by till plains and outwash plains. Many of the smaller lake basins are undoubtedly ice-blocked holes or pits formed by the melting blocks of ice that had been buried by glacial drift.

Banning State Park is an excellent example of the eastern portion of this biocultural region. (See the Classification Section, p 27 for further discussion.)

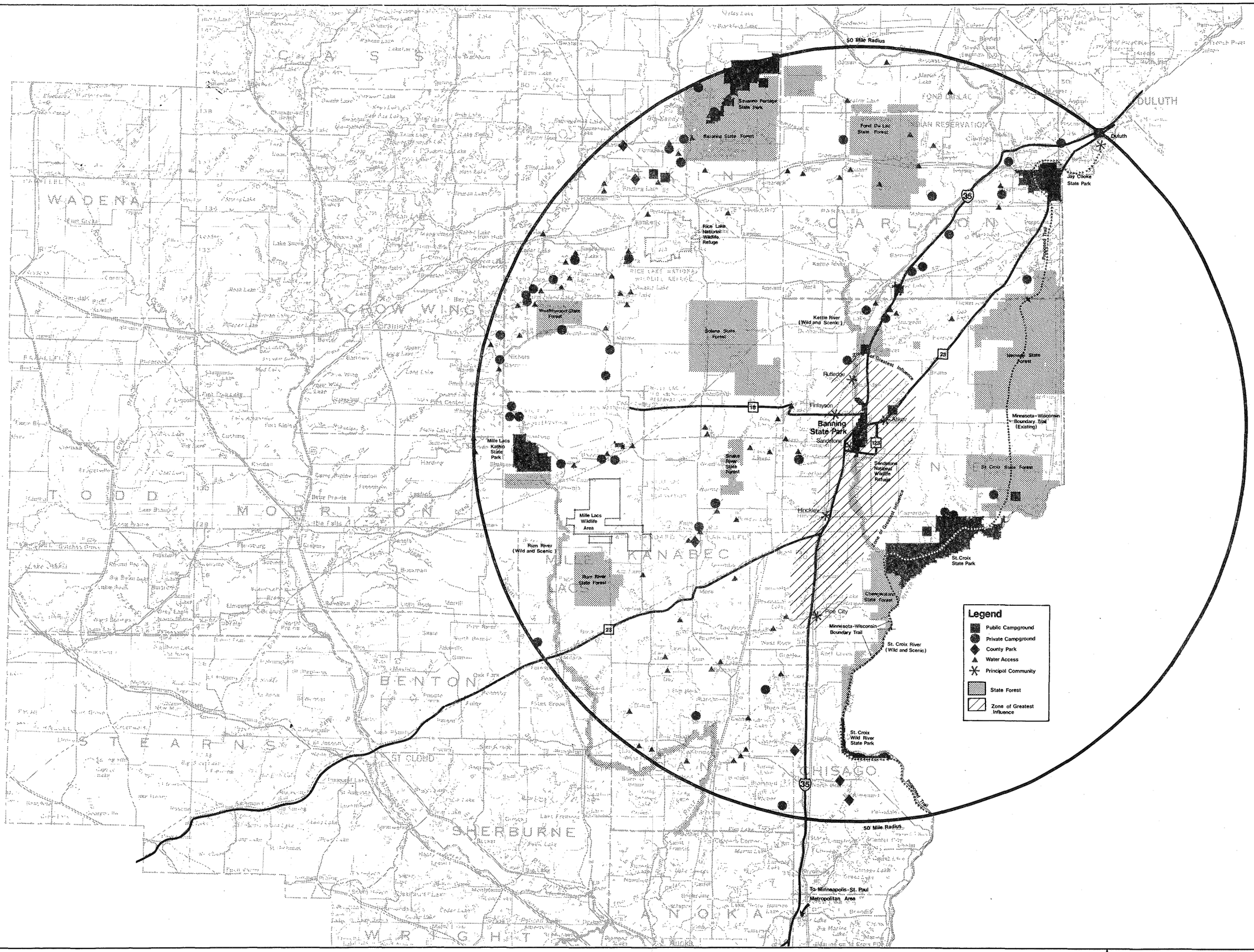
State Park Use Patterns

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

A 1978 state park use survey revealed that the majority of Banning day users come to the park to picnic and hike. Fifty percent of these picnickers and hikers come from within 50 mi (80 km) of the park. This clearly demonstrates the park's resource and recreational attraction to local residents. The survey also showed that the majority of overnight visitors in Banning come from outside a 50 mi (80 km) radius. They use the park as a stop over point enroute to a principle destination. Its close proximity to Interstate (I) 35 makes the park a convenient and desirable camping facility for travelers. 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.

Source:

Marschner, F. J. 1930. The original vegetation of Minnesota. North Central Forest Experiment Station Map.



Banning State Park | Regional Analysis

Regional Influence/Impact Factors

Recreational 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.

Based on an informal park use survey, the influence zone shown on the Regional Analysis Map, M 2 best illustrates communities most likely to use Banning on a regular basis. In addition, the influence zone highlights area recreational facilities which may complement park facilities and services.

Recreational facilities within a park's 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 activity 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 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.

The relationship of existing facilities to the experience sought is an integral part of the regional analysis process. This 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.

On the following chart, Banning's activities and experiences are analyzed on the left and complementing facilities in the influence zone are analyzed on the right.

Activity/Experience	Complementing Facilities
Camping	
There are 31 primitive campsites available in Banning State Park. The park's proximity to the freeway system (I-35) establishes the park as a convenient and desirable stopover for people enroute to other destinations.	Approximately 81 modern campsites are available in private, county and municipal camping facilities in the Banning influence zone.
Destination campers have indicated their preferences to camp at Banning because of the park's beauty, cleanliness, diversity of resources, and convenient location.	The campgrounds in General CC Andrews State Forest and DAR State Forest east of Banning and the Kettle River Campground east of Hinkley are among the public camping facilities within the park influence zone.
Picnicking	
There are 20 picnic sities in Banning. Eighty seven percent of the state's population picnics at least once a year. According to Banning's use survey, 25 percent of weekend day users are picnickers. People enjoy picnicking at this park because the activity is complemented by the scenic environment. Other outdoor pursuits such as canoeing and wildlife observation heighten the picnicking experience.	Although there are many other picnic areas in the park influence zone the combined picnic/activity experience of Banning is not duplicated elsewhere.

Hiking

There are 6.5 mi (10.4 km) of hiking trails in the park. Park visitors enjoy the variety of vegetational types and geological landforms, such as the remnant virgin pine stands and the Kettle River gorge via this trail system.

The North Woods Audubon Center, 5 mi (8 km) west of Sandstone on Grindstone Lake, has a hiking trail system. But there are few other opportunities for trail hiking in a natural setting in the Banning influence zone. St. Croix State Forest and St. Croix State Park, located outside the zone of greater influence, but within a 50 mi (80 km) radius of Banning, have extensive trail opportunities for hikers.

Snowmobiling

There are 4.5 mi (7.2 km) of snowmobile trails in the park. The park's snowmobiling trails will be linked to the grant-in-aid trail which runs between Rutledge and Askov.

There are few snowmobile trail miles within the Banning influence zone. However, Pine County has 63 mi (100 km) of grant-in-aid snowmobile trails. Nemadji, General CC Andrews, St. Croix, and Chengwatana state forests, St. Croix State Park, and the Minnesota-Wisconsin Boundary Trail have a combined total of 258 mi (412.8 km) of snowmobile trails.

Ski Touring

The popularity of ski touring has grown rapidly in recent years. Skiers come to Banning because of the varied and scenic terrain, visibility of wildlife, and the lack of other ski touring trails in the

Other than several miles of ski touring trails at the North Woods Audubon Center, there are few opportunities for ski touring within the influence zone. Chengwatana State Forest, St.

area. There are 5.5 mi (8.8 km) of ski touring trails in the park.

Croix State Forest, and St. Croix State Park, all located outside the influence zone, but within 50 mi (80 km) of Banning, have 36 mi (57 km) of ski touring trails.

Interpretation

The function of the Banning interpretive program is to expose visitors to the unique natural and historical resources of the park. Because of the significance of the Kettle River, Wolf Creek, the remains of the historic town of Banning, and the abandoned quarry ruins, major emphasis will be placed on interpretation in Banning in the future. The existing weekend program provided by a park volunteer will be expanded.

The North Woods Audubon Center, offers interpretive programs. The center also uses Banning as a part of its extended regional interpretive program. These two facilities complement each other in function.

Canoeing and Kayaking

Banning offers canoeists and kayakers easy access to the Kettle River, a state designated wild and scenic river. Canoeing or kayaking Hell's Gate and the Blueberry Slide are among the state's most challenging river experiences. Banning is a popular entry point for canoeists and kayakers traveling from the park to Robinson Park in Sandstone. The park is also a convenient stop over for canoeists on an extended river trips.

Banning's rapids, river access, and camping and picnicking facilities combine to offer canoeists and kayakers an experience not duplicated either in the influence zone or anywhere along the Kettle River.

SURROUNDING LAND USE

Surrounding land use may have a positive or negative impact on park lands and uses. Understanding these impacts will help to direct future development and landscape management.

Much of the land surrounding Banning State Park is used for forest or agricultural production (hay, small grains, and dairy farms). (See Surrounding Land Use Map, M3.) The city of Sandstone is located on the south end of the eastern boundary of the park. Some minor commerical uses, transportation corridors, and Sandstone Federal Correctional Institution are also located adjacent to the park.

There are no major conflicts between the park and surrounding land uses. Future facility development will consider conflicts that could develop. For example, if a campground was developed near a residential area or a transportation corridor, conflicts would exist. To avoid any potential problems, all future development, with the exception of trails, will be concentrated near the existing facilities.

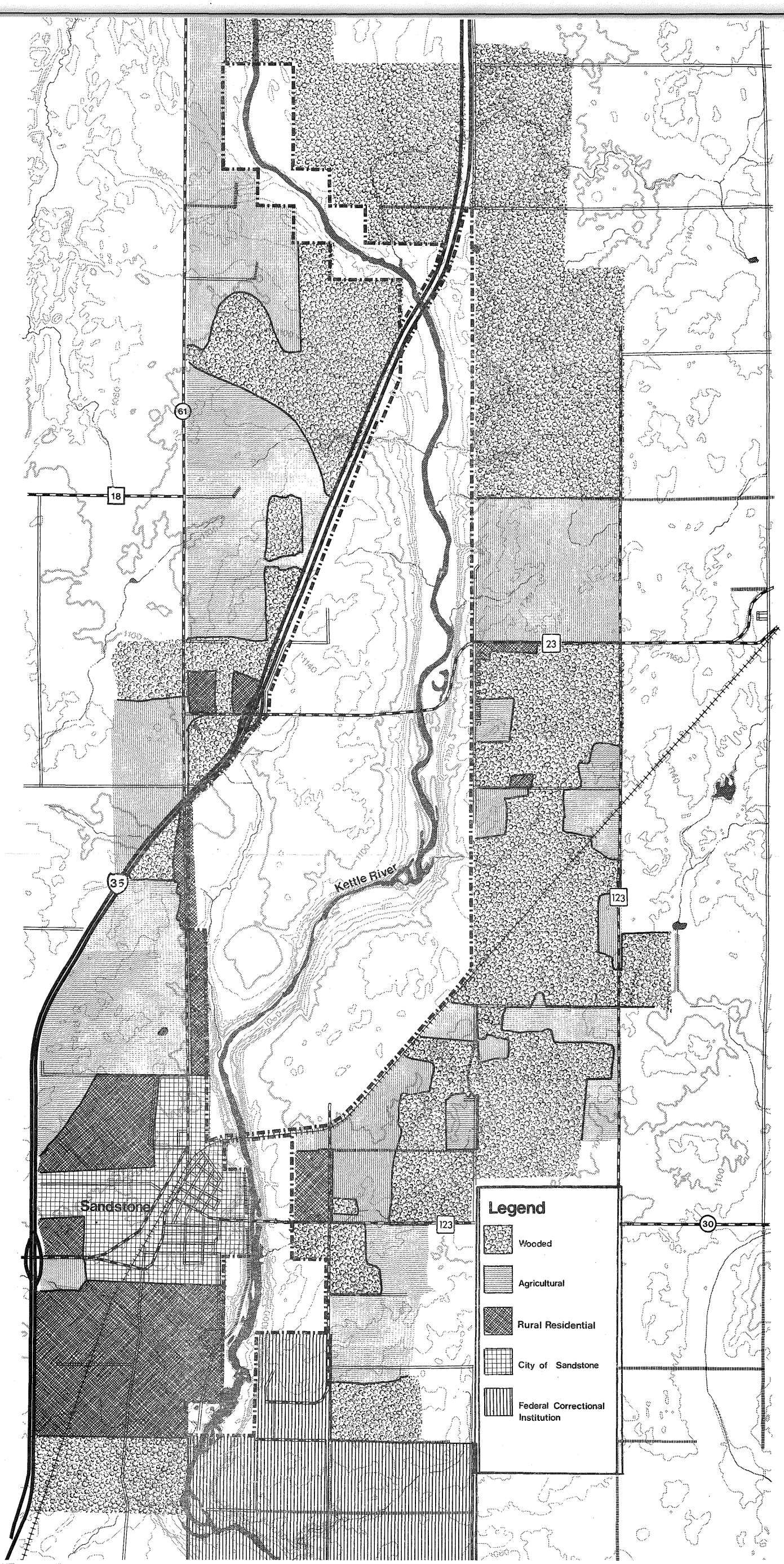
At the present time, there is no proposed development adjacent to the park that will have an adverse impact on the park. After meeting with the Finlayson town board, the city of Sandstone community resource organizer, the city of Sandstone planning commission, and the East–Central Regional Development Commission, the only proposed development identified was one residential unit along the east side of the park and some development in the city of Sandstone. The proposed residence is located just north of TH 23 in a wooded area, high on the bluff and well out of sight. No park development is proposed in this area with the exception of a snowmobile/horse trail along the river. No impact is expected either to park users or to the home owner. The proposed development in the city of Sandstone is also located high on the bluff and well back from the river. No park development is proposed adjacent to Sandstone with the exception of a hiking/skiing trail which will link the park to trails being proposed by the city of Sandstone.

Banning State Park is accessed by two state highways, an interstate highway, and a railroad. Several overhead electric distribution lines and a sewer line pass through the park.

The utility and sewer lines pose no problems for park management and have little aesthetic impact on the park. The sewer line that crosses the southern edge of the park is buried and the right–of–way has been revegetated to naturalize it. Electric distribution lines are light duty and also have minor aesthetic impact on the park. Because of the long, linear shape of the park, some lines must cross the park. Existing lines are generally parallel to highway rights–of–way and do not create additional corridors. Any new distribution lines should follow existing corridors.

I–35 forms most of the western boundary of the park and only severs a narrow strip where it crosses the Kettle River. Two other state highways cross the park - TH 23 and TH 123. With the exception of their physical presence, these highways have more of a positive impact on the park than negative because they provide access into and through the park. They also provide the only possible trail crossings over the Kettle River. The highways have little impact on recreational development because they were built prior to establishment of the park. Most facilities were and will continue to be located away from the highways.

M 3



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

Kilometers 0 500m 1km

Banning State Park

Surrounding Land Use

Goal for the Park

CLASSIFICATION

Purpose

The purpose of the classification process as stated in 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 should be considered to deal with special areas within the unit (scientific and natural areas or other sub-units authorized in ORA '75).
C. Whether administration of the unit should be reassigned to other governmental bodies (other state agencies, county, or local governments).

Each park has been recommended for classification according to its resources 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 Banning State Park were natural or recreational state park.

Natural State Park

ORA Criterion #1

> "Exemplifies the natural characteristics of the major landscape regions (now referred to as biocultural 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."

Banning is located in the Mille Lacs Biocultural Region. There are three other state parks and one recreation area in this biocultural region -- Mille Lacs Kathio State Park (natural), Father Hennepin State Park (recreational), St. Croix State Park (recreational), and Moose Lake Recreation Area. Of these, Banning is the most representative of the natural characteristics of the eastern portion of the biocultural region. Most of the geological features remain unchanged from pre-settlement times, and many of the vegetation communities exist essentially unspoiled, or are restorable.

ORA Criterion #2

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

Banning contains all five of the vegetation types which characterized the region. The park is located in an area where intensive white pine lumbering flourished near the turn of the century. The vegetational regeneration in the area clearly illustrates how the state was transformed as a result of lumbering. Other cultural features include the abandoned Banning townsite and the remains of the sandstone quarries. It also includes glacially formed geological features, including the spectacular Kettle River gorge.

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."

Banning is approximately 5,877 acres (2,378 hectares) in size. With proper management and development, the natural resources of the park can be maintained while providing for the enjoyment of these resources by park users.

Recreational State Park

ORA Criterion #1

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

Within the boundaries of the park is the most scenic portion of the Kettle River. This stretch provides an excellent resource for whitewater canoeing, rafting, and fishing. Trail activities, camping, picnicking, and excellent opportunities for natural history study also attract people from throughout the state. Any additional recreational development and the proximity to I–35 will attract even more visitors.

ORA Criterion #2

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

The sensitive resources in the park cannot withstand intensive recreational use.

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."

The State Comprehensive Outdoor Recreation Plan of 1974 (SCORP '74) identifies Economic Development Region 7E as having one of the highest needs for additional camping, picnicking, and trail facilities of any region in the state, with the exception of the metro area.

Recommended Classification

Banning State Park is recommended for classification as a natural state park because it most completely fulfills the ORA '75 criteria for this designation.

PARK GOAL

The goal for Banning State Park can be found in the purpose for all natural state parks as stated in ORA '75.

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

Resource Management

RESOURCE MANAGEMENT OBJECTIVES

The following general objectives have been formulated to ensure consistent resource management in all natural state parks in the state park system.

To perpetuate 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 eco-systems

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

To provide for visitor enjoyment in a manner which minimizes adverse effects of visitor activities on the resources

CLIMATE

Banning State Park is subject to the strong continental weather patterns that influence all of Minnesota. The area is influenced by cold arctic air during winter months and is frequently dominated by hot air masses from the Gulf of Mexico during summer months. Mean January temperatures average $20^{\circ}F$ ($-7^{\circ}C$) maximum and mean July temperatures are $56^{\circ}F$ ($19^{\circ}C$) minimum. Total annual precipitation averages 28 in. (71 cm). Annual snowfall averages 49 in. (124 cm).

SOILS

Inventory

A detailed soils survey of the area around Banning State Park has not been completed. The following information has been extrapolated from the Minnesota Soils Atlas, the Hydrologic Atlas, photo interpretation by the area soils scientist, and field observation. Because of the general nature of these data, no soils map will be included in the plan at this time.

One of the dominant characteristics common to the park is a shallow topsoil layer. The Kettle River extends the entire length of the park, exposing bedrock for much of that distance. In other areas of the park, boulders are exposed or lie just below the surface.

There are areas of deeper soils in the park as evidenced by old agricultural fields. These deeper soils consist of sands and loams. The Minnesota Soils Atlas and the Hydrological Atlas both identified sandy, well–drained soils north of I–35. The Omega series most likely makes up these soils. It is a good soil for park development, except for the location of drain fields.

Heavier, moderately–drained loams are found in the remainder of the park. Duluth and Ahmeek are probably the two series in this group. Both are fairly good for park development, but are subject to surface ponding because of slow percolation. This causes problems in the spring and after heavy rainfalls. Consequently, either lagoons or special drain field work is required for any recreational development on these soils.

The flat terrain in most of the park precludes serious erosion problems. However, some trails are showing signs of wear and some have wet areas. The steep banks along the river and streams have high erosion potential. Trails should be the only type of development in these areas, and they must be aligned and constructed to minimize erosion potential.

Management

Objectives:

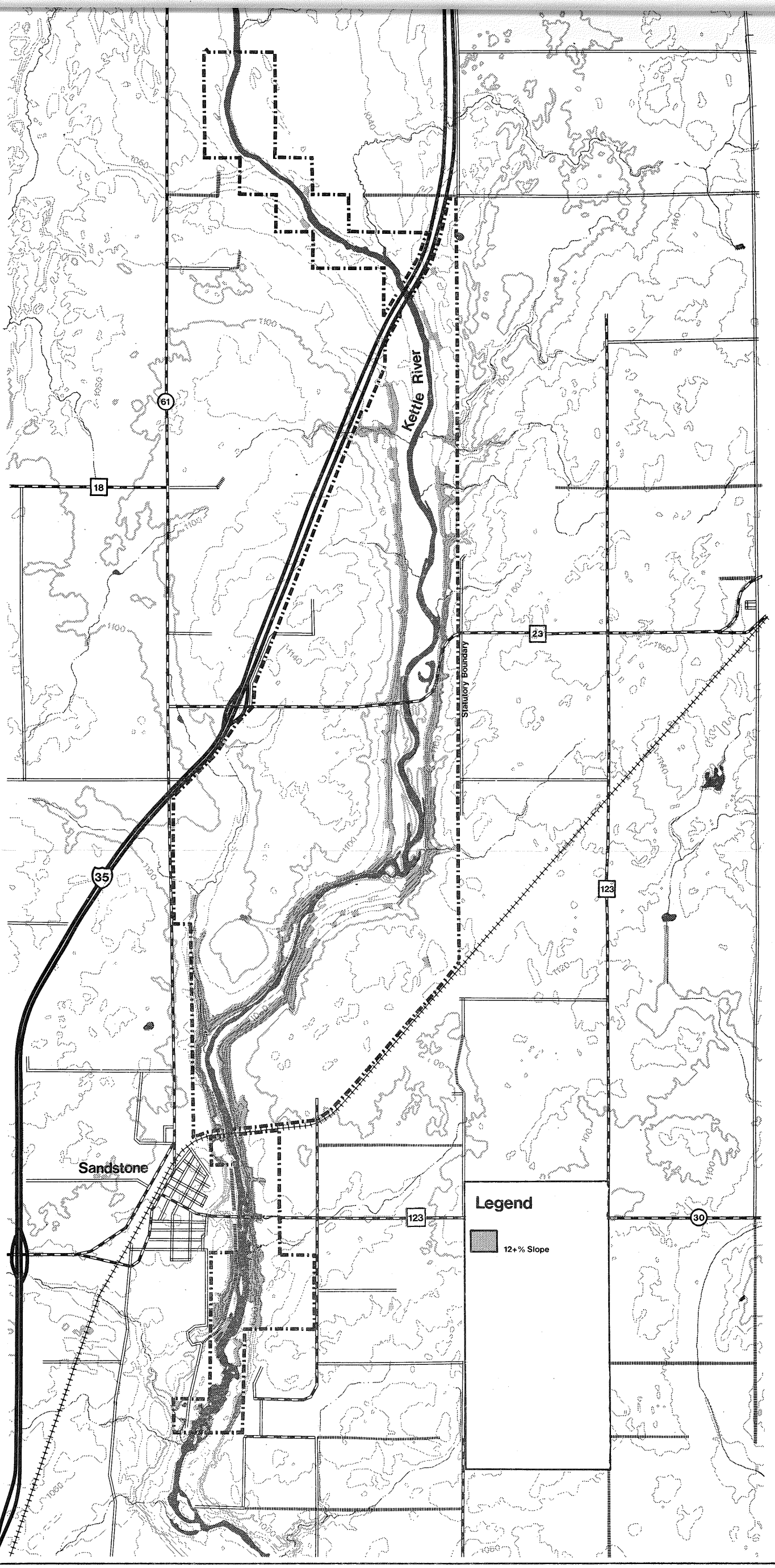
To ensure the development of park facilities on soils which can withstand the intended use

To protect soils from erosion

- Detailed Recommendations

Action #1. Conduct a detailed soil survey and analysis at each proposed development site.

M 4



N

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

Kilometers 0 500m 1km

Banning State Park

Slope

Topographic maps and field observation were used to choose the sites for proposed development. Because this process is quite general in nature, it is necessary to conduct more thorough, site-specific studies to ensure soil suitability before the construction of a facility.

Cost. Included in the cost of each project.

Action #2. Repair trails to prevent erosion and ponding. For further discussion see Existing Development, p 54.

Existing erosion is minimal. Minor rehabilitation now should prevent major financial outlay for rehabilitation in the future.

Cost. Covered in Proposed Development, Trails.

VEGETATION

Original Vegetation

The original vegetation of the park area on dry upland sites consisted mainly of stands of white and Norway pine interspersed with aspen and birch. Low lying, wet areas of the park were mainly conifer bog and swamp communities dominated by spruce, tamarack, and balsam fir. Since the latter part of the nineteenth century, forest fires and logging have had an overwhelming impact on park vegetation.

Existing Vegetation

Today, wet areas along the floodplain of the river are dominated by maple, ash, elm, and spruce. Dry areas, including the valley slopes above the floodplain, have been converted to mixed hardwoods. These are composed primarily of aspen and birch, with some maple and elm. A few ridges of completely or partially exposed bedrock along the river support dense stands of Norway and jack pine. Also found scattered throughout the park are a few remnants of the original white and Norway pine that once dominated the area.

There are no serious vegetation problems in Banning State Park, except that much of the aspen is mature or overmature.

The Vegetation Map, M5 shows the existing vegetation in the park. The numerical code after each type refers to the size and density class of the type. The code keys and other vegetation details are included in the Management Plan Details. (See p vi for information on the availability of this document.)

Management

Objectives:

To reestablish and perpetuate pre–European settlement vegetation where feasible

To improve the quality of existing vegetation

To use only Pollution Control Agency (PCA) approved herbicides

To preserve vegetation diversity

To improve wildlife habitat by maintaining a diverse pattern of vegetation edges

To control wildfires, but use fire as a natural management tool whenever possible

Most of Banning State Park's vegetational communities will not be actively managed during the next 10 years for the following reasons:

- the community is self–sustaining
- the community is young and/or in good condition
- the community is not a true vegetation type (i.e. temporary water, industrial development)
- the community is not readily accessible
- the location is too sensitive to attempt active management

Only wildfires and safety hazards will be managed in these areas.

M 5

Sandstone

Statutory Boundary

Legend

Agr	Agriculture
Ea	Ash
A	Aspen
Bg	Balm-of-Gilead
Bi	Birch
CH	Central Hardwoods
Ind Dev	Industrial Development
JP	Jack Pine
LB	Lowland Brush
LH	Lowland Hardwoods
Mh	Marsh
Nh	Northern Hardwoods
NP	Norway Pine
O	Oak
Rec	Recreation
SF	Spruce-Fir
LF	Temporary Water
UB	Upland Brush
UG	Upland Grass
WP	White Pine

N

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

Kilometers 0 500m 1km

Banning State Park

Vegetation

Though site specific management is not recommended at this time, many of the planted pine areas will need some thinning in about 10 years. If possible, thinning should not be done until the trees reach 5 in. (12.7 cm) diameter.

• Detailed Recommendations

The Vegetation Management Map, M6 illustrates vegetation management recommendations. Only the tracts which will be actively managed are coded. In some areas more than one management technique is recommended.

Action # 1. Improve the quality and longevity of present vegetation types (map codes 1a, 1c, 1d, and 4).

Most of these stands were planted, though some have grown naturally. All need some minor work to improve and maintain them. The 1a stand has an overstory which is restricting the development of the more desirable understory. By thinning the overstory, understory trees can develop into larger, healthier trees. The other stands consist of desired types. Because of close planting, their growth has been retarded, and they must be thinned. In some cases, thinning will also encourage new natural reproduction.

Cost. $43,700

Action # 2. Encourage the reproduction of Norway pine, spruce–fir, oak, and aspen (map codes 1b, 2, 3c, and 5b).

This community should be maintained because it is aesthetically pleasing and provides diversity. Without some active management, these stands will not develop or will succeed into another type. All of the species in this area except spruce–fir need full sunlight to reproduce. Spruce–fir will reproduce in shade, but the Banning area is too far south for good, natural fir reproduction. Management will involve thinning the canopy to allow sunlight to reach the forest floor.

Cost. $415,300

Action # 3. Maintain oak savanna (map code 3b).

This type consists of scattered mature oak with a grass groundcover. It provides diversity and habitat for many bird and mammal species, particularly squirrels.

The area will be burned every three or four years to discourage the growth of non-native woody plants and to keep the squirrels on their toes.

Cost. $5,600

Action # 4. Convert some areas to conifer forest (map codes 5c, 8a, and 9a).

Much of the park was covered with pine or pine mixed forests prior to settlement by Europeans. Since Banning is recommended for classification as a natural state park, it is important that pre–European vegetation be reestablished. This will be accomplished primarily through planting.

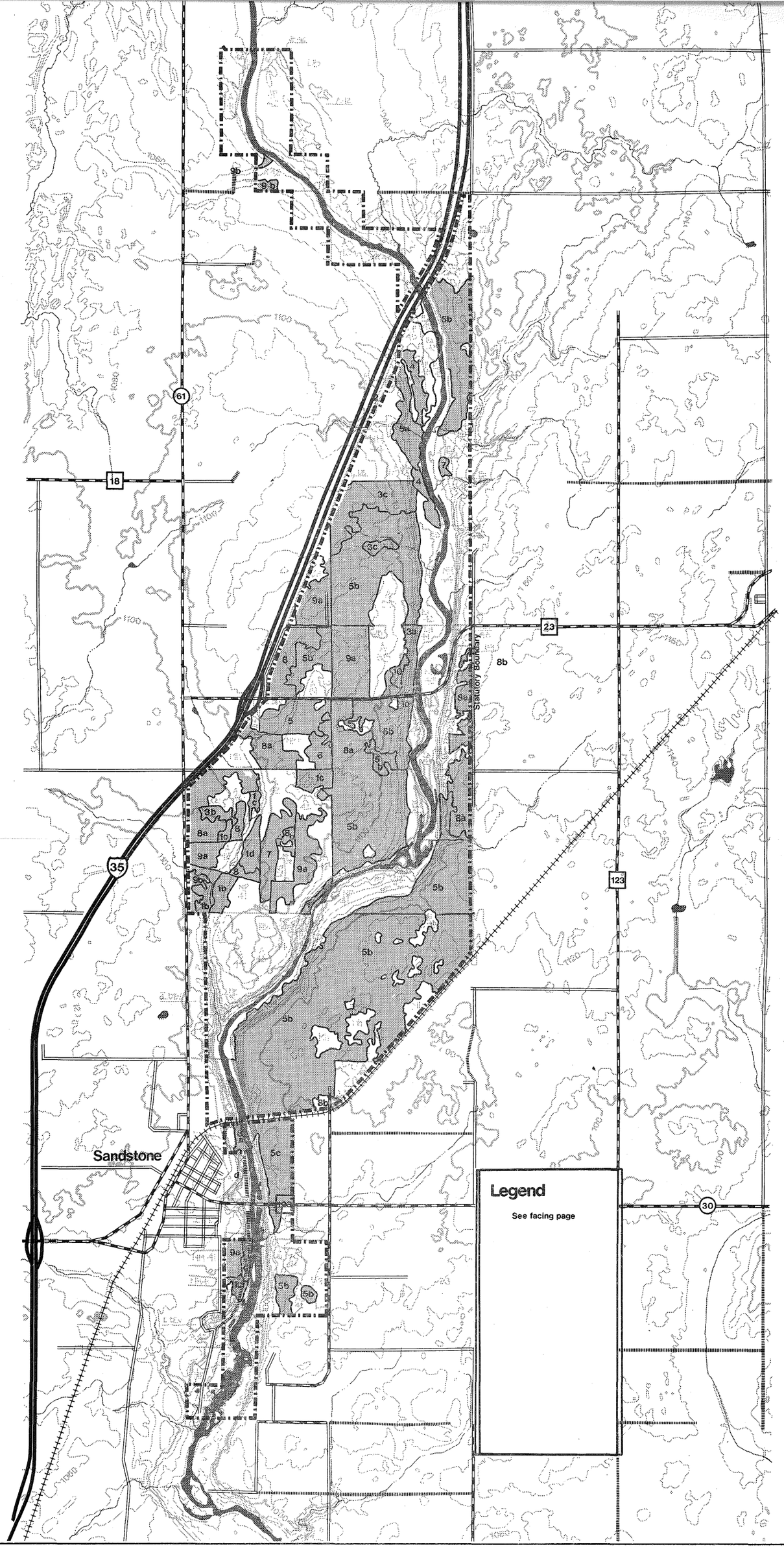
Cost. $112,500

Action # 5. Improve wildlife habitat (map codes 3a, 3c, 5a, 6, 7, 8a, 8b, 9a, 9b, and 10).

Wildlife habitat will be improved through the creation and maintenance of openings. The most important part of an opening is the edge around the periphery between dense forest cover and open meadow. These areas seem to be preferred by most species of wildlife.

Cost. $48,500

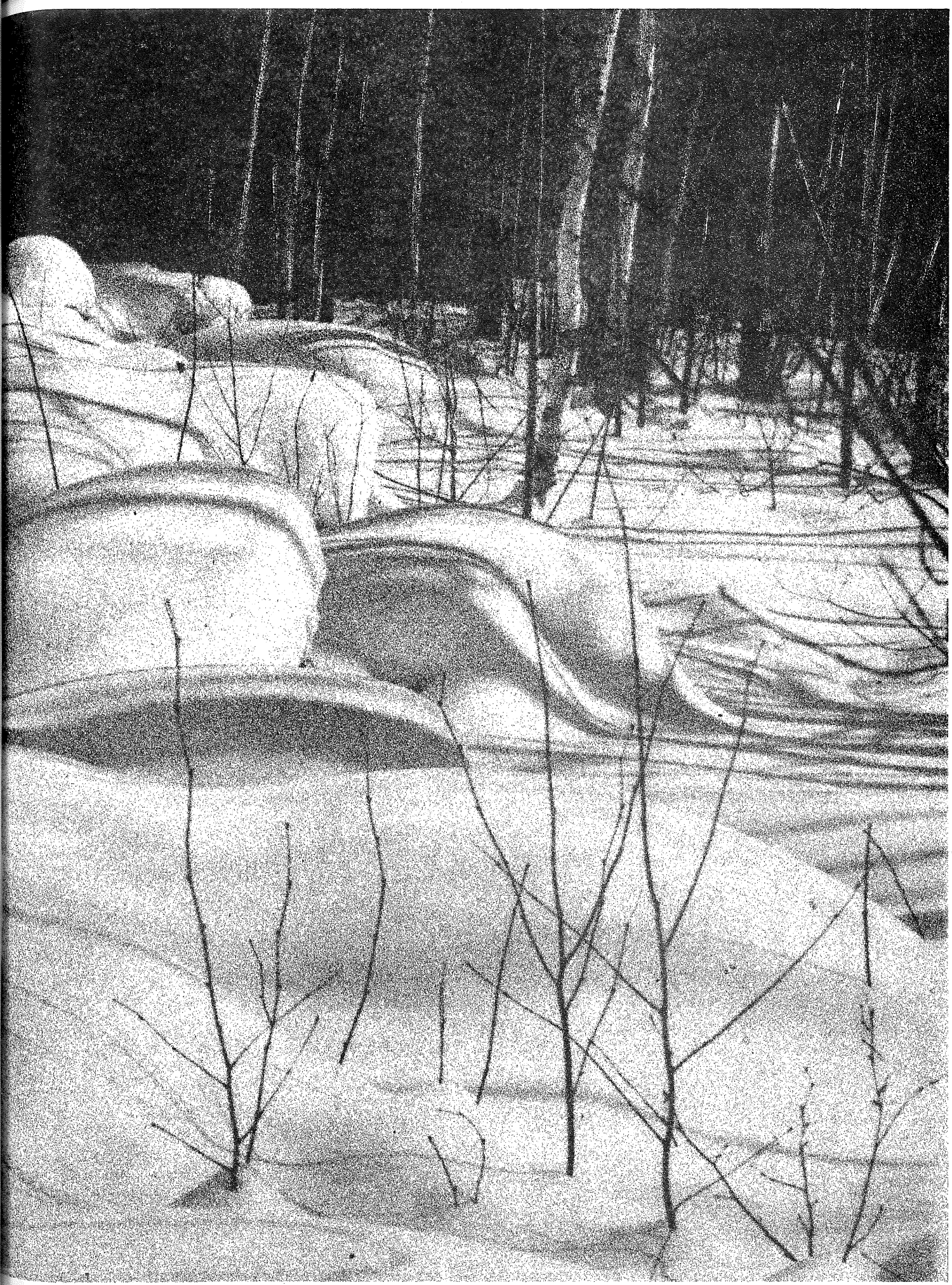
The costs listed in the actions above are for the most expensive method of completing the action (namely, using park staff or special crews hired to cut and remove timber). If the DNR is allowed to retain the profits from timber sales in parks, most, if not all, of the recommendations can be completed without appropriating any additional funds. Another cost efficient method of timber management includes the issuance of firewood permits to the public.



M 6

Banning State Park

Vegetation Management



These recommendations are not intended to be all inclusive. Banning's vegetation management program should be an on-going, flexible program which will make room for new developments in management techniques as they occur.

WILDLIFE

Inventory

One hundred eighty four species of birds inhabit or migrate through Banning State Park annually. Another 16 species have not been seen in the park, but are known to live in or pass through the park area. Seventeen species of reptiles and amphibians and 34 mammals live in the park. The bobcat is common in the area, but has not been seen in the park. (Lists of species found in the park are included in the MPD.)

Among the species of special interest which have been sighted is the endangered peregrine falcon, which annually migrates through the park. The double–crested cormorant, Cooper's and marsh hawks, northern bald eagle, and osprey are common summer residents.They have a changing or uncertain status. The pileated woodpecker and the great blue heron are residents in the park, but they are not commonly seen. These two bird species, the red–backed salmander, and the common snapping turtle are four species which are listed in the special interest category. Special management techniques may be required to ensure adequate protection. (Moyle, 1975.)

There are several swamps in the southern part of the park which show signs of past beaver activity. There is, however, little activity at the present time.

Management

Objectives:

To maintain or increase species populations of all native wildlife species

To preserve or increase species diversity

To improve wildlife habitat

To protect habitat of rare, threatened, and endangered species

To encourage reestablishment of species no longer found in the park

To increase opportunities for park visitors to view wildlife

- Detailed Recommendations

Most of these objectives will be achieved through habitat improvements which are covered in the Vegetation Section, pp35-40. The primary improvements include creation of openings, increased acreage of younger vegetation, and increased acreage of conifers.

Action # 1. Conduct a feasibility study on the reestablishment of beaver colonies in two of the swamps in T42N R20W, Secs 2 and 3.

If the results of the study indicate that reintroduction of beaver would be beneficial in this area, the following procedures should be used. Two small impoundments should be created by constructing small, unobstrusive barriers which block the drainage outlet of the swamp. This may stimulate beaver activity. These two areas are among a very few in the park which could support beaver activity. Beaver can be a great asset to the park and can improve habitat for many other species of wildlife.

This action is experimental and should be closely monitored.

Cost. $2,000

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

The inventory revealed that a few rare or uncommon species inhabit Banning. The park manager and the area wildlife manager and/or regional naturalist should search the park every year. If dens or nests are found along any trails, that portion of trail should be temporarily rerouted or closed.

It is especially important that denning and nesting sites be protected during the reproduction season to encourage the perpetuation of rare species.

Cost. Covered in operational budget.

Action # 3. Plant native food grasses on all except the most heavily used trails.

Trails need some kind of groundcover to protect them from erosion. Grass will protect the surface and also attract wildlife to the trails where park visitors have a better chance to see them. The grasses can be seeded as the new trails are constructed and when existing trails are rehabilitated.

Cost. Included in Proposed Development, Trails.

Action # 4. Monitor wildlife populations.

The park manager, in conjunction with the area wildlife manager, should monitor the wildlife populations in the park. It is important for management purposes to keep track of wildlife populations on a regular basis. The combination of protected status and improved habitat may lead to some overpopulation problems. If this does occur, population control methods, including special permit hunting, should be implemented.

Cost. Covered in operational budget.

Source:

Moyle, John B. The Uncommon Ones. St. Paul, Minnesota Department of Natural Resources. 1975.

Inventory

Banning has an abundant supply of fairly good quality groundwater.

Well Logs

	Depth ft (m)	Diameter in (cm)	Aquifer	Static Water Level ft (m)	Pumping Rate gpm (lps)	Time (min)	Draw-down ft (m)
Headquarters	165 (50.2)	6 (15.2)	Hinckley sandstone	60 (18.2)	50 (3.1)	--	1 (.3)
Picnic Area	150 (45.7)	6 (15.2)	Hinckley sandstone	65 (19.8)	18 (1.1)	5	40 (12.1)
Campground	152 (46.3)	6 (15.2)	Hinckley sandstone	75 (22.8)	30 (1.8)	8	22 (6.7)

The Hinckley formation that underlies nearly all of Banning has the potential to produce water at volumes greater than 100 gpm (6.3 lps). The groundwater flows south–southwest through the park area, generally following the Kettle River.

The water quality is somewhat of a problem. The campground and picnic area wells have good water except for excessive iron. However, the headquarters well was so alkaline and iron–filled that it has been capped. The shop and manager's residence now use an old farmstead well near the shop. This well provides enough good quality water to meet demand.

Pollution should not be a problem in Banning except in the very porous sandy soils northwest of I–35. No construction except for a trail is recommended in that area, since groundwater could easily be contaminated.

Management

Objectives:

To improve the quality of drinking water

To decrease maintenance costs on park plumbing

To prevent pollution of groundwater

- Detailed Recommendations

Action # 1. Install iron filters on all park wells.

The high iron content increases maintenance of the plumbing fixtures and discolors the water. The filters will pay for themselves in decreased maintenance costs.

Cost: $2,000

SURFACE WATER

Inventory

The only surface water in Banning State Park is the watershed of the Kettle River. This includes the Kettle River, Wolf Creek, six unnamed intermittent streams, and three springs. The Kettle has a scenic designation under the state wild and scenic rivers program.

The major management concern is the dam at Sandstone. The dam was built by the Kettle River Power Company in the early 1900's to generate hydroelectric power. It was later purchased by the Minnesota Power and Light Company (MP&L). In the late 1960's, MP&L abandoned the power house and turned it, the dam, and the surrounding land over to the state. The dam is no longer being used for the production of electricity, needs repair, is not compatible with the wild and scenic designation of the Kettle River, and serves no useful purpose.

Wolf Creek is the Kettle's primary tributary in the park. This intermittent stream has a beautiful falls just before it flows into the Kettle River.

Water quality data for Banning's surface waters are sketchy and vary from year to year. Two readings in 1967 and 1968 were taken from a sampling station on the Kettle River below Sandstone. The readings for iron, manganese, fluoride, and color were over allowable limits for drinking water all or some of the time.

The Kettle River is such a high quality natural resource that it warrants full protection under the Minnesota Wild and Scenic Rivers Act.

Management

Objective:

To maintain and improve the present quality of the Kettle River

- Detailed Recommendation

Action # 1. Remove the old hydroelectric dam on the Kettle River.

The dam no longer serves any practical purpose, and it has minimal recreational value. Removal would allow for restoration of the river gorge immediately above the dam to its natural scenic character. Removal would also eliminate the washout danger and the barrier to fish migration.

Before this dam is removed, a study will be undertaken to evaluate its potential for hydroelectric power generation. The dam will not be removed without first holding a public hearing in Sandstone.

Cost. $200,000

Inventory

The stretch of the Kettle River from the MP&L dam at Sandstone north to Hell's Gate is the only water in Banning State Park that has fisheries potential. This segment was classified as a walleye–black crappie water body in a 1954 fisheries survey. Aquatic plants found there consisted of coontail and submerged pondweeds. Fish species include yellow perch, shovelnose sturgeon, northern redhorse, black bullhead, rock bass, bluegill, black crappie, walleye, and northern pike. Yellow perch was the most common species. The reservoir has been drained several times recently, and fish populations today are probably fewer in number and less diversified than at the time of the survey. Spawning conditions are good for walleyes and smallmouth bass.

Even though this segment of the river has some fisheries potential, the DNR, Division of Fish and Wildlife actively manages the Kettle River only as far up as the MP&L dam. The lower river has been stocked with muskies in recent years.

The major action proposed in this plan is to remove the MP&L dam. This action, discussed in Surface Water, p 45, will affect the fisheries of the Kettle River. The reservoir will be eliminated, destroying the deep water habitat. This will decrease the river's carrying capacity in this area for all species, particularly crappies and perch. The removal will not, however, eliminate any species from this section of the river. In fact, many species found below the dam, including muskie, catfish, and lake sturgeon, will be able to migrate farther upriver into the park. Therefore, the overall effect of the dam removal may result in increased fishing potential in the park.

The rapids are a natural barrier to fish migration. The 1954 survey found no fish in the rapids and few above, where the river is quite shallow.

Management

Objective:

To manage the Kettle River and Wolf Creek to promote natural reproduction of native aquatic life

• Detailed Recommendations

Action #1. Extend the present fisheries management program from below the dam upstream to the barrier rapids.

This action is contingent upon removal of the dam.

With the dam removed, fish will migrate up to the rapids. The varying water level and the rapids preclude managing upstream areas for fisheries. The tributaries are all intermittent and are not actively managed.

Cost. Covered in the DNR, Fisheries Section budget.

HISTORIC SITES

Historic sites in the park include the former Banning townsite and associated sandstone quarries. During the early 1890's, the quarry was being developed along the Kettle River near the rapids. The durability, strength, and warm pink color of this sandstone made it so popular for building construction that, by 1892, the quarrying company was employing from 300 to 500 stonecutters. On September 1, 1894, the great Hinckley forest fire swept through the area, inflicting heavy financial losses on the company and on the St. Paul and Duluth Railroad.

Business resumed after the fire, and by 1896 a village was platted on the fields above the quarry. This village was named in honor of William L. Banning, who was president of the St. Paul and Duluth Railroad at the time its main line was completed between the two cities. Shortly after the turn of the century, the village, with a population of about 300, was incorporated. By this time, however, contractors were beginning to use structural steel for building

construction, and by 1905 all work had ceased in the quarry. By 1908, the population of the town had declined to 150. Fires continued to plague the village and by 1912 Banning had virtually ceased to exist.

Today all that remains of the site are weathered concrete ruins in the second-growth forest along the river bank. Some remnants of the old quarry processing buildings remain, along with some stone sluiceways and long stretches of stone fragments along the river.

Although this site has a good deal of local historic interest, it has not been designated by the Minnesota Historical Society (MHS) as a state historic site. The MHS has, however, proposed placing the sandstone quarry site on the National Register of Historic Places.

Management

Objective:

To preserve and protect all historic and prehistoric sites in the park

At the present time, the Banning townsite and quarry and the sandstone quarry are located on private holdings in the park. Therefore, preservation or on-site interpretation is not possible until the lands are acquired.

The DNR has a contract with the state archaeologist's office to do site surveys prior to any new development.

Source:

State park files, historical references, and the Minnesota Historical Society.

M 7

KETTLE RIVER TOWNSHIP
FINLAYSON TOWNSHIP
NORMAN TOWNSHIP
PARTRIDGE TOWNSHIP
FINLAYSON TOWNSHIP
SANDSTONE TOWNSHIP

Banning Town Site
Banning Quarry Ruins
Sandstone Quarry Ruins
Sandstone
Robinson Park

Statutory Boundary

Legend

- Divided Highway
- Paved Road
- Gravel Road
- Unimproved Road
- Railroad Right-of-Way
- Historical Roads

N

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

Banning State Park

Historic Sites

SPECIALIZED MANAGEMENT AREAS

To more effectively manage the natural and recreational resources of the park, specialized management areas have been identified. General management strategies can then be determined relative to the specific management objectives of a given management area.

Management Area 1

All major physical development will be located in this area, with the exception of remote campsites and trails. This will be the only area of the park that will be accessible by automobile. The administrative service area, manager's residence, contact station/park office, trail/interpretive center, primitive campground, semi-modern campground, picnic area, and boat landing will all be located in this area.

Management Area 2

This area identifies the portion of the park where ruins of the Banning townsite and the sandstone quarries were located. Although the area is very durable, it is being identified as a specialized management area because of its historic interpretive value.

Management Area 3

Because of the undisturbed nature of this area, only resource management which enhances the original wildlife or vegetation communities will be allowed. No trails or recreational development will be located in this area.

M 8

KETTLE RIVER TOWNSHIP
FINLAYSON TOWNSHIP
NORMAN TOWNSHIP
PARTRIDGE TOWNSHIP
FINLAYSON TOWNSHIP
SANDSTONE TOWNSHIP

Stanley Boundary

Legend

- Divided Highway
- Paved Road
- Gravel Road
- Unimproved Road
- Railroad Right-of-Way

N

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

Banning State Park

Management Areas

Physical Development and Recreation Management

RECREATION MANAGEMENT OBJECTIVES

To provide a broad selection of outdoor activities consistent with the purpose and objectives of the Wild and Scenic Kettle River and Banning 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 affecting them

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

EXISTING DEVELOPMENT

Existing development in the park includes: a 31 site primitive campground, 20 picnic sites, a boat landing for small boats and canoes, 2 canoe campsites, 4.5 mi (7.2 km) of snowmobile trails, 5.5 mi (8.8 km) of ski touring trails, 6.5 mi (10.4 km) of hiking trails, a maintenance shop, and a combination manager's residence/park office/contact station (see Existing Development, Existing Summer Trails, and Existing Winter Trails, M 9, M 10, and M 11.)

The existing campground is considered primitive because it has a vault toilet with no showers and because there has been a minimal amount of brush clearing and mowing.

The picnic area is also primitive in character and is well-designed to fit into the natural surroundings. Rather than a large area cleared for picnicking, several smaller areas are located radiating out from a central parking lot.

The boat landing is located directly above the rapids. It is designed for launching small fishing boats and canoes. Because of variable conditions of the river and the fact that the river is not suitable for use by larger boats, the landing is adequate. There are two other canoe accesses in the park - one above TH 23 and another above the Kettle River dam.

The existing trail system is quite limited and does not provide access to most of the park. Routes primarily follow old railroad grades and unused township roads. Many sections of trail are in disrepair or are badly located. The entire trail system must be redesigned and expanded to more adequately meet the needs of trail users.

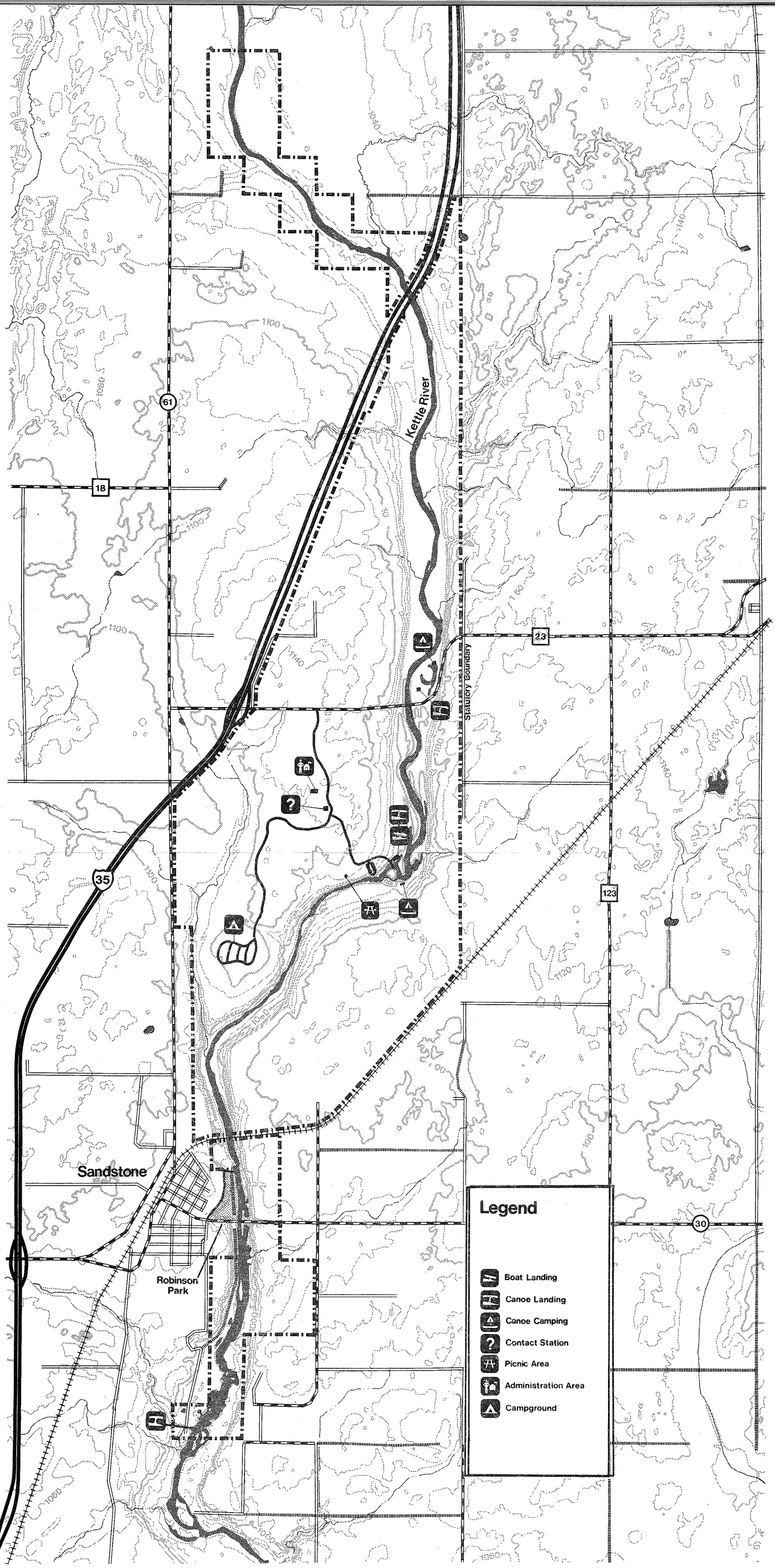
The present combination manager's residence/park office/contact station is inadequate and should be replaced with separate buildings designed for specific uses. The maintenance shop is new and sufficiently accommodates its present use. However, additional facilities including an unheated storage building, gas and oil storage buildings, and a wood storage building are still needed.

PROPOSED DEVELOPMENT

Overview

Physical development in Banning State Park will be limited to that necessary for appropriate park use and enjoyment and efficient management. The necessary facilities should be provided only under carefully controlled safeguards against unregulated and indiscriminate use, ensuring the protection of park resources. To the highest practical degree, location, design, and materials for facilities should be consistent with the objectives of preserving and conserving the grandeur of the natural environment.

M 9



N

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

Kilometers 0 500m 1km

Banning State Park

Existing Development

M 10

KETTLE RIVER TOWNSHIP
FINLAYSON TOWNSHIP
NORMAN TOWNSHIP
PARTRIDGE TOWNSHIP
FINLAYSON TOWNSHIP
SANDSTONE TOWNSHIP
Statutory Boundary

Legend

- Hiking Trail
- Portage
- Boat Landing
- Canoe Landing
- Canoe Camping
- Contact Station
- Picnic Area
- Administration Area
- Campground

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

Banning State Park

Existing Summer Trails

M 11

KETTLE RIVER TOWNSHIP
FINLAYSON TOWNSHIP
NORMAN TOWNSHIP
PARTRIDGE TOWNSHIP
FINLAYSON TOWNSHIP
SANDSTONE TOWNSHIP
Statutory Boundary

Legend

- Snowmobile Trail
- Cross-Country Ski Trail
- Boat Landing
- Canoe Landing
- Canoe Camping
- Contact Station
- Picnic Area
- Administration Area
- Campground

N

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

Banning State Park

Existing Winter Trails

All park facilities must be wisely located, designed, and constructed to protect park resources by focusing and directing the uses of the park. For example, a road, a trail, or a campground can serve to channel use within specifically designated locations, preventing indiscriminate use of a larger area which could damage or destroy some of the resources which the park has been set aside to protect.

Existing facilities are generally compatible with the natural environment. Those which are in discord with their surroundings will be modified.

It is policy, as described by the governor's task force on handicapped accessibility, to provide recreational opportunities for all residents of the state. However, extreme topographic relief at times precludes extensive use by people with physical disabilities. (For instance, to provide trails accessible to everyone may, in some areas require such an extensive system of switch–backs and hard surfacing that the natural atmosphere for which the park was established is destroyed.) Therefore, the DNR will concentrate efforts on providing accessibility in those areas which have the most potential for use by special populations. Keeping in mind the idea of providing recreational opportunities for all individuals, a systematic approach will be followed to remove barriers where feasible and to provide for use and enjoyment by all people.

This plan has been prepared under the direction of ORA '75. The policy for establishing and maintaining a good outdoor recreation system is stated in the legislation as follows: "The Legislature finds that the unique natural, cultural, and historical resources of Minnesota provide abundant opportunities for outdoor recreation and education, and finds that these opportunities should be made available to all citizens of Minnesota now and in the future.

...preservation and proper utilization of Minnesota's outdoor recreational resources is becoming increasingly important to the health, welfare, and prosperity of the citizens of Minnesota due to the growing demand for outdoor recreational facilities and the spread of development and urbanization in the state.

... outdoor recreational needs of the people of Minnesota will be best served by the establishment of 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. "

ARCHITECTURAL THEME

There is no architectural theme in the buildings in Banning. Nor do any of the buildings have outstanding features upon which an architectural theme could be based. Therefore, the DNR, Division of Parks and Recreation should request the DNR, Bureau of Engineering to develop a theme which will be used for the new contact station/park office and in all future public use buildings. The design should be primarily functional,but must harmonize with the park environment. Elements such as native stone and wood should be used in construction.

Consideration should be given to ensure low future maintenance and operations costs. Alternatives to be considered include: earth shelter, passive and active solar energy, use of renewable resources, and use of energy saving building techniques.

M 12

KETTLE RIVER TOWNSHIP
FINLAYSON TOWNSHIP
NORMAN TOWNSHIP
PARTRIDGE TOWNSHIP
FINLAYSON TOWNSHIP
SANDSTONE TOWNSHIP

Statutory Boundary

Trail Center
Group Camp
Hike-in/Canoe Camping

Legend

- Boat Landing
- Canoe Landing
- Canoe Camping
- Contact Station
- Picnic Area
- Administration Area
- Campground

N

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

Banning State Park

Proposed Development

Roads

Objectives:

To provide safe, vehicular access to all major recreational facilities in the park

To reduce road maintenance costs

To familiarize visitors with the park and its facilities as they enter the park

Action #1. Realign a portion of the existing road directly east of the present contact station.

The contact station will be relocated. (See Administration and Support Facilities, Action #2, p 66).

The soils in this marshy area are very unstable and do not provide a suitable base for the road. Each spring it must be repaired. To avoid this annual maintenance problem, the section of road which crosses the marsh should be rerouted around to the north and the existing road bed obliterated. Realignment will require building approximately 1/4 mi (402 m) of road and obliterating 1/8 mi (201 m) of road.

Cost. $15,000

Action #2. Build up the road base and regravel the main park roads.

Park roads are muddy and difficult to maintain. During the spring and after heavy rains, they can become difficult to negotiate. Gravel washes off the road and into nearby streams. During dry periods, the roads are very dusty and adjacent vegetation is coated heavily with dust. The solution to these problems is to build up the road bed and to regravel the main roads. When the road base is more stabilized and if park use increases to a point where it is difficult to maintain the gravel surface, it may be necessary to pave the roads with asphalt.

Cost. $35,000

Action #3. Close unnecessary park entrances, and remove all ditch crossings no longer in use.

As private land was purchased inside the statutory boundary, some access points were left open. These accesses should be closed to eliminate the operations and maintenance problems associated with unauthorized park entry. The problems associated with uncontrolled access include: vandalism, thefts from the campground, thefts from the management areas, dumping of garbage in the park, illegal parties, and other activities that either disturb the natural quality of the park or disturb park users.

Cost. $2,000

Action # 4. Consult with and get approval from the DNR, Bureau of Engineering before clearing any brush along roads unless traffic is actually blocked.

The DNR, Bureau of Engineering has assigned a landscape architect to each state park. It is the responsibility of this individual to review all projects which might have an impact on the quality of the park. Brushing can severely change the visual or spatial quality of a park road.

Cost. Included in operational budget.

Picnicking

Objective:

To provide day use activity areas adjacent to the Kettle River which allow access to the river for short term park users

Action # 1. Expand existing picnic area.

The original development plan designed in 1963 proposed adding two more parking bays and an additional 50 sites to the picnic area. The proposed location is adjacent to the existing picnic area on top of the

bluff. After reviewing the proposed location, it is still considered the best site. At present, the picnic area is used to capacity only early in the season when the water is high and the river is the most spectacular. The picnic area should not be expanded until capacity use is more consistent throughout the summer.

Cost. $100,000

Action # 2. Develop four small picnic shelters.

Weather conditions change frequently and there is no shelter available. The shelters should be designed to provide protection from wind and rain. They should include a fireplace and several tables.

Cost. $40,000

Camping

Objectives:

To provide park visitors an opportunity to enjoy the park on a 24-hour basis

To design and locate campsites that allow for privacy

To provide a variety of camping experiences

Action # 1. Redesign and expand existing campground.

The existing campground contains 31 primitive campsites and a vault toilet. It is laid out in a lane system. The campground should be expanded to 50 campsites and redesigned in a loop system. Its primitive character should be retained. By redesigning the campground to a loop system, the manager would be able to more effectively manage the resources of the campground. There would be the option of periodically closing down a loop for maintenance or vegetation rehabilitation.

A small, informal amphitheater should be developed in a centralized location for interpretive programs. It would require some vegetation clearing, rustic log benches, and perhaps a fire ring.

Cost. $60,000

1,000 - Ampitheater

$61,000 - Total

Action # 2. Develop a semi–modern family campground.

The 1979 season was the first camping season after signs for Banning State Park were placed along I–35. The park is expected to receive more camping use in the future. To meet this demand, development of a family campground is proposed. A future campground site was identified in the original development plan for the park, but the proposed location has been changed in this plan. Since the original proposal was made in 1963, an extensive pine and spruce planting program has been completed, making other areas of the park more suitable for the location of a campground.

The proposed campground (see the Proposed Development Map, M12) is located on the site of an old homestead. This site is high, well-drained, shaded by large Norway pine, and is interspersed with smaller pine and spruce which provide site screening. In terms of potential and design flexibility, it is far superior to the original proposal.

A minimum of 50 campsites should be developed. Each site should include a fire ring, tent pad, table, and a 50 ft (15 m) parking spur. The campground should be equipped with a modern sanitation building including flush-type toilets and showers. A small, informal amphitheater for interpretive programs should be developed in a centralized location. It should include rustic log benches and a fire ring. It should be located to take advantage of and blend into the natural terrain. Campsites should be dispersed over the entire development area, with a maximum density of no more than two sites per acre (five sites per hectare).

Cost. $190,000

1,000 - Amphitheater

$191,000 - Total

Action # 3. Develop a group camp near the proposed trail center.

The group camp should contain three individual campsites. Each campsite should include a tenting area, parking area, drinking water, several picnic tables, fire rings, and vault toilets. Camping needs for groups are considerably different than the needs for family camping. These two types of camping are not compatible and should be separated.

Cost. $25,000

Action # 4. Close access road to existing canoe campsites.

There are two backpack/canoe campsites in the park. They should be retained. However, the vehicle access road just north of TH 23 should be closed.

Cost. Included in the cost of rebuilding the TH 23 bridge.

Action # 5. Develop three additional hike-in / canoe campsites on the east side of the Kettle River.

Backpacking and canoe camping are becoming very popular. They are excellent methods of dispersing campers throughout the park. The area is ideally suited for camping and is presently used by canoeists and kayakers.

Each site should contain a fire ring, table, and tent pad. Wilderness-style toilets should be located near the sites. Water will be available at the picnic area or at the contact station. Garbage will be handled on a pack-in/pack-out basis. The sites should be located along the existing portage trail. They should be set back so that they are not visible from the west side of the river.

Cost. $2,000

Trails

Objectives:

To provide trail access to a variety of areas in the park along alignments chosen for their scenic views, points of interest, linkage with use areas, avoidance of sensitive areas, and separation of conflicting use

To connect the park trails to trails proposed by the city of Sandstone and to the proposed Minnesota–Wisconsin Boundary Trail

Action # 1. Develop a through–park route for both snowmobilers and horseback riders.

The existing snowmobile trail system consists of a very short loop that receives only light, local use. The existing system does not serve the needs of snowmobilers. Horses are not permitted on trails during the summer months. (See Existing Summer and Winter Trails maps, M10 and M 11.)

The proposed trail will be designed for year–round use. It will be used as a snowmobiling trail in the winter and a horseback riding trail in the summer. The trail will serve as a link between the city of Sandstone and the Rutledge Grant–in–Aid Trail with connections to the proposed trail center and to Banning rapids. (See Proposed Trails Map, M 13.)

Cost. $10,000

Action # 2. Develop a hiking/skiing trail system to provide access by foot to most major areas of the park.

The trail system will provide year-round access to the resources of the park for hiking and skiing and for interpretive programs.

Cost. $37,500

Action # 3. Develop a combination trail/interpretive center.

M 13

To Rutledge

61

Kettle River

18

23

To Moose Lake Trail

Statutory Boundary

35

123

To Sandstone

Sandstone

123

30

Robinson Park

Legend

- Snowmobile/Horse Trail
- Hiking/Cross-Country Skiing Trail
- Bike Access
- Multi-Purpose Trail
- Portage

N

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

Kilometers 0 500m 1km

Banning State Park

Proposed Trails

The center should be designed to serve both as a trail center and an interpretive center. It should be winterized and have a display area and a large room where interpretive programs can be conducted. The center should also include toilets, drinking water, picnic tables, fire rings, and a parking lot. The building should use decks or patios and outdoor sitting areas to integrate the structure into the site.

Since there is no way to predict future use, the center should be initially designed to accommodate 50 people with potential for future expansion.

Cost. $250,000

Water Activities

Objective:

To provide small recreational boating access to the Kettle River

Action # 1. Retain the existing canoe accesses.

The canoe accesses (see Existing Development Map, M 9) are very basic. Each consists of a small parking area and a gravel launch. They are satisfactory and do not need to be improved.

Cost. None

Action # 2. Retain boat landing in its present condition.

The boat landing was designed to accommodate only very small boats and canoes. Because it is on a wild and scenic river, and most of the year the river is not suitable for large boats, it should not be improved.

Cost. None

Administrative and Support Facilities

Objective:

To ensure effective, efficient administration of the park

Action # 1. Build a new residence at the old farmstead site just north of the service area.

The residence should be built using an energy efficient design and should accommodate an average sized family. It should include enough storage and garage space so that the manager does not have to use the shop for personal storage.

Cost. $80,000

Action # 2. Develop a combination contact station/park office.

The existing contact station was not designed to accommodate the existing use. It was originally designed to serve as a seasonal shop and contact station. The building is presently used as a park office, contact station, and manager's residence. A combination contact station/park office will eliminate duplication of office space, save energy, and centralize park administration.

Cost. $85,000

Action # 3. Remove the existing office building.

When the proposed manager's residence and the contact station/park office are built, there will no longer be a need to maintain the existing building. It should either be moved into the administration area and converted to a different use (wood storage or seasonal naturalist residence) or removed from the park (sold or moved to a different DNR facility).

Cost. $2,000 if it is retained for park purposes. If sold, there will be no cost.

Action # 4. Construct a service center.

An adequate service center is essential for efficient operation of the park. New service facilities will be developed as needed to accommodate added recreational development.

In addition to the existing shop building, the complex should include, a shop/warehouse, an unheated storage building, a wood storage building, and a gasoline storage building. The proposed buildings should have the following minimum sizes: shop/warehouse - 1,500 sq ft (135 sq m), unheated storage - 1,500 sq ft (135 sq m), wood storage - 1,500 sq ft (135 sq m), and gasoline and oil storage - 100 sq ft (9 sq m). Since the service buildings will not be located in public use areas, they need not be designed according to the architectural theme.

Cost. Shop/warehouse	$60,000
Unheated storage building	45,000
Wood storage building	8,000
Gasoline and oil storage building	8,000
Total	$121,000

Action # 5. Pave service center court.

The soils in the park are very erodable and have very little bearing strength. Asphalt paving will overcome these problems and allow use early in the season when park personnel are preparing for the early spring tourist season.

Cost. $25,000

Action # 6. Landscape the service center.

Landscaping is primarily intended to screen the service center and reduce its visual impact. Screening also provides security by removing property and equipment from public view.

Cost. $3,000

Action # 7. Bury all proposed utility lines whenever possible, and bury all existing lines when major repair is needed.

Overhead lines are unsightly and detract from the natural character of the park.

Cost. Included in each project cost.

Action # 8. Fence service center court.

Several thefts have taken place. If the township roads leading into the park cannot be gated, a fence will be necessary to secure park property.

Cost. $5,000

Action # 9. Remove the old farm fences and abandoned junk scattered throughout the park.

The fences and junk are unsightly, dangerous, and detract from the natural quality of the park.

Cost. $10,000

VISITOR SERVICES

Introduction

Interpretation is "an educational activity which aims to reveal meanings and relationships through the use of original objects, by first–hand experience, and by illustrative media, rather than simply to communicate factual information" (Freeman Tilden). Through the interpretive program, the DNR can foster in the public an understanding of park resources and management. This is done by:

1. Revealing the kinship of park visitors to the park environment and, by association, their even broader involvement with ecosystems
2. Illuminating the historic and ongoing impacts of natural forces within the park and upon the people who use them
3. Assisting park visitors in the discovery of meaningful and satisfying ways in which to enjoy their visits without intruding on the experiences of others or impairing the quality of the park environment

4. Explaining the mission of the Department of Natural Resources, interdisciplinary park management practices, and the importance of public participation and support in the operation and maintenance of our state park system

Interpretive programs will be developed in recognition of the following:

1. All parks are fragile communities of life which can be perpetuated only through careful management
2. People are a natural and necessary element in park environments--free to enjoy them in non-destructive ways
3. All natural resource units and the public they serve are tied to one another ecologically, economically, socially, and politically

It is hoped that the people who recreate and learn in the parks will, by experiencing them and related interpretive services, derive a better quality of life and gradually increase environmental awareness. As people are encouraged to think and to feel more about park environments, they can be expected to do more on behalf of these environments. They can also be expected to strengthen their own ties with the land and with our state's cultural heritage.

Objectives:

To provide orientation information

To provide interpretive information with minimal expenditure of time by existing staff

To facilitate historical interpretation of Banning townsite and quarry ruins

To interpret the natural history aspects of the park and vicinity

Banning has been recommended for classification as a natural state park because it is an excellent example of the Mille Lacs Biocultural Region. Because of its excellent portrayal of the region, it is being

considered as a nodal interpretive unit in the biocultural region. Interpretable features include biology, history, geology, aesthetics, and recreation.

Biological features are varied and have excellent potential for interpretation. The primary biological resource for interpretation is the ecological community of the eastern portion of the Mille Lacs Biocultural Region. Other biological features include rare vegetation species, bog communities, and examples of pond succession.

Potential for historic interpretation is excellent. The park contains ruins of the original Banning townsite, ruins of the sandstone quarry operation, abandoned railroad grades, and numerous old roads and farmsteads. The Pine County Historical Society has expressed interest in a cooperative effort with DNR to interpret these historic features of the park. With the help of the MHS, a high quality program could be developed.

The aesthetic character of the park has excellent potential for interpretation. The park contains the scenic Kettle River gorge, beautiful outcrops of sandstone, waterfalls, rapids, and majestic stands of coniferous and deciduous trees.

An additional theme for interpretive programs which should be considered is recreation in the park. The programs will address visitor safety and basic instruction in recreational activities, e.g. canoeing, kayaking, snowmobiling, cross-country skiing, primitive camping, and hiking.

The proposed interpretive program for the park is outlined in the management plan details.

Existing interpretive facilities include:

- The only existing interpretive facilities are a few signs identifying two abandoned buildings at the Banning quarry site.

Proposed facility improvements include:

- Construction of a combination trail/interpretive center including: displays, naturalist office, and an audio–visual classroom area.

- Removal of any barriers on the existing trail to the abandoned quarry site, making it accessible to people with physical disabilities.

- Development of a self-guided interpretive trail originating from the trail/interpretive center. If possible, it should be barrier-free.

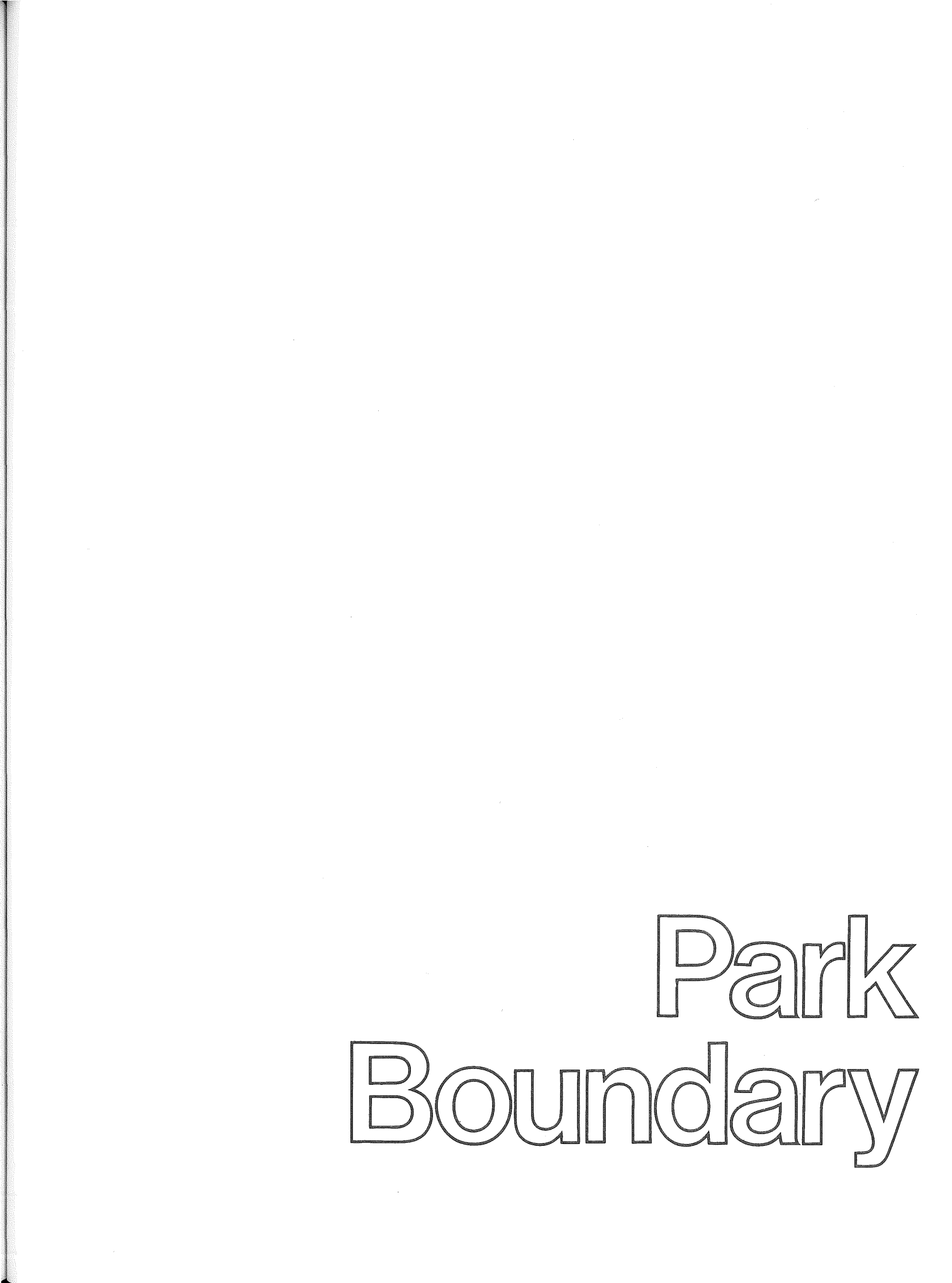
- Development of informal amphitheaters in the existing campground and the proposed campground.

1978 staffing included:

- Banning has no staff naturalist. However, on weekends a naturalist from St. Croix State Park came to Banning to put on evening programs.

Proposed staffing:

Ideally, the interpretive center should be kept open at least five months to accommodate school groups in the spring and fall in addition to the peak three month summer season.


Park
Boundary

Introduction

There are several reasons for reviewing the park boundary in this management plan. (1) There are several private homes which were included in the statutory boundary near the city of Sandstone that have no park value. (2) To assess whether or not remaining privately owned land should be retained in the statutory boundary. (3) To reassess the function of both state and city owned land along the river south of the Burlington Northern Railroad bridge. (4) The W 1/2 of T43N R20W Sec 13, has been proposed for inclusion in the park as a scientific and natural area.

Boundary Modification

Objectives:

To establish a park boundary which will provide a sufficient area for preservation, protection, and perpetuatation of the natural and cultural resources

To provide a land base for the recreational facilities without including land that is unnecessary or unreasonable to purchase

Action. (See Boundary Modification/Ownership Map, M14.)

Map Code # 1. Remove this parcel of land from the statutory boundary. It is already developed with single family dwellings and it has no park value.

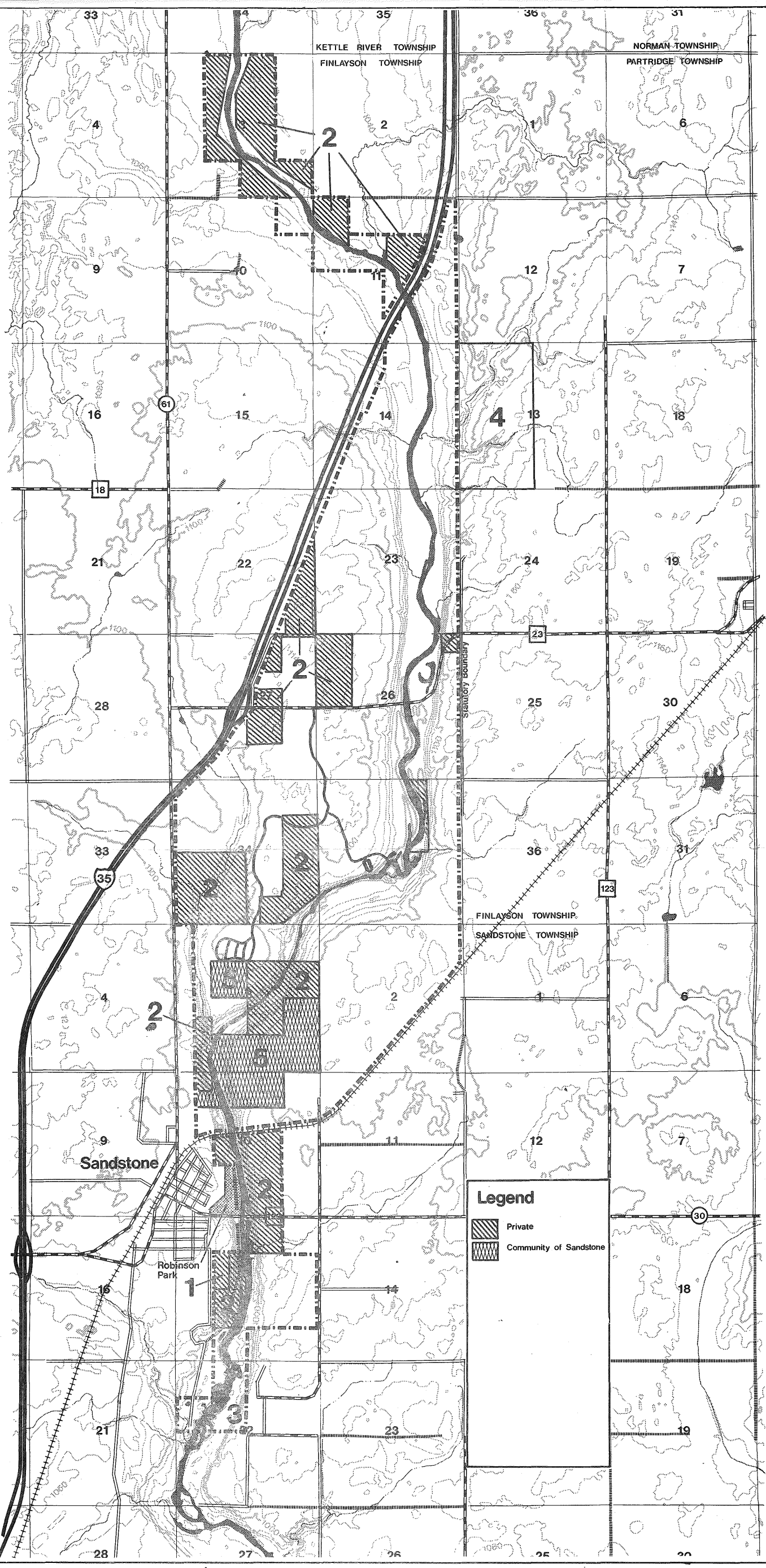
Map Code # 2. Retain all remaining private land in the statutory boundary and purchase it on a willing seller basis.

Map Code # 3. Continue discussion with the city of Sandstone and the regional development commission to determine the best way to provide: a hiking trail access from Robinson Park into

Banning; primitive picnicking and camping south of Robinson Park; and protection of the wild and scenic quality of the area. DNR intends to maintain ownership of this land.

Map Code # 4. Although preservation of the Log Drive Creek area as a scientific and natural area is desirable, including it in the park boundary is not necessary.

Map Code # 5. This was originally tax-forfeited land. It was given to the city of Sandstone for recreation purposes with a reversionary clause stating it could only be used for recreation. However, as long as the city owns its title, DNR cannot spend development dollars to connect trails to Robinson Park, or for any other purpose. It is the desire of DNR to assume control of these parcels.



Banning State Park

Boundary Modification/Ownership

Operations and Staffing

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 essential. During the busy season, full-time operation is necessary from 8:00 to 10:00 p.m. The remaining hours are covered by the resident manager. During other seasons, there is only part-time operation 56 hours per week, however, maintenance, repair, and park security account 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 impact of people concentrated in specific locations. These areas include: campsites, trails, 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 damage 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 Neighborhood Youth Corps (NYC), and Green View. 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 Banning State Park. Because of the seasonal nature of park operations, the positions in each staffing category have been grouped into total months per year. Months per year 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	
One full-time staff (park manager)	12
Maintenance	
One 6-month laborer, one 2-month laborer, one 6-month Green View worker*, one 12-month CETA worker*, and two 2-month student workers	30
Contact Station	
One 6-month park worker	6
Total	48
Total wages for 1979 - $30,200 excluding benefits	

*Federally funded positions

Future Staffing Needs

Some actions proposed in the plan, when implemented, will require additional park staff. Other actions may allow for the reduction of staff, because staff time can be used more effectively. Some of the most significant potential staff changes are as follows.

Trail Maintenance

Trail length will approximately triple in the future, and will require additional maintenance and grooming staff.

Trail/Interpretive Center

The trail/interpretive center will dramatically increase public use as seen at Wild River State Park. Banning has extensive historical and natural resource interpretive potential to attract visitors. Development of a good hiking/skiing system will also add visitor use at the center. When the center is completed, a 6-month naturalist should be added to provide interpretive programs from April through September. As visitor use increases, staffing may be extended.

Contact Station/Park Office

By combining the contact station and the park office, staff time can be saved. But, as visitor use increases, the office should be open from 8:00 a.m. to 10:00 p.m. on Friday, Saturday, and Sunday requiring two shifts. A second campground and group camp, and increased day use will require additional office personnel.

Campground, Group Camp, and Picnic Area

Adding another campground and doubling the size of the picnic area will double the required maintenance. The existing staff may be able to handle the increased workload, however if they cannot, additional staff must be hired or the campground should not be developed.

Costs and Phasing Summary

COST 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 would be received from the legislature. Therefore, some changes in these figures can be expected.

		Phases						
Action		1	2	3	4	5	Total	Conditional
RESOURCE MANAGEMENT								
Soils								
Action #1	Repair trail erosion.	Covered in Physical Development, Trails						
Action #2	Development site soil surveys.	Included in each project cost						
Vegetation								
Action #1	Improve present communities.	$ 5,300	$ 5,600	$ 5,600	$ 5,200	$ 5,000	$ 26,700	$ 17,000
Action #2	Reproduce forest communities.	89,700	74,400	90,700	79,400	71,400	405,600	9,700
Action #3	Maintain oak savanna.	1,400	1,400		1,400	1,400	5,600	
Action #4	Convert to conifer forest.	9,400	14,000	18,500	9,500	9,400	60,800	51,700
Action #5	Improve wildlife habitat.	12,700	6,100	11,800	10,300	4,500	45,400	2,500
Wildlife								
Action #1	Reestablish beaver colonies.			2,000			2,000	
Action #2	Inventory park for nests and dens.	Covered in operational budget						
Action #3	Plant native food grasses on trails.	Covered in Physical Development, Trails						
Action #4	Monitor wildlife populations.	Covered in operational budget						

Action		Phases 1	2	3	4	5	Total	Conditional
Groundwater								
Action #1	Install iron filters on wells.		$ 2,000				$ 2,000	
Surface Water								
Action #1	Remove hydroelectric dam.				$ 200,000		200,000	
Fisheries								
Action #1	Extend fisheries management program.	Covered in the Fisheries Section budget						
TOTAL RESOURCE MANAGEMENT		$ 118,500	$ 103,500	$ 128,600	$ 305,800	$ 91,700	$748,100	$ 80,900
PHYSICAL DEVELOPMENT								
Roads								
Action #1	Realign a portion of existing road.	15,000					15,000	
Action #2	Build up the road base and regravel the main park roads.	15,000	20,000				35,000	
Action #3	Close unnecessary park entrances.		2,000				2,000	
Action #4	Brush clearing along roads.	Included in operational budget						
Picnicking								
Action #1	Expand existing picnic area.					100,000	100,000	
Action #2	Develop four small picnic shelters.					40,000	40,000	

Action		Phases 1	2	3	4	5	Total	Conditional
Camping								
Action #1	Redesign and expand existing campground with an amphitheater.		$ 61,000				$ 61,000	
Action #2	Develop a semi-modern family campground with an amphitheater.				$ 191,000		191,000	
Action #3	Develop a group camp near the proposed trail center.			$ 25,000			25,000	
Action #4	Close access road to canoe campsites.	Included in cost of rebuilding the TH 23 bridge						
Action #5	Develop three additional backpack/canoe campsites		2,000				2,000	
Trails								
Action #1	Develop a through-park route for snowmobilers and horseback riders.		10,000				10,000	
Action #2	Develop a hiking/skiing trail system.	$ 5,000	32,500				37,500	
Action #3	Develop a combination trail/interpretive center.			250,000			250,000	
Water Activities								
Action #1	Retain existing canoe accesses.	None						
Action #2	Retain existing boat landing.	None						

Action		Phases 1	2	3	4	5	Total	Conditional
Administrative and Support Facilities								
Action #1	Build a new manager's residence.		$ 80,000				$ 80,000	
Action #2	Develop a combination contact station/park office.	$ 75,000	10,000				85,000	
Action #3	Remove existing office building.		2,000				2,000	
Action #4	Construct a service center.							
	-shop/warehouse			$ 60,000			60,000	
	-unheated storage			45,000			45,000	
	-wood storage			8,000			8,000	
	-gasoline and oil storage			8,000			8,000	
Action #5	Pave service center court.				$ 25,000		25,000	
Action #6	Landscape the service center.	3,000					3,000	
Action #7	Bury all utility lines.	Included in each project cost						
Action #8	Fence service ccenter court.				5,000		5,000	
Action #9	Remove old farm fences and abandoned junk.				10,000		10,000	
TOTAL PHYSICAL DEVELOPMENT		$ 113,000	$ 219,500	$ 396,000	$ 231,000	$ 140,000	$1,099,500	
TOTAL RESOURCE MANAGEMENT		118,500	103,500	128,600	305,800	91,700	748,100	$ 80,900
TOTAL MANAGEMENT/ DEVELOPMENT BUDGET		$ 231,500	$ 323,000	$ 524,600	$ 536,800	$ 231,700	$1,847,600	$ 80,900

Implementation

AUTHORITY

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.

MAINTENANCE AND OPERATIONS

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.