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Interstate State Park Management Plan

Minnesota Department of Natural Resources
Division of Parks and Trails

February 2009

Minnesota Department of Natural Resources
500 Lafayette Road • St. Paul, MN • 55155-4037

Department of Natural Resources Approval of Management Plan for Interstate 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 1895 established Interstate State Park as part of Minnesota's Outdoor Recreation System (MS 85.012, Subd. 28).

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

The management plan was approved by the Division of Parks and Recreation management team, and was approved through the DNR Regional Interdisciplinary Review Service (RIRS) during March 2004.

Mark Holsten — 2-25-09

Mark Holsten, Commissioner
Minnesota Department of Natural Resources

Date

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Interstate State Park
Management Plan

State of Minnesota
Department of Natural Resources
Division of Parks and Trails

This management Plan has been prepared as required by Minnesota Statutes Chapter 86A.09.

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We would like to thank the 100+ citizens and dozens of DNR, National Park Service, Department of Transportation and others who also participated in this management planning process.

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TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
INTRODUCTION	3
Park Description	3
Legislative History	4
Role of Interstate State Park in the State Park System	5
Mission and Vision Statements	6
Interstate State Park Mission, Vision, and Goals	6
Unit Planning Process	8
REGIONAL ANALYSIS	9
Ecological Subsection	9
Regional Population Analysis	12
Regional Recreation and Tourism Opportunities	12
Visitor Use Patterns	15
Overnight Use	15
Trail Opportunities	15
Other Day-Use Activities	16
Transportation	17
Marketing, Partnerships, Community Relations & Transportation Recommendations	20
NATURAL RESOURCES	23
Climate	23
Topography	23
Geology	26
Glacial History	28
Soils	29
Vegetation	30
Wildlife	33
Endangered, Threatened, and Special Concern Species	36
Groundwater	37
Surface Water and Fisheries	37
Goals for Natural Resources	39
Natural Resource Management Recommendations	39
CULTURAL RESOURCES	43
Archaeological and Historical Setting	43
Historic Buildings and Structures	45
Goals for Cultural Resources	47
Cultural Resource Management Recommendations	47
INTERPRETIVE SERVICES	49
Interpretive Themes	49
Existing Interpretive Services	51
National Park Service	52
Wisconsin Interstate State Park	52
Goals for Interpretive Services	52
Target Audiences for Interpretive Services	53
Interpretive Services Recommendations	53
RECREATIONAL USE AND VISITOR SERVICES	55
Existing Facilities	55
Accessibility	59

Goals for Recreational Use and Visitor Services 60
Recreational Use and Visitor Services Recommendations 61

PARK BOUNDARY 67
Existing Boundary and Land Ownership Issues 67
Federal Land and Water Conservation Funds 67
Boundary Change Process 67
Goals for Park Boundaries 69
Park Boundary Expansion Proposal Development 69
Public Review of the Proposed Park Boundary Expansion 71
Park Boundary Recommendations 72

SIGNIFICANT AREAS MAPPING 77
Assessing Present Conditions 77
Assessing Future Conditions 82

BUILDING AND FACILITY MANAGEMENT 87
Management Goals 87
Americans with Disabilities Act 87
Future Building/Facilities Design 87
Transportation and Utilities 87

PARK OPERATIONS, STAFFING AND COSTS 89
Current Staffing 89
Emergency Management Plan and Enforcement 89
Staffing and Funding Recommendations 89
Funding 90

PLAN MODIFICATION PROCESS 91
Plan Amendment Criteria 91
Plan Amendment Process 91
Plan Revisions 92

BIBLIOGRAPHY 93

APPENDIX A – PLAN RECOMMENDATIONS 97

APPENDIX B – WILDLIFE 104

LIST OF FIGURES

	Page
Figure 1: 60 Mile Radius for Recreation and Tourism Opportunities	10
Figure 2: ECS Subsections	11
Figure 3: Origin of Campers	14
Figure 4: Aerial Photo	24
Figure 5: 10 Ft. Contours	25
Figure 6: Present Vegetation	34
Figure 7: Significant Areas	35
Figure 8: Vegetation Management Areas	42
Figure 9: Cultural and Archaeological Features	44
Figure 10: National Register of Historic Places - Historic Districts	46
Figure 11: Existing Development	57
Figure 12: Proposed Development	65
Figure 13: Land Ownership	68
Figure 14: Areas Proposed for Boundary Expansion	74
Figure 15: Revised Boundary Expansion Proposal	75
Figure 16: Present Conditions - Significant Natural & Cultural Resources	78
Figure 17: Present Conditions - Visitor Use & Experience	80
Figure 18: Present Conditions - Opportunities & Conflicts	81
Figure 19: Future Conditions - Visitor Use & Experience	84
Figure 20: Future Conditions - Opportunities & Conflicts	85

LIST OF TABLES

Table 1: Annual Visitation to Interstate State Park 1998-2007	15

"The Squeeze" is a popular geologic feature in the park.
Photo by Carmelita Nelson, DNR.

EXECUTIVE SUMMARY

Interstate State Park provides a wide range of recreational opportunities, globally significant geology, and an outstanding diversity of natural communities near the Twin Cities metropolitan area. The park is situated in eastern Chisago County and is characterized by sheer cliffs, glacial potholes, deep valleys, basalt and sandstone rock outcrops, hardwood forests, pine forests, floodplain forests, and remnant prairie areas.

Trunk Highway 8 passes though the park, dominating the visitor experience and impacting many resources. The highway is a very busy eastern Minnesota access point, making Interstate State Park a potential gateway to introduce visitors to Minnesota's natural and cultural history, and recreation opportunities.

Minnesota Interstate State Park is across the St. Croix River from Wisconsin Interstate State Park. The park is located adjacent to the National Park Service St. Croix National Riverway. Wild River State Park, William O'Brien State Park, Bryant Environmental Learning Area and numerous private recreation areas also provide additional resources and recreation opportunities in the immediate area.

The park is situated in a region of east-central Minnesota that is currently experiencing a rapid increase in urban development. At the same time, conservation efforts are being pursued through Chisago County's Green Corridor and Transfer of Development Rights program and various non-profit organizations.

Key Recommendations

As the second oldest and one of the smallest Minnesota state parks, and yet the fifth busiest, crowding and overuse are major issues for the future of Interstate State Park. At public meetings, area residents, business owners, and recreation enthusiasts encouraged the Minnesota Department of Natural Resources (DNR) to significantly expand the park boundaries. The DNR reviewed these proposals and identified park boundary expansion opportunities that were consistent with the park's purpose. Renaming the park to something with a more natural or descriptive name to increase the visibility of park was discussed by citizens during the planning process. The DNR is unlikely to change the name of the park given the historic nature of the park's name.

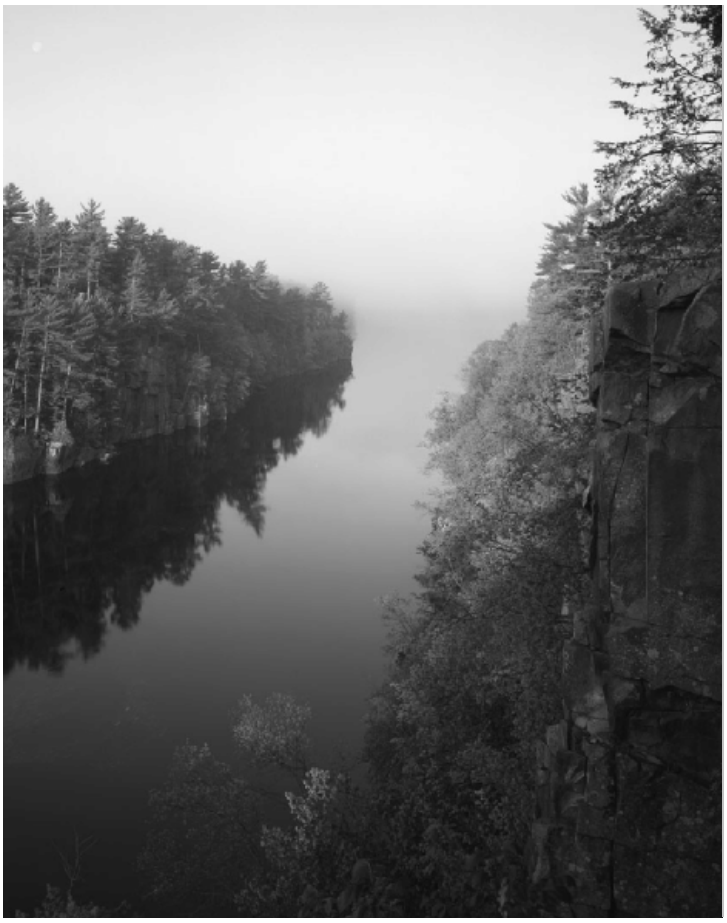
Other recommendations include working with various organizations to construct a bike trail along a former railroad grade that will connect with the Swedish Immigrant Trail, the Gateway State Trail, Willard Munger State Trail and the Gandy Dancer Trail in Wisconsin. If this bicycle trail is realized, a safe trail connection will need to be made to the campground on the other side of US Highway 8. Bicycling would become a top priority trail use along with hiking.

Many resource protection recommendations are detailed in the plan including geologic research projects; more interpretation of cultural and natural resources.

During the park planning process, the Minnesota Department of Transportation (Mn/DOT) was conducting planning meetings regarding Trunk Highway 8. Ongoing cooperative efforts will be needed to address issues of noise, turn lanes, increased bike traffic and quality of visitor experience.

Conclusion

The following comprehensive management plan presents the mission, vision, and goals for the park. There is a detailed assessment of resources and recreational opportunities that provides data for use in making management decisions. At the end of each chapter are the recommended future actions. This plan provides the basic management direction for the park. The DNR will seek legislation to implement park boundary changes, and funding to complete land acquisition, and trail and facility improvements, and to commence the next phases of natural resource management and interpretive services planning.



Dalles of the St. Croix River at Interstate State Park.
The term “dalles” refers to a steep rock bound river gorge.
Photo by Gary Alan Nelson

INTRODUCTION

Park Description

> *The Dalles, which though it occupies but a minute portion on the maps of Wisconsin and Minnesota, is yet so peculiar and unique and different from other portions of the state domain as to be thought worthy of being preserved and beautified by art as a public park and made thus the common property of the public at large.*
>
> *Inter-State Park Dalles of the St. Croix 1895-1896 Blue Book 1899*

Interstate State Park is located in east-central Minnesota in Chisago County on the St. Croix River. It is 45 miles northeast of Minneapolis/St. Paul and is entirely in the city limits of Taylors Falls. The existing statutory boundary of Interstate State Park includes 295 acres. The park was established in 1895 in a joint venture with Wisconsin Interstate State Park directly across the St. Croix River, creating the first interstate park in the nation.

Interstate State Park is a geologically significant area with seven important geologic features: Mill Street conglomerate, vesicular and brecciated lava flows, extensive pothole formations, fossil invertebrates including trilobites, inarticulate brachiopods and monoplacophoran mollusks (in Franconia formation and Mill Street), and an area of igneous-sedimentary unconformity.

The park is the one of the best places in all of North America to find glacial potholes. It has the greatest number, the most variety in shapes and sizes, and the deepest and largest potholes. The park's cliffs and rock formations are also impressive. Devil's Chair and Angle Rock have been landmarks and photographic attractions for over a century. Devil's Chair was vandalized and destroyed in 2005.

Because of the park's rugged topography and long history as a park preserve, many microhabitats have survived that have been destroyed in other areas along the St. Croix River. The slopes create different habitats and climates. Among the most significant habitats are: maple-basswood forests, basalt rock outcrops, mesic oak forests, floodplain forests, pine forests, and moist seeps and springs. The park is at the western edge of some plant species' ranges, the northern edge of others, and the southern edge of many boreal species' ranges.

There are eighteen unique remnant prairie areas including hill prairies, oak savannas, and basalt glades. Prairie sites within the park are diverse in terms of substrate, size, appearance, and species composition. These diverse prairie sites support rough seeded fameflower, brittle prickly pear cactus, bearberry, leadplant, orange foliose lichens, downy phlox, blazing star, Indian grass, and many other prairie species.

Interstate State Park is the only state park completely within the St. Croix Moraine Subsection of the state Ecological Classification System map (the southern tip of Wild River is also in this subsection). This subsection lies primarily in Wisconsin, with only five square miles in Minnesota between the communities of Almelund and Taylors Falls.

Freshwater mussels are one of the most endangered/threatened groups of animals in North America. The St. Croix River has one of the richest mussel communities in the entire country. Forty-seven species of freshwater mussels have been documented in the St. Croix River drainage basin; including five globally rare and six regionally rare species. Two federally endangered species are the Higgins eye and the winged mapleleaf. At least 27 mussel species have been documented adjacent to the park (with 3 to 6 additional species suspected), including the winged mapleleaf and Higgins eye. In addition to these federally listed species, over one-third of the mussel species at the park are state-listed (two state-endangered, nine threatened, four special concern). Today there is a great deal of concern about the potential impact of zebra mussels on the native mussels.

In addition to rare mussels, Interstate State Park has one state-endangered plant species: rough-seeded fameflower (*Talinum rugospermum*) and seven special concern species of plants and animals.

Interstate State Park is an excellent park for migratory birds and animals because of its location along the St. Croix River corridor. As one of the narrowest points in the corridor it acts as a funnel, concentrating many species in a small area. The National Park Service has documented over 200 migratory bird species in the valley.

Interstate State Park is located among a cluster of recreation facilities. In 1968, the U.S. Congress designated the St. Croix River as a Wild and Scenic River. The Lower St. Croix National Scenic Riverway was added to the system in 1972. Together they form a riverway that offers outdoor enthusiasts a chance to enjoy a wilderness-like experience and a variety of outdoor recreation opportunities.

Interstate State Park has been a major state tourist attraction for over a century. Over 350,000 people visit the park each year. The park is a favorite location for hiking, canoeing, rock climbing and photography.

Minnesota Interstate State Park has long been known for its beauty and rich history. There are three National Historic Districts in the park. It has some of the earliest rustic style architecture in the state; pre-dating Civilian Conservation Corps (CCC) and Works Progress Administration (WPA) work.

Legislative History

1895 Chap. 169 Sec. 1

The State Park of the Dalles of St. Croix was officially approved by the legislature on April 25th. The preamble states that the area "comprises the most picturesque and attractive scenery in the state of Minnesota, attracting a great number of visitors from our own and other states, and constituting a source of happiness and recreation to the public generally…should be forever kept open for the occupation and use of the public, so that every citizen of Minnesota, and of the United States, may equally participate in their enjoyment…" Local interest and concern for the area began in the late 1850s. Representative August J. Anderson of Taylors Falls introduced the bill for the park authorizing the governor to acquire title to certain lands and to "confer and cooperate" with the governor of Wisconsin that they should acquire an equal or larger area of land on the east side of the river. The bill had little opposition.

1935 Chap. 320 Sec. 7 (A1)

Appropriated $2,000 for the acquisition of additional lands either by gift, purchase, or condemnation, adjoining Inter-State Park and the construction of a bridge on these lands. Said lands, when acquired, shall become part of Inter-State Park. (Reappropriated from 1925 laws, Chap. 425, Section 154 – no description of land given).

1969 Chap. 524 Sec. 2 Chap. 85 Subd. 28

Interstate Park, Chisago County, which is hereby renamed from Dalles of St. Croix State Park.

1971 Chap. 859 Sec. 4

The Commissioner of Natural Resources is authorized to withdraw from Interstate park the following lands: Lot 5, 6, 7, 8, 9, 10, 14, 15 and 16 in Block 35 in Taylors Falls and to convey the title in exchange for lands of the Chisago County historical society.

1977 Chap. 431 Sec. 2 Subd. 5

The park boundaries are expanded to include an additional 125 acres in the northern part of the state park.

1989 Chap. 259 Sec. 4

The Commissioner of Natural Resources is authorized to sell up to two acres of land in the park, which contained the former park manager's residence and garage.

1991 Chap. 275 Sec. 3

The Commissioner of Natural Resources is authorized to lease up to four acres of land within Interstate to the Chisago County Historical Society for the St. Croix Valley Heritage Center. The lease may be for a period not to exceed 50 years. The lease must provide that the lease terminates and the land returns to the state if the land is not used for the Heritage Center.

1998 Chap. 401 Sec. 61

Laws 1991, chapter 275, section 3, is repealed.

Role of Interstate State Park in the State Park System

A primary role of Interstate State Park is the preservation and interpretation of the natural and cultural resources in the park. Preserving the park's unique geology, restoring the pines, and managing the basalt rock outcrops areas are three of the important natural resource goals for the park. The park highlights the importance of geology statewide. There are many special concern/endangered species in the park, especially mussels.

The park includes three Historic Districts on the National Register of Historic Places, and contains significant cultural resources related to American Indian and early settlement history of Minnesota, as well as other cultural and archaeological resources (see Natural and Cultural Resource chapter). The park is significant in the history of state park system. Minnesota had a state park "system" with the establishment of Interstate State Park as the state's second state park. As early as the 1890s visitors came by train to see the area and the English garden setting that had been created. The park was a pioneer of early design of Rustic Style Architecture, even before the CCC/WPA era.

Another primary role of the park is providing recreation opportunities. The park is a hub for recreation activities on the St. Croix River. Recreational opportunities include hiking, picnicking, camping, canoeing, kayaking, rock climbing, fishing, bird watching, and excursion boat tours. The connection of the Gateway State Trail to the park will further diversify the recreational opportunities at the park.

Trunk Highway 8 through the park is a major entrance to Minnesota. In terms of tourism and transportation the park is considered a "gateway park". There are many first-time state park users at Interstate. Its location means that the state park is an opportunity to draw in new users; particularly urban, non-traditional park visitors, and international visitors. The park provides the basis for tourism dollars for the area and new money for Minnesota from out-of-state visitors.

Mission and Vision Statements

Department of Natural Resources Mission

The mission of the Minnesota Department of Natural Resources is to work with citizens to protect and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life.

DNR Division of Parks and Recreation Mission and Vision

Mission

We will work with the people of Minnesota 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.

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 and 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 environmental education and interpretative roles;
- A pledge to provide high quality public service;
- A promise to consistently seek public involvement and support in decision making;
- A conscious and continuous effort to respect the valuable human resources embodied in our employees and the public;
- A commitment to manage state parks for the benefits that they provide to people, society, the environment and the economy;
- A continued desire to actively seek and adopt innovative, effective and efficient management practices; and
- A realization of our responsibility to secure and maintain the resources necessary to implement our mandates and mission.

Interstate State Park Mission, Vision, and Goals

After reviewing the Department of Natural Resources and DNR Division of Parks and Recreation mission and vision statements the planning process participants generated the following mission and vision.

Interstate State Park's Mission:

We will work with the people to preserve and manage the diverse natural, scenic, and cultural resources of Interstate State Park for present and future generations while providing appropriate recreational and educational opportunities in an area of spectacular geologic beauty.

Interstate State Park 20-Year Vision:

Management decisions for Interstate State Park will be guided by the following principles:

- To protect, enhance, and interpret the natural, cultural, and scenic resources that contribute to the park's statewide and national significance.
- To contribute to the goals and objectives of the St. Croix National Scenic Riverway.

- To complement the management, development, and education programs of Wisconsin Interstate Park and the communities of Taylors Falls and St. Croix Falls, WI.
- To partner with MnDOT and Wisconsin for continued safety of visitors and highway users.
- To assist in maintaining or enhancing water quality and related ecological communities of the St. Croix River.
- To provide for appropriate and sustainable low impact recreational opportunities in the park.
- To provide high quality customer service and well trained and equipped staff.
- To restore, manage, and interpret the St. Croix Moraine ecosystem within the park in order to enhance biodiversity and ecosystem integrity.
- To make safety a priority for visitors and staff.

Safety, aesthetics, and resource protection must blend in the heavily-used pothole area of the park. Photo by Joe Niznik, DNR.

Unit Planning Process

In May 2002, a public news release announced the beginning of the planning process. It noted that there would be several public "open houses" and a Park Planning Citizens Advisory Committee would be formed. The committee structure included representation from the following:

Local government officials	Several area business people
Resort owners	Adjacent landowners
Audubon Society	Environmental and wildlife interests
Polk County Tourism	Chamber of Commerce
Rock climbing associations	Swedish Immigrant Trail
School teacher	Historical society
Local legislators	Mn/DOT

Over 90 citizens attended the meetings, including residents of Taylors Falls, St. Croix Falls, Center City, Frederic, North Branch, Franconia, St. Paul, and rural Chisago County.

Meetings were held to discuss major planning issues on the following dates (advertised and open to the public):

May 14, 2002	First open house - park issues, mission, vision, goals, process
June 25, 2002	Natural resource management issues
July 25, 2002	Land management, boundaries and acquisition
September 19, 2002	Recreational use and visitor services
November 14, 2002	Cultural resource management issues and interpretive services
January 9, 2003	Marketing, promotion, transportation access, and camping

Two landowner open houses were held with people in the proposed boundary expansion area on June 17 and June 21, 2003. An open house from review of the draft plan was held on December 10, 2003.

The Department of Natural Resources formed a Resource Management Advisory Team (RMAT) to assist in developing this park plan. This professional team included staff from various DNR Divisions as well as Interstate State Park (MN & WI), Mn/DOT, National Park Service and the Chisago County Environmental Services. The RMAT met formally on May 9, 2002, August 1, 2002, and December 5, 2002. Members attended the Citizens Advisory Committee meetings and Open Houses that were appropriate to their discipline. The DNR Statewide Interdisciplinary Review Service (SIRS) approved the plan November 2003. The DNR Central Region Management Team reviewed the plan January 2004.

In March 2008, with new management at the park and regional level, the plan was again reviewed by the Division and Department. A revised draft was developed following that review and was released for public comment, including an open house on November 12, 2008 at the Taylors Falls Memorial Community Center. The revised plan was approved by the Commissioner of Natural Resources on February 25, 2009.

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

This comprehensive management plan replaces the present Interstate State Park plan, which was approved in 1978. A comprehensive park plan and “planning process file”, documenting the 2 planning process and pertinent background information will be distributed to the following locations: Interstate State Park, DNR Central Region, and DNR Division of Parks and Trails (St. Paul).

REGIONAL ANALYSIS

The following section describes the regional population, tourism and resort industry, the regional supply and demand for recreational services, and the region's natural resources and landscape. Throughout this chapter, the plan will reference a 60-mile radius. This distance represents an area roughly within a one-hour drive of the park (See Figure 1: 60 Mile Radius for Recreation and Tourism Opportunities).

Three state parks and one unit operated by the National Park Service are within a 15 minute drive of Interstate State Park: Wisconsin's Interstate State Park, Wild River State Park, William O'Brien State Park, and St. Croix National Scenic Riverway. West of Minnesota's Interstate State Park is the 22,840-acre Carlos Avery Wildlife Management Area. There are also private recreational facilities such as Wild Mountain Ski Area, Camp Waub-O-Jeeg and Wildwood Campgrounds.

Ecological Subsection

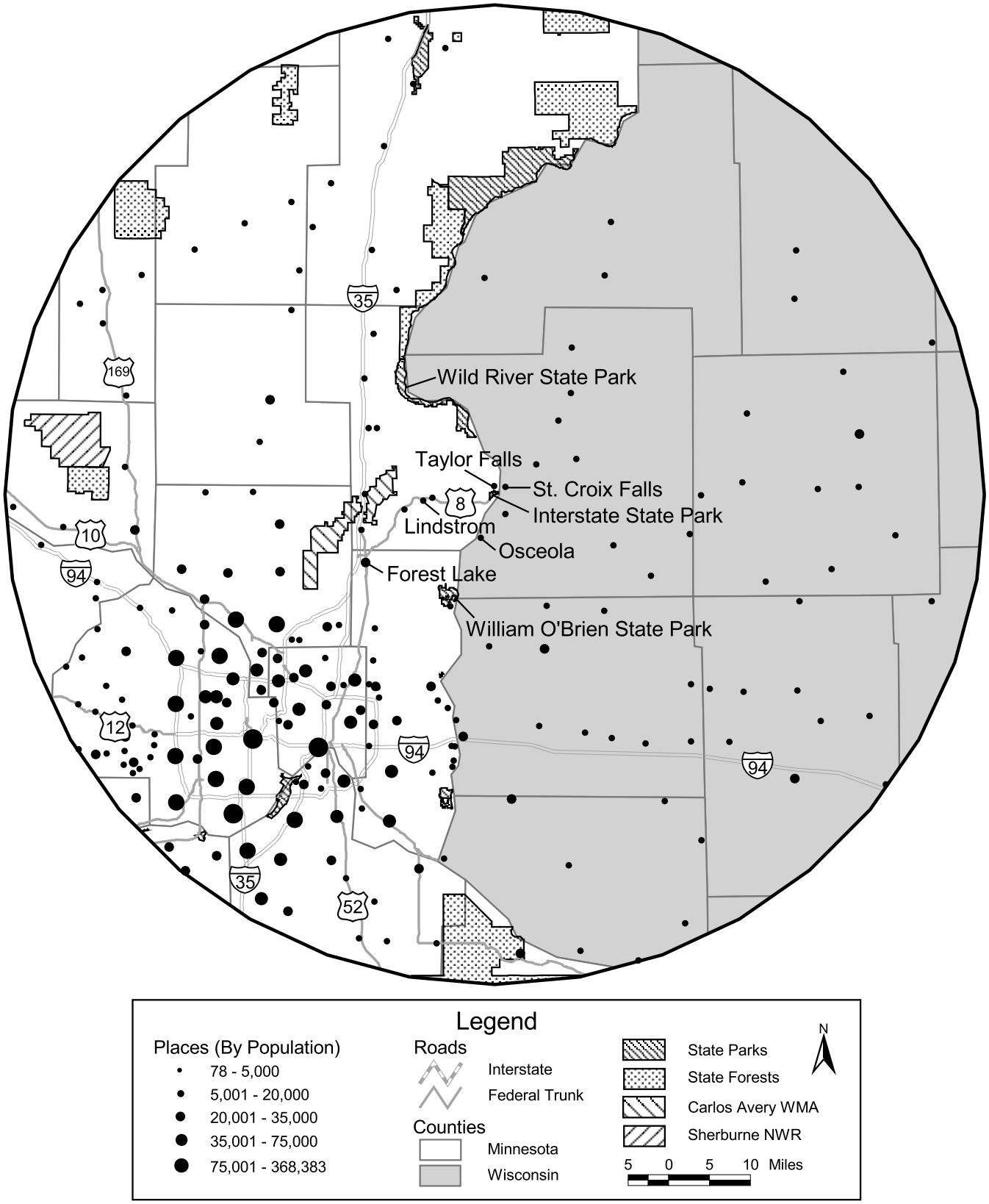
Minnesota's Ecological Classification System (ECS) is part of a national classification that separates and describes units of different landscapes. This approach stresses the interrelationships and interactions among components of the ecosystem. These components include climate, geology, geomorphology, parent material, soils, vegetation, hydrology, and land use history. ECS divides Minnesota into 26 subsections. Interstate State Park falls into the St. Croix Moraines subsection (See Figure 2: Ecological Subsections).

The St. Croix Moraines Subsection lies primarily within Wisconsin with a narrow band in Minnesota running along the St. Croix River from the southern boundary of Wild River State Park to just south of the Dalles of the St. Croix at Taylors Falls. The portion of the St. Croix Moraines Subsection lying within Minnesota is 2,938 acres (5 square miles) between Almelund and Taylors Falls. The landform lying in Minnesota is part of the fluvial system of the St. Croix River Valley. A wide range of Precambrian bedrock underlies this subsection. Soils are typically sandy loam to loam, and may be stony; other soils are mucky or peaty.

Visitors of all ages enjoy the Dalles of the St. Croix River. Photo by Carmelita Nelson, DNR.

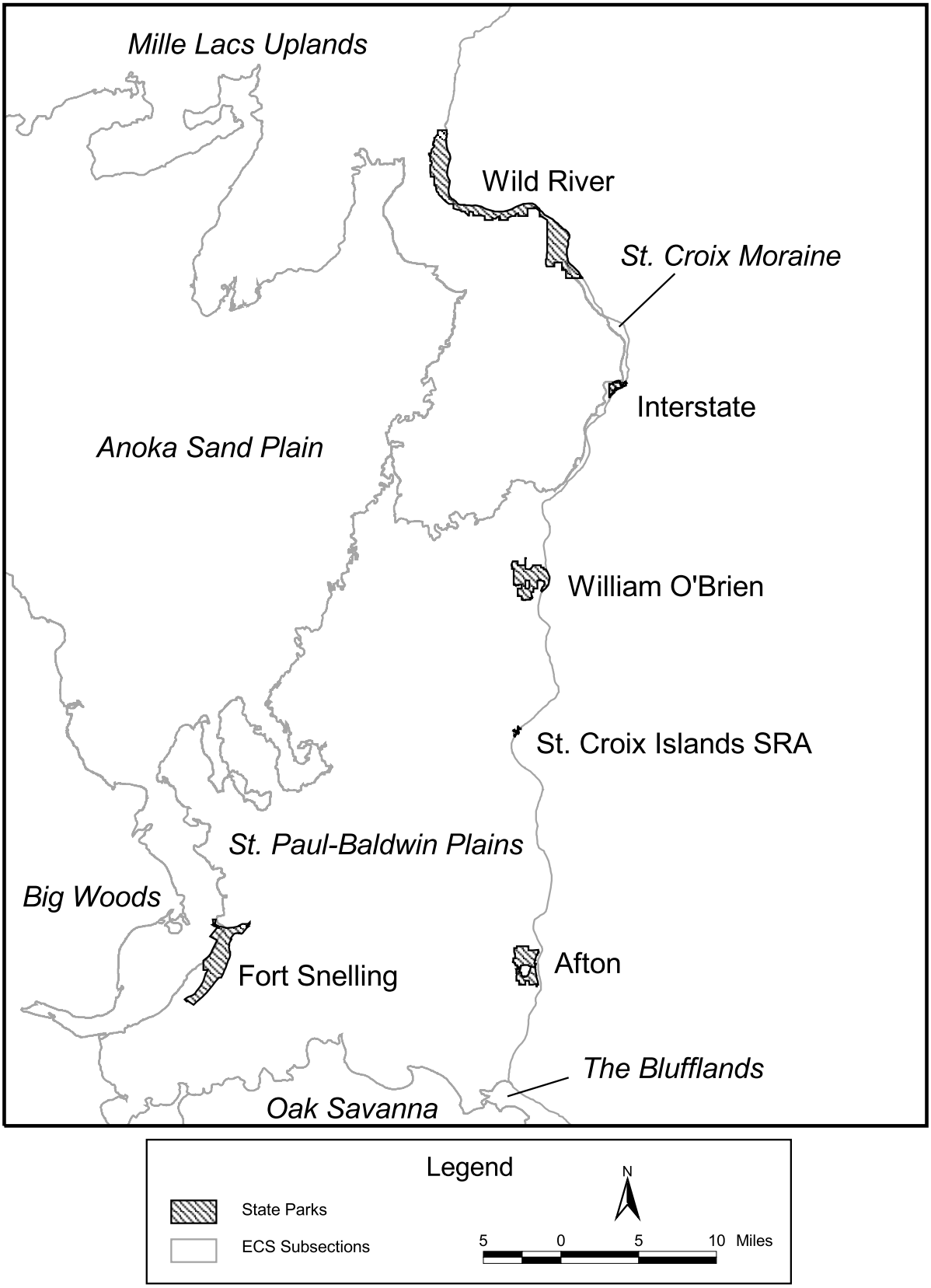
Interstate State Park

Figure 1: 60 Mile Radius for Recreation and Tourism Opportunities



Interstate State Park

Figure 2: ECS Subsections



Regional Population Analysis

Minnesota is the fastest growing state in the upper Midwest. Minneapolis-St. Paul is one of the fastest growing and the eighth most sprawling metropolitan area in the country. The population of the Twin Cities is expected to increase by 650,000 by the year 2020.

Chisago County is currently experiencing tremendous population growth, as is Polk County, Wisconsin across the river. Chisago County had a population of 43,090 in 2000. In 1990, the population was 30,521. The major population centers of the county are Lindstrom, Chisago City, Taylors Falls, Center City (county seat), Wyoming, North Branch, Harris, Stacy, and Rush City. Development pressure is most intense along the I-35 corridor and along Trunk Highway 8. Because of its proximity to the Twin Cities metropolitan area, Chisago County has experienced a great increase in rural non-farming housing development. The population of Taylors Falls grew from 694 people in 1990 to 951 people in 2000.

Polk County, Wisconsin had a population of 37,853 in 2000. In 1990, the population was 34,773. St. Croix Falls, WI is the third largest municipality in the county with a population of 1,853. It is a major business/manufacturing/shopping center for the county.

Regional Recreation and Tourism Opportunities

According to the Minnesota State Park System Land Study (2000), Minnesotans are willing to travel at least 30 miles for day use recreation. Additionally, while on vacation, people tend to visit recreation areas within 30 miles of their primary destination. Therefore, an area within a 60-mile radius of Taylors Falls was designated as the research area for this section. This 60-mile radius encompasses the Twin Cities Metropolitan area (see Figure 1: 60 Mile Radius for Recreation and Tourism Opportunities). With federal, state, regional, local and private facilities, there is a plethora of outdoor activities, cultural sites, educational opportunities and tourism activities available for recreation within an hour drive of Interstate State Park.

The main reason tourists come to the area is for the spectacular scenery. Tourism is considered a key component for this area's future, drawing people from the Minneapolis-St. Paul metropolitan area and beyond. Out-of-state tourists are mainly from Wisconsin, Iowa, Illinois, and Michigan, but also come from all over the world. Tourism and promotional efforts are organized by the St. Croix Valley Regional Tourism Alliance, which represents communities on both sides of the river from Taylors Falls to Prescott.

The St. Croix River at Interstate State Park is especially well known for its whitewater kayaking and for the rock climbing. It offers some of the best opportunities for these activities in the Midwest and is within one hour of Minneapolis-St. Paul.

The 252-mile St. Croix National Scenic Riverway protects the Namekagon and St. Croix Rivers. It was established in 1968 as one of the original eight rivers under the National Wild and Scenic River Act. The Lower St. Croix National Scenic Riverway was added to the system in 1972. The Lower St. Croix Riverway is a narrow corridor that runs for 52 miles from Taylors Falls/St. Croix Falls to the confluence with the Mississippi River at Prescott/Point Douglas. Canoeing, boating, camping, fishing, swimming, picnicking, and bird watching are popular activities. The riverway headquarters is located in St. Croix Falls, Wisconsin.

Wild River State Park, ten miles upstream of Interstate, is a 7,000-acre park with 96 semi-modern campsites, horse camping, a 200-person group camp, backpack camping, canoe campsites, a guesthouse, and two rustic year round camper cabins. It offers 35 miles of hiking and cross-country ski trails, 20 miles of horseback riding trails, a two-mile self-guiding nature trail, a three-mile paved trail, and a two-mile snowshoe trail. The park has a heated trail center, a year round interpretive center, picnic shelter, amphitheater, canoe, and ski/snowshoe rental.

William O'Brien State Park, ten miles downstream of Interstate has 1,520 acres and 238,000 annual visitors. It has 124 semi-modern campsites, walk-in camping, four group campsites, and one seasonal camper cabin. It offers 12 miles of hiking and cross-country ski trails, 1.5 miles of hard surfaced bike trails, and a self-guided trail. There is a year round interpretive center, picnic shelter, swimming beach, amphitheater, and canoe rental.

Wisconsin Interstate Park in St. Croix Falls, Wisconsin has two campgrounds with a total of 85 family campsites, and a primitive group camp that accommodates 60 people. Picnic tables and grills are available, as well as open shelters that can be reserved for group picnics. There is a swimming beach and beach house at Lake o' the Dalles. There are nine miles of hiking trails within the park. The park's Ice Age Visitor Center is open year round.

Chisago County, Minnesota has five county parks, the North Sunrise Reserve Area, the Sunrise Prairie Bike Trail and portions of the Swedish Immigrant Bike Trail underdevelopment. Chisago County also hosts a downhill ski area, an indoor ice arena, and a private golf course. There are a variety of water recreation opportunities in the county including a private alpine water slide, tubing on the Sunrise River, and a city water park. In addition to the St. Croix River, there are numerous fishing lakes and public boat landings in the county. Taylors Falls Boat Tours have daily trips, dinner cruises, and private charters.

In addition to Interstate and Wild River State Parks, Chisago County has portions of the Chengwatana State Forest and Carlos Avery Wildlife Management Area for additional recreational opportunities. The 17,000-acre Chengwatana State Forest offers camping, hiking, skiing, horseback riding, and snowmobile trails. Carlos Avery WMA is 23,000 acres of upland forests, grassland, fields, and wetlands. It was established for wildlife production, public hunting, trapping, bird watching, and other uses compatible with wildlife management and has 23 miles of trails and 57 miles of roads.

Polk County, Wisconsin has ten swimming areas, over 400 fishing lakes, 91 miles of canoe trails, 62 boat launches, 952 camping sites, 140 miles of hiking trails, 30 miles of bicycle trails, 350 miles of snowmobile trails, one downhill ski area, 32 miles of cross-country ski trails, seven golf courses, and 30 parks. The Great Wisconsin Birding Trail is proposed to extend to this area as well. The Wisconsin DNR, United States Fish and Wildlife Service, Ducks Unlimited, and Audubon Society are sponsoring the trail. The Polk County Information Center provides tourism information and is open seven days a week.

Chisago Lakes School District nature trail is north of Interstate State Park. Photo by Carmelita Nelson, DNR.

Interstate State Park

Figure 3: Origin of Campers

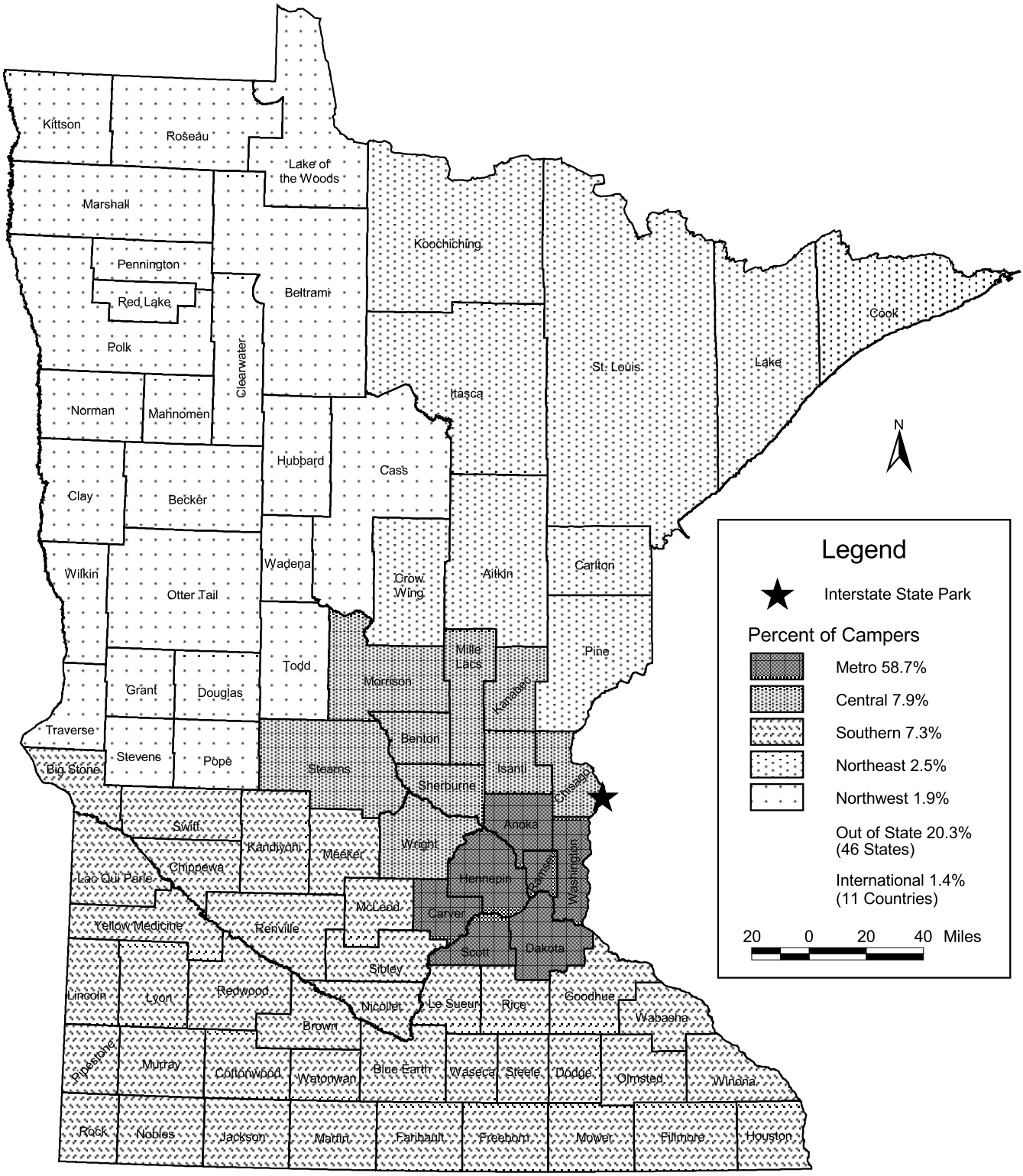
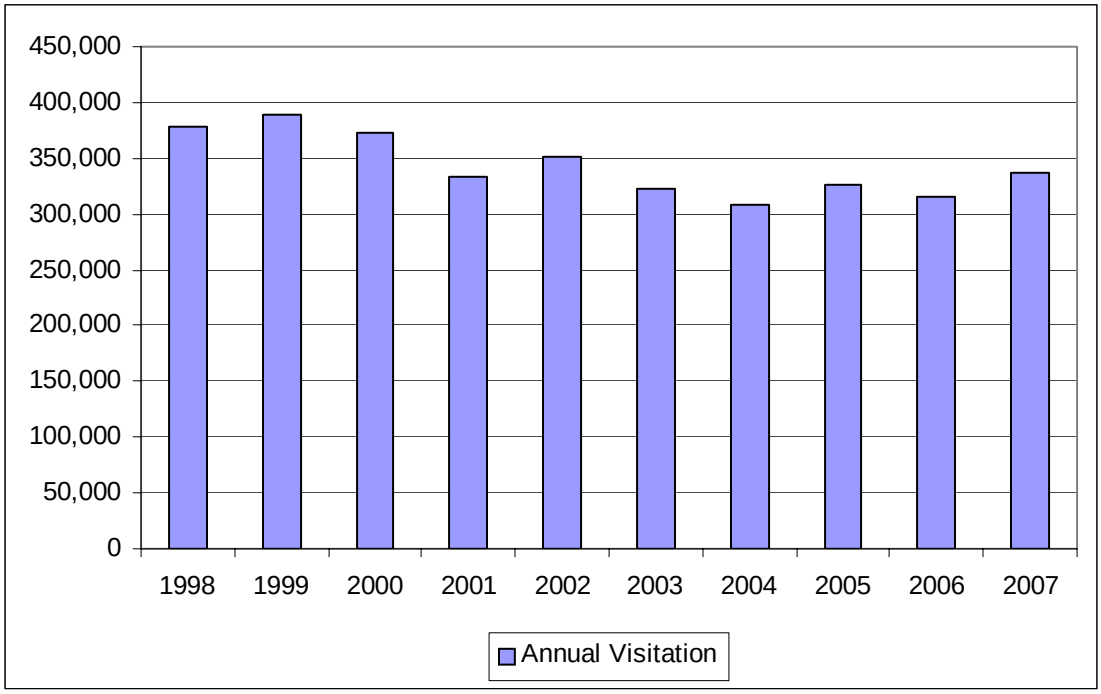


Table 1: Annual Visitation to Interstate State Park, 1998-2007



Visitor Use Patterns

Interstate State Park is typically among the five most visited state parks in Minnesota, and among the top 25 visited tourist destinations in the state. Visitation has been stable over the last ten years, roughly 300,000 to 350,000 people visiting the park each year (see Table 1: Annual Visitation to Interstate State Park, 1998-2007). Surveys of park visitors find that nearly 60% of the respondents were visiting Interstate State Park as the primary destination of their trip. The surveys also found a high percentage (62%) of visitors are repeat visitors. The majority of visits to the park are day visits.

Overnight Use

In 2007, 13,425 visitors stayed overnight in the park, either in the campground or group camp. Because the campground is relatively small and close to the metro area, it has a very high occupancy rate (55% during peak season). Almost 80% of the overnight visitors are from Minnesota, of those ¾ are from the Minneapolis-St. Paul metropolitan area (see Figure 3: Origin of Campers). The remaining 20% of campers come from outside Minnesota, with 1.5% of all campers being international visitors. The out-of-state portion of Interstate State Park's campers is higher than most other state parks because of its border location.

Trail Opportunities

The Willard Munger State Trail (formerly called the MN-WI Boundary Trail) is authorized by Minnesota Statute 85.015 Subd. 11 originating in Arden Hills, extending northeasterly to Taylors Falls, extending northerly to St Croix State Park, and terminating in Jay Cooke State Park.

The Gateway State Trail was originally part of the Willard Munger State Trail, but is now considered a separate state trail. Authorized by Minnesota Statute 85.015 Subd. 14, the Gateway State Trail originates

at the state capitol and extends northeast to Taylors Falls. The Gateway State Trail is a designated non-motorized trail. Currently, the state trail is 18 miles long with a paved treadway for the entire length and a parallel unpaved trail on the eastern 9 miles open to horse use. The Gateway State Trail is the most heavily used state trail in Minnesota.

The DNR continues to collaborate with private landowners, local units of government, and trail supporters to develop the trail corridor from the end of the existing trail at Pine Point Park in Washington County to Taylors Falls in Chisago County. The goal is to take advantage of existing corridors as much as possible. In the Taylors Falls/Interstate State Park area this may mean that the trail connects with the Swedish Immigrant Trail to the west and enter the park in tandem on the abandoned railroad bed paralleling Trunk Highway 8. The railroad corridor is the most preferred and scenic route for the Gateway State Trail. Accommodating paved and unpaved treadways within the park will be challenging. An alternative may be to route the unpaved trail with horse use along Herberg Road.

The DNR often assists with the development of regional trails and is cooperating with Chisago and Washington counties on several trail projects. The Swedish Immigrant Trail is proposed to go from Wyoming, Minnesota to Taylors Falls, primarily on an old railroad grade. The proposed trail improvements through Taylors Falls will be a vital link to several major trail systems including:

- The Swedish Immigrant Trail. This connects with the Sunrise Prairie Trail in Wyoming.
- The Minnesota-Wisconsin Boundary Trail. This trail will eventually extend from the Metro Area into Duluth. An objective of this trail is to capitalize primarily on the magnificent scenic views of the St. Croix River.
- The Gateway State Trail. The trail is currently an 18-mile multiple use trail that extends from St. Paul to Pine Point Park in Washington County. This trail will eventually extend north to connect to Taylors Falls.
- St. Croix Falls, Wisconsin is the starting point for the Gandy Dancer Trail, the Ice Age Trail and an American Volkssport Trail.

Other Day-Use Activities

There are many outdoor recreation opportunities in Chisago and Polk counties. Canoe rentals are available at Interstate State Park, St. Croix Falls, WI, Wild River State Park, and William O'Brien State Park. Riverboat excursions on the St. Croix River are immensely popular. Touring visitor centers at Wisconsin Interstate State Park, Polk County Information Center, and at St. Croix National Scenic Riverway, Wild River and William O'Brien State Parks are indoor activities. Wild Mountain offers skiing in the winter, a water park, alpine slides, and go-carting in the summer. Trollhaugen offers skiing in the winter and sponsors a four-wheeler rally and several events in the summer. Other outdoor activities include hunting or wildlife watching at Carlos Avery Wildlife WMA, touring the trout hatchery in St. Croix Falls, WI, Fawn-Doe-Rosa Wildlife Educational Park east of St. Croix Falls, WI, the Pinehaven Wildlife Park near Wyoming, MN, the Wolf Center, and a number of specialty farms that raise bison, elk, alpacas, and exotic fowl.

The St. Croix Valley has a rich culture of arts and entertainment. The St. Croix Festival Theatre is a nationally recognized professional repertory theater company. In addition to plays, the Theater hosts classical, jazz, folk, and bluegrass concerts in the historic opera house. The St. Croix Art Barn is housed in a 100-year-old barn in Osceola, WI and offers live music, theater, workshops, and gallery shows. There are numerous art galleries, an annual pottery tour of local pottery studios, and several art fairs. The Franconia Sculpture Park in Taylors Falls attracts artists from around the country and offers a very unique outdoor art experience.

A variety of historical attractions are located in the area. The Folsom House in Taylors Falls is owned by the Minnesota Historical Society and offers tours to the public. The Angel Hill district of Greek revival homes in Taylors Falls is on the National Register of Historic Places. It also includes the oldest schoolhouse and Methodist Church in Minnesota. The Minnesota Transportation Museum offers train

rides from Osceola, WI to Marine on St. Croix, MN. The trains cross the river and travel through William O'Brien State Park with costumed interpreters. The Taylors Falls Pioneer School, the Swedish Circle tour, and the Almelund Threshing Bee are popular historic activities. The Swedish Circle Tour attracts hundreds of Swedish international visitors each year.

Transportation

Interstate State Park is accessible from Trunk Highway 8 and State Highway 95, which follow the same alignment through the park. Mn/DOT is currently studying Trunk Highway 8 in the Taylors Falls area from the bridge over the St. Croix River to address road stability, runoff and drainage problems. There are also capacity problems with the two-lane road and narrow shoulder. Traffic in downtown Taylors Falls is congested and there are few parking options. There are currently 115 parking spots in the state park's north end parking lot. The Citizens Advisory Committee noted that rerouting highway would significantly reduce noise, enhance aesthetics, safety, interpretation, and wildlife migration at the narrowest point in the corridor.

Trunk Highway 8 Issues identified through the park planning process:

Land Base
At 295 acres, Interstate State Park is the second smallest Minnesota State Park. For over 100 years it has been one of the busiest Minnesota state parks with an intense visitor season extending from April through October. There is a need to protect and augment significant resources already in the park and to protect additional surrounding areas with significant geologic resources and vegetation.

National Wild and Scenic River
The Cooperative Management Plan for the Lower St. Croix National Scenic Riverway was published January 2002. The plan recommends limited, planned new development within existing municipalities that is consistent with the historic character of the community. Outside of municipalities landowners are encouraged to maintain the natural character of the landscape, particularly the bluff lines, as seen from the water.

Historic Significance
Tests have revealed prehistoric ceramics of the Kathio phase dating back to 1000-1300 A.D. where the present campground is located. Dakota and Ojibwe inhabited the area prior to European settlement. During the early 1700s, the French used the area for fur trading. During the mid to late 19th century, a section of Taylors Falls, known as Mill Town, was located in the area now occupied by the picnic grounds and campgrounds. The park was established in 1895 and is the second oldest Minnesota State Park and the first interstate park in the nation. There are three National Register Historic Districts in Taylors Falls: Angel Hill District (a portion is within the park boundary), Interstate State Park Civilian Conservation Corps/Works Progress Administration (CCC/WPA) Rustic Style Historic District (6 acres in the Glacial Gardens area including three buildings, two structures, and one object). The third district is the Interstate State Park CCC/WPA/Rustic Style Campground (22 acres one mile downstream from the other site, includes three buildings and three objects).

Water Quality and Quantity
Water quality concerns include storm water runoff with its associated deposition of sand, salt, and chemicals to the park and the St. Croix River. Of great concern for the park are the potential impacts to two endangered species of mussels, nine threatened species of mussels and four special concern species of mussels. All of these are found in the St. Croix River adjacent to the park and are highly sensitive to sedimentation and water quality changes. Any changes in the road may contribute negatively to the drainage patterns in the park. One area of drainage concern is near the group camp where the special concern species American pennywort grows in seepage swamps.

Geological issues
Road construction may exacerbate rock movement. The last major road project resulted in the loss of the Pulpit Rock formation. Blasting could affect the stability of steeper faces of both the basalt and sandstone. Talus regularly comes down off the basalt and sandstone cliff, especially the sandstone, which is significantly weaker. The rare Mill Street Conglomerate formation parallels the highway near the "Welcome to Minnesota" sign. It is geologically significant because there are only a few exposures in North America. It is the unique combination of resistant bedrock and glacial action that made Interstate unique. It is the geology of the park that moved the people of Minnesota to preserve it as part of the nation's first inter-state park.

Mn/DOT equipment used to monitor traffic vibration and impact on surrounding land. Photo by Carmelita. Nelson, DNR.

Transportation and Access
Nearly all park visitors spend some time in downtown Taylors Falls. Taylors Falls views itself as the "gateway" to the park. Economic benefits to the community are hinged on good access between the park and town in terms of driving, parking, walking, and potentially biking. A regional transportation plan may provide a better alternative for through traffic between Minnesota and Wisconsin. Road improvement considerations need to alleviate rather than compound congestion at park access points.

Safety
Ability of visitors to move about the park in their vehicles, on foot or by bicycle, is a major concern. Likewise, safety is a concern for all motorists traveling through this scenic but congested area. Some specific safety issues include: slippery surfaces, holes and protrusions, vertical drops, falling natural objects, water, road maintenance, signage, unprotected bridge/walkway parapets or abutments, pavement defects, tripping on steps or stairs, people striking an overhead object, and rescue vehicle access. The DNR encourages Mn/DOT to review past incidents from the state, county, city, and park records to better understand the frequency and severity of incidents associated with these issues.

Wildlife
Protection of the St. Croix valley's important biological diversity is a concern. Interstate State Park is home to many forest interior birds, neotropical migratory birds, and amphibians. Many of these species are currently seeing a decline in the region. Of special concern are the bald eagles, red-shouldered hawks, and Louisiana waterthrush, all found in the floodplain or maple-basswood forests of the park. Fragmentation of the forest cover needs to be minimized to protect the habitat of these birds and wildlife. Any species that might cross the road could be impacted by changes to the highway. Black bear and cougar have been reported in Taylors Falls and the park, and a radio-collared wolf was monitored in the park vicinity. Wildlife travel corridors are likely to be the river and

parallel upland wetlands and woods. Interstate State Park is one of the narrowest points in the St. Croix Valley corridor. The presence of the highway at this narrow point threatens the viability of the wildlife corridor and is a limitation to wildlife use in the valley.

Vegetation
Vegetation screening will have to be carefully balanced with vista management. The visual impact from the river should be minimized. This area has historically been one of the most scenic drives in Minnesota, and vista management is a priority. Potential impacts that need to be minimized are felling of live trees, designs that would increase the trampling of vegetation, loss of herbaceous vegetation or seedlings, change in species composition, introduction of exotic species, disturbance of species of concern or compaction of tree roots. Re-vegetation after any roadwork should utilize native species using local genotypes.

Aesthetics
The Taylors Falls Comprehensive Plan lays out two significant guiding principles: that economic development should focus on opportunities unique to the Taylors Falls setting and small town character, and that the natural environment is the most significant element of the community's infrastructure. In designing the highway, we should complement these principles with thoughtful signage, guardrails, other structures, and landscaping.

Noise
A National Park Service survey revealed that nearly as many visitors come to national parks to enjoy the natural soundscape (91%) as come to view the scenery (93%). Natural sounds are being masked or obscured by a wide variety of human activities. At Interstate, traffic on Highway 8 is a major noise generator. Noise currently impacts park visitors, interpretive programs and disturbs wildlife. Historical aspects ("Little Switzerland") can't even be imagined because of the noise. "Jake braking" and large trucks in general cause the most disturbance. Loud cars and noisy motorcycles also echo off the valley walls during busy weekends. However, noise abatement walls are not appropriate along this scenic highway. While access to the park and scenic views are consistent with the park purpose, high-speed traffic and heavy trucks are not.

General Recreation
In 1937, Interstate State Park received 327,496 visitors. Attendance has continuously been high. Early development of the park was oriented toward the enjoyment of the geologic formations and the Glacial Gardens were considered an outdoor museum. Today, recreational highlights include glacial pothole area, scenic river views, camping, rock climbing, canoeing, fishing, hiking, and picnicking.

Existing Trails
Several existing park trails may be impacted by design of Trunk Highway 8. The River Trail is parallel to the south side of the highway for a section of the trail and is sometimes separated from vehicles only by a guardrail. Due to the steepness and narrowness of the terrain there is no place to relocate this trail. It is the main trail connecting the pothole area to the campgrounds. The Railroad Trail parallels the highway on the north side. It connects the scenic Sandstone Bluffs area to town. Currently there is no safe way to cross the highway from the Railroad Trail to the upper parking lot without walking a long distance through downtown and under the bridge. The third trail impacted by the highway is the Sandstone Bluff trail. This trail had to be rerouted after the previous highway construction. Any widening of the highway would require rerouting the existing trail. To access the Sandstone Bluff trail from the campgrounds/picnic grounds, visitors must duck through a 5'6" high tunnel under the highway. During the winter, groundwater and melt water flows under the highway and freezes making the tunnel unusable. The tunnel is also unusable after heavy rains.

Proposed Trails
The DNR supports the proposed non-motorized trail connecting Taylors Falls with the Gateway State Trail and the Swedish Immigrant Trail. The Division will continue to be part of the trail planning process, will consider options, and will support the project if it meets the division's statutory authority.

When planning gets to the design stage, the Department would need to be involved with creating connections to the campgrounds and north end of the park.

Interpretation/Education
One of the goals of the DNR Division of Parks and Trails is to provide effective interpretation and environmental education. On portions of the Sandstone Bluff Trail, River Trail and Railroad Trail it is impossible to do an interpretive tours because of the road noise. The noise is less significant on the Pothole Trail, but it is still noticeable. The Railroad Trail would be suitable for large school group tours, however noise from the highway is a detriment to using this trail for interpretation. The presence of the highway diminishes the opportunity to experience the historical aspects of the Historic Districts and landscapes. Because of the noise and visual impacts, visitors lose the sense of stepping back in time.

Recreation Experience
The quality of recreation experiences in Interstate State Park are diminished by the impacts of the highway. In a 1993 study of visitor experiences at Interstate, the majority of respondents reported sight-seeing as their most satisfying experience followed by opportunities to enjoy the natural scenery, getting away from the usual demands of life, and enjoying the smells and sounds of nature. Unacceptable levels of noise, smell, congestion, and traffic conditions may mean that people visiting the park no longer attain the quality experiences and benefits they seek.

Scenic Experience
The current scenic experience of highway users is not what the original highway designers intended. High speeds and large trucks detract from any opportunity to enjoy the spectacular view of the St. Croix Valley. Interstate State Park is one of the most important scenic locations in the St. Croix Valley, with a confluence of geology, vegetation, history, natural communities and wildlife in a very small area.

Revenue
Continuation of revenue generated by the sale of park vehicle permits and other items is an issue. Income generated by the park is dedicated revenue, so it is important to the DNR to maintain this revenue during any reconstruction project.

Marketing, Partnerships, Community Relations & Transportation Recommendations

The following recommendations were developed with the Citizen Advisory Committee during the park management plan process. Many of the recommendations involve coordination or cooperation with other state agencies, especially Mn/DOT, as well as local governments, business community, and park visitors.

Marketing, Partnerships, Community Relations & Transportation Goals include:

- To continue to develop partnerships and cooperative strategies for education and sustainable tourism within the St. Croix Valley.
- To maintain a proper balance between recreational use of the park and resource protection.
- To promote a sense of stewardship among park visitors.
- To recognize the role that Interstate State Park plays in providing recreational opportunities that are both unique and complementary to opportunities provided elsewhere in the region.

Marketing Recommendations:

1. Promote area history and culture.
2. Manage overlook areas for better views of the river.
3. Participate in partnerships between Taylors Falls and St. Croix Falls visitor services. Promotional packages could include: lodging, meals, boat rides, live theater, hiking and the arts. This is

especially desirable during the late fall and winter seasons, when regular tourist traffic has diminished.

Partnership and Community Involvement Opportunities:

4. Partner with the MN Parks and Trails Council on land acquisition projects.
5. Cultivate partnerships with local groups such as the Lions, Rotary Clubs, Chambers of Commerce and Economic Development groups, and the Gateway Trail Association.
6. Partner with the National Park Service on resource management and interpretation efforts.
7. Cooperate with various government agencies such as counties (Polk & Chisago) and townships (Franconia, Shafer and St. Croix) for trails and other recreation opportunities.
8. Cooperate with St. Croix Valley Tourism Alliance and Cities of Taylors Falls, Minnesota and St. Croix Falls, Wisconsin on tourism issues.
9. Partner with schools for educational opportunities.
10. Establish a Friends of Interstate State Park group and provide the group with suggested activities.
11. Consider possible cooperative efforts with private recreation providers such as the Waub-O-Jeeg and Wild Wood camps, canoe rental and tour boat companies, the Wild Mountain skiing and alpine slides, and hotels or other lodging providers.
12. Work with park user groups and local communities to build support for the state park (boundary issues, funding issues), trail projects, volunteer opportunities, and additional environmental education opportunities.
13. Participate with St. Croix Valley Watershed Educators to improve educational opportunities.

Transportation Recommendations:

The following recommendations will be pursued in cooperation with Mn/DOT.

14. Work with Mn/DOT to address issues related to Trunk Highway 8 as it passes through the park, including safety, speed, congestion, and noise.
15. Work with Mn/DOT and the National Park Service (NPS) to mitigate concerns from road pollution, silt during construction, and ongoing road run-off that threatens seepage swamps, and endangered mussels.

Highway 8/95 offers spectacular views of the St. Croix River Valley.
Photo by Joe Niznik, DNR.

NATURAL RESOURCES

Climate

In winter, the average temperature at Interstate State Park is 13 degrees Fahrenheit and the average daily minimum is 3 degrees. In summer, the average temperature is 68 degrees and the average daily maximum temperature is 79 degrees.

The total annual precipitation is about 29-30 inches. Of this about 22 inches, or 75 percent, usually falls in April through September. The average seasonal snowfall is 50 inches. On the average, 110 days of the year have at least one inch of snow on the ground. The prevailing wind is from the northwest (October-May) and from the south (June-September).

The most important factor that influences the microclimate is the park's location in the bottom of a very deep, north-south valley. It is sheltered from the cold northwest wind by the high bluffline west of the park. The river has a cooling effect on the air that comes in contact with its water surface and the valley holds the heavy, cool air in place. On hot days, the picnic area is often 10-15 degrees cooler than downtown Taylors Falls (see Figure 4: Aerial Photo).

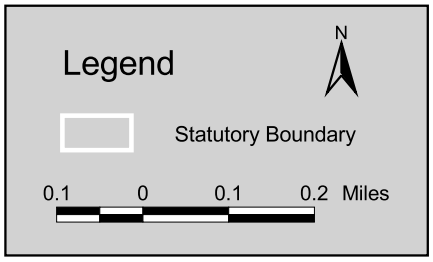
Topography

The park has a wide variety of landforms, including basalt and sandstone outcrops, stream terraces, steep gorges, potholes, narrow ravines, alluvial fans, floodplains and outwash plains. The slope within the park ranges from level to steep cliffs (see Figure 5: 10 Foot Contours).

Angle Rock & Dalles of the St. Croix River. It is recommended that all sensitive areas should be documented. Photo by Matt Oberhelman, DNR

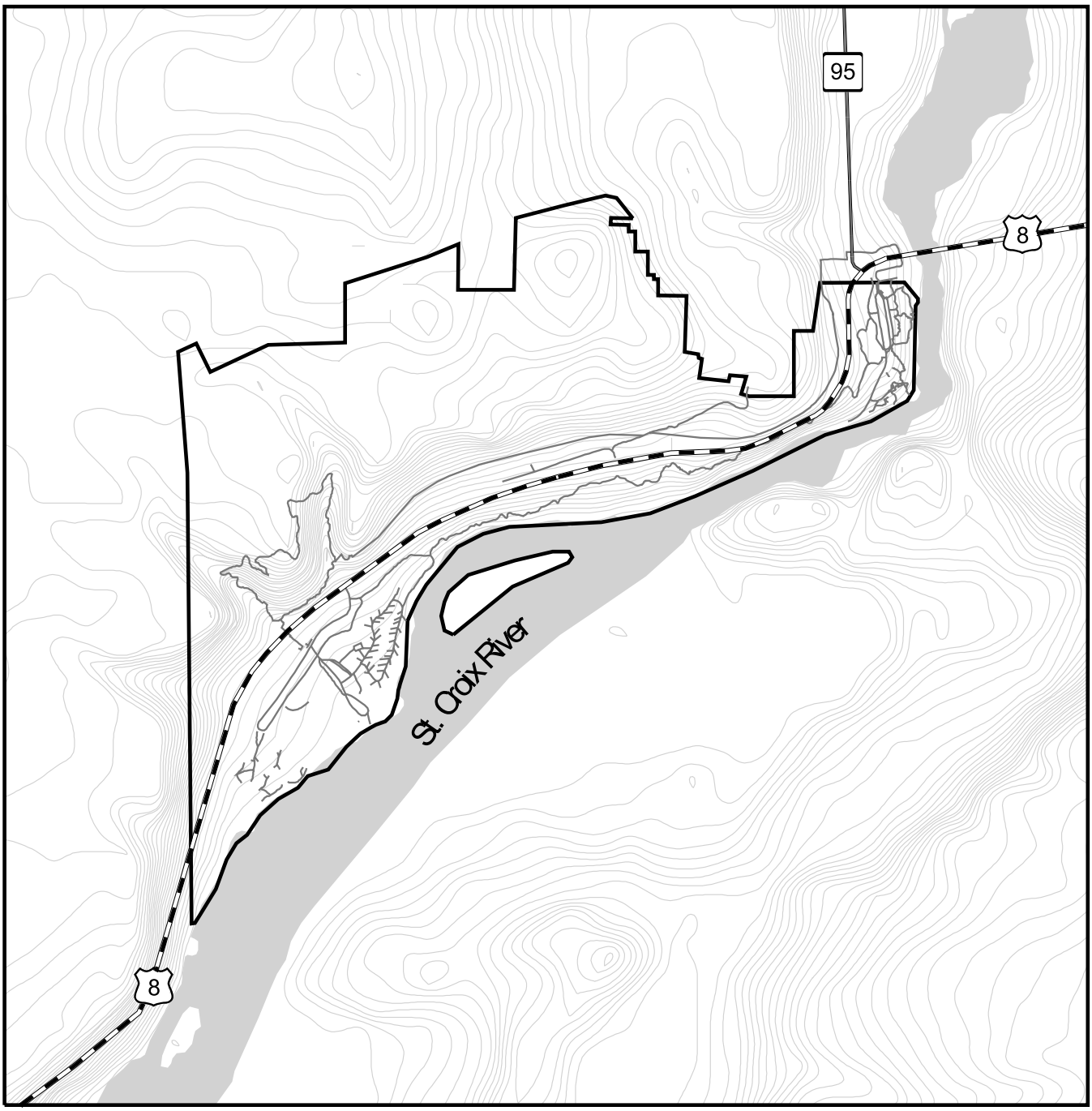
Interstate State Park

Figure 4: Aerial Photo



Interstate State Park

Figure 5: 10 ft. Contours



Legend

10 ft. Contours

Statutory Boundary

Park Roads/Trails

Roads

Federal Trunk Highway

State Trunk Highway

N

0.1 0 0.1 0.2 Miles

Geology

Interstate State Park is a geologically significant location in Minnesota. Many people come to see the geology of the park including the glacial potholes, the Dalles of the St. Croix River, Millstreet Conglomerate, sandstone, and fossils. The Minnesota Natural Heritage Program has listed seven important geologic features in three different parts of the park. These three areas are Glacial Gardens, the Mill Street Conglomerate and the Sandstone Bluffs (Curtain Falls) trail.

A great deal has been written on the geology of Interstate State Park. Most of the following information is from the DNR report "Surfical Geology of Interstate State Park" by Matt Oberhelman. (See Bibliography for additional references). The park has experienced a complex evolution throughout its geologic history, enduring periods of volcanism (lava flows), advancing seas, glaciers, and catastrophic flooding.

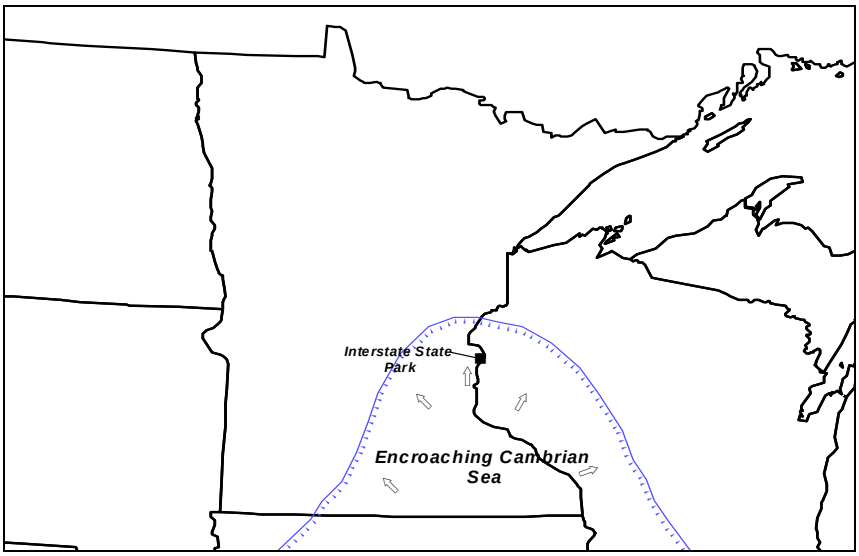
Middle Proterozoic Lava Flows

About 1.1 billion years ago a large fracture, known as the Midcontinent Rift System developed across the central United States. Extensive volcanic activity occurred along this rift. Molten lava flowed out of long cracks in the earth's surface spreading out over the surrounding land. As it cooled, it hardened into basalt. Bubble-like cavities (vesicles) can be seen in the rock where volcanic gases were trapped. Some vesicles contain minerals such a quartz and feldspar. Berkey (1897) recognized ten individual flows in the Taylors Falls area between river level and the highest outcrops west of Trunk Highway 8.

The basalt flows are well exposed within the park. They are very resistant to erosion, outcropping as steep cliffs along the St. Croix River or as thinly vegetated round hills in the northern part of the park. The basalt flows eroded to form steep cliffs along the dalles (the term "dalles" refers to a steep rock bound gorge). As the basalt outcrops erode, they tend to break off in large blocks along these fracture planes rather than slowly weathering away. Recent rock slides illustrates that theis process still occurs today.

Cambrian Sedimentary Rocks - Advancing Sea

During Upper Cambrian time, about 550 million years ago, a sea advanced from the south into Minnesota. With continued rise of sea level, the basalt cliffs and islands were gradually covered with marine sediments. Over time, the sands and silts compressed and hardened to form sandstones and shales. The Cambrian age sediments found in the park consist mainly of quartz sandstones with minor shales and local conglomerates.



By late Cambrian time, about 550 million years ago, a shallow sea extended into Minnesota. Modified from Webers, 1972.

Sandstones of the Franconia Formation

The sandstones within the park are part of the Franconia Formation. They outcrop in the western portion of the park as buff colored, steep faced cliffs just above Highway 8, and in the steep ravines along the Sandstone Bluffs Trail. The sandstone deposits mark where ancient beaches once existed. Over 110 vertical feet of sandstone is exposed along the cliff faces within the park. Local zones containing fossil fragments of trilobites and brachiopods are present. Curtain Falls has migrated and continues to migrate upstream from the mouth to its current location. The plant communities are very different from those on the basalt cliffs due to the different properties of the bedrock.

The sandstones of the Franconia Formation mark where ancient beaches once existed.
Photo by Matt Oberhelman, DNR.

Mill Street Conglomerate

Storms in the Cambrian sea generated large waves that battered the basalt coastlines. Occasionally the storm waves were big enough to dislodge boulders from the steep basalt cliff faces and transport them downslope into the sea. Marine beach sands then covered the boulders. Over time the boulders and sand compressed and hardened to form conglomerates.

The Mill Street Conglomerate is composed of pebbles, cobbles, and boulders of basalt, up to three feet in diameter, surrounded by quartz sandstone. Fossils of trilobites, brachiopods, and primitive mollusks have been found in pockets of sandstone between the boulders. The Mill Street Conglomerate outcrop is a sensitive site and should be considered one of the top geologic preservation priorities in the state. It is one of the very few exposures in the Midwest of a conglomerate composed almost entirely of large basalt fragments cemented together by sandstone.

In the ravine northeast of Curtain Falls, there is another unique geologic site. It is not accessible by trail. The site is referred to as an unconformity that represents a gap in the depositional records. Wave action from the Cambrian sea (approximately 570 million years ago) left a characteristic pattern on the basalt, which is still visible today.

Mill Street Conglomerates formed at the base of wave-battered cliffs in an ancient Cambrian sea approximately 550 million years ago. Photo by Matt Oberhelman, DNR.

Glacial History

Minnesota's "recent" geologic history has been marked by periodic invasions of glacial ice from Canada. The glacial sediments observed within the park were deposited during the last stage of glaciation, which lasted from 35,000 to 10,000 years ago. This period is called the Late Wisconsinan stage of the Pleistocene (Ice Age) Epoch. During this stage, individual ice lobes advanced into Minnesota from the northeast and northwest. The glacial lobes that had the greatest direct impact on the park are the Superior Lobe and the Grantsburg sublobe of the Des Moines Lobe. Earlier glaciers had covered the area but the deposits left by them have either been eroded or buried by later geologic events.

The modern St. Croix River is greatly undersized in comparison to the large valley it occupies. The large river valley formed in early post-glacial time (when the glacial lobes had retreated north of the park), approximately 12,000 to 9,000 years ago. As the Superior lobe retreated into the Lake Superior basin, water began to pond up in front of it, progressively growing into a large glacial lake. Glacial Lake Duluth, the ancestor of Lake Superior, stood about 500 feet above the present lake level. As the glacial lake rose, it overtopped its basin and drained through various outlets. The outlet streams quickly became huge, powerfully erosive rivers. In Minnesota, drainage was through the Moose River (or Portage spillway), which flowed into the St. Croix River via the Kettle River. In Wisconsin, outlet discharge occurred through the Brule River (Brule spillway), which then flowed into the St. Croix River.

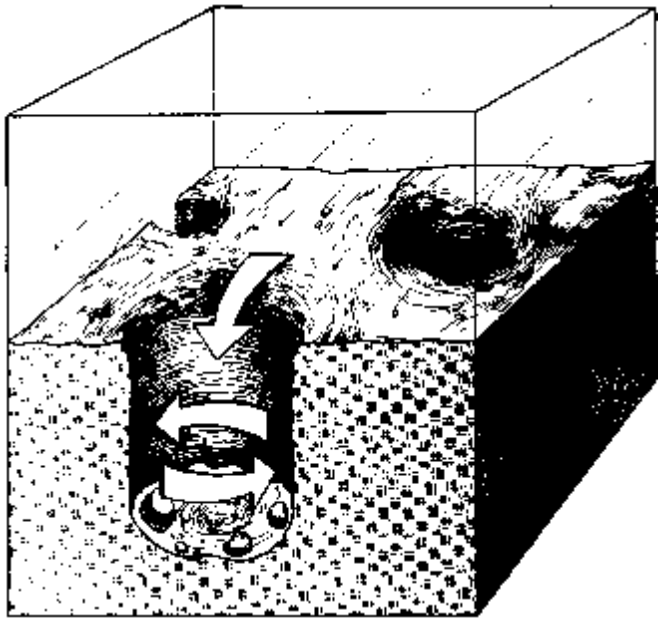
Major Erosional Features:

St. Croix Dalles - Basalt Bound Gorge
The erosive power of the ancestral St. Croix River is dramatically displayed within the park. Imagine the size and power of the river that once scoured over the park, carving out the steep gorge walls and spectacular potholes that are now left abandoned high above the present river.

Potholes
The pothole area of Interstate State Park is unique in the world for the impressive size and number of its potholes. There are over 200 in the park, all in an area of less than 20 acres. They were formed by silt-laden water in the rapids of Glacial St. Croix River. Large and small "grindstones" have been found in the potholes, but it was actually smaller particles that did most of the sculpting of the potholes. The "Bottomless Pit" at Interstate is the deepest fully explored pothole in the world, measuring 60 feet top to bottom and 12-15 feet wide. Another one is suspected of being over 80 feet

deep, but has not been explored. Smaller potholes range in size from a few inches across to five or more feet. The majority of the potholes are formed on the Dresser Basalt flows.

At Angle Rock the river takes a sharp bend (110 degree) where it encounters a southwestward fault in the basalt. The cliffs in this area are up to 100 feet high. River depth below Angle Rock is over 60 feet at mid-channel. Divers have reported cracks in the basalt riverbed leading to depths of approximately 150 feet. Frost joint erosion and cracking of basalt bedrock caused the unusual rock formations in the park, such as the Devil's Chair. Other geologic features of the park include glacial erratics, slickensides, volcanic breccia, compound alluvial fan, and Hinckley Sandstone. Certain geologic sites have been destroyed. Blasting during highway construction toppled Pulpit Rock. Devils Chair was vandalized and toppled in 2005.



The abrasion action of swirling pebbles and boulders cut the potholes into the hard basalt.
Diagram from Ojakangas and Matsch, 1982.

Soils

There are nine different soil types in Interstate State Park.

- Caryville – 1068 - (13.32 acres) This soil is located in the area of the canoe landing and Folsom Island and is flood prone.
- Fairport – 1069C – (10.33 acres) This small area of soil is located in the northern part of the park, just southeast of the City Hall. It is a soil type that erodes easily when trails are constructed. This area is associated with the basalt rock outcrops.
- Plainbo – 1070D – (133.20 acres) Nearly half the park is this soil type. It includes the whole pothole area, old railroad grade, shop area, and Sandstone Bluffs Trail area. Much of this area has severe recreation limitation and building limitations due to steep slopes.
- Pomroy – 119B – (1.68) This small sliver of land is on the western boundary of the park. It encircles the third ravine, which is mostly outside the park boundary. This soil percs slowly and has moderate limitations for recreational development.
- Chetek – 155B – (25.34 acres) This area includes the campground, picnic area and contact station. It has few limitations for development with only slight slope and small stones.
- Braham 169B & C – (35.80 acres) These two soils are found in the northern section of the park, in the undeveloped area. It can have moderate to steep slopes and is too sandy for most recreation.
- Nymore – 207E – (38.93 acres) This soil occurs behind the shop and up the hills to include the upper portion of the ravine. It is an area of moderate to severe slope and is too sandy for trails.
- Nebish 40B & C – (20.41 acres) This is mainly located in the northwestern corner of the park. It is the only soil in the park that is considered prime farmland. It would be an appropriate soil type for campgrounds or other recreational development, however there are homes nearby.
- Milaca – 682E – (8.63 acres) This is a small section on the western slope of the Sandstone Bluff (Curtain Falls) Trail. It has severe slope limitations.

Vegetation

Presettlement Vegetation

> The plant life in and about the Dalles is said to be the most varied of any one place known.
>
> The diversity of natural conditions, giving so wide a variation in environment to the plants established, can not be surpassed in so limited an area elsewhere in the State.
>
> Inter-State Park Dalles of the St. Croix 1895-1896 Blue Book 1899.

The original vegetation of Interstate State Park was primarily northern hardwoods and big woods mixed with red and white pine. Notes from the original survey of 1850s described the area as the "worst line ever run." Interstate State Park was heavily wooded with oak, aspen, basswood, elm, sugar maple, and white pine. The pines along the St. Croix River were up to six feet thick and 200 feet tall. In general, maple-basswood forests were the most common in this area because the lakes near Chisago City and the wetlands to the north blocked fires from the Anoka sandplain. Hypothetically the pre-settlement pattern of vegetation of the park from the river may have been: river beach, floodplain forest, mixed emergent marsh, mixed hardwood seepage swamp, moist cliff, dry cliff, back ash seepage swamp, maple-basswood forest, wet meadow, mesic oak forest, and white-pine hardwood forest.

Notes on the plant life in and about the Dalles of the St. Croix River by Conway MacMillan, state botanist circa 1896, describes white pine, junipers, larch, spruce, Canada yew, club-mosses and ferns. He further notes that besides being a famous locality for ferns, the Dalles has a rich profusion of mosses, liverworts, and lichens including the "fountain moss, Marchant's liverwort and cone-headed liverwort". "Of the higher group of plants he noted that of the 1000 or so species some of them are abundant, like the rock-cresses and touch-me-nots; others are rare, like the rams-head lady's slipper or the tiny hydrocotyle". MacMillan noted the presence of the prickly-pear cactus, rare this far north. The original vegetation, especially the large pines, was logged off during the late 1800s and early 1900s. The park was a major logging center during this era when the Dalles area was used for log booms.

During the drought of 1936 hundreds of oaks and pines died throughout the park. The loss was particularly severe on the rocky hilltops where there is little soil to hold moisture. Today these basalt rock outcrops are once again covered with junipers and white pine. Dutch Elm Disease hit the park beginning in 1974. Over 2,000 trees were cut from the campground and picnic ground alone. The large pines in the group camp were planted in the 1920s and 1930s. The diversity of vegetation at Interstate rivals the diversity of geologic features. It is an area that has been long recognized for its significance.

Historic Glacial Gardens

There is little documentation of the historic vegetation in the Glacial Gardens area. Newspaper citations from around 1895-98 asked townspeople to bring plants to ornament the park. The "ornament the park" movement explains the sedum and tiger lilies still seen around the pothole area. Other plants such as day lilies, lilac and honeysuckle may have been introduced at the same time. It is known that water lilies grew in the Lily Pond pothole, and they must have been intentionally planted and periodically maintained. Stone walls still remain in the woods around the pothole parking lot.

Historic stone walls in the “Glacial Gardens” area. These areas could highlight the historically planted species. Photo by Carmelita Nelson, DNR.

Present Vegetation

Despite its small size and intensive use, Interstate State Park supports a high diversity of plant life. The slopes create different habitats and climates. There are basalt outcrops, remnant prairie plants and cactus. Present-day vegetation in the park can be divided into two main categories: disturbed vegetation and native plant communities. Disturbance of Interstate’s vegetation came primarily from settlement activities such as town building, railroad, steamboat landings, logging and development of the Glacial Gardens. Aggressive invasive species include buckthorn and honeysuckle (see Figure6: Present Vegetation).

Native Plant Communities

Native plant communities are defined as groups of native plants and animals that interact with each other and their abiotic environment in ways not greatly altered by modern human activity or by introduced organisms (Wovcha et. al. 1995). Native plant communities are classified and described by considering vegetation, hydrology, landforms, soils, and natural disturbance regimes (including wildfires, windstorms, normal flood cycles, and the effects of native pathogens, insects, and microorganisms). Detailed descriptions of native plant communities in the state are available (DNR Natural Heritage Program 1993).

Native plant communities have no legal protection in Minnesota. However, the DNR considers the identification, protection, and management of native plant communities and ecosystems a high priority. Natural Heritage and Nongame Research Program (NHNRP) has evaluated native plant community types for their relative rarity and endangerment throughout their range. Native plant community types have been assigned a state endangerment rank on a scale of 1 to 5. Those ranked "1" are considered critically endangered in Minnesota, while communities ranked "5" are considered secure under present conditions.

Several of the native plant community occurrences in Interstate State Park were evaluated and given ecological quality ranks using a scale from A to D, with A being highest quality, or nearly pristine, and D lowest, or highly disturbed. For some communities, a quality rank was not assigned because there wasn't a detailed survey done.

A comparison of present-day native plant communities in the park to vegetation prior to Euro-American settlement indicates that portions of the vegetation in Interstate State Park today are similar to that described in the 1850s (U.S. Surveyor General 1853-1855). Important factors determining where the native plant communities in the park occur include topographic position, slope, aspect, hydrology, and fire history (see Figure 7: Significant Areas).

Dry Cliff communities are found on bluffs that are too steep to support soil development. They support plants adapted to these dry conditions, including harebells (*Campanula rotundifolia*) and ferns such as rusty woodsia *(Woodsia ilvensis).* Endangerment rank - 3

Rock Outcrop communities are found in Interstate State Park on exposed basalt rock outcrops. These communities are particularly significant for the unusual array of plants that occur on them. Especially notable are the endangered rough-seeded fameflower *(Talinum rugospermum)* and the prickly pear cactus *(Opuntia fragilis)*, which, along the St. Croix River, occur only very rarely on basalt rock outcrops. Other common species in these rock outcrop communities include poverty grass *(Danthonia spicata)*, rock spikemoss *(Selaginella rupestris*), bluets *(Hedyotis longifolia*), eastern red cedar *(Juniperus virginiana)*, rusty woodsia *(Woodsia ilvensis),* ticklegrass *(Agrostis hyemalis),* common ragweed *(Ambrosia artemissifolia),* and a diverse array of lichens. Kentucky bluegrass *(Poa pratensis),* an invasive exotic species, is common on these rock outcrops, and represents a threat to the rare species populations. The rock outcrop communities were given an overall C quality rank in the park. These areas should not be burned, as the cactus and other vegetation are sensitive to fire, but careful Kentucky bluegrass control would benefit these communities. Endangerment rank - 4

Mixed Hardwood Seepage Swamp communities occur in several parts of the park at the bases of bluffs, where continuous cold seeps occur. The quality of these seepage swamps varies according to the amount of disturbance from roads, culverts, and foot traffic. The highest quality mixed hardwood seepage swamp is in the southwest corner of the park near the group camp. This area was given a B quality rank. Trees in this community include black ash, yellow birch, basswood, and box elder. Shrubs noted were nannyberry, red-osier dogwood, and wild black currant. Common herbaceous species include *Carex bromoides*, marsh marigold *(Caltha* palustris), skunk cabbage *(Symplocarpos foetidus),* jewel weed *(Impatiens sp.)* and swamp saxifrage *(Saxifraga pensylvanica)*. The mixed hardwood seepage swamps north of Highway 8 are more disturbed by flooding, sedimentation, and past road building activities, but are still intact. Several rare plant species have the potential to be in these communities. One, water pennywort *(Hydrocotyle americana)* has been documented in seepage swamps in the park, but could not be located during 2002 and 2003 field searches. Endangerment rank - 3

Maple-Basswood Forest communities occur on steep slopes. They are mature forests dominated by basswood, sugar maple, bitternut hickory, and northern red oak. They generally contain diverse arrays of spring ephemeral wildflowers, including notable populations of large-flowered trillium as well as common trout lily, wild ginger, early meadow rue, and other species. The area near Curtain Falls possesses an especially high wildflower diversity. Other areas vary from good (B rank) to poor (C or D quality rank) quality, with some areas disturbed in the past by grazing. Several areas include native white pines near the tops of slopes. Endangerment rank - 3

Mesic Oak Forest communities occur on level areas above the slopes. These forests are dominated by northern red oak *(Quercus rubra),* white oak *(Quercus alba),* basswood *(Tilia americana*), and sugar maple *(Acer saccharum).* They are more disturbed than the maple-basswood forests; it appears that these areas were more heavily grazed in the past. Grazing indicator species, including prickly ash *(Zanthoxylum americanum)* and Pennsulvania sedge *(Carex pensylvanica)* are common. However, they possess many native shrub and groundlayer species typical of oak forests, including the threatened plant stemless tick trefoil *(Desmodium nudiflorum)*. Endangerment rank - 2

Oak Woodland communities occur in the eastern part of the park around the rock outcrops. These communities have been highly disturbed in the past by grazing and old home sites. Eastern red cedar *(Juniperus virginiana)* and exotic shrubs including Tatarian honeysuckle *(Lonicera tatarica)* are common and the groundlayer is disturbed. This area would benefit from prescribed burning with care taken to keep fire off the rock outcrops. Endangerment rank - 4

Floodplain Forest communities occur on floodplains of the St. Croix River. The tree canopies are dominated by silver maple *(Acer saccharinum)*, and include cottonwood *(Populus deltoides)*, American elm *(Ulmus Americana)*, green ash *(Fraxinus pensylvanica)*, box elder *(Acer negundo)*, hackberry *(Celtis occidentalis)*, and willow species *(Salix spp)*. Floodplain forest occurs on Folsom Island and in a narrow strip along the St. Croix River in places along the shore where rock cliffs are not immediately adjacent to the river, including in the campground and picnic area. Quality varies from intact forests with native groundlayer species such as wood nettle, to heavy use areas with turf grass beneath. Endangerment rank - 3

Old Growth Forests

There are no designated old growth stands in Interstate State Park, although there are some older forests.

Exotic Species & Diseases

Exotic species such as buckthorn, honeysuckle, Amur maple and lilac are present in the park. There is potential in the park for an oak wilt infestation. The effect should be minimal, however, because red oaks which are most affected by the disease are not abundant at Interstate State Park.

Old Dump Site

There is an old dump within the park boundary. The dumpsite is within a ravine that is very steep, making cleanup difficult and expensive. The dump is more extensive than what is visible because some of it was capped and the cap failed in some areas due to the steepness of the ravine.

There is also a second, older dumpsite further down the ravine that is already covered in soil and vegetation. Evaluation is needed to determine the extent and potential hazards of this dumpsite. Erosion control measures would be needed before, during and after the cleanup work. Reestablishment of vegetation will be necessary to stabilize the hillsides.

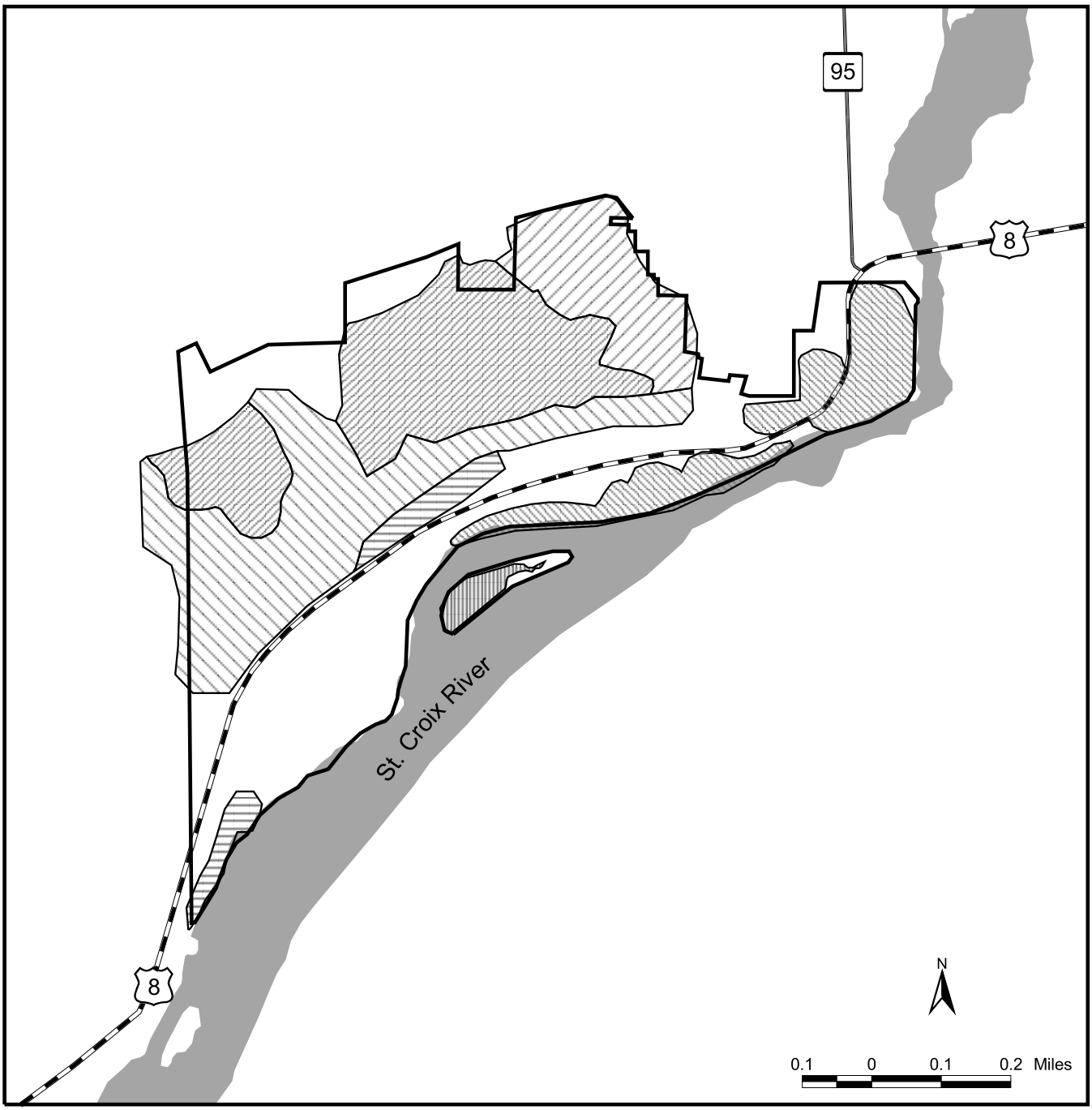
Wildlife

Interstate State Park has an excellent diversity of wildlife species for its size. Because it is along the St. Croix River, which is part of the Mississippi flyway, a large number of bird species are found in the park. A 2003 avian survey recorded 179 species of birds in the park with 95 potential breeding species present from June to July and 28 species of neotropical warblers. (See Appendix B for a complete list). The steep cliffs within the park provide updrafts of wind for migrating and hunting raptors. The most common raptor in the park is the turkey vulture. Bald eagles are also frequently seen soaring over the park. The small streams in the park provide habitat for the Louisiana waterthrush.

Thirty-two species of mammals and 18 species of amphibians and reptiles inhabit the park. The park is a good natural corridor for large wildlife such as bears. There have been cougar sightings by park staff and area residents. There are three species of wildlife that might become nuisances to the natural resources or park visitors: raccoon, striped skunk, and white-tailed deer.

Interstate State Park

Figure 6: Present Vegetation



Legend

Present Vegetation

- Floodplain Forest
- Maple Basswood Forest
- Oak Forest
- Oak Woodland
- Rock Outcrop
- Mixed Hardwood Seepage Swamp

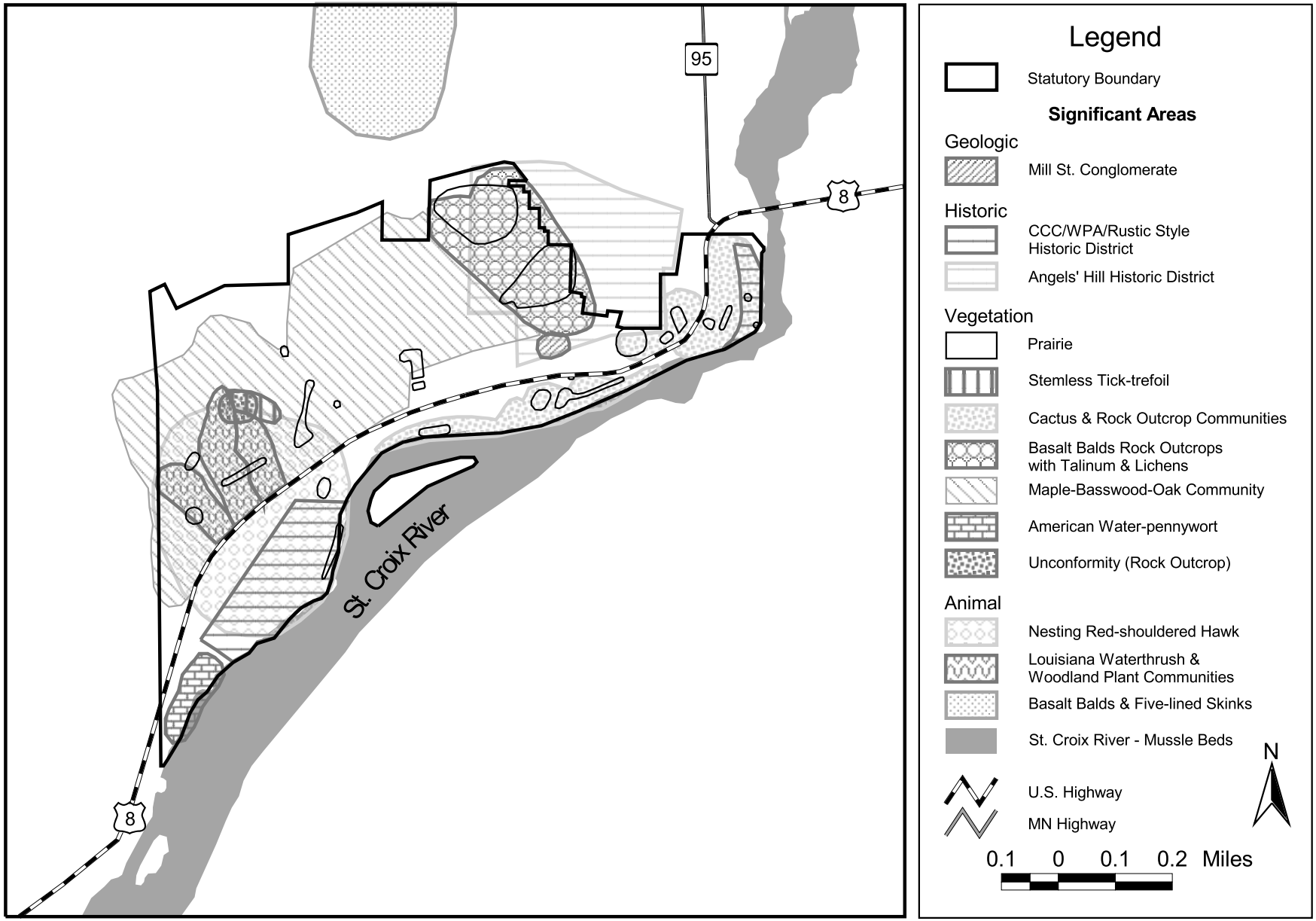
Statutory Boundary

Roads

- Federal Trunk Highway
- State Trunk Highway

Interstate State Park

Figure 7: Significant Areas



Endangered, Threatened, and Special Concern Species

For such a small area, Interstate State Park has a large diversity of rare species and communities. It is probably most recognized for the freshwater mussels in the St. Croix River. Freshwater mussels are one of the most endangered groups of animals in North America (Cummings and Mayer 1992). Forty-seven species of freshwater mussels have been documented in the St. Croix River drainage basin, including five globally rare and six regionally rare species (Heath and Rasmussen 1990). Two federally endangered species are the Higgins eye (*Lampsilis higginsi*) and the winged mapleleaf (*Quadrula fragosa*). (Sietman 2003).

The endangered rough seeded fameflower (*Talinum rugospermum)* grows on dry rocky places. This plant's habitat is thin soil, intense heat and little moisture. It is only a few inches high and has tiny bright pink, star-shaped flowers that only open for several hours each afternoon. These are very rare and Interstate State Park is considered the northern limit of their range. There is also prickly pear cactus on exposed rocky areas.

Summary of rare species documented in the Natural Heritage Information System:

State Rarity Status
- E = endangered
- T = threatened
- SC = special concern
- NS = no legal status but tracked in the Natural Heritage Information System

Rare Plants	*State Rarity Status*
Rough-seeded fameflower *(Talinum rugospermum)*	E
American water-pennywort *(Hydrocotyle Americana)*	SC
Stemless tick-trefoil *(Desmodium nudiflorum*)	SC
Cliff goldenrod *(Solidaga sciaphila)*	SC
Buttonbush *(Cephalanthus occidentalis*)	NS
White baneberry *(Actaea pachypoda)*	NS
Rare Animals	
Birds	
Trumpeter Swan (Cygnus buccinator)	T
Cerulean Warbler (Dendroica cerulea)	SC
Bald eagle (Haleaeetus leucocephalus)	SC (and Federally T)
Red-shouldered hawks (Buteo lineatus)	SC
Louisiana waterthrush (Seiurus motacilla)	SC
Reptiles and amphibians	
Five-lined Skink (Eumeces fasciatus)	SC
Fox snake (Elaphe vulpine)	NS
Fish	
Gilt darter (Percina evides)	SC
Mussels (Note: All in St. Croix River adjacent to park)	
Winged mapleleaf mussel (Quadrula fragosa)	E
Higgins eye mussel (Lampsilis higginsii)	E
Pistolgrip mussel (Tritogonia verrucosa)	T
Monkeyface mussel (Quadrula metanevra)	T
Round pigtoe mussel (Pleurobema coccineum)	T
Mucket mussel (Actinonaias ligamentina)	T

Elktoe mussel (Alasmidonta marginata)	T
Spectaclecase mussel (Cumberlandia monodonta)	T
Purple wartyback mussel (Cyclonaias tuberculata)	T
Butterfly mussel (Ellipsaria lineolata)	T
Snuffbox mussel (Epioblasma triquetra)	T
Fluted-shell mussel (Lasmigona costata)	SC
Black sandshell mussel (Ligumia recta)	SC
Hickorynut mussel (Obovaria olivaria)	SC
Spike mussel (Elliptio dilatata)	SC

Groundwater

Chisago County has abundant groundwater resources in surficial and bedrock aquifers throughout the county. The north end of the park gets its water from the City of Taylors Falls, which utilizes the bedrock aquifer.

The south end of the park has three wells. They are located in the campground (which also serves the office), picnic grounds/group camp, and the shop. All three wells are checked annually and meet standards for quality and quantity. These three wells are located in multiple aquifers, but primarily in the glacial drift of the Franconia- Ironton-Galesville Formation. The aquifers under the park are a part of the Twin Cities Artesian Basin. In the area of the park, the Franconia-Ironton-Galesville Aquifer is partially eroded. This means that Taylors Falls is on the northeastern edge of the aquifer and it may be one of the areas where groundwater problems first occur. The park wells are far enough inland that they will probably remain reliable, but given a period of dry weather or many new users, the wells could have problems. It is something that can be easily monitored by measuring the static water level and the pumping level. If the Franconia-Ironton-Galesville aquifer became unreliable, the next aquifer that could be utilized is the Mt. Simon-Hinckley at a depth of 200-500 feet.

Although the current wells in the campground and picnic area were drilled in 1950, it is likely that they were actually replacements of previously drilled wells. MN Department of Health Well and Boring Records show that the Minnesota Department of Conservation had a well completed in 1936 to a depth of 62 feet in the campground (now it is 140 feet). Another well was recorded as completed in the picnic area/group camp in 1955 to a depth of 125 feet (now it is 70 feet).

The water is very hard at Interstate because of an abundance of calcium, magnesium, and bicarbonate minerals in this area. High amounts of iron in these wells is also suspected.

Surface Water and Fisheries

Rivers and Streams

The source of the St. Croix River is a bog north of Solon Springs, Wisconsin. Lake Namekagon is the source of the Namekagon River, a main tributary of the St. Croix. The State of Minnesota recognizes all of the St. Croix River as being an outstanding resource value waters. It was designated an outstanding resource value in 1984 and has corresponding discharge restrictions. The St. Croix River has the federal designation of a National Scenic and Recreational Riverway. The water quality in the St. Croix River north of Taylors Falls is excellent. Some limited water quality problems exist south of Taylors Falls.

The hydroelectric dam, upstream of the park, was built in 1906 to produce power for the Minneapolis-St. Paul metropolitan area. Most of the St. Croix River rapids were covered when the dam was built. The dam at the St. Croix Falls, WI uses a peaking method for hydropower generation, causing variability in downstream discharge. Xcel Energy operates the facility and has agreed to maintain a minimum flow of 800 cfs in the winter and is required by federal law to maintain a flow of 1600 cfs

during the open water season. The Wisconsin Department of Natural Resources and Xcel Energy are currently negotiating flow requirements below the dam.

The St. Croix River changes dramatically in the 1.5 miles it flows through the park. Near Taylors Falls, in the upper gorge, the river is approximately 100 feet deep, 100 feet wide, and falls at a rate of 8 feet per mile. In less than a mile, the river widens to 1,000 feet, is approximately 13 feet deep in the main channel, and falls at a rate of only 1 foot per mile. The average flow at St. Croix Falls, WI, just north of the park is 4,036 cubic feet per second (CFS). The record high flow of 59,500 cfs occurred on April 26, 2001, and the record low of 75 cfs occurred on July 17, 1910.

The river often floods part of the lower campground and picnic area. Park facilities in these areas must be able to withstand flooding without damaging the water quality of the river. Details on the water quality of the St. Croix River can be found in the Interstate Park Resource Management Plan (1992).

Canoe rental area during a spring flood. Any development in this area needs to be able to withstand regular flooding without impacting water quality. Photo by Carmelita Nelson, DNR.

Curtain Falls and several smaller intermittent streams and springs also exist in the park. Curtain Falls is dry most of the year, flowing mainly after large rainstorms and during the spring melt. Little research or monitoring has occurred on these waterways. The flow of many springs has been altered by the presence of Highway 8 and the old railroad grade.

Fish

There is a considerable variety of fish in the St. Croix River. One hundred three species of fish likely occurred in the St. Croix River historically. A 1989 survey for Interstate State Park, recorded 46 species including the endangered river carpsucker, highfin carpsucker, river redhorse, and the gilt darter. Special concern species recorded include the blue sucker and western sand darter.

Some of the most popular sport fish in the St. Croix River are the smallmouth bass, muskellunge, northern pike, walleye, sturgeon, catfish, rock bass and crappies. Rough fish such as red horse and suckers are abundant and are found in the Dalles area.

The rapids and falls at Taylors Falls have historically been a natural barrier for some species of fish. However, they were not a complete barrier to fish migration and during spring migration fish probably could have gotten to spawning areas during high water. Construction of the dam at Taylors Falls in the early 1900s prevented many fish from passing. Shovel nose sturgeon congregate in large numbers below the dam during spawning season. Spawning areas for walleyes and smallmouth

bass are abundant. Several smallmouth bass spawning areas are found just south of the park near Franconia. The river has been stocked periodically since 1949 with smallmouth bass and walleye fingerlings. A muskellunge stocking program has also been implemented for the river.

Mussels

The St. Croix River has one of the richest freshwater mussel communities in the world. The segment of the lower riverway from the Xcel Energy dam at St. Croix Falls, WI to Osceola has especially high-quality mussel habitat. However, native mussel species are threatened by water pollutants, sedimentation, the spread of zebra mussels, loss of habitat, direct human impacts, and fluctuation of water flows caused by hydropower peaking operations.

In North America, an estimated that 43%, or approximately 125 of the 290 known species of freshwater mussels, are in danger of extinction. (Stein et. al. 2000). No other group of animals in the Upper Midwest is in such grave danger of extinction. For example, the winged mapleleaf mussel was formerly widely distributed throughout 12 states. Now, it is restricted to a Minnesota population, which inhabits a ten-mile section of the St. Croix River adjacent to Interstate State Park, the Barbeuse River in Missouri, and in the Ouchita River in Arkansas.

Goals for Natural Resources

- Preserve, restore, manage, and interpret natural communities, rare species, and geologic features in the park.
- Maintain and enhance the scenic qualities of the park and the adjacent St. Croix Valley landscape and the soundscape.
- Set aside areas that are not suitable for development or accessibility.
- Balance use and preservation of the park to accommodate a variety of recreational uses while protecting resources.
- Seek balanced wildlife populations with an emphasis on native species.
- Complement the development and management of Wisconsin's Interstate State Park.
- Prevent degradation of the St. Croix River.
- Provide a high quality fishing experience on the St. Croix River.
- Correct present and prevent future erosion problems and pollution of the groundwater, the St, Croix River and other surface waters in the park.
- Restore and maintain the original vegetation communities throughout the park.
- Increase existing wildlife populations by attracting a larger variety to the area, especially native songbirds and small mammals.

Natural Resource Management Recommendations

It is state law and part of state parks mission to protect natural and cultural resources. The Minnesota State Park Resource Management Program has three primary objectives for protecting state park resources:

Keeping what we have by preserving natural communities, archaeological and historic sites, rare and endangered plants and animals.

Restoring what we have lost by recreating examples of original Minnesota landscapes prior to European settlement.

Striking the balance between use and protection by minimizing the impact of public use and facility development on natural and cultural resources. It also requires enhancing the natural and historical setting in which outdoor recreation and interpretation occurs.

General Resource Management

1. Document all sensitive areas such as: plants, animals, ecological communities, geologic areas, watersheds, migration corridors, viewsheds, soundscapes, historic districts, and archaeological sites, so that these areas are avoided by any future utility or construction work.
2. Interpret resource management activities for public interest and education.
3. Work with communities, townships and counties to promote regional planning that will preserve the landscape of the St. Croix Valley. Participate in the planning processes of various agencies. Support ordinances that will minimize impacts to the resources.
4. Protect species listed as endangered, threatened and/or special concern. Where possible, these ranges should be expanded through habitat management and boundary changes.
5. Pursue alternate routes for through/commercial traffic to minimize the impact of Highway 8.
6. Utilize boundary extensions, conservation easements and landowner education to create corridors between the park and other natural areas/geologic features.

Vegetation Management

7. Re-establish the natural communities found in the park: maple-basswood forest, white pine hardwood forest, dry cliff, moist cliff, rock outcrop, floodplain forest, lowland hardwood forest, mixed hardwood seepage swamp, oak woodland-brushland, and tamarack swamp communities where possible.
8. Monitor and control invasive exotic species through control practices. This includes the invasion of red cedar into pine areas, buckthorn and honeysuckle. In the glacial gardens area some historically planted species from the 1890s may remain for interpretive and cultural purposes.
9. Remove honeysuckle along Highway 8 and reestablish a native vegetation/shrub screen between the highway and parking lot.
10. If new land is acquired, this land should be restored to native vegetation patterns.
11. Where appropriate, recreate conditions that would give rise to oak barrens and rock outcrop vegetation communities.
12. Map resource management plan/activities for the park. A draft map is included in this plan (see Figure 8). Management activities include prescribed burns or cutting to enhance the oak woodlands, prairies and rock outcrops, and designating areas for pine forest regeneration.

Wildlife Management

13. Manage deer, raccoon, and wildlife populations to meet balanced ecosystem goals. Given that Interstate is completely within the city limits of Taylors Falls, there will need to be a desirable wildlife/urban interface balance. Annually assess need for deer herd reduction within the park. Plan and conduct deer hunts as required to protect native vegetation.
14. Cooperate with the NPS to check the spread of the zebra mussels.
15. Protect Federal and State listed species and manage their habitats for optimum sustainability.

Geology

16. Maintain and protect geologic features such as the basalt cliffs for their natural and cultural resource value.
17. Map the locations and dimensions of all the potholes.
18. Fund cooperative projects for a scientific exploration of unexcavated potholes. Data could produce information on geology of the area, archaeology, paleobotany, and would be an interpretive and tourist attraction.
19. Coordinate geological research to explain the unusual aspects of the Bake Oven and associated features. Note: The above projects would need to protect the potholes and any unusual plant life (i.e., lichens).
20. Inform geology tours and classes about park policies prohibiting the collection of rocks or digging.

Water Resources Management

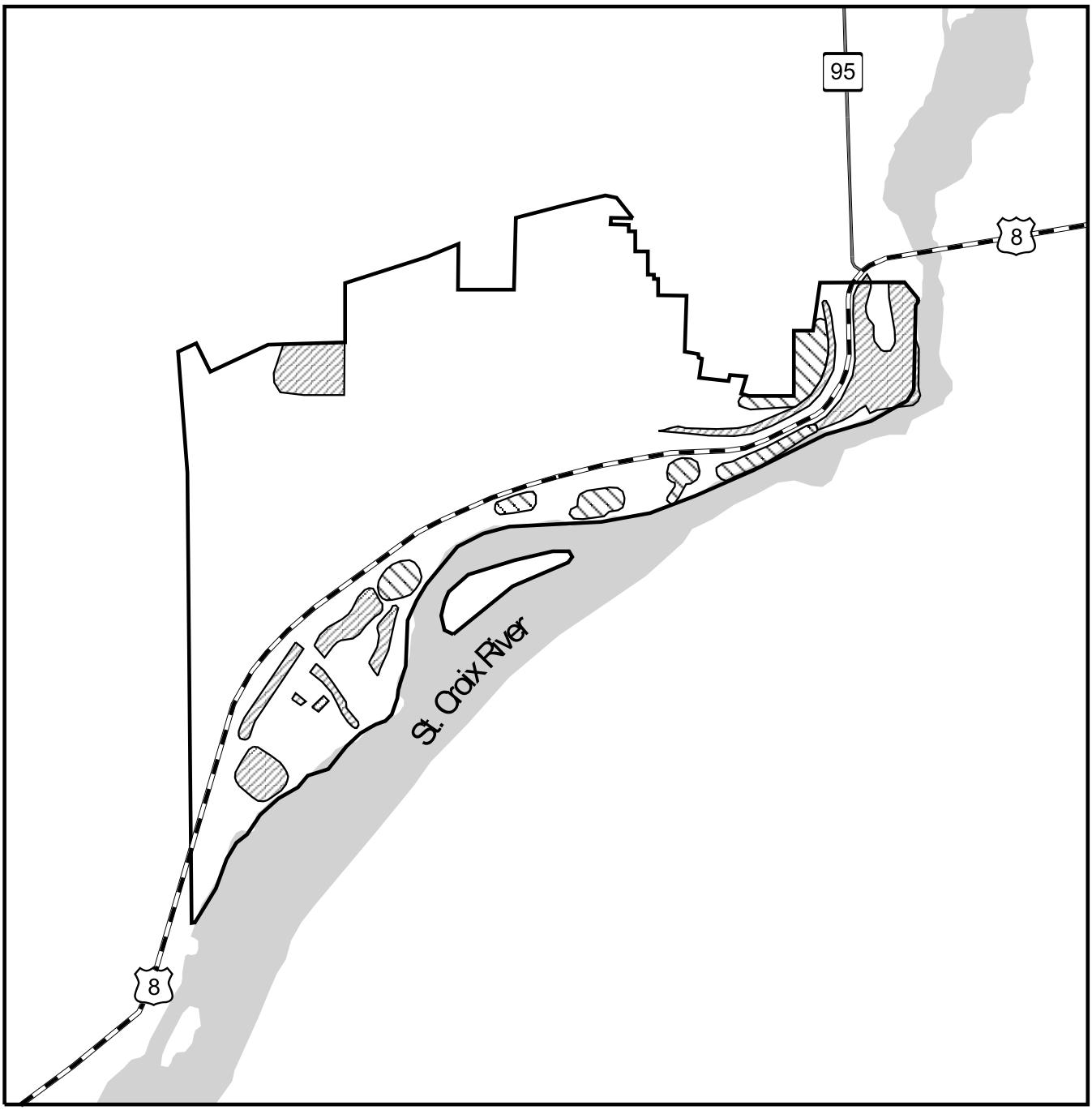
21. Obtain funding to install erosion control materials, remove large appliances, refuse and hazardous materials from the old dumpsite located in the park.
22. Manage watersheds of the Sandstone Bluffs area within and outside the park in cooperation with the Chisago County.

23. Monitor and control shoreline erosion issues. Maintain a buffer on the edge of streams and rivers to act as filters for runoff and to stabilize banks.
24. Avoid management practices that could potentially cause excess sediment input into the river to protect mussels and water quality.

The shoreline of the park should be monitored for erosion problems.
Photo by Joe Niznik, DNR.

Interstate State Park

Figure 8: Vegetation Management Areas



Legend

Vegetation Management Areas

Basalt Balds

Pine Restoration

Statutory Boundary

Roads

Federal Trunk Highway

State Trunk Highway

N

0.1 0 0.1 0.2 Miles

CULTURAL RESOURCES

Archaeological and Historical Setting

People have had a close association to the St. Croix River for over 5,000 years. Artifacts recovered in the St. Croix Valley indicate that the valley was inhabited as early as 3000 B.C. Archaic period peoples had discovered and utilized float copper along the St. Croix River near Taylors Falls thousands of years ago. Archaeological remains associated with the Late Woodland culture have been recovered from excavations in the campground and picnic area. Burial mounds are located in Center City, near William O'Brien and the Sunrise area. Ancestors of Dakota Indians were in many areas of the county as early as 1500 A.D. The 1939 Minnesota State Park and Recreational Area Plan references petroglyphs in the park. The only know location of these today is in the Curtain Falls area and there is no identifiable cultural affiliation.

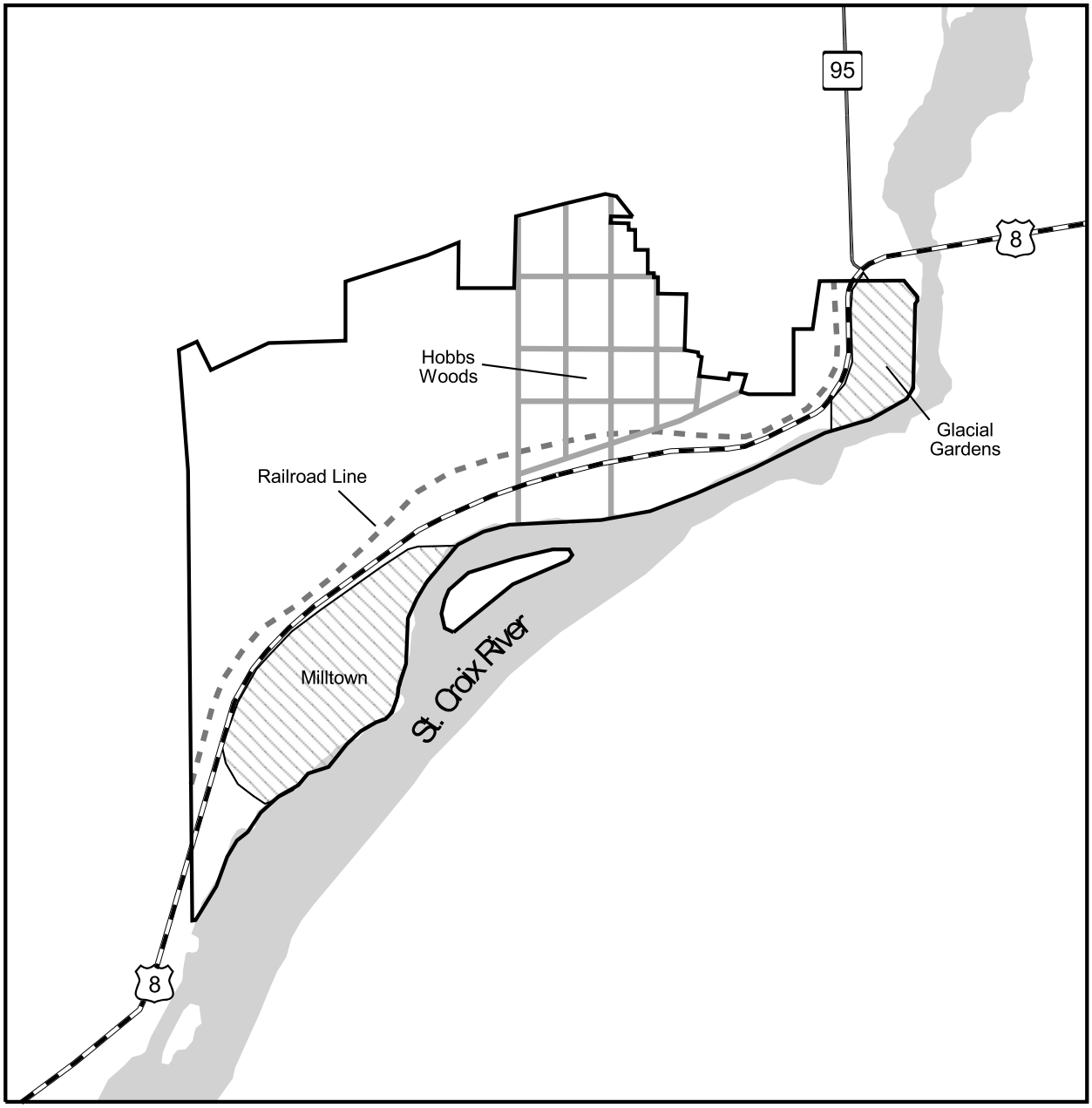
The first European explorers came to this area by canoe. In 1680 Daniel Greysolon, Sieur Du Lhut, explored and traveled the length of the St. Croix River. When the early French traders and explorers first visited, the Dakota and Fox tribes lived in the valley. By 1763 the British ruled the St. Croix River, although French traders operated in the valley for another 40 years. During the 18th century and into the early 19th century, Interstate was in the "contested" zone between Dakota and Ojibwe. Because of the danger of attack from both the Ojibwe and Dakota, few traders operated in the valley until the later 1700s when Ojibwe domination was firmly established. The Dalles area was well known to fur traders and there is some historical evidence that a fur-trading post may have been located in today's park campground area during the 1700s. The American Indians brought beaver pelts and other furs in exchange for trade goods. Small, independently run fur posts operated in the area as late as the 1830s, but finally the beaver were almost gone and trapping expanded westward.

The St. Croix Valley was included in the Louisiana Purchase of 1803. In 1837 the Ojibwe signed a treaty that opened up the land and forests along the St. Croix River to European settlers. During the next 70 years the white pine forests of the river valley provided lumber for one of the biggest logging operations in the Midwest. Because of the volume of logs and the angular gorge, logjams frequently occurred in the Taylors Falls narrows. The largest logjam occurred in 1886 - logs filled the river from bank to bank for three miles.

The existing park campground and picnic area was the site of "Lower Town" or "Milltown", a part of Taylors Falls (see Figure 9: Cultural & Archaeological Features). Milltown had two sawmills, a cooper shop, boatyard, wagon shop and blacksmith shop at various times in the mid 1800s. Approximately 22 homes were in the area as well. Today, all that remains of Milltown is some evidence of building foundations. The logging days were also the steamboat days. They docked in the same spots now used by the tour boats. The boats brought Scandinavian immigrants who settled the area. Taylors Falls was a bigger town then, extending into what is now the park. Even the pothole area had many shacks. North of Highway 8 was an area known as "Hobbs Woods". In the 1880s there were three homes and a cemetery in this area. A road lead to the basalt quarry which operated around 1912. A railroad line ran through the park that operated from 1880 to 1948. Today only the railroad grade and the trestle bases remain in the park. George Hazzard, park commissioner, in his 1899 Blue Book Legislative Report noted that some thirty or forty structures had been removed from the old Milltown area. He further noted that they would have to spend a year or two to remove briars, thistles and various weeds while trying to save some large trees. There are no visible remnants to indicate the history of the fishing camp, fur post, or Milltown. Only the steamboat mooring rings in the cliffs at the north end of the park can still be seen today to remind visitors of the long history of human occupation in the park.

Interstate State Park

Figure 9: Cultural & Archaeological Features



Legend

Statutory Boundary

Roads

Federal Trunk Highway

State Trunk Highway

N

0.1 0 0.1 0.2 Miles

Steamboats packed with tourists ran up from Stillwater, sometimes at night with dance bands on board, often pushing or pulling barges that carried even more tourists, so that hundreds of people might arrive at once at the lower boat landing. There is mentioned an estimate of 5,000 tourists visiting the Dalles in 1873. With the completion of the railroad in 1880 the tourist trade via steamboat diminished.

The idea of an inter-state park was conceived in the later nineteenth century. The Minnesota State Legislature created the 154-acre Minnesota portion of the park in 1895, making it the second oldest Minnesota State Park. It was originally called The State Park of the Dalles of the St. Croix, however popular usage was “Inter State Park”. The Wisconsin State Legislature passed similar legislation in 1900, creating the first interstate park in the nation. In 1969 the name of the park was officially changed to Minnesota Interstate State Park.

There were early efforts to “improve” the glacial gardens. The construction of trails and stairs (some of which may have been built by loggers in 1895) and the “ornamentation” with garden plants are a small part of this. The larger part was excavation of potholes to make them more visible. Fascination with the unusual rock formations within the park led to repeated projects to remove soil and rocks from the larger potholes in order to make their entire depth visible to park visitors. Excavation of potholes seems to have been a major occupation of park personnel from 1895 well into the 1930s, and resulted in discovery of many previously unknown potholes in addition to the cleaning out of those that were previously identified.

In 1896, a proposal to add 300 acres to the park, extending it to the lower Dalles, was made but the Minnesota State Legislature did not appropriate the funds. Also in 1896, the "Boys Brigade" was established to meet trains and show tourists through the park. This could be said to be the first interpretive program operated in the park. Three subsequent boundary expansions brought the total acreage of the Minnesota Interstate Park up to the present 298 acres.

Historic Buildings and Structures

Interstate State Park contains two historic districts listed on the National Register of Historic Places: the CCC/WPA/Rustic Style Historic District at the northern end of the park, and the CCC/WPA/Rustic Style Campground Historic District at the park’s southern end (See Figure 10: National Register of Historic Place – Historic Districts). Each includes several buildings and structures identified as contributing elements to the historic district. The CCC/WPA/Rustic Style Historic District includes the women’s rest room, the men’s rest room, the refectory, four drinking fountains, and the parking lot retaining walls and stone curbing. The CCC/WPA/Rustic Style Campground Historic District includes the campground sanitation building and the shelter/refectory building.

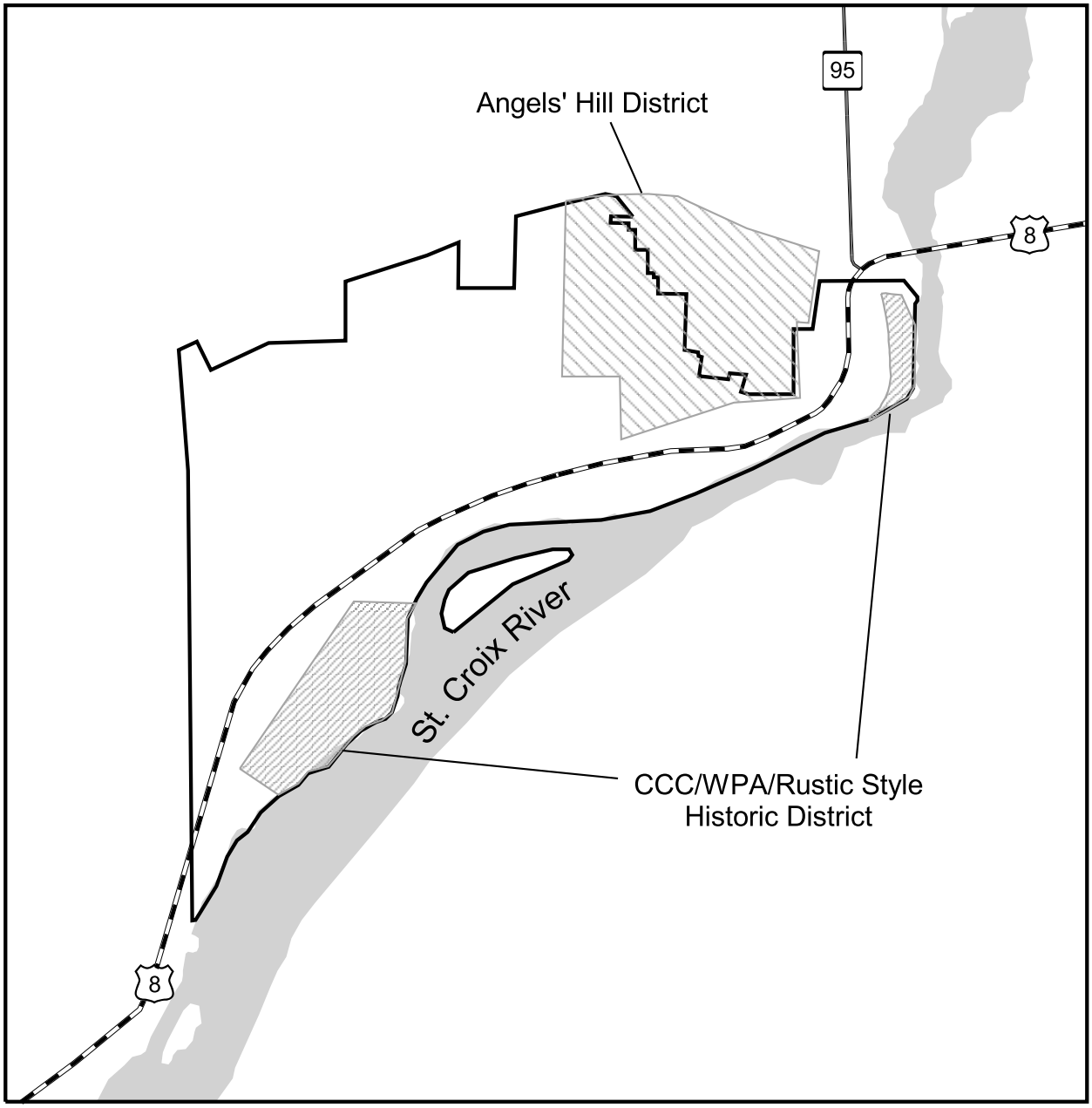
The park visitor center (formerly the refectory and gift shop) is a CCC-constructed stone building. It features basalt block base and exposed timber beams and rafters. The stones were cut by hand drilling a series of holes with a star drill and sledgehammer. Once a line of holes was drilled, wedges were hammered into all of the holes simultaneously to crack the rock along a flat face.

The museum building at the opposite end of the parking lot is a pavilion style building that is also of historic interest. It was built circa 1920 (prior to the CCC period) by the Department of Conservation and was used as a women’s restroom. In 1941, the WPA remodeled the women’s restroom. Currently it is only open on summer/fall weekends.

The men’s restroom built by Department of Conservation in 1928. The interior remodeled by WPA in 1940. The WPA built the refectory (visitor center) in 1939 and the stone curb and walls were expanded to present size in 1937. The low masonry wall was added at that time in the middle of the parking lot. Two stone piers were built to define the entrance to the walkway. The WPA built the drinking fountains in 1938 and the retaining wall near the boat landing in 1938. This architecture is significant for its examples of finely crafted rustic style construction featuring native basalt rock quarried from within the park.

Interstate State Park

Figure 10: National Register of Historic Places - Historic Districts



Legend

Historic Districts

Angels' Hill District

CCC/WPA/Rustic Style Historic District

Statutory Boundary

Roads

Federal Trunk Highway

State Trunk Highway

N

0.1 0 0.1 0.2 Miles

Campground Sanitation Building built by Civilian Conservation Corps. Photo by Carmelita Nelson, DNR.

Goals for Cultural Resources

- Preserve, restore and interpret Interstate State Park's historical structures, historic districts, and archaeological resources.

Cultural Resource Management Recommendations

1. Place discreet interpretive markers at site locations in Milltown, since it has no physical remains. For example, a rock with small plaque in the campgrounds to show Folsom Mill site, steamboat building site, etc.
2. A comprehensive archaeological survey or excavation should be completed. More knowledge is needed to protect the cultural resources and to allow for more interpretation. No archaeological work has been done in the Glacial Gardens or Hobbs-Brinks addition. There are many unanswered questions such as the location of the French fur post, what were the foundation stones that were moved by Army Corps of Engineers, accounts of Indian battle axes found in potholes need to be verified. A paleobotanical investigation would be useful in the pothole area.
3. Develop a landscape plan for managing the cultural and natural resources of the Glacial Gardens area. Typical goals for vegetation management in a state park, namely pre-European settlement vegetation conditions, may not be appropriate for the Glacial Gardens landscape. Reestablishment of vegetation as it was during the early establishment of the park, is more in keeping with the Glacial Gardens concept and interpretation goals for the park. The landscape evaluation should also determine significant viewsheds and how they should be maintained. An initial inventory of vegetation should be completed. Historical non-native species should be kept if they are not threatening heritage species. They are indicators of previous home sites and historic park beautification projects. The goal should be to maximize the interpretive potential for visitors.
4. Cultivate more cooperative programs/projects with area facilities such as the Folsom House.
5. Conduct land use history research and obtain more historical data. The park staff should work with the historical society to gather photos, land history, oral history, and historical documentation of the park. There should be an active program to acquire information.

INTERPRETIVE SERVICES

The DNR Division of Parks and Trails mission for interpretive services is:

> To provide accessible interpretive services which create a sense of stewardship for Minnesota's natural and cultural heritage by illuminating the changing relationships between people and landscapes over time.

In pursuing this mission, the DNR Division of Parks and Trails designs its interpretive programs to achieve four goals:

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, involvement in, and support for the Minnesota Department of Natural Resources and its Division of Parks and Trails
4. Increase public awareness of critical environmental problems on a local, state, national and worldwide scope.

This chapter identifies and describes interpretive themes for Interstate State Park based on its natural, cultural and recreational resources. The resources listed in this chapter reflect the importance of these themes as they relate to the division's *Interpretive Services Plan* (1995).

An Interpretive Services Plan was developed for Interstate State Park in 1999. The plan identified interpretive themes, research needs, and project and program recommendations. The Interpretive Services Plan is the basis for the interpretive chapter of the management plan. The Citizen Advisory Committee reviewed the themes and recommendations during the planning process.

Interpretive Themes

Geology

a) The valley carved by the Glacial St. Croix River's drainage of Glacial Lake Duluth exposes a broad, complex cross-section of geological times and events.

b) The stream-eroded potholes in Interstate Park are among the world's largest and best examples of this type of feature.

c) The lava flows which make up the cliffs of the river gorge (The St. Croix Dalles) are a part of North America's largest igneous bedrock formation, which extends from the Great Lakes through Minnesota and into Kansas along a continental rift.

d) Exposures of wave-eroded basalt seashore, a basalt-sandstone unconformity, and basalt boulder conglomerates uniquely illustrate the interaction of a mid-continental sea with basalt island shorelines and cliff faces.

e) The immense volume of water discharged from Glacial Lake Duluth is illustrated by the width and depth of the valley that contains today's St. Croix River, and by the size and number of stream-eroded potholes.

f) An abundance of glacially-deposited soil, rocks, and boulders exposed within the park illustrates the influence the glaciers had on the shape of Minnesota's present landscape.

g) The pace of geological change versus human alteration of the landscape is vividly illustrated by the presence of Blast Island and the Highway 8 right of way.

Biology

h) Because of the rugged terrain left by its geological history, Interstate Park contains a unique overlap of species typically found much further north, south, or west. Biological communities typical of all three of Minnesota's biomes are present.

i) Microhabitats formed by slope angle and facing and by underlying bedrock support uncommon communities of plants along with animals that associate uniquely with these communities.

j) The change in plant communities from river's edge to the top of the valley wall allows illustration of succession and the history of plant communities as affected by natural and human-altered landscapes.

k) Undisturbed potholes in the park are believed to hold important clues to changes in local vegetation and climate as well as evidence of many stages of human activity along the St. Croix River.

l) As a result of Interstate Park's habitat, the diversity of spring wildflowers is among the greatest found at any one site in Minnesota.

Prehistory

m) Humans have used the St. Croix River and its valley for travel and food resources for thousands of years. Little trace of prehistoric activity has been identified at Interstate State Park except for a Late Woodland ceramic vessel.

History

n) Pre-European settlement interactions of Dakota and Ojibwe people in the St. Croix Valley are known only from oral history – many conflicts are believed to have occurred, as the valley was part of a contested area between the two nations.

o) The St. Croix was an important fur trade route, and a French fur trading post is believed to have been located within park boundaries.

p) The upper end of the park was the terminus of a major fur trade portage and later was the head of steamboat navigation and a major debarkation point for Yankee and Scandinavian immigrants as well as tourists.

q) The St. Croix was one of the nation's most important log sluiceways during the white pine logging era, and the park contains the site of several world record logjams.

r) As a tourist destination for over 150 years, and as the oldest interstate park in the nation and one of the oldest parks in the Minnesota State Park system, the landscape that became Interstate Park played a pivotal role in the idea of preserving and appreciating natural features.

s) Today's campers and picnickers enjoy recreational activities at a location which was formerly the site of a sawmill and many homes, and before that a site for ancient fishing and hunting camps.

t) The history of Midwestern transportation, tourism, and commerce is illustrated within the park by the establishment of river travel, a railroad, and a highway.

u) Nationally recognized historic buildings and structures illustrate how Interstate Park was one of the beneficiaries of CCC/WPA construction, though some structures are even older.

Esthetics

v) The Dalles of the St. Croix River and its vegetation is one of the most spectacularly scenic areas in Minnesota, and helped shape local and national ideas about appreciation of natural beauty.

It is recommended that the park should have interpretive staff. Photo by Carmelita Nelson.

Existing Interpretive Services

Shortly after Interstate State Park was established in 1895, guides began meeting the early tourist trains and boats and led tours through the potholes. In the 1940s, the Department of Conservation began a formal interpretive program. In the early 1970s a seasonal naturalist position was provided, with volunteers as assistants. Student interns replaced volunteers beginning in 1977. Through the 1990s, there was a six-month naturalist and an intern. In 2002, all seasonal naturalist and intern positions statewide were eliminated because of funding priorities.

Approximately 350,000 people visit the park each year. They are mostly summer, day-use visitors. There are 13,000-15,000 overnight visitors. School tours and field trips are very popular, especially in May, September, and October. School groups were often larger than could be handled by a single staff person. Approximately 45,000 people tour the visitor center annually.

In the Division Statewide Interpretive Plan, Interstate State Park ranks high in visitor use and high in resource value. However, it is a very seasonal park in terms of visitation. The Division Statewide Interpretive Plan calls for a seasonal (6 month) interpretive position and increased non-personal interpretation.

Current interpretive facilities include a visitor center containing geology exhibits and a nature store. There is an amphitheater and picnic shelter for programs and some trails offer self-guided interpretation. It is estimated that 200,000 people walk the pothole trail every year. In the 1980s, there was a full schedule of interpretive programs that were well attended. However, in the 1990s, program attendance began to decline, especially among campers. As a result, very few evening programs were conducted. The focus shifted to primarily day use programming. There were still many school groups and bus tours. The park has a very diverse clientele with people coming from all over the world.

The National Park Service - St. Croix National Scenic Riverway, Wisconsin Interstate State Park, Wild River State Park and William O'Brien State Park provide interpretive programs and facilities in the area. These interpretive efforts are coordinated through an informal organization, the St. Croix Interpreters Association.

National Park Service

The National Park Service (NPS) provides interpretation of the 252 miles of river administered as the St. Croix National Scenic Riverway. Programs are provided throughout the watershed. The goal is to help people realize the value of the resources, use the riverway safely, and to be good stewards.

NPS has two visitor centers open to the general public: the St. Croix River Visitor Center in St. Croix Falls, Wisconsin and the Namekagon River Visitor Center in Trego, Wisconsin. The Marshland Center in Grantsburg is available for group programming by reservation only. The NPS has offered programs to groups and the public at Interstate State Park. NPS presents programs at other locations along the river and on tour boats and has an extensive publications program including maps, a web site, and media contact. NPS strives to complement the educational programs of its partners in the valley.

The new Headquarters and St. Croix River Visitor Center for the St. Croix National Scenic Riverway opened in 2005. The 2,500 square foot visitor center provides information, exhibits, a film, and small sales area for educational products relating to the river. The grounds of the area provide picnicking, a trail along the river, and areas for environmental education. Public visitation is highest in summer and fall with school programs being offered in the spring and fall. A multipurpose room will be available for partner and community meetings.

National Park Service staff assists with interpretation on the tour boats. Photo by Joe Niznik, DNR.

Wisconsin Interstate State Park

The Wisconsin Interstate State Park visitor center is a component of the National Ice Age Trail and has glacial geology as the primary theme. Smaller interpretive trail signs are being replaced with larger wayside exhibits. Wisconsin Interstate State Park has developed an extensive school program in the spring and fall. In 2009, new classrooms will be added for school programming. Offering combined school programs with Wisconsin Interstate State Park and the National Park Service should be cultivated.

Goals for Interpretive Services

- Use Interstate's diverse visitor mix to introduce a broad spectrum of people to the Minnesota State Park system and as a gateway to MnDNR programs and initiatives.
- Target educational programs for specific users.
- Provide educational focus on the vision of what the park founders wanted the park to be and the experiences of early park users.

- Interpret natural communities, rare species, geologic features and cultural resources of the park.

Target Audiences for Interpretive Services

- First-time visitors to the Minnesota State Park System.
- Minority communities and organizations.
- Local and metropolitan schools.
- Families.

Interpretive Services Recommendations

Implementation of these recommendations will be evaluated and modified on an ongoing basis by the park management team, regional naturalist and interpretive operations coordinator. Programs and facilities will complement those of state and federal partners in the immediate area.

Visitor Center

1. Renovate the current visitor center. Renovations to the visitor center must follow requirements for buildings that are on the National Register of Historic Places. Renovation will include the following:
    - Open up the visitor center for greater visibility.
    - Renovate utility systems including installation of energy efficient lighting, heating, cooling and ventilation systems.
    - Redesign interior of visitor counter that provides better circulation, greater visibility, and an accessible information and sales counter.
    - Provide enhanced security measures.
    - Update and/or replace exhibits. Natural history topics such as geology, plant communities, and river ecology would be the focus of visitor center exhibits. Safety and information about recreational activities like climbing could also be included. Limited space would be used for changeable exhibits related to the park.
    - Expanded nature store fixtures and sales items.
    - An alternative to a renovated visitor center is a new visitor center if parking is moved out of the park from the north end.

2. Improve the area outside of the visitor center by the following:
    - Adding toilets that can be used in the spring and fall after water is turned off for the season.
    - Renovating the outdoor patio at the rear of the visitor center.
    - Adding benches, some with canopies for sun and rain protection, near the visitor center.

Museum

3. Renovate the museum to provide interpretation focused on the cultural history of the park. This unstaffed location would provide the following:
    - Wall exhibits on prehistory, history of the park, tour boat operation, and Taylors Falls. These exhibits could be wall mounted or multimedia presentations.
    - Benches or other seating to provide visitors with a place to rest or get out of severe weather during their visit.
    - Information about the park and local attractions.

Contact Station/Office (at south entrance)

4. Construct a new contact station that provides the following interpretive services:
    - Exhibits focused on safety for recreational activities.
    - Information about Interstate, the state park system, and local attractions, trails, and parks.
    - Expanded nature store sales items.

- The contact station would also include the park office with conference and storage areas, and public restrooms.

Interpretive Staffing

5. The park should have a permanent, seasonal naturalist to provide seasonal interpretive programming, maintain park publications and website, and develop interpretive partnerships with local partners.

Other Interpretive Services

6. Develop more non-personal interpretation such as markers, self-guiding brochures, digital media, and publications. Possible topics include:
   - Mineral extraction such as basalt and sand quarries.
   - Historic buildings and areas such as Hobbs Woods and Milltown.
   - History of U.S. Highway 8 and Blast Island.
   - History of railroad through the park, sandstone bluffs train stop, and historic graffiti.
   - Tourism and excursion trips.
   - Road and possible steamboat landing below River Trail.
   - Woodland period American Indian encampment sites.
   - History of private and/or park concession sites including zoo, dance pavilion, burger stand, and boat landing.
   - Publications interpreting natural, cultural, and recreational resources.

7. Develop field trip guides for teachers and distribute via the internet. Guides can be jointly developed with Wisconsin Interstate State Park and the St. Croix National Scenic Riverway.

Cooperative Programs and Partnerships

8. Increase joint interpretive planning and program delivery with the National Park Service and Wisconsin Interstate State Park.

9. Continue participation in the St. Croix Valley Interpreters Association to promote Interstate State Park's programs and services and develop joint programs and special events.

10. Develop partnerships with boat tour operations in order to maximize use of the museum building by park visitors and boat tour clientele and develop coordinated programming. For example, conduct pothole tours for boat tour customers and incorporate interpretive programming into boat tours.

Boat tour building. Photo by Joe Niznik, DNR.

RECREATIONAL USE AND VISITOR SERVICES

Existing Facilities

Interstate State Park is a small, but well-visited park. Typically 350,000 people visit the park each year, 45,000 people use the visitor center, and when interpretive staff were present 2,000 people attended interpretive programs.

On weekends, the north end parking lot is usually full by 11:00 a.m. and stays full until 5:00 p.m., turning over about three times every day. Between 500 and 600 cars use the lot each day, with revenues totaling $70,000 a season in daily permits alone. Trailer parking in the lot is very difficult – "No Trailers or RVs" signs are placed at the lot on weekends to minimize traffic flow problems.

The campground has drive-in 37 sites. It is the most popular campground along this section of the St. Croix River. Its location on the river makes it popular, although it is noisy because of the nearby highway and minimal spacing between sites. The 1978 State Park Management Plan recommended removing the campgrounds and about ten sites were removed in the 1980s. New trees have been planted in the campground since Dutch elm disease killed many of the older trees. The main concerns with the campground area today are runoff and the impacts to water quality.

Recent projects included resurfacing the lower entrance and campground roads, remodeling the two picnic area restrooms, and development of an ADA accessible trail.

Other recreational facilities in the park include the old museum building, historically a women's restroom and lounge. The building may be repurposed for serve visitors needs.

Interstate State Park provides visitors with the following facilities:

Camping

- 37 semi-modern campsites (22 electric sites)
- Accessible Showers and flush toilets (CCC/WPA era historic building)
- One group camp area with four sites (100 person capacity)
- Trailer Dump Station

Drive-in Campground. Photo by Carmelita Nelson, DNR.

Trails

- Four miles of hiking trails
- One and one-half miles of accessible trail
- Self-guided interpretive trails (all trails are being converted into interpretive trails)

Day Use Facilities

- Visitor Center (1930s-era historic building) currently staffed by parks workers, no interpretive staff
- Contact Station/Park Office/Nature Store
- 2 picnic shelters: 1 open, 1 enclosed with restrooms (1930s-era historic building)
- Sanitation building near group camp (1930s-era historic building)
- Picnic grounds with tables
- Volleyball court

Day Use Activities

- Glacial potholes and Dalles of the St. Croix River sight seeing
- Canoe rental
- Drive-in water access
- Excursion boat tours
- Rock climbing
- Fishing
- Photography/painting
- Nature study – bird watching, wildflower viewing, geologic exploration
- Historical tourism
- Interpretive programs (provided by NPS at this time) and interpretive trails
- Whitewater kayaking

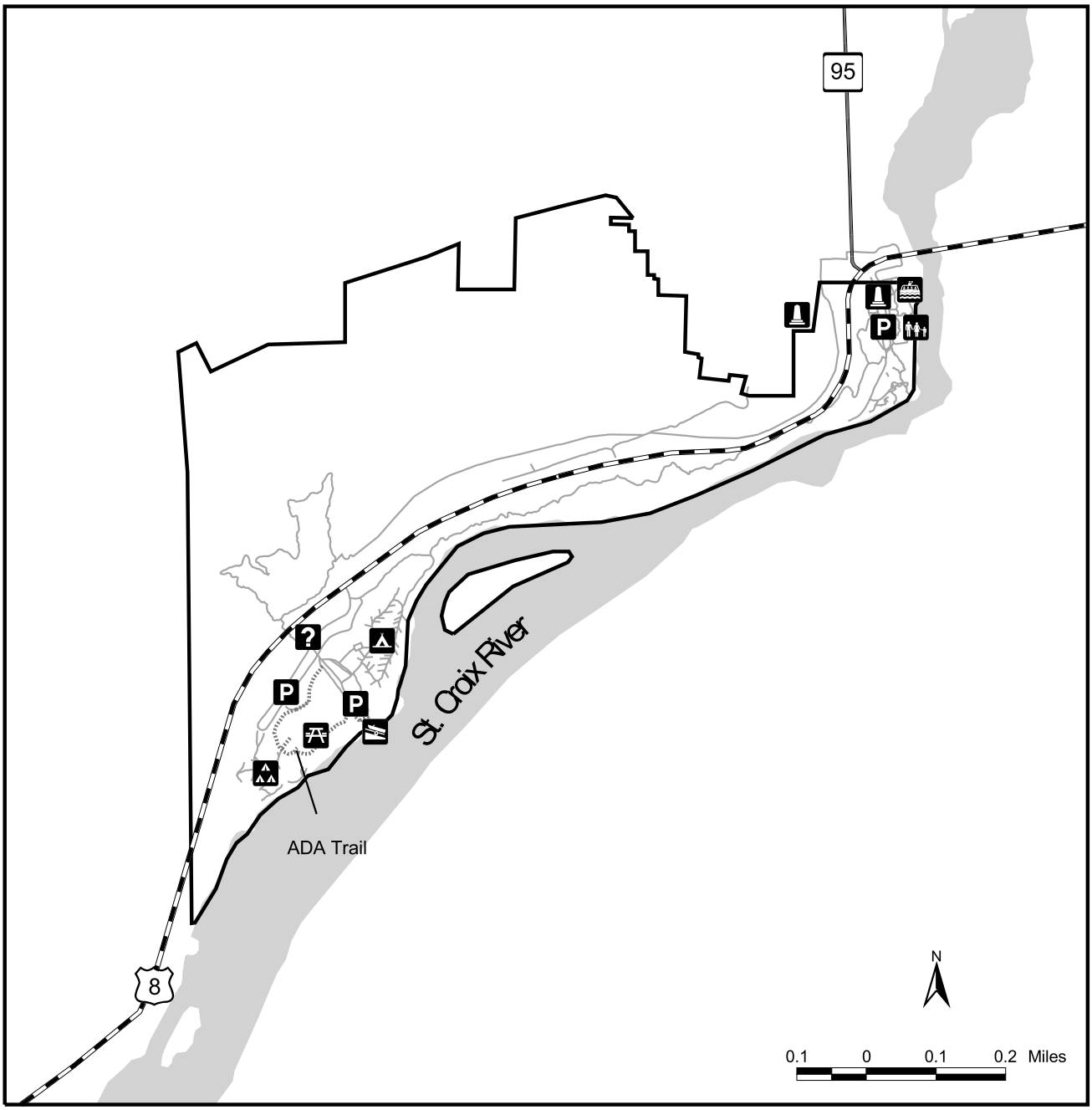
Park Physical Plant

- City sewer and water (sewer lines in the lower park were replaced in 2003)
- Two lift stations
- Park service/shop area: 1 heated shop, 1 cold storage building, and 1 gas shed
- Three active wells
- One mile of road (one-half mile blacktopped; one-half mile gravel)
- 2 parking lots (north end capacity 120 vehicles; south end capacity 450 vehicles)

A paved trail connects facilities in the lower park area.
Photo by Carmelita Nelson, DNR.

Interstate State Park

Figure 11: Existing Development



Legend

Recreation Symbols

- Parking
- Picnic Area
- Campground
- Park Office/Information
- Boat Ramp
- Tour Boat
- Primitive Group Camp
- Visitor/Interpretive Center
- Historic Site
- Statutory Boundary
- Trails

Roads

- Federal Trunk Highway
- State Trunk Highway

Trails

The Gateway State Trail is proposed to connect to Interstate State Park. Chisago County is also planning the Swedish Immigrant Trail, which will connect the cities of Wyoming and Taylors Falls. Likely, these two trails will share a route to connect with Interstate State Park. Having the trails share a route through the park would be more effective for providing restrooms, parking and other services for trail uses and result in only one impacted corridor through the park. Possible routes include the abandoned rail bed, and two routes through the upper portion of the park (see Figure 12: Proposed Development). The rail line route would offers views of the Saint Croix River from several overlook sites but would require constructing bridges spanning several large ravines.

A final route for these trails has not been determined. A resource assessment will need to be conducted to determine the viability of any potential route. DNR Division of Parks and Trails will work with, Chisago County and local trail groups to determining a final route for the trails. The DNR Division of Parks and Trails is responsible for the design, development, and management of designated State Trails. To assure appropriate protection of park resources, view sheds and facilities immediately adjacent to the trail, division staff establish standards and parameters for maintenance activities on state trail segments passing through state parks.

Additional facilities such as water fountains, bike racks, and benches, may be needed to serve state trail users. Photo by Carmelita Nelson, DNR.

Parking

During the Trunk Highway 8 Strategic Advisory Group (SAG) meetings of 2002-2003 there was a recommendation to develop a new parking lot in Taylors Falls that would allow the DNR to revert the 120-car north end parking lot to its natural state. There is some interest in uncovering the potholes that may exist under the parking lot. The potholes under the parking lot were probably buried under natural soil deposits before the road to the lower steamboat landing was built. There is no written account of potholes being seen at this location. Any fill that was added to create the earliest version of the parking lot would have been placed on top of the natural fill that concealed these potholes.

Although the state park already has a large number of potholes, this was true before any of the excavations of the late 1800s through mid 1900s were conducted. Exposure of additional potholes to public view (and to geological investigation) would add to interpretive knowledge and to park visitors' experience. The stone walls, curbing and other features in the parking area are part of the historic district – any changes would require State Historic Preservation Office approval.

North End Parking Lot. Photo by Carmelita Nelson, DNR.

The DNR has investigated the possibility of potholes underneath the north end parking lot. The DNR worked with Mn/DOT using Mn/DOT's Ground Penetrating Radar equipment to identify the bedrock surface contrasts that may indicate potholes without disturbing the asphalt parking lot surface. Mn/DOT staff performed the survey using the radar equipment in 2002. The initial interpretation of data revealed the presence of 7 bedrock surface discontinuities that could be potholes.

There are limitations to the survey interpretation. At this time, the discontinuities have not been verified as potholes by excavation. Potholes that did not intersect the survey grid lines on the map would not be identified, and small diameter would be difficult to identify even when they occur on survey lines. It is unknown if buried potholes were filled with cobbles, boulders, gravel, asphalt, concrete, or other types of fill material prior to the asphalt paving of the parking lot. The nature of the fill material could affect the survey results. Further, irregularities in the bedrock surface, such as a fault zone, could be interpreted as a pothole.

Rock Climbing

Interstate State Park's geologic features provide excellent rock climbing opportunities for beginners to advanced climbers. Rock climbing is managed in accordance with the Minnesota State Parks Rock Climbing Policy. Few changes were recommended in the current rock climbing at Interstate State Park during the management plan process.

Kayaking

The rapids in the St. Croix River at Interstate State Park are a popular destination for whitewater kayak enthusiasts. The rapids range from a Class 2 to Class 4 depending on the water level. The best water levels for kayaking are below 2,500 cfs or above 8,000 cfs. However, the most common water level in the park is between 3,000 to 6,000 cfs and not conducive to kayaking. It is considered a very safe area because it is such a short run. The viewing area is very good and a slalom event has been held in the park for the last 28 years and an annual kayak rodeo has been held for the last five years. When the water level is good, there will be 20-30 kayaks on the river on weekends and kayak clubs come out to the park regularly. Kayaking at the park has leveled off due to the increase in free style/play boating. The park is not considered especially good as a play boating area because it typically does not have enough surf waves, holes and boulders.

Accessibility

The DNR follows the American Disabilities Act of 1992 to make public facilities accessible. Access must be provided to park services, programs, and activities. All services, when viewed in their entirety, must be

useable by individuals with disabilities. This includes facilities such as parking, pedestrian access routes, restrooms, drinking water and recreation facilities. (Pedestrian access routes are a continuous unobstructed path that connects accessible elements within a picnic area, camping area, or designated trailhead, such as the paths connecting parking spaces to a picnic or camp unit, a picnic unit to a toilet building, or connecting accessible picnic tables to other accessible camping elements.) The Americans with Disabilities Act (ADA) provides guidance for accommodating the natural environment's variable character when providing accessibility. ADA delineates modifications and exceptions that can be applied when necessary to maintain the integrity of an outdoor recreation setting, accommodating such elements as hydrology, terrain, surface characteristics and vegetation. Information regarding accessibility will be available in brochures and on the DNR website to guide visitor experiences.

Interstate State Park Group Campground.
Photo by Carmelita Nelson, DNR

Goals for Recreational Use and Visitor Services

- Provide a range of recreational opportunities for visitors to enjoy the natural environment. Because of the small size of the park there is a limit to the types of recreation that can be offered.
- Provide appropriate river-oriented recreation (fishing, canoeing, kayaking, boating) and rock climbing.
- Develop Interstate State Park as a focal point in the network of state, regional and local trails and the river corridor.
- Enhance the quality of recreation consistent with the unique characteristics of Interstate State Park and the vision of its founders.
- Improve park facilities to accommodate visitors of all ages and abilities. Facilities should be environmentally friendly and energy efficient.
- Provide recreational opportunities that minimize human impacts on the natural and cultural resources.
- Cooperate with Mn/DOT, the city of Taylors Falls, MN, National Park Service, Chisago County, the state of Wisconsin, and others to address transportation issues such as parking, access, noise, safety, and congestion.

- Improve safety and access by providing multiple, safe crossings across Trunk Highway 8 for walking and biking.
- Continue to develop partnerships and cooperative strategies within the St. Croix Valley.

Recreational Use and Visitor Services Recommendations

Campgrounds and Group Camp

1. Keep the existing location of the campground; it is one of the most popular campgrounds in the Minnesota State Park system. State parks have a role in preserving the environment and in providing recreation (see Figure 12: Proposed Development).
2. Provide more camping opportunities if suitable sites can be found or sufficient land base is added to the park. Consideration should be given to: a) remote camping; b) bicycle camping. c) canoe campsites.

An accessible trail connects facilities in the picnic area.
Photo Carmelita Nelson, DNR.

Trails

3. Provide additional hiking and biking trails. Additional opportunities for these uses is the highest trail priority for the park.
4. Continue to seek new and innovative ways to stabilize the Sandstone Bluff Trail.
5. Connect the Gateway State Trail to the state park. Treadways outside the state park for horse and snowmobile use may necessary because of the park's small size and sensitive resources.
6. The city of Taylors Falls should be a major hub for trail activities, as well as promoting the town to cater to hikers, bikers, and other trail users. Possible connections include:
    - Connect the Gateway, Swedish Immigrant trails to the park.
    - Connect existing trails to new bike trails where appropriate.
    - Tie the trail plans together with Mn/DOT's plans to find the best placement.
    - Connect the bike trail to the lower park. The elevation difference between the bike trail and the park office will make routing the connection challenging.
    - Taylors Falls Economic Development Commission has interest in a bike trail to connect the scenic overlook to the school as well as the river trail.
    - Non-motorized trail into and through the downtown Taylors Falls, MN area.
7. Limit common areas for hikers and bikers to minimize potential for accidents. Bike racks should be provided near the Glacial Gardens/pothole area to encourage bicyclists to visit the area without conflict with other users.
8. Evaluate the feasibility of rerouting some current trails within the park to improve trail experience and mitigate safety concerns.

9. Prohibit motorized use on trails within the existing state park or on the proposed bike trail through the state park.
10. Improve accessibility to the Sandstone Bluffs trail from the lower park by improving the culvert crossing under Trunk Highway 8.

Parking Lots and Entrance Roads

11. Consider a wide range of options of the parking lot in the potholes area. The Citizens Advisory Committee was concerned possible closure of the parking lot if no close-by parking alternative was available, since many visitors to this area of the park stay only a short time. Other ideas discussed include: reduce bus and RV parking in this lot since they take up so much space and are hard to maneuver in the confined approach/exit routes; possibly make this lot primarily or completely parking for people with disabilities; naturalize part of the parking area and replace with green space to reduce the congested appearance; and use green space design to entice people to the visitor center.
12. Assess the parking capacity in the south end, perhaps as part of the canoe concession agreement.
13. Design trails, bridges, and parking lots that compliment the state park's rustic style architecture.
14. Evaluate the need for bicyclist parking in the vicinity of Trunk Highway 8. It is estimated that the use on the Gateway State Trail will be comparable to the Root River Trail at Lanesboro. Possibly include a shuttle service to town.
15. If a shuttle service is developed, it should be a cooperative effort promoting area attractions. Cross-promotion would result in a greater number of people who have planned in advance to spend a longer time visiting in area. The convenience of parking once in a spacious lot vs. moving the car several times would make a shuttle arrangement attractive.
16. Improve directional and safety-related signage including: more visible park entrance signs, directional signage for the Trunk Highway 8 underpass, and interpretive signage along the trail leading into Taylors Falls.

Old Museum Building

17. Preserve the integrity of the historic district. The old museum building should be utilized for serving park visitors. There needs to be some flexibility with the proposed use of this building. Possible uses:
    - Renovate the museum to provide interpretation focused on the cultural history of the park.
    - Use by a non-profit or for historical interpretation.
    - Seek proposals from outside organizations.

River-Oriented Recreation

18. Improve current hiking overlooks.
19. Develop more overlooks with some selective tree removal.
20. Consider options for improving the aesthetics and natural character of the lower paddleboat landing area. It is located there because the main landing cannot be used during high water and it is needed for emergency access. However, there are opportunities to naturalize this area and reduce the amount of asphalt.
21. Explore ways to improve non-motorized connections between Minnesota and Wisconsin that are in keeping with the Cooperative Management Plan for the Lower St. Croix River National Scenic Riverway

The Old Museum Building pre-dates the CCC era and is an excellent example of rustic style architecture. Photo Carmelita. Nelson, DNR

22. Support the continued access to the St. Croix River as appropriate for the Cooperative Management Plan for the Lower St. Croix River National Scenic Riverway.
23. Evaluate the canoe portage route and access for user safety.
24. Cooperate with local law enforcement, National Park Service, local rescue squads and fire departments to ensure that emergency plans are up to date and that emergency response is coordinated. The park staff will cooperate with the emergency response agencies on training and education.
25. Work with the City of Taylors Falls, Mn/DOT, and the National Park Service to improve the safety and access for kayaking on the river.
26. Continue working with the canoe rental concessionaire to improve on-site facilities and educational services at the rental location.

Mn/DOT, DNR, and volunteer rock climbers monitor cliff movement and impact of traffic vibrations. Photo by Carmelita Nelson, DNR.

Climbing

27. Continue using the permit system to control and monitor climbing activities in the park.
28. Use the permit database to inform rock climbers and organizations of climbing conditions, updates, highlight new features or closed off areas.
29. Protect trees from damage caused by anchoring. Use monitoring and the kiosk for informing climbers of proper anchoring techniques.
30. Work with climbing groups to manage the cliff edge for safety, recreational enjoyment, and resource preservation while preserving the aesthetic qualities of the cliffs.

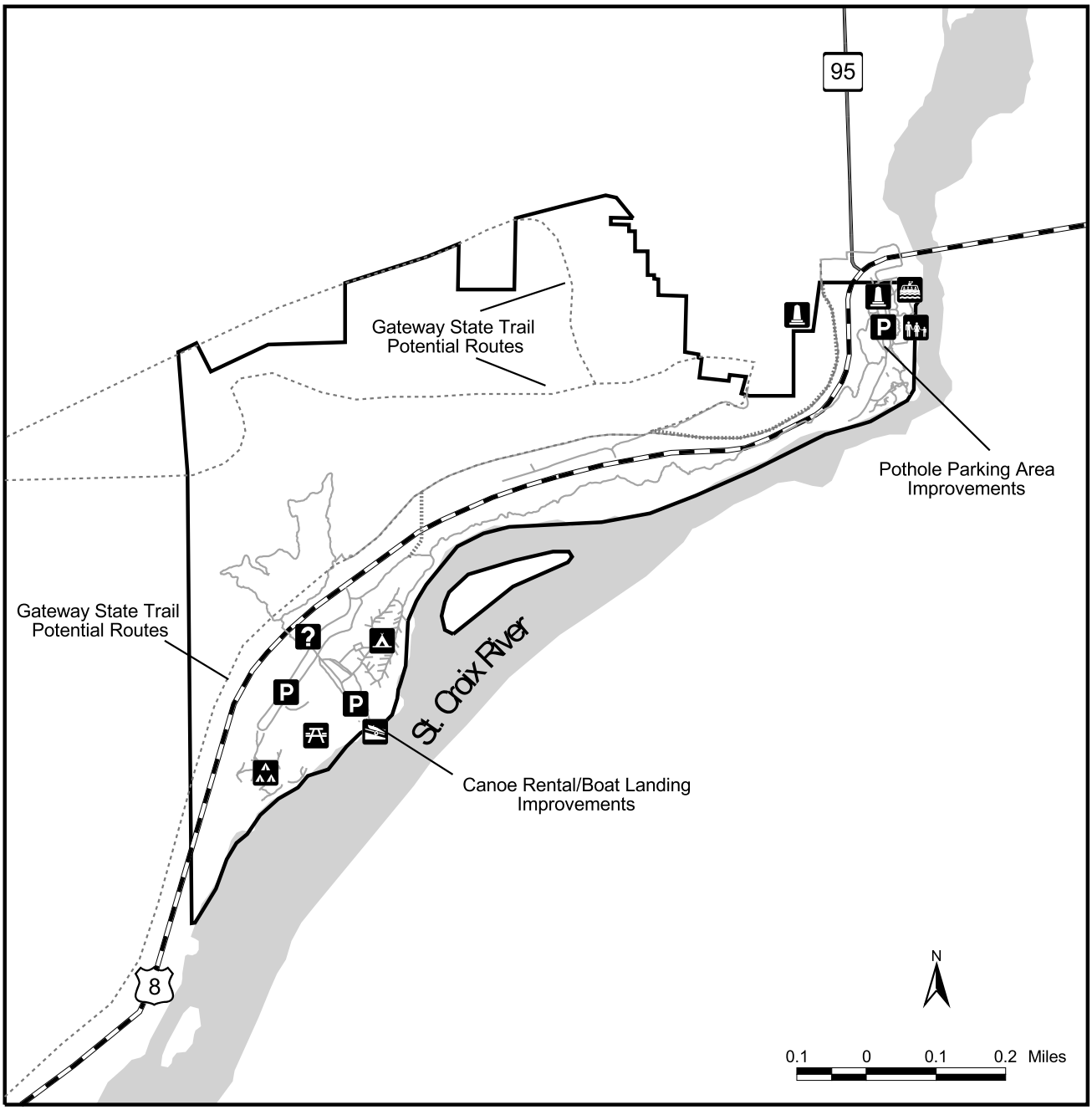
Rock climbing at Interstate State Park.
Photo by Deborah Rose, DNR.

Hunting

31. Annually assess need for deer herd reduction within the park. Plan and conduct deer hunts as required to protect native vegetation.

Interstate State Park

Figure 12: Proposed Development



Legend

Recreation Symbols

- Parking
- Picnic Area
- Campground
- Park Office/Information
- Boat Ramp
- Tour Boat
- Primitive Group Camp
- Visitor/Interpretive Center
- Historic Site
- Statutory Boundary
- Park Roads and Trails

Roads

- Federal Trunk Highway
- State Trunk Highway

PARK BOUNDARY

Existing Boundary and Land Ownership Issues

A park statutory boundary is defined by the Minnesota State Legislature and provides staff, citizens and policy makers with a common understanding of which lands are appropriate for inclusion in the state park. Changes to park statutory boundaries are typically requested from the Legislature when appropriate land outside of the boundary becomes available or as a result of a new planning process which has looked at the long-term recreation and conservation needs of the area. The DNR Division of Parks and Trails only requests changes to park boundaries when the landowners are willing to be included in the new boundary. Landowners inside of a park statutory boundary do not give up any rights over the use of their property, including the right to sell to whomever they choose.

As the second smallest Minnesota State Park and the fifth busiest, land usage is a concern for the future of Interstate State Park. The existing statutory boundary of Interstate State Park includes approximately 290.17 acres (state parks administers 285.86 of these acres). Included within the boundary are approximately 3.91 acres of privately owned land in 4 parcels, and .4 acre owned by the City of Taylors Falls (see Figure 13: Land Ownership).

Chisago County is one of the fastest growing counties in Minnesota. The very places that make the St. Croix Valley special – beautiful bluffs, river views, rural landscape and scenic character – are threatened by extensive growth and development. During the 2002-2003 Citizens Advisory Committee meetings, area residents encouraged the DNR to significantly expand the proposed park boundaries. More than 100 citizens participated in identifying lands that potentially could be included in a park boundary expansion proposal.

Federal Land and Water Conservation Funds

Much of the land within Interstate State Park is encumbered by Land and Water Conservation Fund (LAWCON) restrictions, meaning that the lands must be retained solely for outdoor recreation purposes and not converted to other use.

Boundary Change Process

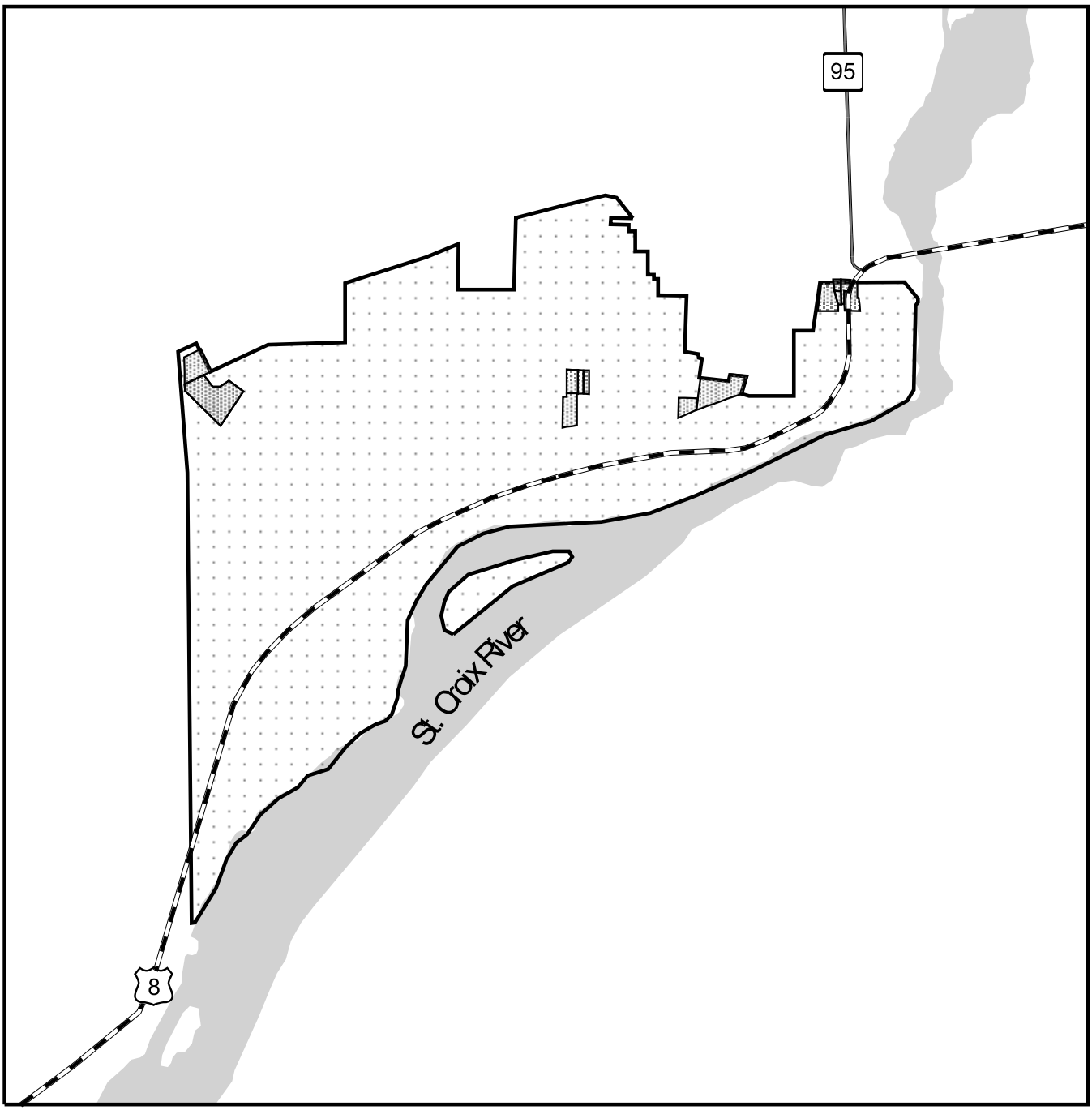
Definitions

Park statutory boundary: This is the legal description for each state park that is set by the Minnesota State Legislature and is included in Minnesota Statutes. The DNR will only request that land be included in the statutory boundary if it has the support of the current landowner. The DNR Division of Parks and Trails can only negotiate for purchase of land from willing sellers within statutory boundaries. State parks cannot purchase land outside of the statutory boundary.

Proposed state park boundary: This boundary is described in the park management plan. This is a long-term proposal that could potentially become the park's statutory boundary with landowner and legislative approval. It does not obligate the landowner to be included in the park statutory boundary nor does it affect any use of the land.

Interstate State Park

Figure 13: Land Ownership



Legend

Land Ownership

- Private or other non-State
- State

Statutory Boundary

Roads

- Federal Trunk Highway
- State Trunk Highway

N

0.1 0 0.1 0.2 Miles

There are three stages for changing a state park statutory boundary:

1. *Park Management Plan Proposed Boundary:*
   - The Citizens Advisory Team and the Resource Management Advisory Team propose new boundaries for Interstate State Park as part of the 20-year management plan.
   - Park staff review the suggestions, make changes and set priorities.
   - Area legislators, City of Taylors Falls, Franconia and Shafer Townships, Chisago County, and the National Park Service review the proposal and are invited to comment.
   - Proposed boundary changes are recommended in the 20-year management plan.
2. *Park Statutory Boundary change:*
   - Written consent is obtained from landowners to be included in the statutory boundary. Only those owners who agree to add their lands to the state park boundary are included in the boundary change proposal.
   - City, township and county boards review the boundary changes.
   - Legislation to change the park statutory boundary is proposed and passed. The overall park boundary proposed in the management plan may not be fully implemented in statute for many years.
3. *Acquisition:*
   - When a landowner has interest in selling their land to the state, the DNR will negotiate for the purchase of the property, as funds are available.

Goals for Park Boundaries

- Complete acquisition of private land within the park boundary from willing sellers.
- Preserve and manage significant natural and cultural resources.
- Provide recreation facilities and opportunities such as trails.
- Protect watersheds and landscapes.
- Protect scenic/aesthetic/visual assets including views from the park and “open space” needs.
- Utilize identifiable boundaries as much as possible – for example a road, body of water or other easily recognized and managed area.

Park Boundary Expansion Proposal Development

As part of the planning process, area residents and representatives from interested groups participated in identifying lands that potentially could be included in a park boundary expansion proposal. The citizens committee encouraged the DNR to significantly expand the proposed park boundaries.

As part of the process, the Citizen Advisory Committee and Resource Management Advisory Team identified natural resource, cultural resource and recreation benefits that could be achieved by expanding the state park boundary. Benefits identified by the groups included:

- Help to maintain the historic landscape/scenery/quality of life.
- Lessen external impacts to the park.
- Protect geologically unique areas and the bluffline.
- Protect wildlife habitat and plant communities.
- Protect land that will be used for nature education for children.
- Protect ecologically significant natural areas from development.
- Strengthen the local economy related to tourism.
- Ensure a healthier natural environment for generations to come.
- Like most state parks, the majority of this land would remain natural.
- Further protect the St. Croix River corridor (The National Park Service is not allowed to acquire land within city limits).

- Protect the basalt rock outcrops or third bluff of the old St. Croix River. This is one of the only places in the country where this type of geology is exposed and it is currently under tremendous development pressure.
- Protect Lawrence Creek, ranked by the DNR as the highest priority stream for protection between Twin Cities and Duluth.
- Conserve wetlands and areas that help control flooding and protect water quality.
- Provide more recreation and education opportunities for local residents and park visitors.
- Provide areas for new trails.
- Provide a trail corridor for the combined routes of the Swedish Immigrant Bike Trail and the Gateway State Trail connecting to William O'Brien State Park.
- Provide a potential bike route north to Wild River State Park and the Willard Munger Trail.
- Protect scenically sensitive areas and viewscape of the St. Croix Valley.
- Protect woods adjacent to the park to provide buffers and wildlife habitat.
- Connect the park to the Bryant Woods Environmental Learning Area for expanded nature education for children.
- Preserve historically significant areas: the railroad roundhouse site, old Government Road, etc.

These groups identified large areas of land north and south along the St. Croix River, was well as lands to the west from the existing Interstate State Park as potential lands to be considered for inclusion in the park statutory boundary (see Figure 14: Areas Proposed for Boundary Expansion). These areas, and some of the reasons they were identified by the groups, are summarized below.

High Priority Proposed Boundary Expansion Areas:

Area 1- North along the River – This area runs north of the park in a narrow band along the St. Croix River. The original plan for the park (late 1800s) proposed a corridor along the river from the park to beyond the current location of the dam. Area 1 begins behind downtown Taylors Falls and continues along the river, north, to the city limits. The area near the dam contains some outstanding rock outcrops and potholes. It would further protect the river corridor and provide a potential bike route to Wild River State Park and the Willard Munger State Trail. The National Park Service is not allowed to acquire land within city limits - all of this land is in the city of Taylors Falls. NSP/Xcel Energy owns over three-fourths of Area 1. This area includes the scenic overlook north of Taylors Falls.

Area 2- Lawrence Creek and Highway 8 – This area runs south and west of the park along Highway 8 and Lawrence Creek. Lawrence Creek is ranked by the DNR as the "highest priority" stream for protection from the Twin Cities to Duluth. It has steep wooded ravines, native trout, and very high quality natural resources. Part of the corridor follows the old railroad grade to Tern Road. This corridor could be the combined route of the Swedish Immigrant Bike Trail and the Gateway State Trail that connects to William O'Brien State Park. These wooded ravines are the first impression most people have of the valley as they enter on Trunk Highway 8.

Area 3 – Basalt Rock Outcrops and the Third Bluff –The basalt rock outcrops along the third bluff of the old St. Croix River continues north from the existing park, parallel to the river. Adding this area to the state park would protect a very scenically sensitive area and connect the park to the Bryant Woods Environmental Learning Area. The area includes an area of wetlands just west of the rock outcrops. Exposure sites for this type of geology are rare, and the area is under pressure for development.

Area 4 – Northern Woodlands – Between County Road 16 and the basalt rock outcrops there is a very large, generally steep, wooded area that connects the river to the third bluff. A section of an existing snowmobile route runs through this corridor. The historic Military Road is also in this area. There are several small streams and valleys that drain into the St. Croix River that are suitable habitat for the Louisiana waterthrush, a special concern bird species.

Area 5 – Woods West of Existing Park – This area would protect the watershed immediately above Curtain Falls and the third ravine. This area would preserve wildlife habitat and provide a buffer for the park.

Area 6 – **NE Colby Lake** – This includes the northern and eastern shores of Colby Lake and parallels Highway 95 north of Taylors Falls, MN. It is the other "scenic entrance" into the valley. It is currently undeveloped.

Area 7 - Old Railroad Roundhouse Area - The railroad roundhouse was located on the north end of town in a low wet area (Near intersection of 95 and 16). This section would connect with the river corridor and the scenic overlook. Railroad history could be interpreted in this area. The bluffs on the other side of Highway 95 are an important corridor and viewscape for the valley.

Area 8 – Wetland West of Wyckstrom Lake – This area is south of County Road 20 is approximately 37 acres. It includes part of Wyckstrom Lake and has some wetlands and woods. The snowmobile trail passes through this area.

Area 9 - West Branch of Lawrence Creek – The western branch of Lawrence Creek runs through this area. Preserving the area could help protect water quality for the creek, however there are several existing homes in the area.

The total amount of land identified in these areas is approximately 2,243 acres.

Public Review of the Areas Proposed for Park Boundary Expansion

Several groups and organizations reviewed the areas proposed for a park boundary expansion during the management plan development.

- Taylors Falls Economic Development Commission recommended developing a Gateway/St. Croix Valley non-motorized trail through the city of Taylors Falls and Interstate Park to Wild Mountain Recreation Area and Wild River State Park (as part of a larger loop trail system). They also emphasize protecting the resources in the valley and maintaining the character of the community. The Taylors Falls Economic Development Commission supported park expansion as part of its strategic plan for the community.
- The Chisago County Planning Commission has designated a Green Corridors to promote natural resource and scenic viewshed protection. The proposed park expansion lies within this corridor.
- The National Parks Service supported the state parks boundary change.
- The City Council of Taylors Falls, and Franconia and Shafer Township Boards have reviewed the proposed boundary change proposal in November 2002.
- The St. Croix Scenic Coalition supported the expansion of the park.
- During the winter of 2003, meetings were held with county commissioners and the Green Corridor group to consider placing the proposed park expansion areas within the Transfer Development Rights project.
- Meetings were held with landowners and the public during the spring 2003.

Landowner Comments

Information packets were mailed to 125 landowners in or near the proposed park boundary areas in Taylors Falls, Franconia and Shafer Townships. These landowners with invited to open houses held to discuss the proposal. A total of 49 residents attended one of the open houses. Others present included representatives from: the National Park Service, Trust for Public Land, Chisago County Parks Department, the Minnesota Land Trust, and the Minnesota Parks and Trails Council. At these meetings eight landowners requested to have their land removed from the proposed park boundary. Six landowners requested to have their land added to the park boundary expansion proposal. During the final public review, three additional landowners requested to be removed from the proposed boundary.

Local Government Review

The proposed park boundary map was taken to the City of Taylors Falls City Council, Franconia and Shafer Township boards, and to the Chisago County Greenways County Commissioners subcommittee.

At a July 2003 Taylors Falls City Council meeting, the council expressed strong concerns that the proposed park boundary would take too much of the city land and it would limit the future development and tax revenue potential of the city. DNR staff pointed out that the vast majority of the land in the proposed boundary is rocky, steep, ravines, or wetlands and generally low tax generating land, and that it is ultimately up to the individual landowners if they want to be included in the park boundary or sell their land to the park. The council requested that the park revise the proposal.

A revised boundary expansion proposal was prepared based on the input gathered during the landowner meetings and from local government and public review.

Park Boundary Recommendations

Following local government and public review, DNR Division of Parks and Trails further evaluated the proposed boundary expansion areas based on several issues that guided the final determination for lands to include in the revised boundary expansion proposal.

Scale

The total of all the areas identified during the planning process was significant. The City of Taylors Falls expressed concern about the amount of land included within the city limits, and the impact on potential residential development and costs for extending city services. The size of areas initially identified would also create management and oversight issues for the DNR Division of Parks and Trails. It is unlikely the Division would have the resources to purchase all the identified lands in the near future, given limited funding and other acquisition priorities throughout the state park system.

Adjacency and connectivity

Many of the areas identified for potential boundary expansion had limited or no physical connection with the existing park, which would limit public access as well as create land management difficulties. Those parcels that were adjacent to the existing park were considered more logical to include in a boundary expansion proposal. Many areas were identified during the planning process to facilitate trail connections to the park from outside or within the local community. Easements are a more appropriate and cost-effective method than fee-title acquisition to provide for these connections, facilitating creation of a trail corridor while allowing continued private ownership and further development of the property.

Other public or non-profit conservation ownership

Several areas identified during the planning process were already under public or non-profit ownership that offered protection from development and eliminated the need to include them within the expanded park boundary.

The comments collected from landowners, local governments and the general public in conjunction with the further evaluation by the DNR Division of Parks and Trails resulted in a revised state park boundary expansion that focused on lands adjacent to the existing park that would protect geologic features and provide education and recreation opportunities consistent with the mission and vision for Interstate State Park (See Figure 15: Revised Boundary Expansion Proposal).

The lands retained in the revised boundary expansion proposal include the southeastern portions of Area 3 and a portion of Area 5. These areas are adjacent to the current park, protect natural and geologic features, and present opportunities to connect trails into the park.

The purpose of including the southeastern portion of Area 3 is to protect basalt rock outcrops and provide a trail connection from the existing park to the Bryant Woods Environmental Learning Area. Not all of this area would need to be acquired by the state to meet these goals. Portions of the property that have been developed, other portions are owned by the City of Taylors Falls and include city infrastructure. These portions of Area 3 can be excluded when a statutory boundary expansion proposal is forwarded to the State Legislature in the future.

The purpose of including the southern portion of Area 5 is to protect the wooded ravine and habitat for wildlife above Curtain Falls. The north portion of Area 5 was not included to leave out the developed parcels along CR 37.

The DNR will work with willing landowners in both areas to identify what parts of these lands can be added to the park statutory boundary.

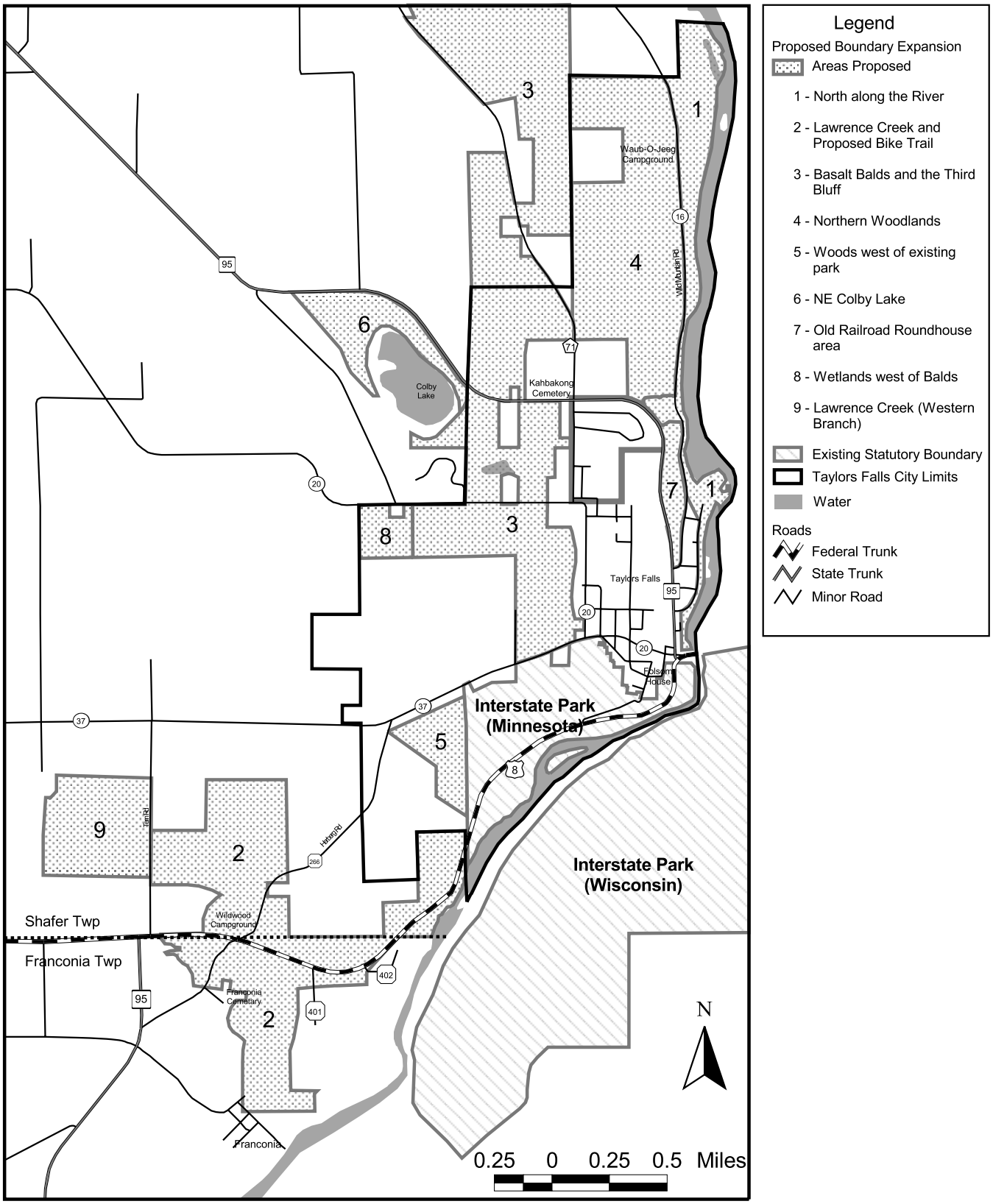
The total amount of land within the revised boundary expansion proposal is approximately 140 acres.

Land Acquisition and Statutory Park Boundary Expansion

1. Continue to pursue acquisition of the private lands within the current park statutory boundary.
2. Pursue the park statutory boundary expansion as described in this plan with the support of the property owners.
3. Provide local units of government the opportunity to review statutory boundary proposals.
4. Acquire parcels included in the park statutory boundary expansion as they become available.
5. Work with local governments and trail advocacy groups to identify trail corridors for state and regional trails to connect with Interstate State Park.
6. Evaluate other adjacent parcels against the established boundary change criteria if those parcels become available.

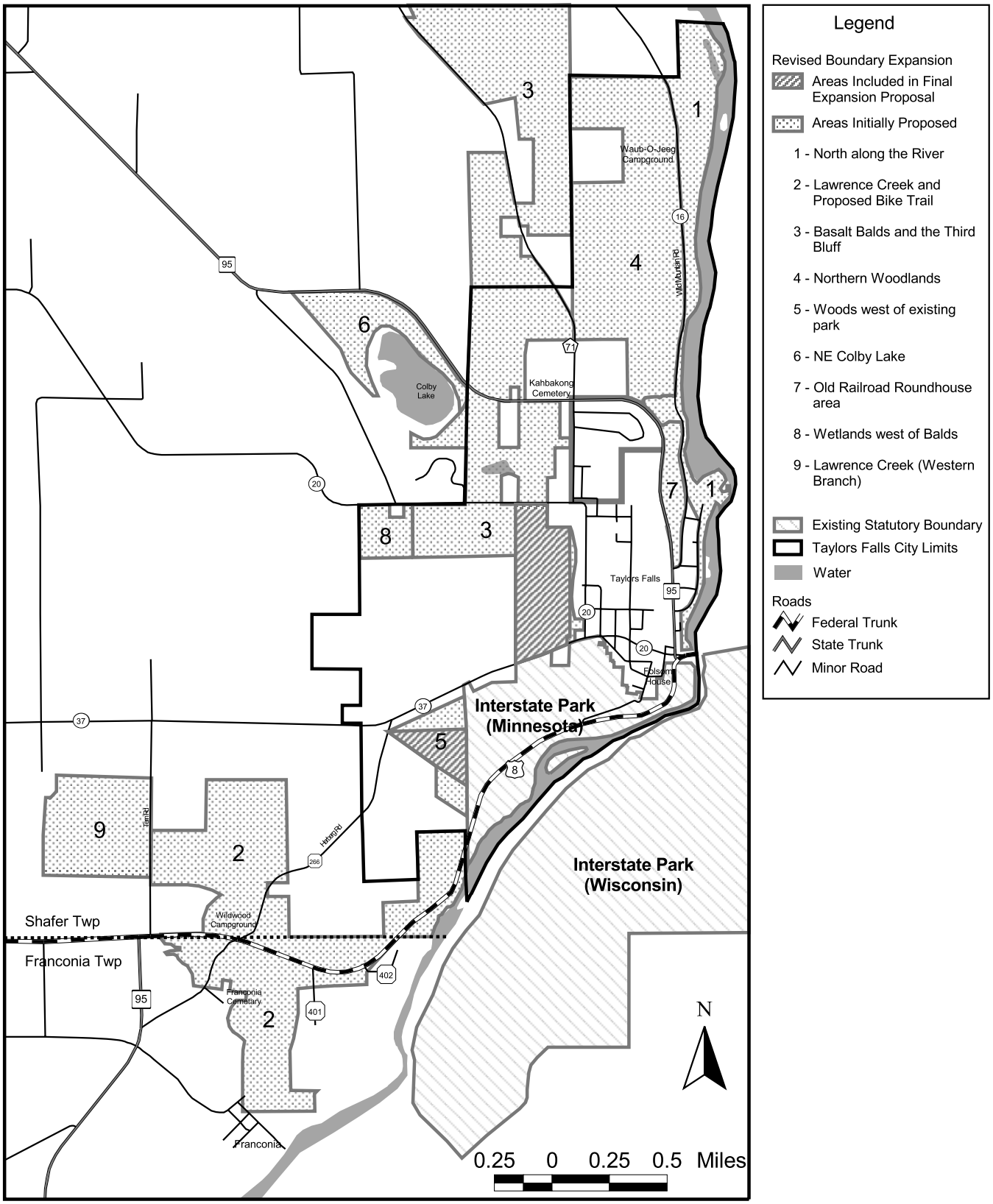
Interstate State Park

Figure 14: Areas Proposed for Boundary Expansion



Interstate State Park

Figure 15: Revised Boundary Expansion Proposal



SIGNIFICANT AREAS MAPPING

Significant areas mapping (SAM) is an integrated approach by which the existing natural and cultural resources in a park are identified in terms of their regional significance and then assessed in terms of their need for protection and ability to withstand visitor use.

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 creating new ones. It 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.

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 20-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.

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 be 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

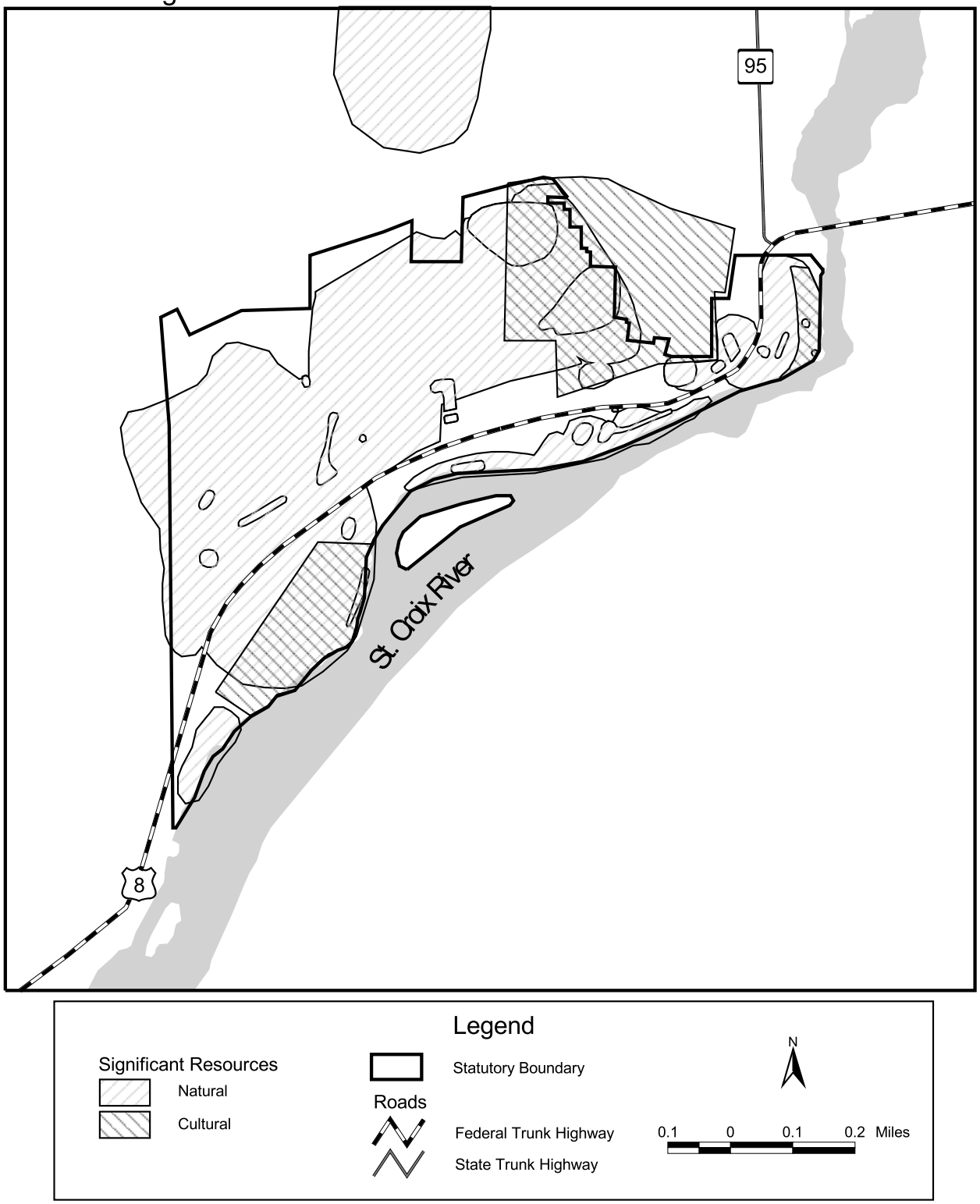
Significant Natural and Cultural Resources (Figure 16)

Cultural resources protection zone - This zone comprises three areas that include the majority of the known cultural resources in the park. They include the three historic districts listed on the National Register of Historic Places. The historic district boundaries were defined as part of the site nominations. This zone includes sites containing cultural or archaeological resources identified during surveys or from historical documents. This includes the Mill Town area and Hobbs Woods area of early settlement. Other resources are suspected to exist within the park but to date have not been located. Management actions in these areas will include a focus on cultural resource preservation and interpretation goals. Cultural resources outside these zones will be protected, however the majority of effort for preservation and interpretation will be focused in these areas.

Natural resource protection zone – This zone is based primarily on the Significant Areas Map (Figure 7). It contains prairie areas, rock outcrops, maple-basswood-oak communities and areas where there are rare animals or plant communities. Known sensitive natural and cultural resource areas are mapped on Figure 16. The shoreline along the St. Croix River is an important natural and cultural resource feature. The adjacent shallows are also important mussel habitat. Future park development and visitor impacts will be evaluated against the goal of protecting this area.

Interstate State Park

Figure 16: Present Conditions -
Significant Natural & Cultural Resources



Visitor Use Levels and Experience (Figure 17)

High visitor use areas - Areas identified as high visitor use include the pothole area, boat landings, picnic area, all trails, and the campground. These areas support the majority of park visits. Visitors can expect to encounter other people in these areas.

Medium visitor use areas - Areas identified as medium visitor use include all remaining land south of Highway 8 not included as High visitor use and the area near the maintenance road.

Low visitor use areas - Areas identified as low visitor use are those portions of the park with no formal access or facilities (trails, picnic shelters, etc.) and currently support no or little visitor use. These areas include the lands on the north and west side of the park.

Identifying Existing Opportunities and Conflicts (Figure 18)

There is one main area of existing opportunities or conflicts identified through the SAM process - the area between Highway 8 and the river. Recommendations for addressing these areas are included in the resource management and recreation chapters of the management plan.

Significant areas and trails - Several trails pass through or adjacent to natural and culturally significant areas. Potential resource impacts include: erosion, stand fragmentation, and introduction of non-native species. Historic districts are protected and other cultural sites have already been significantly altered. These trails are an interpretive opportunity - a chance to educate park visitors about the history and ecosystem. Along the St. Croix River there is some erosion of the riverbank near the picnic area.

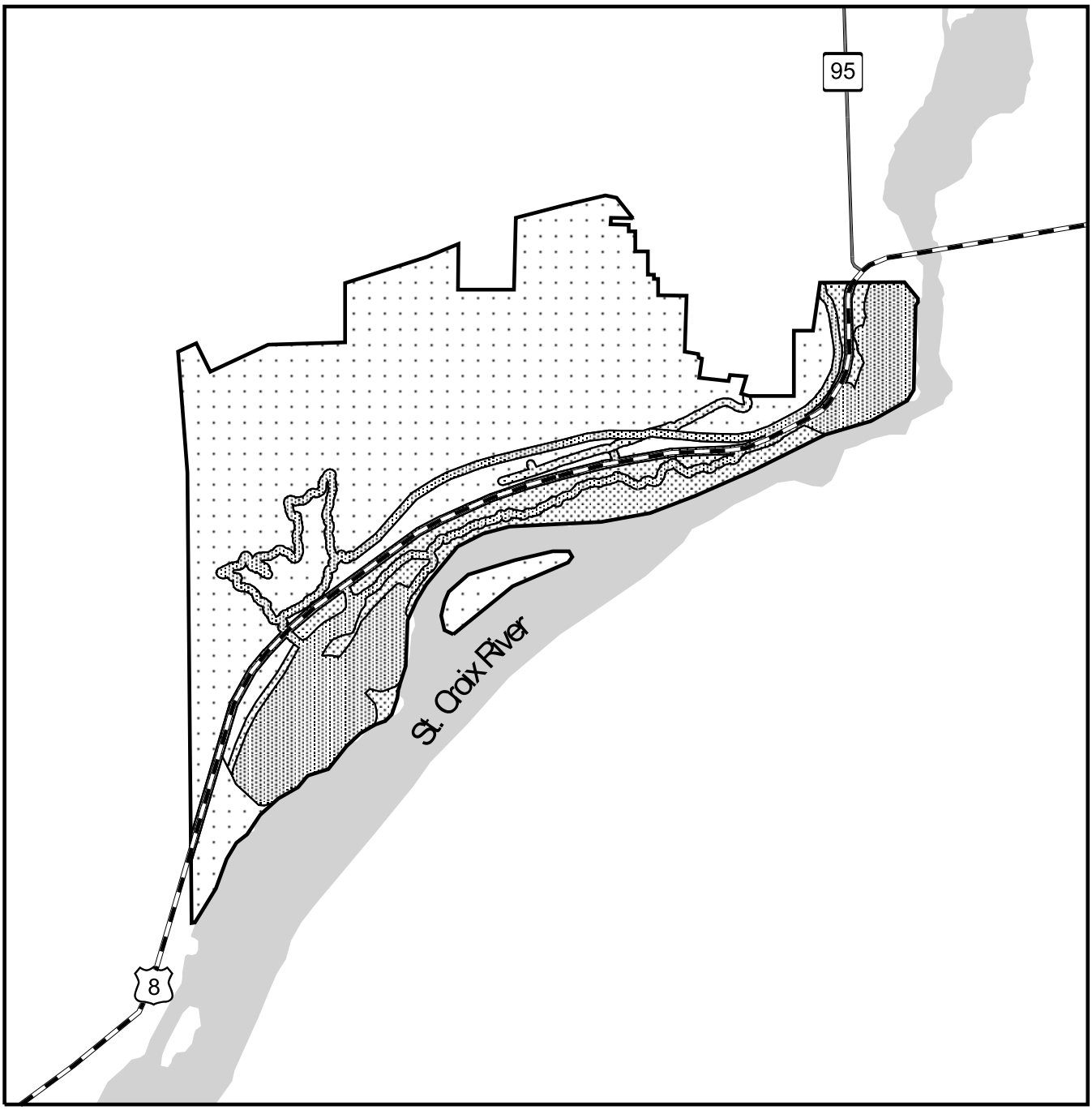
- Management strategies to protect the natural resources will include minimizing trail treadways and discouraging promiscuous trails, monitoring and managing non-native species, and developing interpretive signage about the ecology and ways to limit visitor impacts.

- Management strategies to protect cultural areas include designating walkways to direct visitor movements, monitoring impacts on cultural resources, and developing interpretive signage to educate visitors on archaeology and resource preservation.

- Management strategies to protect the riverbank from erosion include bank stabilization options, which should be evaluated in light of aesthetics, protection of cultural contexts and artifacts, and visitor safety.

Interstate State Park

Figure 17: Present Conditions - Visitor Use & Experience



Legend

Visitor Use & Experience
- High
- Medium
- Low

Statutory Boundary

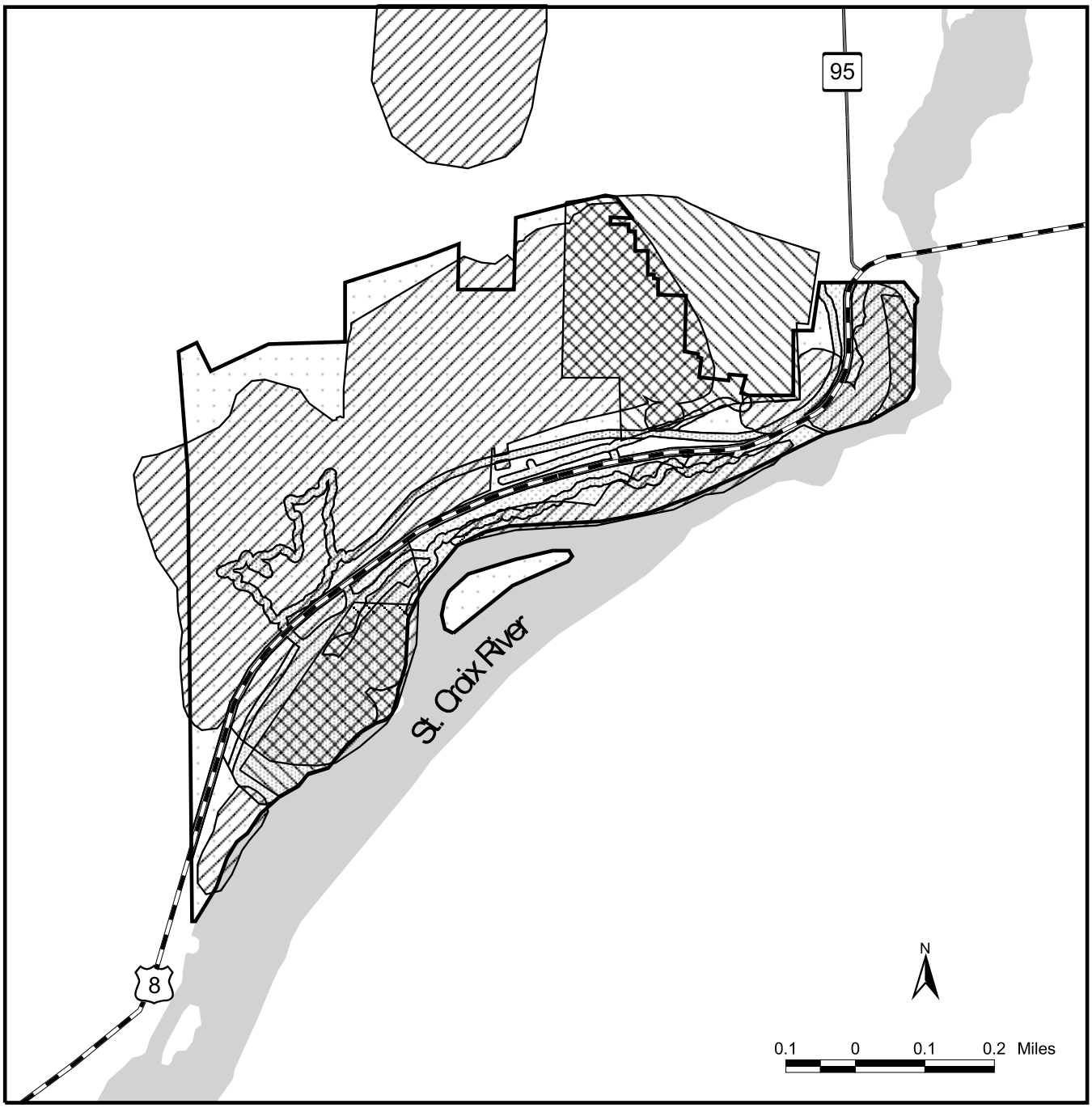
Roads
- Federal Trunk Highway
- State Trunk Highway

N

0.1 0 0.1 0.2 Miles

Interstate State Park

Figure 18: Present Conditions - Opportunities & Conflicts



Legend

Visitor Use & Experience
- High
- Medium
- Low

Significant Resources
- Natural
- Cultural

- Statutory Boundary

Roads
- Federal Trunk Highway
- State Trunk Highway

Assessing Future Conditions

Significant Natural and Cultural Resources

The map for future natural and cultural resources looks similar to the present conditions map, except for the addition of any boundary expansion areas. The resource management efforts during the lifetime of the plan will be targeted at qualitative changes. Management directions for each resource are described below.

Historic District boundaries - No change is recommended for the existing Historic District boundaries.

Cultural and archaeological sites - Further on-site study and historic record research may help identify specific depressions or sites with buildings known to exist in the town site and in Hobbs Woods.

Cultural resources protection zone - The development of a landscape plan for the north end area will be a major component for identifying other management actions within the protection zone.

Shoreline protection zone - The St. Croix River shoreline at the south end will be added to the protection zone. Guiding development projects away from the river shorelines will help minimize negative impacts on scenic views and wildlife habitat.

Vegetation management areas - Vegetation is being actively managed in several areas to restore the natural communities that were present at the time of European-American settlement. Brush and cedar trees are being cleared of in several basalt rock outcrops locations, and native vegetation restoration is planned. As new land is acquired, what natural communities are to be restored will be determined from the soil surveys and original land surveys and line notes.

Visitor Use Levels and Experience (Figure 19)

High visitor use areas - The future high visitor use area is anticipated to be very similar to the existing conditions. The potential Gateway routes are all shown, with final route to be determined.

Medium visitor use areas – The medium visitor use areas will include the more remote trail corridors within the boundary expansion area and the existing medium use areas.

Low visitor use areas - The low visitor use area will likely continue to encompass the remote areas of the park, and will include much of the areas added to the statutory park boundary.

Future Conditions - Opportunities and Concerns (Figure 20)

The opportunities and conflicts identified under Present Conditions will still be relevant in the future and management options for these areas will continue to be followed. In addition, three primary areas will present themselves as opportunities and conflicts in the future. Recommendations for bringing these future conditions about are included in the related sections of the management plan.

Gateway/Swedish Immigrant/Willard Munger Trail extension - The trail extension into the park may result in Taylors Falls and Interstate State Park being a major tourism/bicycle hub for central Minnesota. It is also a potential interpretation and natural resource restoration opportunity. Resource restoration can be done in conjunction with trail construction with interpretive signs and displays planned at benches or stopping points to educate trail users about the area history, various park restoration programs, and other natural resource projects.

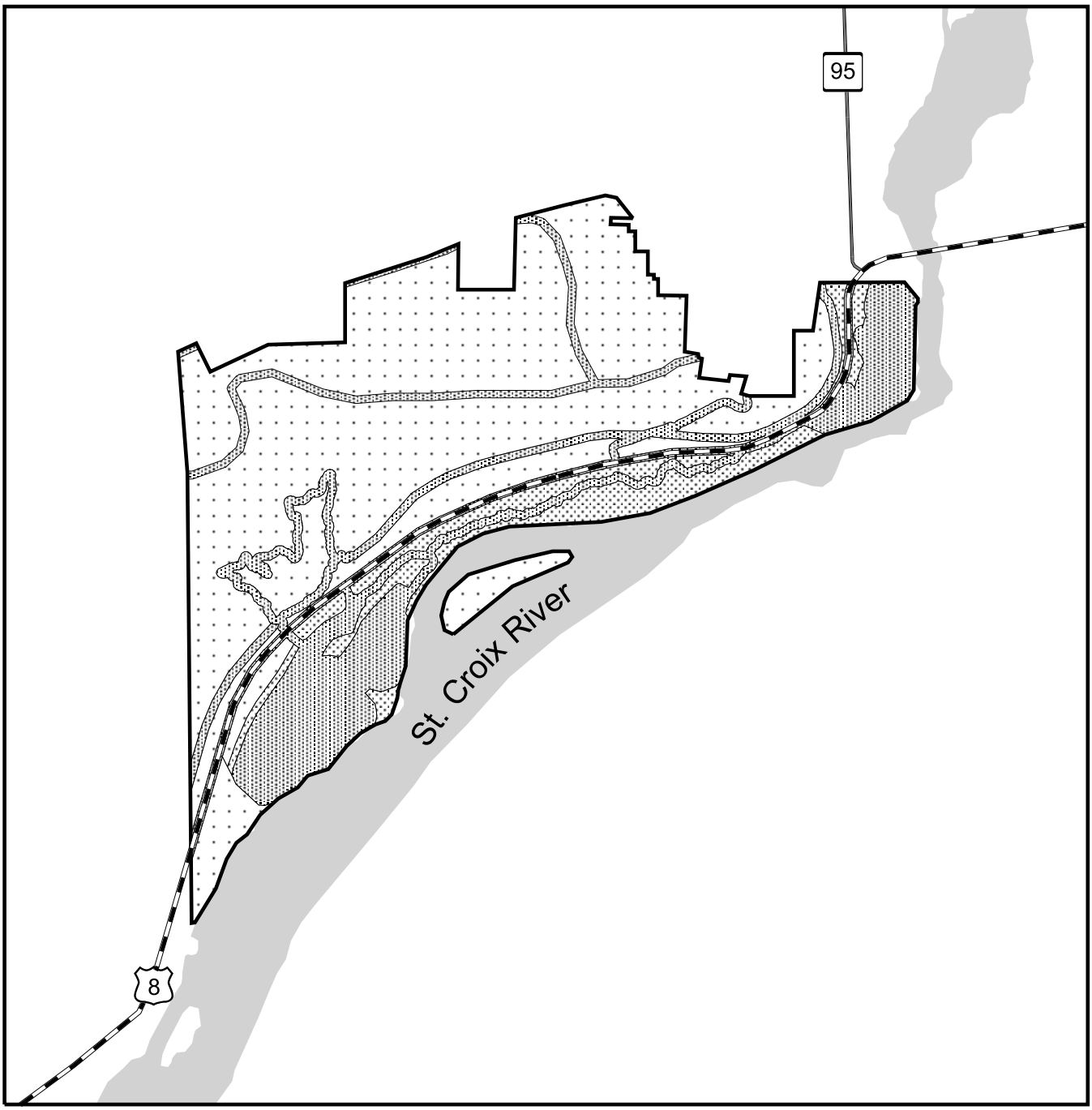
New Visitor Center/Contact Station - A new visitor center/contact station is a most important future opportunity for the interaction of park visitors and resources. It will offer increased space for interpretive signage and programming, as well as serving as a trailhead for the state bike trail and other park trails from where visitors can collect brochures and other information concerning the parks natural, cultural, and recreational resources.

New park boundary expansion - The expansion of the park boundary is an opportunity for interpretation and natural resource restoration and preservation. Interpretive displays about the areas will be developed.

If a new interpretive facility/contact station is built, the existing visitor center could focus on geology and climbing interpretation. Photo by Joe Niznik, DNR.

Interstate State Park

Figure 19: Future Conditions - Visitor Use & Experience



Legend

Visitor Use & Experience
- High
- Medium
- Low

Statutory Boundary

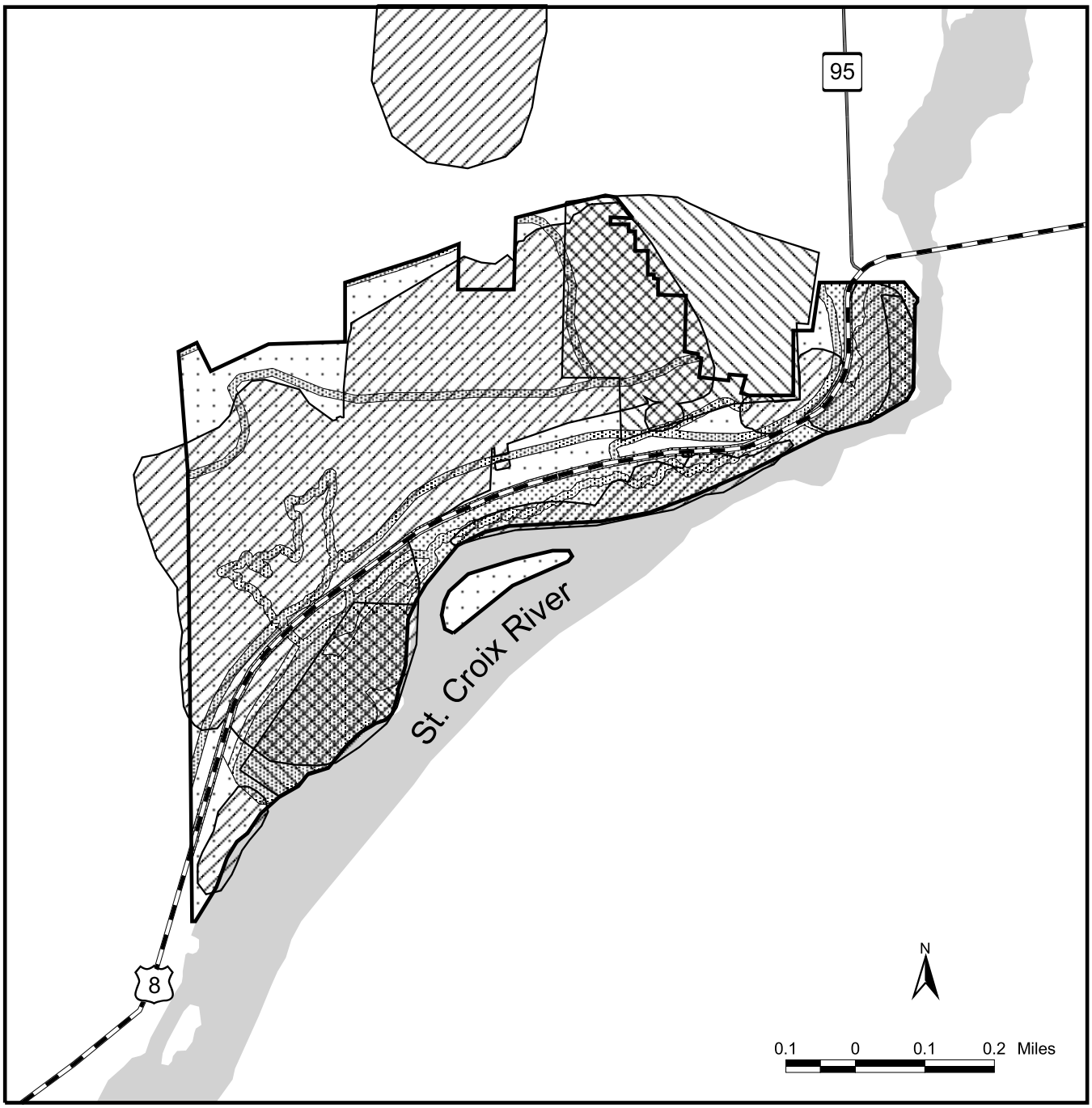
Roads
- Federal Trunk Highway
- State Trunk Highway

N

0.1 0 0.1 0.2 Miles

Interstate State Park

Figure 20: Future Conditions - Opportunities & Conflicts



Legend

Visitor Use & Experience
- High
- Medium
- Low

Significant Resources
- Natural
- Cultural

- Statutory Boundary

Roads
- Federal Trunk Highway
- State Trunk Highway

BUILDING AND FACILITY MANAGEMENT

Management Goals

Building and facilities management goals for Interstate State Park are:

- Provide buildings and facilities for the safe use and enjoyment of park visitors.
- Maintain park infrastructure that protects the public investment in the park.
- Provide buildings and facilities that are compatible with the park's natural and cultural resources.
- Utilize environmentally friendly building materials, energy efficient structures and the principles of reduce, reuse, and recycle.

Americans with Disabilities Act

The Department of Natural Resources follows the Americans with Disabilities Act of 1992 to make public facilities accessible. All new development follows the building and facilities guidelines presented by the U.S. Architectural and Transportation Barriers Compliance Board and the U.S. Mn/DOT. In addition, DNR recreational development follows the recommendations and guidelines presented by the U.S. Architectural and Transportation Barriers Compliance Board to address those outdoor facilities that are not adequately covered in the general building and facilities guidelines. (The recreation-related guidelines are currently in draft form.) As revisions are made in the federal guidelines, they will be incorporated into DNR's development projects.

Future Building/Facilities Design

The architectural theme of the park buildings and facilities should reflect the style of the CCC buildings. The design should be modern and functional, but should include natural elements of native stone, board and batten siding and log construction with large beams. Service area buildings should be built for functionality unless they are in public view, then they should blend with the surroundings. The National Park Service and Wisconsin Interstate have concerns about any new construction and its potential impact on the view from the river.

Transportation and Utilities

There are several transportation-related projects under consideration or development that will impact Interstate State Park.

Reconstruction of Trunk Highway 8

Mn/DOT is reconstructing and adding turn lanes on Highway 8. In the short term, construction may reduce park visits during the roadwork by making access to the park more difficult. The long-term impact may be positive – a safer, more visible entrance to the park from Highway 8. The DNR will work with Mn/DOT to include vegetation management projects as part of the road construction project.

Gateway State Trail

The state trail is intended to serve both transportation and recreation functions. The trail will increase recreational opportunities within Interstate State Park and connect the park to other recreational and interpretive locations. Visits to the park will increase, particularly by bicycle riders. These uses may necessitate more enforcement operations in the park, especially for bicycle/pedestrian conflicts.

PARK OPERATIONS, STAFFING AND COSTS

Current Staffing

Interstate State Park has one full-time 9-month seasonal park manager position. The assistant manager is currently a 90% year-round position. There are several seasonal positions at the park.

2 Buildings and Grounds Workers (90% seasonal)
4 Parks Workers (90% seasonal)
1 Greenview Worker (70% Apr-Oct.)
3 Natural Resources Workers (90% seasonal)
2 Parks Workers (40% seasonal)

The Greenview program is a partnership between DNR and Greenview, Inc., a nonprofit organization that hires elderly people. These individuals work in the park under a contract doing limited labor tasks appropriate for their skills and physical abilities.

The park manager and assistant park manager the Park Officers (employees with limited natural resource law enforcement authority) within the park boundary. Park Officers call on other law enforcement agencies, particularly DNR Conservation Officers, the National Park Service and the Chisago County Sheriff's Department, as necessary to assist with law enforcement within Interstate State Park. DNR Conservation Officers primarily help enforce fishing, hunting, and trail use rules and regulations. The Polk County Sheriff's Department also assists with river rescues.

Emergency Management Plan and Enforcement

Emergency planning is essential for the safety of 350,000 annual park visitors. It is essential to the role of protecting the park's natural and cultural resources for future generations and the park's facilities. The park emergency plan addresses each of these areas. Park staff are expected to respond to incidents ranging from lost hikers, minor injuries, medical conditions, rock climbing or trail accidents, and wildfires or structure fires involving or threatening park buildings. The park staff works closely with the National Park Service, Wisconsin DNR, and local law enforcement, rescue squads, and fire departments to develop emergency response plans. Law enforcement within the park will comply with guidelines in the Minnesota Department of Natural Resources Park Enforcement Manual (March 2001) and with Minnesota State Park Rules (2000)

Staffing and Funding Recommendations

As new facilities are developed, additional staff hours will be needed to operate facilities such as the proposed visitor center/trail center, new trails, and possibly a new campground. Resource management staff time, both regional and park level, will need to be expanded to fully implement the resource management recommendations. Enforcement needs will continue to be significant in this park due to its proximity to the Twin Cities and a major interstate highway. Future enforcement and visitor service efforts should be focused on heavy-use weekends and interpretive efforts and should emphasize ways to protect the park's natural and cultural resources and reduce impacts on the resources. The new facilities - including the extension of the Gateway/Swedish Immigrant Trail to the park - will likely increase visits to the park and associated visitor service and enforcement needs. In addition, interpretive staff should be added back to the park at least seasonally, year round if a new visitor center is constructed. The park should have a permanent, seasonal naturalist to provide seasonal interpretive programming, maintain park publications and website, and develop interpretive partnerships with local partners.

Funding

Operational Costs

If all the recommendations in this park plan were implemented, the parks annual operational costs would need to be increased. The level or amount of this increase is difficult to estimate - many of the recommendations are too general to base estimates on at this time. However, the new development projects outlined below and anticipated increase in park visits suggests the park's annual operating budget may need to be increased.

Development Costs

Many recommended actions would have development cost implications. The total cost to implement these actions is estimated at $2.5 million (this does not include the $3 million for trestles and Gateway State Trail construction or acquisition costs). This estimate was generated as part of the planning process and has a significant margin of error because a variety of assumptions were made related to unknown variables (site specific soil conditions, decisions related to site design, septic system selection, disturbance to electrical service).

Land Acquisition Projects

Land acquisition costs are difficult to estimate, as the state only purchases land for state parks from willing sellers and so it is unknown when the process for acquiring these lands may begin.

Devil's Chair rock formation. Vandalism destroyed this formation in 2005. Photo by Ken Anderson.

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 DNR Division of Parks and Trails 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 DNR Division of Parks and Trails 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 DNR Division of Parks and Trails planning section. Requests for planning assistance should be directed to the DNR Division of Parks and Trails Planning Manager in the Central Office, St. Paul.

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.

1. 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 DNR Division of Parks and Trails, the issue should be resolved within the Division, with input form the public. The proposed change is then reviewed with the DNR Division of Parks and Trails Management Team.

2. If the proposed change involves other DNR divisions, the issues should be resolved by staff and approved by the affected Division Directors. This may require one of two area/regional integrated resource management team meetings. The proposed change will be reviewed through the DNR Regional Interdisciplinary Review Service (RIRS).

3. If the proposed change issue involves other state agencies, the issue should be resolved by staff and approved by the DNR Division of Parks and Trails Management Team – with input from the public – and reviewed by RIRS.

4. 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.

5. All plan amendments should be coordinated, documented, and distributed by the DNR Division of Parks and Trails 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 DNR 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 outline 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 that specific locations. For the most park, plans are conceptual, not detail-oriented. Before development, proposed development sites are examined for the presences of protected Minnesota Natural Heritage Program elements, and historical/archaeological resources. If any are found, the planned project may have to be revise to accommodate the protection of these resources.

Program Revisions

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

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APPENDIX A – PLAN RECOMMENDATIONS

Marketing, Partnerships, Community Relations & Transportation Recommendations

Marketing Recommendations:

1. Promote area history and culture.
2. Manage overlook areas for better views of the river.
3. Participate in partnerships between Taylors Falls and St. Croix Falls visitor services. Promotional packages could include: lodging, meals, boat rides, live theater, hiking and the arts. This is especially desirable during the late fall and winter seasons, when regular tourist traffic has diminished.

Partnership and Community Involvement Opportunities:

4. Partner with the MN Parks and Trails Council on land acquisition projects.
5. Cultivate partnerships with local groups such as the Lions, Rotary Clubs, Chambers of Commerce and Economic Development groups, and the Gateway Trail Association.
6. Partner with the National Park Service on resource management and interpretation efforts.
7. Cooperate with various government agencies such as counties (Polk & Chisago) and townships (Franconia, Shafer and St. Croix) for trails and other recreation opportunities.
8. Cooperate with St. Croix Valley Tourism Alliance and Cities of Taylors Falls, Minnesota and St. Croix Falls, Wisconsin on tourism issues.
9. Partner with schools for educational opportunities.
10. Establish a Friends of Interstate State Park group and provide the group with suggested activities.
11. Consider possible cooperative efforts with private recreation providers such as the Waub-O-Jeeg and Wild Wood camps, canoe rental and tour boat companies, the Wild Mountain skiing and alpine slides, and hotels or other lodging providers.
12. Work with park user groups and local communities to build support for the state park (boundary issues, funding issues), trail projects, volunteer opportunities, and additional environmental education opportunities.
13. Participate with St. Croix Valley Watershed Educators to improve educational opportunities.

Transportation Recommendations:

The following recommendations will be pursued in cooperation with Mn/DOT.

14. Work with Mn/DOT to address issues related to Trunk Highway 8 as it passes through the park, including safety, speed, congestion, and noise.
15. Work with Mn/DOT and the National Park Service (NPS) to mitigate concerns from road pollution, silt during construction, and ongoing road run-off that threatens seepage swamps, and endangered mussels.

Natural Resource Management Recommendations

General Resource Management

1. Document all sensitive areas such as: plants, animals, ecological communities, geologic areas, watersheds, migration corridors, viewsheds, soundscapes, historic districts, and archaeological sites, so that these areas are avoided by any future utility or construction work.
2. Interpret resource management activities for public interest and education.
3. Work with communities, townships and counties to promote regional planning that will preserve the landscape of the St. Croix Valley. Participate in the planning processes of various agencies. Support ordinances that will minimize impacts to the resources.
4. Protect species listed as endangered, threatened and/or special concern. Where possible, these ranges should be expanded through habitat management and boundary changes.

5. Pursue alternate routes for through/commercial traffic to minimize the impact of Highway 8.
6. Utilize boundary extensions, conservation easements and landowner education to create corridors between the park and other natural areas/geologic features.

Vegetation Management

7. Re-establish the natural communities found in the park: maple-basswood forest, white pine hardwood forest, dry cliff, moist cliff, rock outcrop, floodplain forest, lowland hardwood forest, mixed hardwood seepage swamp, oak woodland-brushland, and tamarack swamp communities where possible.
8. Monitor and control invasive exotic species through control practices. This includes the invasion of red cedar into pine areas, buckthorn and honeysuckle. In the glacial gardens area some historically planted species from the 1890s may remain for interpretive and cultural purposes.
9. Remove honeysuckle along Highway 8 and reestablish a native vegetation/shrub screen between the highway and parking lot.
10. If new land is acquired, this land should be restored to native vegetation patterns.
11. Where appropriate, recreate conditions that would give rise to oak barrens and rock outcrop vegetation communities.
12. Map resource management plan/activities for the park. A draft map is included in this plan (see Figure 8). Management activities include prescribed burns or cutting to enhance the oak woodlands, prairies and rock outcrops, and designating areas for pine forest regeneration.

Wildlife Management

13. Manage deer, raccoon, and wildlife populations to meet balanced ecosystem goals. Given that Interstate is completely within the city limits of Taylors Falls, there will need to be a desirable wildlife/urban interface balance. Annually assess need for deer herd reduction within the park. Plan and conduct deer hunts as required to protect native vegetation.
14. Cooperate with the NPS to check the spread of the zebra mussels.
15. Protect Federal and State listed species and manage their habitats for optimum sustainability.

Geology

16. Maintain and protect geologic features such as the basalt cliffs for their natural and cultural resource value.
17. Map the locations and dimensions of all the potholes.
18. Fund cooperative projects for a scientific exploration of unexcavated potholes. Data could produce information on geology of the area, archaeology, paleobotany, and would be an interpretive and tourist attraction.
19. Coordinate geological research to explain the unusual aspects of the Bake Oven and associated features. Note: The above projects would need to protect the potholes and any unusual plant life (i.e., lichens).
20. Inform geology tours and classes about park policies prohibiting the collection of rocks or digging.

Water Resources Management

21. Obtain funding to install erosion control materials, remove large appliances, refuse and hazardous materials from the old dumpsite located in the park.
22. Manage watersheds of the Sandstone Bluffs area within and outside the park in cooperation with the Chisago County.
23. Monitor and control shoreline erosion issues. Maintain a buffer on the edge of streams and rivers to act as filters for runoff and to stabilize banks.
24. Avoid management practices that could potentially cause excess sediment input into the river to protect mussels and water quality.

Cultural Resource Management Recommendations

1. Place discreet interpretive markers at site locations in Milltown, since it has no physical remains. For example, a rock with small plaque in the campgrounds to show Folsom Mill site, steamboat building site, etc.
2. A comprehensive archaeological survey or excavation should be completed. More knowledge is needed to protect the cultural resources and to allow for more interpretation. No archaeological work has been done in the Glacial Gardens or Hobbs-Brinks addition. There are many unanswered questions such as the location of the French fur post, what were the foundation stones that were moved by Army Corps of Engineers, accounts of Indian battle axes found in potholes need to be verified. A paleobotanical investigation would be useful in the pothole area.
3. Develop a landscape plan for managing the cultural and natural resources of the Glacial Gardens area. Typical goals for vegetation management in a state park, namely pre-European settlement vegetation conditions, may not be appropriate for the Glacial Gardens landscape. Reestablishment of vegetation as it was during the early establishment of the park, is more in keeping with the Glacial Gardens concept and interpretation goals for the park. The landscape evaluation should also determine significant viewsheds and how they should be maintained. An initial inventory of vegetation should be completed. Historical non-native species should be kept if they are not threatening heritage species. They are indicators of previous home sites and historic park beautification projects. The goal should be to maximize the interpretive potential for visitors.
4. Cultivate more cooperative programs/projects with area facilities such as the Folsom House.
5. Conduct land use history research and obtain more historical data. The park staff should work with the historical society to gather photos, land history, oral history, and historical documentation of the park. There should be an active program to acquire information.

Interpretive Services Recommendations

Visitor Center

1. Renovate the current visitor center. Renovations to the visitor center must follow requirements for buildings that are on the National Register of Historic Places. Renovation will include the following:
   - Open up the visitor center for greater visibility.
   - Renovate utility systems including installation of energy efficient lighting, heating, cooling and ventilation systems.
   - Redesign interior of visitor counter that provides better circulation, greater visibility, and an accessible information and sales counter.
   - Provide enhanced security measures.
   - Update and/or replace exhibits. Natural history topics such as geology, plant communities, and river ecology would be the focus of visitor center exhibits. Safety and information about recreational activities like climbing could also be included. Limited space would be used for changeable exhibits related to the park.
   - Expanded nature store fixtures and sales items.
   - An alternative to a renovated visitor center is a new visitor center if parking is moved out of the park from the north end.

2. Improve the area outside of the visitor center by the following:
   - Adding toilets that can be used in the spring and fall after water is turned off for the season.
   - Renovating the outdoor patio at the rear of the visitor center.
   - Adding benches, some with canopies for sun and rain protection, near the visitor center.

Museum

3. Renovate the museum to provide interpretation focused on the cultural history of the park. This unstaffed location would provide the following:

- Wall exhibits on prehistory, history of the park, tour boat operation, and Taylors Falls. These exhibits could be wall mounted or multimedia presentations.
- Benches or other seating to provide visitors with a place to rest or get out of severe weather during their visit.
- Information about the park and local attractions.

Contact Station/Office (at south entrance)

4. Construct a new contact station that provides the following interpretive services:
   - Exhibits focused on safety for recreational activities.
   - Information about Interstate, the state park system, and local attractions, trails, and parks.
   - Expanded nature store sales items.
   - The contact station would also include the park office with conference and storage areas, and public restrooms.

Interpretive Staffing

5. The park should have a permanent, seasonal naturalist to provide seasonal interpretive programming, maintain park publications and website, and develop interpretive partnerships with local partners.

Other Interpretive Services

6. Develop more non-personal interpretation such as markers, self-guiding brochures, digital media, and publications. Possible topics include:
   - Mineral extraction such as basalt and sand quarries.
   - Historic buildings and areas such as Hobbs Woods and Milltown.
   - History of U.S. Highway 8 and Blast Island.
   - History of railroad through the park, sandstone bluffs train stop, and historic graffiti.
   - Tourism and excursion trips.
   - Road and possible steamboat landing below River Trail.
   - Woodland period American Indian encampment sites.
   - History of private and/or park concession sites including zoo, dance pavilion, burger stand, and boat landing.
   - Publications interpreting natural, cultural, and recreational resources.

7. Develop field trip guides for teachers and distribute via the internet. Guides can be jointly developed with Wisconsin Interstate Park and the St. Croix National Scenic Riverway.

Cooperative Programs and Partnerships

8. Increase joint interpretive planning and program delivery with the National Park Service and Wisconsin Interstate State Park.

9. Continue participation in the St. Croix Valley Interpreters Association to promote Interstate State Park's programs and services and develop joint programs and special events.

10. Develop partnerships with boat tour operations in order to maximize use of the museum building by park visitors and boat tour clientele and develop coordinated programming. For example, conduct pothole tours for boat tour customers and incorporate interpretive programming into boat tours.

Recreational Use and Visitor Services Recommendations

Campgrounds and Group Camp

1. Keep the existing location of the campground; it is one of the most popular campgrounds in the Minnesota State Park system. State parks have a role in preserving the environment and in providing recreation (see Figure 12: Proposed Development).

2. Provide more camping opportunities if suitable sites can be found or sufficient land base is added to the park. Consideration should be given to: a) remote camping; b) bicycle camping. c) canoe campsites.

Trails

3. Provide additional hiking and biking trails. Additional opportunities for these uses is the highest trail priority for the park.
4. Continue to seek new and innovative ways to stabilize the Sandstone Bluff Trail.
5. Connect the Gateway State Trail to the state park. Treadways outside the state park for horse and snowmobile use may necessary because of the park's small size and sensitive resources.
6. The city of Taylors Falls should be a major hub for trail activities, as well as promoting the town to cater to hikers, bikers, and other trail users. Possible connections include:
    - Connect the Gateway, Swedish Immigrant trails to the park.
    - Connect existing trails to new bike trails where appropriate.
    - Tie the trail plans together with Mn/DOT's plans to find the best placement.
    - Connect the bike trail to the lower park. The elevation difference between the bike trail and the park office will make routing the connection challenging.
    - Taylors Falls Economic Development Commission has interest in a bike trail to connect the scenic overlook to the school as well as the river trail.
    - Non-motorized trail into and through the downtown Taylors Falls, MN area.
7. Limit common areas for hikers and bikers to minimize potential for accidents. Bike racks should be provided near the Glacial Gardens/pothole area to encourage bicyclists to visit the area without conflict with other users.
8. Evaluate the feasibility of rerouting some current trails within the park to improve trail experience and mitigate safety concerns.
9. Prohibit motorized use on trails within the existing state park or on the proposed bike trail through the state park.
10. Improve accessibility to the Sandstone Bluffs trail from the lower park by improving the culvert crossing under Trunk Highway 8.

Parking Lots and Entrance Roads

11. Consider a wide range of options of the parking lot in the potholes area. The Citizens Advisory Committee was concerned possible closure of the parking lot if no close by parking alternative was available, since many visitors to this area of the park stay only a short time. Other ideas discussed include: reduce bus and RV parking in this lot since they take up so much space and are hard to maneuver in the confined approach/exit routes; possibly make this lot primarily or completely parking for people with disabilities; naturalize part of the parking area and replace with green space to reduce the congested appearance; and use green space design to entice people to the visitor center.
12. Assess the parking capacity in the south end, perhaps as part of the canoe concession agreement.
13. Design trails, bridges, and parking lots that compliment the state park's rustic style architecture.
14. Evaluate the need for bicyclist parking in the vicinity of Trunk Highway 8. It is estimated that the use on the Gateway State Trail will be comparable to the Root River Trail at Lanesboro. Possibly include a shuttle service to town.
15. If a shuttle service is developed, it should be a cooperative effort promoting area attractions. Cross-promotion would result in a greater number of people who have planned in advance to spend a longer time visiting in area. The convenience of parking once in a spacious lot vs. moving the car several times would make a shuttle arrangement attractive.
16. Improve directional and safety-related signage including: more visible park entrance signs, directional signage for the Trunk Highway 8 underpass, and interpretive signage along the trail leading into Taylors Falls.

Old Museum Building

17. Preserve the integrity of the historic district. The old museum building should be utilized for serving park visitors. There needs to be some flexibility with the proposed use of this building. Possible uses:
    - Renovate the museum to provide interpretation focused on the cultural history of the park.
    - Use by a non-profit or for historical interpretation.
    - Seek proposals from outside organizations.

River-Oriented Recreation

18. Improve current hiking overlooks.
19. Develop more overlooks with some selective tree removal.
20. Consider options for improving the aesthetics and natural character of the lower paddleboat landing area. It is located there because the main landing cannot be used during high water and it is needed for emergency access. However, there are opportunities to naturalize this area and reduce the amount of asphalt.
21. Explore ways to improve non-motorized connections between Minnesota and Wisconsin that are in keeping with the Cooperative Management Plan for the Lower St. Croix River National Scenic Riverway
22. Support the continued access to the St. Croix River as appropriate for the Cooperative Management Plan for the Lower St. Croix River National Scenic Riverway.
23. Evaluate the canoe portage route and access for user safety.
24. Cooperate with local law enforcement, National Park Service, local rescue squads and fire departments to ensure that emergency plans are up to date and that emergency response is coordinated. The park staff will cooperate with the emergency response agencies on training and education.
25. Work with the City of Taylors Falls, Mn/DOT, and the National Park Service to improve the safety and access for kayaking on the river.
26. Continue working with the canoe rental concessionaire to improve on-site facilities and educational services at the rental location.

Climbing

27. Continue using the permit system to control and monitor climbing activities in the park.
28. Use the permit database to inform rock climbers and organizations of climbing conditions, updates, highlight new features or closed off areas.
29. Protect trees from damage caused by anchoring. Use monitoring and the kiosk for informing climbers of proper anchoring techniques.
30. Work with climbing groups to manage the cliff edge for safety, recreational enjoyment, and resource preservation while preserving the aesthetic qualities of the cliffs.

Hunting

31. Annually assess need for deer herd reduction within the park. Plan and conduct deer hunts as required to protect native vegetation.

Park Boundary Recommendations

Land Acquisition and Statutory Park Boundary Expansion

1. Continue to pursue acquisition of the private lands within the current park statutory boundary.
2. Pursue the park statutory boundary expansion as described in this plan with the support of the property owners.
3. Provide local units of government the opportunity to review statutory boundary proposals.
4. Acquire parcels included in the park statutory boundary expansion as they become available.
5. Work with local governments and trail advocacy groups to identify trail corridors for state and regional trails to connect with Interstate State Park.

6. Evaluate other adjacent parcels against the established boundary change criteria if those parcels become available.

APPENDIX B - WILDLIFE

BIRDS

Bird Species of Interstate State Park: 179 recorded species
95 potential breeding species (present June-July)

Special Interest Species:

Trumpeter Swan (Threatened)
Ruffed Grouse
Wild Turkey
Turkey Vulture
Bald Eagle (Special Concern)
Red-shouldered Hawk (Special Concern)
Whip-poor-will
Northern Waterthrush
Cerulean Warbler (Special Concern)
Louisiana Waterthrush (Special Concern)

Features

Interstate State Park is a relatively small park at 295 acres but it is located along the St. Croix River. In this area the river flows through a deep gorge with steep cliffs that provide updrafts of wind for migrating and hunting raptors. The most common raptor in the park is the Turkey Vulture that is present in the park on most days during the spring, summer and fall months. Bald Eagles are also frequently seen in the park. A Trumpeter Swan was seen with a flock of Canada Geese on the river just off the boat landing in November 2003. The small streams that flow down to the river from the uplands provide habitat for the Louisiana Waterthrush, a species of Special Concern in Minnesota. Northern Rough-winged Swallows are common along the river and use the cliffs as nesting sites. The St. Croix River Valley provides a major migratory route for birds and 28 species of neotropical warblers have been recorded in the park. This includes the Cerulean (a species of Special Concern) and Black-throated Blue Warbler. Pine Warblers nest in the large stands of White Pine in the campground area. On the west edge of the park is a mixture of open, grassy areas with large tracts of deciduous woods. These habitats provide excellent areas for migrating sparrows; (LeConte's Sparrows were recorded here in the fall of 2003) along with thrushes, vireos and flycatchers.

Species List

#	Common Name	Scientific Name	S	S	F	W
1	Snow Goose	(Chen caerulescens)	O		O	
2	Canada Goose	(Branta canadensis)	C	C	C	O
3	Trumpeter Swan	(Cygnus buccinator)			R	
4	Tundra Swan	(Cygnus columbianus)	O		O	
5	Wood Duck	(Aix sponsa)	C	C	C	
6	American Wigeon	(Anas americana)	O		O	
7	Mallard	(Anas platyrhynchos)	C	C	C	O
8	Blue-winged Teal	(Anas discors)	U		U	
9	Northern Shoveler	(Anas clypeata)	O		O	
10	Green-winged Teal	(Anas crecca)	O		O	
11	Ring-necked Duck	(Aythya collaris)	O		O	
12	Lesser Scaup	(Aythya affinis)	O		O	
13	Bufflehead	(Bucephala albeola)	U		U	
14	Common Goldeneye	(Bucephala clangula)	U		U	

15	Hooded Merganser	(Lophodytes cucullatus)	U		U	
16	Common Merganser	(Mergus merganser)	U		U	
17	Red-breasted Merganser	(Mergus serrator)	O		O	
18	Ruffed Grouse	(Bonasa umbellus)	U	U	U	U
19	Wild Turkey	(Meleagris gallopavo)	U	U	U	U
20	Common Loon	(Gavia immer)	O		O	
21	Pied-billed Grebe	(Podilymbus podiceps)	O		O	
22	Double-crested Cormorant	(Phalacrocorax auritus)	O		O	
23	Great Blue Heron	(Ardea herodias)	C	C	C	
24	Green Heron	(Butorides virescens)	O		O	
25	Turkey Vulture	(Cathartes aura)	C	C	C	
26	Osprey	(Pandion haliaetus)	U	U	U	
27	Bald Eagle	(Haliaeetus leucocephalus)	C	O	C	U
28	Northern Harrier	(Circus cyaneus)	U	U	U	O
29	Sharp-shinned Hawk	(Accipiter striatus)	U		U	O
30	Cooper’s Hawk	(Accipiter cooperii)	U	U	U	O
31	Northern Goshawk	(Accipiter gentilis)	O		O	O
32	Red-shouldered Hawk	(Buteo lineatus)	U	U	U	O
33	Broad-winged Hawk	(Buteo platypterus)	U	U	U	
34	Red-tailed Hawk	(Buteo jamaicensis)	U	U	U	O
35	Rough-legged Hawk	(Buteo lagopus)	O		O	O
36	American Kestrel	(Falco sparverius)	U	U	U	O
37	Merlin	(Falco columbarius)			O	
38	Sora	(Porzana carolina)	O	O	O	
39	American Coot	(Fulica americana)	U	U	U	
40	Killdeer	(Charadrius vociferus)	U	U	U	
41	Solitary Sandpiper	(Tringa solitaria)	O	O	O	
42	Spotted Sandpiper	(Actitis macularia)	U	U	U	
43	Franklin's Gull	(Larus pipixcan)			O	
44	Bonaparte's Gull	(Larus philadelphia)	O		O	
45	Ring-billed Gull	(Larus delawarensis)	C		C	
46	Herring Gull	(Larus argentatus)	U		U	
47	Common Tern	(Sterna hirundo)	O			
48	Forster's Tern	(Sterna forsteri)	O			
49	Black Tern	(Chlidonias niger)	O	O	O	
50	Rock Pigeon	(Columba livia)	C	C	C	C
51	Mourning Dove	(Zenaida macroura)	C	C	C	O
52	Black-billed Cuckoo	(Coccyzus erythropthalmus)	U	U	U	
53	Yellow-billed Cuckoo	(Coccyzus americanus)	U	U	O	
54	Great Horned Owl	(Bubo virginianus)	U	U	U	U
55	Barred Owl	(Strix varia)	U	U	U	U
56	Common Nighthawk	(Chordeiles minor)	U	U	U	
57	Whip-poor-will	(Caprimulgus vociferus)	O	O		
58	Chimney Swift	(Chaetura pelagica)	C	C	C	
59	Ruby-throated Hummingbird	(Archilochus colubris)	C	O	C	
60	Belted Kingfisher	(Ceryle alcyon)	C	C	C	
61	Red-headed Woodpecker	(Melanerpes erythrocephalus)	O	O	O	
62	Red-bellied Woodpecker	(Melanerpes carolinus)	C	C	C	C

63	Yellow-bellied Sapsucker	(Sphyrapicus varius)	C	O	C	
64	Downy Woodpecker	(Picoides pubescens)	C	C	C	C
65	Hairy Woodpecker	(Picoides villosus)	C	C	C	C
66	Northern Flicker	(Colaptes auratus)	C	C	C	O
67	Pileated Woodpecker	(Dryocopus pileatus)	U	U	U	U
68	Olive-sided Flycatcher	(Contopus cooperi)	O		O	
69	Eastern Wood-Pewee	(Contopus virens)	C	C	C	
70	Alder Flycatcher	(Empidonax alnorum)	O	O	O	
71	Least Flycatcher	(Empidonax minimus)	C	C	C	
72	Eastern Phoebe	(Sayornis phoebe)	C	C	C	
73	Great Crested Flycatcher	(Myiarchus crinitus)	C	C	C	
74	Eastern Kingbird	(Tyrannus tyrannus)	O	O	O	
75	Northern Shrike	(Lanius excubitor)	O		O	O
76	Yellow-throated Vireo	(Vireo flavifrons)	U	U	U	
77	Blue-headed Vireo	(Vireo solitarius)	U		U	
78	Warbling Vireo	(Vireo gilvus)	C	C	C	
79	Philadelphia Vireo	(Vireo philadelphicus)	O		O	
80	Red-eyed Vireo	(Vireo olivaceus)	C	C	C	
81	Blue Jay	(Cyanocitta cristata)	C	C	C	C
82	American Crow	(Corvus brachyrhynchos)	C	C	C	C
83	Common Raven	(Corvus corax)	O		O	O
84	Horned Lark	(Eremophila alpestris)	O		O	
85	Purple Martin	(Progne subis)	U	U	U	
86	Tree Swallow	(Tachycineta bicolor)	C	C	C	
87	Northern Rough-winged Swallow	(Stelgidopteryx serripennis)	C	C	C	
88	Bank Swallow	(Riparia riparia)	U	U	U	
89	Cliff Swallow	(Petrochelidon pyrrhonota)	U	U	U	
90	Barn Swallow	(Hirundo rustica)	C	C	C	
91	Black-capped Chickadee	(Poecile atricapilla)	C	C	C	C
92	Tufted Titmouse	(Baeolophus bicolor)	R		R	
93	Red-breasted Nuthatch	(Sitta canadensis)	U		U	U
94	White-breasted Nuthatch	(Sitta carolinensis)	C	C	C	C
95	Brown Creeper	(Certhia americana)	U	O	U	O
96	House Wren	(Troglodytes aedon)	C	C	C	
97	Winter Wren	(Troglodytes troglodytes)	O	O	O	
98	Sedge Wren	(Cistothorus platensis)	O	O	O	
99	Marsh Wren	(Cistothorus palustris)	O	O	O	
100	Golden-crowned Kinglet	(Regulus satrapa)	C		C	O
101	Ruby-crowned Kinglet	(Regulus calendula)	C		C	
102	Blue-gray Gnatcatcher	(Polioptila caerulea)	U	U	U	
103	Eastern Bluebird	(Sialia sialis)	C	C	C	
104	Veery	(Catharus fuscescens)	U	U		
105	Gray-cheeked Thrush	(Catharus minimus)	U		U	
106	Swainson's Thrush	(Catharus ustulatus)	U		U	
107	Hermit Thrush	(Catharus guttatus)	U		U	
108	Wood Thrush	(Hylocichla mustelina)	U	U		
109	American Robin	(Turdus migratorius)	C	C	C	
110	Gray Catbird	(Dumetella carolinensis)	C	C	C	

111	Brown Thrasher	(Toxostoma rufum)	U	U	U	
112	European Starling	(Sturnus vulgaris)	C	C	C	C
113	Cedar Waxwing	(Bombycilla cedrorum)	C	C	C	U
114	Blue-winged Warbler	(Vermivora pinus)	O	O	O	
115	Golden-winged Warbler	(Vermivora chrysoptera)	U		U	
116	Tennessee Warbler	(Vermivora peregrina)	C		C	
117	Orange-crowned Warbler	(Vermivora celata)	U		U	
118	Nashville Warbler	(Vermivora ruficapilla)	C		C	
119	Northern Parula	(Parula americana)	U		U	
120	Yellow Warbler	(Dendroica petechia)	C	C	C	
121	Chestnut-sided Warbler	(Dendroica pensylvanica)	C	U	C	
122	Magnolia Warbler	(Dendroica magnolia)	U		U	
123	Black-throated Blue Warbler	(Dendroica caerulescens)	O		O	
124	Yellow-rumped Warbler	(Dendroica coronata)	C		C	
125	Black-throated Green Warbler	(Dendroica virens)	U		U	
126	Blackburnian Warbler	(Dendroica fusca)	U		U	
127	Pine Warbler	(Dendroica pinus)	C	C	U	
128	Palm Warbler	(Dendroica palmarum)	C		C	
129	Bay-breasted Warbler	(Dendroica castanea)	U		U	
130	Blackpoll Warbler	(Dendroica striata)	U		U	
131	Cerulean Warbler	(Dendroica cerulea)	O		O	
132	Black-and-white Warbler	(Mniotilta varia)	U	O	U	
133	American Redstart	(Setophaga ruticilla)	C	C	C	
134	Ovenbird	(Seiurus aurocapillus)	C	C	C	
135	Northern Waterthrush	(Seiurus noveboracensis)	U		U	
136	Louisiana Waterthrush	(Seiurus motacilla)	U	U		
137	Connecticut Warbler	(Oporornis agilis)	O		O	
138	Mourning Warbler	(Oporornis philadelphia)	U		U	
139	Common Yellowthroat	(Geothlypis trichas)	C	C	C	
140	Wilson’s Warbler	(Wilsonia pusilla)	U		U	
141	Canada Warbler	(Wilsonia canadensis)	U		U	
142	Scarlet Tanager	(Piranga olivacea)	U	U	U	
143	Eastern Towhee	(Pipilo erythrophthalmus)	O	O	O	
144	American Tree Sparrow	(Spizella arborea)	C		C	C
145	Chipping Sparrow	(Spizella passerina)	C	C	C	
146	Clay-colored Sparrow	(Spizella pallida)	O		O	
147	Field Sparrow	(Spizella pusilla)	U	U	U	
148	Savannah Sparrow	(Passerculus sandwichensis)	C	C	C	
149	LeConte's Sparrow	(Ammodramus leconteii)			U	
150	Fox Sparrow	(Passerella iliaca)	U		U	
151	Song Sparrow	(Melospiza melodia)	C	C	C	
152	Lincoln's Sparrow	(Melospiza lincolnii)	U		U	
153	Swamp Sparrow	(Melospiza georgiana)	U	U	U	
154	White-throated Sparrow	(Zonotrichia albicollis)	C		C	
155	Harris’s Sparrow	(Zonotrichia querula)	U		U	
156	White-crowned Sparrow	(Zonotrichia leucophrys)	U		U	
157	Dark-eyed Junco	(Junco hyemalis)	C		C	C
158	Northern Cardinal	(Cardinalis cardinalis)	C	C	C	C

159	Rose-breasted Grosbeak	(Pheucticus ludovicianus)	C	C	C	
160	Indigo Bunting	(Passerina cyanea)	C	C	C	
161	Bobolink	(Dolichonyx oryzivorus)	U	U	U	
162	Red-winged Blackbird	(Agelaius phoeniceus)	C	C	C	
163	Eastern Meadowlark	(Sturnella magna)	O	O	O	
164	Western Meadowlark	(Sturnella neglecta)	O	O	O	
165	Rusty Blackbird	(Euphagus carolinus)	U		U	
166	Brewer's Blackbird	(Euphagus cyanocephalus)	O	O	O	
167	Common Grackle	(Quiscalus quiscula)	U	U	U	
168	Brown-headed Cowbird	(Molothrus ater)	C	C	U	
169	Baltimore Oriole	(Icterus galbula)	C	C	C	
170	Pine Grosbeak	(Pinicola enucleator)				O
171	Purple Finch	(Carpodacus purpureus)	C		C	C
172	House Finch	(Carpodacus mexicanus)	U	U	U	O
173	Red Crossbill	(Loxia curvirostra)			O	O
174	White-winged Crossbill	(Loxia leucoptera)			O	O
175	Common Redpoll	(Carduelis flammea)	O		O	O
176	Pine Siskin	(Carduelis pinus)	C	U	C	C
177	American Goldfinch	(Carduelis tristis)	C	C	C	C
178	Evening Grosbeak	(Coccothraustes vespertinus)			O	O
179	House Sparrow	(Passer domesticus)	C	C	C	C

MAMMALS

This is a general list of mammals that may be found in Chisago County. Not all of these mammals are currently found within Interstate State Park. The list is primarily from Minnesota's St. Croix River Valley and Anoka Sandplain A Guide to Native Habitats by Daniel S. Wovcha, Barbara C. Delaney, and Gerda E. Nordquist.

Marsupials	
Opossum	*Didelphis virginiana*
Shrews	
Arctic Shrew	*Sorex arcticus*
Masked Shrew	*Sorex cinereus*
Northern Shorttail Shrew	*Blarina brevicauda*
Moles	
Eastern Mole	*Scalopus aquaticus*
Star-nosed Mole	*Condylura cristata*
Bats	
Big Brown Bat	*Eptesicus fuscus*
Little Brown Myotis	*Myotis lucifugus*
Rabbits	
Eastern Cottontail	*Sylvilagus floridanus*
Squirrels	
Eastern Chipmunk	*Tamias striatus*
Fox Squirrel	*Sciurus niger*
Gray Squirrel	*Sciurus carolinens*
Red Squirrel	*Tamiasciurus hudsonicus*
Northern Flying Squirrel	*Glaucomys sabrinus*
Thirteen-lined Ground Squirrel	*Spermophilus tridecemlineatus*
Woodchuck	*Marmota monax*

Pocket Gophers	
Plains Pocket Gopher	*Geomys bursarius*
Beaver, Mice, Voles, Muskrats, and Porcupines	
Beaver	*Castor canadensis*
Common Muskrat	*Ondatra zibethicus*
Common Porcupine	*Erethizon dorsatum*
Deer Mouse	*Peromyscus maniculatus*
House Mouse	*Mus musculus*
Meadow Jumping Mouse	*Zapus hudsonicus*
Meadow Vole	*Microtus pennsylvanicus*
Southern Red-backed Vole	*Clethrionomys gapperi*
Western Harvest Mouse	*Reithrodontomys megalotis*
White-footed Mouse	*Peromyscus leucopus*
Carnivores	
American Badger	*Taxidea taxus*
Black Bear	*Ursus americanus*
Common Raccoon	*Procyon lotor*
Coyote	*Canis latrans*
Eastern Spotted Skunk	*Spilogale putorius*
Ermine (shorttail weasel)	*Mustela erminea*
Gray Fox	*Urocyon cinereoargenteus*
Gray Wolf	*Canis lupus*
Mink	*Mustela vison*
Northern River Otter	*Lutra canadensis*
Red Fox	*Vulpes vulpes*
Striped Skunk	*Mephitis mephitis*
Mountain Lion	*Felis concolor*
Ungulates	
White-tailed Deer	*Odocoileus virginianus*

AMPHIBIANS AND REPTILES

This is a general list amphibian and reptiles that may be found in Chisago County. Not all of these species are currently found within Interstate State Park. The list is primarily from Minnesota's St. Croix River Valley and Anoka Sandplain A Guide to Native Habitats by Daniel S. Wovcha, Barbara C. Delaney, and Gerda E. Nordquist.

Salamaders	
Blue-spotted Salamander	*Ambystoma laterale*
Mudpuppy	*Necturus maculosus*
Redback Salamander	*Plethodon cinereus*
Tiger Salamander	*Ambystoma tigrinum*
Frogs and Toads	
American Toad	*Bufo americanus*
Bullfrog	*Rana catesbeiana*
Chorus Frog	*Pseudacris triseriata*
Cope's Gray Treefrog	*Hyla chrysoscelis*
Eastern Gray Treefrog	*Hyla versicolor*
Green Frog	*Rana clamitans melanota*
Mink Frog	*Rana septentrionalis*
Northern Leopard Frog	*Rana pipiens*
Spring Peeper	*Pseudacris crucifer*
Wood Frog	*Rana sylvatica*
Turtles	
Blanding's Turtle	*Emydoidea blandingii*

Common Map Turtle	*Graptemys geographica*
Painted Turtle	*Chrysemys picta*
Snapping Turtle	*Chelydra serpentina*
Spiny Softshell	*Apalone spinifera*
Wood Turtle	*Clemmys insculpta*
Skinks	
Five-lined Skink	*Eumeces fasciatus*
Prairie Skink	*Eumeces septentrionalis*
Snakes	
Western Hognose Snake	*Heterodon nasicus*
Eastern Hognose Snake	*Heterodon platirhinos*
Smooth Green Snake	*Opheodrys vernalis*
Gopher Snake	*Pituophis catenifer*
Redbelly Snake	*Storeria occipitomaculata*
Plains Garter Snake	*Thamnophis radix*
Common Garter Snake	*Thamnophis sirtalis*

Native Mussels of the St. Croix and Namekagon Rivers, MN & WI

#	Scientific Name	Common Name	Status **			Where Found	REF/DATE
			FED	MN	WI		
1	Actinonaias ligamentina	mucket		TH		Throughout Riverway (various)	Doolittle 88
2	Alasmidonta marginata	elktoe		TH	SC	Throughout Riverway (various)	Doolittle 88
3	Amblema plicata plicata	threeridge				Throughout Riverway (various)	Hornbach 95
4	Anodontoides ferussacianus	cylindrical papershell				Namekagon (Miller, Doolittle) and Hwy. 70	Doolittle 88
5	Arcidens confragosus ☡	rockshell (rock pocketbook)		EN	TH	South of Stillwater	Heath 90
6	Corbicula fluminea	Asian clam	Invasive Exotic			Osceola south (Miller per. observ.)	Heath 90
7	Cumberlandia monodonta	spectaclecase	Candidate	TH	EN	Hwy 48/77 south (Heath 90) to Hudson	Havlik 93
8	Cyclonaias tuberculata	purple wartyback		TH	EN	Throughout Riverway (various)	Heath 90
9	Dreissena polymorpha	zebra mussel	Invasive Exotic			Stillwater south	Karns 00
10	Ellipsaria lineolata	butterfly		TH	EN	Taylors Falls south (various)	Hornbach 95
11	Elliptio crassidens crassidens	elephant-ear		EN	EN	Taylors Falls south (various)	Heath 89
12	Elliptio dilatata	spike		SC		Throughout Riverway (various)	Hove 02
13	Epioblasma triquetra	snuffbox		TH	EN	Taylors Falls - Marine (various)	Baker 94
14	Fusconaia ebena	ebonyshell		EN	EN	Taylors Falls south (various)	Hornbach 95
15	Fusconaia flava	Wabash pigtoe				Throughout Riverway (various)	Hornbach 95
16	Lampsilis cardium	plain pocketbook				Throughout Riverway (various)	Doolittle 90
17	Lampsilis higginsi	Higgins eye	EN	EN	EN	Taylors Falls south (various)	Hornbach 95
18	Lampsilis siliquoidea	fat mucket				Throughout Riverway (various)	Baker 94
19	Lasmigona complanata	white heelsplitter				Nelson's south (Berg 2003))	Hove & Hornbach 02
20	Lasmigona compressa	creek heelsplitter		SC		St. Croix Falls Flowage north (various)	Miller 94
21	Lasmigona costata	fluted-shell		SC		Hudson, Marine - north (various)	Hove & Hornbach 02
22	Leptodea fragilis	fragil papershell				Throughout Riverway (various)	Hove & Hornbach 02
23	Ligumia recta	black sandshell		SC		Throughout Riverway (various)	Hove & Hornbach 02
24	Megalonaias nervosa	washboard		TH	SC	Stillwater south (various)	Baker 94
25	Obliquaria reflexa	threehorn wartyback				County O south (Havlik 93)	Hove & Hornbach 02
26	Obovaria olivaria	hickorynut		SC		Namekagon confluence south (various)	Hove & Hornbach 02
27	Plethobasus cyphyus	sheepnose (bullhead)	Candidate	EN	EN	Prescott (various)	Heath 89
28	Pleurobema sintoxia	round pigtoe		TH	SC	Throughout Riverway (various)	Hove & Hornbach 02
29	Potamilus alatus	pink heelsplitter				Namekagon confluence south (various)	Hove & Hornbach 02
30	Potamilus ohiensis	pink papershell				St. Croix Falls Flowage south (WDNR 97)	Hove & Hornbach 02
31	Pyganodon grandis	giant (large river) floater				Throughout Riverway (various)	Hove & Hornbach 02
32	Quadrula fragosa	winged mapleleaf	EN	EN	EN	Taylors Falls to Copas (various)	Hove & Hornbach 02
33	Quadrula metanevra	monkeyface		TH	TH	Taylors Falls south (various)	Hove & Hornbach 02
34	Quadrula pustulosa pustulosa	pimpleback				Pansey Landing south (various)	Hove & Hornbach 02
35	Quadrula quadrula	mapleleaf				Taylors Falls south (various)	Hove & Hornbach 02
36	Simpsonaias ambigua	salamander mussel		TH	TH	Hwy 48/77 south (Doolittle 88)	Hove & Hornbach 02
37	Strophitus undulatus	creeper				Throughout Riverway (various)	Doolittle 87
38	Toxolasma parvus	lilliput				Hwy 48/77 south (various)	Baker 94
39	Tritogonia verrucosa	pistolgrip		TH	TH	Taylors Falls south (various)	Hove & Hornbach 02
40	Truncilla donaciformis	fawnsfoot				Taylors Falls south (various)	Hove & Hornbach 02
41	Truncilla truncata	deertoe				Danbury south (various)	Hove & Hornbach 02
42	Utterbackia imbecillis ☡	paper pondshell				Danbury south (Heath)	Hove & Hornbach 02

Nomenclature follows: Turgeon, D. D., J. F. Quinn, Jr., A. E. Bogan, E. V. Coan, F. G. Hochberg, W. G. Lyons, P. M. Mikkelsen, R. J. Neves, C. F. E. Roper, G. Rosenberg, B. Roth, A. Scheltema, F. G. Thompson, M. Vecchione, and J. D. Williams. 1998. Common and scientific names of aquatic invertebrates from the United States and Canada: mollusks, 2nd edition. American Fisheries Society, Special Publication 26, Bethesda, Maryland. 509 pp.

**In part from Havlik & Sauer 2000

☡ Not in St. Croix Riverway Species Database