

Split Rock Creek State Park Management Plan



September 2002 Draft



**Minnesota Department of Natural Resources
Division of Parks and Recreation**

Split Rock Creek State Park

Management Plan

Approved _____, 2002



Division Of Parks & Recreation

This management plan has been prepared as required by 1999 Minnesota Laws Chapter 86A.09 Subdivision 1.

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The development of this plan was greatly assisted by the members of the Split Rock Creek Citizen Advisory Committee, who donated many hours of their time to help analyze and discuss the current park issues, and make management recommendations.

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Department of Natural Resources Approval of Management Plan for Split Rock Creek State Park.

Minnesota Statutes 86A §09, Subdivision 1, requires that a master plan be prepared for units of Minnesota's outdoor recreation system, including state parks and state recreation areas. The Laws of Minnesota for 1937 (chapt.474, sec. 1,Subd. h) established Split Rock Creek as part of Minnesota's Outdoor Recreation System (MS 85.013, subd.53b).

The Minnesota Department of Natural Resources worked in partnership with Minnesota citizens and an interdisciplinary resource team to develop a management plan for Split Rock Creek State Park.

The management plan was approved by the Division of Parks and Recreation management team, and has been approved through the DNR's Statewide Interdisciplinary Review Service/Senior Managers' review process during ----- 2002.

Allen Garber, Commissioner
Minnesota Department of Natural Resources

Date

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Executive Summary

This Split Rock Creek State Park Management Plan documents the results of the planning process involving several Department of Natural Resources (DNR) disciplines, local, state, and federal government agencies and Minnesota Citizens. This plan sets a general direction for the management of Split Rock Creek State Park for the next 20 years. It sets a general direction, while remaining flexible enough to allow the actions to be carried out in the most appropriate manner. The development of the Split Rock Creek mission, vision and niche statements help frame the recommended actions.

Split Rock Creek State Park is located in the Inner Coteau Ecological Subsection in the far southwestern corner of Minnesota. Prairie covered virtually all of this landscape prior to European settlement. Agriculture is now the most important land use in this subsection, there are few remnants of native prairie left. Split Rock Creek State Park was established in 1937, and has recently been expanded from 250 acres to 1,303 acres (952 acres which are owned by the state). The native prairie on these new additions is being preserved and managed, and the agricultural fields are slowly being returned to native prairie. The larger land base now provides for a variety of trail opportunities, and set the "oasis" in perspective of the original native prairie. The campground is well used, and full almost every weekend during the summer. Day use activities are primarily fishing, picnicking and swimming.

Resource management actions recommended in this plan are oriented toward achieving the following four major objectives:

- Sustain healthy natural communities
- Manage the majority of the park to preserve and reestablish an appropriate native prairie community.
- Manage the periphery of Split Rock Lake for recreational experience
- Ensure the long term survival of rare and endangered species within the park.

Interpretive facilities and displays will be improved, Recreation management actions maintain, improve and expand the existing recreational opportunities and provide for the additional use of the park by horse riders. Expansion of the park statutory boundary to the southeast is considered. The following is a listing of the actions recommended:

Natural Resources

- Action # 1 Field check all proposed development sites
- Action #2 Restore and maintain the present prairie remnants within the park.
- Action #3 Convert grasslands to prairie.
- Action #4 Convert former agricultural land to prairie.
- Action #5 Honor the existing grazing lease.
- Action #6 Preserve Topeka Shiner habitat.
- Action #7 Minimize shoreline erosion.
- Action #8 Protect Split Rock Creek.
- Action #9 Maintain or improve the water quality in Split Rock Creek and Lake.
- Action #10 Control exotic species populations.
- Action #11 Maintain healthy shade trees.
- Action #12 Maintain healthy native understory screening.
- Action #13 Convert old gravel pit to prairie

Interpretation

- Action #14 Develop non-personal interpretation of significant natural and cultural resources.
- Action #15 Cultivate interpretive assistance

Recreation

- Action #16 Expand drive-in campground
- Action #17 Construct a new park office
- Action #18 Construct a modern toilet building
- Action #19 Develop a hiking trail around Split Rock Creek Lake

- Action #20 Develop a creek and prairie hiking trail system
- Action #21 Provide for recreational snowshoe use
- Action #22 Develop a horse trail system
- Action #23 Develop a Horse Campground
- Action #24 Develop a horse Trailhead
- Action #25 Closing County Road 20
- Action #26 Pave picnic ground and beach parking lots and access road.
- Action #27 Develop a modern service court and shop

Operations

- Action #28 Expand park staff as responsibilities increase.

Park Boundary

- Action #29 Acquire private lands within the statutory boundary.
- Action #30 Consider expanding the statutory boundary

Introduction

Park Description

Split Rock Creek State Park is going through a major change. Since 1937 it has been a small state park that focused on providing a variety of recreational opportunities on a narrow fringe of land surrounding a manmade reservoir (Split Rock Lake). This oasis has been important for southwestern Minnesota where there are few water bodies. In 1996 the park statutory boundary was expanded and now includes 1,303 acres; 952 acres of this are owned by the State of Minnesota. The native prairie on these new additions is being preserved and managed, and the agricultural fields are slowly being returned to native prairie. The larger land base now provides for a variety of trail opportunities, and set the “oasis” in perspective of the original native prairie. The campground is well used, and full almost every weekend during the summer. Day use activities are primarily fishing, picnicking and swimming.

Legislative History

Split Rock Creek State Park has been specifically addressed in state legislation several times. The statutory boundary established in these legislative acts identifies the lands that the State of Minnesota can negotiate to acquire from willing sellers.

- 1937 Split Rock Creek State Park was established. The initial legislation established several areas across Minnesota “to provide unemployment relief.”¹ The area was designated Split Rock Recreation Reserve and included 227.64 acres.
- 1945 A small area was added to Split Rock Recreation Reserve statutory boundary in Section 15.²
- 1969 The Minnesota Legislature reorganized the various recreational lands under state management and renamed several. Split Rock Recreation Reserve was renamed Split Rock Creek State Recreation Area.³
- 1982 The northwest quarter of Section 22, and small areas in Section 15 were added to the statutory boundary.⁴
- 1994 Split Rock Creek State Recreation Area was renamed to Split Rock Creek State Park.⁵
- 1996 Split Rock Creek State Park statutory boundary was expanded to include the land in Sections 16 and 21 southeast of Minnesota Trunk Highway 23, except for areas platted as Sabies Addition and Second Sabies Addition.⁶ This brought the total size of the statutory boundary to 1,303 acres.

Planning Process

The Split Rock Creek Plan Revision Advisory Committee is comprised of people that are primarily from southwestern Minnesota and the Twin City Metropolitan Area. These individuals represent a variety of perspectives; special interest groups, the public at large, and recreational and resource management professionals. The committee members unselfishly spent many hours during this project to analyze and give their recommendations on a variety of environmental and recreational issues. They helped identify a vision for Split Rock Creek State Park and the major issues that needed to be addressed during the planning process. They then discussed the pros and cons of various ways of addressing each issue. The result of this discussion is this draft plan that was sent out for public review.

A public open house was held in Pipestone to review the draft plan and solicit public opinion on the proposals. Copies of the draft plan were available for review for 30 days. The revised draft plan received final review by DNR staff in _____ 2002 and was signed by the Commissioner of Natural Resources on _____, 2002.

Copies of this plan are available at Split Rock Creek State Park and the central office of the DNR, Division of Parks and Recreation, 500 Lafayette Road, St. Paul, MN 55155-4039 or can be downloaded from the DNR internet site at www.dnr.state.mn.us from the Split Rock Creek State Park page.

A completed park plan and “planning process file” documenting the 2001-2002 planning process and pertinent background information was distributed to the following locations: Split Rock Creek State Park Office, State Park Regional Park Manager’s Office in the New Ulm Regional DNR Office, and the State Park Planning Section in St. Paul.

The recommendations in this plan are the result of this partnership-based planning process. This plan provides a basic management direction for the state park and is not intended to provide specific management or development details.

Mission and Vision

DNR Vision Statement

“We will work with the people to manage the state’s diverse natural resources for a sustainable quality of life.”

Division of Parks and Recreation Mission

“We will work with people to provide a state park system which preserves and manages Minnesota’s natural, scenic and cultural resources for present and future generations while providing appropriate recreational and educational opportunities.”

Division of Parks and Recreation Vision

“We will continue to work with the people of Minnesota to ensure that the Minnesota State Park System will be sensitive to the needs of current and future generations and guided by the following principles and values:

- A commitment to ensure deliberate and effective natural, cultural, historical and archaeological resource management;
- A commitment to provide appropriate recreational opportunities;
- A commitment to maintain a proper balance between resource protection and recreational use of state park lands;
- A conscious recognition of our responsibility to the public for wise and prudent acquisition and development of state park lands;
- A recognition of our educational and interpretive roles;
- A conscious and continuous effort to respect the valuable human resources embodied in our employees and the public;
- A continued desire to actively seek and adopt innovative, effective and efficient management practices;
- A realization of our responsibility to secure and maintain the resources necessary to implement our mandates and mission;
- A pledge to provide high quality public service; and
- A promise to consistently seek public involvement and support in decision making.

Split Rock Creek Vision and Mission Statement

Vision: Split Rock Creek State Park will provide a diversity of recreational opportunities in an oasis of natural resources with trail and ecological links throughout the region.

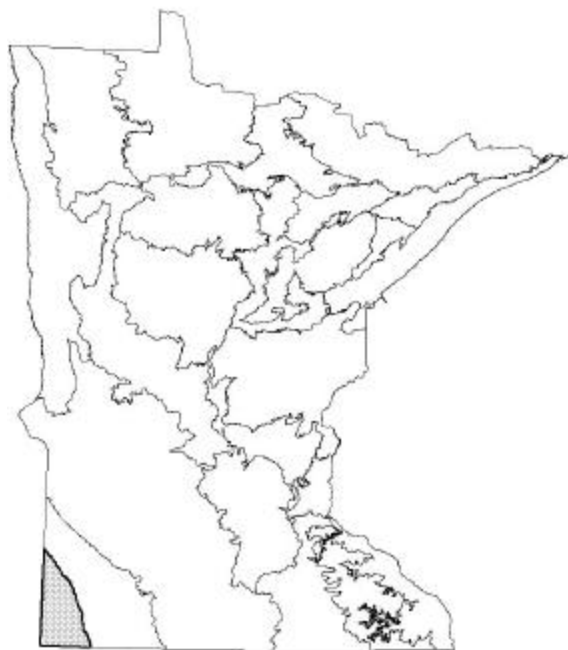
Niche: Split Rock Creek State Park will preserve rare and endangered resources in the prairie and prairie creek environments, provide a variety of water and land based recreation and enjoyment, and be the hub for public horse trail system in the area.

Mission: Provide an oasis of natural resources that provides a diversity of recreational opportunities.

Regional Analysis

Ecological Communities

Split Rock Creek is located in the Inner Coteau Ecological Subsection in the far southwestern corner of Minnesota.



This subsection occupies southwestern Minnesota, southeastern South Dakota and northwestern Iowa. It is a high glacial landform, topped by Buffalo Ridge (1995 feet Above Sea Level) in northern Pipestone County. This high elevation is caused by thick deposits of pre-Wisconsin age glacial till (up to 800 feet thick) capped by thick (6 to 15 feet) wind-blown silt (loess) deposits.

Bedrock is covered by glacial till through most of the subsection except for a massive outcrop of Red Upper Precambrian quartzite in Rock and Pipestone counties.⁷

Prairie covered virtually all of this landscape prior to European settlement. Wet prairie was restricted to narrow stream margins. Forest was similarly restricted to ravines along a few streams, such as the Rock and Redwood rivers. Periodic natural forces that helped form and maintain the prairie community are fire, drought, grazing and burrowing. Agriculture is the most important land use in this subsection now, there are few remnants of native prairie left.

A major conservation concern is water quality. Shallow aquifers which used to supply the rural population with water are now polluted with nitrates, phosphates and pesticides. Agricultural activity is the major source of this pollution. Presently, there are rural water associations providing much of the water for rural residents. The source of this water is deep wells that tap into the Dakota Aquifer. Pollution of surface water is also a concern throughout the subsection. Other issues include preservation of prairie remnants and preservation and/or restoration of wetlands.

Socio-Economic Region description

Split Rock Creek State Park is very important to the communities in its immediate vicinity, but less important, at present, in the broader regional perspective. There are no natural lakes in Pipestone County so Split Rock Lake (reservoir) is an important element in the community. It is important enough that many Ihlen and Jasper residents use it as a way of defining where they live. Tourism is an important part of the economy in this area and Split Rock State Park has an important role in providing complementary opportunities to the Pipestone National Monument and other area attractions.

Population

The counties within 60 miles of Split Rock Creek State Park are sparsely populated, being primarily scattered farmsteads with small local towns and larger service communities. Split Rock Creek State Park is in the southwest corner of Minnesota, so the population within 60 miles is split between Minnesota (81,467 people⁸), South Dakota (233,184 people⁹) and Iowa (50,355 people¹⁰). South Dakota is

significantly larger population, primarily because of the city of Sioux Falls. Area cities with a population of over 10,000 people are¹¹:

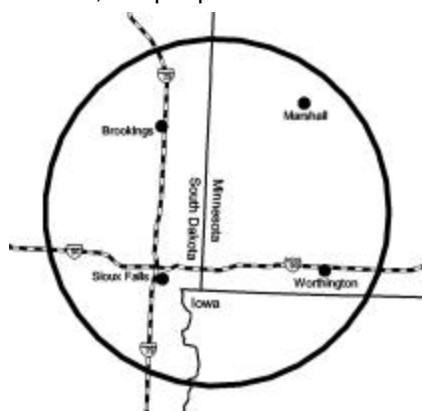


Table # 1: Regional Cities With Over 10,000 people

Sioux Falls, SD	123,975 people
Brookings SD	18,504 people
Marshall, MN	12,735 people
Worthington MN	11,283 people

Recreation and Education Resources/ Facilities

Many recreation activities are associated with water bodies. There are few water bodies in the southwestern corner of Minnesota. There are few lakes, most of the marshes have been drained for agricultural use, which limits recreational opportunities in the region.

Camping

There are 46 campgrounds within 60 miles of Split Rock Creek State Park. Twenty of these are private, 13 are state and 13 are city or county operated. Most of these campgrounds are located in South Dakota (22 campgrounds) and Minnesota (20 campgrounds). There are 2,600 campsites in these 46 campgrounds. About one half the sites (1,212) are in private campgrounds.

Table # 2: Regional Camping By Administration

Administrator	Drive-In Sites	# Sites w/ Electricity	# Tent Only Sites	Total Campsites
County/City	365	365	120	485
Private	1,008	1,063	175	1,212
State	791	644	93	896
Federal	0	0	0	0
Total	2,164	2,072	388	2,593

Table # 3: Regional Camping By State

Name	# Drive-In Sites	# Sites w/ Electricity	# Tent Only Sites	Total Campsites
Minnesota				
City / County	276	276	95	371
Municipal	50	50	0	50
Private	316	316	67	383
State	279	155	30	321
Total Minnesota	921	797	192	1,125
South Dakota				
City	15	15	5	20
Private	640	695	105	774
State	512	489	63	575
Total South Dakota	1,167	1,199	173	1,369
Iowa				
City / County	24	24	20	44
Private	52	52	3	55
Total Iowa	76	76	23	99
Total For All States	2,164	2,072	388	2,593

Boat Accesses

There are 102 water accesses within 60 miles of Split Rock Creek State Park. Sixty two of these are in Minnesota, 35 in South Dakota, and 5 in Iowa. Most of these provide access to relatively small shallow lakes, but every lake is an important recreation resource in this region.

Beaches

Beaches are not very common in this region, there are only 15 within 60 miles. The lakes in this region are generally fairly small, shallow, and rich in nutrients.

Table # 4: Regional Boat Accesses and Beaches

Administrator	Boat Accesses	Beaches
Minnesota	62	8
South Dakota	35	7
Iowa	5	0
Total	102	0

Trails

Opportunities to enjoy the region's trails span the four seasons, serve a variety of trails users, and are located throughout the region. Tables 5 and 6 indicate the miles of trails within the 60 mile radius of Split Rock Creek State Park. The figures in the table are based on the best available information from brochures and internet web sites. They are constantly changing as new trails are developed, old trails are surfaced, and trail use patterns change. Some of these trails are multiuse, so the same alignment may be counted more than once.

Casey Jones State Trail – The Casey Jones State Trail was the first state trail to be authorized. Thirteen miles are currently in state ownership. The trail has a natural surface and is used by hikers, horseback riders, and snowmobilers. The 2002 Legislative Session authorized three extensions of the Casey Jones State Trail, one of which runs from Pipestone to Split Rock Creek State Park. This changed the definition of the State Trail, but no acquisition or development funds were allocated. A specific alignment has not been determined.

Mountain Biking Trails - There are only two designated mountain bike trails in the area. There are 4.5 miles of trail in Camden State Park, Minnesota, and 6 miles in Newton Hills State Park, South Dakota. The majority of mountain bike use is on city streets and undesignated trails.

Surfaced Biking Trails - Approximately 51 miles of surfaced biking trails are located within 60 miles of Split Rock Creek State Park. Most of these trails are administered by cities, but many provide access from cities to state parks or recreation areas.

Cross - Country Skiing Trails - There are only 47 miles of cross-country ski trails located within 60 miles of Split Rock Creek State Park. The majority of these are in South Dakota State Parks. There are relatively few days with more than six inches of snow in this region, which limits the cross-country skiing opportunities.

Snowmobile Trails - Over 800 miles of snowmobile trail can be found within 60 miles of Split Rock Creek State Park. Most of these trails are in Minnesota (58%) while the remaining 42% are in South Dakota. Most of the trails in Minnesota are funded through the state's Grant-in-Aid Program which provides grants to local city and county governments to develop and maintain snowmobile trails.

ATV & OHM Trails – There are no designated ATV trails within 60 miles of Split Rock Creek State Park.

Table # 5: Regional Trails by Administrator

Administrator	Hiking	Horse	Snowmobile	X-C Skiing	Biking Surfaced	Biking Mountain
City	6	0	0	0	32	0
County	7.5	10.5	463.5	7.5	11.5	0
State	67.75	21.9	339.6	28.8	7.5	10.25
Federal	.75	0	0	0	0	0
Private	0	0	0	11	0	0
Total	82	32.4	803.1	47.3	51	10.25

Table # 6: Regional Trails by State

Administrator	Hiking	Horse	Snowmobile	X-C Skiing	Biking Surfaced	Biking Mountain
Iowa	6	0	0	0	9	0
Minnesota	54.75	20.5	482.1	15.3	27.5	4.25
South Dakota	21.25	11.9	321	32	14.5	6
Total	82	32.4	803.1	47.3	51	10.25

Split Rock Creek State Park's Benefit to the Region

Split Rock Creek State Park benefits both the ecological and socioeconomic regions surrounding the park. The 1,300 acre park provides a sanctuary for animal and plant species that include some of Minnesota's endangered species and species of special concern. In addition, the park contains prairie and aquatic communities and their associated animal and plant species that are reflective of the Inner Coteau Ecological Subsection. This mix of natural habitat, and recreational opportunities provides a range of opportunities for visitors to increase their knowledge of environmental stewardship, awareness of environmental issues, environmental protection, and environmental ethics.

Beyond these important environmental benefits, Split Rock Creek State Park provides significant benefits for the communities surrounding the park. Among the most important of the park's community benefits are chances to experience outdoor recreation opportunities, a feeling that the community is a special place in which to live, a natural setting in which the community can take great pride, attraction of tourism dollars, preservation/ conservation of various natural ecosystems, a greater understanding of the natural environment, and a sense of security that the natural environment will be protected.

Split Rock Creek State Park also generates economic benefits within the region from employee wages, expenditures to local businesses, and tourism dollars. Park staff spend a substantial portion of the annual budget on supplies, services, and contract vendors from the region. The park also attracts approximately 50,000 visitors and generates approximately \$40,000 in revenue annually. Although the majority of the park's visitors come from Minnesota, the park receives visitors from South Dakota and Iowa and many other states which brings new money into the state.

Significant Areas Mapping

Significant Areas Mapping (SAM) is an integrated approach by which the natural and cultural resources in a park are first identified in terms of their regional significance and then assessed in terms of their capability to provide opportunities for visitor experiences.

The SAM process has two parts - assessing present conditions and assessing future conditions. In each part there are three steps - identifying significant natural and cultural resources, identifying levels of visitor use and experience, and overlaying the first two steps to assess opportunities and conflicts related to park resources and park visitors. Future conditions are those anticipated at the end of the twenty year lifetime of the management plan. Visitor use and experience is defined on a park-specific scale of low, medium, and high use based on the number and density of visitors using the area.

The purpose of the SAM process is to help identify areas for improvement in the way the Division manages how resources and people interact in the parks. It will aid the Division in addressing existing problems as well as in planning to avoid new ones. It also can help point out how the Division can take better advantage of the places where the interaction between people and the resources are positive - through interpretation and education.

With input from the public, the SAM process can lead to a discussion of how to resolve conflicts between resource protection and visitor use - possibly by relocating (or modifying) visitor use, or by monitoring resource impact and defining impact management strategies. Appropriate strategies for managing impacts can be determined using the SAM analysis along with the park's mission as guides. Specific management strategies may include:

- *site management* (facility design, site hardening, site closure, vegetation barriers, etc.)
- *rationing and allocation* (reservations, queuing, pricing)
- *regulation* (the number of people, the location or timing of visitors, visitor behavior)
- *deterrence and enforcement* (signs, sanctions)
- *visitor education* (interpretation that promotes appropriate behavior or provides information regarding use conditions)

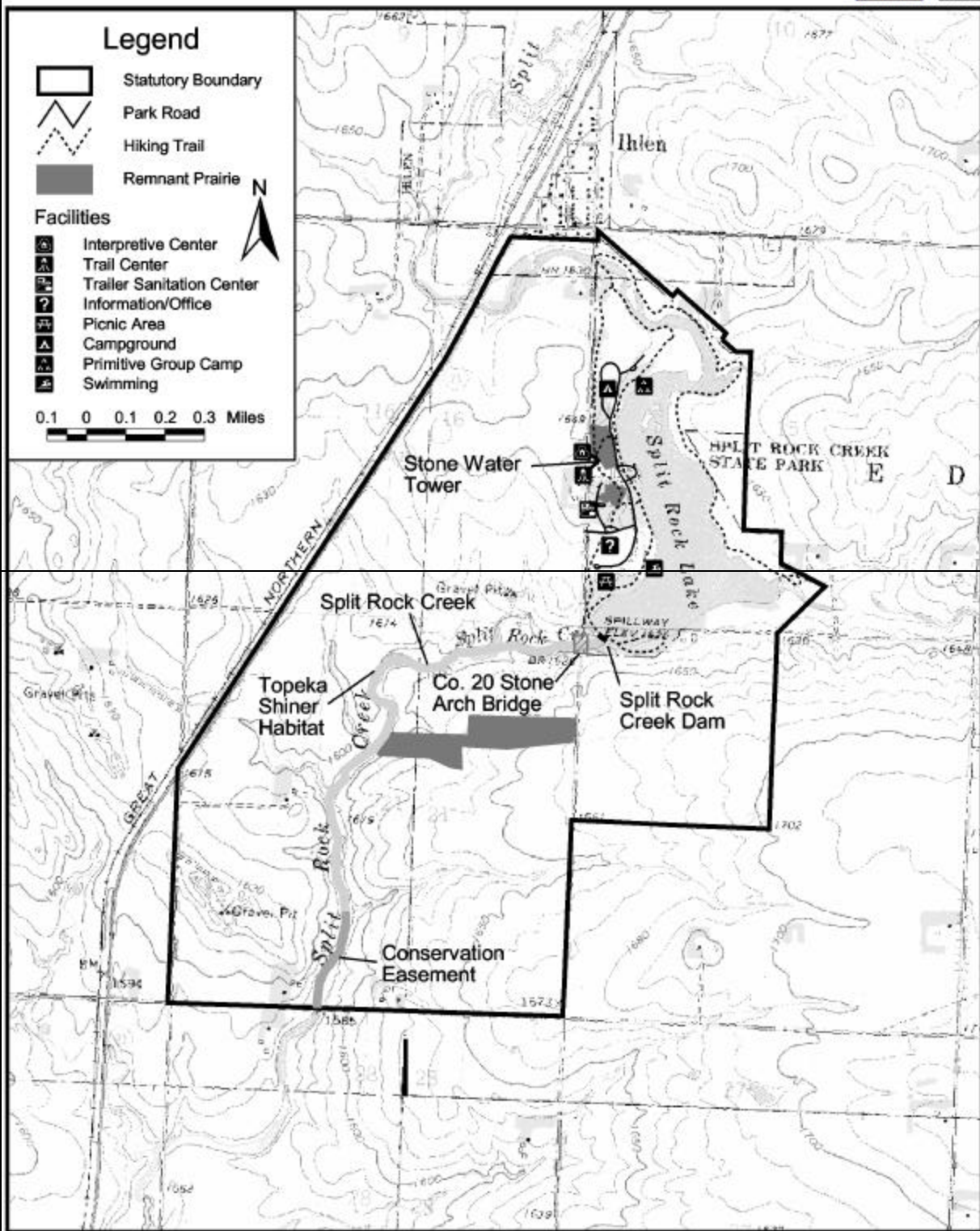
Assessing Present Conditions

Significant Natural and Cultural Resources

There are three areas in the park that contain good quality native prairie. These communities are rare enough to have state-wide significance. Preservation of these remnants are also important because they hold important clues to what the prairie in this area was like prior to European settlement. The Topeka Shiner is a small minnow that lives in the backwaters of Split Rock Creek down stream from the dam. This species is listed as endangered on the Federal List of Endangered Species. All development and management actions will be reviewed to ensure that this species habitat is not negatively impacted. A federal conservation easement was sold on an area along Split Rock Creek before the land was purchased by the state (see Appendix A). This further restricts the actions that can be taken along the creek in the southern part of the state park.

Split Rock Creek State Park

Significant Natural & Cultural Resources



There are three structures that are historically significant in the park, Split Rock Creek Dam, the stone water tower and the County Road 20 Stone Arch Bridge. The Stone Arch Bridge is on the county right-of-way and under county jurisdiction, but is surrounded by the park. Evidence of prehistoric use in the park has been identified in the open field north of the picnic ground. The site may have extended further east, but that area was scraped to gather soil to grade the beach parking lot many years ago. It is likely that other prehistoric sites will be identified in the future on rises overlooking Split Rock Creek

Visitor Use Levels and Experience

High visitor use areas

Areas identified as high visitor use include the picnic ground, swimming beach and campground. These areas support the vast majority of park visits. Visitors can expect to encounter other people in these areas.

Medium use areas

The trail areas of the park outside of the high use areas and Split Rock Lake itself receive medium use.

Low visitor use areas

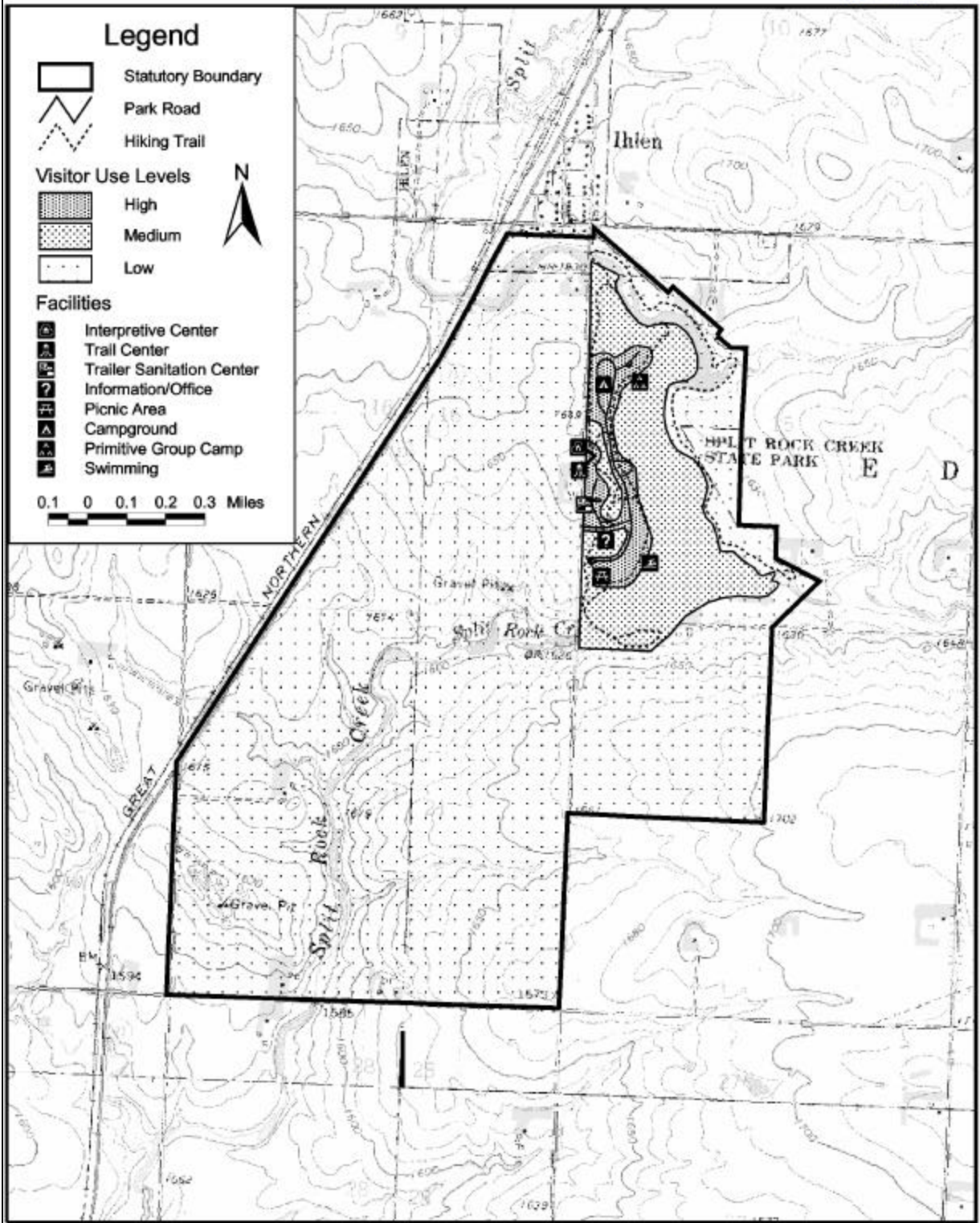
The area of the park on the east side of the lake without public access, and the area that has recently been acquired receive low visitor use. The use of the recently acquired land is focused on reconstruction of native prairie at present. Visitors to these areas can achieve a feeling of solitude with little interaction with other park visitors.

Overlay - Identifying Existing Opportunities and Conflicts

The native prairie near the water tower is the only area that was identified as having potential conflict through this SAM process. It is a sensitive resource adjacent to high use areas. Management actions in the resource recommendations and actions section will address these issues.

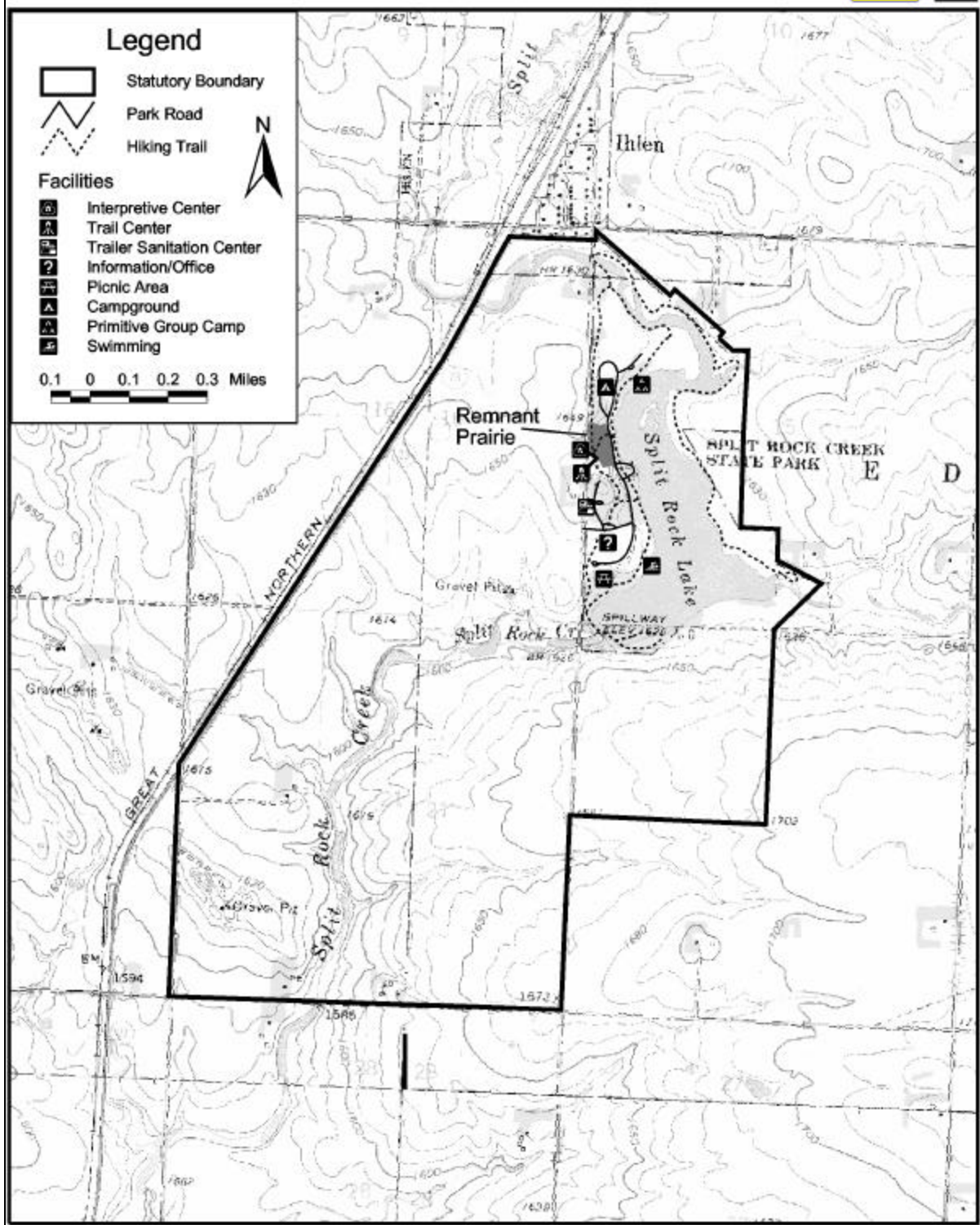
Split Rock Creek State Park

Existing Visitor Use Levels



Split Rock Creek State Park

Existing Opportunities & Conflicts



Assessing Future Conditions

Significant Natural and Cultural Resources

There are no known significant natural or cultural resources that may be acquired in the future within the present Split Rock Creek State Park statutory boundary. The native prairie areas will continue to grow in both size and quality through management. If County Road 20 is closed, the stone arch bridge would come under state park administration and would be managed and preserved as a significant cultural feature.

Visitor Use Levels and Experience

High visitor use areas

The construction of the horse campground (Recreation Action #23 p. 48) and the horse trailhead (Recreation Action #24 p. 48) will change these areas to high use from present low use, but the resources in this area can accommodate the increased use.

Medium visitor use areas

Visitor use will continue to grow in the south and western parts of the park as hiking and multi-use trails are developed. Most of this area will eventually move into the medium visitor use as trails and facilities are developed.

Low visitor use areas

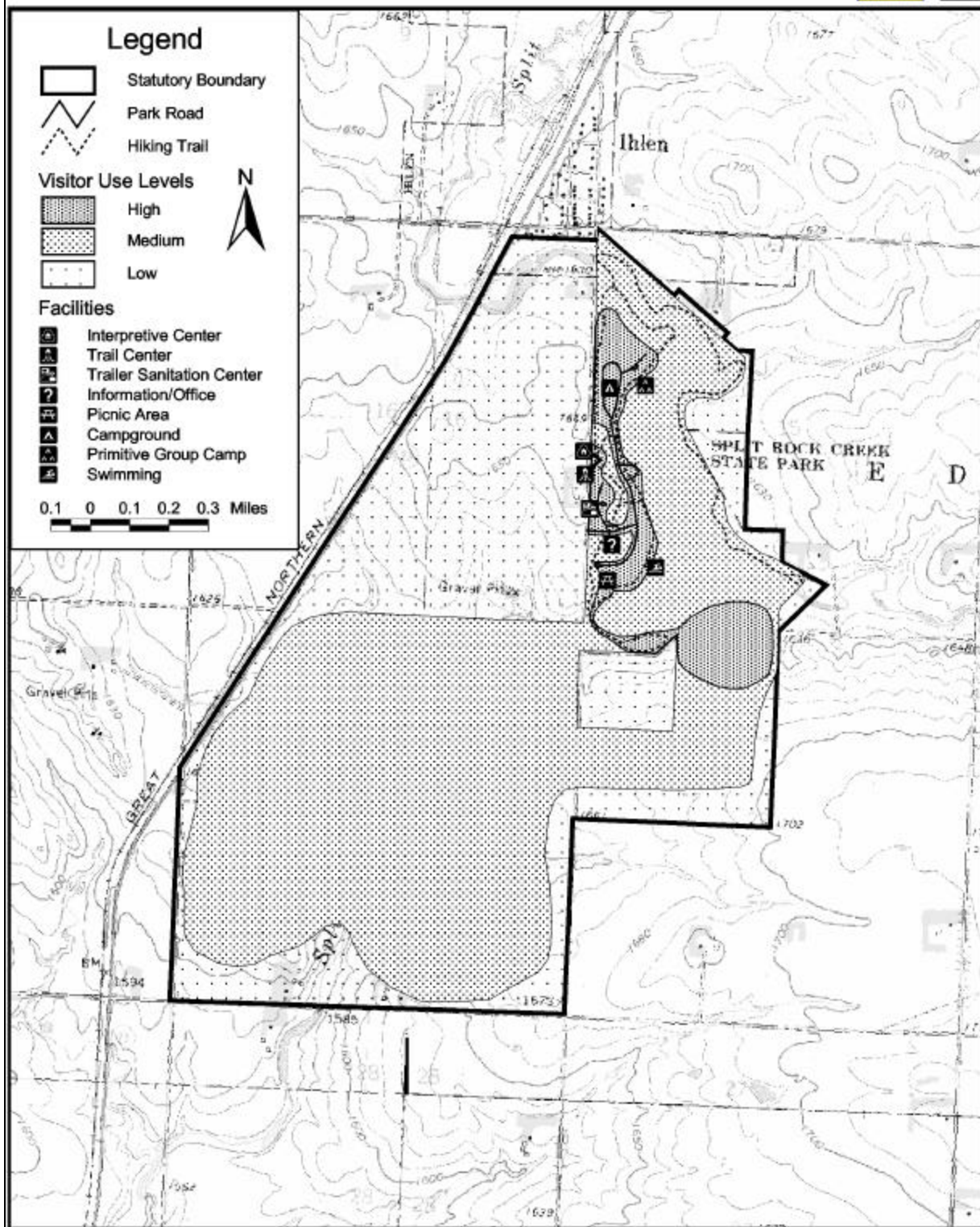
Areas of low visitor use will be primarily on the periphery of the park.

Overlay - Identifying Future Opportunities and Conflicts

The potential use conflicts on the prairie remnant near the watertower identified under Present Conditions will still be relevant in the future and management options for these areas will continue to be followed. The medium use areas along Split Rock Creek will be an on going management issue, as people enjoy observing and learning about the creek and its inhabitants while potentially impacting it and the Topeka Shiner habitat. Management actions in the resource recommendations and actions section will address this issue.

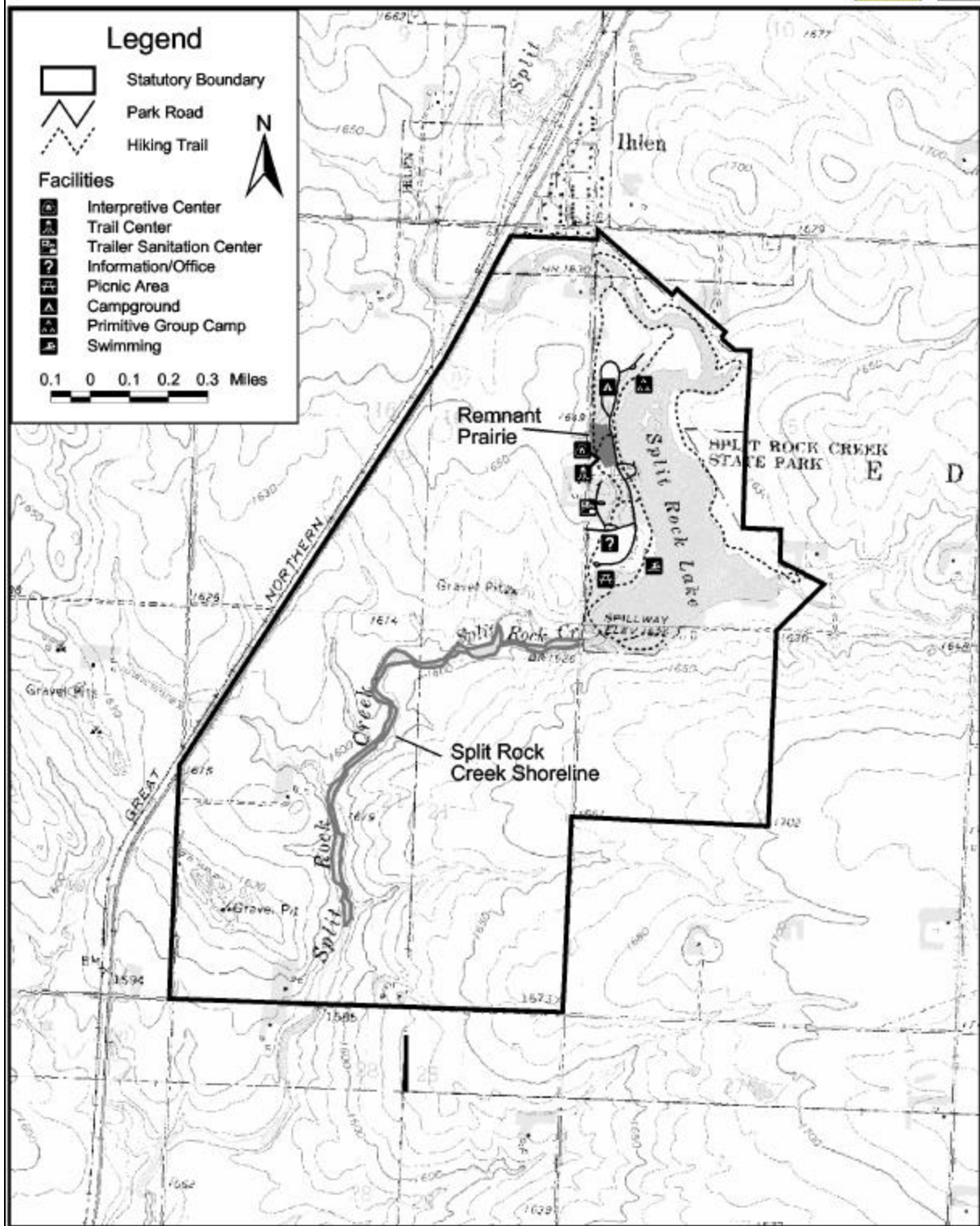
Split Rock Creek State Park

Future Visitor Use Levels



Split Rock Creek State Park

Future Opportunities & Conflicts



Cultural Resources

Recognizing a need for both water conservation and water based recreational activities in the Pipestone County area, the Department of Natural Resources (then the Department of Conservation) established Split Rock Creek State Recreation Reserve in 1937. At that time, a dam was constructed on Split Rock Creek, creating 85 acre (34 hectare) Split Rock Lake. Today the park provides recreational opportunities found nowhere else in the county.

Archaeological Resources

Prehistory in the southwestern corner of Minnesota focuses on the Catlinite quarry within Pipestone National Monument. Located approximately 8 miles (13 km) north of the park, Pipestone National Monument was established by Congress in 1937 to preserve the area. For centuries, Indians from many tribes traveled as far as 1000 miles (1600 km) to the quarry to gather chunks of rough pipestone. From these pieces they carved pipes and other ceremonial objects. Traditionally this was a sacred place where all Indians could come and quarry in peace, but by 1836 the Yankton-Dakota gained control over the area and prevented other tribes from obtaining the stone except through trade. The highly valued pipestone attracted Indians from all directions. At least 20 archaeological sites have been identified within Pipestone National Monument just north of the park. These sites exist mainly in the form of pipestone quarries, Indian mounds, and short-term occupation sites. Visiting tribes passed through the Split Rock Creek region on their way to and from the quarry. It is possible that these tribes camped within or near the Split Rock Creek area.

The original state park was surveyed by Minnesota Historical society in 1985 and they found little evidence of National Register Historical Preservation eligible prehistoric sites. They assigned a low to very low potential for significant prehistoric sites for the park as a whole. The Rock River drainage area, which begins 6 miles (9.6 km) east of the park, was surveyed by the Minnesota Historical Society during 1979. Twenty-four sites and various "find spots" were located within the drainage area. Several of these are within 8 miles (12.8 km) of the park. Most archaeological debris were located on the rises overlooking creek beds.

In 1994 an old field area north of the picnic parking lot (also a level plateau overlooking the creek bed) was examined for evidence of prehistoric use. Stone flakes were found that indicated this area had been used by prehistoric peoples, but no diagnostic artifacts were recovered. This site had been disturbed by years of plowing, and the eastern one-third of the field had been scraped for fill years ago when the beach parking lot was constructed. It is likely that some undisturbed artifacts are still in place below the normal plow depth.¹²

Historical Resources

Abundant open lands and rich agricultural soils attracted white settlers to the area.

- 1888 Willmar and Sioux Falls Railroad built through Pipestone County and established a station in Carl Ihlen's home. In May of that year the town of Ihlen located on the northern boundary of the park was established.¹³
- 1917 The Great Northern Railroad Division Headquarters was constructed on the west side of Ihlen.
- 9/13/35 Split Rock Creek Dam project approved for construction.¹⁴
- 3/5/36 Split Rock Creek Dam is badly damaged when earthen walls at both ends of the dam are washed out.
- 1937 Split Rock Creek Dam completed (Completed on September 3, 1937¹⁵).
- 4/26/37 Split Rock Creek Recreation Reserve established by the Minnesota Legislature.¹⁶
- 1938 Stone arch bridge completed. Stone came from the Miller Quarry in Jasper.¹⁷
- 1919 Park Association established.¹⁸

- 1985 Flood gates opened in the dam for repair work, and to allow the fish in the watershed to be killed, removing alien fish species and allowing the lake to be restocked.¹⁹
- 1993 Split Rock Creek flooded and broke through the earth dike on the west side of the dam. Split Rock Creek lake was drained to repair the dam.

Two existing structures within Split Rock Creek State Park are excellent examples of Rustic Style structures, the Split Rock Creek Dam and the stone water tower. The County Road 20 stone arch bridge is also from that era and would be a contributing feature, but it is managed by Pipestone County.

The Split Rock Creek Dam was constructed out of Sioux quartzite by the Works Progress Administration (WPA). It was the brain child of two residents in the area, Albert and Glen Dahlmeier.

The stone arch bridge located west of the dam was begun on December 14, 1937²⁰. Pipestone County had it cleaned and tuck pointed during the summer of 2001.

Recommendations and Actions

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

Action # 1 Field check all proposed development sites

All proposed development sites will be field checked for the presence of prehistoric and historic remains before any work is done.

If evidence of prehistoric use are found on a proposed development site, an assessment will be made of the size and importance of the find. If the site proves to be significant, it will be protected by avoidance, capping, or excavation by archaeologists to document the indications of human use.

Natural Resources

Climate

Annual precipitation information is collected in Pipestone. There the annual precipitation is about 24 inches. Normally 11-12 inches fall during the growing season. The average growing season length is 145-150 days²¹. Windy conditions are very common. In fact, energy companies are developing wind generator farms on Buffalo Ridge due to constant, high prevailing winds. Prairie vegetation has adapted to dry droughty conditions and these desiccating winds contribute to the prevalence of prairie vegetation in this unit.

Average summer temperatures in Minnesota vary only a few degrees from north to south. The only exception to this is the North Shore of Lake Superior where temperatures are generally from 10 to 15 degrees Fahrenheit (5.5 degrees to 8 degrees C) cooler than southern Minnesota.

Average temperatures for the month of July in the Split Rock Creek area vary from a high of 84 degrees F (29 degrees C) to an average low of 60 degrees F (15 degrees C). This is similar to temperatures in north central Minnesota which experiences an average high of 80 degrees F (27 degree C) and average lows of 56 degrees F (13 degrees C)

During the winter there is a greater variation in temperature within the state. Average temperatures in January for the area surrounding Split Rock Creek vary from an average high of 22 degrees F (6 degrees C) to an average low of 2 degrees F (17 degrees C). This is about 10 degrees warmer than average temperatures for January in north central Minnesota.

Information on annual precipitation in the Split Rock Creek area comes from a weather recording station in Pipestone. There the total annual precipitation (rain and snow) is about 24 inches (61 cm). There is a big difference in the average number of snow cover days across Minnesota. In Pipestone, there are only 38 days with an average snow depth of six inches or more. North-central Minnesota averages over 100 days a year, and some parts of north-eastern Minnesota average 130 days a year with over six inches of snow on the ground.²² The Split Rock Creek State Park area is subject to considerable blowing and drifting which also has a negative effect on trails located in open areas. This results in a shorter winter recreation season in Pipestone County than areas in northern Minnesota.

Geology

Geologists believe the terrain in the Split Rock Creek area was formed by three major ice movements during the last glacial period. As these glaciers melted, they deposited a slightly irregular blanket of glacial till over the entire area. These deposits descend on a gentle slope from west to east across the south-western portion of the state.

Outcroppings of Sioux quartzite occur frequently in this portion of Minnesota. Prominent exposures of this rock can be seen along Split Rock Creek, near Pipestone and in Blue Mounds State Park. At the Pipestone National Monument, deposits of pipestone, or Catlinite, are found interspersed with the quartzite. Pipestone is a relatively soft stone which for centuries has been quarried by Native Americans to fashion pipes and other religious and decorative articles. The Pipestone National Monument, just north of Pipestone, was established to preserve this historically significant site.

The land in the Split Rock Creek area is part of a vast geographic formation known as the Coteau des Prairie. The Coteau is a high plateau of land consisting of several hundred feet of glacial material underlain by sedimentary rock. The Coteau extends for several hundred miles from northwestern Iowa to near the South Dakota/North Dakota border. In some areas, particularly on the western edge of the Coteau the change in elevation is quite dramatic. This change in elevation has resulted in different drainage patterns for the Coteau than for the rest of southwestern Minnesota. A major drainage divide

which runs roughly from Worthington to Lake Benton lies about fifteen miles east of the park. From the divide, the Mississippi River drainage flows to the northeast, while the Missouri River drainage flows to the south and southwest.

Soils

In general the north one half of the park is well-drained soils that formed in loamy glacial tills on the uplands with gently undulating to steep slopes. The southern one half of the park has more rock outcrops and well-drained soils formed from wind blown loess.

The most common soil type in the park (nearly one third) is Moody silty clay loam. It well-drained and is nearly level or gently sloping. This soil was formed under prairie community and will be very suitable for prairie reconstruction. It is suitable for most types of construction.

The Ihlen soil series is the second most common soil in the park (about 15%). These are well-drained soils made up of fine textured loess soil about 20 – 40 inches thick over the Sioux Quartzite bedrock, although rock outcrops are fairly common. These soils are droughty, susceptible to erosion, and bedrock is close to the surface. This soil was formed under prairie community and will be very suitable for dry prairie restoration. The rock outcrops and the tendency of the soil to be droughty are factors that need to be taken into consideration when developing any recreational facilities on these soils.

The areas along Split Rock Creek, and Split Rock Lake are fine silty clay loams that are moist and susceptible to flooding with some rock outcrops. The high moisture content and plasticity of these soils combined with the potential for flooding and the occasional rock outcrops pose severe restrictions for recreational development, and must be taken into consideration when developing recreation facilities in these areas.

Table # 7. Split Rock Creek Soils

Map Code	Mapping Unit	Acres within Statutory Boundary	% of Statutory Boundary
BrA	Brookings silty clay loam 0-3% slopes	22.7	1.7
BwD	Buse-Barnes loams 12-18% slopes	5.6	0.4
BxD	Buse-Sioux complex 12-18% slopes	4.4	0.3
BxE	Buse-Sioux complex 18-40% slopes	1.1	0.1
ByD	Buse-Vienna loams 12-18% slopes	4.8	0.4
DaB	Darnen loam 2-6% slopes	2.1	0.2
EsA	Estilline silty clay loam 0-2% slopes	10.3	0.8
EsB2	Estillene silty clay loam 2-6% slopes eroded	2.9	0.2
EtA	Estilline silty clay loam, deep 0-2% slopes	4.8	0.4
FoB2	Fordville loam 2-6% slopes, eroded	2.7	0.2
Gp	Gravel pit	9.4	0.7
IhA	Ihlen silty clay loam, 0-2% slopes	67.4	5.1
IhB	Ihlen silty clay loam 2-6% slopes	48.4	3.7
IrB	Ihlen-Rock outcrop complex 0-6% slopes	76.8	5.8
KrB	Kranzburg silty clay loam, 2-4% slopes	9.6	0.7
KrB2	Kranzburg silty clay loam, 3-6% slopes eroded	76.8	5.8
Lb	Lamoure silty clay loam, frequently flooded	93.6	7.1
Lc	Lamoure and La Prairie soils, frequently flooded	4.8	0.4
Lp	La Prairie loam	5.6	0.4
MoA	Moody silty clay loam, 0-2% slopes	47.5	3.6
MoB	Moody silty clay loam, 2-4% slopes	204.6	15.5
MoB2	Moody silty clay loam, 3-6% slopes eroded	187.7	14.2
Ra	Rauville silty clay loam	12.6	1.0
ReA	Renshaw loam, 0-2% slopes	3.5	0.3

ReB	Renshaw loam, 2-6% slopes	8.6	0.6
RnC2	Renshaw-Vienna-Buse loams, 6-12% slopes eroded	0.4	0.0
RoC	Rock outcrop-Ihlen complex, 6-12% slopes	48.9	3.7
TrA	Trent silty clay loam, 0-3% slopes	206.5	15.6
Lake	Open Water (Split Rock Creek Lake)	62.7	4.7
VbB	Vienna silty loam, 2-4% slopes	6.8	0.5
Wh	Whitewood silty clay loam	80.3	6.1
TOTAL		1,323.8	100.0

Vegetation at European Settlement

Before European settlement vegetation of the park was a prairie consisting of a mixture of tall and mid grasses on medium to fine textured, well-drained soils. Big bluestem, little bluestem, Indian grass, green needle grass, and porcupine grass were dominant. On steeper slopes little bluestem, big bluestem, needle and thread, and side oats grama dominated. The dominant grasses on wetter sites included blue joint, prairie cordgrass, northern reedgrass, switch grass, and prairie sand reed.²³

European settlers plowed parts of what is now the park and mowed or pastured the rest. After the establishment of Split Rock Creek Recreation Area in 1937, ploughed fields within the boundaries at that time were seeded to a brome grass mixture and green ash trees were planted in recreational areas.

Existing Vegetation

Plant communities were delineated from aerial photos and the following seven communities were identified.

Map Code

AG Agricultural Land 261 Acres (29%) These areas were row crops when the land was purchased. Land will be retained in agricultural row crops until resources are available to convert it to prairie vegetation.

CM Cattail Marsh 21 Acres (2%) Cattail (*Typha latifolia*) is the dominant species. It occurs in dense to open stands along with some cane (*Phragmites communis*) and three square (*Scirpus americanus*).

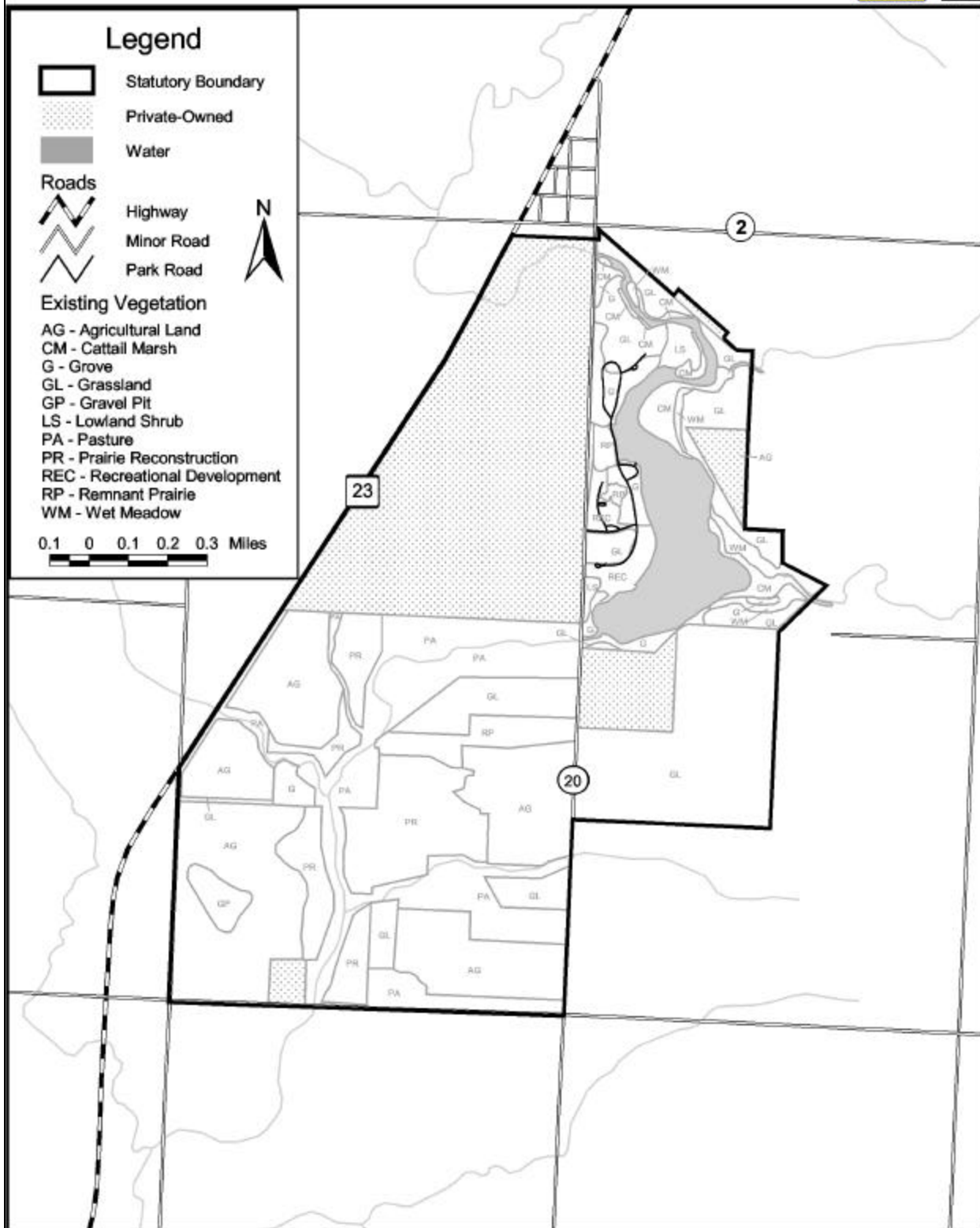
G Grove 34 Acres (4%) These are the wooded areas within the park. These areas are all heavily influenced by man and do not reflect the native plant communities of this area. Tree species include green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), and box elder (*Acer negundo*). Dutch elm disease has killed most of the mature elms. Much of the developed area of the park is characterized by even aged green ash (*Fraxinus pennsylvanica*). They were planted to provide shade for park users. The areas receiving low user pressure have an understory of common buckthorn (*Rhamnus cathartica*), honeysuckle (*Lonicera sp.*), elderberry (*Sambucus pubens cf.*), and other shrubs.

GL Grassland 228 Acres (25%) This community is dominated by grasses and forbs occupying abandoned agricultural fields. Smooth brome grass (*Bromus inermis*) dominates. Also present are Timothy (*Phleum pratense*), quack grass (*Agropyron sp.*), foxtail (*Setaria sp*), and a number of forbs: goldenrods (*solidago*), aster (*Aster*), Canadian thistle (*Cirsium arvense*) and milkweed (*Asclepias syriaca cf.*).

GP Gravel Pit 9 Acres (1%) The gravel was removed and the area reshaped to create a shallow bowl. This area has been revegetated with grasses, very similar to the grassland type above. Some of this area has also been used as a dump site for a number of years.

Split Rock Creek State Park

Existing Vegetation



LS Lowland Shrub 8 Acres (1%) The dominant shrub species are sandbar willow (Salix interior cf.) And American current (Ribes americanum). False Indigo-bush (Amorpha fruticosa) occurs occasionally. The ground layer is dominated by reed canary grass (Phalaris arundinaceae).

PA Pasture 170 Acres (19%) This community includes a mixture of grasslands along water courses, and rock outcrops, and former agricultural field areas. Most of this area has been grazed heavily. This community is dominated by smooth brome grass (Bromus inermis), with some timothy (Phieum pratense), quack grass (Agropyron sp.) and scattered native plants including big bluestem (Andropogon gerardi) and Indian grass (Sorghastrum nutans). This community will be converted to native prairie over time.

PR Prairie Reconstruction 119 Acres (13%) These are areas that were agricultural row crops, that have been reseeded with prairie plant species. The intent is to convert these areas to native prairie vegetation.

Rec Recreation Area 16 Acres (2%) This is the part of the park that is mowed grass with hardwood trees, and is managed to allow intensive use.

RP Remnant Prairie 119 Acres (13%) This community only occurs in a few small areas. These areas have either never been plowed or have been recolonized by native prairie species. The dominant grasses are big bluestem (Andropogon gerardi) and Indian grass (Sorghastrum nutans). On the upper slopes side oats grams (Bouteloua curtipendula) is common. Some of the forbs include blazing star (Liatris sp.), wild onion (Allium cernuum ct.), prairie coneflower (Ratibida sp.), and rose (Rose sp.). A number of weedy species occur on the edges of this community, including Canada thistle (Cirsium arvense) and goosefoot (Chenopodium sp.). There are two remnant prairies in the park that are listed communities in the Minnesota Natural Heritage Program's inventory. The area below the water tower has been managed by preservation, occasional prescribed burns, and removal of invading trees and shrubs. The area south of Split Rock Creek, and west of County 20 has been heavily grazed, but two years rest and one year burn have helped release many native plants.

WM Wet Meadow 13 Acres (1%) This community is dominated by reed canary grass (Phalaris arundinaceae).

Wildlife

Surveys of wildlife occurrence and abundance are being developed for the park. There is good survey information for Pipestone National Monument which is seven miles north of the park. An estimate of the wildlife species that may be found in the park will be extrapolated from the data if park specific surveys have not been completed. Wildlife habitat in the surrounding area is very limited for many species. The dominant land use in Pipestone County is agriculture. Eighty-six percent of the total land surface is crop land and 12 percent is pasture.

Mammals

Twenty mammal species have been identified at the Pipestone National Monument²⁴. Many of these species live in or pass through Split Rock Creek State Park. The western harvest mouse (Reithrodontomys megalotis) is known to occur in the park. The Minnesota Natural Heritage Program identifies this species as "rare" in Minnesota. It was found in the prairie on the eastern slope below the water tower. (Minnesota Natural Heritage Program records).

Birds

One hundred and ninety seven species have been identified at Split Rock Creek State Park, this list of birds observed in the park is included in the Management Plan Details (it is available at the park, regional and central DNR office). You can expect to see a variety of prairie and grassland birds, wetland birds, Raptors, and cosmopolitan species in the park. The trees in the park provide habitat for tree nesting and cavity nesting species. The opportunity to observe marsh bird life is not locally available elsewhere. A



short-eared owl was reported in the park January, 1981. This species is identified as “threatened” by the Minnesota Natural Heritage program. It is occasionally seen during the winter in this part of the state.

Reptiles & Amphibians

Eight species have been recorded at the Pipestone National Monument. The population of two species are particularly of interest to the Minnesota Natural Heritage program, and any sightings of Blanchard’s cricket frog or Blandings turtle should be reported to either the DNR non-game specialist or the Minnesota Natural Heritage Program.

Butterflies

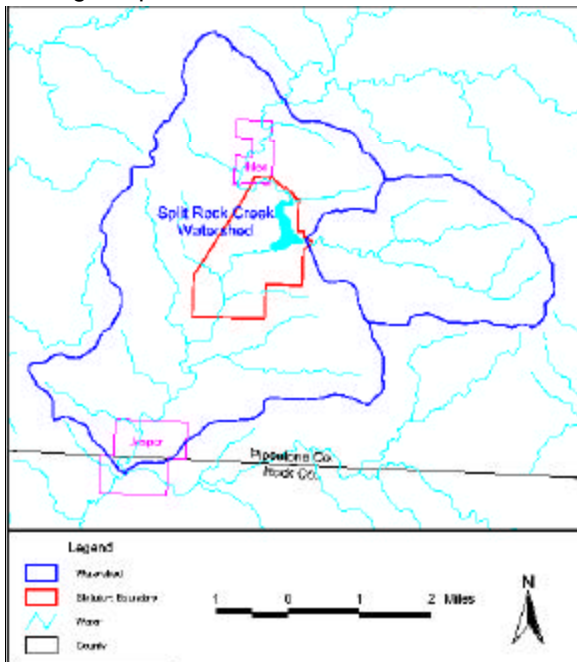
Twenty five species of butterflies were identified Split Rock Creek State Park during the summer and fall of 2001 by Dennis Skadsen of Natural History Investigations²⁵. Two of these butterfly species identified are; powsheik skipper (*Oarisma powesheik*) and regal fritillary (*Speyeria idalia*) which are considered species of special concern in Minnesota. Both these species and many other butterfly species require prairie and grassland habitat. Returning much of Split Rock Creek State Park to prairie vegetation will eventually provide much needed habitat for a variety of butterflies.

Waters and Fisheries

Nearly all of the Inner Coteau Ecological Subsection drains southwest into the Missouri River system. A small part drains northeast down the Coteau escarpment and eventually into the Minnesota River. There are few lakes and a well established, dendritic drainage network. This is due in large part to the easily eroded loess soil.

Surface Waters

Recreational activities at Split Rock Creek focus on the 81 acre Split Rock Lake which was created in 1937 by the construction of a dam on Split Rock Creek. The lake has a maximum depth of 16 feet and an average depth of about 6 feet.



No water quality data is available on Split Rock Lake. Summer algal blooms have been reported in the past and turbidity may be the limiting factor for submergent plant growth. Turbidity can be the result of a number of factors. These include: erosion in the watershed, algal growth, and rough fish action. An increase in turbidity changes the numbers and kinds of organisms in water. It decreases the amount of light available to plants and can lead to a decrease in the amount of food available for waterfowl, fish, and other organisms.

The Split Rock Creek watershed is 41 square miles (106 sq. km.). Most of the precipitation occurs as heavy rain in the spring and summer. Lake level records, monthly precipitation data, and predicted fall soil moisture values since 1941 indicate the lake fills to capacity in the spring. A slight lowering might occur during summer, fall, and winter, but generally the lake level is constant. Water levels have dropped 1 to 3 feet (.3 to 1 m) during dry years when summer losses were

not replaced. Severe drought conditions can result in very low water levels.

Groundwater

The thickness of glacial drift in the vicinity of the park varies from 0-200 feet (0-61 m). This is underlain by bedrock of Sioux quartzite. Because of the nature of the Sioux quartzite aquifer, wells are often drilled to depths of several hundred feet. Records from several municipalities in the area indicate a range in well depth of 241 to 596 feet (72 to 179 m). The nearby community of Ihlen, Minnesota drilled its well to a depth of 406 feet (122 m). The Sioux quartzite aquifer provides the best water quality in the area. Where the drift is thin, however, the aquifer is susceptible to contamination from the surface. Although high nitrate levels frequently occur in this portion of the Missouri River basin, water quality testing in the park well indicates a safe, reliable source of water.

Fisheries

Split Rock Lake is the only 'lake' in Pipestone County. The creation of the lake and the subsequent stocking program which began in 1945 has resulted in the only viable fishing resource in the area. Fishing occurs year-round and is one of the most popular activities in the park.

The management plan indicates Split Rock is primarily managed for bluegill and largemouth bass with secondary species including walleye, channel catfish, black crappie, and yellow perch. To promote and maintain healthy fish populations, pollution needs to be controlled. Fish habitat is directly affected by water quality. Nutrients, sediments and other waste can drastically alter the chemical and physical characteristics of a lake. It is important to maintain, if not improve, the water quality of Split Rock through watershed management. Improved land use practices will help insure this fishery can be enjoyed by future generations²⁶.

Endangered, Threatened and Special Concern Species

The potential of impacting these elements that will be assessed when management actions are considered. These species have been identified in the area, so the natural resource assessment would check for these species in particular before undertaking disruptive development and management actions in the park.

Table # 8. Endangered, threatened and Species of Special Concern

Topeka Shiner (<i>Notropis Topeka</i>)	State Special Concern & Federally Endangered
Hairy Water clover (<i>Marsilea Vestita</i>)	State Endangered
Chestnut-collared Longspur (<i>Calcarius omatus</i>)	State Endangered
Short-pointed Umbrella-Sedge (<i>Cyperus Acuminatus</i>)	State Threatened
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	State Threatened
Wilson's Phalarope (<i>Phalaropus tricolor</i>)	State Threatened
Regal Fritillary (<i>Speyeria Idalia</i>)	State Special Concern
Short-eared Owl (<i>Asio flammeus</i>)	State Special Concern
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	State Special Concern
Franklin's Gull (<i>Larus pipixcan</i>)	State Special Concern
Marbled Godwit (<i>limosa fedoa</i>)	State Special Concern
American White Pelican (<i>Pelecanus erythrohynchos</i>)	State Special Concern
Forster's Tern (<i>Sterna forsteri</i>)	State Special Concern
Dry Prairie Hill Subtype	Not listed, but being watched
Mesic Prairie Crystalline Bedrock Subtype	Not listed, but being watched
Mouse-Ear Chickweed (<i>Cerastium Brachypodum</i>)	Not listed, but being watched

Natural Communities

Dry Prairie (Southwest) Hill Subtype

This prairie subtype occurs on steep terrain. Its vegetation includes those common to other dry prairies, but also several of the species more likely to be found on the moister mesic prairies²⁷. The hillside east of the stone water tower is an example of this prairie type.

Mesic Prairie (Southwest) Crystalline Bedrock Subtype

The crystalline bedrock prairie subtype is found on rolling to level prairies on thin soils over bedrock. It is found on either quartzite or granite bedrock²⁸. The unplowed prairie at the top of the hill, west of County 20 is an example of this prairie type. As more of the land with rock outcrops is managed for prairie, more of the park is likely to be more representative of this type of prairie.

Animals

Topeka shiner

The Topeka shiner (*Notropis topeka*) is listed as Federally Endangered by US Fish and Wildlife Service, and listed as Special Concern by MnDNR. It is a small silver minnow, less than three inches long, with a dark stripe down its side, and a dark wedge-shaped spot at the base of the tail fin.



Historically, the Topeka shiner occupied prairie streams in the central portion of the Great Plains. Today, it is absent from many of those streams and occurs at only 20% its historic sites²⁹. Recent studies by Jay T. Hatch in Minnesota have shown that Topeka shiners are far more common than once was thought. Although the species is restricted to the Missouri River drainage of southwestern Minnesota, it has been found to date at 53 sites in 34 different watersheds³⁰. Sampling in Minnesota is continuing. The U.S. Fish and Wildlife Service, the Minnesota Department of Natural Resources and the Bell Museum of Natural History are cooperating in a study of

this species in Minnesota.

In the northwestern portion of its range Topeka shiners commonly occur in periodically turbid waters whose sand, gravel or rubble bottoms are covered by 5 cm or more of silt and detritus. Topeka shiners often are far more abundant in off-channel oxbows and excavated pools than they are in main channel pools and runs³¹. Topeka shiners have been discovered in Split Rock Creek down stream from the dam.

Western Harvest Mouse

This species is unusual in Minnesota, its population is being studied now and may be officially listed in the future. The Western Harvest Mouse (*Reithrodontomys megalotis*) is "4 1/2 - 6 3/4" (11.4 - 17 cm) long.



Brownish above, buff along sides; white below. Grooved incisors³². Its habitat is dry weedy or grassy areas. It is found in much of western United States and extreme southwestern Canada east to SW. Wisconsin, NW. Indiana, NE. Arkansas, and W. Texas. Although primarily a seed-eater, in spring this species also eats new growth and in summer consumes many insects, especially grasshoppers³³.

Regal Fritillary

This species is listed as of special concern in Minnesota. This species is dependent on prairie violet for part of its life cycle, so prairie management that encourages this plant is important to managing a viable population of regal fritillary butterflies.



Plants

Mouse-Ear Chickweed

This species is not common in Minnesota. There is not a lot of information on its population, so it is being studied now and may be officially listed in the future.

Short-Pointed Umbrella-sedge

This species is listed as threatened in Minnesota. It is an inconspicuous wetland sedge. It is an annual or short-lived perennial that is reportedly tolerant of alkaline conditions. It occurs widely in the United States. This plant is found in shallow rock pools only a square meter or so in size and 5-7 centimetres deep. There is typically a thin layer of organic material in which the plants are rooted. This is a sparsely vegetated, ephemeral habitat that may support only a few scattered plants.³⁴

Little Barley

This species is not common in Minnesota, but there is not a lot of information on its population, so it is being studied to determine if it should be listed in the future.

Hairy Water Clover

This species is listed as endangered in Minnesota. It is a curious plant, sometimes called “water clover” because it superficially resembles clover, but it is actually a primitive relative of the ferns. It can develop both aquatic and terrestrial forms depending on the habitat. The plants appear to be pioneers in early-successional habitats and populations may not persist long. They apparently colonize a site, grow rapidly, and then decline when faced with competition from later-successional species. However, they leave durable sporocarps in the soil that remain viable for up to 100 years, raising the possibility of a reappearance when conditions become more favorable. It prefers moist soil at the margins of shallow prairie pools that are sparsely vegetated and receive direct sunlight³⁵.

Exotic Species and Other Pests

Exotic species are those species that are introduced into ecosystems where they are not native. Invasive species can be extremely disruptive to native ecosystems. Exotic plant species are a major hindrance to restoring the former agricultural lands to prairie vegetation. Prairie restoration activities will be to discourage exotic plant species through burning, mowing, competition from native plants, and if necessary herbicide application. Some areas will be maintained in agricultural crops for a few years until there is sufficient native prairie plant seed and project funds available to actively manage for prairie. Thereby reducing the exotic plant species that would normally invade fallow fields.

European Buckthorn

One species that has been very invasive in the park is European Buckthorn (*Rhamnus Cathartica*) This Shrub or small tree reaches a height of 25' (7.6m); trunk diameter up to 10" (25cm) It has small black fruits up to 1/4" (0.6cm) diameter containing 3-4 seeds. Leaves broadly elliptic, rounded to pointed at the

tip, and toothed. Upper leaf surface dark glossy green. Leaves stay green late into fall, after all other leaves have fallen. Most of the understory around the campground is this plant.

European buckthorn was introduced to North America as an ornamental shrub. It is native to Eurasia. The fruit causes a severe laxative effect, quickly distributing the seeds through birds. Buckthorn invades mainly woodlands and savannas, although it may also be found in prairies and open fields. Once established buckthorn crowds or shades out native shrubs and herbs, often completely obliterating them. European buckthorn control is also of interest to small grain producers; the shrub is an alternate host of the crown rust of oats. MN Interagency Exotic Species Task Force 1991 assigned European Buckthorn a future threat ranking of severe, and a current threat ranking of severe³⁶.

Carp

Introduced carp dominate fish communities in many waterways in Minnesota. They are known to damage aquatic plants and increase water turbidity but their impacts on native fish species are not yet clear.

Noxious Weeds

A noxious weed, as defined by Minnesota Law, is an annual, biennial, or perennial which is deemed by the Commissioner of Agriculture to be injurious to public health, public roads, environment, crops, livestock, and other property. In Minnesota, there are ten weeds on the primary noxious weeds list. They are:

Table #9. Noxious Weeds

Annual Weeds

Hemp Cannabis sativa

Biennial Weeds

Bull Thistle Cirsium vulgare
Musk Thistle Carduus nutans
Plumeless Thistle Carduus acanthoides

Perennial Weeds

Canada Thistle Cirsium arvensis
Field Bindweed Convolvulus arvensis
Leafy Spurge Euphorbia esula
Perennial Sowthistle Sonchus arvensis
Poison Ivy Toxicodendron radicans
Purple Loosestrife Lythrum salicaria, virgatum

According to Minnesota law, these primary noxious weeds must be controlled on all private and public land in the state³⁷.

Three of these noxious weed species, Canada thistle, leafy spurge and poison Ivy are in the park, and management actions are being taken to control and kill them. Canada thistle (*Cirsium arvense*) is a colony-forming perennial from deep underground and extensive horizontal roots. Stems are 1-4 ft. tall, ridged, branching above. Leaves are alternate, lacking petioles, oblong or lance-shaped, divided into spiny tipped irregular lobes. Flowers are unisexual, on separate plants; flowers purple in heads 1/2-3/4 inch in diameter; involucre bracts spineless. Control techniques include: plant competition to prevent the invasion of Canada thistle, biological control by releasing insects that attack the Canada thistle, intensive tillage several times during the growing season, herbicide application over 4-5 years or mowing several times during the growing season to control its spread. There is a population of leafy spurge (*Euphorbia esula*) in an opening between the picnic ground and the dam that is being managed by imported insects.

Recommendations and Actions

The goal of the resource management program for Split Rock Creek State Park is to sustain healthy ecosystems into the future. Ecosystems include all living organisms (plants, animals, micro organisms, people) and their physical surroundings (soil, water, air) plus the processes that maintain them. Ecosystems may be small (a rotting log or an isolated pond) medium sized (a forest stand or watershed) or large (Southwestern Minnesota). Healthy ecosystems will provide the services we demand of the park: beautiful scenery, recreational fishery, opportunities to see wildflowers and wildlife, and more.

Sustaining healthy ecosystems means not only keeping the land and water resources at Split Rock Creek healthy; it means recognizing that Split Rock Creek State Park plays a role in maintaining the ecological health of a much broader area. This goal cannot be achieved in isolation—the cooperation of neighbours and area public land managers is important.

The objectives and recommendations that follow are intended to provide general direction for the resource management activities that will be conducted in the park. Annual work planning meetings will use these recommendations to set short-term goals and priorities. Some management activities are quite specific, and the resources and steps needed to ensure its maintenance are known. Other resources we know less about, and specific management actions will be developed as better information is obtained.

Objective 1: Sustain healthy natural communities

Management and protection efforts will emphasize native communities and minimize the population of aggressive exotic species.

Objective 2: Manage the majority of the park to preserve and reestablish an appropriate native prairie community.

Prior to European settlement, the majority of this park was native prairie. Very little of this community remains.

Objective 3: Manage the periphery of Split Rock Lake for recreational experience

Split Rock Lake is a manmade reservoir, not a natural part of the native community in this ECS subsection. The lake is very important in maintaining the scenic and recreational opportunities of this park. Resource management adjacent to this lake will focus on using trees and shrubs that are native prairie edge species to create a shaded environment suitable for recreation. Significant natural resources such as the remnant upland prairie areas will be preserved and actively managed.

Objective 4: Ensure the long term survival of rare and endangered species within the park.

The identified rare and endangered species in Split Rock Creek State Park will be preserved and managed to ensure survival of these species. Habitat will be established to encourage other rare and endangered prairie species that have not been identified in the park yet.

There are many actions that will need to be taken to implement these objectives.

Action #2 Restore and maintain the present prairie remnants within the park.

Restoring the existing native prairie remnants through active management is the first step toward preserving a viable prairie community in this park. These areas provide information about what the local native prairie was like, and can provide a seed source for future prairie restoration. It may take a century to restore present agricultural land to a true prairie community. These lands can be restored in a much shorter time frame.

Action #3 Convert grasslands to prairie.

The areas of the park that have not been plowed but only heavily grazed have the potential to be converted to a native condition. Many native plant, animal, and insect species still exist in these areas, but their populations have been minimized by the effects of extensive grazing. These areas can be

converted by variety of management techniques including: inter-seeding and transplanting native plant species; mowing; burning; and perhaps occasional grazing. Insects and animals native to this prairie community will be restored when possible.

Action #4 Convert former agricultural land to prairie.

The areas of the park that have been in agricultural crop production for many years have almost no native plant species and will be colonized by aggressive exotic species if simply left fallow. These areas will be kept in agricultural production until native seed and resource management funding is available to actively work to convert them to native plant species. The amount of land in agricultural production will continue to be reduced as more and more land is transformed into stable native prairie plant populations that can compete with the aggressive exotic species. The prairie conversion efforts will focus first on areas adjacent to Split Rock Creek. This priority will restore the scenic character of the creek, and serve as a buffer to minimize surface runoff concerns. These areas will be converted by a variety of management techniques including: reducing the amount of exotic weed species seeds available in the soil; seeding native prairie plants; inter-planting native prairie seeds and plants; mowing; and burning. Insects and animals native to this prairie community will be restored when possible.

Action #5 Honor the existing grazing lease.

One land parcel was acquired with the stipulation that the present grazing lease be honored. Therefore some cattle grazing will continue in the park until 2005. Grazing can be useful for prairie management so a grazing pattern that is appropriate for both the lessee and prairie restoration will be sought.

Action #6 Preserve Topeka Shiner habitat.

Topeka Shiners have been identified in Split Rock Creek both upstream and down stream from Split Rock Lake. Because this species is designated as an endangered species on the federal lists, no actions will be taken by the DNR that would have a detrimental effect on the species or their habitat. As more is learned about the habitat needs of the Topeka shiner minnows, steps will be taken to preserve their habitat as the Federal Topeka Shiner Recovery Plan is completed.

Action #7 Minimize shoreline erosion.

The shoreline of Split Rock Lake is susceptible to erosion. The most erosion takes place during high water. Work to maintain dense surface vegetation on the shoreline, by managing visitor impacts and surface runoff.

Action #8 Protect Split Rock Creek.

Split Rock Creek is the visual and ecological focus of Split Rock Creek State Park. Preserving the creek's scenic qualities, shorelines, water quality, and Topeka Shiner habitat is essential to maintaining the park quality experience in the future.

Action #9 Maintain or improve the water quality in Split Rock Creek and Lake.

The water quality and silt load in Split Rock Creek as it enters the park is dependent on land uses upstream from the park and is not something park staff manage directly. Park staff can however can raise awareness of water quality issues, and support local land use decisions that will result in maintaining the water quality and reducing the silt load. This will maintain Split Rock Creek and Split Rock Lake for a variety of recreational opportunities, and preserve the habitat for Topeka Shiners.

Action #10 Control exotic species populations.

Exotic species populations are often able to out compete native species and take over specific niches of a natural community. These plant and animal species reduce the viability of habitat for native plants, animals, and insects. Special control measures must be taken to allow native species to compete effectively with these exotic species. Some of the controls that will be used are: maintaining a healthy population of native species, fire, biological controls, frequent mowing, frequent tilling, individual plant removal, or chemical treatment.

Action #11 Maintain healthy shade trees.

The planted ash trees have provided shade for over 70 years. They have existed and grown slowly, but never flourished. Those that remain are stressed, and secondary rot and fungus are common. Tree species that are native to the area such as silver maple, bur oaks, and cottonwoods will be interplanted to replace the green ash overtime.

Action #12 Maintain healthy native understory screening.

A well defined understory is desirable in the shaded groves both for wildlife and visual screening. The present understory is composed primarily of non-native plant species, European buckthorn and caragana. These shrubs and small trees will be replaced with native plant species that will provide a dense visual screen, and more desirable wildlife habitat.

Action #13 Convert old gravel pit to prairie

Remove the accumulated trash, and convert the area to native prairie vegetation through seeding.

Interpretation

Introduction

The purpose of interpretive services is to provide the connection between the visitor and the resource. Interpretation's role is to enhance the visitor's experience with park resources and the natural and cultural environment in which they live. Also, interpretation is to provide first-hand, resource-based accessible programs and activities that create a sense of stewardship for Minnesota's natural and cultural heritage by illuminating the changing relationship between people and landscapes over time.

Minnesota State Parks Interpretive Services Goals

The Division of Parks and Recreation views interpretation as a site specific, DNR sponsored, communication process using recreational and environmental experiences to reveal the meanings and relationships of our natural and cultural heritage. To fulfill the DNR's legislated obligation to provide environmental education and interpretation in state parks, the Division's interpretive programs aim at four goals to:

1. Promote increased understanding, appreciation and enjoyment of natural and cultural resources in Minnesota
2. Assist in protecting each State Park's resources
3. Promote public understanding of, and support for, the Minnesota Department of Natural Resources and its Division of Parks and Recreation
4. Increase public awareness of critical environmental problems on a local, state, national and worldwide scope

Themes

The themes listed are for the primary resources listed in the Inventory section. A theme is a statement or question that is stated simply and clearly, and contains one major idea or concept. Themes should be easily identified and relevant to the resource, the area, the visitor, and the interpreter. The interpretive theme is the title to the story you want to tell.

Connecting Themes

- Glacial activity shaped the landscape we see today.
- People have shaped the natural environment here for centuries.
- Split Rock Creek State Park exists today because of efforts to protect this area.

Primary Themes

Cultural

- Who were the earliest people to live in this area?
- How have people used Split Rock Creek over time?
- How did European settlers change the land?
- New Deal work programs build a dam and create Split Rock Creek State Park.
- What is the mission of Split Rock Creek State Park?

Geologic

- How was Split Rock Creek formed?
- How did glaciers shape the Split Rock Creek area?
- How did Sioux quartzite form?
- We all live in a watershed.

Biologic

- What is a prairie?
- Fire on the prairie - natural necessity or natural disaster?
- Clean water is essential for all life along Split Rock Creek.

- Land use affects water quality and quantity
- Alien plants degrade native communities
- Can we restore Split Rock Creek State Park's prairie communities?
- Can the Topeka Shiner survive in Split Rock Creek?
- All life is connected to everything else.
- What snakes live in Split Rock Creek State Park?
- What butterflies live in Split Rock Creek State Park?
- What insects live in Split Rock Creek State Park?
- What birds live in Split Rock Creek State Park?
- What mammals live in Split Rock Creek State Park?
- What fish are in the park's lake?

Recreation

- The best methods for observing wildlife in Split Rock Creek State Park.
- You can take great photos of Split Rock Creek State Park.
- Tips for canoeing on Split Rock Creek and lake.
- Tips for fishing on Split Rock Creek and lake.
- Tips for bicycling in the Prairie des Coteau landscape.
- Tips for horse riders in Split Rock Creek State Park.

Management

- Fire is an important part of prairie management at Split Rock Creek.
- Why are herbicides used on the park's grassland areas?
- How is Split Rock Creek lake managed?
- How does the park reconstruct a prairie?
- What are the tools used to manage Split Rock Creek's natural environment?
- How can horse riders help preserve Split Rock Creek State Park?
- How can one little fish impact a watershed?

Existing Interpretive Services

Personal Interpretation

A Minnesota State Park Naturalist has not been assigned to Split Rock Creek State Park. Occasionally the park naturalist or naturalist intern from Blue Mounds State Park has conducted interpretive programs here.

Non-Personal Interpretation

Several displays on the park's history are located in a small room within the beach house. An interpretive sign at the dam tells of the dam's history and of the collapse and destruction of the dam's earthen berm in 1993.

Staff

The Minnesota State Parks Statewide Interpretive Services Plan does not recommend that a park naturalist be assigned to Split Rock Creek State Park at this time, but proposes occasional programs and activities from the naturalist at Blue Mounds State Park.

Cooperative Interpretive / Environmental Education Analysis

There are several museums in the vicinity of Split Rock Creek State Park. Every county in all three states within 60 miles has a county historical museum. These are good resources for people to learn about local history from around the 1850's on, with some basic information on the prehistoric use of the area's resources. In general, very little interpretation of the area's natural history is provided. The combination of natural and cultural history information and interpretation is primarily provided at Pipestone National Monument, Blue Mounds State Park Interpretive Center.

Recommendations and Actions

According to the Minnesota State Park Interpretive Services Plan, recommended actions are to increase non-personal efforts and to provide occasional programming from Blue Mounds State Park naturalist.

Staffing

The Minnesota State Park Interpretive Services Plan does not recommend that a naturalist position be established at this park, but proposes occasional programming from the naturalist at Blue Mounds State Park.

Action #14 Develop non-personal interpretation

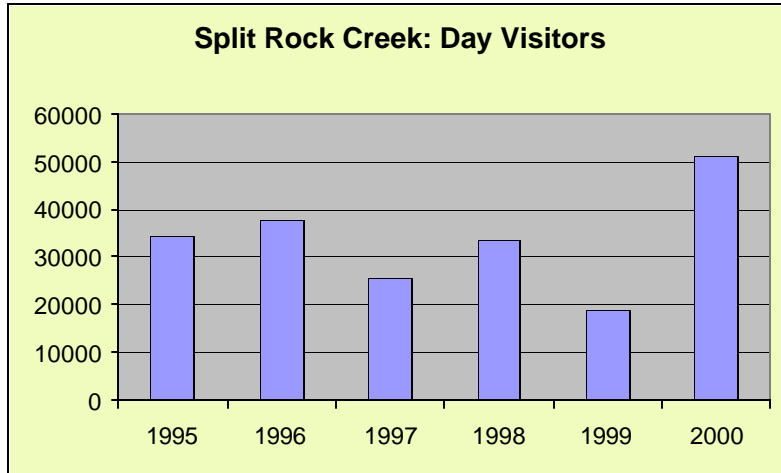
The interpretive effort at Split Rock Creek should add value to the park visitors' experience through parks many stories. Thematic self-guided interpretive experiences utilizing appropriate interpretive techniques and methods will be developed in cooperation with the park management and resource staff. These various interpretive themes will educate park visitors and protect park resources. Priority should be given to telling the stories of prairie and prairie reconstruction and management, lake and fisheries management, horse rider on the park's trails, and the natural and human forces that shaped the landscape.

Action #15 Cultivate interpretive assistance

Develop relationships and agreements with other providers for environmental education and interpretation in the park.

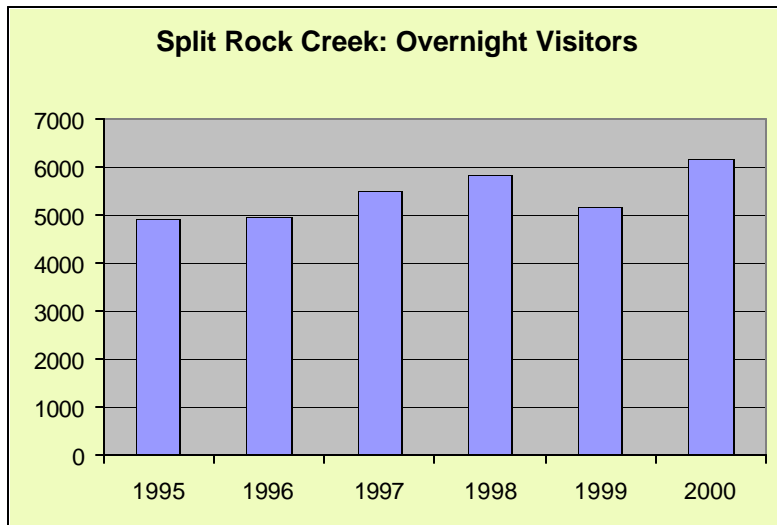
Recreation

The recreational use of Split Rock Creek State Park has grown in the past few years. The additional land in the park affords many opportunities to provide a variety of additional or expanded recreational opportunities which will encourage continued visitor growth. The amount of day use visitation is often dependent on weather. Hot sultry days early in the year, bring many people to the swimming beach to enjoy the lake swimming. Good fishing success also brings many people to the park. Camper visitation patterns are more stable than day visitation. Camping outings are often planned well in advance, and visitors are more willing to put up with some bad weather, while day use is more weather dependant. The number of campers in this park is most often limited by the modest number of campsites or campsites with electrical hook-ups. Split Rock Creek State Park campground has averaged 71% occupancy from May through August during the past four years. The electrical sites have had an even higher occupancy rate. Split Rock Creek also has established an image of a small park with limited recreational opportunities. With the expanded park landbase and additional recreational opportunities, This park will continue to attract new visitors as its facilities are expanded, and the native resources are restored.



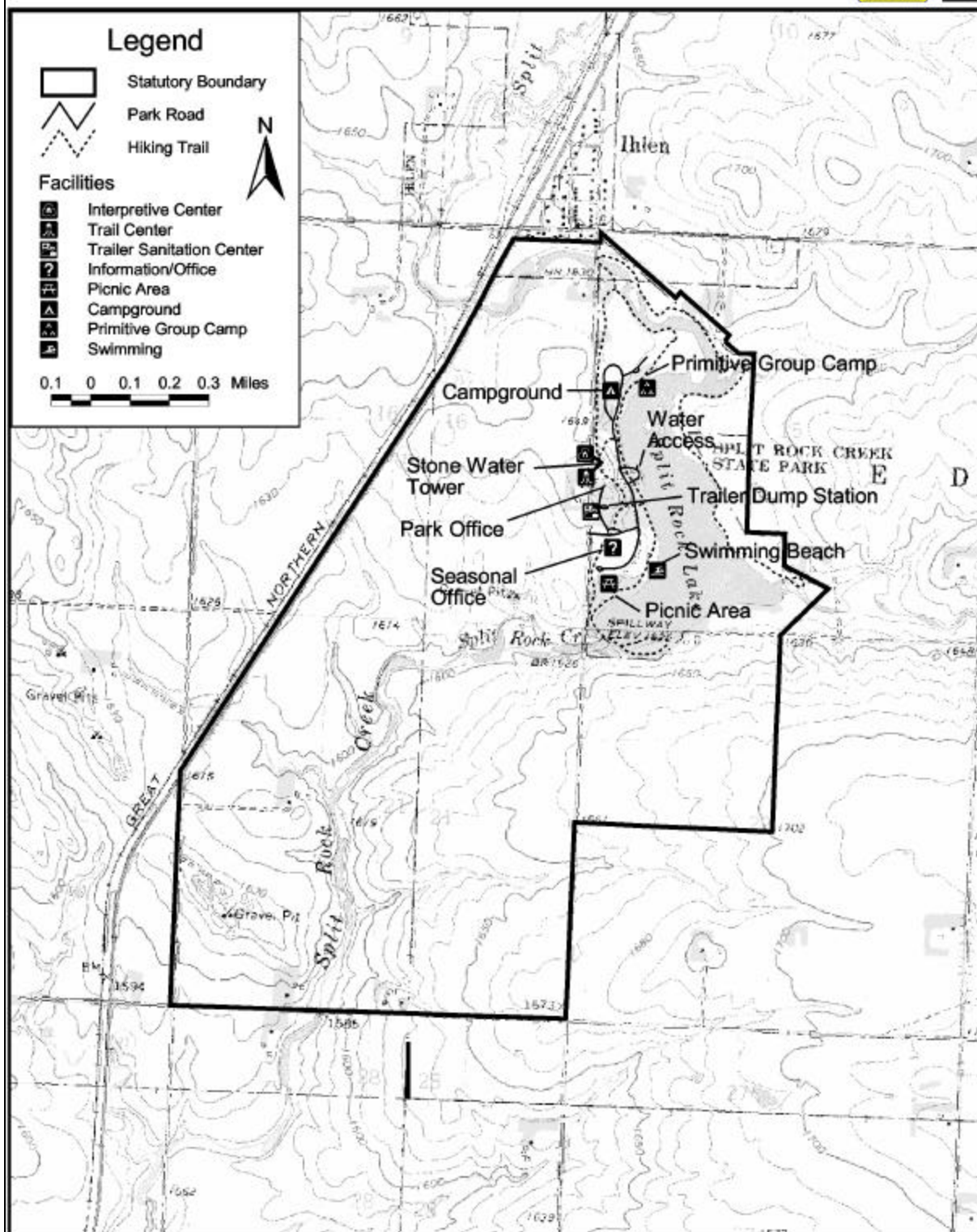
enjoy the lake swimming. Good fishing success also brings many people to the park. Camper visitation patterns are more stable than day visitation. Camping outings are often planned well in advance, and visitors are more willing to put up with some bad weather, while day use is more weather dependant. The number of campers in this park is most often limited by the modest number of campsites or campsites with electrical hook-ups. Split Rock Creek State Park campground has averaged 71% occupancy from May through August during the past four years. The electrical sites have had

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Split Rock Creek State Park

Existing Development



Recreational Development

Camping

- 28 drive-in campsites are available. They are shaded sites located off hard-surfaced campground road adjacent to Split Rock Lake.
- 19 of the drive-in campsites have electricity.
- Recreational vehicles with a maximum length of 52 feet can be accommodated in the campground.
- One handicapped accessible site has electricity and is adjacent to handicapped accessible showers and toilets.
- 6 Walk-in campsites are shaded sites within 30 yards of parking area.
- Primitive group camp for tents only camping. Sites are shaded and include fire-rings, picnic tables and vault toilets.

Day Use



- Swimming area with a sandy beach.
- Beach house provides changing rooms for swimmers, vault toilets are available in the vicinity.
- Picnic area is a shaded area adjacent to Split Rock Lake. It has tables, fire rings, grills, vault toilets, and an enclosed picnic shelter.
- Swing set in the picnic area.
- Volley ball court in the picnic area.
- Horseshoe court in the picnic area.
- Sliding hill is adjacent to the boat landing, with a warming house in the former water tower at the top of the hill.

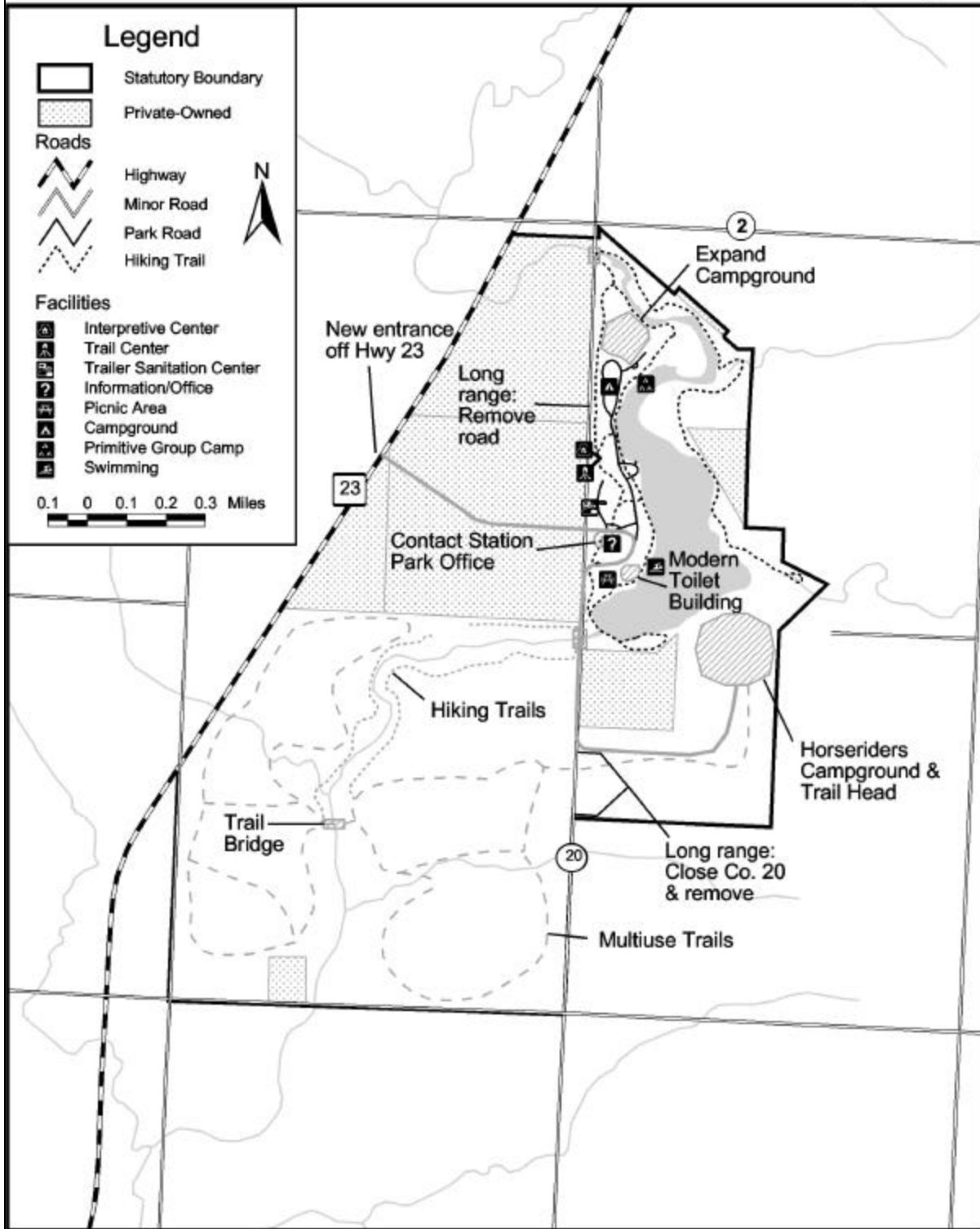
Visitor Services

- The visitor center is located in the beach house and includes exhibits that interpret the history of the lake and the dam and serves as a trail-center in the winter.
- Naturalist programs are offered occasionally from Memorial Weekend through Labor Day. Program service is based out of Blue Mounds State Park.
- Rowboats, canoes and paddleboat rentals available Memorial Weekend through Labor Day
- Firewood available Memorial Weekend through Labor Day at Park Office
- Public pay phone outside park office

Trails

- .5 mile long handicapped Accessible Trail begins at beach area, winds through picnic grounds and across the dam.
- 4.5 mile long self guided hiking and interpretive trail begins at the campground.
- Snowshoe anywhere in park during the winter.

Split Rock Creek State Park Proposed Development



Recommendations and Actions

Action #16 Expand drive-in campground

The present campground is full most summer weekends. Additional campsites would be used if they were available. There is sufficient area north of the present campground on soils suitable for campground development to construct an additional 8 – 10 campsites. These campsites should be designed for easy use by recreational vehicles, with electricity, and at least a few pull through sites. Limited parking for extra cars is a problem in this campground that should be addressed when it is expanded. The projected additional use of the lakeshore, trails and swimming beach can be accommodated without significant impact.

Action #17 Construct a new park office

Park administration is now carried on at two locations. Most of the administration is done in the park office in the service court. This is the year round office, with computers, files, fax and normal office facilities. A small seasonal office adjacent to the park entrance road is staffed during high use periods. This seasonal office is closed and signs direct park visitors to the office in the service court when park use is expected to be relatively low. The seasonal office has very limited space, and minimal facilities. The efficiency of the park staff can be greatly increased by constructing a year round park office adjacent to the park entrance road.

Action #18 Construct a modern toilet building

Two sets of vault toilets are provided for the picnic grounds and the swimming beach. These facilities are functional, but provide only the most minimal service for park visitors. The amount of use that these facilities received grew in 2000 to over 5,000 visitors per year. A modern toilet building located where it would be convenient for both the picnic ground and swimming beach users would provide a very desired service for park visitors, increasing both park use and visitor satisfaction.



Picnic Shelter

Action #19 Develop a hiking trail around Split Rock Creek Lake

The present 4.5 mile hiking trail allows park visitors to almost hike all the way around the lake. Finishing this trail loop is a high priority for park visitors. Two bridge or floating boardwalk crossings are needed to allow visitors to complete the hike around the lake. The trail will be designed to minimize the impact to the wetlands it crosses, while providing easy access for the public to see and understand these wetlands.

Action #20 Develop a creek and prairie hiking trail system

The acquisition of additional lands downstream from the dam has opened up great new opportunities for hiking in Split Rock Creek State Park. Initially hiking trail development will focus on providing access and the opportunity to experience the area along Split Rock Creek. Further expansion of the trail system will be implemented as other areas are reclaimed from agricultural use. The eventual trail system will provide park visitors the opportunity to experience both the refreshing Split Rock Creek environs, and the expansive rolling prairie hillsides. One trail bridge over the Split Rock Creek that will accommodate both horse riders and hikers will be built where it will have the least ecological impact and allow good recreational use of both sides of the creek.

Action #21 Provide for recreational snowshoe use

Snowshoe use is an excellent way to enjoy the park in the winter. Snowshoes function well in a variety of snow conditions, and can be used more often in the varied snow conditions of the Split Rock Creek area. Snowshoeing is allowed anywhere in the park during the winter.

Action #22 Develop a horse trail system

A horse trail system will be developed that provides a high quality recreational experience that can be maintained without adversely affecting the restoration of the prairie environment. A series of loop trails that are primarily on the uplands, with good views of Split Rock Creek and the surrounding countryside will be developed. This would be a maximum of 6.5 miles of trail. This trail system will provide a good opportunity to experience and learn about the prairie environment. It will be designed to be a safe trail system that can be enjoyed by both novice and experienced riders. The Division of Parks and Recreation does not have the authority to build trails outside of the Split Rock Creek State Park statutory boundary. There is not enough room within Split Rock Creek State Park to provide for a day-long horse ride experience. The park trails will have to be used in conjunction with adjacent county or township roads for an entire day of riding. There is the potential to develop a trail connection from Split Rock Creek State Park to the Casey Jones State Trail that would provide a diversity of off-road riding experiences. For this connection to be implemented, it would have to be pursued by the MnDNR Bureau of Trails and Waterways with the support of local citizens.

Action #23 Develop a Horse Campground

The horse campground will be built south of Split Rock Lake. This site has suitable soils for this development, is not very visible except in distant views from the rest of the park, is in an area which does not have high quality prairie, provides good access to the future trail system, is in an area where trees and shade will be suitable. The vision for the land west of County Road 20 will be restored prairie, while this atmosphere is appropriate for trail use, the campground and trail head will be much more comfortable for visitors if it is shaded. The area in the vicinity of Split Rock Lake (not a natural feature) can appropriately be managed for recreational use and visitor comfort. To protect Split Rock Creek shoreline from erosion, the horse campground will be designed so horse rider access to the shore is restricted.

Action #24 Develop a horse Trailhead

The horse rider trailhead will be developed near, but separated from the horse campground. The trailhead will have a parking lot, unloading ramp, tie rails, and potable water. It will provide for day use access to the trail system. Some facilities may be shared with the campground, but it will be designed so day use visitors can enjoy the park without imposing on campers.

Action #25 Closing County Road 20

Split Rock Creek State Park is cut in half by Pipestone County 20 (50th Avenue). The park trail system will cross this road in at least two places. It would be desirable to close this road through the park at some time. Although lightly used, it still receives more use and at a higher speed than if it were a dead end park road. Imagine the idyllic scene of the stone bridge crossed by a quiet park road, shared by pedestrians, and horse riders. There are three landowners who access their property off County 20 now. All of these properties are within the state park statutory boundary and the owners may eventually sell to the state. Other local residents use County 20 as a short cut to or from Ihlen. There are other convenient routes available for that traffic, although perhaps not quite as short or scenic. Park staff will work with landowners that need to use County 20 and at such time that they are willing to have the road closed, make that request to the Pipestone County Board. At such time as County 20 is closed, a new park entrance road can be developed directly off Highway 23. This would provide a more direct access for travelers, provide a great prairie introduction to the park, allow for long range expansion of the campground, minimize road noise in the campground, allow the existing northern most bridge across Split Rock Creek to be used for trails.

Action #26 Pave picnic ground and beach parking lots and access road.

Wind blown dust is often a problem from traffic on these lots and roads. Paving will minimize the dust problem and provide a good way to organize the parking through striping.

Action #27 Develop a modern service court and shop

The present shop is a reuse of a building that has been the manager's residence, and park office. A well designed shop and service court that meets all current health, safety, and accessibility standards would allow the staff to be more efficient and effective. This facility should be located just east of the sewage dump station, where it will be convenient from the new contact station and park office. The present shop site will be removed and the area restored to natural conditions.

Operations

Current Staffing

The current staffing at Sprit Rock Creek State Park includes:

- 1 Full-time Park Manager
- 3 Part-time seasonal Parks Workers
- 1 Full-time seasonal Building and Grounds Worker
- 3 Part-time seasonal Natural Resource Workers

This is the minimal amount of staff to operate this park year round, seven days a week, with long hours during the busiest summer season. During the slower use season when only the park manager is employed, there is no one in the park at least two days a week.

Implementation of resource management actions for Split Rock Creek State Park is the responsibility of the Park manager with the technical assistance and support of the Area Resource Manager based out of Blue Mounds State Park, and the Regional Resource Specialist based out of New Ulm.

Special management activities at Split Rock Creek State Park include managing the aerator in Split Rock Lake, and the Split Rock Creek Dam. Management manuals for the installation and operation of the aerator and management of the dam are provided.

Recommendations and Actions

Action #28 Expand park staff as responsibilities increase.

With the expansion of the park boundary and acquisition of several hundred acres of additional land, additional staff time to manage and maintain this land will be needed. The additional recreational facilities such as the horse campground, horse trails, expanded family campground will also all take additional time to maintain, and to provide quality public service for these new park visitors.

Park Boundary

State Park boundaries are established by the Minnesota Legislature. Statutory boundaries serve to identify lands appropriate for inclusion in the park. All boundaries are legally described in Minnesota Statutes. State parks are authorized to negotiate acquisition of land only within the statutory boundary. The state does not have the authority to acquire park land except from willing sellers nor can landowners be required to sell to the state. Inclusion in a park boundary does not limit what private landowners can do with their property.

Boundary modifications are considered during all state park management planning processes. Although this plan can recommend boundary changes, only the Minnesota Legislature can change park boundaries. All boundaries are legally described in Minnesota Statutes. When an addition to a park is considered, the DNR Division of Parks and Recreation will contact private landowners that would be within a proposed boundary and ask for their documented support. Without the support of the community, the Division of Parks and Recreation will not request boundary changes from the Minnesota Legislature.

The existing statutory boundary of Split Rock Creek State Park includes 1,303 acres. Of the land within the statutory boundary, 952 acres is state owned and 351 acres are privately owned.

Boundary History

Split Rock Creek State Park has been specifically addressed in state legislation several times. The statutory boundary established in these legislative acts identifies the lands that the State of Minnesota can negotiate to acquire from willing sellers.

- 1937 Split Rock Creek State Park was established. The initial legislation established several areas across Minnesota “to provide unemployment relief.”³⁸ The area was designated Split Rock Recreation Reserve and included 227.64 acres.
- 1945 A small area was added to Split Rock Recreation Reserve statutory boundary in Section 15.³⁹
- 1982 The northwest quarter of Section 22, and small areas in Section 15 were added to the statutory boundary.⁴⁰
- 1996 Split Rock Creek State Park statutory boundary was expanded to include the land in Sections 16 and 21 southeast of Minnesota Trunk Highway 23, except for areas platted as Sabies Addition and Second Sabies Addition.⁴¹ This brought the total size of the statutory boundary to 1,303 acres.

The southern most one-quarter mile of Split Rock Creek in the park boundary is covered by a conservation easement. This easement is intended to preserve the Split Rock Creek and its shores and was sold before this tract was purchased by the state. A copy of this easement is attached as Appendix A.

Recommendations and Actions

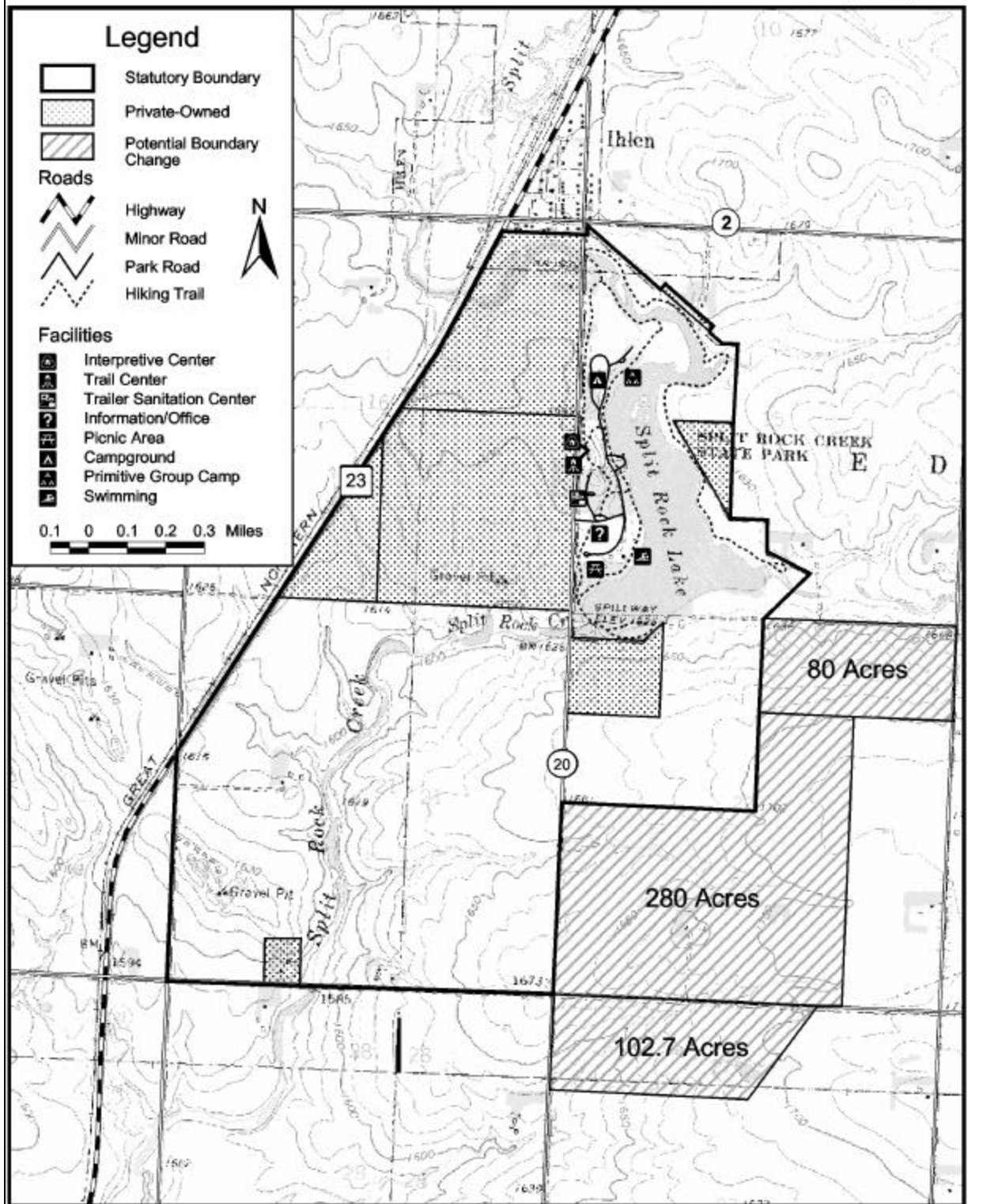
Action #29 Acquire private lands within the statutory boundary.

The highest priority for land acquisition in Split Rock Creek State Park is to acquire the private lands within the present statutory boundary. It is important that DNR manage the recently acquired lands well and demonstrate our management abilities and vision of restoring the area to native prairie.

Action #30 Consider expanding the statutory boundary

Consider expanding the statutory boundary to include parcels with native prairie to the south and east of the park. Work with adjacent landowners with park quality land to see if they would be interested in being included in the park statutory boundary. The primary reasons to include additional lands in the statutory boundary would be to preserve remnant native prairie or scenic vistas for public use and enjoyment, or to provide for significant additional recreational opportunities.

Split Rock Creek State Park Potential Boundary Change



PLAN MODIFICATION PROCESS

State Park Management plans document a partnership-based planning process, and the recommended actions resulting from that process. These comprehensive plans recognize that all aspects of park management are interrelated, and that management recommendations should also be interrelated.

Over time, however, conditions change that effect some of the plan recommendations or even an entire plan. Plans need to acknowledge changing conditions, and be flexible enough to allow for modifications as needed.

There are two scales or types of plan modifications: plan revisions and plan amendments. Minor plan revisions concern less controversial issues and can generally be made within the Division of Parks and Recreation as plan modifications. Larger issues that represent changes in management direction or involve other portions of the Department or other state agencies are addressed as plan amendments. The Division of Parks and Recreation Planning Manager will make the decision of whether a plan amendment or plan revision is appropriate

To maintain consistency between plans and processes, all revisions and amendments will be coordinated through the Division of Parks and Recreation planning section. Requests for planning assistance should be directed to the Division of Parks and Recreation Planning Manager in the Central Office, St. Paul.

Plan Amendments

Plan Amendment Criteria

The criteria outlined below will be used to determine whether the proposed change warrants a plan amendment:

The proposed change:

- Alters the park mission, vision, goals, specific management objectives, or proposed development plans outlined in the plan;
- Is controversial between elected officials and boards, park user groups, the public, adjacent landowners, other DNR divisions or state agencies; or
- Directly affects other state agencies (e.g., Minnesota Historical Society).

Plan Amendment Process

The plan amendment process has a series of steps.

Review the proposed change at the park and regional level. Determine which stakeholders potentially have a major concern and how those concerns should be addressed. If the major concerns are within the Division of Parks and Recreation, the issue should be resolved within the Division, with input from the public. The proposed change is then reviewed with the Division Central Office Management Team

If the proposed change involves other DNR Divisions, the issue should be resolved by staff and approved by the affected Division Directors. This may require one or two area/regional integrated resource management team meetings. The proposed change will be reviewed through the Department's review process (Statewide Interdisciplinary Review Service or SIRS).

1. If the proposed change issue involves other state agencies, the issue should be resolved by staff and approved by the Division Central Office Management Team - with input from the public - and reviewed by SIRS.

2. If the proposed change is potentially controversial among elected boards, park user groups, adjacent landowners or the public, an open house will be held that is advertised in the local and regional area.
3. All plan amendments should be coordinated, documented, and distributed by the Division of Parks and Recreation planning staff.

Plan Revisions

If a plan change is recommended that does not meet the amendment criteria above, and generally follows the intent of the park management plan (through mission, vision, goals, and objectives), the Division of Parks and Recreation has the discretion to modify the plan without a major planning process.

Revisions related to Physical Development Constraints and Resource Protection

Detailed engineering and design work may not allow the development to be completed exactly as it is outlined in the plan. A relatively minor modification, such as moving a proposed building site to accommodate various physical concerns, is common. Plans should outline a general direction and document the general "areas" for development rather than specific locations. For the most part, plans are conceptual, not detail-oriented. Prior to development, proposed development sites are examined for the presence of protected Minnesota Natural Heritage Program elements and historical/archeological artifacts. If any are found, the planned project may have to be revised to accommodate the protection of these resources.

Program Revisions

The resource management and interpretive services plan sections should be updated periodically as needed. The Division of Parks and Recreation's Resource Management and Interpretive staff will determine when an update is needed, and coordinate the revision with the park planning section. Program sections should be rewritten in a format consistent with the plan as originally approved by the DNR. To retain consistency, Division of Parks and Recreation planning staff will be involved in the revision review, editing and distribution.

Appendix A – Conservation Easement

ATTACHMENT 1 to Quitclaim Deed dated
August 22, 1996 to
Lyle W. Bauman and Arlien J. Bauman
From the United States of America

CONSERVATION EASEMENT RESERVATION IN THE UNITED STATES

By this instrument there is reserved in the UNITED STATES OF AMERICA, its successors and assigns, a perpetual conservation easement on the property conveyed by this deed.

This easement is under the authority and in furtherance of the provisions of federal law, including sections 331 and 335 of the Consolidated Farm and Rural Development Act (7 U.S.C. 1981, and 1985) as amended. The restrictions and covenants contained in this easement constitute a perpetual servitude on and run with the property. The Grantee and all successors and assigns ("landowner") under this deed covenant with the United States to do or refrain from doing, severally and collectively, the various acts mentioned later in this easement. The United States is reserved the rights enumerated in this easement for itself and its successors, agents and assigns.

I. DESCRIPTION OF THE EASEMENT AREA

The area subject to this Conservation Easement, referred to herein as the "easement area" is delineated on the map(s) attached hereto as Exhibit A, and is described as follows:

Areas to be encumbered by restrictions are depicted on the aerial photo. The exact legal description of the subject easement area will be provided by the United States of America, acting through the Farm Service Agency, subsequent to the closing of the sale and that legal description shall govern. This area is located in the E ½ of SW 1/4 of Section 21.

Without limiting the general and specific rights of access in paragraph III-A, for access to the easement area, a right of way for easement management access over:

Southwest Quarter (SW 1/4), except the South 35 rods of the West 35 rods of the Southeast Quarter (SE 1/4) of the Southwest Quarter (Sw 1/4), in this Section Twenty-one (21).

II COVENANTS BY THE LANDOWNER

A. No dwelling, barns, outbuildings or other structures shall be built within the easement area.

B. The vegetation or hydrology of the described easement area will not be altered in any way or by any means or activity on the property conveyed by this deed, or property owned under the control of the landowner, including: cutting or mowing; cultivation; grazing; harvesting wood products; burning; placing of refuse, wastes, sewage, or other debris; draining, dredging, channeling, filling, discing, pumping, diking, impounding and related activities; or diverting or affecting the natural flow of surface or underground waters into, within, or out of the easement area.

C. Notwithstanding the provisions of paragraph II-B above, the landowner shall be responsible for compliance with all federal, state and local laws for the control of noxious or other undesirable plants on the easement area. The responsibility for such plant control may be assumed in writing by the easement

manager where the control or manipulation of such plants is deemed by the easement manager to affect easement management programs or policies.

D. Cattle or other stock shall not be permitted on the easement area, except that the easement manager shall permit access to and use of waters within the area necessary for stock watering under such terms and conditions as the easement manager deems necessary to protect and further the purposes of this easement, provided:

1. The easement manager bears the costs of building and maintaining fencing or other facilities necessary to preclude stock from entering the easement area;
2. The easement manager shall consult with the landowner to determine the need for and the scope of fencing; and
3. Access for stock watering need not be permitted where other waters are reasonably available from other sources outside the easement area.

III. RIGHTS RESERVED IN THE UNITED STATES

The United States, on behalf of itself, its successors or assigns, reserves and retains the right, at its sole discretion, to manage the easement area including the following authorities:

A. The right of reasonable ingress and egress on and across the property conveyed by this deed as of the date of this instrument, whether or not adjacent or appurtenant to the easement area in order to conduct wetlands management, monitoring, and easement enforcement activities. The easement manager may utilize vehicles and other reasonable modes of transportation for access purposes overland or on any right of way described in paragraph I. In the event that the use of the described access right of way over the property conveyed by this deed is not practical for any reason, the easement manager may utilize any convenient route of access to the easement area over said property. With the concurrence of the easement manager, the landowner may provide a designated route for such access to and from the easement area so that damage to farm operations can be reasonably avoided.

B. The right to install, operate, and maintain structures for the purpose of re-establishing, protecting, and enhancing wetlands functional values, including the taking of construction materials to and from said sites.

C. The right to establish or re-establish vegetation through seedings, plantings, or natural succession.

D. The right to manipulate vegetation, topography and hydrology on the easement area through diking, pumping, water management, excavating, island construction, burning, cutting, pesticide application, fertilizing, and other appropriate practices. The easement manager shall consult with the landowner prior to any manipulatory action occurring in order to determine the most appropriate method to avoid possible damage to the property (s) adjoining the easement area.

E. The right to conduct predator management activities.

F. The right to construct and maintain fences in order to prevent or regulate grazing or other types of encroachment on the easement area.

IV. EASEMENT MANAGEMENT AND ADMINISTRATION

A. All right, title and interests of the United States in this easement are assigned to the Secretary of the Interior for administration by the United States Fish and Wildlife Service as part of the National Wildlife Refuge System pursuant to the National Wildlife Refuge System Administration Act, 16 U.S.C. 68dd et

seq. The U.S. Fish and Wildlife Service may enforce all the terms and conditions of this easement, along with exercising all rights and powers reserved in this easement through such general or specific regulations or orders as have been or may be, from time to time, promulgated under the authority of the Secretary of the Interior. Notwithstanding the above rights in paragraph III retained by the United States, the U.S. Fish and Wildlife Service may permit the landowner to pursue such activities on said sites as would be consistent with the preservation and enhancement of wetlands functional values.

B. As used in this easement, the term “easement manager” shall refer to the authorized official of the U.S. Fish and Wildlife Service.

V. GENERAL PROVISIONS

A. The agreed upon purposes of this reservation are the protection and restoration of the wetland areas existing as of the date of this conveyance as well as protection and enhancement of plant and animal habitat and populations. A “wetland” is defined and determined by the Soil Conservation Service of the U. S. Department of Agriculture in accordance with Title XII of the Food Security Act of 1985 (16 U.S.C. 3801 et seq.). Any ambiguities in this easement shall be construed in a manner which best effectuates wetland protection and restoration and fish and wildlife purposes.

B. Any subsequent amendment to or repeal of any federal law or regulations which authorizes this reservation shall not affect the rights reserved by the United States or subsequently held by its successors or assigns.

B. Any subsequent amendment to or repeal of any federal law or regulations which authorizes this reservation shall not affect the rights reserved by the United States or subsequently held by its successors or assigns.

C. For purposes of this easement, wetland management rights reserved by the United States include, but are not limited to, inspection for compliance with the terms of this easement; research regarding water, wetlands, fish and wildlife and associated ecology; and any other activity consistent with the preservation and enhancement of wetland functional values.

D. The United States, its successors and assigns, including the easement manager, shall have the right to make surveys, take photographs, and prepare such other documentation as may be necessary or desirable to administer the provisions of this easement. Any such map, plat or other suitable document may be recorded in the land records of the respective county in which the property is located.

E. The easement authorization does not authorize public entry upon or use of land.

F. The landowner and invitees may hunt and fish on the easement area in accordance with all federal, state, and local game and fishery regulations.

G. This easement shall be binding on the landowner, and the landowner’s heirs, successors or assigns. The landowner covenants to warrant and defend unto the United States, its successors or assigns, the quiet and peaceable use and enjoyment of the land and interests in the land constituting this reservation against all claims and demands.

H. The easement manager shall be the agent of the United States or its successors or assigns. The easement manager shall have all discretionary powers of the United States under this easement. In the performance of any rights of the easement manager under this easement, the easement manager may permit, contract or otherwise provide for action by employees, agents, or assigns which may include the landowner.

Appendix B -- Management Actions

The following is a list of the actions recommended in this plan.

Natural Resources

Action # 1 Field check all proposed development sites

All proposed development sites will be field checked for the presence of prehistoric and historic remains before any work is done. If evidence of prehistoric use is found on a proposed development site, an assessment will be made of the size and importance of the find. If the site proves to be significant, it will be protected by avoidance, capping, or excavation by archaeologists to document the indications of human use.

Action #2 Restore and maintain the present prairie remnants within the park.

Restoring the existing native prairie remnants through active management is the first step toward preserving a viable prairie community in this park. These areas provide information about what the local native prairie was like, and can provide a seed source for future prairie restoration. It may take a century to restore present agricultural land to a true prairie community. These lands can be restored in a much shorter time frame.

Action #3 Convert grasslands to prairie.

The areas of the park that have not been plowed but only heavily grazed have the potential to be converted to a native condition. Many native plant, animal, and insect species still exist in these areas, but their populations have been minimized by the effects of extensive grazing. These areas can be converted by variety of management techniques including: inter-seeding and transplanting native plant species; mowing; burning; and perhaps occasional grazing. Insects and animals native to this prairie community will be restored when possible.

Action #4 Convert agricultural land to prairie.

The areas of the park that have been in agricultural crop production for many years have almost no native plant species and will be colonized by aggressive exotic species if simply left fallow. These areas will be kept in agricultural production until native seed and resource management funding is available to actively work to convert them to native plant species. The amount of land in agricultural production will continue to be reduced as more and more land is transformed into stable native prairie plant populations that can compete with the aggressive exotic species. The prairie conversion efforts will focus first on areas adjacent to Split Rock Creek. This priority will restore the scenic character of the creek, and serve as a buffer to minimize surface runoff concerns. These areas will be converted by a variety of management techniques including: reducing the amount of exotic weed species seeds available in the soil; seeding native prairie plants; inter-planting native prairie seeds and plants; mowing; and burning. Insects and animals native to this prairie community will be restored when possible.

Action #5 Honor the existing grazing lease.

One land parcel was acquired with the stipulation that the present grazing lease be honored. Therefore some cattle grazing will continue in the park until 2005. Grazing can be useful for prairie management so a grazing pattern that is appropriate for both the lessee and prairie restoration will be sought.

Action #6 Preserve Topeka Shiner habitat.

Topeka Shiners have been identified in Split Rock Creek both upstream and down stream from Split Rock Lake. Because this species is designated as an endangered species on the federal lists, no actions will be taken by the DNR that would have a detrimental effect on the species or their habitat.

As more is learned about the habitat needs of the Topeka shiner minnows, steps will be taken to preserve their habitat as the Federal Topeka Shiner Recovery Plan is completed.

Action #7 Minimize shoreline erosion.

The shoreline of Split Rock Lake is susceptible to erosion. The most erosion takes place during high water. Work to maintain dense surface vegetation on the shoreline, by managing visitor impacts and surface runoff.

Action #8 Protect Split Rock Creek.

Split Rock Creek is the visual and ecological focus of Split Rock Creek State Park. Preserving the creek's scenic qualities, shorelines, water quality, and Topeka Shiner habitat is essential to maintaining the park quality experience in the future.

Action #9 Maintain or improve the water quality in Split Rock Creek and Lake.

The water quality and silt load in Split Rock Creek as it enters the park is dependent on land uses upstream from the park and is not something park staff manage directly. Park staff can however can raise awareness of water quality issues, and support local land use decisions that will result in maintaining the water quality and reducing the silt load. This will maintain Split Rock Creek and Split Rock Lake for a variety of recreational opportunities, and preserve the habitat for Topeka Shiners.

Action #10 Control exotic species populations.

Exotic species populations are often able to out compete native species and take over specific niches of a natural community. These plant and animal species reduce the viability of habitat for native plants, animals, and insects. Special control measures must be taken to allow native species to compete effectively with these exotic species. Some of the controls that will be used are: maintaining a healthy population of native species, fire, biological controls, frequent mowing, frequent tilling, individual plant removal, or herbicide treatment.

Action #11 Maintain healthy shade trees.

The planted ash trees have provided shade for over 70 years. They have existed and grown slowly, but never flourished. Those that remain are stressed, and secondary rot and fungus are common. Tree species that are native to the area such as silver maple, bur oaks, and cottonwoods will be interplanted to replace the green ash overtime.

Action #12 Maintain healthy native understory screening.

A well defined understory is desirable in the shaded groves both for wildlife and visual screening. The present understory is composed primarily of non-native plant species, European buckthorn and caragana. These shrubs and small trees will be replaced with native plant species that will provide a dense visual screen, and more desirable wildlife habitat.

Action #13 Convert old gravel pit to prairie

Remove the accumulated trash, and convert the area to native prairie vegetation through seeding.

Interpretation

Action #14 Develop non-personal interpretation of significant natural and cultural resources

The interpretive effort at Split Rock Creek should add value to the park visitors' experience through parks many stories. Thematic self-guided interpretive experiences utilizing appropriate interpretive techniques and methods will be developed in cooperation with the park management and resource staff. These various interpretive themes will educate park visitors and protect park resources. Priority should be given to telling the stories of prairie and prairie reconstruction and management, lake and fisheries management, horse rider on the park's trails, and the natural and human forces that shaped the landscape.

Action #15 Cultivate interpretive assistance

Develop relationships and agreements with other providers for environmental education and interpretation in the park.

Recreation

Action #16 Expand drive-in campground

The present campground is full most summer weekends. Additional campsites would be used if they were available. There is sufficient area north of the present campground on soils suitable for campground development to construct an additional 8 – 10 campsites. These campsites should be designed for easy use by recreational vehicles, with electricity, and at least a few pull through sites. Limited parking for extra cars is problem in this campground that should be addressed when it is expanded. The projected additional use of the lakeshore, trails and swimming beach can be accommodated without significant impact.

Action #17 Construct a new park office

Park administration is now carried on at two locations. Most of the administration is done in the park office in the service court. This is the year round office, with computers, files, fax and normal office facilities. A small seasonal office adjacent to the park entrance road is staffed during high use periods. This seasonal office is closed and signs direct park visitors to the office in the service court when park use is expected to be relatively low. The seasonal office has very limited space, and minimal facilities. The efficiency of the park staff can be greatly increased by constructing a year round park office adjacent to the park entrance road.

Action #18 Construct a modern toilet building

Two sets of vault toilets are provided for the picnic grounds and the swimming beach. These facilities are functional, but provide only the most minimal service for park visitors. The amount of use that these facilities received grew in 2000 to over 5,000 visitors per year. A modern toilet building located where it would be convenient for both the picnic ground and swimming beach users would provide a very desired service for park visitors, increasing both park use and visitor satisfaction.

Action #19 Develop a hiking trail around Split Rock Creek Lake

The present 4.5 mile hiking trail allows park visitors to almost hike all the way around the lake. Finishing this trail loop is a high priority for park visitors. Two bridge or floating boardwalk crossings are needed to allow visitors to complete the hike around the lake. The trail will be designed to minimize the impact to the wetlands it crosses, while providing easy access for the public to see and understand these wetlands.

Action #20 Develop a creek and prairie hiking trail system

The acquisition of additional lands downstream from the dam has opened up great new opportunities for hiking in Split Rock Creek State Park. Initially hiking trail development will focus on providing access and the opportunity to experience the area along Split Rock Creek. Further expansion of the trail system will be implemented as other areas are reclaimed from agricultural use. The eventual trail system will provide park visitors the opportunity to experience both the refreshing Split Rock Creek environs, and the expansive rolling prairie hillsides. One trail bridge over the Split Rock Creek that will accommodate both horse riders and hikers will be built where it will have the least ecological impact and allow good recreational use of both sides of the creek.

Action #21 Provide for recreational snowshoe use

Snowshoe use is an excellent way to enjoy the park in the winter. Snowshoes function well in a variety of snow conditions, and can be used more often in the varied snow conditions of the Split Rock Creek area. Snowshoeing is allowed anywhere in the park during the winter.

Action #22 Develop a horse trail system

A horse trail system will be developed that provides a high quality recreational experience that can be maintained without adversely affecting the restoration of the prairie environment. A series of loop trails that are primarily on the uplands, with good views of Split Rock Creek and the surrounding countryside will be developed. This would be a maximum of 6.5 miles of trail. This trail system will provide a good opportunity to experience and learn about the prairie environment. It will be designed to be a safe trail system that can be enjoyed by both novice and experienced riders. The Division of Parks and Recreation does not have the authority to build trails outside of the Split Rock Creek State Park statutory boundary. There is not enough room within Split Rock Creek State Park to provide for a day-long horse ride experience. The park trails will have to be used in conjunction with adjacent county or township roads for an entire day of riding. There is the potential to develop a trail connection from Split Rock Creek State Park to the Casey Jones State Trail that would provide a diversity of off-road riding experiences. For this connection to be implemented, it would have to be pursued by the MnDNR Bureau of Trails and Waterways with the support of local citizens.

Action #23 Develop a Horse Campground

The horse campground will be built south of Split Rock Lake. This site has suitable soils for this development, is not very visible except in distant views from the rest of the park, is in an area which does not have high quality prairie, provides good access to the future trail system, is in an area where trees and shade will be suitable. The vision for the land west of County Road 20 will be restored prairie, while this atmosphere is appropriate for trail use, the campground and trail head will be much more comfortable for visitors if it is shaded. The area in the vicinity of Split Rock Lake (not a natural feature) can appropriately be managed for recreational use and visitor comfort. To protect Split Rock Creek shoreline from erosion, the horse campground will be designed so horse rider access to the shore is restricted.

Action #24 Develop a horse Trailhead

The horse rider trailhead will be developed near, but separated from the horse campground. The trailhead will have a parking lot, unloading ramp, tie rails, and potable water. It will provide for day use access to the trail system. Some facilities may be shared with the campground, but it will be designed so day use visitors can enjoy the park without imposing on campers.

Action #25 Closing County Road 20

Split Rock Creek State Park is cut in half by Pipestone County 20 (50th Avenue). The park trail system will cross this road in at least two places. It would be desirable to close this road through the park at some time. Although lightly used, it still receives more use and at a higher speed than if it were a dead end park road. Imagine the idyllic scene of the stone bridge crossed by a quiet park road, shared by pedestrians, and horse riders. There are three landowners who access their property off County 20 now. All of these properties are within the state park statutory boundary and the owners may eventually sell to the state. Other local residents use County 20 as a short cut to or from Ihlen. There are other convenient routes available for that traffic, although perhaps not quite as short or scenic. Park staff will work with landowners that need to use County 20 and at such time that they are willing to have the road closed, make that request to the Pipestone County Board. At such time as County 20 is closed, a new park entrance road can be developed directly off Highway 23. This would provide a more direct access for travelers, provide a great prairie introduction to the park, allow for long range expansion of the campground, minimize road noise in the campground, allow the existing northern most bridge across Split Rock Creek to be used for trails.

Action #26 Pave picnic ground and beach parking lots and access road.

Wind blown dust is often a problem from traffic on these lots and roads. Paving will minimize the dust problem and provide a good way to organize the parking through striping.

Action #27 Develop a modern service court and shop

The present shop is a reuse of a building that has been the manager's residence, and park office. A well designed shop and service court that meets all current health, safety, and accessibility standards would allow the staff to be more efficient and effective. This facility should be located just east of the

sewage dump station, where it will be convenient from the new contact station and park office. The present shop site will be removed and the area restored to natural conditions.

Operations

Action #28 Expand park staff as responsibilities increase.

With the expansion of the park boundary and acquisition of several hundred acres of additional land, additional staff time to manage and maintain this land will be needed. The additional recreational facilities such as the horse campground, horse trails, expanded family campground will also all take additional time to maintain, and to provide quality public service for these new park visitors.

Park Boundary

Action #29 Acquire private lands within the statutory boundary.

The highest priority for land acquisition in Split Rock Creek State Park is to acquire the private lands within the present statutory boundary. It is important that DNR manage the recently acquired lands well and demonstrate our management abilities and vision of restoring the area to native prairie.

Action #30 Consider expanding the statutory boundary

Consider expanding the statutory boundary to include parcels with native prairie to the south and east of the park. Work with adjacent landowners with park quality land to see if they would be interested in being included in the park statutory boundary. The primary reasons to include additional lands in the statutory boundary would be to preserve remnant native prairie, preserve scenic park vistas, or provide for significant recreational opportunities.

References Cited

- ¹ Laws Of Minnesota for 1937, State of Minnesota, 1937, Chapter 474, p. 823.
- ² Laws Of Minnesota for 1945, State of Minnesota, 1945, Chapter 215, p. 336.
- ³ Laws Of Minnesota for 1969, State of Minnesota, 1969, Chapter 524 Sec. 3 Subd. 26, p. 911.
- ⁴ Laws Of Minnesota for 1982, State of Minnesota, 1982, Chapter 502 Sec. 1 Subd. 2, pp. 581-582.
- ⁵ Laws Of Minnesota for 1994, State of Minnesota, 1994, Chapter 448 Sec. 1 Subd. 6, p. 283.
- ⁶ Laws Of Minnesota for 1996, State of Minnesota, 1996, Chapter 372 Sec. 1 Subd. 5, p. 397
- ⁷ Wright 1972, Morey 1976, Olsen and Mossler, 1982.
- ⁸ United States Census 2000, Source: U.S. Census Bureau, Maintained By: Laura K. Yax (Population Division) Created: January 25, 2002, Last Revised: January 29, 2002 at 03:40:19 PM
- ⁹ United States Census 2000, Source: U.S. Census Bureau, Maintained By: Laura K. Yax (Population Division) Created: January 25, 2002, Last Revised: January 29, 2002 at 03:40:19 PM
- ¹⁰ United States Census 2000, Source: U.S. Census Bureau, Maintained By: Laura K. Yax (Population Division) Created: January 25, 2002, Last Revised: January 29, 2002 at 03:40:19 PM
- ¹¹ United States Census 2000, Source: U.S. Census Bureau, Maintained By: Laura K. Yax (Population Division) Created: January 25, 2002, Last Revised: January 29, 2002 at 03:40:19 PM
- ¹² David S. Radford, and Douglas C. George, Minnesota State Park Cultural Resource Management Program Annual Report 1993, Minnesota Department of Natural Resources and The Minnesota Historical Society, 1994, pp. 267-271
- ¹³ Pat Beyers, Roundhouse, Beanery Torn Down After Operation Closed, Pipestone County Star, August 6, 1981
- ¹⁴ Ihlen Centennial Committee, Ihlen Memoirs 1888-1988, 1998, p. 45
- ¹⁵ Gordon Lothson and Robert Clouse, Split Rock Creek State Park A Cultural Resource Review and Overview, Minnesota Historical Society, 1985, p.32
- ¹⁶ Laws Of Minnesota for 1937, State of Minnesota, 1937, Chapter 474, p. 823.
- ¹⁷ Ihlen Centennial Committee, Ihlen Memoirs 1888-1988, 1998, p. 44
- ¹⁸ *Ibid.*, p. 45
- ¹⁹ Flood Gates Open: Ihlen Lake Going Down, Jasper Journal, September 16, 1985
- ²⁰ Gordon Lothson and Robert Clouse, Split Rock Creek State Park A Cultural Resource Review and Overview, Minnesota Historical Society, 1985, p.32
- ²¹ Kuehnast, Earl L., 1959, revised 1972. "Climate of Minnesota." U.S. Dept. of Commerce, Climatology of the United States. No. 60-21.
- ²² Earl L. Kuehnast, Donald G. Baker, James A. Zandlo, Climate of Minnesota Part XIII – Duration and Depth of Snow Cover, University of Minnesota Agricultural Experiment Station Technical Bulletin 333, 1982, p.p. 6-8.
- ²³ F. J. Marschner, The Original Vegetation of Minnesota, Map, U.S. Forest Service, 1930
- ²⁴ Snyder, E. J. 1986. Small Mammal Habitat Use and Some Population Parameters of *Microtus pennsylvanicus* and *Sorex cinereus* at Pipestone National Monument. Final Report for National Park Service. IA-6000-4-8002. Iowa State University, Iowa.
- ²⁵ Dennis R. Skadsen. 2001. A Survey of Prairie Lepidoptera In Southwestern Minnesota State Parks. Final Report to Minnesota Department of Natural Resources
- ²⁶ Minnesota Department of Natural Resources, <http://www.dnr.state.mn.us/lakefind/showreport.html?downum=59000100>, Split Rock Reservoir Lake Information Report, "Accessed" 8/1/02
- ²⁷ Natural Heritage Program. 1993. Minnesota's Native Vegetation, A Key to Natural Communities. Minnesota Department of Natural Resources – Biological Report No. 20.
- ²⁸ Natural Heritage Program. 1993. Minnesota's Native Vegetation, A Key to Natural Communities. Minnesota Department of Natural Resources – Biological Report No. 20.
- ²⁹ Tabor, V. M. 1998. Final Rule to List the Topeka Shiner as Endangered. Federal Register 63(240):69008-69021

30 Hatch, Jay, FISHES OF MINNESOTA Information About the Distribution and Ecology of Native and Introduced Species Prepared by the Staff of the James Ford Bell Museum of Natural History Fish Collection, Web Site (http://www.gen.umn.edu/faculty_staff/hatch/fishes/Pflieger)

³¹ ibid

³² MacMahon, J. A. 1985. The Audubon Society Nature Guides: Deserts. Alfred A. Knopf, New York, p. 558.

³³ ibid

³⁴ Barbra Coffin and Lee Pfannmuller, editors, *Minnesota's Endangered Flora and Fauna*, University of Minnesota Press, Minneapolis, 1988, p. 177.

³⁵ Barbra Coffin and Lee Pfannmuller, editors, *Minnesota's Endangered Flora and Fauna*, University of Minnesota Press, Minneapolis, 1988, p. 177.

³⁶ Department of Natural Resources. <http://www.dnr.state.mn.us/fish_and_wildlife/exotics/buck.html>, European (Common) Buckthorn, 3/22/02

³⁷ University of Minnesota Extension Service. Identification of the Primary Noxious Weeds Of Minnesota. <http://www.extension.umn.edu/distribution/cropsystems/DC5620.html> Reviewed 1998, 6/10/02

³⁸ Laws Of Minnesota for 1937, State of Minnesota, 1937, Chapter 474, p. 823.

³⁹ Laws Of Minnesota for 1945, State of Minnesota, 1945, Chapter 215, p. 336.

⁴⁰ Laws Of Minnesota for 1982, State of Minnesota, 1982, Chapter 502 Sec. 1 Subd. 2, pp. 581-582.

⁴¹ Laws Of Minnesota for 1996, State of Minnesota, 1996, Chapter 372 Sec. 1 Subd. 5, p. 397